Appendix A
Initial Study/Notice of Preparation



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NOTICE OF PREPARATION AND INITIAL STUDY FOR:

NORTH HEMET

SPECIFIC PLAN

prepared for:

CITY OF HEMET

Contact:
Ron Running
Project Planner

prepared by:

THE PLANNING CENTER|DC&E

Contact:
Nicole Vermilion
Senior Planner

OCTOBER 2011

City of Hemet

NOTICE OF PREPARATION

TO: NOP DISTRIBUTION LIST

SUBJECT: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING HEARING FOR THE NORTH HEMET SPECIFIC PLAN

LEAD AGENCY: CITY OF HEMET

CONTACT: Ron Running, Project Planner
City of Hemet, 445 E. Florida Avenue, Hemet, CA 92543-4209

NOP REVIEW PERIOD: October 12, 2011–November 11, 2011

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act," as amended to date, the City of Hemet intends to prepare an Environmental Impact Report (EIR) for the project described below.

Project Title: North Hemet Specific Plan (SP 11-001)

Project Location: The project site comprised of 37 parcels totaling 28.6 acres in the northwestern portion of the City of Hemet, Riverside County, California. It is within the North Hemet Subarea of the Redevelopment Agency for the County of Riverside's Mid-County Redevelopment Project Area (MCRPA). More specifically, the project site is bounded on the north and northwest by existing residential land uses, on the west by Alessandro Street, on the south by Oakland Avenue, and on the east by State Street.

Project Description: The Redevelopment Agency for the County of Riverside is seeking the City of Hemet's approval of the North Hemet Specific Plan with a General Plan Amendment and Zone Change. The North Hemet Specific Plan would permit a maximum of 442 high-density units (100 units within mixed-use areas) and 83 medium density residential units; 118,919 square feet of commercial uses; and 16,335 square feet of office uses. The North Hemet Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities.

Environmental Analysis: The Initial Study for the proposed project indicates that there may be significant adverse environmental impacts associated with this project. These issues will be addressed in the Draft EIR.

The City of Hemet would like to know the views of agencies and other interested parties as to the scope and content of the environmental information that is germane to each agency's statutory responsibilities in connection with the proposed project. Due to the time limits mandated by state law, comments on the Initial Study will be received during the public review period, which is **October 12, 2011 through November 11, 2011**. Comments should focus on the issues and alternatives to be addressed in the Draft EIR. The final scope of the EIR will be based on the comments received on this Notice of Preparation (NOP).

Please submit your comments to Ron Running at the address shown above. Agencies should provide the name of a contact person with their response. Copies of the NOP/Initial Study will be available for public review at the City of Hemet Planning Department and at the Hemet Public Library at 300 E. Latham Avenue.

Notice of Scoping Meeting: The proposed project is considered a project of statewide, regional or area-wide significance. A scoping meeting will be held by the lead agency. The scoping meeting will be held on **October 20, 2011 at 10:00 AM** at downstairs meeting room of the Hemet Public Library at 300 E. Latham Avenue, Hemet, CA 92543.

Date: October 10, 2011

Signature: _____

Ron Running, Project Planner

Telephone: (951) 765-2375

INITIAL STUDY FOR:

NORTH HEMET

SPECIFIC PLAN



prepared for:

CITY OF HEMET

445 East Florida Avenue
Hemet, CA 92543
951.765.2375

Contact:
Ron Running
Project Planner

prepared by:

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Senior Planner

CORV-01.2L

OCTOBER 2011

Table of Contents

Section		Page
1.	**INTRODUCTION**	**1**
1.1	PROJECT LOCATION	1
1.2	ENVIRONMENTAL SETTING	1
1.3	PROJECT DESCRIPTION	2
1.4	EXISTING ZONING AND GENERAL PLAN	15
1.5	CITY ACTION REQUESTED	15
2.	**ENVIRONMENTAL CHECKLIST**	**21**
2.1	BACKGROUND	21
2.2	ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	23
2.3	DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)	23
2.4	EVALUATION OF ENVIRONMENTAL IMPACTS	24
3.	**ENVIRONMENTAL ANALYSIS**	**33**
3.1	AESTHETICS	33
3.2	AGRICULTURE AND FOREST RESOURCES	34
3.3	AIR QUALITY	35
3.4	BIOLOGICAL RESOURCES	37
3.5	CULTURAL RESOURCES	39
3.6	GEOLOGY AND SOILS	41
3.7	GREENHOUSE GAS EMISSIONS	43
3.8	HAZARDS AND HAZARDOUS MATERIALS	43
3.9	HYDROLOGY AND WATER QUALITY	45
3.10	LAND USE AND PLANNING	48
3.11	MINERAL RESOURCES	48
3.12	NOISE	49
3.13	POPULATION AND HOUSING	50
3.14	PUBLIC SERVICES	51
3.15	RECREATION	53
3.16	TRANSPORTATION/TRAFFIC	54
3.17	UTILITIES AND SERVICE SYSTEMS	56
3.18	MANDATORY FINDINGS OF SIGNIFICANCE	57
4.	**REFERENCES**	**59**
4.1	PRINTED REFERENCES	59
4.2	PERSONAL COMMUNICATIONS	59
4.3	WEB SITES	59
5.	**LIST OF PREPARERS**	**63**
	LEAD AGENCY	63
	THE PLANNING CENTER|DC&E	63

List of Figures

Figure		Page
Figure 1	Regional Location	5
Figure 2	Local Vicinity	7
Figure 3	Property Ownership	9
Figure 4	Aerial Photograph	11
Figure 5	North Hemet Specific Plan	13
Figure 6	Existing General Plan Land Use Designations	17
Figure 7	Existing Zoning	19

List of Tables

Table		Page
Table 1	Land Use Categories	3
Table 2	Land Use Plan Statistical Summary	3
Table 3	Examples of Construction Phase Stormwater Pollution Prevention BMPs	42
Table 4	Hemet USD and San Jacinto USD Schools Serving Project Site	52
Table 5	Parks within One Mile of Project Site	53

1. Introduction

The Redevelopment Agency for the County of Riverside is seeking the City of Hemet's approval of the North Hemet Specific Plan with a General Plan Amendment and Zone Change. The North Hemet Specific Plan would permit a maximum of 442 high-density units (100 units within mixed-use areas) and 83 medium density residential units; 118,919 square feet of commercial uses; and 16,335 square feet of office uses. The 28.6-acre project site is west of State Street between Oakland Avenue on the south and the multifamily residential land uses north of Menlo Avenue. The North Hemet Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities.

In compliance with the California Environmental Quality Act (CEQA), the City of Hemet, as lead agency, is preparing the environmental documentation for the project to determine if approval of the discretionary actions requested and subsequent development would have a significant impact on the environment. As defined by Section 15063 of the CEQA Guidelines, an initial study is prepared primarily to provide the lead agency with information to use as the basis for determining whether an environmental impact report (EIR), negative declaration, or mitigated negative declaration would be appropriate for providing the necessary environmental documentation and clearance for the proposed project.

1.1 PROJECT LOCATION

The project site comprised of 37 parcels totaling 28.6 acres in the northwestern portion of the City of Hemet, Riverside County, California. It is within the North Hemet Subarea of the Redevelopment Agency for the County of Riverside's Mid-County Redevelopment Project Area (MCRPA). More specifically, the project site is bounded on the north and northwest by existing residential land uses, on the west by Alessandro Street, on the south by Oakland Avenue, and on the east by State Street. Figure 1, *Regional Location*, and Figure 2, *Local Vicinity*, show the location of the project site within the regional and local contexts of Riverside County and the City of Hemet, respectively. Regional access to the site is via State Route 74 (SR-74 or Florida Avenue), approximately 0.5 mile south of the site, and State Route 79 (SR-79 or San Jacinto Street), approximately 0.75 mile to the east. Local access to the site is via State Street, Alessandro Street, Oakland Avenue, and Menlo Avenue. Figure 3, *Property Ownership*, shows parcels owned by MCRPA.

1.2 ENVIRONMENTAL SETTING

1.2.1 Existing Land Use

There are a total of 18 structures and a 36-unit mobile home park within the boundaries of the North Hemet Specific Plan.

There are two single-family units near the western site boundary and several more at the northeast corner of the site along State Street on the portion of the site that is north of Menlo Avenue. Commercial/retail land uses north of Menlo Avenue include, Entenmann's/Orowheat bakery store along State Street; two auto service businesses (Fuentes Tires and an auto glass business); and one vacant commercial building along State Street. The northwest corner of the portion of the site north of Menlo Avenue is vacant land with a few scattered trees and several freight containers.

Several single-family residences front Oakland Avenue and one single-family unit fronts Alessandro Street on the portion of the site that is south of Menlo Avenue. The 39-unit Town and Country Mobile Home Park is at the southwest corner of Menlo Avenue and State Street. A liquor store and restaurant is at the southeast corner of the site near Oakland Avenue. The remainder, or roughly four-fifths, of the southern part of the site that is south of Menlo Avenue is vacant land vegetated with grasses and scattered shrubs and trees.

1.2.2 Surrounding Land Use

Surrounding land uses are shown in Figure 4, *Aerial Photograph,* and include: single-family and mobile homes to the west; the Hemet Stock Farm to the south; commercial uses, including a gas station, a construction business, and a day care facility to the east; and a multifamily residential complex to the north. In addition, the Burlington Northern-Santa Fe (BNSF) railroad tracks that extend from the Perris Valley Line run north–south parallel to the site and approximately 700 feet east.

1.3 PROJECT DESCRIPTION

1.3.1 Proposed Land Use

The proposed project involves the development of a specific plan on an approximately 28.6-acre site within the North Hemet Subarea of the MCRPA in the City of Hemet. A specific plan acts as a bridge between the general plan and individual development proposals. It combines development standards and design guidelines, capital improvement programs, and financing methods into a single document that is tailored to meet the needs of a specific area. Jurisdictions may adopt specific plans by resolution or ordinance. The North Hemet Specific Plan would be adopted as ordinance and would serve as the zoning for the project site. It would establish the necessary plans, development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent project-related development activities. Local public works projects, design review plans, detailed site plans, grading and building permits, or any other action requiring ministerial or discretionary approval applicable to the project area must be consistent with the specific plan.

Land Use Categories

The proposed project would be developed by a number of landowners over time, within the framework established by the North Hemet Specific Plan. The specific plan calls for a range of residential densities and product types, neighborhood commercial, office, community facilities, and recreational land uses. Table 1 describes the land use categories in the North Hemet Specific Plan. In addition, detention basins in the Planning Areas would provides for dual use as a passive park with drainage and detention uses, including drainage swales.

Table 1
Land Use Categories

Designation	Land Use	Description
Medium Density Residential (MDR)	8.0–18.0 units per acre	Provides for medium-density residential use (such as detached greencourt homes, paired homes, cottage clusters, rowtowns, garden apartments, assisted living, live-work).
High Density Residential (HDR)	18.1–30.0 units per acre	Provides for high-density multifamily residential uses (such as motorcourt, garden and family apartments, cottage clusters, rowtowns, assisted living, live-work).
Neighborhood Mixed-Use Node (NMUD)	Office	Provides for a mix of professional office and related support services uses.
	Commercial	Provides for neighborhood retail and service uses
	Residential: 18.1–30.0 units per acre	Provides for high-density multifamily residential uses adjacent to or above non-residential uses.
Street Right-of-Way (ROW)		Accommodates local roads within the project. Does not include private drives or alleys.

Land Use Plan

The Land Use Plan for the North Hemet Specific Plan area has been divided into seven planning areas, as described in Table 2 and shown on Figure 5, *North Hemet Specific Plan*. The project would allow transfer of units (or development potential) between Planning Areas.

Table 2
Land Use Plan Statistical Summary

Planning Area	Land Use		Gross Acres[1]	Max. Residential Density	Floor-Area Ratio (FAR)[2]	Maximum Buildout Potential	
						Residential Units[3]	Square Feet, Nonresidential
1	HDR[4]	Residential	6.4	30.0		192	
2	NMUN	Commercial	4.0		0.35		38,115 – Retail
		Office			0.25		16,335 – Office
3	MDR	Residential	2.2	18.0		40	
4	NMUN	Residential	3.5	30.0	0.35	40	53,361 – Retail
		Commercial					
5	HDR	Residential	5.0	30.0		150	
6	NMUN	Residential	3.8	30.0	0.35	60	27,443 – Retail
		Commercial					
7	MDR	Residential	2.4	18.0		43	
Public Street Right-of-Way (ROW)			1.3				
Total			**28.6**			**525**	**135,254**

Notes: FAR is the ratio of the total floor area of buildings to the gross acreage of the site.
[1] Gross site area includes local roads and any area devoted to detention areas. It does not include any existing public right-of-way. Includes section of existing public street (Menlo Avenue) within the Specific Plan boundary.
[2] F.A.R., or Floor Area Ratio, is the ratio of the total floor area of buildings in relation to the gross acres of the specified land use within a planning area.
[3] Units are based on gross acres multiplied by density.
[4] Planning Area 1 is intended for senior housing, including assisted living and non-assisted senior apartments or condominiums.

- **Planning Area 1.** Planning Area 1 would be bounded by Menlo Avenue on the south, Planning Area 2 on the east, existing multifamily apartments on the north, and existing single-family residences on the west. This planning area would comprise 6.4 gross acres of high density residential land use intended for a range of senior housing. It could develop a maximum of 192 dwelling units at 30.0 units per acre. In addition, a 0.29 acre detention basin is conceptually identified to handle the storm drainage needs of Planning Areas 1 and 2.

- **Planning Area 2.** Planning Area 2 would be bounded by Menlo Avenue on the south, State Street on the east, existing multifamily apartments on the north, and Planning Area 1 on the west. This planning area would comprise 1.5 acres of office use and 2.5 acres of commercial use. It could develop a maximum of 16,335 square feet of office use at a floor area ratio (FAR)1 of 0.25 and a maximum of 38,115 square feet of commercial uses at an FAR of 0.35.

- **Planning Area 3.** Planning Area 3 would be bounded by Planning Area 5 on the south, Planning Area 4 on the east, Menlo Avenue on the north, and Alessandro Street on the west. This planning area would comprise 2.2 gross acres of medium density residential land use, which includes a 0.24-acre retention basin to handle the storm drainage needs of Planning Areas 3, 4, and a portion of Planning Area 5. It could develop a maximum of 40 residential dwelling units at 18.0 units per acre.

- **Planning Area 4**. Planning Area 4 would be bounded by Planning Area 6 on the south, State Street on the east, Menlo Avenue on the north, and Planning Areas 3 and 5 on the west. This planning area would comprise 3.5 gross acres of mixed-use. It could develop a maximum of 53,361 square feet of commercial uses at an FAR of 0.35 and a maximum of 40 residential dwelling units at 30.0 units per acre.

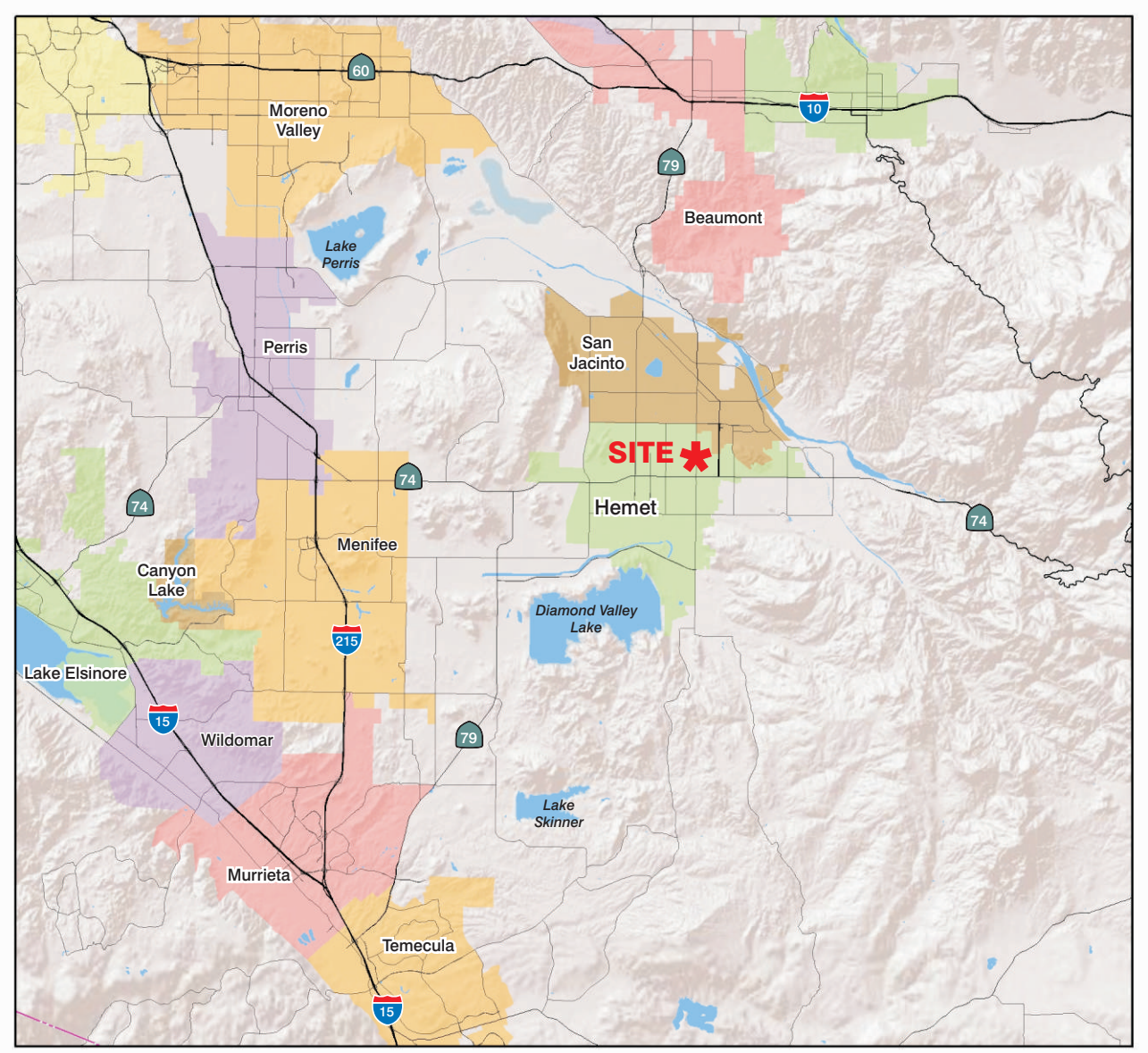
- **Planning Area 5.** Planning Area 5 would be bounded by Planning Area 7 on the south, Planning Areas 4 and 6 on the east, Planning Area 3 on the north, and Alessandro Street on the west. This planning area would comprise 5.0 gross acres of high density residential land use. It could develop a maximum of 150 residential dwelling units at 30.0 units per acre.

- **Planning Area 6.** Planning Area 6 would be bounded by Oakland Avenue on the south, State Street on the east, Planning Area 4 on the north, and Planning Areas 5 and 7 on the west. This planning area would comprise 3.8 gross acres of mixed-use. It could develop a maximum of 60 residential dwelling units at 30.0 units per acre and a maximum 27,443 square feet of commercial uses at an FAR of 0.35.

Planning Area 7. Planning Area 7 would be bounded by Oakland Avenue on the south, Planning Area 6 on the east, Planning Area 5 on the north, and Alessandro Street on the west. This planning area would comprise 2.4 gross acres of medium density residential land use, which includes a 0.24-acre detention basin to handle the storm drainage needs of Planning Areas 6 and 7, and a portion of Planning Area 5. It could develop a maximum of 43 residential dwelling units at 18.0 units per acre.

[1] The ratio of the total floor area of buildings (i.e., building square footage) to the gross acreage of the site.

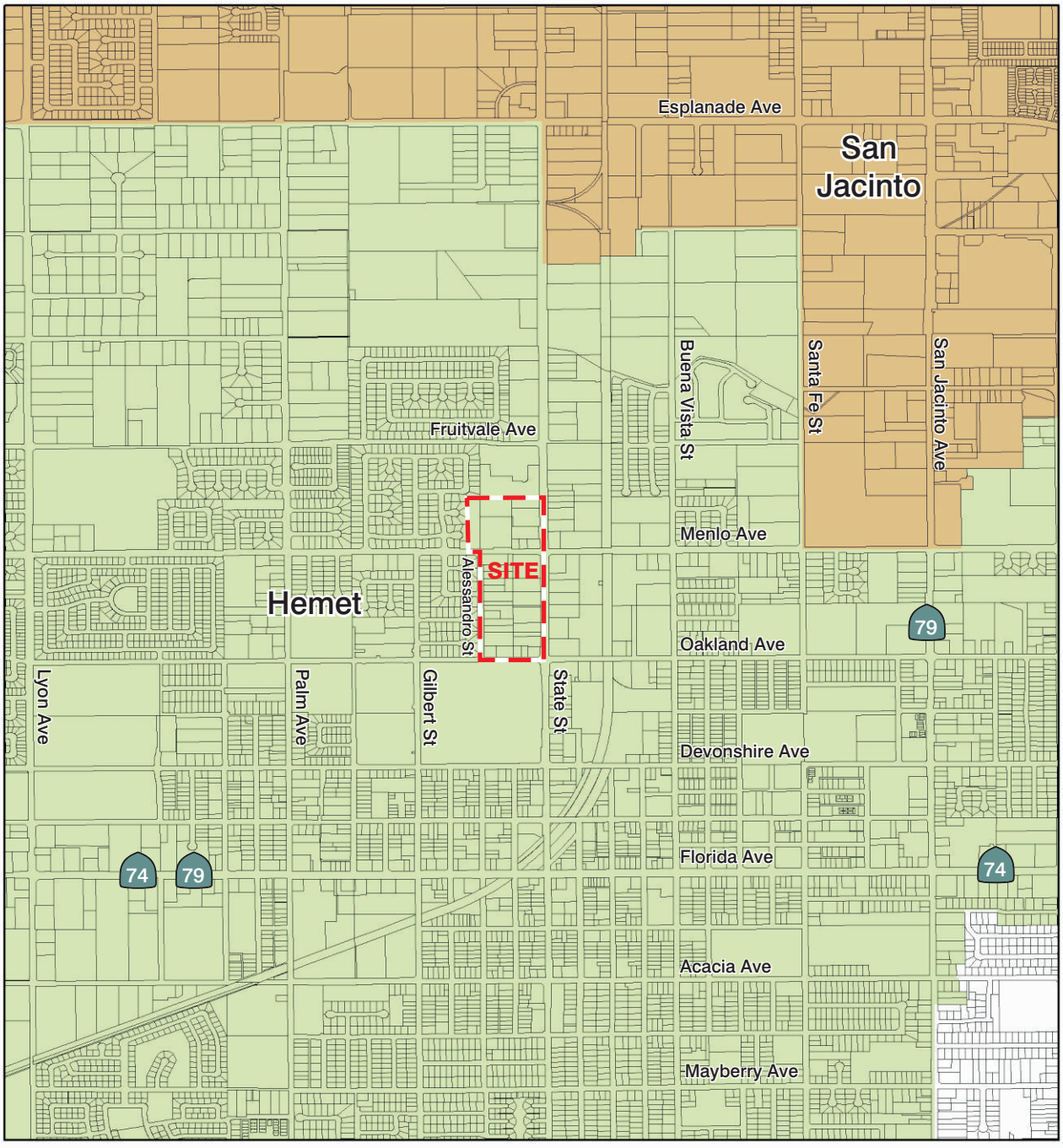
Regional Location



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Local Vicinity

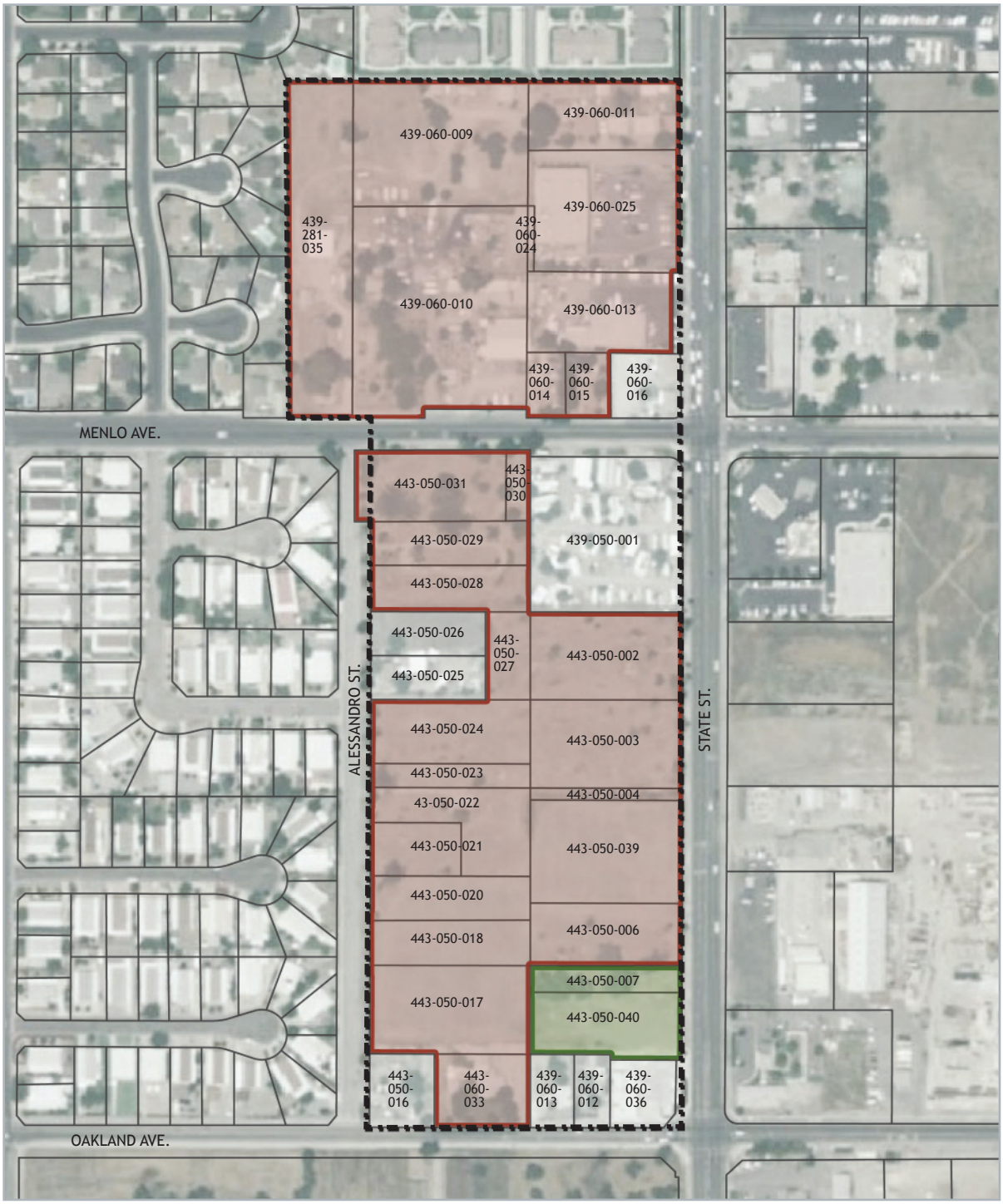


Specific Plan Boundary

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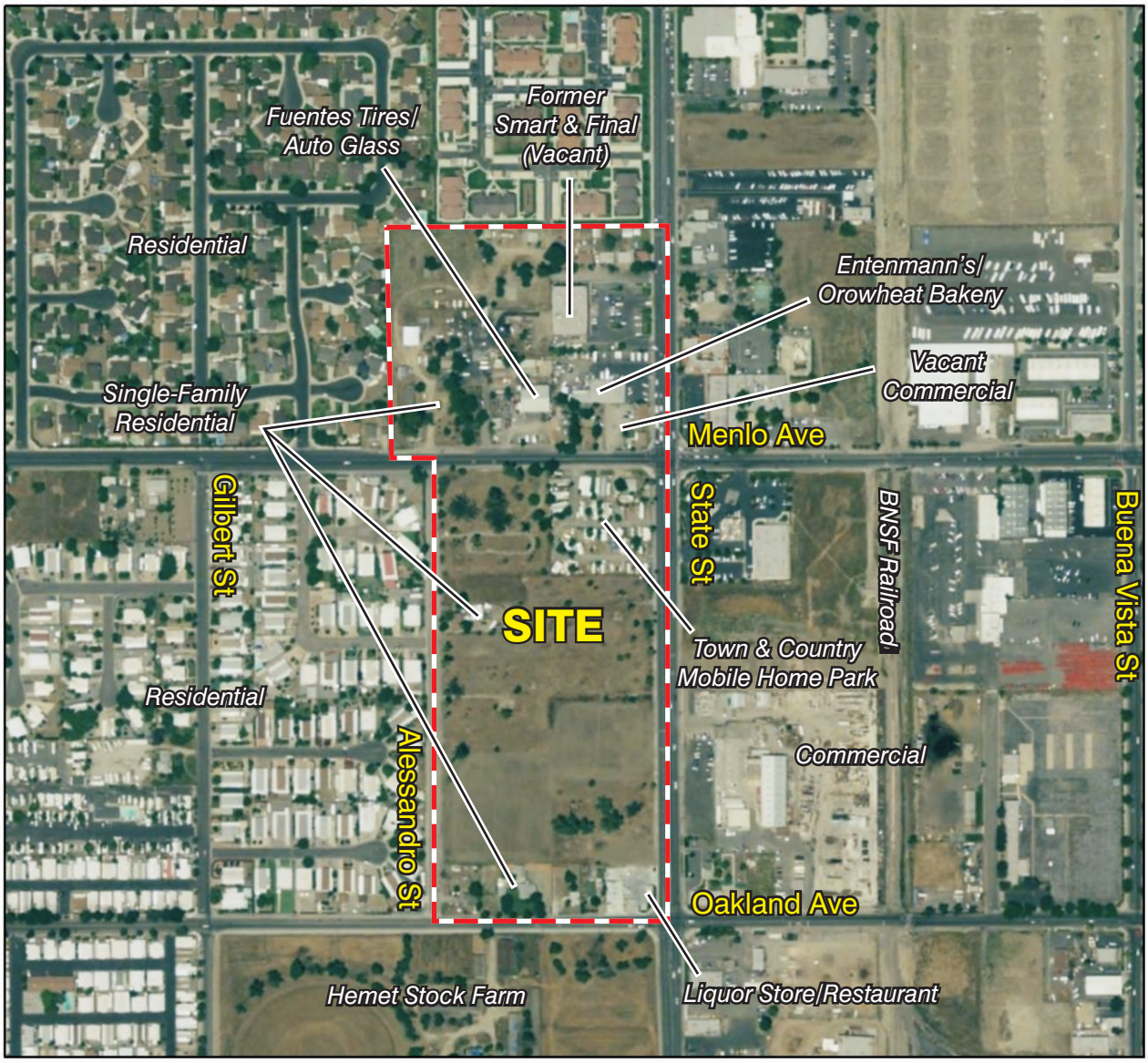
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Property Ownership



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Aerial Photograph

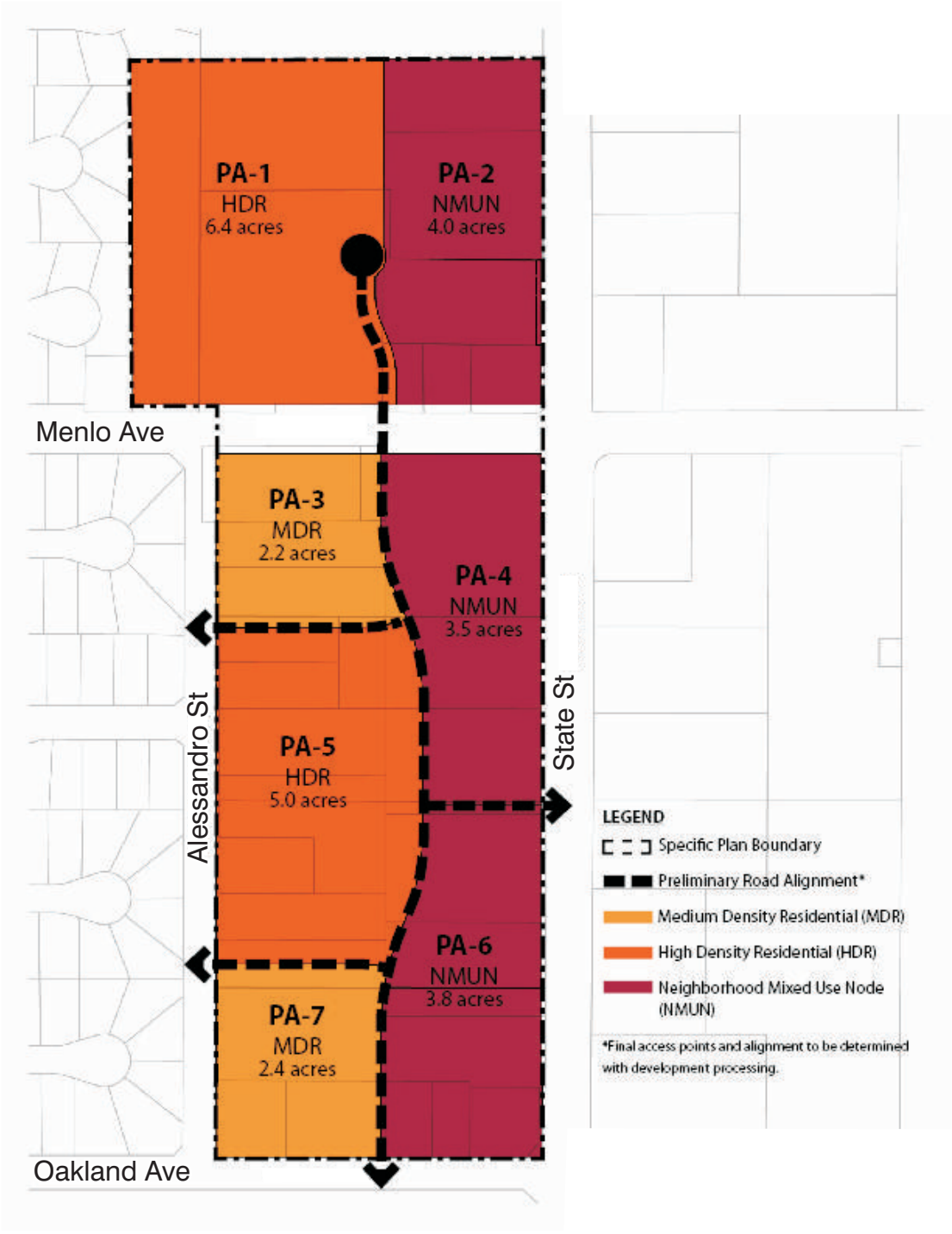


Specific Plan Boundary

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North Hemet Specific Plan



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Access and Circulation Plan

As part of the development plan for the North Hemet Specific Plan, the proposed infrastructure would include a pedestrian and vehicular circulation system, including roadways, landscaping, parks, street lighting, sidewalks, and pedestrian paths. The access and circulation plan for the specific plan is intended to efficiently integrate the proposed project into the City's transportation network. The proposed system of vehicular streets, pedestrian paths, and bikeways would provide convenient, efficient, and safe access to uses within the proposed project as well as to offsite destinations.

Access to the project site would be provided via entries along State Street, Menlo Avenue, Oakland Avenue, and Alessandro Street. Some entries would be signal controlled and others stop-sign-controlled; some would provide all-way turning movements while others would be right-in/right-out only.

A network of internal roadways would be developed within the project site. These internal roadways would accommodate low-speed traffic for vehicular circulation and connect to public streets along the perimeter of the project site. The internal roads would consist of both local roads and smaller access roads or alleys serving development. In addition to the above roadways, roundabouts (also known as traffic circles) may be provided at key locations to highlight key internal intersections and help facilitate vehicular and pedestrian traffic.

1.3.2 Project Phasing

The project would be constructed in two phases beginning in 2012 and would be built out by 2020. Phase one includes Planning Areas1 and 2 north of Menlo Avenue. Phase 1 would commence in 2012 and would be complete by 2016. Phase 2 would commence in 2016 and would be complete by 2020 and would involve Planning Areas 3 through 7 south of Menlo Avenue.

1.4 EXISTING ZONING AND GENERAL PLAN

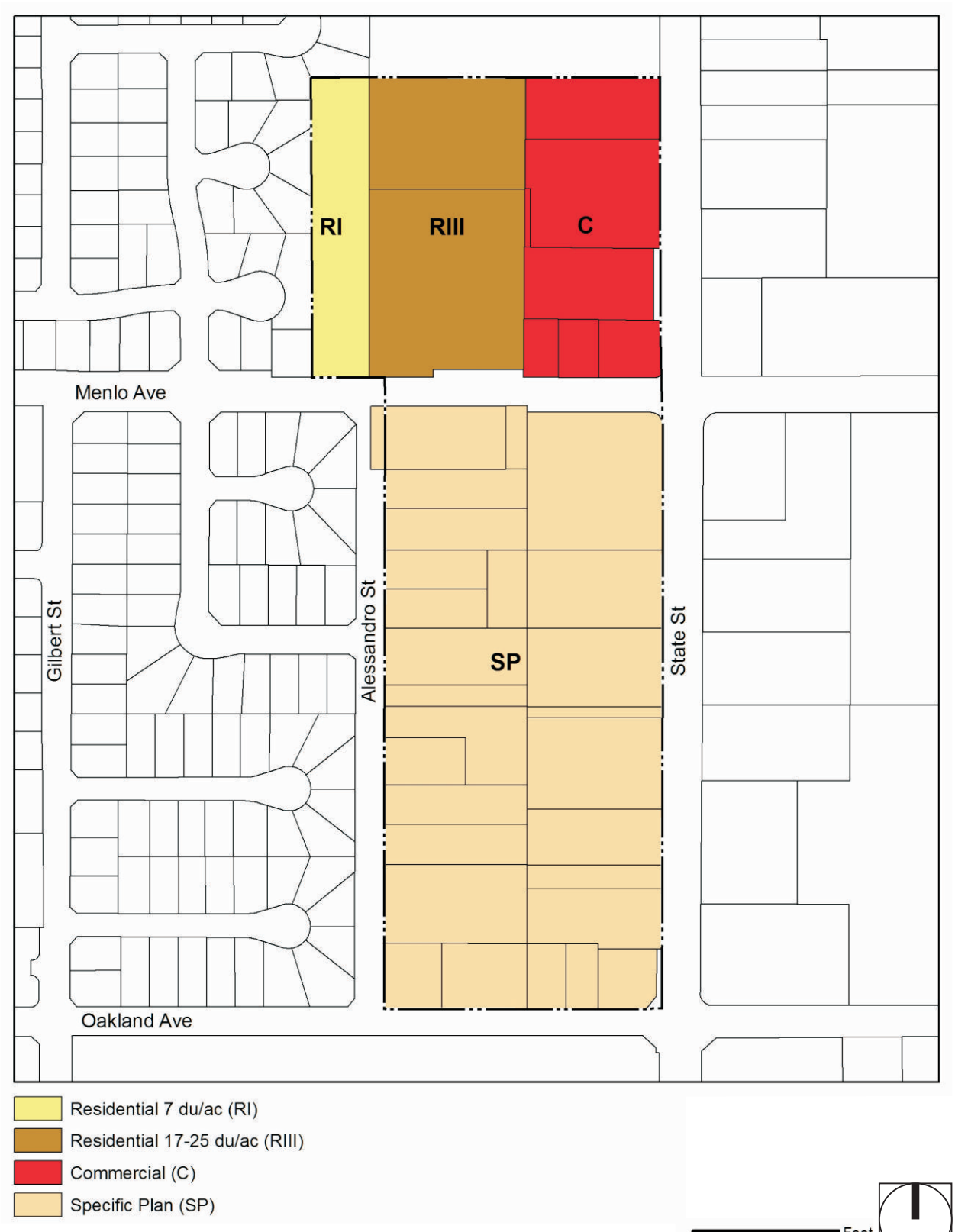
The existing General Plan land use designations onsite are shown in Figure 6, Existing General Plan Land Use Designations, and include RI – Residential (7 dwelling units per acre), RIII – Residential (17 to 25 dwelling units per acre), C – Commercial, and SP – Specific Plan (Hemet 1994). The existing zoning districts onsite are shown in Figure 7, Existing Zoning, and are R-1 (Single-Family Residential), R-3 (Multiple Family Residential), C-1 (Neighborhood Commercial), and C-2 (General Commercial) (Hemet 2007).

1.5 CITY ACTION REQUESTED

- North Hemet Specific Plan: Adoption of North Hemet Specific Plan by ordinance.
- General Plan Amendment: Approval of General Plan Amendment to designate the project site as the North Hemet Specific Plan.
- Zone Change: Approval of a Zone Change to Specific Plan.

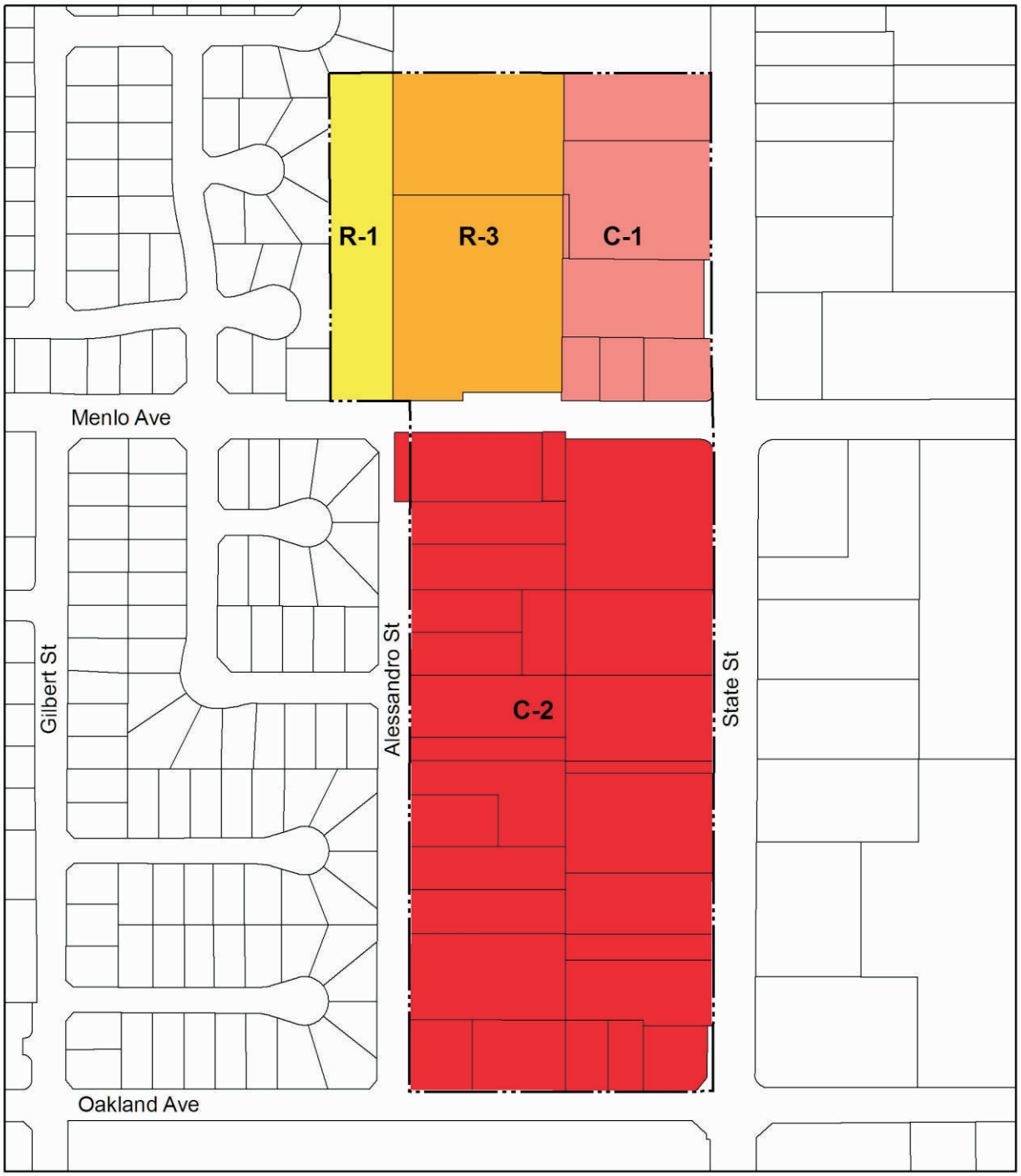
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Existing General Plan Land Use Designations



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Existing Zoning



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2. Environmental Checklist

2.1 BACKGROUND

1. **Project Title:** North Hemet Specific Plan

2. **Lead Agency Name and Address:**
   City of Hemet
   445 East Florida Avenue
   Hemet, CA 92543

3. **Contact Person and Phone Number:**

   Ron Running, Project Planner
   951.765.2393

4. **Project Location:** The 28.6-acre project site is in the City of Hemet in Riverside County, California. The site is bound by Oakland Avenue on the south; State Street on the east; Alessandro Street on the west; and residential uses on the north.

5. **Project Sponsor's Name and Address:**
   Heidi Marshall, Assistant Director
   Redevelopment Agency for the County of Riverside
   3403 Tenth Street, Suite 500
   Riverside, CA 92501

6. **General Plan Designation:** RI – Residential (7 dwelling units per acre), RIII – Residential (17 to 25 dwelling units per acre), C – Commercial, and SP – Specific Plan.

7. **Zoning:** R-1 (Single-Family Residential), R-3 (Multiple Family Residential), C-1 (Neighborhood Commercial), and C-2 (General Commercial).

8. **Description of Project:** The Redevelopment Agency for the County of Riverside is seeking the City of Hemet's approval of the North Hemet Specific Plan with a General Plan Amendment and Zone Change. The North Hemet Specific Plan would permit a maximum of 442 high-density units (100 units within mixed-use areas) and 83 medium density residential units; 118,919 square feet of commercial uses; and 16,335 square feet of office uses. The 28.6-acre project site is on the west side of State Street, extending from Oakland Avenue on the south to north of Menlo Avenue. The North Hemet Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities.

9. **Surrounding Land Uses and Setting**: Surrounding land uses include: single-family and mobile homes to the west; multifamily residential to the north, the Hemet Stock Farm to the south; and commercial uses, including a gas station, a construction business, and a day care facility to the east.

10. Other Public Agencies Whose Approval Is Required:

Redevelopment Agency for the County of Riverside
Santa Ana Regional Water Quality Control Board: Approval of water quality management plan
Riverside County Flood Control and Water Conservation District: Approval of project drainage plan

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agricultural and Forest Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☒ Geology / Soils
☒ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials	☒ Hydrology / Water Quality
☒ Land Use / Planning	☐ Mineral Resources	☒ Noise
☒ Population / Housing	☒ Public Services	☒ Recreation
☒ Transportation / Traffic	☒ Utilities / Service Systems	☒ Mandatory Findings of Significance

2.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Nicole Vermilion — *Signature*

10/11/2011 — *Date*

Nicole Vermilion — *Printed Name*

Ron Running, City of Hemet — *For*

2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) **Earlier Analyses Used.** Identify and state where they are available for review.

   b) I**mpacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	*Potentially Significant Impact*	*Less Than Significant With Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	X			
II. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. **Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:**				
a) Conflict with or obstruct implementation of the applicable air quality plan?	X			
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	X			
d) Expose sensitive receptors to substantial pollutant concentrations?	X			
e) Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. **Would the project:**				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	
V. CULTURAL RESOURCES. **Would the project:**				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	X			

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	
VI. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	X			
ii) Strong seismic ground shaking?	X			
iii) Seismic-related ground failure, including liquefaction?	X			
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	X			
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X			
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	X			
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			X	
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	X			
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site	X			
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	X			
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	X			
f) Otherwise substantially degrade water quality?	X			
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	X			
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	X			

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	X			
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X			
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X			
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			X	
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	X			

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	X			
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	X			
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	X			
b) Police protection?	X			
c) Schools?	X			
d) Parks?	X			
e) Other public facilities?	X			
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	X			
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	X			
XVI. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	X			
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	X			
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X			
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	X			

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Result in inadequate parking capacity?	X			
XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	X			
e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	X			
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	X			
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X			
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

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3. Environmental Analysis

Section 2.3 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Scenic vistas are views of features such as mountains, forests, the ocean, or urban skylines, generally more than one mile distant from the viewer. Scenic vistas visible from the site include the San Jacinto Mountains to the east and northeast; the Lakeview Mountains to the west; and the Santa Rosa Hills to the south. There are no protected viewsheds that would be impacted by the project; a protected viewshed is a scenic view from public property (such as roads, trails, or open space) that is protected by public policy. The San Jacinto Mountains rise steeply just east of the City of Hemet, and reach a peak elevation of 10,804 feet; thus, buildout of the Specific Plan would not substantially degrade vistas of the San Jacinto Mountains from residential uses west of the site. Views of the Santa Rosa Hills from residential uses north of the site are already blocked by buildings onsite; Specific Plan buildout would not degrade such vistas. The commercial uses east of State Street are not sensitive uses regarding scenic vistas; therefore, the project would not substantially degrade scenic vistas to the west from east of the site. Views of the northern San Jacinto Mountains from the northernmost part of the site are already blocked by two-story multifamily residences next to the northern site boundary. The project would not substantially degrade scenic vistas and there are no protected viewsheds in the vicinity of the project site. Impacts would be less than significant. No mitigation is needed and this issue will not be discussed further in the EIR.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest State Scenic Highway to the project site is SR-74 approximately seven miles east of the site (Caltrans 2007). Project development would not substantially damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is needed. This topic will not be discussed further in the EIR.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Potentially Significant Impact. The project would substantially change the visual character of the site. The part of the project site north of Menlo Avenue is presently developed with commercial and residential uses, except for the northwest corner of the site, which is vacant land with a few scattered trees and several freight containers, but is not visible from public roads. The part of the site south of Menlo Avenue is mostly vacant land vegetated with grasses and scattered shrubs and trees. Land uses on that part of the site include a mobile home park at the southwest corner of State Street and Menlo Avenue; several single-family detached homes; and one commercial building at the southeast corner. The vegetation on the vacant parcels is not irrigated or well maintained. A commercial building near the northeast corner of the site is vacant. At buildout of the proposed Specific Plan, the site would be developed with medium-high density and high density residential uses, office and commercial uses, parks and open space, and roadways and pedestrian paths.

The project site is surrounded by State Street and commercial uses to the east; Alessandro Street and residential uses to the west; residential uses to the north; and Oakland Avenue and the historic Hemet Stock Farm property to the south. The EIR will evaluate potential changes in the aesthetic character of the project site as a result of development of the proposed project. Mitigation measures will be incorporated as necessary.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. The project would include outdoor security and street lighting associated with proposed residential, commercial, and office structures. The EIR will evaluate the potential for these new sources of illumination to result in substantial light or glare. Mitigation measures will be incorporated as necessary.

3.2 AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation (CDC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project (FRAP) and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site is not mapped as any category of farmland by the Division of Land Resource Protection (DLRP 2009). The part of the project site south of Menlo Avenue, except for the mobile home park at the southwest corner of Menlo Avenue and State Street, is mapped as Other Land which is land other than urban land that is not suitable for agricultural production; this category includes low-density rural development, brush, wetlands, and riparian areas. Project development would not convert mapped farmland to nonagricultural use, and no impact would occur. This topic will not be included in the EIR.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. There are no Williamson Act contracts in effect on the site (DLRP 2007). The existing zoning districts onsite are R-3 (Multiple Family Residential), C-1 (Neighborhood Commercial), and C-2 (General Commercial). Agricultural uses are not permitted in these zones, except for certain types of poultry and small mammals in the R-3 zone. Such uses are usually inside structures and do not use agricultural soil directly. The project would not conflict with zoning for agricultural use or a Williamson Act contract, and no impact would occur. This issue will not be evaluated in the EIR.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. Zoning designations onsite are listed previously in Section 1.4. There is no zoning onsite for forest land, timberland, or timberland production, and project development would not conflict with any such zoning. No impact would occur. This issue will not be discussed in the EIR.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (California Public Resources Code Section 12220[g]). Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees" (California Public Resources Code Section 4526). There are scattered trees and shrubs onsite, including one small windrow that appears to be left from past agricultural use onsite. However, the great majority of the vegetation onsite is grasses common to disturbed sites in urban southern California. The land does not support trees sufficient to meet the definition of either forest land or timberland. Furthermore, the project site is not mapped as forestland by CAL FIRE (CAL FIRE 2003). Project development would not convert forest land or timberland to nonforest use, and no impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The project site is surrounded by urban residential and commercial uses. Project development would not cause conversion of farmland or forest land to nonagricultural or nonforest use, and no impact would occur.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. Emissions projections for the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) are based on land use designations in adopted General Plans. The proposed project would require a General Plan Amendment and therefore has the potential conflict with the AQMP. This issue will be addressed in the EIR.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. Project construction and increased vehicular traffic generated by development of the Specific Plan have the potential to generate fugitive dust, various stationary source emissions, and mobile emissions. Air pollutant emissions associated with the project could occur over the short term for site preparation and construction activities to support the proposed land use. In addition,

emissions could result from the long-term operation of the completed project. An air quality analysis is required to determine if the resulting project's short- or long-term emissions would violate any air quality standards or exceed SCAQMD's regional significance thresholds. Further evaluation in the EIR is necessary. Mitigation measures will be incorporated as needed.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Potentially Significant Impact. The South Coast Air Basin (SoCAB) is designated as nonattainment for O_3 and $PM_{2.5}$ under the California and national ambient air quality standards (AAQS), and nonattainment for PM_{10}, NO_x, and lead (Los Angeles County only) under the California AAQS. In accordance with SCAQMD methodology, any project that does not exceed or can be mitigated to less than the daily threshold values does not add significantly to a cumulative impact (SCAQMD 1993). As mentioned above, air pollutant emissions associated with the project could occur over the short term for site preparation and construction activities to support the proposed land use. In addition, emissions could result from the long-term operation of the completed project. An air quality analysis is required to determine if the project will result in a cumulatively considerable net increase in any criteria pollutant. Further evaluation in the EIR is necessary. Mitigation measures will be incorporated as needed.

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. The project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Localized concentrations refer to the amount of pollutant in a volume of air (ppm or $\mu g/m^3$) and can be correlated to potential health effects. The nearest sensitive receptors to the project site are the residential land uses immediately adjacent to the project boundary. Short-term impacts related to construction could potentially expose sensitive receptors to substantial concentrations of air pollutants. An air quality analysis is required to determine if sensitive receptors would be exposed to substantial pollutant concentrations. Further evaluation in the EIR is necessary. Mitigation measures will be incorporated as needed.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Odors are one of the most obvious forms of air pollution to the general public. Odors can present significant problems for both the source and the surrounding community. Although offensive odors seldom cause physical harm, they can cause agitation, anger, and concern to the general public. Most people consider an odor objectionable if it is sensed longer than the duration of a human breath, typically 2 to 5 seconds.

A minimal amount of objectionable odors, such as diesel exhaust from demolition activities, construction equipment, and laying asphalt, would be created during the demolition, grading, and construction of the proposed project. However, construction would occur at limited locations for short periods of time. Furthermore, no long-term objectionable odors would be created with implementation of the residential, commercial, and office structures. Odor complaints are subject to SCAQMD Rule 402, Nuisance, which requires that odors not result in a nuisance or annoyance to the public. Odor impacts resulting from the proposed project are therefore not considered significant. No mitigation measures are necessary. This issue will not be addressed further in the EIR.

3.4 BIOLOGICAL RESOURCES

The following analysis is based on a review of existing information, including a database search of biological resources and habitat conservation plans (HCPs) applicable to the project site. This information was supplemented with a review of aerial images, and photographs by Phil Brylski, Senior Biologist, at The Planning Center|DC&E to determine the potential for biological resources to occur onsite.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Special status species include those listed as endangered or threatened under the federal Endangered Species Act (ESA) or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Game (CDFG); and plant species listed as rare by the California Native Plant Society. Vegetation onsite includes grasses typical of disturbed sites in urban southern California and scattered trees and shrubs. Habitat types onsite consist of nonnative grassland, disturbed, and ruderal[2]. Trees onsite are ornamental or remain from past agricultural use of the site. There is no native habitat onsite. The site is surrounded by developed urban uses. There is suitable foraging habitat (nonnative grassland) onsite for the following sensitive species: burrowing owl (*Athene cunicularia*), ferruginous hawk (*Buteo regalis*); pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), western yellow bat (*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*) (CDFG 2010). However, the site does not otherwise contain suitable habitat for sensitive species. There is abundant agricultural land and open space near the City of Hemet available for foraging by raptors and bats, and the loss of foraging onsite would not be substantial compared to the amount of such habitat in the region.

The project site is in the plan area of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP); the Stephens' kangaroo rat (SKR) is listed as federally endangered and as threatened by the state. SKR occurs in coastal sage scrub and in transition areas between coastal sage scrub and other habitats, especially grasslands. There is no coastal sage scrub on or near the project site; thus, the potential for SKR to occur onsite is considered low. Impacts to sensitive species would be less than significant. This issue will not be evaluated further in the EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact. There is no riparian habitat and no sensitive natural communities onsite. The nearest US Geological Survey (USGS) blue-line stream is a drainage channel approximately 1.9 miles to the southeast. The site is not identified as ecologically sensitive or as containing sensitive habitat in local or regional plans, or in the SKRHCP or the Western Riverside County Multiple-Species Habitat Conservation Plan (WRCMSHCP) (Hemet 1992; RCIP 2003; RCHCA 2009; WRCRCA 2010). Therefore, there would be no impacts to riparian habitat or sensitive natural communities. Impacts are less than significant. This issue will not be discussed in the EIR.

[2] Vegetation on disturbed habitats, consisting largely of nonnative grasses and shrubs.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. There are no federally protected wetlands onsite, and no impact would occur. Moreover, project implementation would not involve direct removal, filling, hydrological interruption, or other direct or indirect impact to wetlands under jurisdiction of regulatory agencies. This issue will not be discussed further in the EIR.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The project site does not serve as a wildlife dispersal or migration corridor. The City of Hemet General Plan designates three areas of biological sensitivity in or near the City that are each long and linear in shape, and two of the areas surround USGS blue-line streams (Hemet 1992); thus, these areas may be suitable wildlife movement and/or migration corridors. One area is along Bautista Creek and the second is along the San Jacinto River; both of these areas are outside the eastern City boundary. The third area extends north–south in the western part of the City near Warren Avenue. The project site is not in or near any of these three areas. However, ornamental trees and shrubs on the project site can provide foraging and nesting habitat for birds. Project development could impact migratory birds, including nesting birds that may use trees on and near the site. The Migratory Bird Treaty Act of 1918 (MBTA) implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. US Fish and Wildlife Service (USFWS) administers permits to take migratory birds in accordance with the regulations pursuant to the MBTA. The applicant would be required to comply with these regulations. Options for compliance with the MBTA include: a) avoiding grading activities during the nesting season, February 15 to August 15; or b) if grading activities are to be undertaken during the nesting season, a site survey for nesting birds by a qualified biologist before commencement of grading activities. If nesting birds are found, the applicant would consult with the USFWS regarding means to avoid or minimize impacts to nesting birds. Adherence to the MTBA regulations would ensure that if construction occurs during the breeding season, appropriate measures would be taken to avoid impacts to nesting birds. No significant impacts would occur. This issue will not be discussed further in the EIR.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact The City of Hemet does not have an ordinance protecting trees on private property. The City's General Plan Strategy II-E.4(5) states that where the removal of existing trees is reasonably unavoidable, all mature tree removals (those four inches or greater in diameter) require replacement at a 3-to-1 ratio with 15-gallon minimum nursery trees. Trees planted for agricultural production are exempted from this policy; however, such trees should be incorporated into the project design to the extent practicable. Some of the trees onsite are in windrows, that is, straight lines, and thus appear to be remnants of past agricultural use; other trees onsite have been grown for ornamental use. Trees remaining from past agricultural use are exempt from required replacement; ornamental trees would require replacement. The project would not conflict with such policy, and no impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant Impact The project site is in the plan area of two habitat conservation plans (HCPs) that have been adopted for the protection of biological resources: the WRCMSHCP and the SKRHCP. The project site is not in an area designated as a preserve under either of the two HCPs, and there are no survey requirements for the site under the WRCMSHCP (TLMA 2010). The project site is not in an area where surveys for SKR would be required under the SKRHCP. However, the project applicant would be required to pay an impact and mitigation fee under the SKRHCP and a mitigation fee under the WRCMSHCP (Hemet Municipal Code Sections 31-7 and 58-98, respectively). The project would comply with requirements of each HCP applicable to the project site, and no adverse impact would occur.

3.5 CULTURAL RESOURCES

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Potentially Significant Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally a resource is considered to be "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

An impact would be considered significant if a project changes the significance of a resource through actions such as demolition, replacement, substantial alteration, and relocation of historic properties (Public Resources Code § 5020.1).

There are 18 structures onsite: 4 commercial buildings and 14 residential structures. The Historic Resources Survey Report evaluated structures 45 or more years old for eligibility for listing on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), and the Riverside County Register of Historic Landmarks (RCRHL). Thirteen of the structures onsite were identified as 45 years or older; however, structures must also meet certain other conditions to be eligible for inclusion in the historic al register. In addition, buried historical resources may be present in site soils. The EIR will evaluate the presence of historical resources onsite and mitigation measures will be incorporated as necessary.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Potentially Significant Impact. Hemet and the surrounding area was occupied by several seminomadic Indian bands. The bands generally camped along the base of foothills throughout the San Jacinto Valley; archaeological resources have also been found along drainage courses. Evidence of their occupation

includes various forms of petroglyphs, that is, carvings into rock surfaces, and other rock markings and formations; discolored soil from years of campfires; and mortars (depressions in rocks that food was ground in) and slicks from food processing on bedrock features (City of Hemet 1992). Two Native American archaeological resources near the City of Hemet are listed as California Historical Landmarks: the Indian village of Pochea at the site of the Ramona Bowl approximately 2.8 miles southeast of the project site; and the Hemet Maze Stone, a pictograph (painting on rock) at Maze Stone Park approximately five miles west of the project site (OHP 2010). Buried archaeological resources could be present in site soils. Native American consultation is required for the North Hemet Specific Plan in accordance with Senate Bill 18 (SB 18). Project impacts on archaeological resources will be discussed in the EIR, and mitigation measures will be recommended as needed.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Impact. The project site is very nearly flat, with a west slope of approximately 0.7 percent. There are no unique geological features onsite. Riverside County has an extensive record of fossil life extending from the Jurassic Period (200 million years ago [mya] to 146 mya) to the present. The project site is in an area designated as highly sensitive for paleontological resources, that is, fossils, by the Riverside County General Plan (RCIP 2003),[3] There may be fossils in site soils; therefore, project impacts on paleontological resources will be discussed in the EIR and mitigation measures will be recommended as required.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. California Health and Safety Code Section 7050.5 requires that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation until the coroner has determined that the remains are not subject to provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Compliance with existing law would reduce potential impacts to human remains to less than significant, and no mitigation is needed. This issue will not be evaluated further in the EIR.

[3] The project site is in an area designated Highly Sensitive-B, indicating that fossils have been discovered in the region at depths of four feet or greater, and therefore fossils may be impacted during construction activities (RCIP 2003).

3.6 GEOLOGY AND SOILS

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Potentially Significant Impact. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent construction of buildings used for human occupancy on the surface of active faults to minimize the hazard of surface rupture of a fault to people and habitable buildings. An active fault is a fault that has had surface displacement within the last 11,000 years. The nearest known fault to the project site is the active Casa Loma Fault, 0.3 mile northeast of the site (CGS 2010). Project development may expose people or structures to hazards involving rupture of a known earthquake fault. This issue will be discussed further in the EIR.

ii) Strong seismic ground shaking?

Potentially Significant Impact. There are a number of active faults in the area that could generate strong ground shaking. The active Casa Loma Fault, which is one branch of the active San Jacinto Fault, passes approximately 0.3 mile northeast of the project site; a second branch of the San Jacinto Fault passes approximately 3.6 miles northeast of the site (CGS 2010). This topic will be evaluated further in the EIR.



iii) Seismic-related ground failure, including liquefaction?

Potentially Significant Impact. Liquefaction refers to loose, saturated sand or silt deposits that lose their load-supporting capability when strongly shaken. In general, soils that are susceptible to liquefaction are loose, saturated granular soils having low content of fine-grained particles (such as clays) and under low confining pressures. Liquefaction can make soils highly mobile, leading to lateral movement, sliding, consolidation and settlement of loose sediments, sand boils, and other damaging deformations. Lateral spreading is a form of seismic ground failure due to liquefaction in a subsurface layer. This issue will be evaluated in the EIR.

iv) Landslides?

No Impact. No evidence of slope instabilities or ancient landslides was observed onsite, and the potential for landslides onsite is considered negligible. The project site is almost flat, with a west slope of approximately 0.7 percent. No impact would occur, and no further analysis is needed.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Project development would not cause substantial soil erosion. Erosion is the movement of soil and rock from place to place. Erosion occurs naturally by agents such as wind and flowing water; however, grading and construction activities can greatly increase erosion if effective erosion control measures are not used. Common means of soil erosion from construction sites include water, wind, and being tracked offsite by vehicles.

The State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ (General Construction Permit) contains water quality standards and stormwater discharge requirements applying to construction projects of one acre or more. The General Construction Permit was issued pursuant to National Pollutant Discharge Elimination System (NPDES) regulations for implementing part of the federal Clean Water Act. The General Construction Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) that identifies the sources of pollution that may affect the quality of stormwater discharges and describes and ensures the implementation of best management practices (BMPs) to reduce the pollutants, including silt and soil, in construction stormwater discharges. The City of Hemet administers compliance with BMPs within the City. Examples of BMPs that are commonly included in SWPPPs are shown in Table 3.

Table 3
Examples of Construction Phase Stormwater Pollution Prevention BMPs

Category	*Goal*	*Sample Measures*
Erosion Controls	Prevent soil particles from being detached from the ground surface and transported in runoff	Preserving existing vegetation; soil binders; geotextiles and mats
Sediment controls	Filter out soil particles that have entered runoff	Barriers such as slit fences and gravel bag berms; and street sweeping
Tracking Controls	Prevent soil from being tracked offsite by vehicles	Stabilized construction roadways and entrances/exits
Wind Erosion Control	Prevent soil from being transported offsite by wind	Similar to erosion controls above
Non-stormwater Management	Prevent discharges of soil from site by means other than runoff and wind	BMPs regulating various construction practices; water conservation
Waste and Materials Management	Prevent release of waste materials into storm discharges	BMPs regulating storage and handling of materials and wastes

The project applicant would comply with NPDES permit requirements by preparing and implementing a SWPPP specifying BMPs for minimizing pollution of stormwater with soil and sediment during project construction. Impacts related to substantial soil erosion or the loss of topsoil would be less than significant. No mitigation measures are needed. No further analysis is necessary in the EIR.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Potentially Significant Impact. Liquefaction and lateral spreading are addressed above in Section 3.6.a.iii, and landslides are addressed above in Section 3.6.a.iv. Geologic hazards are potentially significant and will be evaluated in the EIR.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Potentially Significant Impact. Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking or swelling can shift, crack, or break structures built on such soils. This issue will be evaluated further in the EIR.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The project would not involve septic tanks or other alternative wastewater disposal systems. No impact would occur and no mitigation is needed. No additional evaluation is necessary in the EIR.

3.7 GREENHOUSE GAS EMISSIONS

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas (GHG) emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. The State of California, through its governor and legislature, has established a comprehensive framework for the substantial reduction of GHG emissions over the next 40-plus years. This will occur primarily through the implementation of Assembly Bill 32 (AB 32) and Senate Bill 375 (SB 375), which will address GHG emissions on a statewide, cumulative basis. The EIR will evaluate the potential for the project to generate a substantial increase in GHG emissions. Mitigation measures will be incorporated as necessary.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. The California Air Resources Board (CARB) adopted the Scoping Plan on December 11, 2008. The Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by AB 32, which is 1990 levels by year 2020. The EIR will evaluate consistency with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Mitigation measures will be incorporated as necessary.

3.8 HAZARDS AND HAZARDOUS MATERIALS

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. Project construction would involve use of hazardous materials such as fuels, greases, paints, and cleaning materials. The use, storage, transport, and disposal of hazardous materials by the project would be required to comply with existing regulations of several agencies, including the Department of Toxic Substances Control (DTSC), the United States Environmental Protection Agency (EPA), the Occupational Safety & Health Administration (OSHA), Hemet Fire Department, and the Riverside County Environmental Protection Oversight (EPO) Division.[4] Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner, and would minimize the potential for safety impacts to occur. Long-term operations of the proposed project would not involve routine transport, storage, use, and disposal of substantial amounts of hazardous materials. Hazardous materials impacts would be less than significant. This issue will not be discussed further in the EIR.

[4] The EPO Division is the Certified Unified Program Agency (CUPA) for Riverside County; the Certified Unified Program coordinates and makes consistent the administration and enforcement of several environmental and emergency response programs.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potentially Significant Impact. A recognized environmental condition (REC) is an existing or past release, or a material threat of a release, of hazardous substances or petroleum products into the ground, groundwater, or surface water, even under conditions in compliance with laws. A Phase I Environmental Analysis will be prepared to identify RECs associated with the project site. This issue will be addressed further in the EIR.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. There are no existing schools within 0.25 mile of the project site. The nearest school campus is 0.4 mile southeast of the project site (West Valley High School). The project would not generate hazardous emissions. The handling of hazardous materials by the project would comply with existing regulations and would not pose substantial hazards to persons at schools. Impacts would be less than significant. No additional analysis is necessary in the EIR.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Potentially Significant Impact. Government Code Section 65962.5 specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. The EIR will identify hazardous materials sites in the vicinity of the project. This issue will be evaluated further in the EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant Impact. Hemet-Ryan Airport is approximately 2.7 miles southwest of the project site. The project site is outside of Airport Compatibility Zones established for Hemet-Ryan Airport by the Riverside County Airport Land Use Commission (RCALUC 2006). Federal Aviation Administration (FAA) Part 77 regulations limit the heights of structures within specified distances of airports. The project is outside of the area surrounding Hemet-Ryan Airport governed by Part 77 regulations. The project would not cause hazards related to air traffic to or from airports for people on or near the project site. Impacts would be less than significant, and no mitigation is required. This issue will not be evaluated further in the EIR.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant Impact. The nearest private airstrip or heliport to the project site is the Hemet Valley Hospital Helistop near the intersection of Florida Avenue and San Jacinto Street approximately 0.75 mile southeast of the project site. Helicopters fly vertically when in the immediate vicinity of heliports. Project development would not cause a substantial hazard related to helicopter traffic for people on or near the project site. Impacts would be less than significant, and no mitigation is needed. No additional analysis is necessary in the EIR.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The County of Riverside has prepared a Multi-Jurisdictional Local Hazard Mitigation Plan (Multi-Jurisdictional LHMP) for coordination of emergency services during catastrophes and other emergency events associated with natural, man-made, and technological hazards (Riverside 2005). The City of Hemet is a participating jurisdiction in the County's Multi-Jurisdictional LHMP. The Multi-Jurisdictional LHMP identifies fire, police, and emergency operations centers; schools; hospitals; rail facilities; airports; highways; government buildings; red cross shelters; waste management and water treatment sites; reservoirs and lakes; and water, oil, and natural gas pipelines as critical facilities that must remain operational after a catastrophic event or pose an unacceptable risk to public safety if damaged. New structures would be built to achieve the applicable standards, designs, and construction practices to reduce risk to tolerable levels for projects involving critical facilities, residential development, and commercial development. The project would not interfere with an adopted emergency response plan, and impacts would be less than significant. No mitigation is needed. This issue will not be discussed further in the EIR.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. There is no wildland vegetation on or near the project site, as the site and surroundings are in an urban setting. The project site is not mapped in a fire hazard zone by the California Department of Forestry and Fire Protection (CalFire 2009). Therefore, project development would not expose people or structures to significant hazards arising from wildland fires. No impact would occur, and no mitigation is needed. This issue will not be addressed further in the EIR.

3.9 HYDROLOGY AND WATER QUALITY

a) Violate any water quality standards or waste discharge requirements?

Potentially Significant Impact. Standards regulating discharges to stormwater are contained in the Santa Ana Regional Water Quality Control Board's (SARWQCB) Order No. R8-2010-0033, which became effective January 29, 2010, and State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, which became effective July 1, 2010. Each of these orders were issued pursuant to National Pollution Discharge Elimination System (NPDES) regulations under the federal Clean Water Act (CWA). The potential pollutants generated due to conversion of vacant land and agricultural land into residential and commercial sites are sediment/turbidity, nutrients, organic compounds, trash and debris, oxygen-demanding substances, bacteria and viruses, oil and grease, pesticides, and metals.

Since the project has the potential to impact water quality, a preliminary water quality management plan (WQMP) is required for the proposed project. The WQMP is required to address existing water pollutants onsite; existing water pollutants impacting downstream receiving waters; and water quality impacts expected from Specific Plan buildout, and to specify best management practices for minimizing water pollution from the project. The impact to downstream water quality due to the proposed development would be mitigated by appropriate site design and source control and treatment control BMPs. An SWPPP is also required for the project; the SWPPP would specify BMPs for minimizing pollution of stormwater from project construction activities. The WQMP and SWPPP will be discussed in the EIR and mitigation measures will be recommended as needed.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. Development of the North Hemet Specific Plan project would increase development intensity and therefore increase impervious surfaces at the project site. The groundwater basin underlying the site is the San Jacinto Groundwater Basin. Natural recharge to the basin is primarily from percolation of flow in the San Jacinto River and its tributary streams, albeit some recharge is from infiltration of rainfall on the valley floor. The primary recharge area is where the San Jacinto River and Bautista Creek enter the San Jacinto Valley. Natural recharge is augmented by spreading of State Water Project (SWP) and reclaimed water through infiltration ponds in the upper reaches of the San Jacinto River. Percolation of water stored in Lake Perris has been an additional source of recharge since construction of the lake in the 1970s, and reclaimed water percolates through several storage ponds distributed throughout the valley. Artificial recharge can exceed natural recharge, particularly in years with low precipitation (DWR 2006). Although the project would increase impervious surface area onsite, the project would have minimal impact on groundwater recharge as the project site is not located in a primary recharge area and artificial recharge occasionally exceeds natural recharge. This issue will not be addressed further in the EIR (see Section 3.17, *Utilities and Services Systems*, for impacts regarding water supply and demand).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

Potentially Significant Impact. Development of the proposed project would alter the existing drainage pattern. Pre- and postdevelopment hydrologic conditions will be evaluated in the EIR. Mitigation measures will be recommended as needed.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Potentially Significant Impact. Development of the proposed project would alter the existing drainage pattern. Pre- and postdevelopment hydrologic conditions will be evaluated in the EIR. Mitigation measures will be recommended as needed.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Potentially Significant Impact. Development of the proposed project would alter the existing drainage pattern. Pre- and postdevelopment hydrologic conditions will be evaluated in the EIR. Mitigation measures will be recommended as needed.

f) Otherwise substantially degrade water quality?

Potentially Significant Impact. Creeks and washes in the vicinity of the project site with degraded water quality are listed on the CWA Section 303(d) List of Water Quality Limited Segments and Total Maximum Daily Load (TMDL) for the Santa Ana Region CSWRCB. Short-term construction and long-term operational activity on-site has potential to degrade water quality. A WQMP is required to address existing water pollutants onsite; existing water pollutants impacting downstream receiving waters; water quality impacts

expected from Specific Plan buildout; and specify BMPs for minimizing water pollution from the project. Impacts to water quality will be evaluated in the EIR and mitigation measures will be recommended as needed.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Potentially Significant Impact. Parts of the project site are designated by the Federal Emergency Management Agency as Flood Zone A (FEMA 2008; FEMA 2010). Zone A is in a 100-year flood zone; no flood depths or base flood elevations are designated. Buildout of the Specific Plan would develop 525 residential units on the site. Flood hazards will be addressed in the hydrology study and the EIR, and mitigation measures will be recommended as needed.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Potentially Significant Impact. Portions of the project site are within a 100-year flood zone (FEMA 2008; FEMA 2010). The project has the potential to place structures within a 100-year flood zone that would impede or redirect flood flows. Flood hazards will be addressed in the EIR, and mitigation measures will be recommended as needed.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?



Less Than Significant Impact. The project site is approximately 4.3 miles north of Diamond Valley Lake, which is impounded by three dams; however, the site is outside of the areas that would be flooded by failure of any of those dams (RCTLMA 2006). No significant impacts would occur. This issue will not be evaluated further in the EIR.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact.

Seiche. A seiche is a surface wave created when an inland body of water is shaken, usually by earthquake activity. There are no surface water bodies near the project site that pose a substantial hazard of flooding of the site due to a seiche. The project site is approximately 4.3 miles north of Diamond Valley Lake, which is impounded by three dams; however, the site is outside of the areas that would be flooded by failure of any of those dams (RCTLMA 2006). Hazards arising from a seiche would be less than significant. This issue will not be discussed further in the EIR.

Tsunami. A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is approximately 42 miles inland from the Pacific Ocean and ranges from roughly 1,575 feet to 1,585 feet above mean sea level; thus, there is no flood hazard to the site due to a tsunami. This topic will not be evaluated further in the EIR.

Mudflow. A mudflow is a landslide composed of saturated rock debris and soil with a consistency of wet cement. The site is very nearly flat and is not in a streambed. There are no slopes on or near the site that could generate a mudflow. No flood hazard due to mudflows would occur. No additional analysis is warranted in the EIR

3.10 LAND USE AND PLANNING

a) Physically divide an established community?

No Impact. The project site is surrounded by a mixture of residential uses to the west and north; commercial uses to the east; and the Hemet Stock Farm property to the south. The proposed Specific Plan would develop 525 residential units and 135,254 square feet of residential uses on the site. The project would not divide an established community, and no adverse impact would occur. This topic will not be discussed further in the EIR.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. The Specific Plan includes an application for a General Plan Amendment and Zone Change. The Notice of Preparation for a Draft Program EIR for the Hemet General Plan Update was circulated on June 28, 2010 (Aecom 2010). Proposed General Plan land use designations for the project site are Residential Very High Density (R45, permitting up to 45 residential units per acre), Residential Medium High Density (R18 permitting up to 18 residential units per acre), and Mixed Use (MU). If the City of Hemet approves the General Plan Update, which would designate the site as Specific Plan, proposed land uses in the Specific Plan would conform with land use designations in the General Plan Update; thus, a General Plan Amendment would not be needed for approval of the North Hemet Specific Plan. However, if the proposed project precedes the General Plan Update, a General Plan Amendment will be necessary. Therefore, the EIR will discuss the potential for the project to conflict with applicable land use plans, policies, or regulations.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project site is in the plan area of two HCPs. However, the project site is not in an area designated as a preserve or in an area with any survey requirements under either of the two HCPs TLMA 2010. The project applicant would be required to pay an impact and mitigation fee under the SKRHCP, and a mitigation fee under the WRCMSHCP (City of Hemet Municipal Code Sections 31-7 and 58-98). The project would comply with applicable requirements of each HCP, and no adverse impact would occur. This topic will not be addressed in the EIR.

3.11 MINERAL RESOURCES

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

Less Than Significant Impact. Project development would not make unavailable known mineral resources valuable to the region and the state. The project site is mapped in an urban area, and not in any Mineral Resource Zone, on the Mineral Land Classification Map of the San Bernardino Production-Consumption Region (CGS 2008). Impacts would be less than significant, and no mitigation is needed. This issue will not be addressed further in the EIR.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less Than Significant Impact. There are no mineral deposits of statewide or regional importance in the City of Hemet. Limestone, serpentine, and sand and gravel were formerly mined in Bautista Canyon, Diamond Valley, and in the Salt Creek and San Jacinto Riverbeds, respectively (Hemet 1992). However, the nearest of these areas to the site is the San Jacinto River approximately 2.8 miles to the northeast, and project development would not impact availability of mineral resources at any of these former mining sites. Impacts would be less than significant, and no mitigation is needed. No additional analysis in the EIR is warranted.

3.12 NOISE

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. The primary existing noise sources in the project area are transportation facilities. Vehicular traffic on State Street is a steady source of ambient noise. Short-term noise impacts would be associated with demolition, excavation, grading, and erecting of buildings onsite during construction of the proposed project. Construction-related, short-term noise levels could be higher than existing ambient noise levels in the project area and could potentially impact neighboring land uses, such as the residential land uses surrounding the site to the north and west. Further evaluation in the EIR is required to determine if the project will exceed noise standards or expose people to excessive noise levels. Mitigation measures will be incorporated as needed.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. Vibration impacts are generally associated with project construction activities such as heavy construction equipment (e.g., bulldozer). Construction equipment utilized during project development would produce vibration from vehicle travel as well as grading and building construction activities. Further analysis in the EIR is necessary to determine the potential for construction related activities resulting in groundborne vibration impacts. Mitigation measures will be incorporated as needed.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The proposed project would result in an increase in traffic levels in the project vicinity, which could result in a permanent increase in the ambient noise environment. Further evaluation in the EIR is required to determine potential on- and offsite impacts of the project on sensitive receptors (e.g., residents to the north and west) in the vicinity. Mitigation measures will be incorporated as needed.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. As stated above, during the construction phase of the proposed project, noise levels associated with construction activities may result in a substantial increase in the ambient noise environment throughout the duration of construction activities. Further evaluation in the EIR is necessary to determine the noise impacts on sensitive receptors in the vicinity of the project site from on- and offsite construction activities. Mitigation measures will be incorporated as needed.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant. Hemet-Ryan Airport is approximately 2.7 miles southwest of the project site. The project site is outside of Airport Compatibility Zones established for Hemet-Ryan Airport by the Riverside County Airport Land Use Commission and outside of the 65 dBA CNEL contour for the airport (RCALUC 2006). The project would not expose people to excessive aircraft noise. Impacts would be less than significant, and no mitigation is required. This issue will not be evaluated further in the EIR.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The nearest private airstrip or heliport to the project site is the Hemet Valley Hospital Helistop near the intersection of Florida Avenue and San Jacinto Street, approximately 0.75 mile southeast of the project site. This helipad is used for emergency medical purposes and helicopters fly vertically when in the immediate vicinity of heliports. Helicopter noise from this hospital facility does not significantly contribute to the ambient noise environment at the project site. Consequently, the project would not expose people to excessive aircraft noise. Impacts would be less than significant, and no mitigation is required. This issue will not be evaluated further in the EIR.

3.13 POPULATION AND HOUSING

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Potentially Significant Impact. Buildout of the Specific Plan would develop 442 high-density units (100 within mixed-use areas) and 83 medium density residential units; 135,254 square feet of commercial uses; and 16,335 square feet of office uses on a 28.6-acre site. The population of the City of Hemet is forecast to increase from 85,741 in 2010 to 144,891 in 2035 (SCAG 2008), an increase of 59,150. The EIR will evaluate the project's potential to induce substantial growth in population, housing, and employment in the City of Hemet.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Potentially Significant Impact. There are approximately 50 residences onsite that would be displaced by buildout of the Specific Plan, including the Town & Country Mobile Home Park. The Redevelopment Agency for the County of Riverside currently owns or is in the process of purchasing many of the existing parcels. However, several of the existing residential and commercial buildings are occupied. The EIR will evaluate residential housing displacements that may occur as a result of the proposed project. Mitigation measures will be incorporated, as needed, to reduce potentially significant impacts.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Potentially Significant Impact. There are approximately 50 residences onsite that would be displaced by buildout of the Specific Plan, including the Town & Country Mobile Home Park. The Redevelopment Agency for the County of Riverside currently owns or is in the process of purchasing many of the existing parcels. However, several of the existing residential and commercial buildings are occupied. The EIR will evaluate residential housing displacements that may occur as a result of the proposed project. Mitigation measures will be incorporated, as needed, to reduce potentially significant impacts.

3.14 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Potentially Significant Impact. Fire protection is provided to the City of Hemet by the Hemet Fire Department (HFD). The two nearest HFD stations to the project site are Station No. 1 at 220 North Juanita Street, about 0.4 mile southeast of the project site, and Station No. 2 at 895 West Stetson Avenue, roughly 1.9 miles south of the site. Station No. 1 is equipped with one fire engine, one truck, and one squad vehicle (HFD 2010 and Shobert 2010). The project is expected to result in some increase in calls for fire protection and emergency medical services. HFD will be consulted for information about existing staffing at Stations 1 and 2, and regarding project impacts on fire protection and emergency medical services. Impacts to fire protection will be discussed in the EIR, and mitigation measures will be recommended as needed.

b) Police protection?

Potentially Significant Impact. Police protection is provided by the Hemet Police Department (HPD). HPD's staff includes 68 sworn officers and 27 civilian employees (Webb 2010). Buildout of the Specific Plan would increase the intensity of land use on the site, and therefore could result in an increase in calls for police protection in the vicinity of the project site. The HPD will be consulted regarding project impacts to police protection, and such impacts will be discussed in the EIR.

c) Schools?

Potentially Significant Impact. Two school districts provide public kindergarten through grade 12 education to the project site. The Hemet Unified School District (HUSD) provides school services to the portion of the

site south of Menlo Avenue, while the San Jacinto Unified School District (SJUSD) serves the portion of the site north of Menlo Avenue.

Hemet Unified School District provides public K–12 education for the City of Hemet, part of the City of San Jacinto, and unincorporated areas of Riverside County east, west, and south of Hemet, including the communities of Idyllwild, Anza, Aguanga, and Winchester. HUSD operates 15 elementary schools; 4 middle schools, with a fifth middle school opening in Fall 2010; 4 comprehensive high schools; and 1 alternative high school. During the 2008–2009 school year HUSD's total enrollment was 22,908 students (Bridwell 2010).

San Jacinto Unified School District provides public K–12 education for most of the City of San Jacinto, part of Hemet, and unincorporated areas of Riverside County east, north and west of San Jacinto, and parts of the cities of Beaumont and Moreno Valley north of San Jacinto. SJUSD operates 7 elementary schools, 2 middle schools, 1 comprehensive high school, and 1 alternative high school. SJUSD's total enrollment during 2008–2009 was 9,300 students (Gonzalez 2010).

Existing HUSD and SJUSD schools serving students from the project site are described in Table 4. Buildout of the Specific Plan would develop 442 high-density units (100 within mixed-use areas) and 83 medium-high density residential units; 135,254 square feet of commercial uses; and 16,335 square feet of office uses on a 28.6-acre site, resulting in an increase in student population and demand for school services. Further evaluation of school service in the EIR is required. Mitigation measures will be incorporated, as necessary.

Table 4
Hemet USD and San Jacinto USD Schools Serving Project Site

School	*Location*	*Grades Taught*	*Capacity*	*Current Enrollment*
Hemet USD[1]				
Jacob Wiens Elementary School	935 East Campus Way, Hemet	K–5	550	690
Rancho Viejo Middle School	985 North Cawston Avenue, Hemet	6–8	1,450	1,593
Tahquitz High School	4425 West Commonwealth Avenue, Hemet	9–12	2,400	1,590
San Jacinto USD[2]				
Park Hill Elementary	1157 East Commonwealth Avenue, San Jacinto	K–5	825	844
North Mountain Middle School	1202 East 7th Street, San Jacinto	6–8	1,111	1,044
San Jacinto High School	500 Idyllwild Drive, San Jacinto	9–12	3,563	2,378

[1] Source: Koonce 2010. Based on enrollment for the 2009-2010 school year. Excludes additional capacity provided by 8 portable classroom units at Jacob Wiens Elementary School.
[2] Source: Gonzalez 2010. Based on the 2008-2009 school year. Includes permanent and portable classrooms.

d) Parks?

Potentially Significant Impact. There are five parks within one mile of the project site, described in Table 5. Parks in the City of Hemet are maintained by the City. In addition, recreational services at Valley Wide Regional Park and Searl Sports Park are provided by the Valley-Wide Recreation and Park District (VWRPD). The City of Hemet Municipal Code (Sections 70-281 et. seq.) requires new development projects to mitigate impacts on parks on the City's parkland in the form of development impact fees and/or dedication of land.

Table 5
Parks within One Mile of Project Site

Park and Location Relative to Project Site	Acreage	Recreational Facilities
Welch Memorial Park Florida Avenue about 0.5 mile southeast of site	0.3	Passive recreation
Weston Park Florida Avenue about 0.5 mile southeast of site	4	Playground, basketball court
Rodeghier Green Park Acacia Avenue about 0.75 mile south of site	4	Passive recreation
Searl Sports Park Buena Vista Street about 0.3 mile northeast of site	11	ballfields and a soccer field
Valley Wide Regional Park Esplanade Avenue about 0.9 mile north of site	36	Variety of recreational facilities including ballfields, soccer fields, and hardcourts

Sources: City of Hemet 2010; VWRPD 2010.

Buildout of the Specific Plan would develop 442 high-density units (100 within mixed-use areas) and 83 medium-high density residential units; 135,254 square feet of commercial uses; and 16,335 square feet of office uses on a 28-6-acre site. The EIR will analyze the project's compliance with the City's park acreage standards and its potential to physically deteriorate recreational facilities. Further analysis in the EIR is necessary.

e) Other public facilities

Potentially Significant Impact. Library services are provided to the project area by the City of Hemet Public Library, which is at 300 East Latham Avenue, approximately 0.6 mile southeast of the project site. The library has a collection of approximately 102,000 items in a two-story building comprising approximately 52,000 square feet (Disher 2010). It is currently open four days per week, Wednesday through Saturday. The project is expected to cause an increase in demand for library services. The City of Hemet Public Library will be consulted regarding existing library services and project impacts on such services. Impacts on library services will be discussed in the EIR, and mitigation measures will be recommended as needed.

3.15 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Potentially Significant Impact. Buildout of the Specific Plan would develop 442 high-density units (100 within mixed-use areas) and 83 medium-high density residential units; 135,254 square feet of commercial uses, and 16,335 square feet of office uses on a 28.6-acre site. The project is estimated to add 1,102 residents and 225 employees to the project site; thus, the project is expected to result in increased use of parks in the City of Hemet.[5] The EIR will analyze the project's compliance with the City's park acreage

[5] The net increase in dwelling units would be 525 proposed less 50 existing = 475. The average household size in the City of Hemet in 2005 was 2.32 persons (Economics & Politics Inc. 2005). Thus, net project-generated population growth would be 475 x 2.32, or 1,102.

Project-generated employment is forecast using employment density estimates from Natelson 2001. For other retail/services, 621 square feet per employee x 118,919 square feet = 191 employees; for low-rise office use, 481 square feet per employee x 16,335 square feet = 34 employees, for a total of 225.

standards and its potential to physically deteriorate recreational facilities. Further analysis in the EIR is necessary.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Potentially Significant Impact. Buildout of the Specific Plan would develop 442 high-density units (100 within mixed-use areas) and 83 medium-high density residential units; 135,254 square feet of commercial uses, and 16,335 square feet of office uses on a 28.6-acre site. The EIR will analyze the project's compliance with the City's park acreage standards and whether it would require the expansion or construction of new recreational facilities. Further analysis in the EIR is necessary.

3.16 TRANSPORTATION/TRAFFIC

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Potentially Significant Impact. The project would generate an increase in vehicle trips in the vicinity of the project site. A detailed traffic impact analysis for the proposed Specific Plan will be prepared to address project-related traffic impacts on the existing roadway network. The traffic analysis will inventory existing roadways configuration, traffic controls, and evaluate the level of service at these intersections in the project area:

- Esplanade Avenue and State Street
- Fruitvale Avenue and State Street
- Lyon Avenue and Menlo Avenue
- Palm Avenue and Menlo Avenue
- Alessandro Street and Menlo Avenue
- State Street and Menlo Avenue
- San Jacinto Avenue and Menlo Avenue
- Alessandro Street and Oakland Avenue
- State Street and Devonshire Avenue
- Florida Avenue and Devonshire Avenue

The traffic study will address project-related traffic impacts for the anticipated buildout of the project. The methods and findings of the traffic analysis will be discussed in the EIR, and mitigation measures will be recommended as appropriate.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Potentially Significant Impact. Two roadways within one mile of the project site are included in the 2007 Riverside County Congestion Management Program (CMP): Florida Avenue (SR-74), 0.5-mile south of the project site, and San Jacinto Street (SR-79), 0.75-mile east of the site. The traffic analysis will include an evaluation of project and cumulative traffic impacts to the two CMP roadways. This topic will be discussed in the EIR, and mitigation measures will be recommended as needed.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Less Than Significant Impact. The nearest public-use airport to the project site is Hemet-Ryan Airport approximately 2.7-miles southwest of the site; the nearest heliport is Hemet Valley Hospital Helistop near the intersection of Florida Avenue and San Jacinto Street, approximately 0.75-mile southeast of the site. The project site is outside of the area surrounding Hemet-Ryan Airport where the FAA regulates the heights of structures. Buildout of the Specific Plan would not require moving air traffic routes. While the project would add an estimated 1,102 residents and 225 employees to the project site (see 3.15a, footnote 5) such an increase in population is within existing forecasts for population growth in the City of Hemet, and the project would not cause a substantial increase in air traffic levels. Impacts would be less than significant, and no mitigation is needed.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. The project would not add incompatible uses such as farm equipment to area roadways. The Specific Plan site plan proposes six intersections of proposed roadways within the project site with existing roadways on the site perimeter. All of these intersections would be at right angles. The project traffic analysis will evaluate the circulation plan for the Specific Plan for impacts on existing and proposed intersections. Any incompatible turning movements or other hazards identified will be discussed in the EIR. Mitigation measures will be recommended as needed.

e) Result in inadequate emergency access?

Less Than Significant Impact. The California Fire Code (CFC), Section 503, contains requirements for emergency access to habitable buildings and for access roads and turning radii for fire vehicles. The Specific Plan would comply with CFC emergency access requirements. In addition, project plans would be submitted to the Hemet Fire Department for review for adequacy of emergency evacuation from buildings and fire department access to buildings. Emergency access for future development projects within the North Hemet Specific Plan would be provided in accordance with the CFC. No significant impacts would occur. This issue will not be evaluated further in the EIR.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Potentially Significant Impact. The EIR will identify transit routes in the vicinity of the project. In addition, internal circulation for pedestrian and bicycles will be evaluated in the EIR. Mitigation measures will be recommended as needed.

g) Result in inadequate parking capacity?

Potentially Significant Impact. The City of Hemet's requirements for off-street parking by land use type are specified in Chapter 90, Article XL, of the City's Municipal Code. Parking provided in the Specific Plan will be discussed in the EIR, and mitigation measures will be recommended as needed.

3.17 UTILITIES AND SERVICE SYSTEMS

a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The proposed North Hemet Specific Plan would result in an increase in residential, commercial, and office land uses at the 28.6-acre project site. The project would not generate industrial wastewater or new point sources of wastewater such as mining, animal feed lots, wastewater treatment facilities, etc., that would require an individual permit from the Santa Ana Regional for additional treatment beyond the capabilities of the existing wastewater treatment facilities serving the project site (see Section 3.9, *Hydrology and Water Quality*, for stormwater and other sources of pollution covered under the general NPDES permits). No significant impact would occur. This issue will not be discussed further in the EIR.

b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. Water treatment facilities filter and/or disinfect water before it is delivered to customers. Water is provided to the northern portion of the project site, north of Menlo Avenue, by the Eastern Municipal Water District (EMWD). Water is provided to the southern portion of the site, south of Menlo Avenue, by the Lake Hemet Municipal Water District (LHMWD). Wastewater treatment services are provided to the entire project area by EMWD at the San Jacinto Valley Regional Water Reclamation Facility (SJVRWRF). It is not anticipated that the North Hemet Specific Plan would significantly impact wastewater treatment service levels. However, further evaluation in the EIR is required to determine the level of significance and to identify mitigation, if needed.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. Development of the North Hemet Specific Plan project would increase development intensity and therefore increase impervious surfaces at the project site. These factors will result in an overall increase in stormwater runoff in terms of peak discharge rates and volumes. The EIR will evaluate the extent to which existing or planned flood control infrastructure can accommodate the increases in volume and velocity of stormwater runoff generated by the project. Mitigation measures will be recommended as needed.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact. Development of the project site will generate demand for water for domestic and irrigation purposes. The potential volume of this demand needs to be estimated and compared to existing and planned water supplies to determine whether development of the project site would result in significant impacts on local or regional water supplies. EMWD and LHMWD will be consulted regarding available water supplies and project impacts on water supplies. A Water Supply Assessment is being prepared by these agencies in accordance with Senate Bill 610. This topic will be discussed further in the EIR, and mitigation measures will be recommended as needed.

e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Potentially Significant Impact. Proposed development would result in wastewater generation on a daily basis. The potential volume of wastewater needs to be estimated and compared to existing and planned offsite sewer capacities to determine whether development of the project site would exceed such capacities. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if possible.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Potentially Significant Impact. The Riverside County Waste Management Department provides landfill service for the San Jacinto Valley at two facilities: the Lamb Canyon Sanitary Landfill in the City of Beaumont and the Badlands Sanitary Landfill in the City of Moreno Valley. The Lamb Canyon Landfill has maximum permitted throughput of 3,000 tons per day, remaining capacity of about 19 million cubic yards (or about 10.1 million tons), and an estimated closing date of 2021. The Badlands Sanitary Landfill has a maximum permitted throughput of 4,000 tons per day, remaining capacity of about 19.5 million cubic yards (or roughly 10.4 million tons), and an estimated closing date of 2016. The proposed project would generate solid waste during construction activities and on a recurring basis during operation. The solid waste volume needs to be estimated and an analysis made of the impact of this solid waste stream on the City's ability to provide solid waste collection service and to comply with its obligations to reduce disposal at landfills, pursuant to AB 939. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The project would comply with federal, state, and local laws and regulations governing solid waste, and no adverse impact would occur. AB 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Jurisdictions select and implement the combination of waste prevention, reuse, recycling, and composting that best meets the needs of their residents while achieving the diversion requirements of the act. Cities and counties also may work cooperatively toward the 50 percent goal by forming a regional agency. Much of the solid waste generated in Hemet is diverted from landfills. The City of Hemet operates 36 solid waste diversion programs, including recycling, composting, household hazardous waste, and public education programs (CalRecycle 2010b). In 2008 the target disposal rates for the City of Hemet under AB 939 were 7 pounds per person per day (PPD) for residential solid waste and 25.8 pounds per employee per day for solid waste from businesses. Actual disposal rates in the City in 2008 were 5 PPD from residences and 13.8 PPD for businesses. Hemet has met the 50 percent diversion rate mandated by AB 939 since 1997 (CalRecycle 2010b). Therefore, the City of Hemet is complying with AB 939 goals.

3.18 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict

the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. As discussed throughout this initial study, the project implementation has the potential to impact historical and cultural resources. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures to reduce impacts to below a level of significance, if possible.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. As discussed throughout this initial study, the project implementation has the potential to contribute to a cumulatively considerable impact. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures to reduce impacts to below a level of significance, if possible.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. As discussed throughout this initial study, the project implementation has the potential to adversely affect human beings. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if possible.

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Western Riverside County Regional Conservation Authority (WRCRCA). 2010, April 21. Western Riverside County Habitat Conservation Summary. http://www.wrc-rca.org/webimages/Habitat_Conservation_Summary_Map_300dpi.pdf.

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5. List of Preparers

LEAD AGENCY

Ron Running	Project Planner

THE PLANNING CENTER|DC&E

JoAnn C. Hadfield	Director, Environmental Services
Nicole Vermillion	Senior Planner
Michael Milroy	Assistant Planner
Phil Brylski	Senior Biologist

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Appendix B
IS/NOP Comments

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STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

RECEIVED
OCT 12 2011
PLANNING DEPT

October 12, 2011

Mr. Ron Running, Project Planner
CITY OF HEMET
445 E. Florida Avenue
Hemet, CA 92543-4209

Sent by FAX to: 951-765-2359
No. of Pages: 4

Re_ Tribal Consultation Pursuant to Government Codes No. 127e §§ 65092, 65351, 65352.3, 65352 .4, 65560 and 65562.5 (SB 18) for **the General Plan Amendment and zone Change for the NORTH HEMET SPECIFIC PLAN ; " located on 28.6-acres and 37 parcels for a Mixed-Use Development;** City of Hemet; Riverside County, California

Dear Mr. Running:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. The Native American Heritage Commission is the state "trustee agency' designated for the protection of Native American Cultural Resource pursuant to CA Public Resources Code §21070. In the 1985 Appellate Court decision ((170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites

Attached is a consultation list of tribes with traditional lands or cultural places located within the Project Area of Potential Effect (APE. The tribal entities on the list are for your guidance for **government-to-government consultation** purposes. Pursuant to CA Public Resources Code §5097.95, please provide pertinent project information to the tribal consulting parties.

The NAHC did perform a Sacred Lands File search of the project location and **Native American cultural resources were not identified**. Also note: the NAHC Sacred Lands Inventory is not exhaustive; cultural resources may be discovered during construction, ground-breaking activity. Please contact the Native Americans on the attached list to determine, from their knowledge, if the proposed changes or governmental action might impact on Native American cultural resources. If so, Section 15382 of the CEQA Guidelines defines a significant impact on the environment as "substantial," and Section 2183.2 requires documentation, data recovery of cultural

resources identified. The NAHC recommends that lead agencies provide appropriate archaeological studies and pertinent project information to the consulting Native American tribes, as appropriate.

The Native American Heritage Commission works with Native American tribal governments regarding its identification of 'Areas of Traditional Use,' The Commission may adjust the submitted data defining the 'Area of Traditional Use' in accordance with documentation provided by consulting tribes, generally accepted ethnographic, anthropological, archeological research and oral history.

If you have any questions, please contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Tribal Government Consultation List

Native American Tribal Consultation List
Riverside County
October 12, 2011

Los Coyotes Band of Mission Indians
Shane Chapparosa, Spokesperson
P.O. Box 189 Cahuilla
Warner , CA 92086
loscoyotes@earthlink.net
(760) 782-0711

Pala Band of Mission Indians
Tribal Historic Preservation Office/Shasta Gaughen
35008 PalaTemecula Road, PMB Luiseno
Pala , CA 92059 Cupeno
sgaughen@palatribe.com
(760) 891-3515

Pauma & Yuima Reservation
Randall Majel, Chairperson
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
paumareservation@aol.com
(760) 742-1289

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105

Rincon Band of Mission Indians
Tiffany Wolfe, Cultural & Environmental Department
P.O. Box 68 Luiseno
Valley Center , CA 92082
twolfe@rincontribe.org
(760) 297-2632

Soboba Band of Mission Indians
Scott Cozaet, Chairperson; Attn: Carrie Garcia
P.O. Box 487 Luiseno
San Jacinto , CA 92581
carrieg@soboba-nsn.gov
(951) 654-2765

Santa Rosa Band of Mission Indians
John Marcus, Chairwoman
P.O. Box 391820 Cahuilla
Anza , CA 92539
sestrada@
(951) 659-2700
(951) 659-2228 Fax

Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
P.O. Box 68 Luiseno
Valley Center , CA 92082
bomazzetti@aol.com
(760) 749-1051

San Luis Rey Band of Mission Indians
Tribal Council
1889 Sunset Drive Luiseno
Vista , CA 92081
760-724-8505

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Rroad Cahuilla
Banning , CA 92220 Serrano
(951) 849-8807
(951) 755-5200

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3. and 65362.4.

Native American Tribal Consultation List
Riverside County
October 12, 2011

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula , CA 92593
tbrown@pechanga-nsn.gov
(951) 770-6100

La Jolla Band of Mission Indians
ATTN: Rob Roy,Environmental Director
22000 Highway 76 Luiseno
Pauma Valley , CA 92061
rob.roy@lajolla-nsn.gov
(760) 742-3796

Cahuilla Band of Indians
Luther Salgado, Sr., , Chairperson
PO Box 391760 Cahuilla
Anza , CA 92539
tribalcouncil@cahuilla.net
915-763-5549

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3. and 65362.4.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

November 3, 2011

Ron Running, Project Planner
City of Hemet
445 E. Florida Avenue
Hemet, CA 92543

RECEIVED
NOV 07 2011
PLANNING

Notice of Preparation of a CEQA Document for the
North Hemet Specific Plan

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The SCAQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. The lead agency may wish to consider using land use emissions estimating software such as URBEMIS 2007 or the recently released CalEEMod. These models are available on the SCAQMD Website at: http://www.aqmd.gov/ceqa/models.html.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has developed a methodology for calculating PM2.5 emissions from construction and operational activities and processes. In connection with developing PM2.5 calculation methodologies, the SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD requests that the lead agency quantify PM2.5 emissions and compare the results to the recommended PM2.5 significance thresholds. Guidance for calculating PM2.5 emissions and PM2.5 significance thresholds can be found at the following internet address: http://www.aqmd.gov/ceqa/handbook/PM2_5/PM2_5.html.

In addition to analyzing regional air quality impacts the SCAQMD recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the

recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized significance analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the SCAQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additional mitigation measures can be found on the SCAQMD's CEQA web pages at the following internet address: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html Additionally, SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html. In addition, guidance on siting incompatible land uses can be found in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Perspective, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's World Wide Web Homepage (http://www.aqmd.gov).

The SCAQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. If you have any questions regarding this letter, please call Ian MacMillan, Program Supervisor, CEQA Section, at (909) 396-3244.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

IM
RVC111012-05
Control Number

STATE OF CALIFORNIA
EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

November 7, 2011

Ron Running
City of Hemet
445 E. Florida Avenue
Hemet, CA 92543

RECEIVED
NOV 10 2011
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Dear Mr. Running:

Re: SCH 201101031; North Hemet Specific Plan

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossings Engineering Section (RCES) is in receipt of the *Notice of Completion & Environmental Document Transmittal-Notice of Preparation* from the State Clearinghouse for the proposed North Hemet Specific Plan. As the state agency responsible for rail safety within California, we recommend that the City add language to the project so that any future planned development adjacent to or near the BNSF Railway Company right-of-way is planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade crossings like Oakland Avenue (CPUC No. 002X-36.50, DOT No. 027383H). This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way.

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way.

Language should be in place so that any traffic impact studies undertaken should also address vehicular and pedestrian traffic volumes increase impacts over the affected crossing(s) and associated proposed mitigation measures.

If you have any questions, please contact Bill Lay at 213-576-1399, email at bill.lay@cpuc.ca.gov, or myself at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Senior Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

RECEIVED
NOV 10 2011
PLANNING

November 8, 2011

Mr. Ron Running
City of Hemet Planning Department
445 E. Florida Avenue
Hemet, California 92545

NOTICE OF PREPARATION (NOP) FOR NORTH HEMET SPECIFIC PLAN (SCH# 2011101031)

Dear Mr. Running:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation Report for the above-mentioned project. The following project description is stated in your document: "The Redevelopment Agency for the County of Riverside is seeking the City of Hemet's approval of the North Hemet Specific Plan with a General Plan Amendment and Zone Change. The North Hemet Specific Plan would permit a maximum of 442 high-density units (100 units within mixed-use areas) and 83 medium density residential units; 118,919 square feet of commercial uses; and 16,335 square feet of office uses. The 28.6-acre project site is west of State Street between Oakland Avenue on the south and the multifamily residential land uses north of Menlo Avenue. The North Hemet Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities".

Based on the review of the submitted document DTSC has the following comments:

1) The EIR should evaluate whether conditions within the project area may pose a threat to human health or the environment. Following are the databases of some of the regulatory agencies:

   - National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
   - Envirostor (formerly CalSites): A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).

- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.

- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.

- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.

- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.

- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.

- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents.

3) Any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. All closure, certification or remediation approval reports by regulatory agencies should be included in the EIR.

4) If buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should also be conducted for the presence of other hazardous chemicals, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

5) Future project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

6) Human health and the environment of sensitive receptors should be protected during any construction or demolition activities. If necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

7) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

8) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact me at ashami@dtsc.ca.gov, or by phone at (714) 484-5472.

Sincerely,

Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
nritter@dtsc.ca.gov.

CEQA # 3389

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Raymond Hicks
Region Manager

RECEIVED
NOV 10 2011
PLANNING

November 8, 2011

Mr. Ron Running
Project Planner
City of Hemet
445 E. Florida Ave.
Hemet, CA 92543-4209

Re: North Hemet Specific Plan (SP11-001)

Mr. Running:

Southern California Edison (SCE) appreciates the opportunity to review and provide comment on the above referenced project. SCE Company right-of-ways and fee-owned properties are purchased for the exclusive use of SCE to operate and maintain its present and future facilities. Any proposed use will be reviewed on a case-by-case basis by SCE's Operating Departments. Approvals or denials will be in writing based upon review of the maps provided and compatibility with SCE right-of-way constraints and rights. In the event the project impacts SCE facilities or its land related rights, please forward six (6) sets of plans depicting SCE's facilities and associated land rights to the following location:

Real Properties Department
Southern California Edison Company
2131 Walnut Grove Avenue
G.O.3 – Second Floor
Rosemead, CA 91770

Please be advised if development plans result in the need to build new or relocate existing SCE electrical facilities that operate at or above 50 kV, the SCE construction may have environmental consequences subject to CEQA review as required by the California Public Utilities Commission (CPUC). If those environmental consequences are identified and addressed by the local agency in the CEQA process for the larger project, SCE may not be required to pursue a later, separate, mandatory CEQA review through the CPUC's General Order 131-D (GO 131-D) process. If the SCE facilities are not adequately addressed in the CEQA review for the larger project, and the new facilities could result in significant environmental impacts, the required additional CEQA review at the CPUC could delay approval of the SCE power line portion of the project for two years or longer.

26100 Menifee Rd.
Menifee, CA 92585

Office: (951) 928-8238
E-mail: Raymond.hicks@sce.com

In closing, SCE would like to refer the project proponent to the "Savings By Design" program, a statewide, nonresidential, new construction and renovation/remodeling energy efficiency program, funded by utilities customers through the Public Purpose Programs surcharge. The Savings By Design program offers design assistance and financial incentives to improve the energy efficiency of a project. Energy efficiency recommendations may improve the energy performance of a project beyond Title 24 (or other baseline) requirements. The program is voluntary, and developers are not under any obligation to modify construction design based on resulting recommendations. Please note, however, that financial incentives are available only if an agreement is completed, eligibility is established by the utility, the project meets program/performance requirements, and the energy efficiency strategies are installed and verified. For further information on how to participate in the Savings By Design program, please refer to SCE's website at http://www.sce.com/, under *Business, Energy Management Solutions.*

If you have any questions regarding this letter, please do not hesitate to contact me at (951) 928-8238.

Sincerely,

Raymond Hicks

Ray Hicks
Region Manager
Local Public Affairs Region Manager
Southern California Edison Company

26100 Menifee Rd.
Menifee, CA 92585

Office: (951) 928-8238
E-mail: Raymond.hicks@sce.com

November 9, 2011

Riverside Transit Agency
1825 Third Street
P.O. Box 59968
Riverside, CA 92517-1968
Phone: (951) 565-5000
Fax: (951) 565-5001

Ron Running
Project Pl anner
City of Hemet
445 E. Florida Avenue
Hemet, CA 92543
ron.running@cityofhemet.org

RE: Notice of Preparation of the Environmental Impact Report for the North Hemet Specific Plan

Dear Mr. Running:

Thank you for allowing the Riverside Transit Agency (RTA) to comment on the Notice of Preparation of the EIR for the North Hemet Specific Plan. RTA anticipates that this project will be a significant generator of bus transit in the future because of the inclusion of higher density residential and retail units.

A review of the area indicates that an existing RTA bus stop is located southbound on State Street far side of Menlo Avenue. The bus stop is currently served by Routes 31 and 33. Route 31 is a regional route that travels from Banning and Beaumont to San Jacinto and Hemet, and Route 33 is a local route within the Hemet area.

As a part of the environmental impact review, it would be valuable to integrate transit enhancements that could reduce vehicle trips and mitigate traffic. RTA recommends that the current bus stop be enhanced with components, such as the following, to meet the increase in ridership demand and serve as a viable alternative mode of travel.

- The current bus stop is not in compliance with the Americans with Disabilities Act (ADA) as it was implemented before the legislation was enacted and should be improved along with the sidewalks. Complete streets and sidewalks enhance pedestrian mobility, particularly for seniors and disabled persons who may reside in the project area.
- A bus turnout may be considered if the lane width is less than twenty feet. A bus turnout would allow buses a space to stop without impeding traffic if the outer thru traffic lane adjacent to the project site is not at least twenty feet wide.
- Convenient pedestrian pathways should be incorporated for easy access to the bus stop from the planned high density projects, particularly if residential and retail units will be included.
- Transit amenities such as a bench, trash receptacle, and shelter could attract more ridership. Bus stops with shelters should be adjacent to sidewalks that are a minimum of eight feet wide to allow for the implementation of ADA compliant bus shelters.

For more information on design guidelines for transit bus service please see RTA's *Design Guidelines for Bus Transit* document at www.riversidetransit.com under publications. Should you have any questions, please do not hesitate to contact me by phone at (951) 565-5166 or email at lmoeluna@riversidetransit.com.

Sincerely,

Lorelle Moe Luna
Senior Planner

Riverside County
Waste Management Department
Hans W. Kernkamp, General Manager-Chief Engineer

November 10, 2011

Ron Running, Project Planner
Planning Department
City of Hemet
445 East Florida Avenue
Hemet, CA 92543

RECEIVED
NOV 10 2011
PLANNING

RE: North Hemet Specific Plan
Notice of Preparation (NOP) for an Environmental Impact Report (EIR)

Dear Mr. Running:

The Riverside County Waste Management Department (Department) has reviewed a NOP prepared for the above-mentioned specific plan, located in the northwestern portion of the City of Hemet. The specific plan would permit a maximum of 442 high density units, 83 medium density residential units, 118,919 square feet of commercial uses, and 16,335 square feet of office uses. The Department has prepared the following comments:

1. Solid Waste Management/Impacts

a) Given the scale of the proposed project, it will generate a substantial amount of solid waste during project construction, as well as at project build-out. During project construction, the Department is concerned about the quantity of construction and demolition (C&D) waste to be generated by the project and how the waste will be handled. Should a large quantity of the project's C&D waste be brought to a County landfill for disposal, it could cause an exceedance of the landfill's permitted daily capacity, thus a violation of State regulations and an impact to County landfill operation.

b) Build-out of the proposed project may have the potential to generate a substantial amount of waste that might adversely affect solid waste disposal capacity. To assess waste impacts, the DEIR will need to include the projected amount of waste generated by the project, using an appropriate waste generation factor for constructing activities and the project's type of land use. (Note: Consult the California Department of Resources Recycling and Recovery, or CalRecycle, website (at: http://www.calrecycle.ca.gov/wastechar/wastegenrates) to determine waste generation factors.

c) The Lamb Canyon Landfill, located on Highway 70, between Beaumont and San Jacinto is the nearest landfill from the project site. However, two other regional landfills in the western Riverside County area, namely, the Badlands Landfill and El Sobrante Landfill, can also be used for disposal of the project's solid waste. All three landfills are Class III, municipal solid waste landfills.

A description of each of these three landfills is as follows:

Lamb Canyon Landfill:
The Lamb Canyon Landfill is located between the City of Beaumont and City of San Jacinto at 16411 Lamb Canyon Road (State Route 79), south of Interstate 10 and north of Highway 74. The landfill is owned and operated by Riverside County. The landfill property encompasses approximately 1,189 acres, of which 580.5 acres encompass the current landfill permit area. Of the 580.5-acre landfill permit area, approximately 144.6 acres are permitted for waste disposal. The landfill is currently permitted to receive 5,000 tons of refuse per day and had an estimated total disposal capacity of approximately 15.646 million tons, as of June 30, 2009.[1] As of January 1, 2011 (beginning of day), the landfill had a total remaining capacity of approximately 8.647 million tons.[2] The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2021.[3] During 2010, the Lamb Canyon Landfill accepted a daily average volume of 1,703 tons and a period total of approximately 529,744 tons. Landfill expansion potential exists at the Lamb Canyon Landfill site.

Badlands Landfill:
The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue and accessed from State Highway 60 at Theodore Avenue. The landfill is owned and operated by Riverside County. The existing landfill encompasses 1,168.3 acres, of which 150 acres are permitted for refuse disposal and another 96 acres are designated for existing and planned ancillary facilities and activities. The landfill is currently permitted to receive 4,000 tons per day and had an estimated total capacity of approximately 15.237 million tons, as of June 30, 2009.[4] As of January 1, 2011 (beginning of day), the landfill had a total remaining disposal capacity of approximately 8.987 million tons.[5] The Badlands Landfill is projected to reach capacity, at the earliest time, in 2024.[6] During 2010, the Badlands Landfill accepted a daily average volume of 1,667 tons and a period total of approximately 516,676 tons. Further landfill expansion potential exists at the Badlands Landfill site.

El Sobrante Landfill:
The El Sobrante Landfill is located east of Interstate 15 and Temescal Canyon Road to the south of the City of Corona and Cajalco Road at 10910 Dawson Canyon Road. The landfill is owned and operated by USA Waste of California, a subsidiary of Waste Management, Inc., and encompasses 1,322 acres, of which 645 acres are permitted for landfill operation. According to Solid Waste Facility Permit (SWFP) # AA-33-0217 issued on 09/09/2009, the El Sobrante Landfill has a total disposal capacity of approximately 209.91 million cubic yards and can receive up to 70,000 tons per week (tpw) of refuse. USA Waste must allot at least 28,000 tpw for County refuse. The SWFP allows a maximum of 16,054 tons per day (tpd) of waste to be accepted into the landfill, due to the limits on vehicle trips. If needed, 5,000 tpd must be reserved for County waste, leaving the maximum commitment of Non-County waste at 11,054 tpd. As of January 1, 2011 (beginning of day), the landfill had a remaining in-County disposal

[1] GASB 18 – 2009– Engineering Estimate for total landfill capacity
[2] GASB 18– 2009 – Engineering Estimate, and tonnage data from SiteInfo
[3] Lamb Canyon JTD, Addendum No. 13 – Updated RDSI, dated January 2009
[4] GASB 18 – 2009 – Engineering Estimate
[5] GASB 18– 2009 – Engineering Estimate, and tonnage data from SiteInfo
[6] Latest site life expectancy estimate by Project Engineer

capacity of approximately 38.506 million tons.[7] In 2010, the El Sobrante Landfill accepted a total of 694,963 tons, or approximately 0.695 million tons, of waste generated within Riverside County. The daily average for in-County waste was 2,235 tons during 2010. The landfill is expected to reach capacity in approximately 2045.

d) It is recommended that the DEIR consider incorporating the following measures to help reduce the anticipated project's solid waste impacts and enhance efforts to comply with the State's mandate of 50% solid waste diversion from landfilling:

- The project proponent shall make every effort and take every means to recycle, reuse, and/or reduce the amount of construction and demolition materials (i.e., concrete, asphalt, wood, etc.) generated by development of the project that would otherwise be taken to a landfill.
- The project proponent shall consider the use of mulch and/or compost in the development and maintenance of landscaped areas within the project boundaries and shall try to establish a green and woody waste recycling program for all landscaped areas, especially for developments with large common green areas, such as golf courses or parks, through such methods as grasscycling or composting (i.e., leaving grass clippings on lawn or sending separated material to composting facility).
- For commercial, industrial, institutional, or multi-family residential projects, the project proponent shall construct Refuse/Recyclables Collection and Loading Areas per the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327).

e) Hazardous materials are not accepted at Riverside County landfills. In compliance with federal, state, and local regulations and ordinances, any hazardous waste generated in association with the project shall be disposed of at a permitted Hazardous Waste disposal facility. Hazardous waste materials include, but are not limited to, paint, batteries, oil, asbestos, and solvents. For further information regarding the determination, transport, and disposal of hazardous waste, please contact the Riverside County Department of Environmental Health, Environmental Protection and Oversight Division, at 1.888.722.4234.

Thank you for the opportunity to review and comment on the Notice of Preparation. We would appreciate a copy of the EIR on CD for review and comment, when it is available. Please call me at (951) 486-3351 if you have any questions regarding the above comments.

Sincerely,

Ryan Ross
Urban/Regional Planner IV

PD#49476v4

[7] Based on remaining capacity estimated for the prior year and tonnage figures as reported in SiteInfo

WARREN D. WILLIAMS
General Manager-Chief Engineer

RECEIVED
NOV 2 2 2011
PLANNING DEPT

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org
137681

Filed AS
SP Hemil-001

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

City of Hemet
Planning Department
445 E. Florida Avenue
Hemet, California 92543

Attention: Ron Running

Re: NOP - North Hemet Specific Plan (SP 11-001)

Ladies and Gentlemen:

The District does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check city land use cases, or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees). In addition, information of a general nature is provided.

The District has not reviewed the proposed project in detail and the following checked comments do not in any way constitute or imply District approval or endorsement of the proposed project with respect to flood hazard, public health and safety or any other such issue:

___ No comment.

_X_ This project would not be impacted by District Master Drainage Plan facilities nor are other facilities of regional interest proposed.

___ This project involves District Master Plan facilities. The District will accept ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection and administrative fees will be required.

___ This project proposes channels, storm drains 36 inches or larger in diameter, or other facilities that could be considered regional in nature and/or a logical extension of the adopted _____ Master Drainage Plan. The District would consider accepting ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection and administrative fees will be required.

_X_ This project is located within the limits of the District's San Jacinto Regional Area Drainage Plan for which drainage fees have been adopted; applicable fees should be paid by cashier's check or money order only to the Flood Control District or City prior to issuance of grading permits. Fees to be paid should be at the rate in effect at the time of issuance of the actual permit.

___ An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities. For further information, contact the District's encroachment permit section at 951.955.1266.

GENERAL INFORMATION

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation, or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt.

If this project involves a Federal Emergency Management Agency (FEMA) mapped flood plain, then the City should require the applicant to provide all studies, calculations, plans and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation or other final approval of the project, and a Letter of Map Revision (LOMR) prior to occupancy.

If a natural watercourse or mapped flood plain is impacted by this project, the City should require the applicant to obtain a Section 1602 Agreement from the California Department of Fish and Game and a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers, or written correspondence from these agencies indicating the project is exempt from these requirements. A Clean Water Act Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board prior to issuance of the Corps 404 permit.

Very truly yours,

MEKBIB DEGAGA
Engineering Project Manager

Date: 11/16/2011

EWR

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

RECEIVED
OCT 20 2011
CODE ENFORCEMENT

October 12, 2011

To: Reviewing Agencies

Re: North Hemet Specific Plan
SCH# 2011101031

Attached for your review and comment is the Notice of Preparation (NOP) for the North Hemet Specific Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Ron Running
City of Hemet
445 E. Florida Avenue
Hemet, CA 92545

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2011101031
Project Title North Hemet Specific Plan
Lead Agency Hemet, City of

Type NOP Notice of Preparation

Description The Redevelopment Agency for the County of Riverside is seeking the City of Hemet's approval of the North Hemet Specific Plan with a General Plan Amendment and Zone Change. The North Hemet Specific Plan would permit a maximum of 442 high-density units (100 units within mixed-use areas) and 83 medium density residential units; 118,919 square feet of commercial uses; and 16,335 square feet of office uses. The 28.6-acre project site is west of State Street between Oakland Avenue on the south and the multifamily residential land uses north of Menlo Avenue. The North Hemet Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities.

Lead Agency Contact

Name Ron Running
Agency City of Hemet
Phone (951) 765-2375 **Fax**
email
Address 445 E. Florida Avenue
City Hemet **State** CA **Zip** 92545

Project Location

County Riverside
City Hemet
Region
Cross Streets Oakland Ave & State Street, Oakland Ave U Alessandro Street
Lat / Long
Parcel No. various
Township 05S **Range** 1W **Section** 10 **Base** San Bern

Proximity to:

Highways 74, 79
Airports
Railways BNSF rail spurs to the east
Waterways
Schools numerous
Land Use Residential (R1, R3), Commercial (C1, C2), Specific Plan (SP)

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse

Reviewing Agencies Resources Agency; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Fish and Game, Region 6; Office of Emergency Management Agency, California; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 8; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 9

Date Received 10/12/2011 **Start of Review** 10/12/2011 **End of Review** 11/10/2011

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Riverside

SCH# 2011101031

Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Mike Sotelo
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Gerald R. Zimmerman
- [x] **Dept. of Conservation**
  Jonathan Martis
- [ ] **California Energy Commission**
  Eric Knight
- [ ] **Cal Fire**
  Allen Robertson
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [x] **Office of Historic Preservation**
  Ron Parsons
- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **California Department of Resources, Recycling & Recovery**
  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [ ] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou
- [ ] _____
  Conservancy

Fish and Game

- [ ] **Depart. of Fish & Game**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Game Region 1**
  Donald Koch
- [ ] **Fish & Game Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Game Region 2**
  Jeff Drongesen
- [ ] **Fish & Game Region 3**
  Charles Armor
- [ ] **Fish & Game Region 4**
  Julie Vance
- [ ] **Fish & Game Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [x] **Fish & Game Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] **Fish & Game Region 6 I/M**
  Brad Henderson
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Anna Garbeff
  Environmental Services Section
- [ ] **Dept. of Public Health**
  Bridgette Binning
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Linda Flack
- [x] **Cal EMA (Emergency Management Agency)**
  Dennis Castrillo
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [x] **Public Utilities Commission**
  Leo Wong
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [x] **State Lands Commission**
  Cy R. Oggins
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans - Planning**
  Terri Pencovic
- [x] **California Highway Patrol**
  Bob Nannini
  Office of Special Projects
- [x] **Housing & Community Development**
  CEQA Coordinator
  Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Bruce de Terra
- [ ] **Caltrans, District 4**
  Lisa Carboni
- [ ] **Caltrans, District 5**
  David Murray
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Elmer Alvarez
- [x] **Caltrans, District 8**
  Dan Kopulsky
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Marlon Regisford

Cal EPA

Air Resources Board

- [ ] Airport Projects
  Jim Lerner
  - [ ] Transportation Projects
    Douglas Ito
  - [ ] Industrial Projects
    Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [x] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [x] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

Last Updated 8/23/11

Appendix C
Air Quality and Greenhouse Gas Emissions Modeling



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North Hemet Specific Plan - Project Description

Climate Zone 10

Existing	du or 1,000 sqft	Daily Trips	With Passby/ Internal Capture	Trip Rate for CalEEMod	Acreage
Phase 1					
Single-Family (PA 1+ PA 2)	11	105	105	9.55	6.4
Auto-care Center (PA 1 + PA 2)	7.51	150	150	19.97	2
Retail (PA 2)	6.5	288	288	44.31	2
		543	543		10.4
Phase 2					
Single-Family (PA 5 + PA 6 + PA 7)	6	58	58	9.67	11.5
Mobile home Park (PA 4)	30	150	150	5.00	1.75
High Turnover Restaurant (PA 6)	1.45	184	184	126.90	1.75
Convenience Market (PA 6)	2.9	1,450	1088	375.00	1.9
		1,842	1,480		16.9
TOTAL		2,385	2,023	w/ 1.3 ROW	28.6

Phase 1	du or 1,000 sqft	Daily Trips	With Passby/ Internal Capture	Trip Rate for CalEEMod	Acreage
Senior Housing* (PA 1)	96	356	353	3.68	3.2
Assisted Living (converted from beds to units) (PA 1)	96	375	375	3.91	3.2
Office (PA 2)	16.34	331	331	20.26	2
Commercial (PA 2)	38.12	2,436	1,608	42.18	2
TOTAL		3,498	2,667		10.4
	54.46				

Phase 2	du or 1,000 sqft	Daily Trips	With Passby/ Internal Capture	Trip Rate for CalEEMod	
Apartments (PA 3 + PA 5 + PA 6 + PA 7)	252	1,756	1,753	6.96	8.65
Condo/Townhomes (PA 3 + PA 4 + PA 7)	81	474	474	5.85	4.6
Commercial (PA 4 + PA 6)	80.8	5,164	3,257	40.31	3.65
		7,394	5,484		16.9
				ROW	1.3
		10,892	8,151		28.6
Less Existing Trips		8,507	6,129		

Assume 0.3 acre ROW paved in phase 1 and 1.0 acres paved in Phase 2

* CalEEMod Retirement Community land use has an error in the GHG calcs and therefore apartments mid-rise was used instead

Note: 2020 CO2 intensity based on SCE's Current Renewable Procurement Status: http://www.cpuc.ca.gov/PUC/energy/Renewables/index.htm

Water Use

Existing Phase 1 (based on generation rates from EMWD)				
Res	2.97	acre-feet/year	967,779	gallons/year
Com	3.0	acre-feet/year	977,554	gallons/year
Total	5.97	acre-feet/year	1,945,333	gallons/year
	indoor	1,556,266	outdoor	389,067
Existing Phase 2	12.4	acre-feet/year	4,040,558	gallons/year
	indoor	3,232,446	outdoor	808,112
Phase 1				
Res.	25.9	acre-feet/year	8,439,552	gallons/year
Res.	25.9	acre-feet/year	8,439,552	gallons/year
Office	0.9	acre-feet/year	293,302	gallons/year
Com.	2.1	acre-feet/year	684,252	gallons/year
Total	54.8	acre-feet/year	17,856,658	gallons/year
	indoor	14,285,327	outdoor	3,571,332
Phase 2	123.8	acre-feet/year	40,340,407	gallons/year
	indoor	32,272,326	outdoor	8,068,081

Operational Phase Worksheet

Existing in 2016

Winter Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.83	0.01	0.93	0	0.01	0.01
Energy	0.02	0.18	0.11	0	0.01	0.01
Mobile	2.39	6.29	24.58	0.04	5.51	0.47
Total	3.24	6.48	25.62	0.04	5.53	0.49

Summer Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.83	0.01	0.93	0	0.01	0.01
Energy	0.02	0.18	0.11	0	0.01	0.01
Mobile	2.49	5.97	26.62	0.05	5.51	0.46
Total	3.34	6.16	27.66	0.05	5.53	0.48

Highest Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.8	0.0	0.9	0.0	0.0	0.0
Energy	0.0	0.2	0.1	0.0	0.0	0.0
Mobile	2.5	6.3	26.6	0.1	5.5	0.5
Total	3.3	6.5	27.7	0.1	5.5	0.5

Operational Phase Worksheet

Phase 1 - 2016

Winter Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.33	0.19	16.26	0	0.22	0.21
Energy	0.09	0.78	0.35	0	0.06	0.06
Mobile	11.75	30.94	120.94	0.22	27.12	2.3
Total	18.17	31.91	137.55	0.22	27.4	2.57

Summer Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.33	0.19	16.26	0	0.22	0.21
Energy	0.09	0.78	0.35	0	0.06	0.06
Mobile	12.23	29.38	131.01	0.24	27.11	2.28
Total	18.65	30.35	147.62	0.24	27.39	2.55

Highest Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	6.3	0.2	16.3	0.0	0.2	0.2
Energy	0.1	0.8	0.4	0.0	0.1	0.1
Mobile	12.2	30.9	131.0	0.2	27.1	2.3
Total	18.7	31.9	147.6	0.2	27.4	2.6
Less Existing	-3.3	-6.5	-27.7	-0.1	-5.5	-0.5
Net Increase	15.3	25.4	120.0	0.2	21.9	2.1

Operational Phase Worksheet

Existing in 2020

Winter Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.23	0.03	3.02	0	0.02	0.02
Energy	0.04	0.36	0.2	0	0.03	0.03
Mobile	5.24	12.67	50.11	0.11	14.11	0.81
Total	6.51	13.06	53.33	0.11	14.16	0.86

Summer Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.23	0.03	3.02	0	0.02	0.02
Energy	0.04	0.36	0.2	0	0.03	0.03
Mobile	5.41	12.29	53.79	0.13	14.1	0.81
Total	6.68	12.68	57.01	0.13	14.15	0.86

Highest Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1	0	3	0	0	0
Energy	0	0	0	0	0	0
Mobile	5	13	54	0	14	1
Total	7	13	57	0	14	1

Operational Phase Worksheet

Phase 2 - 2020

Winter Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	10.91	0.32	27.93	0	0.6	0.59
Energy	0.19	1.65	0.72	0.01	0.13	0.13
Mobile	20.22	48.99	194.94	0.45	55.65	3.21
Total	31.32	50.96	223.59	0.46	56.38	3.93

Summer Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	10.91	0.32	27.93	0	0.6	0.59
Energy	0.19	1.65	0.72	0.01	0.13	0.13
Mobile	20.83	47.45	210.15	0.5	55.64	3.19
Total	31.93	49.42	238.8	0.51	56.37	3.91

Highest Category	ROG lb/day	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	11	0	28	0	1	1
Energy	0	2	1	0	0	0
Mobile	21	49	210	1	56	3
Total	32	51	239	1	56	4
Less Existing	-6.7	-13.1	-57.0	-0.1	-14.2	-0.9
Net Increase	25.3	37.9	181.8	0.4	42.2	3.1

Total Phase 1 + Phase 2

Total	41	63	302	1	64	5

Construction Worksheet - Phase 2

lbs/day	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Overlap	68.8	89.2	78.8	0.2	13.3	6.5
Demolition	4.9	37.0	26.8	0.1	8.1	1.7
Category						
Fugitive Dust					0.6	0.0
Off-Road	4.7	34.7	25.0	0.1	1.6	1.6
Total	4.7	34.7	25.0	0.1	2.2	1.6
Category						
Hauling	0.2	2.2	1.2	0.0	5.7	0.1
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.6	0.0	0.2	0.0
Total	0.2	2.3	1.8	0.0	5.9	0.1
Site Preparation	5.4	40.9	26.0	0.1	9.8	6.1
Category						
Fugitive Dust					7.7	4.3
Off-Road	5.3	40.8	25.2	0.1	1.8	1.8
Total	5.3	40.8	25.2	0.1	9.6	6.1
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.8	0.0	0.2	0.0
Total	0.1	0.1	0.8	0.0	0.2	0.0
Grading	6.3	46.9	31.7	0.1	6.0	3.5
Category						
Fugitive Dust					3.7	1.4
Off-Road	6.3	46.8	30.9	0.1	2.1	2.1
Total	6.3	46.8	30.9	0.1	5.8	3.5
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.8	0.0	0.3	0.0
Total	0.1	0.1	0.8	0.0	0.3	0.0
Building	3.9	22.9	29.7	0.1	4.8	1.4
Category						
Off-Road	2.5	16.2	15.2	0.0	0.9	0.9
Total	2.5	16.2	15.2	0.0	0.9	0.9
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.5	5.6	3.4	0.0	0.6	0.2
Worker	1.0	1.1	11.1	0.0	3.3	0.3
Total	1.4	6.8	14.5	0.0	3.9	0.5

Construction Worksheet - Phase 2

lbs/day	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Paving	3.0	18.0	14.4	0.0	1.7	1.5
Category						
Off-Road	2.9	17.9	13.7	0.0	1.5	1.5
Paving	0.0				0.0	0.0
Total	2.9	17.9	13.7	0.0	1.5	1.5
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.6	0.0	0.2	0.0
Total	0.1	0.1	0.6	0.0	0.2	0.0
Coating	55.6	1.4	3.1	0.0	0.8	0.1
Category						
Archit. Coating	55.2				0.0	0.0
Off-Road	0.2	1.2	1.2	0.0	0.1	0.1
Total	55.4	1.2	1.2	0.0	0.1	0.1
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.2	0.2	1.9	0.0	0.7	0.0
Total	0.2	0.2	1.9	0.0	0.7	0.0
Maximum	68.8	89.2	78.8	0.2	13.3	6.5

Construction LST Worksheet - Phase 2

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Overlap	82.1	61.0	8.3	6.0
Demolition	34.7	25.0	2.2	1.6
Category				
Fugitive Dust			0.6	0.0
Off-Road	34.7	25.0	1.6	1.6
Total	34.7	25.0	2.2	1.6
Site Preparation	40.8	25.2	9.6	6.1
Category				
Fugitive Dust			7.7	4.3
Off-Road	40.8	25.2	1.8	1.8
Total	40.8	25.2	9.6	6.1
Grading	46.8	30.9	5.8	3.5
Category				
Fugitive Dust			3.7	1.4
Off-Road	46.8	30.9	2.1	2.1
Total	46.8	30.9	5.8	3.5
Building	16.2	15.2	0.9	0.9
Category				
Off-Road	16.2	15.2	0.9	0.9
Total	16.2	15.2	0.9	0.9

Construction LST Worksheet - Phase 2

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Paving	17.9	13.7	1.5	1.5
Category				
Off-Road	17.9	13.7	1.5	1.5
Paving			0.0	0.0
Total	17.9	13.7	1.5	1.5
Coating	1.2	1.2	0.1	0.1
Category				
Archit. Coating			0.0	0.0
Off-Road	1.2	1.2	0.1	0.1
Total	1.2	1.2	0.1	0.1
Maximum	82.1	61.0	9.6	6.1

Construction Worksheet - Phase 1

lbs/day	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Overlap	42.9	54.0	45.2	0.1	6.6	4.0
Demolition	6.2	49.6	30.4	0.1	5.9	2.5
Category						
Fugitive Dust					0.3	0.0
Off-Road	6.0	47.7	28.6	0.1	2.4	2.4
Total	6.0	47.7	28.6	0.1	2.7	2.4
Category						
Hauling	0.2	1.8	0.8	0.0	3.0	0.1
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.9	0.0	0.2	0.0
Total	0.2	1.9	1.7	0.0	3.2	0.1
Site Preparation	6.8	54.3	31.7	0.1	10.6	6.9
Category						
Fugitive Dust					7.7	4.3
Off-Road	6.7	54.2	30.7	0.1	2.7	2.7
Total	6.7	54.2	30.7	0.1	10.4	6.9
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	1.1	0.0	0.2	0.0
Total	0.1	0.1	1.1	0.0	0.2	0.0
Grading	8.0	65.5	36.6	0.1	7.0	4.5
Category						
Fugitive Dust					3.7	1.4
Off-Road	7.9	65.3	35.4	0.1	3.1	3.1
Total	7.9	65.3	35.4	0.1	6.8	4.5
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	1.2	0.0	0.3	0.0
Total	0.1	0.1	1.2	0.0	0.3	0.0
Building	4.6	29.1	27.4	0.1	3.9	1.9
Category						
Off-Road	3.5	23.3	15.7	0.0	1.5	1.5
Total	3.5	23.3	15.7	0.0	1.5	1.5
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.4	4.8	2.6	0.0	0.4	0.2
Worker	0.8	1.0	9.1	0.0	1.9	0.2
Total	1.1	5.8	11.7	0.0	2.3	0.3

Construction Worksheet - Phase 1

lbs/day	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Paving	3.8	23.0	15.0	0.0	2.2	2.0
Category						
Off-Road	3.8	22.9	14.2	0.0	2.0	2.0
Paving	0.0				0.0	0.0
Total	3.8	22.9	14.2	0.0	2.0	2.0
Category	lb/day					
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.1	0.9	0.0	0.2	0.0
Total	0.1	0.1	0.9	0.0	0.2	0.0
Coating	34.5	1.9	2.8	0.0	0.5	0.2
Category						
Archit. Coating	34.1				0.0	0.0
Off-Road	0.3	1.7	1.3	0.0	0.2	0.2
Total	34.4	1.7	1.3	0.0	0.2	0.2
Category						
Hauling	0.0	0.0	0.0	0.0	0.0	0.0
Vendor	0.0	0.0	0.0	0.0	0.0	0.0
Worker	0.1	0.2	1.5	0.0	0.4	0.0
Total	0.1	0.2	1.5	0.0	0.4	0.0
Maximum	42.9	65.5	45.2	0.1	10.6	6.9

Construction LST Worksheet - Phase 1

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Overlap	47.9	31.2	3.7	3.7
Demolition	47.7	28.6	2.7	2.4
Category				
Fugitive Dust			0.3	0.0
Off-Road	47.7	28.6	2.4	2.4
Total	47.7	28.6	2.7	2.4
Site Preparation	54.2	30.7	10.4	6.9
Category				
Fugitive Dust			7.7	4.3
Off-Road	54.2	30.7	2.7	2.7
Total	54.2	30.7	10.4	6.9
Grading	65.3	35.4	6.8	4.5
Category				
Fugitive Dust			3.7	1.4
Off-Road	65.3	35.4	3.1	3.1
Total	65.3	35.4	6.8	4.5
Building	23.3	15.7	1.5	1.5
Category				
Off-Road	23.3	15.7	1.5	1.5
Total	23.3	15.7	1.5	1.5

Construction LST Worksheet - Phase 1

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Paving	22.9	14.2	2.0	2.0
Category				
Off-Road	22.9	14.2	2.0	2.0
Paving			0.0	0.0
Total	22.9	14.2	2.0	2.0
Coating	1.7	1.3	0.2	0.2
Category				
Archit. Coating			0.0	0.0
Off-Road	1.7	1.3	0.2	0.2
Total	1.7	1.3	0.2	0.2
Maximum	65.3	35.4	10.4	6.9

Construction LST Worksheet - Phase 1, Mitigated

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Overlap	47.9	31.2	3.7	3.7
Demolition	47.7	28.6	2.7	2.4
Category				
Fugitive Dust			0.3	0.0
Off-Road	47.7	28.6	2.4	2.4
Total	47.7	28.6	2.7	2.4
Site Preparation	29.5	27.3	9.7	6.2
Category				
Fugitive Dust			7.7	4.3
Off-Road	29.5	27.3	2.0	2.0
Total	29.5	27.3	9.7	6.2
Grading	35.6	38.1	6.1	3.8
Category				
Fugitive Dust			3.7	1.4
Off-Road	35.6	38.1	2.4	2.4
Total	35.6	38.1	6.1	3.8
Building	23.3	15.7	1.5	1.5
Category				
Off-Road	23.3	15.7	1.5	1.5
Total	23.3	15.7	1.5	1.5

Construction LST Worksheet - Phase 1, Mitigated

lbs/day	NOx	CO	PM10 Total	PM2.5 Total
Paving	22.9	14.2	2.0	2.0
Category				
Off-Road	22.9	14.2	2.0	2.0
Paving			0.0	0.0
Total	22.9	14.2	2.0	2.0
Coating	1.7	1.3	0.2	0.2
Category				
Archit. Coating			0.0	0.0
Off-Road	1.7	1.3	0.2	0.2
Total	1.7	1.3	0.2	0.2
Maximum	47.9	38.1	9.7	6.2

Annual

Existing

	Phase 1	Phase 2	MTons/ Year
Area	0.28	0.91	1
Energy	115.47	168.29	284
Mobile	730.22	1,670.08	2,400
Waste	23.72	64.66	88
Water	7.56	15.71	23
Total	877	1,920	2,797

Construction

	Total Construction Emissions	Amortized over 30 years
Phase 1	1,947	65
Phase 2	2,523	84

Annual GHG Emissions

Phase 1

	MTons/ Year
Area	74
Energy	626
Mobile	3,595
Waste	178
Water	178
Amortized Construction	65
Total	4,717
Per SP	8.6

Phase 1 Service Population	
Residential	501
Employees	50
Service Population	551

Notes: 2.61 person/household; 541 employee/sft office; 1,844 employee/sqft commercial

Phase 2

	MTons/ Year
Area	250
Energy	1,168
Mobile	6,575
Waste	180
Water	129
Amortized Construction	84
Total	8,385
Per SP	9.2

Phase 2 Service Population	
Residential	869
Employees	44
Service Population	913

Notes: 2.61 person/household; 541 employee/sft office; 1,844 employee/sqft commercial

Phase 1 + Phase 2

	MTons/ Year	Net Increase MTons/Year
Area	324	323
Energy	1,794	1,510
Mobile	10,170	7,770
Waste	358	269
Water	307	284
Amortized Construction	149	149
Total	13,102	10,305
Per SP	8.9	

Phase 2 Service Population	
Residential	1370
Employees	94
Service Population	1464

Notes: 2.61 person/household; 541 employee/sft office; 1,844 employee/sqft commercial

Energy

	Title 24 Electricity KWhr/size/year	Non-Title 24 Electricity KWhr/size/year	Lighting Energy KWh/size/year	Title 24 Natural Gas KBTU/size/year	Non-Title 24 Natural Gas KBTU/size/year
Apartments Mid-Rise	991.22	2,392.12	805.7	13,274.20	1,975.7
Congregate Care	991.22	2,392.12	805.7	13,274.20	1,975.7
General Office Building	3.75	2.79	4.15	3.65	0.0
Strip Mall	5.6	2.44	7.62	2.02	0.3
Apartments Low-Rise	1197.25	2,399.07	876.36	14,081.08	2,756.0
Condo/Townhouse	979.54	2,943.11	1016.08	22,444.84	3,381.0
Strip Mall 2	5.6	2.44	7.62	2.02	0.3

Phase 1	number							
Apt	96	95,157	229,644	77,347	402,148	1,274,323	189,667	1,463,990
Cong	96	95,157	229,644	77,347	402,148	1,274,323	189,667	1,463,990
Office	16,340	61,275	45,589	67,811	174,675	59,641	0	59,641
Strip	38,120	213,472	93,013	290,474	596,959	77,002	11,436	88,438
Total		465,061	597,888	512,980	1,575,929	2,685,290	390,770	3,076,060
Phase 1		Unmitigated						
	Electricity	1,575,929						
	Natural Gas	3,076,060						

Phase 2	number							
Apt	252	301,707	604,566	220,843	1,127,115	3,548,432	694,512	5,370,060
Condo	81	79,343	238,392	82,302	400,037	1,818,032	273,861	2,491,930
Com.	80,800	452,480	197,152	615,696	1,265,328	163,216	24,240	1,452,784
Total		833,530	1,040,110	918,841	2,792,480	5,529,680	992,613	6,522,293
					-			-
Phase 2		Unmitigated		total Phase 1+ Phase 2				
	Electricity	2,792,480		4,368,410				
	Natural Gas	6,522,293		9,598,353				

Existing

		Title 24 Electricity KWhr/size/year	Non-Title 24 Electricity KWhr/size/year	Lighting Energy KWh/size/year		Title 24 Natural Gas KBTU/size/year	Non-Title 24 Natural Gas KBTU/size/year	
Autocare		2.69	5.02	3.36		16.16	17.1	
Single-Family		1245.11	4,476.23	1478.48		34,584.80	5,940.0	
Strip mall		5.6	2.44	7.62		2.02	0.3	
convenience		5.6	2.44	7.62		2.02	0.3	
rest		15.13	28.48	8.79		81.74	195.8	
Mobile home		1090.4	3,134.97	1007.12		22,574.20	1,735.0	
sFR		1245.11	4,476.23	1478.48		34,584.80	5,940.0	
EXISTING 2016								
Autocare	7,510	20,202	37,700	25,234	83,136	121,362	128,646	250,008
Single-Family	11	13,696	49,239	16,263	79,198	380,433	65,340	445,773
Strip mall	6,500	36,400	15,860	49,530	101,790	13,130	1,950	15,080
Total		70,298	102,799	91,027	264,124	514,924	195,936	710,861
					-			-
Existing 1		Unmitigated						
	Electricity	264,124						
	Natural Gas	710,861						
EXISTING 2020								
convenience	2,900	16,240	7,076	22,098	45,414	5,858	870	6,728
rest	1,450	21,939	41,296	12,746	75,980	118,523	283,867	402,390
Mobile home	30	32,712	94,049	30,214	156,975	677,226	52,050	729,276
sFR	6	7,471	26,857	8,871	43,199	207,509	35,640	243,149
Total	4,386	78,361	169,278	73,928	321,568	1,009,116	372,427	1,381,542
Existing 1		Unmitigated						
	Electricity	321,568						
	Natural Gas	1,381,542						

CalEEMod Modifications to Construction Defaults

Phase 1 Default	Note: 22 work days per month	Days Original	Days Modified	Months
Demolition	modified for 3 year schedule	20	41	2
Site Preparation	modified for 3 year schedule	10	20	1
Grading	modified for 3 year schedule	30	61	3
Building Construction	modified for 3 year schedule	330	660	30
Paving	modified for 3 year schedule and 2 Pas	20	81	4
Architectural Coating	modified for 3 year schedule and 2 Pas	20	81	4

Project Construction Schedule: assume 3 year schedule w/overlap	CalEEMod	792	days
2013 through 2015 (operation by 2016)	2.03		

CalEEMod Modifications to Construction Defaults

Phase 2 Default	Note: 22 work days per month	Days Original	Days Modified	Months
Demolition	modified for 3 year schedule	20	41	2
Site Preparation	assumes slightly longer time frame than phase 1 to mass grade larger site	10	41	2
Grading	modified for 3 year schedule	30	61	3
Building Construction	modified for 3 year schedule	330	691	31
Paving	modified for 3 year schedule and multiple Pas	20	81	4
Architectural Coating	modified for 3 year schedule and 2 multiple Pas	20	81	4

Project Construction Schedule: assume 3 year schedule w/overlap	CalEEMod	792	days
2017 through 2019 (operational by 2020)	2.03		

CalEEMod Modifications to Construction Defaults - Load Factors

Load factors based on OFFROAD2011 In-Use Off-Road Equipment (Construction, Industrial, Ground Support and Oil Drilling) module. Where data is not yet available in OFFROAD2011, load factors are reduced by 33 percent in accordance with CARB recommendations (California Air Resources Board [CARB]. 2010, September. Workshops on Information Regarding the Off-Road, Truck and Bus, Drayage Truck Regulations).

Default Equipment Mix

PhaseName	OffRoadEquipmentType	OffRoadEquipmentUnitAmount	UsageHours	HorsePower	LoadFactor	Modified Load Factor
Phase 1						
Demolition	Concrete/Industrial Saws	1	8	81	0.73	0.49
Demolition	Excavators	3	8	157	0.57	0.38
Demolition	Rubber Tired Dozers	2	8	358	0.59	0.40
Site Preparation	Rubber Tired Dozers	3	8	358	0.59	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	75	0.55	0.37
Grading	Excavators	2	8	157	0.57	0.38
Grading	Graders	1	8	162	0.61	0.41
Grading	Rubber Tired Dozers	1	8	358	0.59	0.40
Grading	Scrapers	2	8	356	0.72	0.48
Grading	Tractors/Loaders/Backhoes	2	8	75	0.55	0.37
Building Construction	Cranes	1	7	208	0.43	0.29
Building Construction	Forklifts	3	8	149	0.3	0.20
Building Construction	Generator Sets	1	8	84	0.74	0.50
Building Construction	Tractors/Loaders/Backhoes	3	7	75	0.55	0.37
Building Construction	Welders	1	8	46	0.45	0.30
Paving	Pavers	2	8	89	0.62	0.42
Paving	Paving Equipment	2	8	82	0.53	0.36
Paving	Rollers	2	8	84	0.56	0.38
Architectural Coating	Air Compressors	1	6	78	0.48	0.32
Phase 2						0.00
Demolition	Concrete/Industrial Saws	1	8	81	0.73	0.49
Demolition	Excavators	3	8	157	0.57	0.38
Demolition	Rubber Tired Dozers	2	8	358	0.59	0.40
Site Preparation	Rubber Tired Dozers	3	8	358	0.59	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	75	0.55	0.37
Grading	Excavators	2	8	157	0.57	0.38
Grading	Graders	1	8	162	0.61	0.41
Grading	Rubber Tired Dozers	1	8	358	0.59	0.40
Grading	Scrapers	2	8	356	0.72	0.48
Grading	Tractors/Loaders/Backhoes	2	8	75	0.55	0.37
Building Construction	Cranes	1	7	208	0.43	0.29
Building Construction	Forklifts	3	8	149	0.3	0.20
Building Construction	Generator Sets	1	8	84	0.74	0.50
Building Construction	Tractors/Loaders/Backhoes	3	7	75	0.55	0.37
Building Construction	Welders	1	8	46	0.45	0.30
Paving	Pavers	2	8	89	0.62	0.42
Paving	Paving Equipment	2	8	82	0.53	0.36
Paving	Rollers	2	8	84	0.56	0.38
Architectural Coating	Air Compressors	1	6	78	0.48	0.32

Workshops on Information Regarding the Off-Road, Truck and Bus and Drayage Truck Regulations





August/September 2010 Workshop Series
September 3, 2010

California Environmental Protection Agency

Air Resources Board

Load Factor

- Load varies by equipment type and usage
- Collected engine load data from ARB testing programs and manufacturer provided data
  - Analysis indicates that OFFROAD load factors are 25-50% too high
  - Staff concluded load factors should be reduced 33% for the updated inventory
  - Consistent with findings for other off-road equipment.

ENVIRON

September 15, 2010

DRAFT MEMORANDUM

To: Emeryville Air Group

From: Kai Zhao

Subject: Summary of ARB's Workshop on Revision to the Off-Road and On-Road Vehicle Emissions Inventories (Oakland – September 8th, 2010)

Background

On September 8, 2010 in Oakland, staff from the ARB concluded a series of public workshops throughout the state which focused on the finalized emissions inventories underlying the off-road and truck & bus regulations. The updated off-road and on-road vehicle emissions inventories account for the impact from the recession since 2008 and the newly collected equipment data. The emissions across both categories are significantly lower than the previous inventories. The actual changes to the regulations were not discussed during this workshop but will be the focus of the next round of workshops starting the end of September 2010. Below is the proposed regulatory timing:

- September 30th – October 12th: workshops focused on the revised staff proposals and unofficial commenting period
- Mid - Late October: release of the staff report and beginning of the official commenting period
- Mid December: Board hearing

More background information can be found on ARB's website:
http://www.arb.ca.gov/msprog/ordiesel/meetings.htm

This memo focuses on the changes to the off-road and truck & bus emissions inventory that directly affect our analyses approach.

In-Use Off-Road Vehicles

Based on the newly collected engine load data from the ARB testing programs and manufacturers, ARB staff indicated that their analysis for OFFROAD load factors were 25-50% too high depending on the equipment type and concluded that the OFFROAD load factors should be reduced by 33%. In addition, the email communication with Nicole Dolney from ARB (attached) confirmed that this 33% reduction can be directly applied to the load factor during the off-road equipment emissions calculation, which results a 33% emissions reduction for all pollutants (i.e., NO_2, CO, PM, SO_2, CH_4, and CO_2).

ARB also revised equipment population, activity, age, and growth rate for the emissions inventory by taking into account the impact from the recession and new data, and lower the

equipment fuel usage rate based on a paper published by Prof. Robert Harley from UC Berkeley in 2009.[1]

The summary table below shows how the impacts of these revisions might affect our emissions calculation approach.

Equipment Parameter	Revisions	Reference[2] (slide #)	Affect Approach?	Impact
Population	Lower	39 - 41	No[3]	NA
Age	Generally Younger	42, 43	Yes[4]	Reduce emissions
Activity	Lower	46 - 49	No[3]	NA
Load Factor	Lower	50	Yes[5]	Reduce emissions
Growth	Lower	51, 52	No[3]	NA
Fuel Usage	Lower	60	No[6]	NA
Based Emission Factors	Unchanged	60	No	NA
Deterioration Rates[7]	Unchanged	60	No	NA

Additional information regarding the updated off-road vehicle emissions inventory can be found in the workshop presentation.[2]

On-Road Vehicles (Statewide Truck and Bus)

ARB revised the following four categories for the truck and bus emissions inventory, but ENVIRON's emissions calculation for on-road vehicles should not be affected. One voice message has been left for Nicole from ARB, and her advice or confirmation is expected.

1. Vehicle/Fleet Size Categories
2. Odometer
3. Out-of-State Vehicle Miles Traveled
4. Regional Allocation

Item 3 was the only category went under major change. The detailed information regarding the revisions to these four categories can be found in slides 11 to 28 of the workshop presentation.

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[1] Millstein, D.E.; Harley, R.A. (2009). Revised Estimates of Construction Activity and Emissions: Effects on Ozone and Elemental Carbon Concentrations in Southern California. *Atmospheric Environment* **43**, 6328-6335.

[2] The workshop presentation:
http://www.arb.ca.gov/msprog/ordiesel/documents/emissions_inventory_presentation_full_10_09_03.pdf

[3] These revisions do not affect the back-calculated average equipment emissions factors (in g/hp-hr) used in ENVIRON's emissions calculation that also uses the project specific equipment number and activity.

[4] The change to the equipment age distribution affects the back-calculated average equipment emission factors. However, the change varies by year and locatio, and it is difficult to quantify the actual impact. A voice message has been left for Nicole from ARB, and her advice is expected.

[5] Apply the reduction directly to the emissions.

[6] Based on Nicole Dolney's email on Sep 8th, 2010, the OFFROAD fuel usage was back-calculated from the CO_2 emissions.

[7] The deterioration is capped at 12,000 hours for each piece of equipment.

The impact of revisions on the on-road emissions inventory (shown in slides 29 to 34) relatively small compared to that on the off-road inventory.

Conclusion

Before the updated off-road and on-road vehicle regulations are released to the public later this year, a 33% load factor reduction should be applied during the off-road equipment emissions calculations (e.g., construction project) regardless the source of the emission factors (e.g., OFFROAD and USEPA Tier standards), and no change is necessary for the current on-road vehicle emissions calculation.

From: Dolney, Nicole@ARB
To: Kai Zhao;
cc: Sax, Todd@ARB;
Subject: RE: Workshop Follow Up Questions
Date: Wednesday, September 08, 2010 4:52:41 PM

Hello Kai,

I wanted to follow up on a workshop question regarding the off-road inventory. As Todd indicated you can directly apply a 33% reduction for the LF correction. With regards to the CO2 correction you won't be able to ratio the BSFCs. OFFROAD uses CO2 emission factors and then backcalculates fuel. For the updated inventory we're going to use the new BSFC values to calculate fuel. Also, at the workshop we said that we are using USEPA values for BSFC – this means that for the 50 HP bin the BSFC is 0.408 and for every other HP bin the BSFC is 0.367 lb/hr-hr.

Call or email if you have additional questions.

Nicole Dolney
Manager, Off-Road Diesel Analysis Section
Planning and Technical Support Division
California Air Resources Board
916-322-1695
ndolney@arb.ca.gov

From: Kai Zhao [mailto:kaizhao@Environcorp.com]
Sent: Wednesday, September 08, 2010 4:03 PM
To: Sax, Todd@ARB
Subject: Workshop Follow Up Questions

Hi Todd,

It was good meeting to you today at the workshop in Oakland. Thank you and the other ARB/Cal EPA staff members for putting together this spirited discussion. I was hoping you could help me with one follow-up issue. As we discussed at the workshop, some of the updates regarding the offroad construction equipment presented during the workshop are important to our analysis and I would like to confirm the following to make sure I implement the changes properly.

I understand that ARB staff concluded that the load factor should be reduced by 33% for the updated inventory based on the collected engine load data from ARB testing programs and manufacturer provided data. I want to confirm that we can apply 33% reduction to the current default construction equipment load factors used by OFFROAD 2007 during our construction emissions calculation (i.e., updated emissions = 0.67 * emissions calculated using the current OFFROAD default equipment parameters).

In addition, for the CO2 emissions, we can further reduce the emissions multiplying the following fuel consumption ratio:

0.367lb/hp-hr (USEPA's NonROAD Model fuel consumption rate)

0.401 lb/hp-hr (OFFROAD fuel consumption rate)

Please let me know if the approaches above are correct. Lastly, are there any restrictions on applying these emissions reductions (e.g., specific equipment types, sizes)?

Thanks for your help with this matter.

Best,

-Kai

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message in error, please contact the sender by electronic reply to email@environcorp.com and immediately delete all copies of the message.

EquipmentTypeID	OFFROAD2011 Adj ARB LF	COMPARE TO CalEEMod Default	Percent Change
Aerial Lifts	0.3082	0.46	-33%
Air Compressors	NA	0.48	
Bore/Drill Rigs	0.5025	0.75	-33%
Cement and Mortar Mixers	NA	0.56	
Concrete/Industrial Saws	NA	0.73	
Cranes	0.2881	0.43	-33%
Crawler Tractors	0.4288	0.64	-33%
Crushing/Proc. Equipment	NA	0.78	
Dumpers/Tenders	NA	0.38	
Excavators	0.3819	0.57	-33%
Forklift (GSE)	0.201	0.30	-33%
Forklifts	0.201	0.30	-33%
Generator Sets	NA	0.74	
Graders	0.4087	0.61	-33%
Off-Highway Tractors	0.4355	0.65	-33%
Off-Highway Trucks	0.3819	0.57	-33%
Other Construction Equipment	0.4154	0.62	-33%
Other General Industrial Equipment	0.3417	0.51	-33%
Other Material Handling Equipment	0.3953	0.59	-33%
Pavers	0.4154	0.62	-33%
Paving Equipment	0.3551	0.53	-33%
Plate Compactors	NA	0.43	
Pressure Washers	NA	0.30	
Pumps	NA	0.74	
Rollers	0.3752	0.56	-33%
Rough Terrain Forklifts	0.402	0.60	-33%
Rubber Tired Dozers	0.3953	0.59	-33%
Rubber Tired Loaders	0.3618	0.54	-33%
Scrapers	0.4824	0.72	-33%
Signal Boards	NA	0.82	
Skid Steer Loaders	0.3685	0.55	-33%
Surfacing Equipment	0.3015	0.45	-33%
Sweepers/Scrubbers	0.4556	0.68	-33%
Tractors/Loaders/Backhoes	0.3685	0.55	-33%
Trenchers	0.5025	0.75	-33%
Welders		0.45	

Source: OFFROAD2011 and CalEEMod

SAN JACINTO RANGER STN, CALIFORNIA (047813)

Period of Record Monthly Climate Summary

Period of Record : 7/ 1/1948 to 12/29/2011

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	66.8	67.6	70.6	77.1	83.2	90.9	97.2	98.3	93.2	84.0	73.9	67.2	80.8
Average Min. Temperature (F)	37.9	39.6	42.4	45.7	50.9	55.1	60.5	61.2	57.5	50.2	41.6	36.1	48.2
Average Total Precipitation (in.)	2.61	2.59	1.95	0.80	0.42	0.08	0.19	0.21	0.28	0.61	0.91	1.67	12.31
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.
Max. Temp.: 39.1% Min. Temp.: 39% Precipitation: 46.6% Snowfall: 41.3% Snow Depth: 41.3%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

Construction Localized Significance Thresholds - North Hemet Specific Plan

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
28	4.00	25	82

Source Receptor Distance (meters)	Hemet/San Jacinto Valley 25
NO2	**325**
CO	**1676**
PM10	**11.0**
PM2.5	**6.7**

Equipment	Acres/8-hr Day	Equipment Used	Acres
Tractors	0.5	2	1
Graders	0.5	1	0.5
Dozers	0.5	1	0.5
Scrapers	1	2.0	2
		Acres	4.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	4	325	369	468	622	1028
	4	325	369	468	622	1028
		325	369	468	622	1028
CO	4	1677	2333	3782	7831	27975
	4	1677	2333	3782	7831	27975
		1677	2333	3782	7831	27975
PM10	4	11	33	52	89	200
	4	11	33	52	89	200
		11	33	52	89	200
PM2.5	4	7	9	14	28	100
	4	7	9	14	28	100
		7	9	14	28	100

Hemet/San Jacinto Valley

4.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	325	369	468	622	1028
CO	1677	2333	3782	7831	27975
PM10	11	33	52	89	200
PM2.5	7	9	14	28	100

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
28	4	28	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Operation Localized Significance Thresholds - North Hemet Specific Plan

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
28	5.00	25	82

Source Receptor	**Hemet/San Jacinto Valley**
Distance (meters)	25
NOx	**371**
CO	**1965**
PM10	**4**
PM2.5	**2**

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	5	371	416	520	672	1072
	5	371	416	520	672	1072
		371	416	520	672	1072
CO	5	1965	2714	4282	8547	29256
	5	1965	2714	4282	8547	29256
		1965	2714	4282	8547	29256
PM10	5	4	10	14	23	50
	5	4	10	14	23	50
		4	10	14	23	50
PM2.5	5	2	3	4	8	26
	5	2	3	4	8	26
		2	3	4	8	26

Hemet/San Jacinto Valley

5.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	371	416	520	672	1072
CO	1965	2714	4282	8547	29256
PM10	4	10	14	23	50
PM2.5	2	3	4	8	26

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
28	5	28	5
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2010 - Table C-1. 2006 – 2008

ExistingDemoedinPhase1

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	11	Dwelling Unit
Automobile Care Center	7.51	1000sqft
Strip Mall	6.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project Description

Construction Phase -

Off-road Equipment -

Architectural Coating - no construction

Vehicle Trips - Trip generation provided by Urban Crossroads

Woodstoves - assume no fireplaces

Water And Wastewater - Water generation estimate from rates in WSA

Solid Waste - error in waste single-family waste calc (11 * 0.36 = 3.96), and in strip mall (6.5 *3.0= 19.5) in CalEemod appendix D

Construction Off-road Equipment Mitigation -

Water Mitigation -

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.15	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Energy	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	114.76	114.76	0.00	0.00	115.47
Mobile	0.42	1.09	4.60	0.01	0.87	0.05	0.92	0.03	0.05	0.08	0.00	729.60	729.60	0.03	0.00	730.22
Waste						0.00	0.00		0.00	0.00	10.59	0.00	10.59	0.63	0.00	23.72
Water						0.00	0.00		0.00	0.00	0.00	7.15	7.15	0.00	0.00	7.56
Total	**0.57**	**1.12**	**4.79**	**0.01**	**0.87**	**0.05**	**0.92**	**0.03**	**0.05**	**0.08**	**10.59**	**851.78**	**862.37**	**0.66**	**0.00**	**877.25**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.15	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Energy	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	114.76	114.76	0.00	0.00	115.47
Mobile	0.42	1.09	4.60	0.01	0.87	0.05	0.92	0.03	0.05	0.08	0.00	729.60	729.60	0.03	0.00	730.22
Waste						0.00	0.00		0.00	0.00	10.59	0.00	10.59	0.63	0.00	23.72
Water						0.00	0.00		0.00	0.00	0.00	7.15	7.15	0.00	0.00	7.56
Total	**0.57**	**1.12**	**4.79**	**0.01**	**0.87**	**0.05**	**0.92**	**0.03**	**0.05**	**0.08**	**10.59**	**851.78**	**862.37**	**0.66**	**0.00**	**877.25**

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.42	1.09	4.60	0.01	0.87	0.05	0.92	0.03	0.05	0.08	0.00	729.60	729.60	0.03	0.00	730.22
Unmitigated	0.42	1.09	4.60	0.01	0.87	0.05	0.92	0.03	0.05	0.08	0.00	729.60	729.60	0.03	0.00	730.22
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	149.97	149.97	149.97	438,146	438,146
Single Family Housing	105.05	105.05	105.05	336,045	336,045
Strip Mall	288.02	288.02	288.02	803,600	803,600
Total	543.04	543.04	543.04	1,577,791	1,577,791

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	76.83	76.83	0.00	0.00	77.31
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	76.83	76.83	0.00	0.00	77.31
NaturalGas Mitigated	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	37.93	37.93	0.00	0.00	38.17
NaturalGas Unmitigated	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	37.93	37.93	0.00	0.00	38.17
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Automobile Care Center	250008	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	13.34	13.34	0.00	0.00	13.42
Single Family Housing	445773	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	23.79	23.79	0.00	0.00	23.93
Strip Mall	15080	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.80	0.80	0.00	0.00	0.81
Total		**0.00**	**0.03**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**37.93**	**37.93**	**0.00**	**0.00**	**38.16**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Automobile Care Center	250008	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	13.34	13.34	0.00	0.00	13.42
Single Family Housing	445773	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	23.79	23.79	0.00	0.00	23.93
Strip Mall	15080	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.80	0.80	0.00	0.00	0.81
Total		**0.00**	**0.03**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**37.93**	**37.93**	**0.00**	**0.00**	**38.16**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Automobile Care Center	83135.7					24.18	0.00	0.00	24.33
Single Family Housing	79198					23.04	0.00	0.00	23.18
Strip Mall	101790					29.61	0.00	0.00	29.79
Total						**76.83**	**0.00**	**0.00**	**77.30**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Automobile Care Center	83135.7					24.18	0.00	0.00	24.33
Single Family Housing	79198					23.04	0.00	0.00	23.18
Strip Mall	101790					29.61	0.00	0.00	29.79
Total						**76.83**	**0.00**	**0.00**	**77.30**

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.15	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Unmitigated	0.15	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Total	**0.15**	**0.00**	**0.17**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.27**	**0.27**	**0.00**	**0.00**	**0.28**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.12					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.17	0.00		0.00	0.00		0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28
Total	**0.15**	**0.00**	**0.17**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.27**	**0.27**	**0.00**	**0.00**	**0.28**

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					7.15	0.00	0.00	7.56
Unmitigated					7.15	0.00	0.00	7.56
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Automobile Care Center	0.391022 / 0.097755					1.80	0.00	0.00	1.90
Single Family Housing	0.774223 / 0.193556					3.56	0.00	0.00	3.76
Strip Mall	0.391022 / 0.097755					1.80	0.00	0.00	1.90
Total						**7.16**	**0.00**	**0.00**	**7.56**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Automobile Care Center	0.391022 / 0.097755					1.80	0.00	0.00	1.90
Single Family Housing	0.774223 / 0.193556					3.56	0.00	0.00	3.76
Strip Mall	0.391022 / 0.097755					1.80	0.00	0.00	1.90
Total						**7.16**	**0.00**	**0.00**	**7.56**

ExistingDemoedinPhase1
Riverside-South Coast County, Annual

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					10.59	0.63	0.00	23.72
Unmitigated					10.59	0.63	0.00	23.72
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Automobile Care Center	28.69					5.82	0.34	0.00	13.05
Single Family Housing	3.96					0.80	0.05	0.00	1.80
Strip Mall	19.5					3.96	0.23	0.00	8.87
Total						**10.58**	**0.62**	**0.00**	**23.72**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Automobile Care Center	28.69					5.82	0.34	0.00	13.05
Single Family Housing	3.96					0.80	0.05	0.00	1.80
Strip Mall	19.5					3.96	0.23	0.00	8.87
Total						**10.58**	**0.62**	**0.00**	**23.72**

9.0 Vegetation

ExistingDemoedinPhase1

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	11	Dwelling Unit
Automobile Care Center	7.51	1000sqft
Strip Mall	6.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project Description

Construction Phase -

Off-road Equipment -

Architectural Coating - no construction

Vehicle Trips - Trip generation provided by Urban Crossroads

Woodstoves - assume no fireplaces

Water And Wastewater - Water generation estimate from rates in WSA

Solid Waste - error in waste single-family waste calc (11 * 0.36 = 3.96), and in strip mall (6.5 *3.0= 19.5) in CalEemod appendix D

Construction Off-road Equipment Mitigation -

Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Energy	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Mobile	2.49	5.97	26.62	0.05	5.22	0.28	5.51	0.18	0.28	0.46		4,709.47		0.19		4,713.40
Total	**3.34**	**6.16**	**27.66**	**0.05**	**5.22**	**0.28**	**5.53**	**0.18**	**0.28**	**0.48**	**0.00**	**4,940.25**		**0.19**	**0.00**	**4,945.61**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Energy	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Mobile	2.49	5.97	26.62	0.05	5.22	0.28	5.51	0.18	0.28	0.46		4,709.47		0.19		4,713.40
Total	**3.34**	**6.16**	**27.66**	**0.05**	**5.22**	**0.28**	**5.53**	**0.18**	**0.28**	**0.48**	**0.00**	**4,940.25**		**0.19**	**0.00**	**4,945.61**

ExistingDemoedinPhase1
Riverside-South Coast County, Summer

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.49	5.97	26.62	0.05	5.22	0.28	5.51	0.18	0.28	0.46		4,709.47		0.19		4,713.40
Unmitigated	2.49	5.97	26.62	0.05	5.22	0.28	5.51	0.18	0.28	0.46		4,709.47		0.19		4,713.40
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	149.97	149.97	149.97	438,146	438,146
Single Family Housing	105.05	105.05	105.05	336,045	336,045
Strip Mall	288.02	288.02	288.02	803,600	803,600
Total	543.04	543.04	543.04	1,577,791	1,577,791

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

ExistingDemoedinPhase1
Riverside-South Coast County, Summer

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
NaturalGas Unmitigated	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Automobile Care Center	684.953	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01		80.58		0.00	0.00	81.07
Single Family Housing	1221.3	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01		143.68		0.00	0.00	144.56
Strip Mall	41.3151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		4.86		0.00	0.00	4.89
Total		**0.02**	**0.18**	**0.11**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**229.12**		**0.00**	**0.00**	**230.52**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Automobile Care Center	0.684953	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01		80.58		0.00	0.00	81.07
Single Family Housing	1.2213	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01		143.68		0.00	0.00	144.56
Strip Mall	0.0413151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		4.86		0.00	0.00	4.89
Total		**0.02**	**0.18**	**0.11**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**229.12**		**0.00**	**0.00**	**230.52**

ExistingDemoedinPhase1
Riverside-South Coast County, Summer

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Unmitigated	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.03	0.01	0.93	0.00		0.00	0.01		0.00	0.01		1.65		0.00		1.69
Total	**0.83**	**0.01**	**0.93**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**1.65**		**0.00**	**0.00**	**1.69**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.03	0.01	0.93	0.00		0.00	0.01		0.00	0.01		1.65		0.00		1.69
Total	**0.83**	**0.01**	**0.93**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**1.65**		**0.00**	**0.00**	**1.69**

ExistingDemoedinPhase1
Riverside-South Coast County, Summer

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ExistingDemoedinPhase1
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	11	Dwelling Unit
Automobile Care Center	7.51	1000sqft
Strip Mall	6.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -
Land Use - Project Description
Construction Phase -
Off-road Equipment -
Architectural Coating - no construction
Vehicle Trips - Trip generation provided by Urban Crossroads
Woodstoves - assume no fireplaces
Water And Wastewater - Water generation estimate from rates in WSA
Solid Waste - error in waste single-family waste calc (11 * 0.36 = 3.96), and in strip mall (6.5 *3.0= 19.5) in CalEemod appendix D
Construction Off-road Equipment Mitigation -
Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Energy	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Mobile	2.39	6.29	24.58	0.04	5.22	0.29	5.51	0.18	0.29	0.47		4,286.91		0.18		4,290.62
Total	**3.24**	**6.48**	**25.62**	**0.04**	**5.22**	**0.29**	**5.53**	**0.18**	**0.29**	**0.49**	**0.00**	**4,517.69**		**0.18**	**0.00**	**4,522.83**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Energy	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Mobile	2.39	6.29	24.58	0.04	5.22	0.29	5.51	0.18	0.29	0.47		4,286.91		0.18		4,290.62
Total	**3.24**	**6.48**	**25.62**	**0.04**	**5.22**	**0.29**	**5.53**	**0.18**	**0.29**	**0.49**	**0.00**	**4,517.69**		**0.18**	**0.00**	**4,522.83**

ExistingDemoedinPhase1
Riverside-South Coast County, Winter

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.39	6.29	24.58	0.04	5.22	0.29	5.51	0.18	0.29	0.47		4,286.91		0.18		4,290.62
Unmitigated	2.39	6.29	24.58	0.04	5.22	0.29	5.51	0.18	0.29	0.47		4,286.91		0.18		4,290.62
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	149.97	149.97	149.97	438,146	438,146
Single Family Housing	105.05	105.05	105.05	336,045	336,045
Strip Mall	288.02	288.02	288.02	803,600	803,600
Total	543.04	543.04	543.04	1,577,791	1,577,791

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00

ExistingDemoedinPhase1
Riverside-South Coast County, Winter

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
NaturalGas Unmitigated	0.02	0.18	0.11	0.00		0.00	0.01		0.00	0.01		229.13		0.00	0.00	230.52
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Automobile Care Center	684.953	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01		80.58		0.00	0.00	81.07
Single Family Housing	1221.3	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01		143.68		0.00	0.00	144.56
Strip Mall	41.3151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		4.86		0.00	0.00	4.89
Total		**0.02**	**0.18**	**0.11**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**229.12**		**0.00**	**0.00**	**230.52**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Automobile Care Center	0.684953	0.01	0.07	0.06	0.00		0.00	0.01		0.00	0.01		80.58		0.00	0.00	81.07
Single Family Housing	1.2213	0.01	0.11	0.05	0.00		0.00	0.01		0.00	0.01		143.68		0.00	0.00	144.56
Strip Mall	0.0413151	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		4.86		0.00	0.00	4.89
Total		**0.02**	**0.18**	**0.11**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**229.12**		**0.00**	**0.00**	**230.52**

ExistingDemoedinPhase1
Riverside-South Coast County, Winter

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Unmitigated	0.83	0.01	0.93	0.00		0.00	0.01		0.00	0.01	0.00	1.65		0.00	0.00	1.69
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.03	0.01	0.93	0.00		0.00	0.01		0.00	0.01		1.65		0.00		1.69
Total	**0.83**	**0.01**	**0.93**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**1.65**		**0.00**	**0.00**	**1.69**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.67					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.03	0.01	0.93	0.00		0.00	0.01		0.00	0.01		1.65		0.00		1.69
Total	**0.83**	**0.01**	**0.93**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**1.65**		**0.00**	**0.00**	**1.69**

ExistingDemoedinPhase1
Riverside-South Coast County, Winter

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	6	Dwelling Unit
Mobile Home Park	30	Dwelling Unit
High Turnover (Sit Down Restaurant)	1.45	1000sqft
Convenience Market (24 Hour)	2.9	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project Description. Population based on 2.61 persons/unit

Construction Phase -

Off-road Equipment -

Architectural Coating - no construction

Vehicle Trips - Trip generation provided by Urban Crossroads

Woodstoves - assume no fireplaces

Water And Wastewater - Water generation estimate from rates in WSA

Solid Waste - error in waste single-family waste calc (6 * 0.36 = 2.16), and in mobile home (30*3.0= 4.23) and in highturnover restaurant (1.45 *3.0 - 4.35) in CalEemod appendix D

Construction Off-road Equipment Mitigation -

Water Mitigation -

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.22	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Energy	0.01	0.06	0.04	0.00		0.00	0.01		0.00	0.01	0.00	167.26	167.26	0.01	0.00	168.29
Mobile	0.90	2.23	9.32	0.02	2.23	0.12	2.35	0.03	0.11	0.15	0.00	1,668.76	1,668.76	0.06	0.00	1,670.08
Waste						0.00	0.00		0.00	0.00	28.85	0.00	28.85	1.71	0.00	64.66
Water						0.00	0.00		0.00	0.00	0.00	14.85	14.85	0.00	0.00	15.71
Total	**1.13**	**2.30**	**9.91**	**0.02**	**2.23**	**0.12**	**2.36**	**0.03**	**0.11**	**0.16**	**28.85**	**1,851.77**	**1,880.62**	**1.78**	**0.00**	**1,919.65**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.22	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Energy	0.01	0.06	0.04	0.00		0.00	0.01		0.00	0.01	0.00	167.26	167.26	0.01	0.00	168.29
Mobile	0.90	2.23	9.32	0.02	2.23	0.12	2.35	0.03	0.11	0.15	0.00	1,668.76	1,668.76	0.06	0.00	1,670.08
Waste						0.00	0.00		0.00	0.00	28.85	0.00	28.85	1.71	0.00	64.66
Water						0.00	0.00		0.00	0.00	0.00	14.85	14.85	0.00	0.00	15.71
Total	**1.13**	**2.30**	**9.91**	**0.02**	**2.23**	**0.12**	**2.36**	**0.03**	**0.11**	**0.16**	**28.85**	**1,851.77**	**1,880.62**	**1.78**	**0.00**	**1,919.65**

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.90	2.23	9.32	0.02	2.23	0.12	2.35	0.03	0.11	0.15	0.00	1,668.76	1,668.76	0.06	0.00	1,670.08
Unmitigated	0.90	2.23	9.32	0.02	2.23	0.12	2.35	0.03	0.11	0.15	0.00	1,668.76	1,668.76	0.06	0.00	1,670.08
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,087.50	1,087.50	1087.50	2,897,543	2,897,543
Single Family Housing	58.02	58.02	58.02	185,600	185,600
High Turnover (Sit Down Restaurant)	184.01	184.01	184.01	501,463	501,463
Mobile Home Park	150.00	150.00	150.00	479,836	479,836
Total	1,479.53	1,479.53	1,479.53	4,064,442	4,064,442

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Mobile Home Park	10.80	7.30	7.50	40.20	19.20	40.60

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	93.53	93.53	0.00	0.00	94.12
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	93.53	93.53	0.00	0.00	94.12
NaturalGas Mitigated	0.01	0.06	0.04	0.00		0.00	0.01		0.00	0.01	0.00	73.72	73.72	0.00	0.00	74.17
NaturalGas Unmitigated	0.01	0.06	0.04	0.00		0.00	0.01		0.00	0.01	0.00	73.72	73.72	0.00	0.00	74.17
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Convenience Market (24 Hour)	6728	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
High Turnover (Sit Down Restaurant)	402390	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	21.47	21.47	0.00	0.00	21.60
Mobile Home Park	729276	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	38.92	38.92	0.00	0.00	39.15
Single Family Housing	243149	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	12.98	12.98	0.00	0.00	13.05
Total		**0.00**	**0.06**	**0.03**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**73.73**	**73.73**	**0.00**	**0.00**	**74.16**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Convenience Market (24 Hour)	6728	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.36	0.36	0.00	0.00	0.36
High Turnover (Sit Down Restaurant)	402390	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	21.47	21.47	0.00	0.00	21.60
Mobile Home Park	729276	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00	0.00	38.92	38.92	0.00	0.00	39.15
Single Family Housing	243149	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	12.98	12.98	0.00	0.00	13.05
Total		**0.00**	**0.06**	**0.03**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**73.73**	**73.73**	**0.00**	**0.00**	**74.16**

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Convenience Market (24 Hour)	45414					13.21	0.00	0.00	13.29
High Turnover (Sit Down Restaurant)	75980					22.10	0.00	0.00	22.24
Mobile Home Park	156975					45.66	0.00	0.00	45.95
Single Family Housing	43198.9					12.57	0.00	0.00	12.64
Total						**93.54**	**0.00**	**0.00**	**94.12**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Convenience Market (24 Hour)	45414					13.21	0.00	0.00	13.29
High Turnover (Sit Down Restaurant)	75980					22.10	0.00	0.00	22.24
Mobile Home Park	156975					45.66	0.00	0.00	45.95
Single Family Housing	43198.9					12.57	0.00	0.00	12.64
Total						**93.54**	**0.00**	**0.00**	**94.12**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.22	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Unmitigated	0.22	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.18					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.02	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Total	**0.22**	**0.01**	**0.55**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.90**	**0.90**	**0.00**	**0.00**	**0.91**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.18					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.02	0.01	0.55	0.00		0.00	0.00		0.00	0.00	0.00	0.90	0.90	0.00	0.00	0.91
Total	**0.22**	**0.01**	**0.55**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.90**	**0.90**	**0.00**	**0.00**	**0.91**

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					14.85	0.00	0.00	15.71
Unmitigated					14.85	0.00	0.00	15.71
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Convenience Market (24 Hour)	0.465421 / 0.116355					2.14	0.00	0.00	2.26
High Turnover (Sit Down Restaurant)	0.232711 / 0.058178					1.07	0.00	0.00	1.13
Mobile Home Park	2.11193 / 0.527982					9.70	0.00	0.00	10.26
Single Family Housing	0.422386 / 0.105596					1.94	0.00	0.00	2.05
Total						**14.85**	**0.00**	**0.00**	**15.70**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Convenience Market (24 Hour)	0.465421 / 0.116355					2.14	0.00	0.00	2.26
High Turnover (Sit Down Restaurant)	0.232711 / 0.058178					1.07	0.00	0.00	1.13
Mobile Home Park	2.11193 / 0.527982					9.70	0.00	0.00	10.26
Single Family Housing	0.422386 / 0.105596					1.94	0.00	0.00	2.05
Total						**14.85**	**0.00**	**0.00**	**15.70**

ExistingDemoedinPhase2
Riverside-South Coast County, Annual

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					28.85	1.71	0.00	64.66
Unmitigated					28.85	1.71	0.00	64.66
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Convenience Market (24 Hour)	8.72					1.77	0.10	0.00	3.97
High Turnover (Sit Down Restaurant)	4.35					0.88	0.05	0.00	1.98
Mobile Home Park	126.9					25.76	1.52	0.00	57.73
Single Family Housing	2.16					0.44	0.03	0.00	0.98
Total						**28.85**	**1.70**	**0.00**	**64.66**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Convenience Market (24 Hour)	8.72					1.77	0.10	0.00	3.97
High Turnover (Sit Down Restaurant)	4.35					0.88	0.05	0.00	1.98
Mobile Home Park	126.9					25.76	1.52	0.00	57.73
Single Family Housing	2.16					0.44	0.03	0.00	0.98
Total						**28.85**	**1.70**	**0.00**	**64.66**

9.0 Vegetation

ExistingDemoedinPhase2

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	6	Dwelling Unit
Mobile Home Park	30	Dwelling Unit
High Turnover (Sit Down Restaurant)	1.45	1000sqft
Convenience Market (24 Hour)	2.9	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project Description. Population based on 2.61 persons/unit

Construction Phase -

Off-road Equipment -

Architectural Coating - no construction

Vehicle Trips - Trip generation provided by Urban Crossroads

Woodstoves - assume no fireplaces

Water And Wastewater - Water generation estimate from rates in WSA

Solid Waste - error in waste single-family waste calc (6 * 0.36 = 2.16), and in mobile home (30*3.0= 4.23) and in highturnover restaurant (1.45 *3.0 - 4.35) in CalEemod appendix D

Construction Off-road Equipment Mitigation -

Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Energy	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Mobile	5.41	12.29	53.79	0.13	13.46	0.64	14.10	0.19	0.62	0.81		10,758.28		0.43		10,767.42
Total	**6.68**	**12.68**	**57.01**	**0.13**	**13.46**	**0.64**	**14.15**	**0.19**	**0.62**	**0.86**	**0.00**	**11,208.99**		**0.45**	**0.01**	**11,220.95**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Energy	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Mobile	5.41	12.29	53.79	0.13	13.46	0.64	14.10	0.19	0.62	0.81		10,758.28		0.43		10,767.42
Total	**6.68**	**12.68**	**57.01**	**0.13**	**13.46**	**0.64**	**14.15**	**0.19**	**0.62**	**0.86**	**0.00**	**11,208.99**		**0.45**	**0.01**	**11,220.95**

ExistingDemoedinPhase2
Riverside-South Coast County, Summer

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.41	12.29	53.79	0.13	13.46	0.64	14.10	0.19	0.62	0.81		10,758.28		0.43		10,767.42
Unmitigated	5.41	12.29	53.79	0.13	13.46	0.64	14.10	0.19	0.62	0.81		10,758.28		0.43		10,767.42
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,087.50	1,087.50	1087.50	2,897,543	2,897,543
Single Family Housing	58.02	58.02	58.02	185,600	185,600
High Turnover (Sit Down Restaurant)	184.01	184.01	184.01	501,463	501,463
Mobile Home Park	150.00	150.00	150.00	479,836	479,836
Total	1,479.53	1,479.53	1,479.53	4,064,442	4,064,442

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Mobile Home Park	10.80	7.30	7.50	40.20	19.20	40.60

ExistingDemoedinPhase2
Riverside-South Coast County, Summer

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
NaturalGas Unmitigated	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	18.4329	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.17		0.00	0.00	2.18
High Turnover (Sit Down Restaurant)	1102.44	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01		129.70		0.00	0.00	130.49
Mobile Home Park	1998.02	0.02	0.18	0.08	0.00		0.00	0.01		0.00	0.01		235.06		0.00	0.00	236.49
Single Family Housing	666.161	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00		78.37		0.00	0.00	78.85
Total		**0.04**	**0.35**	**0.20**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**445.30**		**0.00**	**0.00**	**448.01**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	0.0184329	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.17		0.00	0.00	2.18
High Turnover (Sit Down Restaurant)	1.10244	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01		129.70		0.00	0.00	130.49
Mobile Home Park	1.99802	0.02	0.18	0.08	0.00		0.00	0.01		0.00	0.01		235.06		0.00	0.00	236.49
Single Family Housing	0.666161	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00		78.37		0.00	0.00	78.85
Total		**0.04**	**0.35**	**0.20**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**445.30**		**0.00**	**0.00**	**448.01**

ExistingDemoedinPhase2

Riverside-South Coast County, Summer

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Unmitigated	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.01					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.09	0.03	3.02	0.00		0.00	0.02		0.00	0.02		5.41		0.01		5.52
Total	**1.23**	**0.03**	**3.02**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**5.41**		**0.01**	**0.00**	**5.52**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.01					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.09	0.03	3.02	0.00		0.00	0.02		0.00	0.02		5.41		0.01		5.52
Total	**1.23**	**0.03**	**3.02**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**5.41**		**0.01**	**0.00**	**5.52**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ExistingDemoedinPhase2

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	6	Dwelling Unit
Mobile Home Park	30	Dwelling Unit
High Turnover (Sit Down Restaurant)	1.45	1000sqft
Convenience Market (24 Hour)	2.9	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Project Description. Population based on 2.61 persons/unit

Construction Phase -

Off-road Equipment -

Architectural Coating - no construction

Vehicle Trips - Trip generation provided by Urban Crossroads

Woodstoves - assume no fireplaces

Water And Wastewater - Water generation estimate from rates in WSA

Solid Waste - error in waste single-family waste calc (6 * 0.36 = 2.16), and in mobile home (30*3.0= 4.23) and in highturnover restaurant (1.45 *3.0 - 4.35) in CalEemod appendix D

Construction Off-road Equipment Mitigation -

Water Mitigation -

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Energy	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Mobile	5.24	12.67	50.11	0.11	13.46	0.65	14.11	0.19	0.62	0.81		9,809.15		0.38		9,817.17
Total	**6.51**	**13.06**	**53.33**	**0.11**	**13.46**	**0.65**	**14.16**	**0.19**	**0.62**	**0.86**	**0.00**	**10,259.86**		**0.40**	**0.01**	**10,270.70**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Energy	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Mobile	5.24	12.67	50.11	0.11	13.46	0.65	14.11	0.19	0.62	0.81		9,809.15		0.38		9,817.17
Total	**6.51**	**13.06**	**53.33**	**0.11**	**13.46**	**0.65**	**14.16**	**0.19**	**0.62**	**0.86**	**0.00**	**10,259.86**		**0.40**	**0.01**	**10,270.70**

ExistingDemoedinPhase2
Riverside-South Coast County, Winter

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.24	12.67	50.11	0.11	13.46	0.65	14.11	0.19	0.62	0.81		9,809.15		0.38		9,817.17
Unmitigated	5.24	12.67	50.11	0.11	13.46	0.65	14.11	0.19	0.62	0.81		9,809.15		0.38		9,817.17
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,087.50	1,087.50	1087.50	2,897,543	2,897,543
Single Family Housing	58.02	58.02	58.02	185,600	185,600
High Turnover (Sit Down Restaurant)	184.01	184.01	184.01	501,463	501,463
Mobile Home Park	150.00	150.00	150.00	479,836	479,836
Total	1,479.53	1,479.53	1,479.53	4,064,442	4,064,442

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00
Mobile Home Park	10.80	7.30	7.50	40.20	19.20	40.60

ExistingDemoedinPhase2
Riverside-South Coast County, Winter

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
NaturalGas Unmitigated	0.04	0.36	0.20	0.00		0.00	0.03		0.00	0.03		445.30		0.01	0.01	448.01
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	18.4329	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.17		0.00	0.00	2.18
High Turnover (Sit Down Restaurant)	1102.44	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01		129.70		0.00	0.00	130.49
Mobile Home Park	1998.02	0.02	0.18	0.08	0.00		0.00	0.01		0.00	0.01		235.06		0.00	0.00	236.49
Single Family Housing	666.161	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00		78.37		0.00	0.00	78.85
Total		**0.04**	**0.35**	**0.20**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**445.30**		**0.00**	**0.00**	**448.01**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	0.0184329	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.17		0.00	0.00	2.18
High Turnover (Sit Down Restaurant)	1.10244	0.01	0.11	0.09	0.00		0.00	0.01		0.00	0.01		129.70		0.00	0.00	130.49
Mobile Home Park	1.99802	0.02	0.18	0.08	0.00		0.00	0.01		0.00	0.01		235.06		0.00	0.00	236.49
Single Family Housing	0.666161	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00		78.37		0.00	0.00	78.85
Total		**0.04**	**0.35**	**0.20**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**445.30**		**0.00**	**0.00**	**448.01**

ExistingDemoedinPhase2
Riverside-South Coast County, Winter

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Unmitigated	1.23	0.03	3.02	0.00		0.00	0.02		0.00	0.02	0.00	5.41		0.01	0.00	5.52
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.01					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.09	0.03	3.02	0.00		0.00	0.02		0.00	0.02		5.41		0.01		5.52
Total	**1.23**	**0.03**	**3.02**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**5.41**		**0.01**	**0.00**	**5.52**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.13					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.01					0.00	0.00		0.00	0.00						0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00	0.00
Landscaping	0.09	0.03	3.02	0.00		0.00	0.02		0.00	0.02		5.41		0.01		5.52
Total	**1.23**	**0.03**	**3.02**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**5.41**		**0.01**	**0.00**	**5.52**

ExistingDemoedinPhase2
Riverside-South Coast County, Winter

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

NorthHemetSP_Phase1

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Mid Rise	96	Dwelling Unit
Congregate Care (Assisted Living)	96	Dwelling Unit
General Office Building	16.34	1000sqft
Strip Mall	38.12	1000sqft
Other Asphalt Surfaces	0.3	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Based on Phase 1 of the project description. Population based on 2.61 persons per unit.

Construction Phase - Default construction schedule adjust to accommodate 3 year construction schedule of Planning Area 1 and 2. Assumes mass-grading of Phase 1

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Grading -

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Demolition -

Vehicle Trips - Trip rates based on the traffic study prepared by Urban Crossroads.

Woodstoves - assumes no fireplace in assisted living and gas fireplaces in retirement homes.

Water And Wastewater - From WSA

Solid Waste - errors: congregate care waste generation (96*0.46 = 44.16 tons). general office (16.34 *11.54=189 tons), strip mall (38.12*3.0=114 tons)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency requirements

NorthHemetSP_Phase1

Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	0.91	6.47	4.58	0.01	0.69	0.37	1.06	0.22	0.37	0.59	0.00	750.63	750.63	0.07	0.00	752.19
2014	0.55	3.47	3.47	0.01	0.27	0.20	0.48	0.01	0.20	0.22	0.00	589.99	589.99	0.05	0.00	590.95
2015	1.90	3.23	3.44	0.01	0.29	0.19	0.48	0.01	0.19	0.20	0.00	603.37	603.37	0.04	0.00	604.27
Total	**3.36**	**13.17**	**11.49**	**0.03**	**1.25**	**0.76**	**2.02**	**0.24**	**0.76**	**1.01**	**0.00**	**1,943.99**	**1,943.99**	**0.16**	**0.00**	**1,947.41**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	0.91	6.47	4.58	0.01	0.40	0.37	0.78	0.10	0.37	0.47	0.00	750.63	750.63	0.07	0.00	752.19
2014	0.55	3.47	3.47	0.01	0.25	0.20	0.45	0.01	0.20	0.22	0.00	589.99	589.99	0.05	0.00	590.95
2015	1.90	3.23	3.44	0.01	0.26	0.19	0.45	0.01	0.19	0.20	0.00	603.37	603.37	0.04	0.00	604.27
Total	**3.36**	**13.17**	**11.49**	**0.03**	**0.91**	**0.76**	**1.68**	**0.12**	**0.76**	**0.89**	**0.00**	**1,943.99**	**1,943.99**	**0.16**	**0.00**	**1,947.41**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.13	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	73.94	73.94	0.01	0.00	74.46
Energy	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	622.54	622.54	0.02	0.01	626.41
Mobile	2.07	5.39	22.68	0.04	4.27	0.25	4.53	0.16	0.25	0.42	0.00	3,599.10	3,599.10	0.14	0.00	3,602.12
Waste						0.00	0.00		0.00	0.00	79.43	0.00	79.43	4.69	0.00	178.02
Water						0.00	0.00		0.00	0.00	0.00	65.65	65.65	0.00	0.01	69.41
Total	**3.22**	**5.56**	**25.70**	**0.04**	**4.27**	**0.25**	**4.56**	**0.16**	**0.25**	**0.45**	**79.43**	**4,361.23**	**4,440.66**	**4.86**	**0.02**	**4,550.42**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.13	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	73.94	73.94	0.01	0.00	74.46
Energy	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	622.54	622.54	0.02	0.01	626.41
Mobile	2.06	5.39	22.64	0.04	4.26	0.25	4.52	0.16	0.25	0.42	0.00	3,591.91	3,591.91	0.14	0.00	3,594.93
Waste						0.00	0.00		0.00	0.00	79.43	0.00	79.43	4.69	0.00	178.02
Water						0.00	0.00		0.00	0.00	0.00	54.12	54.12	0.00	0.01	57.14
Total	**3.21**	**5.56**	**25.66**	**0.04**	**4.26**	**0.25**	**4.55**	**0.16**	**0.25**	**0.45**	**79.43**	**4,342.51**	**4,421.94**	**4.86**	**0.02**	**4,530.96**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.12	0.98	0.59	0.00		0.05	0.05		0.05	0.05	0.00	94.03	94.03	0.01	0.00	94.24
Total	**0.12**	**0.98**	**0.59**	**0.00**	**0.02**	**0.05**	**0.07**	**0.00**	**0.05**	**0.05**	**0.00**	**94.03**	**94.03**	**0.01**	**0.00**	**94.24**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.02	0.00	0.06	0.00	0.06	0.00	0.00	0.00	0.00	5.16	5.16	0.00	0.00	5.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.71	2.71	0.00	0.00	2.71
Total	**0.00**	**0.04**	**0.04**	**0.00**	**0.06**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**7.87**	**7.87**	**0.00**	**0.00**	**7.87**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.12	0.98	0.59	0.00		0.05	0.05		0.05	0.05	0.00	94.03	94.03	0.01	0.00	94.24
Total	**0.12**	**0.98**	**0.59**	**0.00**	**0.01**	**0.05**	**0.06**	**0.00**	**0.05**	**0.05**	**0.00**	**94.03**	**94.03**	**0.01**	**0.00**	**94.24**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.02	0.00	0.05	0.00	0.06	0.00	0.00	0.00	0.00	5.16	5.16	0.00	0.00	5.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.71	2.71	0.00	0.00	2.71
Total	**0.00**	**0.04**	**0.04**	**0.00**	**0.05**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**7.87**	**7.87**	**0.00**	**0.00**	**7.87**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.3 Site Preparation - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.18	0.00	0.18	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.54	0.31	0.00		0.03	0.03		0.03	0.03	0.00	49.10	49.10	0.01	0.00	49.21
Total	**0.07**	**0.54**	**0.31**	**0.00**	**0.18**	**0.03**	**0.21**	**0.10**	**0.03**	**0.13**	**0.00**	**49.10**	**49.10**	**0.01**	**0.00**	**49.21**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	1.58	0.00	0.00	1.59
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.58**	**1.58**	**0.00**	**0.00**	**1.59**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.08	0.00	0.08	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.54	0.31	0.00		0.03	0.03		0.03	0.03	0.00	49.10	49.10	0.01	0.00	49.21
Total	**0.07**	**0.54**	**0.31**	**0.00**	**0.08**	**0.03**	**0.11**	**0.04**	**0.03**	**0.07**	**0.00**	**49.10**	**49.10**	**0.01**	**0.00**	**49.21**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	1.58	0.00	0.00	1.59
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.58**	**1.58**	**0.00**	**0.00**	**1.59**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.4 Grading - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.26	0.00	0.26	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.24	1.99	1.08	0.00		0.09	0.09		0.09	0.09	0.00	201.16	201.16	0.02	0.00	201.57
Total	**0.24**	**1.99**	**1.08**	**0.00**	**0.26**	**0.09**	**0.35**	**0.11**	**0.09**	**0.20**	**0.00**	**201.16**	**201.16**	**0.02**	**0.00**	**201.57**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.37	5.37	0.00	0.00	5.37
Total	**0.00**	**0.00**	**0.04**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**5.37**	**5.37**	**0.00**	**0.00**	**5.37**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.11	0.00	0.11	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.24	1.99	1.08	0.00		0.09	0.09		0.09	0.09	0.00	201.16	201.16	0.02	0.00	201.57
Total	**0.24**	**1.99**	**1.08**	**0.00**	**0.11**	**0.09**	**0.20**	**0.05**	**0.09**	**0.14**	**0.00**	**201.16**	**201.16**	**0.02**	**0.00**	**201.57**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.37	5.37	0.00	0.00	5.37
Total	**0.00**	**0.00**	**0.04**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**5.37**	**5.37**	**0.00**	**0.00**	**5.37**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.5 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.24	1.61	1.09	0.00		0.11	0.11		0.11	0.11	0.00	169.71	169.71	0.02	0.00	170.12
Total	**0.24**	**1.61**	**1.09**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**169.71**	**169.71**	**0.02**	**0.00**	**170.12**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.32	0.17	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	49.08	49.08	0.00	0.00	49.10
Worker	0.05	0.06	0.66	0.00	0.13	0.00	0.13	0.01	0.00	0.01	0.00	94.69	94.69	0.01	0.00	94.81
Total	**0.08**	**0.38**	**0.83**	**0.00**	**0.15**	**0.01**	**0.16**	**0.01**	**0.01**	**0.02**	**0.00**	**143.77**	**143.77**	**0.01**	**0.00**	**143.91**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.24	1.61	1.09	0.00		0.11	0.11		0.11	0.11	0.00	169.71	169.71	0.02	0.00	170.12
Total	**0.24**	**1.61**	**1.09**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**169.71**	**169.71**	**0.02**	**0.00**	**170.12**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.32	0.17	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	49.08	49.08	0.00	0.00	49.10
Worker	0.05	0.06	0.66	0.00	0.12	0.00	0.12	0.01	0.00	0.01	0.00	94.69	94.69	0.01	0.00	94.81
Total	**0.08**	**0.38**	**0.83**	**0.00**	**0.14**	**0.01**	**0.15**	**0.01**	**0.01**	**0.02**	**0.00**	**143.77**	**143.77**	**0.01**	**0.00**	**143.91**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.41	2.81	2.03	0.00		0.18	0.18		0.18	0.18	0.00	320.98	320.98	0.03	0.00	321.69
Total	**0.41**	**2.81**	**2.03**	**0.00**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**320.98**	**320.98**	**0.03**	**0.00**	**321.69**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.55	0.30	0.00	0.03	0.02	0.05	0.00	0.02	0.02	0.00	93.13	93.13	0.00	0.00	93.17
Worker	0.09	0.11	1.13	0.00	0.24	0.01	0.25	0.01	0.01	0.02	0.00	175.88	175.88	0.01	0.00	176.09
Total	**0.14**	**0.66**	**1.43**	**0.00**	**0.27**	**0.03**	**0.30**	**0.01**	**0.03**	**0.04**	**0.00**	**269.01**	**269.01**	**0.01**	**0.00**	**269.26**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.41	2.81	2.03	0.00		0.18	0.18		0.18	0.18	0.00	320.98	320.98	0.03	0.00	321.69
Total	**0.41**	**2.81**	**2.03**	**0.00**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**320.98**	**320.98**	**0.03**	**0.00**	**321.69**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.55	0.30	0.00	0.03	0.02	0.05	0.00	0.02	0.02	0.00	93.13	93.13	0.00	0.00	93.17
Worker	0.09	0.11	1.13	0.00	0.22	0.01	0.23	0.01	0.01	0.02	0.00	175.88	175.88	0.01	0.00	176.09
Total	**0.14**	**0.66**	**1.43**	**0.00**	**0.25**	**0.03**	**0.28**	**0.01**	**0.03**	**0.04**	**0.00**	**269.01**	**269.01**	**0.01**	**0.00**	**269.26**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.38	2.55	2.01	0.00		0.16	0.16		0.16	0.16	0.00	320.98	320.98	0.03	0.00	321.63
Total	**0.38**	**2.55**	**2.01**	**0.00**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**320.98**	**320.98**	**0.03**	**0.00**	**321.63**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.50	0.28	0.00	0.03	0.02	0.05	0.00	0.02	0.02	0.00	93.22	93.22	0.00	0.00	93.25
Worker	0.08	0.10	1.03	0.00	0.24	0.01	0.25	0.01	0.01	0.02	0.00	171.70	171.70	0.01	0.00	171.88
Total	**0.12**	**0.60**	**1.31**	**0.00**	**0.27**	**0.03**	**0.30**	**0.01**	**0.03**	**0.04**	**0.00**	**264.92**	**264.92**	**0.01**	**0.00**	**265.13**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.38	2.55	2.01	0.00		0.16	0.16		0.16	0.16	0.00	320.98	320.98	0.03	0.00	321.63
Total	**0.38**	**2.55**	**2.01**	**0.00**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**320.98**	**320.98**	**0.03**	**0.00**	**321.63**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.50	0.28	0.00	0.03	0.02	0.05	0.00	0.02	0.02	0.00	93.22	93.22	0.00	0.00	93.25
Worker	0.08	0.10	1.03	0.00	0.22	0.01	0.23	0.01	0.01	0.02	0.00	171.70	171.70	0.01	0.00	171.88
Total	**0.12**	**0.60**	**1.31**	**0.00**	**0.25**	**0.03**	**0.28**	**0.01**	**0.03**	**0.04**	**0.00**	**264.92**	**264.92**	**0.01**	**0.00**	**265.13**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.6 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.15	0.93	0.57	0.00		0.08	0.08		0.08	0.08	0.00	72.70	72.70	0.01	0.00	72.96
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.15**	**0.93**	**0.57**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**72.70**	**72.70**	**0.01**	**0.00**	**72.96**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.34	5.34	0.00	0.00	5.35
Total	**0.00**	**0.00**	**0.04**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**5.34**	**5.34**	**0.00**	**0.00**	**5.35**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.15	0.93	0.57	0.00		0.08	0.08		0.08	0.08	0.00	72.70	72.70	0.01	0.00	72.96
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.15**	**0.93**	**0.57**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**72.70**	**72.70**	**0.01**	**0.00**	**72.96**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.34	5.34	0.00	0.00	5.35
Total	**0.00**	**0.00**	**0.04**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**5.34**	**5.34**	**0.00**	**0.00**	**5.35**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.38					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.89	6.89	0.00	0.00	6.90
Total	**1.39**	**0.07**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**6.89**	**6.89**	**0.00**	**0.00**	**6.90**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.01	0.06	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	10.59	10.59	0.00	0.00	10.60
Total	**0.00**	**0.01**	**0.06**	**0.00**	**0.01**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**10.59**	**10.59**	**0.00**	**0.00**	**10.60**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.38					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.89	6.89	0.00	0.00	6.90
Total	**1.39**	**0.07**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**6.89**	**6.89**	**0.00**	**0.00**	**6.90**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.01	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	10.59	10.59	0.00	0.00	10.60
Total	**0.00**	**0.01**	**0.06**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**10.59**	**10.59**	**0.00**	**0.00**	**10.60**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.06	5.39	22.64	0.04	4.26	0.25	4.52	0.16	0.25	0.42	0.00	3,591.91	3,591.91	0.14	0.00	3,594.93
Unmitigated	2.07	5.39	22.68	0.04	4.27	0.25	4.53	0.16	0.25	0.42	0.00	3,599.10	3,599.10	0.14	0.00	3,602.12
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	353.28	353.28	353.28	1,130,109	1,127,777
Congregate Care (Assisted Living)	375.36	375.36	375.36	1,200,741	1,198,264
General Office Building	331.05	331.05	331.05	967,146	965,151
Strip Mall	1,607.90	1,607.90	1607.90	4,486,259	4,477,003
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,667.59	2,667.59	2,667.59	7,784,255	7,768,195

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60
Congregate Care (Assisted Living)	10.80	7.30	7.50	40.20	19.20	40.60
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	458.39	458.39	0.02	0.01	461.26
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	458.39	458.39	0.02	0.01	461.26
NaturalGas Mitigated	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	164.15	164.15	0.00	0.00	165.15
NaturalGas Unmitigated	0.02	0.14	0.06	0.00		0.00	0.01		0.00	0.01	0.00	164.15	164.15	0.00	0.00	165.15
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Mid Rise	1.46399e+006	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.60
Congregate Care (Assisted Living)	1.46399e+006	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.60
General Office Building	59641	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.18	3.18	0.00	0.00	3.20
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	88438.4	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	4.72	4.72	0.00	0.00	4.75
Total		**0.02**	**0.14**	**0.06**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**164.14**	**164.14**	**0.00**	**0.00**	**165.15**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Mid Rise	1.46399e+006	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.60
Congregate Care (Assisted Living)	1.46399e+006	0.01	0.07	0.03	0.00		0.00	0.01		0.00	0.01	0.00	78.12	78.12	0.00	0.00	78.60
General Office Building	59641	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.18	3.18	0.00	0.00	3.20
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	88438.4	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	4.72	4.72	0.00	0.00	4.75
Total		**0.02**	**0.14**	**0.06**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**164.14**	**164.14**	**0.00**	**0.00**	**165.15**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Mid Rise	402148					116.97	0.01	0.00	117.71
Congregate Care (Assisted Living)	402148					116.97	0.01	0.00	117.71
General Office Building	174675					50.81	0.00	0.00	51.13
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	596959					173.64	0.01	0.00	174.73
Total						**458.39**	**0.03**	**0.00**	**461.28**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Mid Rise	402148					116.97	0.01	0.00	117.71
Congregate Care (Assisted Living)	402148					116.97	0.01	0.00	117.71
General Office Building	174675					50.81	0.00	0.00	51.13
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	596959					173.64	0.01	0.00	174.73
Total						**458.39**	**0.03**	**0.00**	**461.28**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.13	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	73.94	73.94	0.01	0.00	74.46
Unmitigated	1.13	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	73.94	73.94	0.01	0.00	74.46
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.14					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.89					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.01	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	69.16	69.16	0.00	0.00	69.58
Landscaping	0.09	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	4.78	4.78	0.00	0.00	4.88
Total	**1.13**	**0.03**	**2.96**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**73.94**	**73.94**	**0.00**	**0.00**	**74.46**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.14					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.89					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.01	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	69.16	69.16	0.00	0.00	69.58
Landscaping	0.09	0.03	2.96	0.00		0.00	0.02		0.00	0.02	0.00	4.78	4.78	0.00	0.00	4.88
Total	**1.13**	**0.03**	**2.96**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**	**0.00**	**73.94**	**73.94**	**0.00**	**0.00**	**74.46**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					54.12	0.00	0.01	57.14
Unmitigated					65.65	0.00	0.01	69.41
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Mid Rise	6.75164 / 1.68791					31.03	0.00	0.01	32.80
Congregate Care (Assisted Living)	6.75164 / 1.68791					31.03	0.00	0.01	32.80
General Office Building	0.234642 / 0.05866					1.08	0.00	0.00	1.14
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Strip Mall	0.547402 / 0.13685					2.52	0.00	0.00	2.66
Total						**65.66**	**0.00**	**0.02**	**69.40**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Mid Rise	5.40131 / 1.58495					25.58	0.00	0.00	27.01
Congregate Care (Assisted Living)	5.40131 / 1.58495					25.58	0.00	0.00	27.01
General Office Building	0.187714 / 0.0550817					0.89	0.00	0.00	0.94
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Strip Mall	0.437922 / 0.128502					2.07	0.00	0.00	2.19
Total						**54.12**	**0.00**	**0.00**	**57.15**

NorthHemetSP_Phase1
Riverside-South Coast County, Annual

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					79.43	4.69	0.00	178.02
Unmitigated					79.43	4.69	0.00	178.02
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Mid Rise	44.16					8.96	0.53	0.00	20.09
Congregate Care (Assisted Living)	44.16					8.96	0.53	0.00	20.09
General Office Building	189					38.37	2.27	0.00	85.98
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	114					23.14	1.37	0.00	51.86
Total						**79.43**	**4.70**	**0.00**	**178.02**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Mid Rise	44.16					8.96	0.53	0.00	20.09
Congregate Care (Assisted Living)	44.16					8.96	0.53	0.00	20.09
General Office Building	189					38.37	2.27	0.00	85.98
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	114					23.14	1.37	0.00	51.86
Total						**79.43**	**4.70**	**0.00**	**178.02**

9.0 Vegetation

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	16.34	1000sqft
Other Asphalt Surfaces	0.3	Acre
Apartments Mid Rise	96	Dwelling Unit
Congregate Care (Assisted Living)	96	Dwelling Unit
Strip Mall	38.12	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Based on Phase 1 of the project description. Population based on 2.61 persons per unit.

Construction Phase - Default construction schedule adjust to accommodate 3 year construction schedule of Planning Area 1 and 2. Assumes mass-grading of Phase 1

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Demolition -

Grading -

Vehicle Trips - Trip rates based on the traffic study prepared by Urban Crossroads.

Woodstoves - assumes no fireplace in assisted living and gas fireplaces in retirement homes.

Water And Wastewater - From WSA

Solid Waste - errors: congregate care waste generation (96*0.46 = 44.16 tons). general office (16.34 *11.54=189 tons), strip mall (38.12*3.0=114 tons)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency requirements

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	65.44	42.44	0.07	18.30	3.75	20.97	9.94	3.75	12.61	0.00	7,458.87	0.00	0.76	0.00	7,474.81
2014	4.23	26.79	26.29	0.05	2.30	1.57	3.87	0.10	1.57	1.67	0.00	4,925.27	0.00	0.38	0.00	4,933.28
2015	38.37	26.23	28.03	0.06	2.71	1.56	4.27	0.11	1.56	1.67	0.00	5,356.72	0.00	0.39	0.00	5,364.92
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	52.09	42.44	0.07	7.94	3.75	9.90	4.25	3.75	6.22	0.00	7,458.87	0.00	0.76	0.00	7,474.81
2014	4.23	26.79	26.29	0.05	2.10	1.57	3.67	0.10	1.57	1.67	0.00	4,925.27	0.00	0.38	0.00	4,933.28
2015	38.37	26.23	28.03	0.06	2.47	1.56	4.04	0.11	1.56	1.67	0.00	5,356.72	0.00	0.39	0.00	5,364.92
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment
Use DPF for Construction Equipment
Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.74	0.00	0.74	0.00	0.00	0.00						0.00
Off-Road	5.97	47.66	28.64	0.05		2.36	2.36		2.36	2.36		5,057.71		0.54		5,069.00
Total	**5.97**	**47.66**	**28.64**	**0.05**	**0.74**	**2.36**	**3.10**	**0.00**	**2.36**	**2.36**		**5,057.71**		**0.54**		**5,069.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.83	0.84	0.00	3.24	0.07	3.31	0.01	0.07	0.08		276.62		0.01		276.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.20	0.01	0.20	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.22**	**1.92**	**1.71**	**0.00**	**3.44**	**0.08**	**3.51**	**0.02**	**0.08**	**0.09**		**416.71**		**0.02**		**417.03**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.32	0.00	0.32	0.00	0.00	0.00						0.00
Off-Road	3.85	25.16	27.38	0.05		1.77	1.77		1.77	1.77	0.00	5,057.71		0.54		5,069.00
Total	**3.85**	**25.16**	**27.38**	**0.05**	**0.32**	**1.77**	**2.09**	**0.00**	**1.77**	**1.77**	**0.00**	**5,057.71**		**0.54**		**5,069.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.83	0.84	0.00	2.95	0.07	3.02	0.01	0.07	0.08		276.62		0.01		276.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.18	0.01	0.19	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.22**	**1.92**	**1.71**	**0.00**	**3.13**	**0.08**	**3.21**	**0.02**	**0.08**	**0.09**		**416.71**		**0.02**		**417.03**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.3 Site Preparation - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	6.70	54.15	30.68	0.05		2.66	2.66		2.66	2.66		5,413.51		0.60		5,426.15
Total	**6.70**	**54.15**	**30.68**	**0.05**	**18.07**	**2.66**	**20.73**	**9.93**	**2.66**	**12.59**		**5,413.51**		**0.60**		**5,426.15**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.11	1.05	0.00	0.23	0.01	0.24	0.01	0.01	0.02		168.10		0.01		168.31
Total	**0.09**	**0.11**	**1.05**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**168.10**		**0.01**		**168.31**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.72	0.00	7.72	4.25	0.00	4.25						0.00
Off-Road	4.52	29.49	27.26	0.05		1.96	1.96		1.96	1.96	0.00	5,413.51		0.60		5,426.15
Total	**4.52**	**29.49**	**27.26**	**0.05**	**7.72**	**1.96**	**9.68**	**4.25**	**1.96**	**6.21**	**0.00**	**5,413.51**		**0.60**		**5,426.15**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.11	1.05	0.00	0.21	0.01	0.22	0.01	0.01	0.02		168.10		0.01		168.31
Total	**0.09**	**0.11**	**1.05**	**0.00**	**0.21**	**0.01**	**0.22**	**0.01**	**0.01**	**0.02**		**168.10**		**0.01**		**168.31**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.4 Grading - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	7.94	65.32	35.42	0.07		3.07	3.07		3.07	3.07		7,272.09		0.71		7,287.00
Total	**7.94**	**65.32**	**35.42**	**0.07**	**8.67**	**3.07**	**11.74**	**3.31**	**3.07**	**6.38**		**7,272.09**		**0.71**		**7,287.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.13	1.16	0.00	0.26	0.01	0.27	0.01	0.01	0.02		186.78		0.01		187.01
Total	**0.10**	**0.13**	**1.16**	**0.00**	**0.26**	**0.01**	**0.27**	**0.01**	**0.01**	**0.02**		**186.78**		**0.01**		**187.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.71	0.00	3.71	1.42	0.00	1.42						0.00
Off-Road	5.47	35.63	38.12	0.07		2.41	2.41		2.41	2.41	0.00	7,272.09		0.71		7,287.00
Total	**5.47**	**35.63**	**38.12**	**0.07**	**3.71**	**2.41**	**6.12**	**1.42**	**2.41**	**3.83**	**0.00**	**7,272.09**		**0.71**		**7,287.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.13	1.16	0.00	0.24	0.01	0.25	0.01	0.01	0.02		186.78		0.01		187.01
Total	**0.10**	**0.13**	**1.16**	**0.00**	**0.24**	**0.01**	**0.25**	**0.01**	**0.01**	**0.02**		**186.78**		**0.01**		**187.01**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.5 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53		2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**		**2,712.00**		**0.31**		**2,718.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.81	2.59	0.01	0.27	0.15	0.42	0.02	0.15	0.17		780.05		0.02		780.44
Worker	0.76	0.98	9.08	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,456.90		0.09		1,458.71
Total	**1.14**	**5.79**	**11.67**	**0.02**	**2.31**	**0.22**	**2.53**	**0.10**	**0.22**	**0.32**		**2,236.95**		**0.11**		**2,239.15**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53	0.00	2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**	**0.00**	**2,712.00**		**0.31**		**2,718.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.81	2.59	0.01	0.24	0.15	0.40	0.02	0.15	0.17		780.05		0.02		780.44
Worker	0.76	0.98	9.08	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,456.90		0.09		1,458.71
Total	**1.14**	**5.79**	**11.67**	**0.02**	**2.10**	**0.22**	**2.33**	**0.10**	**0.22**	**0.32**		**2,236.95**		**0.11**		**2,239.15**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36		2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**		**2,712.00**		**0.28**		**2,717.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	4.38	2.42	0.01	0.27	0.14	0.40	0.02	0.14	0.16		782.59		0.02		782.95
Worker	0.70	0.88	8.31	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,430.68		0.08		1,432.36
Total	**1.05**	**5.26**	**10.73**	**0.02**	**2.31**	**0.21**	**2.51**	**0.10**	**0.21**	**0.31**		**2,213.27**		**0.10**		**2,215.31**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36	0.00	2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**	**0.00**	**2,712.00**		**0.28**		**2,717.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	4.38	2.42	0.01	0.24	0.14	0.38	0.02	0.14	0.16		782.59		0.02		782.95
Worker	0.70	0.88	8.31	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,430.68		0.08		1,432.36
Total	**1.05**	**5.26**	**10.73**	**0.02**	**2.10**	**0.21**	**2.31**	**0.10**	**0.21**	**0.31**		**2,213.27**		**0.10**		**2,215.31**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21		2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**		**2,712.00**		**0.26**		**2,717.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.32	3.98	2.26	0.01	0.27	0.12	0.39	0.02	0.12	0.14		783.24		0.02		783.56
Worker	0.64	0.80	7.58	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,396.52		0.07		1,398.06
Total	**0.96**	**4.78**	**9.84**	**0.02**	**2.31**	**0.19**	**2.50**	**0.10**	**0.19**	**0.29**		**2,179.76**		**0.09**		**2,181.62**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21	0.00	2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**	**0.00**	**2,712.00**		**0.26**		**2,717.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.32	3.98	2.26	0.01	0.24	0.12	0.37	0.02	0.12	0.14		783.24		0.02		783.56
Worker	0.64	0.80	7.58	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,396.52		0.07		1,398.06
Total	**0.96**	**4.78**	**9.84**	**0.02**	**2.10**	**0.19**	**2.30**	**0.10**	**0.19**	**0.29**		**2,179.76**		**0.09**		**2,181.62**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.6 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99		1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**		**1,979.14**		**0.34**		**1,986.20**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.20	0.01	0.20	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.07**	**0.09**	**0.87**	**0.00**	**0.20**	**0.01**	**0.20**	**0.01**	**0.01**	**0.01**		**140.09**		**0.01**		**140.26**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99	0.00	1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**	**0.00**	**1,979.14**		**0.34**		**1,986.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.18	0.01	0.19	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.07**	**0.09**	**0.87**	**0.00**	**0.18**	**0.01**	**0.19**	**0.01**	**0.01**	**0.01**		**140.09**		**0.01**		**140.26**

NorthHemetSP_Phase1mit
Riverside-South Coast County, Winter

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15		187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**		**187.46**		**0.02**		**187.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.16	1.51	0.00	0.40	0.01	0.42	0.02	0.01	0.03		277.51		0.01		277.82
Total	**0.13**	**0.16**	**1.51**	**0.00**	**0.40**	**0.01**	**0.42**	**0.02**	**0.01**	**0.03**		**277.51**		**0.01**		**277.82**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15	0.00	187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**	**0.00**	**187.46**		**0.02**		**187.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.16	1.51	0.00	0.37	0.01	0.38	0.02	0.01	0.03		277.51		0.01		277.82
Total	**0.13**	**0.16**	**1.51**	**0.00**	**0.37**	**0.01**	**0.38**	**0.02**	**0.01**	**0.03**		**277.51**		**0.01**		**277.82**

NorthHemetSP_Phase1

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Mid Rise	96	Dwelling Unit
Congregate Care (Assisted Living)	96	Dwelling Unit
General Office Building	16.34	1000sqft
Strip Mall	38.12	1000sqft
Other Asphalt Surfaces	0.3	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Based on Phase 1 of the project description. Population based on 2.61 persons per unit.

Construction Phase - Default construction schedule adjust to accommodate 3 year construction schedule of Planning Area 1 and 2. Assumes mass-grading of Phase 1

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Grading -

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Demolition -

Vehicle Trips - Trip rates based on the traffic study prepared by Urban Crossroads.

Woodstoves - assumes no fireplace in assisted living and gas fireplaces in retirement homes.

Water And Wastewater - From WSA

Solid Waste - errors: congregate care waste generation (96*0.46 = 44.16 tons). general office (16.34 *11.54=189 tons), strip mall (38.12*3.0=114 tons)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency requirements

NorthHemetSP_Phase1

Riverside-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	65.43	43.56	0.08	18.30	3.75	20.97	9.94	3.75	12.61	0.00	7,481.97	0.00	0.77	0.00	7,498.06
2014	4.23	26.56	27.20	0.05	2.30	1.57	3.87	0.10	1.57	1.66	0.00	5,109.53	0.00	0.39	0.00	5,117.66
2015	38.37	26.02	29.06	0.06	2.71	1.56	4.27	0.11	1.56	1.67	0.00	5,571.66	0.00	0.40	0.00	5,580.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	65.43	43.56	0.08	7.94	3.75	10.61	4.25	3.75	6.92	0.00	7,481.97	0.00	0.77	0.00	7,498.06
2014	4.23	26.56	27.20	0.05	2.10	1.57	3.67	0.10	1.57	1.66	0.00	5,109.53	0.00	0.39	0.00	5,117.66
2015	38.37	26.02	29.06	0.06	2.47	1.56	4.03	0.11	1.56	1.67	0.00	5,571.66	0.00	0.40	0.00	5,580.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Energy	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Mobile	12.24	29.43	131.24	0.24	25.77	1.39	27.16	0.89	1.39	2.29		23,231.70		0.92		23,251.12
Total	**18.66**	**30.40**	**147.85**	**0.24**	**25.77**	**1.39**	**27.44**	**0.89**	**1.39**	**2.56**	**0.00**	**26,284.99**		**1.01**	**0.06**	**26,323.43**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Energy	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Mobile	12.23	29.38	131.01	0.24	25.72	1.39	27.11	0.89	1.39	2.28		23,185.25		0.92		23,204.64
Total	**18.65**	**30.35**	**147.62**	**0.24**	**25.72**	**1.39**	**27.39**	**0.89**	**1.39**	**2.55**	**0.00**	**26,238.54**		**1.01**	**0.06**	**26,276.95**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.74	0.00	0.74	0.00	0.00	0.00						0.00
Off-Road	5.97	47.66	28.64	0.05		2.36	2.36		2.36	2.36		5,057.71		0.54		5,069.00
Total	**5.97**	**47.66**	**28.64**	**0.05**	**0.74**	**2.36**	**3.10**	**0.00**	**2.36**	**2.36**		**5,057.71**		**0.54**		**5,069.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.75	0.77	0.00	3.24	0.07	3.31	0.01	0.07	0.08		278.23		0.01		278.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	1.00	0.00	0.20	0.01	0.20	0.01	0.01	0.01		157.41		0.01		157.60
Total	**0.22**	**1.84**	**1.77**	**0.00**	**3.44**	**0.08**	**3.51**	**0.02**	**0.08**	**0.09**		**435.64**		**0.02**		**435.98**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.32	0.00	0.32	0.00	0.00	0.00						0.00
Off-Road	5.97	47.66	28.64	0.05		2.36	2.36		2.36	2.36	0.00	5,057.71		0.54		5,069.00
Total	**5.97**	**47.66**	**28.64**	**0.05**	**0.32**	**2.36**	**2.68**	**0.00**	**2.36**	**2.36**	**0.00**	**5,057.71**		**0.54**		**5,069.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.75	0.77	0.00	2.95	0.07	3.02	0.01	0.07	0.08		278.23		0.01		278.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	1.00	0.00	0.18	0.01	0.19	0.01	0.01	0.01		157.41		0.01		157.60
Total	**0.22**	**1.84**	**1.77**	**0.00**	**3.13**	**0.08**	**3.21**	**0.02**	**0.08**	**0.09**		**435.64**		**0.02**		**435.98**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.3 Site Preparation - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	6.70	54.15	30.68	0.05		2.66	2.66		2.66	2.66		5,413.51		0.60		5,426.15
Total	**6.70**	**54.15**	**30.68**	**0.05**	**18.07**	**2.66**	**20.73**	**9.93**	**2.66**	**12.59**		**5,413.51**		**0.60**		**5,426.15**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.10	1.20	0.00	0.23	0.01	0.24	0.01	0.01	0.02		188.89		0.01		189.12
Total	**0.09**	**0.10**	**1.20**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**188.89**		**0.01**		**189.12**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.72	0.00	7.72	4.25	0.00	4.25						0.00
Off-Road	6.70	54.15	30.68	0.05		2.66	2.66		2.66	2.66	0.00	5,413.51		0.60		5,426.15
Total	**6.70**	**54.15**	**30.68**	**0.05**	**7.72**	**2.66**	**10.38**	**4.25**	**2.66**	**6.91**	**0.00**	**5,413.51**		**0.60**		**5,426.15**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.10	1.20	0.00	0.21	0.01	0.22	0.01	0.01	0.02		188.89		0.01		189.12
Total	**0.09**	**0.10**	**1.20**	**0.00**	**0.21**	**0.01**	**0.22**	**0.01**	**0.01**	**0.02**		**188.89**		**0.01**		**189.12**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.4 Grading - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	7.94	65.32	35.42	0.07		3.07	3.07		3.07	3.07		7,272.09		0.71		7,287.00
Total	**7.94**	**65.32**	**35.42**	**0.07**	**8.67**	**3.07**	**11.74**	**3.31**	**3.07**	**6.38**		**7,272.09**		**0.71**		**7,287.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.11	1.33	0.00	0.26	0.01	0.27	0.01	0.01	0.02		209.88		0.01		210.13
Total	**0.10**	**0.11**	**1.33**	**0.00**	**0.26**	**0.01**	**0.27**	**0.01**	**0.01**	**0.02**		**209.88**		**0.01**		**210.13**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.71	0.00	3.71	1.42	0.00	1.42						0.00
Off-Road	7.94	65.32	35.42	0.07		3.07	3.07		3.07	3.07	0.00	7,272.09		0.71		7,287.00
Total	**7.94**	**65.32**	**35.42**	**0.07**	**3.71**	**3.07**	**6.78**	**1.42**	**3.07**	**4.49**	**0.00**	**7,272.09**		**0.71**		**7,287.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.11	1.33	0.00	0.24	0.01	0.25	0.01	0.01	0.02		209.88		0.01		210.13
Total	**0.10**	**0.11**	**1.33**	**0.00**	**0.24**	**0.01**	**0.25**	**0.01**	**0.01**	**0.02**		**209.88**		**0.01**		**210.13**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.5 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53		2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**		**2,712.00**		**0.31**		**2,718.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.36	4.64	2.28	0.01	0.27	0.15	0.42	0.02	0.15	0.17		786.93		0.02		787.31
Worker	0.77	0.89	10.38	0.02	2.04	0.07	2.11	0.08	0.07	0.15		1,637.05		0.09		1,639.01
Total	**1.13**	**5.53**	**12.66**	**0.03**	**2.31**	**0.22**	**2.53**	**0.10**	**0.22**	**0.32**		**2,423.98**		**0.11**		**2,426.32**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53	0.00	2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**	**0.00**	**2,712.00**		**0.31**		**2,718.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.36	4.64	2.28	0.01	0.24	0.15	0.39	0.02	0.15	0.17		786.93		0.02		787.31
Worker	0.77	0.89	10.38	0.02	1.86	0.07	1.93	0.08	0.07	0.15		1,637.05		0.09		1,639.01
Total	**1.13**	**5.53**	**12.66**	**0.03**	**2.10**	**0.22**	**2.32**	**0.10**	**0.22**	**0.32**		**2,423.98**		**0.11**		**2,426.32**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36		2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**		**2,712.00**		**0.28**		**2,717.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.34	4.23	2.11	0.01	0.27	0.13	0.40	0.02	0.13	0.15		789.58		0.02		789.92
Worker	0.71	0.80	9.52	0.02	2.04	0.07	2.11	0.08	0.07	0.15		1,607.95		0.09		1,609.77
Total	**1.05**	**5.03**	**11.63**	**0.03**	**2.31**	**0.20**	**2.51**	**0.10**	**0.20**	**0.30**		**2,397.53**		**0.11**		**2,399.69**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36	0.00	2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**	**0.00**	**2,712.00**		**0.28**		**2,717.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.34	4.23	2.11	0.01	0.24	0.13	0.38	0.02	0.13	0.15		789.58		0.02		789.92
Worker	0.71	0.80	9.52	0.02	1.86	0.07	1.93	0.08	0.07	0.15		1,607.95		0.09		1,609.77
Total	**1.05**	**5.03**	**11.63**	**0.03**	**2.10**	**0.20**	**2.31**	**0.10**	**0.20**	**0.30**		**2,397.53**		**0.11**		**2,399.69**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21		2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**		**2,712.00**		**0.26**		**2,717.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.31	3.87	1.96	0.01	0.27	0.12	0.39	0.02	0.12	0.14		790.33		0.01		790.64
Worker	0.65	0.72	8.70	0.02	2.04	0.07	2.11	0.08	0.07	0.15		1,569.90		0.08		1,571.59
Total	**0.96**	**4.59**	**10.66**	**0.03**	**2.31**	**0.19**	**2.50**	**0.10**	**0.19**	**0.29**		**2,360.23**		**0.09**		**2,362.23**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21	0.00	2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**	**0.00**	**2,712.00**		**0.26**		**2,717.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.31	3.87	1.96	0.01	0.24	0.12	0.37	0.02	0.12	0.14		790.33		0.01		790.64
Worker	0.65	0.72	8.70	0.02	1.86	0.07	1.93	0.08	0.07	0.15		1,569.90		0.08		1,571.59
Total	**0.96**	**4.59**	**10.66**	**0.03**	**2.10**	**0.19**	**2.30**	**0.10**	**0.19**	**0.29**		**2,360.23**		**0.09**		**2,362.23**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.6 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99		1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**		**1,979.14**		**0.34**		**1,986.20**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	1.00	0.00	0.20	0.01	0.20	0.01	0.01	0.01		157.41		0.01		157.60
Total	**0.07**	**0.09**	**1.00**	**0.00**	**0.20**	**0.01**	**0.20**	**0.01**	**0.01**	**0.01**		**157.41**		**0.01**		**157.60**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99	0.00	1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**	**0.00**	**1,979.14**		**0.34**		**1,986.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	1.00	0.00	0.18	0.01	0.19	0.01	0.01	0.01		157.41		0.01		157.60
Total	**0.07**	**0.09**	**1.00**	**0.00**	**0.18**	**0.01**	**0.19**	**0.01**	**0.01**	**0.01**		**157.41**		**0.01**		**157.60**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15		187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**		**187.46**		**0.02**		**187.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.14	1.73	0.00	0.40	0.01	0.42	0.02	0.01	0.03		311.97		0.02		312.30
Total	**0.13**	**0.14**	**1.73**	**0.00**	**0.40**	**0.01**	**0.42**	**0.02**	**0.01**	**0.03**		**311.97**		**0.02**		**312.30**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15	0.00	187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**	**0.00**	**187.46**		**0.02**		**187.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.14	1.73	0.00	0.37	0.01	0.38	0.02	0.01	0.03		311.97		0.02		312.30
Total	**0.13**	**0.14**	**1.73**	**0.00**	**0.37**	**0.01**	**0.38**	**0.02**	**0.01**	**0.03**		**311.97**		**0.02**		**312.30**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.23	29.38	131.01	0.24	25.72	1.39	27.11	0.89	1.39	2.28		23,185.25		0.92		23,204.64
Unmitigated	12.24	29.43	131.24	0.24	25.77	1.39	27.16	0.89	1.39	2.29		23,231.70		0.92		23,251.12
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	353.28	353.28	353.28	1,130,109	1,127,777
Congregate Care (Assisted Living)	375.36	375.36	375.36	1,200,741	1,198,264
General Office Building	331.05	331.05	331.05	967,146	965,151
Strip Mall	1,607.90	1,607.90	1607.90	4,486,259	4,477,003
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,667.59	2,667.59	2,667.59	7,784,255	7,768,195

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60
Congregate Care (Assisted Living)	10.80	7.30	7.50	40.20	19.20	40.60
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
NaturalGas Unmitigated	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	4010.93	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
Congregate Care (Assisted Living)	4010.93	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
General Office Building	163.4	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		19.22		0.00	0.00	19.34
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	242.297	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		28.51		0.00	0.00	28.68
Total		**0.08**	**0.78**	**0.35**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**		**991.47**		**0.02**	**0.02**	**997.52**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	4.01093	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
Congregate Care (Assisted Living)	4.01093	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
General Office Building	0.1634	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		19.22		0.00	0.00	19.34
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.242297	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		28.51		0.00	0.00	28.68
Total		**0.08**	**0.78**	**0.35**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**		**991.47**		**0.02**	**0.02**	**997.52**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Unmitigated	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase1
Riverside-South Coast County, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.76					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.88					0.00	0.00		0.00	0.00						0.00
Hearth	0.19	0.00	0.01	0.00		0.00	0.13		0.00	0.13	0.00	2,032.94		0.04	0.04	2,045.31
Landscaping	0.51	0.19	16.25	0.00		0.00	0.09		0.00	0.09		28.87		0.03		29.49
Total	**6.34**	**0.19**	**16.26**	**0.00**		**0.00**	**0.22**		**0.00**	**0.22**	**0.00**	**2,061.81**		**0.07**	**0.04**	**2,074.80**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.76					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.88					0.00	0.00		0.00	0.00						0.00
Hearth	0.19	0.00	0.01	0.00		0.00	0.13		0.00	0.13	0.00	2,032.94		0.04	0.04	2,045.31
Landscaping	0.51	0.19	16.25	0.00		0.00	0.09		0.00	0.09		28.87		0.03		29.49
Total	**6.34**	**0.19**	**16.26**	**0.00**		**0.00**	**0.22**		**0.00**	**0.22**	**0.00**	**2,061.81**		**0.07**	**0.04**	**2,074.80**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Mid Rise	96	Dwelling Unit
Congregate Care (Assisted Living)	96	Dwelling Unit
General Office Building	16.34	1000sqft
Strip Mall	38.12	1000sqft
Other Asphalt Surfaces	0.3	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Based on Phase 1 of the project description. Population based on 2.61 persons per unit.

Construction Phase - Default construction schedule adjust to accommodate 3 year construction schedule of Planning Area 1 and 2. Assumes mass-grading of Phase 1

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Grading -

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Demolition -

Vehicle Trips - Trip rates based on the traffic study prepared by Urban Crossroads.

Woodstoves - assumes no fireplace in assisted living and gas fireplaces in retirement homes.

Water And Wastewater - From WSA

Solid Waste - errors: congregate care waste generation (96*0.46 = 44.16 tons). general office (16.34 *11.54=189 tons), strip mall (38.12*3.0=114 tons)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency requirements

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	65.44	42.44	0.07	18.30	3.75	20.97	9.94	3.75	12.61	0.00	7,458.87	0.00	0.76	0.00	7,474.81
2014	4.23	26.79	26.29	0.05	2.30	1.57	3.87	0.10	1.57	1.67	0.00	4,925.27	0.00	0.38	0.00	4,933.28
2015	38.37	26.23	28.03	0.06	2.71	1.56	4.27	0.11	1.56	1.67	0.00	5,356.72	0.00	0.39	0.00	5,364.92
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	8.44	65.44	42.44	0.07	7.94	3.75	10.61	4.25	3.75	6.92	0.00	7,458.87	0.00	0.76	0.00	7,474.81
2014	4.23	26.79	26.29	0.05	2.10	1.57	3.67	0.10	1.57	1.67	0.00	4,925.27	0.00	0.38	0.00	4,933.28
2015	38.37	26.23	28.03	0.06	2.47	1.56	4.04	0.11	1.56	1.67	0.00	5,356.72	0.00	0.39	0.00	5,364.92
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Energy	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Mobile	11.76	30.99	121.14	0.22	25.77	1.41	27.18	0.89	1.41	2.30		21,147.11		0.87		21,165.41
Total	**18.18**	**31.96**	**137.75**	**0.22**	**25.77**	**1.41**	**27.46**	**0.89**	**1.41**	**2.57**	**0.00**	**24,200.40**		**0.96**	**0.06**	**24,237.72**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Energy	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Mobile	11.75	30.94	120.94	0.22	25.72	1.40	27.12	0.89	1.40	2.30		21,104.88		0.87		21,123.16
Total	**18.17**	**31.91**	**137.55**	**0.22**	**25.72**	**1.40**	**27.40**	**0.89**	**1.40**	**2.57**	**0.00**	**24,158.17**		**0.96**	**0.06**	**24,195.47**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.74	0.00	0.74	0.00	0.00	0.00						0.00
Off-Road	5.97	47.66	28.64	0.05		2.36	2.36		2.36	2.36		5,057.71		0.54		5,069.00
Total	**5.97**	**47.66**	**28.64**	**0.05**	**0.74**	**2.36**	**3.10**	**0.00**	**2.36**	**2.36**		**5,057.71**		**0.54**		**5,069.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.83	0.84	0.00	3.24	0.07	3.31	0.01	0.07	0.08		276.62		0.01		276.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.20	0.01	0.20	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.22**	**1.92**	**1.71**	**0.00**	**3.44**	**0.08**	**3.51**	**0.02**	**0.08**	**0.09**		**416.71**		**0.02**		**417.03**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.32	0.00	0.32	0.00	0.00	0.00						0.00
Off-Road	5.97	47.66	28.64	0.05		2.36	2.36		2.36	2.36	0.00	5,057.71		0.54		5,069.00
Total	**5.97**	**47.66**	**28.64**	**0.05**	**0.32**	**2.36**	**2.68**	**0.00**	**2.36**	**2.36**	**0.00**	**5,057.71**		**0.54**		**5,069.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.15	1.83	0.84	0.00	2.95	0.07	3.02	0.01	0.07	0.08		276.62		0.01		276.77
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.18	0.01	0.19	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.22**	**1.92**	**1.71**	**0.00**	**3.13**	**0.08**	**3.21**	**0.02**	**0.08**	**0.09**		**416.71**		**0.02**		**417.03**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.3 Site Preparation - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	6.70	54.15	30.68	0.05		2.66	2.66		2.66	2.66		5,413.51		0.60		5,426.15
Total	**6.70**	**54.15**	**30.68**	**0.05**	**18.07**	**2.66**	**20.73**	**9.93**	**2.66**	**12.59**		**5,413.51**		**0.60**		**5,426.15**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.11	1.05	0.00	0.23	0.01	0.24	0.01	0.01	0.02		168.10		0.01		168.31
Total	**0.09**	**0.11**	**1.05**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**168.10**		**0.01**		**168.31**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.72	0.00	7.72	4.25	0.00	4.25						0.00
Off-Road	6.70	54.15	30.68	0.05		2.66	2.66		2.66	2.66	0.00	5,413.51		0.60		5,426.15
Total	**6.70**	**54.15**	**30.68**	**0.05**	**7.72**	**2.66**	**10.38**	**4.25**	**2.66**	**6.91**	**0.00**	**5,413.51**		**0.60**		**5,426.15**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.11	1.05	0.00	0.21	0.01	0.22	0.01	0.01	0.02		168.10		0.01		168.31
Total	**0.09**	**0.11**	**1.05**	**0.00**	**0.21**	**0.01**	**0.22**	**0.01**	**0.01**	**0.02**		**168.10**		**0.01**		**168.31**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.4 Grading - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	7.94	65.32	35.42	0.07		3.07	3.07		3.07	3.07		7,272.09		0.71		7,287.00
Total	**7.94**	**65.32**	**35.42**	**0.07**	**8.67**	**3.07**	**11.74**	**3.31**	**3.07**	**6.38**		**7,272.09**		**0.71**		**7,287.00**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.13	1.16	0.00	0.26	0.01	0.27	0.01	0.01	0.02		186.78		0.01		187.01
Total	**0.10**	**0.13**	**1.16**	**0.00**	**0.26**	**0.01**	**0.27**	**0.01**	**0.01**	**0.02**		**186.78**		**0.01**		**187.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.71	0.00	3.71	1.42	0.00	1.42						0.00
Off-Road	7.94	65.32	35.42	0.07		3.07	3.07		3.07	3.07	0.00	7,272.09		0.71		7,287.00
Total	**7.94**	**65.32**	**35.42**	**0.07**	**3.71**	**3.07**	**6.78**	**1.42**	**3.07**	**4.49**	**0.00**	**7,272.09**		**0.71**		**7,287.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.13	1.16	0.00	0.24	0.01	0.25	0.01	0.01	0.02		186.78		0.01		187.01
Total	**0.10**	**0.13**	**1.16**	**0.00**	**0.24**	**0.01**	**0.25**	**0.01**	**0.01**	**0.02**		**186.78**		**0.01**		**187.01**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.5 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53		2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**		**2,712.00**		**0.31**		**2,718.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.81	2.59	0.01	0.27	0.15	0.42	0.02	0.15	0.17		780.05		0.02		780.44
Worker	0.76	0.98	9.08	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,456.90		0.09		1,458.71
Total	**1.14**	**5.79**	**11.67**	**0.02**	**2.31**	**0.22**	**2.53**	**0.10**	**0.22**	**0.32**		**2,236.95**		**0.11**		**2,239.15**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.47	23.27	15.73	0.03		1.53	1.53		1.53	1.53	0.00	2,712.00		0.31		2,718.50
Total	**3.47**	**23.27**	**15.73**	**0.03**		**1.53**	**1.53**		**1.53**	**1.53**	**0.00**	**2,712.00**		**0.31**		**2,718.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.81	2.59	0.01	0.24	0.15	0.40	0.02	0.15	0.17		780.05		0.02		780.44
Worker	0.76	0.98	9.08	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,456.90		0.09		1,458.71
Total	**1.14**	**5.79**	**11.67**	**0.02**	**2.10**	**0.22**	**2.33**	**0.10**	**0.22**	**0.32**		**2,236.95**		**0.11**		**2,239.15**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36		2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**		**2,712.00**		**0.28**		**2,717.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	4.38	2.42	0.01	0.27	0.14	0.40	0.02	0.14	0.16		782.59		0.02		782.95
Worker	0.70	0.88	8.31	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,430.68		0.08		1,432.36
Total	**1.05**	**5.26**	**10.73**	**0.02**	**2.31**	**0.21**	**2.51**	**0.10**	**0.21**	**0.31**		**2,213.27**		**0.10**		**2,215.31**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.18	21.53	15.56	0.03		1.36	1.36		1.36	1.36	0.00	2,712.00		0.28		2,717.97
Total	**3.18**	**21.53**	**15.56**	**0.03**		**1.36**	**1.36**		**1.36**	**1.36**	**0.00**	**2,712.00**		**0.28**		**2,717.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.35	4.38	2.42	0.01	0.24	0.14	0.38	0.02	0.14	0.16		782.59		0.02		782.95
Worker	0.70	0.88	8.31	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,430.68		0.08		1,432.36
Total	**1.05**	**5.26**	**10.73**	**0.02**	**2.10**	**0.21**	**2.31**	**0.10**	**0.21**	**0.31**		**2,213.27**		**0.10**		**2,215.31**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21		2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**		**2,712.00**		**0.26**		**2,717.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.32	3.98	2.26	0.01	0.27	0.12	0.39	0.02	0.12	0.14		783.24		0.02		783.56
Worker	0.64	0.80	7.58	0.01	2.04	0.07	2.11	0.08	0.07	0.15		1,396.52		0.07		1,398.06
Total	**0.96**	**4.78**	**9.84**	**0.02**	**2.31**	**0.19**	**2.50**	**0.10**	**0.19**	**0.29**		**2,179.76**		**0.09**		**2,181.62**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	19.58	15.42	0.03		1.21	1.21		1.21	1.21	0.00	2,712.00		0.26		2,717.50
Total	**2.91**	**19.58**	**15.42**	**0.03**		**1.21**	**1.21**		**1.21**	**1.21**	**0.00**	**2,712.00**		**0.26**		**2,717.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.32	3.98	2.26	0.01	0.24	0.12	0.37	0.02	0.12	0.14		783.24		0.02		783.56
Worker	0.64	0.80	7.58	0.01	1.86	0.07	1.93	0.08	0.07	0.15		1,396.52		0.07		1,398.06
Total	**0.96**	**4.78**	**9.84**	**0.02**	**2.10**	**0.19**	**2.30**	**0.10**	**0.19**	**0.29**		**2,179.76**		**0.09**		**2,181.62**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.6 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99		1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**		**1,979.14**		**0.34**		**1,986.20**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.20	0.01	0.20	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.07**	**0.09**	**0.87**	**0.00**	**0.20**	**0.01**	**0.20**	**0.01**	**0.01**	**0.01**		**140.09**		**0.01**		**140.26**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	22.93	14.17	0.02		1.99	1.99		1.99	1.99	0.00	1,979.14		0.34		1,986.20
Paving	0.01					0.00	0.00		0.00	0.00						0.00
Total	**3.76**	**22.93**	**14.17**	**0.02**		**1.99**	**1.99**		**1.99**	**1.99**	**0.00**	**1,979.14**		**0.34**		**1,986.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.87	0.00	0.18	0.01	0.19	0.01	0.01	0.01		140.09		0.01		140.26
Total	**0.07**	**0.09**	**0.87**	**0.00**	**0.18**	**0.01**	**0.19**	**0.01**	**0.01**	**0.01**		**140.09**		**0.01**		**140.26**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

3.7 Architectural Coating - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15		187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**		**187.46**		**0.02**		**187.97**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.16	1.51	0.00	0.40	0.01	0.42	0.02	0.01	0.03		277.51		0.01		277.82
Total	**0.13**	**0.16**	**1.51**	**0.00**	**0.40**	**0.01**	**0.42**	**0.02**	**0.01**	**0.03**		**277.51**		**0.01**		**277.82**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	34.09					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.71	1.27	0.00		0.15	0.15		0.15	0.15	0.00	187.46		0.02		187.97
Total	**34.36**	**1.71**	**1.27**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**	**0.00**	**187.46**		**0.02**		**187.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.13	0.16	1.51	0.00	0.37	0.01	0.38	0.02	0.01	0.03		277.51		0.01		277.82
Total	**0.13**	**0.16**	**1.51**	**0.00**	**0.37**	**0.01**	**0.38**	**0.02**	**0.01**	**0.03**		**277.51**		**0.01**		**277.82**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.75	30.94	120.94	0.22	25.72	1.40	27.12	0.89	1.40	2.30		21,104.88		0.87		21,123.16
Unmitigated	11.76	30.99	121.14	0.22	25.77	1.41	27.18	0.89	1.41	2.30		21,147.11		0.87		21,165.41
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	353.28	353.28	353.28	1,130,109	1,127,777
Congregate Care (Assisted Living)	375.36	375.36	375.36	1,200,741	1,198,264
General Office Building	331.05	331.05	331.05	967,146	965,151
Strip Mall	1,607.90	1,607.90	1607.90	4,486,259	4,477,003
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,667.59	2,667.59	2,667.59	7,784,255	7,768,195

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60
Congregate Care (Assisted Living)	10.80	7.30	7.50	40.20	19.20	40.60
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
NaturalGas Unmitigated	0.09	0.78	0.35	0.00		0.00	0.06		0.00	0.06		991.48		0.02	0.02	997.51
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	4010.93	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
Congregate Care (Assisted Living)	4010.93	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
General Office Building	163.4	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		19.22		0.00	0.00	19.34
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	242.297	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		28.51		0.00	0.00	28.68
Total		**0.08**	**0.78**	**0.35**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**		**991.47**		**0.02**	**0.02**	**997.52**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Mid Rise	4.01093	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
Congregate Care (Assisted Living)	4.01093	0.04	0.37	0.16	0.00		0.00	0.03		0.00	0.03		471.87		0.01	0.01	474.75
General Office Building	0.1634	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00		19.22		0.00	0.00	19.34
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.242297	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		28.51		0.00	0.00	28.68
Total		**0.08**	**0.78**	**0.35**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**		**991.47**		**0.02**	**0.02**	**997.52**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Unmitigated	6.33	0.19	16.26	0.00		0.00	0.22		0.00	0.21	0.00	2,061.81		0.07	0.04	2,074.80
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase1
Riverside-South Coast County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.76					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.88					0.00	0.00		0.00	0.00						0.00
Hearth	0.19	0.00	0.01	0.00		0.00	0.13		0.00	0.13	0.00	2,032.94		0.04	0.04	2,045.31
Landscaping	0.51	0.19	16.25	0.00		0.00	0.09		0.00	0.09		28.87		0.03		29.49
Total	**6.34**	**0.19**	**16.26**	**0.00**		**0.00**	**0.22**		**0.00**	**0.22**	**0.00**	**2,061.81**		**0.07**	**0.04**	**2,074.80**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.76					0.00	0.00		0.00	0.00						0.00
Consumer Products	4.88					0.00	0.00		0.00	0.00						0.00
Hearth	0.19	0.00	0.01	0.00		0.00	0.13		0.00	0.13	0.00	2,032.94		0.04	0.04	2,045.31
Landscaping	0.51	0.19	16.25	0.00		0.00	0.09		0.00	0.09		28.87		0.03		29.49
Total	**6.34**	**0.19**	**16.26**	**0.00**		**0.00**	**0.22**		**0.00**	**0.22**	**0.00**	**2,061.81**		**0.07**	**0.04**	**2,074.80**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	252	Dwelling Unit
Condo/Townhouse	81	Dwelling Unit
Strip Mall	80.8	1000sqft
Other Asphalt Surfaces	1	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Land uses based on the project description. Persons per unit = 2.61.

Construction Phase - Assumes mass grading of site but overlap of fine grading, building and paving of individual planning areas. Based on phase 2 schedule

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Grading -

Demolition -

Vehicle Trips - Trip rates provided by Urban Crossroads

Woodstoves - Assumes gas-burning fireplaces in accordance with SCAQMD Rule 445

Water And Wastewater - Water demand from WSA

Solid Waste - error in strip mall (38.12 *11.54 = 242)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency measures.

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.86	5.77	5.30	0.01	1.12	0.31	1.42	0.33	0.31	0.64	0.00	1,014.02	1,014.02	0.07	0.00	1,015.51
2018	0.46	2.69	3.76	0.01	0.47	0.14	0.61	0.01	0.14	0.15	0.00	756.59	756.59	0.04	0.00	757.40
2019	2.66	2.43	3.63	0.01	0.48	0.13	0.60	0.01	0.12	0.13	0.00	748.92	748.92	0.04	0.00	749.67
Total	**3.98**	**10.89**	**12.69**	**0.03**	**2.07**	**0.58**	**2.63**	**0.35**	**0.57**	**0.92**	**0.00**	**2,519.53**	**2,519.53**	**0.15**	**0.00**	**2,522.58**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.86	5.77	5.30	0.01	0.70	0.31	1.01	0.15	0.31	0.46	0.00	1,014.02	1,014.02	0.07	0.00	1,015.51
2018	0.46	2.69	3.76	0.01	0.43	0.14	0.57	0.01	0.14	0.15	0.00	756.59	756.59	0.04	0.00	757.40
2019	2.66	2.43	3.63	0.01	0.44	0.13	0.56	0.01	0.12	0.13	0.00	748.92	748.92	0.04	0.00	749.67
Total	**3.98**	**10.89**	**12.69**	**0.03**	**1.57**	**0.58**	**2.14**	**0.17**	**0.57**	**0.74**	**0.00**	**2,519.53**	**2,519.53**	**0.15**	**0.00**	**2,522.58**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.90	0.06	5.09	0.00		0.00	0.04		0.00	0.04	0.00	248.18	248.18	0.01	0.00	249.81
Energy	0.04	0.30	0.13	0.00		0.00	0.02		0.00	0.02	0.00	1,160.30	1,160.30	0.04	0.02	1,167.51
Mobile	3.51	8.68	36.62	0.09	8.90	0.47	9.37	0.14	0.45	0.59	0.00	6,640.01	6,640.01	0.25	0.00	6,645.22
Waste						0.00	0.00		0.00	0.00	80.22	0.00	80.22	4.74	0.00	179.77
Water						0.00	0.00		0.00	0.00	0.00	148.30	148.30	0.01	0.03	156.80
Total	**5.45**	**9.04**	**41.84**	**0.09**	**8.90**	**0.47**	**9.43**	**0.14**	**0.45**	**0.65**	**80.22**	**8,196.79**	**8,277.01**	**5.05**	**0.05**	**8,399.11**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.90	0.06	5.09	0.00		0.00	0.04		0.00	0.04	0.00	248.18	248.18	0.01	0.00	249.81
Energy	0.04	0.30	0.13	0.00		0.00	0.02		0.00	0.02	0.00	1,160.30	1,160.30	0.04	0.02	1,167.51
Mobile	3.48	8.62	36.30	0.09	8.81	0.46	9.27	0.14	0.44	0.58	0.00	6,569.77	6,569.77	0.25	0.00	6,574.93
Waste						0.00	0.00		0.00	0.00	80.22	0.00	80.22	4.74	0.00	179.77
Water						0.00	0.00		0.00	0.00	0.00	122.27	122.27	0.01	0.02	129.09
Total	**5.42**	**8.98**	**41.52**	**0.09**	**8.81**	**0.46**	**9.33**	**0.14**	**0.44**	**0.64**	**80.22**	**8,100.52**	**8,180.74**	**5.05**	**0.04**	**8,301.11**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.71	0.51	0.00		0.03	0.03		0.03	0.03	0.00	94.03	94.03	0.01	0.00	94.20
Total	**0.10**	**0.71**	**0.51**	**0.00**	**0.03**	**0.03**	**0.06**	**0.00**	**0.03**	**0.03**	**0.00**	**94.03**	**94.03**	**0.01**	**0.00**	**94.20**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.02	0.00	0.12	0.00	0.12	0.00	0.00	0.00	0.00	10.00	10.00	0.00	0.00	10.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.00	0.00	2.51
Total	**0.00**	**0.04**	**0.03**	**0.00**	**0.12**	**0.00**	**0.12**	**0.00**	**0.00**	**0.00**	**0.00**	**12.51**	**12.51**	**0.00**	**0.00**	**12.52**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.10	0.71	0.51	0.00		0.03	0.03		0.03	0.03	0.00	94.03	94.03	0.01	0.00	94.20
Total	**0.10**	**0.71**	**0.51**	**0.00**	**0.01**	**0.03**	**0.04**	**0.00**	**0.03**	**0.03**	**0.00**	**94.03**	**94.03**	**0.01**	**0.00**	**94.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.02	0.00	0.10	0.00	0.11	0.00	0.00	0.00	0.00	10.00	10.00	0.00	0.00	10.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.51	2.51	0.00	0.00	2.51
Total	**0.00**	**0.04**	**0.03**	**0.00**	**0.10**	**0.00**	**0.11**	**0.00**	**0.00**	**0.00**	**0.00**	**12.51**	**12.51**	**0.00**	**0.00**	**12.52**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.37	0.00	0.37	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.11	0.84	0.52	0.00		0.04	0.04		0.04	0.04	0.00	100.65	100.65	0.01	0.00	100.84
Total	**0.11**	**0.84**	**0.52**	**0.00**	**0.37**	**0.04**	**0.41**	**0.20**	**0.04**	**0.24**	**0.00**	**100.65**	**100.65**	**0.01**	**0.00**	**100.84**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	3.01	0.00	0.00	3.01
Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.01**	**3.01**	**0.00**	**0.00**	**3.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.16	0.00	0.16	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.11	0.84	0.52	0.00		0.04	0.04		0.04	0.04	0.00	100.65	100.65	0.01	0.00	100.84
Total	**0.11**	**0.84**	**0.52**	**0.00**	**0.16**	**0.04**	**0.20**	**0.09**	**0.04**	**0.13**	**0.00**	**100.65**	**100.65**	**0.01**	**0.00**	**100.84**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01	3.01	0.00	0.00	3.01
Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.01**	**3.01**	**0.00**	**0.00**	**3.01**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.26	0.00	0.26	0.11	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.43	0.94	0.00		0.06	0.06		0.06	0.06	0.00	201.16	201.16	0.02	0.00	201.48
Total	**0.19**	**1.43**	**0.94**	**0.00**	**0.26**	**0.06**	**0.32**	**0.11**	**0.06**	**0.17**	**0.00**	**201.16**	**201.16**	**0.02**	**0.00**	**201.48**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.98	4.98	0.00	0.00	4.98
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**4.98**	**4.98**	**0.00**	**0.00**	**4.98**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.11	0.00	0.11	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.43	0.94	0.00		0.06	0.06		0.06	0.06	0.00	201.16	201.16	0.02	0.00	201.48
Total	**0.19**	**1.43**	**0.94**	**0.00**	**0.11**	**0.06**	**0.17**	**0.05**	**0.06**	**0.11**	**0.00**	**201.16**	**201.16**	**0.02**	**0.00**	**201.48**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.98	4.98	0.00	0.00	4.98
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**4.98**	**4.98**	**0.00**	**0.00**	**4.98**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.22	1.44	1.35	0.00		0.08	0.08		0.08	0.08	0.00	218.91	218.91	0.02	0.00	219.28
Total	**0.22**	**1.44**	**1.35**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**218.91**	**218.91**	**0.02**	**0.00**	**219.28**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.49	0.28	0.00	0.04	0.01	0.05	0.00	0.01	0.02	0.00	108.02	108.02	0.00	0.00	108.06
Worker	0.08	0.09	1.03	0.00	0.28	0.01	0.29	0.01	0.01	0.02	0.00	193.10	193.10	0.01	0.00	193.29
Total	**0.12**	**0.58**	**1.31**	**0.00**	**0.32**	**0.02**	**0.34**	**0.01**	**0.02**	**0.04**	**0.00**	**301.12**	**301.12**	**0.01**	**0.00**	**301.35**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.22	1.44	1.35	0.00		0.08	0.08		0.08	0.08	0.00	218.91	218.91	0.02	0.00	219.28
Total	**0.22**	**1.44**	**1.35**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**218.91**	**218.91**	**0.02**	**0.00**	**219.28**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.49	0.28	0.00	0.03	0.01	0.05	0.00	0.01	0.02	0.00	108.02	108.02	0.00	0.00	108.06
Worker	0.08	0.09	1.03	0.00	0.26	0.01	0.27	0.01	0.01	0.02	0.00	193.10	193.10	0.01	0.00	193.29
Total	**0.12**	**0.58**	**1.31**	**0.00**	**0.29**	**0.02**	**0.32**	**0.01**	**0.02**	**0.04**	**0.00**	**301.12**	**301.12**	**0.01**	**0.00**	**301.35**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.29	1.91	1.97	0.00		0.11	0.11		0.11	0.11	0.00	320.98	320.98	0.02	0.00	321.48
Total	**0.29**	**1.91**	**1.97**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**320.98**	**320.98**	**0.02**	**0.00**	**321.48**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.06	0.66	0.39	0.00	0.05	0.02	0.07	0.00	0.02	0.02	0.00	158.52	158.52	0.00	0.00	158.57
Worker	0.11	0.12	1.40	0.00	0.41	0.02	0.43	0.01	0.02	0.02	0.00	277.09	277.09	0.01	0.00	277.35
Total	**0.17**	**0.78**	**1.79**	**0.00**	**0.46**	**0.04**	**0.50**	**0.01**	**0.04**	**0.04**	**0.00**	**435.61**	**435.61**	**0.01**	**0.00**	**435.92**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.29	1.91	1.97	0.00		0.11	0.11		0.11	0.11	0.00	320.98	320.98	0.02	0.00	321.48
Total	**0.29**	**1.91**	**1.97**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**320.98**	**320.98**	**0.02**	**0.00**	**321.48**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.06	0.66	0.39	0.00	0.05	0.02	0.07	0.00	0.02	0.02	0.00	158.52	158.52	0.00	0.00	158.57
Worker	0.11	0.12	1.40	0.00	0.38	0.02	0.39	0.01	0.02	0.02	0.00	277.09	277.09	0.01	0.00	277.35
Total	**0.17**	**0.78**	**1.79**	**0.00**	**0.43**	**0.04**	**0.46**	**0.01**	**0.04**	**0.04**	**0.00**	**435.61**	**435.61**	**0.01**	**0.00**	**435.92**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.26	1.67	1.89	0.00		0.09	0.09		0.09	0.09	0.00	309.91	309.91	0.02	0.00	310.35
Total	**0.26**	**1.67**	**1.89**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**309.91**	**309.91**	**0.02**	**0.00**	**310.35**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.60	0.36	0.00	0.05	0.02	0.07	0.00	0.02	0.02	0.00	153.17	153.17	0.00	0.00	153.22
Worker	0.10	0.11	1.25	0.00	0.40	0.02	0.42	0.01	0.02	0.02	0.00	262.16	262.16	0.01	0.00	262.40
Total	**0.15**	**0.71**	**1.61**	**0.00**	**0.45**	**0.04**	**0.49**	**0.01**	**0.04**	**0.04**	**0.00**	**415.33**	**415.33**	**0.01**	**0.00**	**415.62**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.26	1.67	1.89	0.00		0.09	0.09		0.09	0.09	0.00	309.91	309.91	0.02	0.00	310.35
Total	**0.26**	**1.67**	**1.89**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**309.91**	**309.91**	**0.02**	**0.00**	**310.35**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.60	0.36	0.00	0.05	0.02	0.07	0.00	0.02	0.02	0.00	153.17	153.17	0.00	0.00	153.22
Worker	0.10	0.11	1.25	0.00	0.36	0.02	0.38	0.01	0.02	0.02	0.00	262.16	262.16	0.01	0.00	262.40
Total	**0.15**	**0.71**	**1.61**	**0.00**	**0.41**	**0.04**	**0.45**	**0.01**	**0.04**	**0.04**	**0.00**	**415.33**	**415.33**	**0.01**	**0.00**	**415.62**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.12	0.73	0.56	0.00		0.06	0.06		0.06	0.06	0.00	72.70	72.70	0.01	0.00	72.90
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.12**	**0.73**	**0.56**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**72.70**	**72.70**	**0.01**	**0.00**	**72.90**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.96	4.96	0.00	0.00	4.96
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**4.96**	**4.96**	**0.00**	**0.00**	**4.96**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.12	0.73	0.56	0.00		0.06	0.06		0.06	0.06	0.00	72.70	72.70	0.01	0.00	72.90
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.12**	**0.73**	**0.56**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**72.70**	**72.70**	**0.01**	**0.00**	**72.90**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.96	4.96	0.00	0.00	4.96
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**4.96**	**4.96**	**0.00**	**0.00**	**4.96**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.24					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00	0.00	6.89	6.89	0.00	0.00	6.90
Total	**2.25**	**0.05**	**0.05**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**6.89**	**6.89**	**0.00**	**0.00**	**6.90**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.08	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	16.79	16.79	0.00	0.00	16.80
Total	**0.01**	**0.01**	**0.08**	**0.00**	**0.03**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**16.79**	**16.79**	**0.00**	**0.00**	**16.80**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.24					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.05	0.00		0.00	0.00		0.00	0.00	0.00	6.89	6.89	0.00	0.00	6.90
Total	**2.25**	**0.05**	**0.05**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**6.89**	**6.89**	**0.00**	**0.00**	**6.90**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	16.79	16.79	0.00	0.00	16.80
Total	**0.01**	**0.01**	**0.08**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**16.79**	**16.79**	**0.00**	**0.00**	**16.80**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.48	8.62	36.30	0.09	8.81	0.46	9.27	0.14	0.44	0.58	0.00	6,569.77	6,569.77	0.25	0.00	6,574.93
Unmitigated	3.51	8.68	36.62	0.09	8.90	0.47	9.37	0.14	0.45	0.59	0.00	6,640.01	6,640.01	0.25	0.00	6,645.22
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,753.92	1,753.92	1753.92	5,610,623	5,549,196
Condo/Townhouse	473.85	473.85	473.85	1,515,801	1,499,206
Strip Mall	3,257.05	3,257.05	3257.05	9,087,596	8,988,103
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	5,484.82	5,484.82	5,484.82	16,214,021	16,036,504

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	812.25	812.25	0.04	0.01	817.34
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	812.25	812.25	0.04	0.01	817.34
NaturalGas Mitigated	0.04	0.30	0.13	0.00		0.00	0.02		0.00	0.02	0.00	348.05	348.05	0.01	0.01	350.17
NaturalGas Unmitigated	0.04	0.30	0.13	0.00		0.00	0.02		0.00	0.02	0.00	348.05	348.05	0.01	0.01	350.17
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Low Rise	4.24294e+006	0.02	0.20	0.08	0.00		0.00	0.02		0.00	0.02	0.00	226.42	226.42	0.00	0.00	227.80
Condo/Townhouse	2.09189e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	111.63	111.63	0.00	0.00	112.31
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	187456	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	10.00	10.00	0.00	0.00	10.06
Total		**0.03**	**0.31**	**0.13**	**0.00**		**0.00**	**0.03**		**0.00**	**0.03**	**0.00**	**348.05**	**348.05**	**0.00**	**0.00**	**350.17**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Low Rise	4.24294e+006	0.02	0.20	0.08	0.00		0.00	0.02		0.00	0.02	0.00	226.42	226.42	0.00	0.00	227.80
Condo/Townhouse	2.09189e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	111.63	111.63	0.00	0.00	112.31
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	187456	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	10.00	10.00	0.00	0.00	10.06
Total		**0.03**	**0.31**	**0.13**	**0.00**		**0.00**	**0.03**		**0.00**	**0.03**	**0.00**	**348.05**	**348.05**	**0.00**	**0.00**	**350.17**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	1.12712e+006					327.84	0.01	0.01	329.90
Condo/Townhouse	400037					116.36	0.01	0.00	117.09
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	1.26533e+006					368.05	0.02	0.01	370.35
Total						**812.25**	**0.04**	**0.02**	**817.34**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	1.12712e+006					327.84	0.01	0.01	329.90
Condo/Townhouse	400037					116.36	0.01	0.00	117.09
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	1.26533e+006					368.05	0.02	0.01	370.35
Total						**812.25**	**0.04**	**0.02**	**817.34**

NorthHemetSP_Phase2

Riverside-South Coast County, Annual

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.90	0.06	5.09	0.00		0.00	0.04		0.00	0.04	0.00	248.18	248.18	0.01	0.00	249.81
Unmitigated	1.90	0.06	5.09	0.00		0.00	0.04		0.00	0.04	0.00	248.18	248.18	0.01	0.00	249.81
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.22					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.50					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.02	0.00	0.00	0.00		0.00	0.02		0.00	0.02	0.00	239.90	239.90	0.00	0.00	241.36
Landscaping	0.15	0.06	5.09	0.00		0.00	0.03		0.00	0.03	0.00	8.28	8.28	0.01	0.00	8.45
Total	**1.89**	**0.06**	**5.09**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**	**0.00**	**248.18**	**248.18**	**0.01**	**0.00**	**249.81**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.22					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.50					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.02	0.00	0.00	0.00		0.00	0.02		0.00	0.02	0.00	239.90	239.90	0.00	0.00	241.36
Landscaping	0.15	0.06	5.09	0.00		0.00	0.03		0.00	0.03	0.00	8.28	8.28	0.01	0.00	8.45
Total	**1.89**	**0.06**	**5.09**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**	**0.00**	**248.18**	**248.18**	**0.01**	**0.00**	**249.81**

NorthHemetSP_Phase2
Riverside-South Coast County, Annual

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					122.27	0.01	0.02	129.09
Unmitigated					148.30	0.01	0.03	156.80
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	19.1477 / 4.78691					87.99	0.00	0.02	93.03
Condo/Townhouse	6.15461 / 1.53865					28.28	0.00	0.01	29.90
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Strip Mall	6.97006 / 1.74252					32.03	0.00	0.01	33.87
Total						**148.30**	**0.00**	**0.04**	**156.80**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	15.3181 / 4.49491					72.54	0.00	0.01	76.59
Condo/Townhouse	4.92368 / 1.44479					23.32	0.00	0.00	24.62
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Strip Mall	5.57605 / 1.63622					26.41	0.00	0.00	27.88
Total						**122.27**	**0.00**	**0.01**	**129.09**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					80.22	4.74	0.00	179.77
Unmitigated					80.22	4.74	0.00	179.77
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	115.92					23.53	1.39	0.00	52.73
Condo/Townhouse	37.26					7.56	0.45	0.00	16.95
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	242					49.12	2.90	0.00	110.09
Total						**80.21**	**4.74**	**0.00**	**179.77**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	115.92					23.53	1.39	0.00	52.73
Condo/Townhouse	37.26					7.56	0.45	0.00	16.95
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Strip Mall	242					49.12	2.90	0.00	110.09
Total						**80.21**	**4.74**	**0.00**	**179.77**

9.0 Vegetation

NorthHemetSP_Phase2

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	252	Dwelling Unit
Condo/Townhouse	81	Dwelling Unit
Strip Mall	80.8	1000sqft
Other Asphalt Surfaces	1	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -

Land Use - Land uses based on the project description. Persons per unit = 2.61.

Construction Phase - Assumes mass grading of site but overlap of fine grading, building and paving of individual planning areas. Based on phase 2 schedule

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Off-road Equipment - Load factors based on OFFROAD2011

Grading -

Demolition -

Vehicle Trips - Trip rates provided by Urban Crossroads

Woodstoves - Assumes gas-burning fireplaces in accordance with SCAQMD Rule 445

Water And Wastewater - Water demand from WSA

Solid Waste - error in strip mall (38.12 *11.54 = 242)

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Mobile Land Use Mitigation -

Water Mitigation - CalGreen Water efficiency measures.

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	13.21	87.55	77.11	0.16	18.30	4.79	20.15	9.94	4.79	11.79	0.00	16,235.48	0.00	1.20	0.00	16,260.65
2018	3.56	20.68	29.59	0.07	3.92	1.08	5.01	0.06	1.06	1.12	0.00	6,589.81	0.00	0.33	0.00	6,596.80
2019	58.86	20.29	31.94	0.08	4.61	1.07	5.68	0.07	1.05	1.11	0.00	7,222.53	0.00	0.35	0.00	7,229.78
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	13.21	87.55	77.11	0.16	7.94	4.79	12.49	4.25	4.79	6.38	0.00	16,235.48	0.00	1.20	0.00	16,260.65
2018	3.56	20.68	29.59	0.07	3.58	1.08	4.67	0.06	1.06	1.12	0.00	6,589.81	0.00	0.33	0.00	6,596.80
2019	58.86	20.29	31.94	0.08	4.22	1.07	5.28	0.07	1.05	1.11	0.00	7,222.53	0.00	0.35	0.00	7,229.78
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Energy	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Mobile	20.97	47.80	212.12	0.51	53.69	2.56	56.25	0.76	2.46	3.22		42,811.27		1.72		42,847.46
Total	**32.07**	**49.77**	**240.77**	**0.52**	**53.69**	**2.56**	**56.98**	**0.76**	**2.46**	**3.94**	**0.00**	**52,015.37**		**1.94**	**0.17**	**52,108.29**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Energy	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Mobile	20.83	47.45	210.15	0.50	53.10	2.53	55.64	0.75	2.44	3.19		42,357.82		1.71		42,393.65
Total	**31.93**	**49.42**	**238.80**	**0.51**	**53.10**	**2.53**	**56.37**	**0.75**	**2.44**	**3.91**	**0.00**	**51,561.92**		**1.93**	**0.17**	**51,654.48**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.41	0.00	1.41	0.00	0.00	0.00						0.00
Off-Road	4.69	34.71	25.00	0.05		1.61	1.61		1.61	1.61		5,057.71		0.42		5,066.50
Total	**4.69**	**34.71**	**25.00**	**0.05**	**1.41**	**1.61**	**3.02**	**0.00**	**1.61**	**1.61**		**5,057.71**		**0.42**		**5,066.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.19	2.15	1.05	0.01	6.18	0.08	6.26	0.02	0.08	0.10		539.24		0.01		539.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.72	0.00	0.20	0.01	0.20	0.01	0.01	0.01		145.97		0.01		146.12
Total	**0.24**	**2.21**	**1.77**	**0.01**	**6.38**	**0.09**	**6.46**	**0.03**	**0.09**	**0.11**		**685.21**		**0.02**		**685.55**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.60	0.00	0.60	0.00	0.00	0.00						0.00
Off-Road	4.69	34.71	25.00	0.05		1.61	1.61		1.61	1.61	0.00	5,057.71		0.42		5,066.50
Total	**4.69**	**34.71**	**25.00**	**0.05**	**0.60**	**1.61**	**2.21**	**0.00**	**1.61**	**1.61**	**0.00**	**5,057.71**		**0.42**		**5,066.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.19	2.15	1.05	0.01	5.63	0.08	5.71	0.02	0.08	0.10		539.24		0.01		539.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.72	0.00	0.18	0.01	0.19	0.01	0.01	0.01		145.97		0.01		146.12
Total	**0.24**	**2.21**	**1.77**	**0.01**	**5.81**	**0.09**	**5.90**	**0.03**	**0.09**	**0.11**		**685.21**		**0.02**		**685.55**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	5.34	40.84	25.21	0.05		1.84	1.84		1.84	1.84		5,413.51		0.48		5,423.54
Total	**5.34**	**40.84**	**25.21**	**0.05**	**18.07**	**1.84**	**19.91**	**9.93**	**1.84**	**11.77**		**5,413.51**		**0.48**		**5,423.54**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.87	0.00	0.23	0.01	0.24	0.01	0.01	0.02		175.17		0.01		175.34
Total	**0.07**	**0.07**	**0.87**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**175.17**		**0.01**		**175.34**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.72	0.00	7.72	4.25	0.00	4.25						0.00
Off-Road	5.34	40.84	25.21	0.05		1.84	1.84		1.84	1.84	0.00	5,413.51		0.48		5,423.54
Total	**5.34**	**40.84**	**25.21**	**0.05**	**7.72**	**1.84**	**9.56**	**4.25**	**1.84**	**6.09**	**0.00**	**5,413.51**		**0.48**		**5,423.54**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.87	0.00	0.21	0.01	0.22	0.01	0.01	0.02		175.17		0.01		175.34
Total	**0.07**	**0.07**	**0.87**	**0.00**	**0.21**	**0.01**	**0.22**	**0.01**	**0.01**	**0.02**		**175.17**		**0.01**		**175.34**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	6.27	46.79	30.85	0.07		2.07	2.07		2.07	2.07		7,272.08		0.56		7,283.83
Total	**6.27**	**46.79**	**30.85**	**0.07**	**8.67**	**2.07**	**10.74**	**3.31**	**2.07**	**5.38**		**7,272.08**		**0.56**		**7,283.83**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.08	0.96	0.00	0.26	0.01	0.27	0.01	0.01	0.02		194.63		0.01		194.82
Total	**0.07**	**0.08**	**0.96**	**0.00**	**0.26**	**0.01**	**0.27**	**0.01**	**0.01**	**0.02**		**194.63**		**0.01**		**194.82**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.71	0.00	3.71	1.42	0.00	1.42						0.00
Off-Road	6.27	46.79	30.85	0.07		2.07	2.07		2.07	2.07	0.00	7,272.08		0.56		7,283.83
Total	**6.27**	**46.79**	**30.85**	**0.07**	**3.71**	**2.07**	**5.78**	**1.42**	**2.07**	**3.49**	**0.00**	**7,272.08**		**0.56**		**7,283.83**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.08	0.96	0.00	0.24	0.01	0.25	0.01	0.01	0.02		194.63		0.01		194.82
Total	**0.07**	**0.08**	**0.96**	**0.00**	**0.24**	**0.01**	**0.25**	**0.01**	**0.01**	**0.02**		**194.63**		**0.01**		**194.82**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.45	16.17	15.19	0.03		0.93	0.93		0.93	0.93		2,712.00		0.22		2,716.59
Total	**2.45**	**16.17**	**15.19**	**0.03**		**0.93**	**0.93**		**0.93**	**0.93**		**2,712.00**		**0.22**		**2,716.59**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.44	5.51	2.87	0.01	0.45	0.16	0.62	0.03	0.16	0.20		1,343.06		0.02		1,343.51
Worker	0.97	1.03	12.80	0.03	3.47	0.13	3.60	0.13	0.13	0.26		2,588.59		0.12		2,591.14
Total	**1.41**	**6.54**	**15.67**	**0.04**	**3.92**	**0.29**	**4.22**	**0.16**	**0.29**	**0.46**		**3,931.65**		**0.14**		**3,934.65**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.45	16.17	15.19	0.03		0.93	0.93		0.93	0.93	0.00	2,712.00		0.22		2,716.59
Total	**2.45**	**16.17**	**15.19**	**0.03**		**0.93**	**0.93**		**0.93**	**0.93**	**0.00**	**2,712.00**		**0.22**		**2,716.59**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.44	5.51	2.87	0.01	0.41	0.16	0.58	0.03	0.16	0.20		1,343.06		0.02		1,343.51
Worker	0.97	1.03	12.80	0.03	3.17	0.13	3.30	0.13	0.13	0.26		2,588.59		0.12		2,591.14
Total	**1.41**	**6.54**	**15.67**	**0.04**	**3.58**	**0.29**	**3.88**	**0.16**	**0.29**	**0.46**		**3,931.65**		**0.14**		**3,934.65**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.24	14.63	15.09	0.03		0.81	0.81		0.81	0.81		2,712.00		0.20		2,716.19
Total	**2.24**	**14.63**	**15.09**	**0.03**		**0.81**	**0.81**		**0.81**	**0.81**		**2,712.00**		**0.20**		**2,716.19**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.41	5.12	2.68	0.01	0.45	0.15	0.60	0.01	0.14	0.15		1,344.21		0.02		1,344.63
Worker	0.90	0.94	11.82	0.03	3.47	0.13	3.60	0.05	0.12	0.17		2,533.60		0.11		2,535.98
Total	**1.31**	**6.06**	**14.50**	**0.04**	**3.92**	**0.28**	**4.20**	**0.06**	**0.26**	**0.32**		**3,877.81**		**0.13**		**3,880.61**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.24	14.63	15.09	0.03		0.81	0.81		0.81	0.81	0.00	2,712.00		0.20		2,716.19
Total	**2.24**	**14.63**	**15.09**	**0.03**		**0.81**	**0.81**		**0.81**	**0.81**	**0.00**	**2,712.00**		**0.20**		**2,716.19**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.41	5.12	2.68	0.01	0.41	0.15	0.56	0.01	0.14	0.15		1,344.21		0.02		1,344.63
Worker	0.90	0.94	11.82	0.03	3.17	0.13	3.30	0.05	0.12	0.17		2,533.60		0.11		2,535.98
Total	**1.31**	**6.06**	**14.50**	**0.04**	**3.58**	**0.28**	**3.86**	**0.06**	**0.26**	**0.32**		**3,877.81**		**0.13**		**3,880.61**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	13.25	14.99	0.03		0.69	0.69		0.69	0.69		2,712.00		0.18		2,715.85
Total	**2.04**	**13.25**	**14.99**	**0.03**		**0.69**	**0.69**		**0.69**	**0.69**		**2,712.00**		**0.18**		**2,715.85**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.79	2.53	0.01	0.45	0.14	0.59	0.01	0.13	0.14		1,345.29		0.02		1,345.68
Worker	0.85	0.86	11.00	0.03	3.47	0.13	3.60	0.05	0.12	0.17		2,483.04		0.11		2,485.27
Total	**1.23**	**5.65**	**13.53**	**0.04**	**3.92**	**0.27**	**4.19**	**0.06**	**0.25**	**0.31**		**3,828.33**		**0.13**		**3,830.95**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	13.25	14.99	0.03		0.69	0.69		0.69	0.69	0.00	2,712.00		0.18		2,715.85
Total	**2.04**	**13.25**	**14.99**	**0.03**		**0.69**	**0.69**		**0.69**	**0.69**	**0.00**	**2,712.00**		**0.18**		**2,715.85**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.38	4.79	2.53	0.01	0.41	0.14	0.55	0.01	0.13	0.14		1,345.29		0.02		1,345.68
Worker	0.85	0.86	11.00	0.03	3.17	0.13	3.30	0.05	0.12	0.17		2,483.04		0.11		2,485.27
Total	**1.23**	**5.65**	**13.53**	**0.04**	**3.58**	**0.27**	**3.85**	**0.06**	**0.25**	**0.31**		**3,828.33**		**0.13**		**3,830.95**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	17.92	13.73	0.02		1.47	1.47		1.47	1.47		1,979.14		0.26		1,984.65
Paving	0.03					0.00	0.00		0.00	0.00						0.00
Total	**2.94**	**17.92**	**13.73**	**0.02**		**1.47**	**1.47**		**1.47**	**1.47**		**1,979.14**		**0.26**		**1,984.65**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.72	0.00	0.20	0.01	0.20	0.01	0.01	0.01		145.97		0.01		146.12
Total	**0.05**	**0.06**	**0.72**	**0.00**	**0.20**	**0.01**	**0.20**	**0.01**	**0.01**	**0.01**		**145.97**		**0.01**		**146.12**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	17.92	13.73	0.02		1.47	1.47		1.47	1.47	0.00	1,979.14		0.26		1,984.65
Paving	0.03					0.00	0.00		0.00	0.00						0.00
Total	**2.94**	**17.92**	**13.73**	**0.02**		**1.47**	**1.47**		**1.47**	**1.47**	**0.00**	**1,979.14**		**0.26**		**1,984.65**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.72	0.00	0.18	0.01	0.19	0.01	0.01	0.01		145.97		0.01		146.12
Total	**0.05**	**0.06**	**0.72**	**0.00**	**0.18**	**0.01**	**0.19**	**0.01**	**0.01**	**0.01**		**145.97**		**0.01**		**146.12**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.18	1.22	1.23	0.00		0.09	0.09		0.09	0.09		187.46		0.02		187.79
Total	**55.41**	**1.22**	**1.23**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**		**187.46**		**0.02**		**187.79**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.17	0.17	2.19	0.01	0.69	0.03	0.72	0.01	0.02	0.03		494.74		0.02		495.18
Total	**0.17**	**0.17**	**2.19**	**0.01**	**0.69**	**0.03**	**0.72**	**0.01**	**0.02**	**0.03**		**494.74**		**0.02**		**495.18**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.18	1.22	1.23	0.00		0.09	0.09		0.09	0.09	0.00	187.46		0.02		187.79
Total	**55.41**	**1.22**	**1.23**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**187.46**		**0.02**		**187.79**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.17	0.17	2.19	0.01	0.63	0.03	0.66	0.01	0.02	0.03		494.74		0.02		495.18
Total	**0.17**	**0.17**	**2.19**	**0.01**	**0.63**	**0.03**	**0.66**	**0.01**	**0.02**	**0.03**		**494.74**		**0.02**		**495.18**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.83	47.45	210.15	0.50	53.10	2.53	55.64	0.75	2.44	3.19		42,357.82		1.71		42,393.65
Unmitigated	20.97	47.80	212.12	0.51	53.69	2.56	56.25	0.76	2.46	3.22		42,811.27		1.72		42,847.46
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,753.92	1,753.92	1753.92	5,610,623	5,549,196
Condo/Townhouse	473.85	473.85	473.85	1,515,801	1,499,206
Strip Mall	3,257.05	3,257.05	3257.05	9,087,596	8,988,103
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	5,484.82	5,484.82	5,484.82	16,214,021	16,036,504

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
NaturalGas Unmitigated	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	11624.5	0.13	1.07	0.46	0.01		0.00	0.09		0.00	0.09		1,367.59		0.03	0.03	1,375.91
Condo/Townhouse	5731.21	0.06	0.53	0.22	0.00		0.00	0.04		0.00	0.04		674.26		0.01	0.01	678.36
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	513.578	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00		60.42		0.00	0.00	60.79
Total		**0.20**	**1.65**	**0.72**	**0.01**		**0.00**	**0.13**		**0.00**	**0.13**		**2,102.27**		**0.04**	**0.04**	**2,115.06**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	11.6245	0.13	1.07	0.46	0.01		0.00	0.09		0.00	0.09		1,367.59		0.03	0.03	1,375.91
Condo/Townhouse	5.73121	0.06	0.53	0.22	0.00		0.00	0.04		0.00	0.04		674.26		0.01	0.01	678.36
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.513578	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00		60.42		0.00	0.00	60.79
Total		**0.20**	**1.65**	**0.72**	**0.01**		**0.00**	**0.13**		**0.00**	**0.13**		**2,102.27**		**0.04**	**0.04**	**2,115.06**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Unmitigated	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	8.19					0.00	0.00		0.00	0.00						0.00
Hearth	0.65	0.00	0.04	0.00		0.00	0.45		0.00	0.44	0.00	7,051.76		0.14	0.13	7,094.68
Landscaping	0.85	0.32	27.89	0.00		0.00	0.15		0.00	0.15		50.07		0.05		51.09
Total	**10.92**	**0.32**	**27.93**	**0.00**		**0.00**	**0.60**		**0.00**	**0.59**	**0.00**	**7,101.83**		**0.19**	**0.13**	**7,145.77**

NorthHemetSP_Phase2
Riverside-South Coast County, Summer

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	8.19					0.00	0.00		0.00	0.00						0.00
Hearth	0.65	0.00	0.04	0.00		0.00	0.45		0.00	0.44	0.00	7,051.76		0.14	0.13	7,094.68
Landscaping	0.85	0.32	27.89	0.00		0.00	0.15		0.00	0.15		50.07		0.05		51.09
Total	**10.92**	**0.32**	**27.93**	**0.00**		**0.00**	**0.60**		**0.00**	**0.59**	**0.00**	**7,101.83**		**0.19**	**0.13**	**7,145.77**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Apartments Low Rise	252	Dwelling Unit
Condo/Townhouse	81	Dwelling Unit
Strip Mall	80.8	1000sqft
Other Asphalt Surfaces	1	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Southern California Edison
Climate Zone	10		2.4		
		Precipitation Freq (Days)			
			28		

1.3 User Entered Comments

Project Characteristics -
Land Use - Land uses based on the project description. Persons per unit = 2.61.
Construction Phase - Assumes mass grading of site but overlap of fine grading, building and paving of individual planning areas. Based on phase 2 schedule
Off-road Equipment - Load factors based on OFFROAD2011
Off-road Equipment - Load factors based on OFFROAD2011
Off-road Equipment - Load factors based on OFFROAD2011
Off-road Equipment - Load factors based on OFFROAD2011
Off-road Equipment - Load factors based on OFFROAD2011
Off-road Equipment - Load factors based on OFFROAD2011
Grading -
Demolition -
Vehicle Trips - Trip rates provided by Urban Crossroads
Woodstoves - Assumes gas-burning fireplaces in accordance with SCAQMD Rule 445
Water And Wastewater - Water demand from WSA
Solid Waste - error in strip mall (38.12 *11.54 = 242)
Construction Off-road Equipment Mitigation - SCAQMD Rule 403
Mobile Land Use Mitigation -
Water Mitigation - CalGreen Water efficiency measures.

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	13.21	87.78	75.69	0.16	18.30	4.79	20.15	9.94	4.79	11.79	0.00	15,900.06	0.00	1.19	0.00	15,925.00
2018	3.56	20.86	28.51	0.07	3.92	1.09	5.01	0.06	1.07	1.12	0.00	6,297.40	0.00	0.32	0.00	6,304.21
2019	58.86	20.45	30.65	0.07	4.61	1.07	5.69	0.07	1.05	1.12	0.00	6,880.32	0.00	0.33	0.00	6,887.35
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	13.21	87.78	75.69	0.16	7.94	4.79	12.50	4.25	4.79	6.39	0.00	15,900.06	0.00	1.19	0.00	15,925.00
2018	3.56	20.86	28.51	0.07	3.58	1.09	4.67	0.06	1.07	1.12	0.00	6,297.40	0.00	0.32	0.00	6,304.21
2019	58.86	20.45	30.65	0.07	4.22	1.07	5.29	0.07	1.05	1.12	0.00	6,880.32	0.00	0.33	0.00	6,887.35
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Energy	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Mobile	20.37	49.36	196.62	0.46	53.69	2.58	56.27	0.76	2.48	3.24		39,031.35		1.51		39,063.06
Total	**31.47**	**51.33**	**225.27**	**0.47**	**53.69**	**2.58**	**57.00**	**0.76**	**2.48**	**3.96**	**0.00**	**48,235.45**		**1.73**	**0.17**	**48,323.89**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Energy	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Mobile	20.22	48.99	194.94	0.45	53.10	2.55	55.65	0.75	2.45	3.21		38,618.36		1.50		38,649.76
Total	**31.32**	**50.96**	**223.59**	**0.46**	**53.10**	**2.55**	**56.38**	**0.75**	**2.45**	**3.93**	**0.00**	**47,822.46**		**1.72**	**0.17**	**47,910.59**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.0 Construction Detail

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads
Clean Paved Roads

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.41	0.00	1.41	0.00	0.00	0.00						0.00
Off-Road	4.69	34.71	25.00	0.05		1.61	1.61		1.61	1.61		5,057.71		0.42		5,066.50
Total	**4.69**	**34.71**	**25.00**	**0.05**	**1.41**	**1.61**	**3.02**	**0.00**	**1.61**	**1.61**		**5,057.71**		**0.42**		**5,066.50**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.19	2.23	1.17	0.01	6.18	0.08	6.26	0.02	0.08	0.10		535.98		0.01		536.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.63	0.00	0.20	0.01	0.20	0.01	0.01	0.01		129.87		0.01		130.00
Total	**0.24**	**2.29**	**1.80**	**0.01**	**6.38**	**0.09**	**6.46**	**0.03**	**0.09**	**0.11**		**665.85**		**0.02**		**666.18**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.60	0.00	0.60	0.00	0.00	0.00						0.00
Off-Road	4.69	34.71	25.00	0.05		1.61	1.61		1.61	1.61	0.00	5,057.71		0.42		5,066.50
Total	**4.69**	**34.71**	**25.00**	**0.05**	**0.60**	**1.61**	**2.21**	**0.00**	**1.61**	**1.61**	**0.00**	**5,057.71**		**0.42**		**5,066.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.19	2.23	1.17	0.01	5.63	0.08	5.71	0.02	0.08	0.10		535.98		0.01		536.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.63	0.00	0.18	0.01	0.19	0.01	0.01	0.01		129.87		0.01		130.00
Total	**0.24**	**2.29**	**1.80**	**0.01**	**5.81**	**0.09**	**5.90**	**0.03**	**0.09**	**0.11**		**665.85**		**0.02**		**666.18**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	5.34	40.84	25.21	0.05		1.84	1.84		1.84	1.84		5,413.51		0.48		5,423.54
Total	**5.34**	**40.84**	**25.21**	**0.05**	**18.07**	**1.84**	**19.91**	**9.93**	**1.84**	**11.77**		**5,413.51**		**0.48**		**5,423.54**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.08	0.75	0.00	0.23	0.01	0.24	0.01	0.01	0.02		155.85		0.01		156.00
Total	**0.06**	**0.08**	**0.75**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**155.85**		**0.01**		**156.00**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.72	0.00	7.72	4.25	0.00	4.25						0.00
Off-Road	5.34	40.84	25.21	0.05		1.84	1.84		1.84	1.84	0.00	5,413.51		0.48		5,423.54
Total	**5.34**	**40.84**	**25.21**	**0.05**	**7.72**	**1.84**	**9.56**	**4.25**	**1.84**	**6.09**	**0.00**	**5,413.51**		**0.48**		**5,423.54**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.08	0.75	0.00	0.21	0.01	0.22	0.01	0.01	0.02		155.85		0.01		156.00
Total	**0.06**	**0.08**	**0.75**	**0.00**	**0.21**	**0.01**	**0.22**	**0.01**	**0.01**	**0.02**		**155.85**		**0.01**		**156.00**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	6.27	46.79	30.85	0.07		2.07	2.07		2.07	2.07		7,272.08		0.56		7,283.83
Total	**6.27**	**46.79**	**30.85**	**0.07**	**8.67**	**2.07**	**10.74**	**3.31**	**2.07**	**5.38**		**7,272.08**		**0.56**		**7,283.83**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.83	0.00	0.26	0.01	0.27	0.01	0.01	0.02		173.16		0.01		173.34
Total	**0.07**	**0.09**	**0.83**	**0.00**	**0.26**	**0.01**	**0.27**	**0.01**	**0.01**	**0.02**		**173.16**		**0.01**		**173.34**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.71	0.00	3.71	1.42	0.00	1.42						0.00
Off-Road	6.27	46.79	30.85	0.07		2.07	2.07		2.07	2.07	0.00	7,272.08		0.56		7,283.83
Total	**6.27**	**46.79**	**30.85**	**0.07**	**3.71**	**2.07**	**5.78**	**1.42**	**2.07**	**3.49**	**0.00**	**7,272.08**		**0.56**		**7,283.83**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.09	0.83	0.00	0.24	0.01	0.25	0.01	0.01	0.02		173.16		0.01		173.34
Total	**0.07**	**0.09**	**0.83**	**0.00**	**0.24**	**0.01**	**0.25**	**0.01**	**0.01**	**0.02**		**173.16**		**0.01**		**173.34**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.45	16.17	15.19	0.03		0.93	0.93		0.93	0.93		2,712.00		0.22		2,716.59
Total	**2.45**	**16.17**	**15.19**	**0.03**		**0.93**	**0.93**		**0.93**	**0.93**		**2,712.00**		**0.22**		**2,716.59**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.47	5.62	3.38	0.01	0.45	0.17	0.62	0.03	0.17	0.20		1,330.73		0.02		1,331.20
Worker	0.95	1.13	11.10	0.03	3.47	0.13	3.60	0.13	0.13	0.26		2,303.08		0.11		2,305.39
Total	**1.42**	**6.75**	**14.48**	**0.04**	**3.92**	**0.30**	**4.22**	**0.16**	**0.30**	**0.46**		**3,633.81**		**0.13**		**3,636.59**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.45	16.17	15.19	0.03		0.93	0.93		0.93	0.93	0.00	2,712.00		0.22		2,716.59
Total	**2.45**	**16.17**	**15.19**	**0.03**		**0.93**	**0.93**		**0.93**	**0.93**	**0.00**	**2,712.00**		**0.22**		**2,716.59**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.47	5.62	3.38	0.01	0.41	0.17	0.58	0.03	0.17	0.20		1,330.73		0.02		1,331.20
Worker	0.95	1.13	11.10	0.03	3.17	0.13	3.30	0.13	0.13	0.26		2,303.08		0.11		2,305.39
Total	**1.42**	**6.75**	**14.48**	**0.04**	**3.58**	**0.30**	**3.88**	**0.16**	**0.30**	**0.46**		**3,633.81**		**0.13**		**3,636.59**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.24	14.63	15.09	0.03		0.81	0.81		0.81	0.81		2,712.00		0.20		2,716.19
Total	**2.24**	**14.63**	**15.09**	**0.03**		**0.81**	**0.81**		**0.81**	**0.81**		**2,712.00**		**0.20**		**2,716.19**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.43	5.20	3.19	0.01	0.45	0.15	0.60	0.01	0.14	0.15		1,331.71		0.02		1,332.15
Worker	0.88	1.03	10.23	0.03	3.47	0.13	3.60	0.05	0.12	0.17		2,253.69		0.10		2,255.86
Total	**1.31**	**6.23**	**13.42**	**0.04**	**3.92**	**0.28**	**4.20**	**0.06**	**0.26**	**0.32**		**3,585.40**		**0.12**		**3,588.01**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.24	14.63	15.09	0.03		0.81	0.81		0.81	0.81	0.00	2,712.00		0.20		2,716.19
Total	**2.24**	**14.63**	**15.09**	**0.03**		**0.81**	**0.81**		**0.81**	**0.81**	**0.00**	**2,712.00**		**0.20**		**2,716.19**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.43	5.20	3.19	0.01	0.41	0.15	0.57	0.01	0.14	0.15		1,331.71		0.02		1,332.15
Worker	0.88	1.03	10.23	0.03	3.17	0.13	3.30	0.05	0.12	0.17		2,253.69		0.10		2,255.86
Total	**1.31**	**6.23**	**13.42**	**0.04**	**3.58**	**0.28**	**3.87**	**0.06**	**0.26**	**0.32**		**3,585.40**		**0.12**		**3,588.01**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	13.25	14.99	0.03		0.69	0.69		0.69	0.69		2,712.00		0.18		2,715.85
Total	**2.04**	**13.25**	**14.99**	**0.03**		**0.69**	**0.69**		**0.69**	**0.69**		**2,712.00**		**0.18**		**2,715.85**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.41	4.84	3.04	0.01	0.45	0.14	0.59	0.01	0.13	0.14		1,332.63		0.02		1,333.04
Worker	0.84	0.95	9.50	0.03	3.47	0.13	3.60	0.05	0.12	0.17		2,208.25		0.10		2,210.27
Total	**1.25**	**5.79**	**12.54**	**0.04**	**3.92**	**0.27**	**4.19**	**0.06**	**0.25**	**0.31**		**3,540.88**		**0.12**		**3,543.31**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.04	13.25	14.99	0.03		0.69	0.69		0.69	0.69	0.00	2,712.00		0.18		2,715.85
Total	**2.04**	**13.25**	**14.99**	**0.03**		**0.69**	**0.69**		**0.69**	**0.69**	**0.00**	**2,712.00**		**0.18**		**2,715.85**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.41	4.84	3.04	0.01	0.41	0.14	0.55	0.01	0.13	0.14		1,332.63		0.02		1,333.04
Worker	0.84	0.95	9.50	0.03	3.17	0.13	3.30	0.05	0.12	0.17		2,208.25		0.10		2,210.27
Total	**1.25**	**5.79**	**12.54**	**0.04**	**3.58**	**0.27**	**3.85**	**0.06**	**0.25**	**0.31**		**3,540.88**		**0.12**		**3,543.31**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	17.92	13.73	0.02		1.47	1.47		1.47	1.47		1,979.14		0.26		1,984.65
Paving	0.03					0.00	0.00		0.00	0.00						0.00
Total	**2.94**	**17.92**	**13.73**	**0.02**		**1.47**	**1.47**		**1.47**	**1.47**		**1,979.14**		**0.26**		**1,984.65**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.63	0.00	0.20	0.01	0.20	0.01	0.01	0.01		129.87		0.01		130.00
Total	**0.05**	**0.06**	**0.63**	**0.00**	**0.20**	**0.01**	**0.20**	**0.01**	**0.01**	**0.01**		**129.87**		**0.01**		**130.00**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.91	17.92	13.73	0.02		1.47	1.47		1.47	1.47	0.00	1,979.14		0.26		1,984.65
Paving	0.03					0.00	0.00		0.00	0.00						0.00
Total	**2.94**	**17.92**	**13.73**	**0.02**		**1.47**	**1.47**		**1.47**	**1.47**	**0.00**	**1,979.14**		**0.26**		**1,984.65**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.05	0.06	0.63	0.00	0.18	0.01	0.19	0.01	0.01	0.01		129.87		0.01		130.00
Total	**0.05**	**0.06**	**0.63**	**0.00**	**0.18**	**0.01**	**0.19**	**0.01**	**0.01**	**0.01**		**129.87**		**0.01**		**130.00**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.18	1.22	1.23	0.00		0.09	0.09		0.09	0.09		187.46		0.02		187.79
Total	**55.41**	**1.22**	**1.23**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**		**187.46**		**0.02**		**187.79**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.17	0.19	1.89	0.01	0.69	0.03	0.72	0.01	0.02	0.03		439.99		0.02		440.39
Total	**0.17**	**0.19**	**1.89**	**0.01**	**0.69**	**0.03**	**0.72**	**0.01**	**0.02**	**0.03**		**439.99**		**0.02**		**440.39**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	55.23					0.00	0.00		0.00	0.00						0.00
Off-Road	0.18	1.22	1.23	0.00		0.09	0.09		0.09	0.09	0.00	187.46		0.02		187.79
Total	**55.41**	**1.22**	**1.23**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**187.46**		**0.02**		**187.79**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.17	0.19	1.89	0.01	0.63	0.03	0.66	0.01	0.02	0.03		439.99		0.02		440.39
Total	**0.17**	**0.19**	**1.89**	**0.01**	**0.63**	**0.03**	**0.66**	**0.01**	**0.02**	**0.03**		**439.99**		**0.02**		**440.39**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Increase Density
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.22	48.99	194.94	0.45	53.10	2.55	55.65	0.75	2.45	3.21		38,618.36		1.50		38,649.76
Unmitigated	20.37	49.36	196.62	0.46	53.69	2.58	56.27	0.76	2.48	3.24		39,031.35		1.51		39,063.06
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,753.92	1,753.92	1753.92	5,610,623	5,549,196
Condo/Townhouse	473.85	473.85	473.85	1,515,801	1,499,206
Strip Mall	3,257.05	3,257.05	3257.05	9,087,596	8,988,103
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	5,484.82	5,484.82	5,484.82	16,214,021	16,036,504

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Condo/Townhouse	10.80	7.30	7.50	40.20	19.20	40.60
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
NaturalGas Unmitigated	0.19	1.65	0.72	0.01		0.00	0.13		0.00	0.13		2,102.27		0.04	0.04	2,115.06
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	11624.5	0.13	1.07	0.46	0.01		0.00	0.09		0.00	0.09		1,367.59		0.03	0.03	1,375.91
Condo/Townhouse	5731.21	0.06	0.53	0.22	0.00		0.00	0.04		0.00	0.04		674.26		0.01	0.01	678.36
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	513.578	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00		60.42		0.00	0.00	60.79
Total		**0.20**	**1.65**	**0.72**	**0.01**		**0.00**	**0.13**		**0.00**	**0.13**		**2,102.27**		**0.04**	**0.04**	**2,115.06**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	11.6245	0.13	1.07	0.46	0.01		0.00	0.09		0.00	0.09		1,367.59		0.03	0.03	1,375.91
Condo/Townhouse	5.73121	0.06	0.53	0.22	0.00		0.00	0.04		0.00	0.04		674.26		0.01	0.01	678.36
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Strip Mall	0.513578	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00		60.42		0.00	0.00	60.79
Total		**0.20**	**1.65**	**0.72**	**0.01**		**0.00**	**0.13**		**0.00**	**0.13**		**2,102.27**		**0.04**	**0.04**	**2,115.06**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Unmitigated	10.91	0.32	27.93	0.00		0.00	0.60		0.00	0.59	0.00	7,101.83		0.18	0.13	7,145.77
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	8.19					0.00	0.00		0.00	0.00						0.00
Hearth	0.65	0.00	0.04	0.00		0.00	0.45		0.00	0.44	0.00	7,051.76		0.14	0.13	7,094.68
Landscaping	0.85	0.32	27.89	0.00		0.00	0.15		0.00	0.15		50.07		0.05		51.09
Total	**10.92**	**0.32**	**27.93**	**0.00**		**0.00**	**0.60**		**0.00**	**0.59**	**0.00**	**7,101.83**		**0.19**	**0.13**	**7,145.77**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.23					0.00	0.00		0.00	0.00						0.00
Consumer Products	8.19					0.00	0.00		0.00	0.00						0.00
Hearth	0.65	0.00	0.04	0.00		0.00	0.45		0.00	0.44	0.00	7,051.76		0.14	0.13	7,094.68
Landscaping	0.85	0.32	27.89	0.00		0.00	0.15		0.00	0.15		50.07		0.05		51.09
Total	**10.92**	**0.32**	**27.93**	**0.00**		**0.00**	**0.60**		**0.00**	**0.59**	**0.00**	**7,101.83**		**0.19**	**0.13**	**7,145.77**

NorthHemetSP_Phase2
Riverside-South Coast County, Winter

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Appendix D
Historical Resources Survey Report

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Historical Resource Survey Report of the
North Hemet Revitalization Plan Area
Hemet, CA 92543

Prepared For:
The Planning Center
1580 Metro Drive, Costa Mesa, CA 92626

Prepared By:
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URBANA PRESERVATION & PLANNING LLC

May 2010

TABLE OF CONTENTS

I. Executive Summary 1
II. Introduction 1
Methodological Approach 1
III. Historic Preservation Regulatory Framework 1
National Historic Preservation Act (NHPA) & Historic Properties 1
California Environmental Quality Act (CEQA) & Historical Resources 2
Riverside County Historic Landmark Program 3
IV. Historical Overview 3
Hemet, California 3
North Hemet Revitalization Plan Survey Area 5
V. Survey Area Observations 7
Historic Era Buildings Constructed Between 1900-1929 7
Historic Era Buildings Constructed Between 1930-1949 8
Historic Era Buildings Constructed Between 1950-1960s 10
VI. Eligibility Analysis & Regulatory Interpretation 15
Eligibility Analysis – National, California & Local Register 15
CEQA Historical Resource Interpretation & Impacts Findings 15
VII. Conclusions 15
VIII. Bibliography 17

APPENDICES

Appendix A – Survey Property Spreadsheet
Appendix B – DPR 523 Forms
Appendix C – Preparer Qualifications

I. EXECUTIVE SUMMARY

This Historical Resource Survey Report (HRSR) was prepared by Wendy L. Tinsley Becker, AICP, Principal Historian of Urbana Preservation & Planning, LLC (Urbana) and Malia A. Bassett, Junior Planner, to inform the discretionary review process for future projects proposed within the North Hemet Revitalization Plan Area (NHRPA). The NHRPA is located within the City of Hemet municipal boundaries and is administered by the Riverside County Redevelopment Agency. The purpose of this HRSR is to notify the environmental planning team and Municipal and Redevelopment Staff of the possibility for the occurrence of historical resources within the NHRPA.

The NHRPA is bound by Alessandro Street to the west, Fruitvale Avenue to the north, N. State Street to the east and Oakland Avenue to the south. The survey area includes 40 lots. Of the 40 lots, 18 are improved with buildings (residential and commercial), and 22 are vacant and unimproved. Of the 18 buildings observed:

- 1 was constructed between 1900 and 1910,
- 2 were constructed between 1920 and 1929,
- 3 were constructed between 1930 and 1939,
- 3 were constructed between 1940 and 1949,
- 2 were constructed between 1950 and 1959,
- 2 were constructed between 1960 and 1969, and
- 5 were constructed between 1970 and the present.

As part of this study the NHRPA was surveyed at an intensive level to identify, document, and evaluate all buildings or structures observed to be at least 45 years of age. Of the 18 buildings and structures observed, 13 are at least 45 years of age, and five are less than 45 years of age. Each 'Over-45' property was documented at an intensive level and evaluated on State of California Department of Parks and Recreation (DPR) 523 A (Primary Record) and B (Building, Structure, Object Record) forms. A National Register of Historic Places / California Register of Historical Resources status code was assigned to all 13 survey properties. The status codes provide a summary of a property's eligibility under the criteria of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and the City of Santa Ana Historical Resources Register (Local Register).

None of the buildings or structures within the project area are included on the National Register of Historic Places, the California Register of Historical Resources, or the County of Riverside Register of Historic Landmarks, nor have any survey-area buildings been previously surveyed or evaluated for eligibility on the local, state or national registers. No survey-area properties are listed as California Historic Landmarks or Points of Historical Interest, and none of the survey-area properties are included on the California State Office of Historic Preservation's *Historic Property Data File for Riverside County*. None of the properties appear to have been previously presented to or discussed by the State Historic Resources Commission. None of the survey-area buildings were found to be eligible for inclusion on the National Register of Historic Places, the California Register of Historical Resources, or the Local Hemet and Riverside County Historical Registers.

A survey property spreadsheet is included in Appendix A. The DPR 523 series forms completed for the survey area properties that are 45 years of age or older are attached as Appendix B. Resumes for Urbana Principal Wendy L. Tinsley Becker, AICP and Malia A. Bassett, Junior Planner, are included as Appendix C.

II. INTRODUCTION

This Historical Resource Analysis Report (HRAR) was prepared to notify the environmental planning team and Municipal Planning Staff of the possibility for the occurrence of historical resources within the boundaries of the North Hemet Revitalization Plan Area in Hemet, California, and to provide a discussion of potential impacts resultant from future projects proposed under the regulatory framework of the National Historic Preservation Act and the California Environmental Quality Act (CEQA).

A historical overview of the survey area, summary of buildings observed, eligibility conclusions and related CEQA historical resource regulatory interpretation are included on the following pages.

Methodological Approach

The methodological approach undertaken for this HRAR consisted of three major tasks – field survey, archival research, and technical analysis.

Urbana Principal Wendy L. Tinsley Becker, AICP, and Malia Bassett, Junior Planner, completed field survey efforts in May 2010. The purpose of the site visit was to observe and photograph all buildings and structures within the survey area in order to understand and identify the architectural styles, character-defining features, land development patterns that comprise the survey area.

Archival research included a review of relevant records and references resources on file at the Hemet Public Library History Room, the Riverside County Public Library, and Urbana's in-house library. Site-specific and thematic historical research was conducted to inform the historical narrative established for the survey area and to inform eligibility evaluations for the individual properties within the survey area.

The technical analysis consisted of reviewing the survey area buildings under the eligibility criteria of the National Register of Historic Places, the California Register of Historical Resources, and the County of Riverside Register of Historic Properties. These eligibility criteria establish a threshold under which a property may be determined to meet the definition of an historical resource for the purposes of CEQA and the local planning and development discretionary review process.

Lastly, this report was prepared under the guidance of National Register Bulletin 15 *How to Apply the National Register Criteria for Evaluation* and National Register Bulletin 24 *Guidelines for Local Surveys: A Basis for Preservation Planning*.

III. HISTORIC PRESERVATION REGULATORY FRAMEWORK

Following is an overview of the historic preservation regulatory framework related to current and future projects proposed in North Hemet.

National Historic Preservation Act (NHPA) & Historic Properties

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of proposed federal undertakings on historic properties. A historic property is defined as any building, site, district, structure or object that is listed in or eligible for the National Register of Historic Places. For a property to qualify for the National Register of Historic Places it must meet one of the four National Register Criteria for Evaluation listed below by being associated with an important historic context and retaining historic integrity of those features necessary to convey its significance. According to *National Register Bulletin 15* the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represents a significant and distinguishable entity whose components lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.[1]

Two scenarios exist relative to the effects a potential undertaking may have on an historic property; 1) No historic properties affected, or 2) Historic properties are affected. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. A finding of no adverse effect may be issued if the proposed undertaking's effects do not meet the above-listed examples pursuant to 36 CFR part 800.5(a)(1), or if the undertaking is modified or conditions are imposed in order to avoid adverse effects.

California Environmental Quality Act (CEQA) & Historical Resources

The California Environmental Quality Act (CEQA) was enacted in 1970 in order to inform, identify, prevent, and disclose to decision-makers and the general public the effects a project may have on the environment. Historical resources are included in the comprehensive definition of the environment under CEQA. Under CEQA a historical resource is defined as:

- Any resource listed in or determined eligible for listing in the *California Register of Historical Resources* by the State Historical Resources Commission; or
- Any resource included in a local register of historical resources pursuant to §5020.1 (k) of the California Public Resources Code; or
- Any resource identified as significant in a historical resource survey meeting the criteria set forth in §5024.1 (g) of the California Public Resource Code; or
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.[2]

In order to be eligible for listing on the California Register of Historical Resources, one of the four following criteria must be met:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, region, or method or construction, or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

CEQA Public Resources Code §21084.1 provides that any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Public Resources Code §5020.1(q) defines "substantial adverse change" as demolition, destruction, relocation, or alteration such that the significance of the historical resource would be impaired. According to Public Resources Code §5024.1, an historical resource is a resource that is listed in, or determined to be eligible for listing in the California Register of Historical Resources; included in a local register of historical resources; or is identified as significant in an historic resource survey if that survey meets specified criteria.

According to §15064.5(b)(3) generally, a project that follows *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *The Secretary of the Interior's Standards Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), Weeks and Grimmer, shall be considered as mitigated to an impact level of less-than-significant.

[1] U.S. Interior Department – National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, 2-3.
[2] C.C.R. Title 14, Chapter 3, Article 5, §15064.5 (a)(1-3).

Riverside County Historic Landmark Program

The Riverside County Historic Landmark Program provides for the local designation of individual historic properties and historic districts within Riverside County municipal boundaries. In order to be included on the Riverside County Register of Historic Landmarks (Local Register) any building, site, structure or object must be at least 45 years of age and must meet one or more of the following eligibility conditions.

1. It is associated with events that have made a significant contribution to the broad patterns of Riverside County's history and cultural heritage,
2. It is associated with the lives of persons important to the history of Riverside County or its communities,
3. Embodies the distinctive characteristics of a type, period, Riverside County region, or method of construction, or represents the work of an important creative individual or possesses high artistic values,
4. Has yielded or may be likely to yield, information important to Riverside County, state of California, or national prehistory or history,
5. Resources that have been rehabilitated according to the U.S. Secretary of Interiors Standards for integrity, or
6. Reconstructed buildings that are more than 45 years old and embody traditional building methods and techniques or high artistic value.[3]

IV. HISTORICAL OVERVIEW

Hemet, California

The City of Hemet is positioned in the valley of the San Jacinto Mountains, approximately 35 miles southeast of Riverside within the boundaries of Riverside County. Hemet's past is parallel to the history of Southern California and the San Jacinto Valley, and is distinguished by periods of growth associated with agricultural development, expansion of transportation networks, and the outward growth of suburban tracts.

In 1842 the land area comprising present-day Hemet and the surrounding San Jacinto Valley was deeded to Jose Antonio Estudillo as *Rancho San Jacinto*. By the late nineteenth century, American and European immigrants began to form agricultural operations in the region region. Transportation of goods from the Hemet valley to other nearby regions consisted of a wagon route through the mountains leading west to Los Angeles. The route's challenging topography required much travel time, and consequently, the route could only support the trade of non-perishable goods. In response, the *San Jacinto Valley Railway* was formed in 1886. The *San Jacinto Valley Railway* was comprised of a 20-mile track linking Perris to San Jacinto and flanked by stations at Ellis, Ethanac, Menifee, Winchester, Enfield, Egan, Hemet and San Jacinto.[4] Soon after operations began, the railway supported daily expeditions of both passenger and freight transportation. Train depots were constructed along the rail path to serve passengers and facilitate shipment of goods. A train depot in Hemet was developed on Florida Avenue. With a new level of accessibility to the area, Hemet experienced a migration of early permanent settlers.

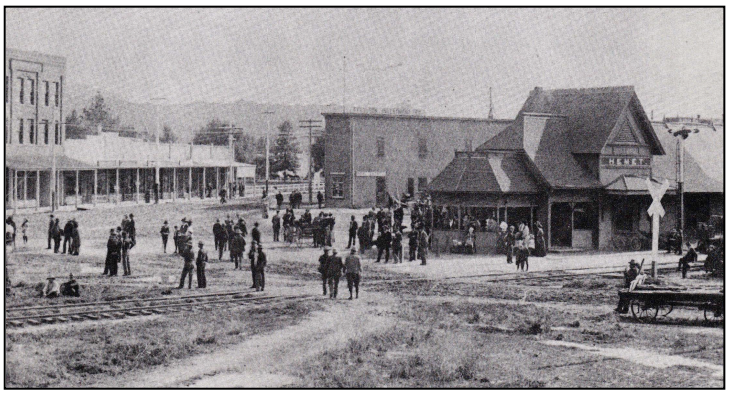


The Hemet Land Co. and The Lake Hemet Water Co. offices in Hemet, CA. Source: Hemet (Images of America: California).

[3] Riverside County Regional Park and Open Space District, *Riverside County Historic Landmarks Criteria & Procedures*, §VIB Criteria for Evaluating the Significance of Historic Resources, 4-5.
[4] Hanson, Barry & Bill Jennings. "The San Jacinto Valley Railway." Save Our Station, Inc., Hemet, California: 1991. Page 3.

Among the initial settlers of the Hemet valley were investment partners and longtime friends William F. Whittier and Edward L. Mayberry. Together they established the *Lake Hemet Water Company* and simultaneously the *Hemet Land Company* in 1887 with intentions of stimulating growth within the Hemet valley area. Considering that significant development in the area would not be achievable without a viable water supply, the developers immediately began plans for the creation of a dam in the San Jacinto Mountains that stored and released water from the south fork of the San Jacinto River. Under the operations of the *Lake Hemet Water Company,* Whittier and Mayberry purchased 1,000 acres from Charles Thomas for the development of a Hemet dam and reservoir site.

Whittier and Mayberry commissioned Southern California engineer James D. Schuyler to design the dam and oversee its configuration. Construction of the Hemet Dam relied on the *San Jacinto Valley Railway* to transport the imported cement that was used to make the granite blocks that formed the dam. Upon completion of construction in 1893, the Hemet Dam provided a reliable water supply to Hemet and allowed for agricultural farming and trade operations to take place on a larger scale. In 1923 the dam was expanded to achieve a height of approximately 135 feet, and at the time was considered to be the tallest masonry dam in the west. Lake Hemet was subsequently formed after the dam expansion was completed. [5]



Hemet Town Center with second Hemet train depot at the corner of Harvard Street and Latham Avenue c. mid-1890s. Source: Hemet Museum Collection.

As proprietors of the *Hemet Land Company*, Whittier and Mayberry purchased a total of 6,000 acres for $20 per acre of present-day Hemet property from San Jacinto Valley pioneers H.T. Hewitt, and Francisco Estudillo, son of original Hemet rancher Jose Estudillo.[6] Land development began quickly as the Hemet Tract subdivision supported large five-to-forty acre parcels. On December 9, 1893, the first edition of the local newspaper, *Hemet News*, announced the establishment of Hotel Mayberry, a grammar school and a general store while a barbershop, drug store and a dentist was announced as desired services for Hemet residents. By 1906, Harvard Street and Front Street were considered the main streets in Hemet, both having been improved with cement sidewalks and streetlights.[7]

As a result of land speculation efforts by Whittier and Mayberry and the formation of the San Jacinto Valley Railway and the Hemet Dam, Hemet experienced a large population expansion and was incorporated as a City in 1910. With a population of 922, the City of Hemet was primarily identified as an agricultural district; supporting trade and distribution of crops such as apricots, peaches, olives, citrus, walnuts, potatoes and alfalfa. Significant among other Hemet establishments was the Hemet Stock Farm consisting of a 40-acre parcel with a half-mile racing track. The manager's office located at the Stock Farm is considered the oldest building in the city of Hemet.[8]

Highway construction during the post-World War I era began to outmode the old railroad lines. In Hemet, by the early 1920s railroad service for passengers and freight was reduced to a single combined function.. This limited rail service continued until the WWII period when ridership dramatically spiked for the *San*

[5] Brown, James T. "Harvest of the Sun: An Illustrated History of Riverside County." Windsor Publications, USA: 1985. Page 84.
[6] Ibid, 84.
[7] Ibid, 87.
[8] Hemet (Images of America: California) by Hemet Area Museum Association. August 2008. Arcadia Publishing (SC).

Jacinto Valley Railway resultant from the individuals stationed at the Ryan Air Field (now the Hemet-Ryan Airport) who were reliant on the service as their primary means of transportation.

In the post-WWII era residential construction in Hemet began to overtake agricultural development as the region's economic engine. By the 1960s, the area soon became known as a desert retirement community with developments such as the Art Linkletter's 'Sierra Dawn Estates' retirement community.[9] Residential tracts continued to develop in Hemet through the 1990s. Today Hemet is considered a suburb of both Los Angeles and San Diego, serving as a bedroom community for workers who commute to both regions..

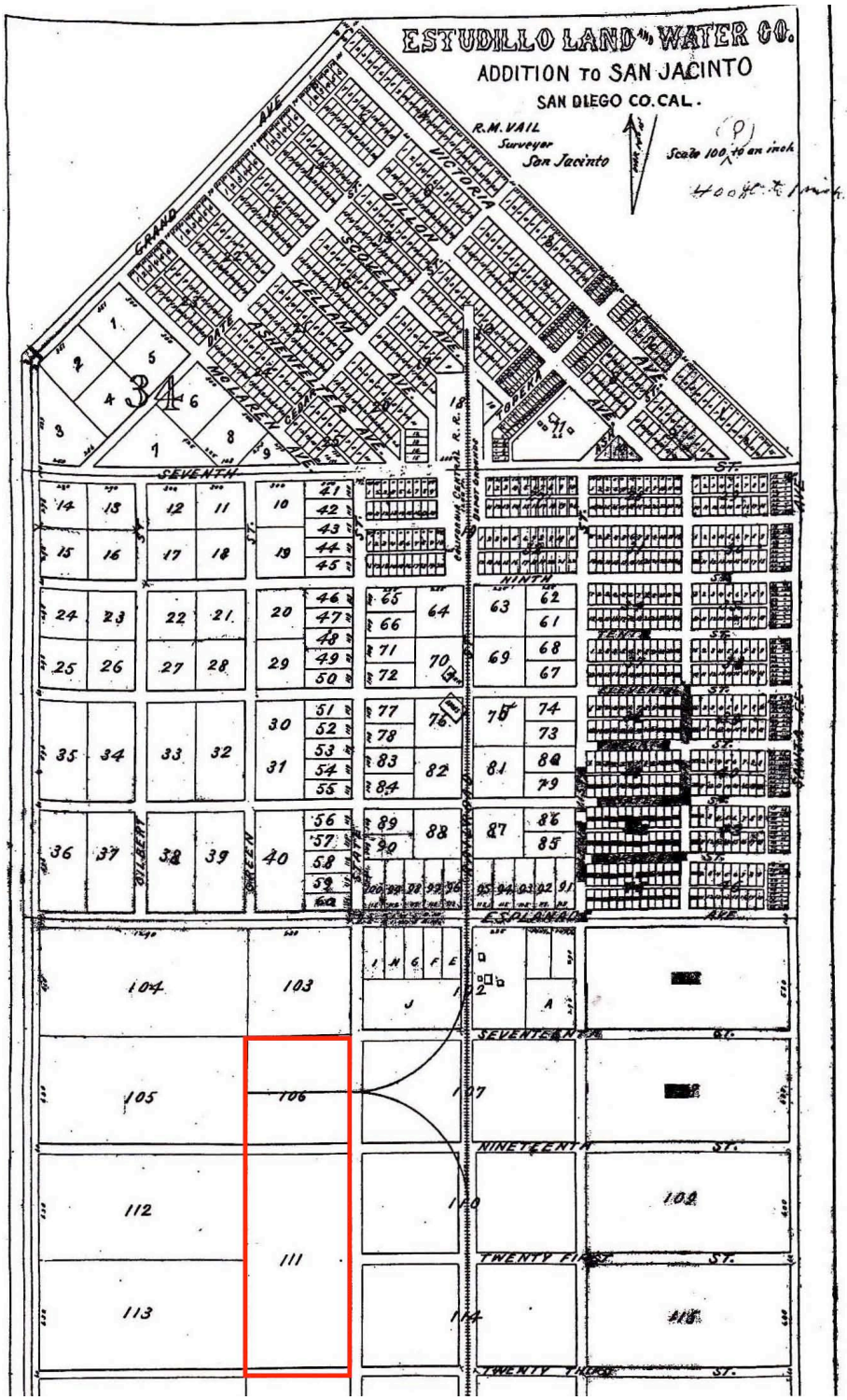
North Hemet Revitalization Plan Survey Area

The lands comprising the North Hemet Revitalization Plan are situated immediately north of the Hemet proper and were initially platted as part of the *Estudillo Land and Water Co. Addition to San Jacinto*, recorded with the County of San Diego as Map No. 410 in December 1887. Within the survey area several street names have changed from the time of the 1887 plat including Seventeenth Street to present-day Fruitvale Avenue, Nineteenth Street to present-day Menlo Avenue, and Twenty-Fifth Street to present-day Oakland Avenue.

The *Estudillo Land and Water Co. Addition* was developed with agricultural and residential uses and nearby tracts including the adjacent Hemet Land Company's acreage (platted in circa 1892), maintained similar land use and lot configuration patterns. This bucolic land use continued through the first half of the Twentieth Century when by 1967 historic aerial images capture vies of orchard lands at the northwest quadrant of the survey area (at the present-day intersection of Fruitvale Avenue and Alessandro Street) and at the southwest corner of Menlo Avenue and State Street.[10]

By 1960, the population of Hemet had reached 5,416 and the composition of the area began to adjust to population increases.[11] As automobile use increased commercial entities that accommodated the automobile began to develop in the survey area and additional single-family dwellings were constructed. Building patterns in the survey area evolved to include single-family residences as early as 1910 and most occurring in the 1930s along Oakland Avenue and as recently as 1996 along Menlo Avenue Auto-service oriented businesses such as tire shops, auto-repair stations, quick-stop grocery stores and gas stations were developed along State Street – one of the main auto corridors of Hemet which links the northern portion of Hemet with the community of San Jacinto. Commercial developments began to materialize in the area by the 1970s, including a liquor store on the corner of State Street and Menlo Avenue and Fuente's tire shop also on Menlo Avenue. By the late 1980s a mobile home community was constructed at the southwest corner of State Street and Menlo Avenue.[12]

[9] The City of Hemet General Plan. *"Stages of Hemet's Development."* Page 5.
[10] The Planning Center, *North Hemet Revitalization Plan Modified Phase I Report: Section 4: Site History*. Riverside County Economic Development Agency. March 2007. Page 17.
[11] *Important Dates in Hemet History.* Hemet Library Heritage Room. Local History Collection.
[12] North Hemet Revitalization Plan Modified Phase I Report. *Site History*. Riverside County Economic Development Agency. Page 17.



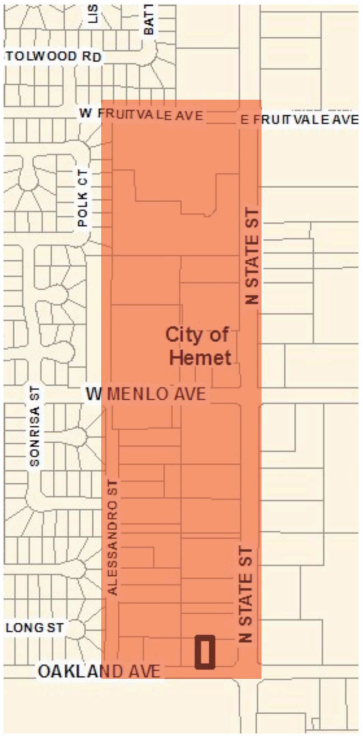
Location of the Survey area within the boundaries of the 1887 *Estudillo Land and Water Co. Addition to San Jacinto.*
Source: Map No. 410, San Diego County Assessors Office.

V. Survey Area Observations

The survey area is bound by Alessandro Street to the west, Fruitvale Avenue to the north, N. State Street to the east and Oakland Avenue to the south. The proposed project entails a redevelopment project in Hemet, California. The survey area is characterized by a scattering of single-family homes, commercial buildings, and vacant unimproved lots. A total 40 lots are sited within the survey boundaries. Of the 40 lots, 18 are improved with buildings (residential and commercial), and 22 are vacant and unimproved. Of the 18 buildings observed:

- 1 was constructed between 1900 and 1910,
- 2 were constructed between 1920 and 1929,
- 3 were constructed between 1930 and 1939,
- 3 were constructed between 1940 and 1949,
- 2 were constructed between 1950 and 1959,
- 2 were constructed between 1960 and 1969, and
- 5 were constructed between 1970 and the present.

13 buildings within the survey area are at least 45 years of age. A survey property spreadsheet, identifying addresses and conditions of all properties observed is included in Appendix A of the report.



Map showing boundaries of survey area.

Buildings Constructed Between 1900-1929

Dwellings constructed in this period typically are classified as Craftsman. The style was influenced by the English Arts and Crafts movement and emphasized handcrafted products over machine-made details in reaction to the profusion of the mass-manufactured ornamentation of the Victorian styles. The movement embodied every aspect of residential design from furniture, to the bucolic setting of one's own yard, to the art pottery and the wallpaper that decorated house interiors. Popular literature, examples of which include, *The Craftsman*, *Ladies Home Journal*, *Bungalow Magazine,* and *House Beautiful*, distributed the movement's ideals to the middle class. The Craftsman style had broad boundaries that were further defined by regional tastes and interests. Craftsman-style design was popular nationwide, but flourished in California, because the mild climate allowed for an integration of interior and exterior spaces, as exemplified by large porches and balconies. In California, the Craftsman style often incorporated varying influences, including California's Mission tradition, Shingle style, as well as Middle Eastern and Asian influences.

The style is often associated with and applied to bungalows—low one-story houses with large front porches. However, ornamentation in other styles, such as Queen Anne and Classical Revival, has often been applied to the bungalow house form. The California version of a bungalow was usually a one-story detached house. However, variations on this norm included bungalow courts (several houses around a courtyard) and houses with an inhabitable attic. Consistent plan features include the entrance directly into the living room with no parlor and a large kitchen. Many had sleeping porches, breakfast nooks, and inglenooks (or fireplace seats). Bungalows were usually constructed on small- to medium-sized lots. Many two-story houses were designed with Craftsman features, such as the large front porch, natural materials, and interior plan. Other character-defining features of the style include wide overhanging eaves, exposed rafters and purlins, massive piers, porches that connect interior and exterior rooms, gabled roofs, dormers, and solid balustrades. Nationwide, the style often employed materials, such as fieldstone, regular and clinker brick. However, like other styles used in the survey area, the majority of Craftsman-style residence are wood frame with either wood siding or an applied stucco exterior finish.

The three survey-area properties dating to circa 1900-1929 are residential and exhibit vernacular Craftsman architectural details. Following are the three survey-area buildings constructed between 1900-1929:

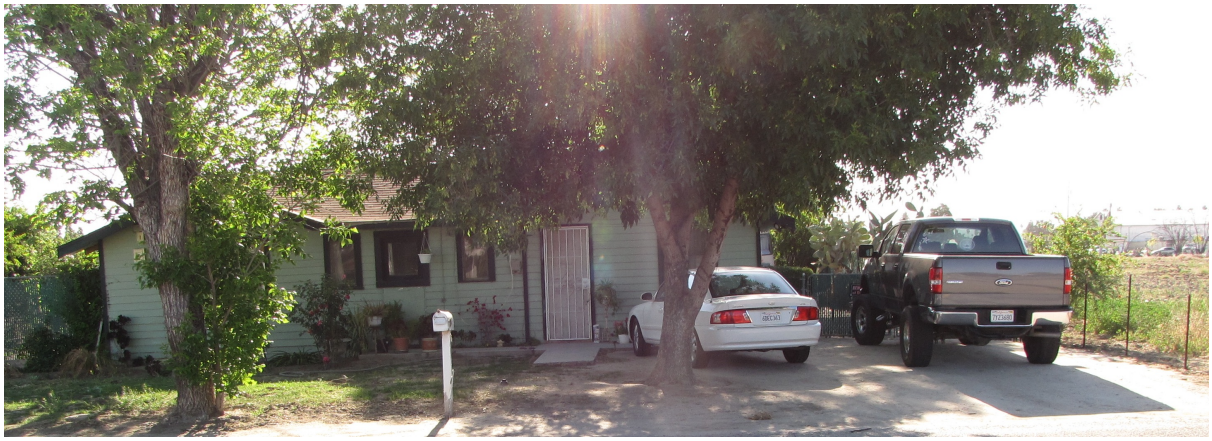
- 250 Oakland Avenue (1910),
- 150 Oakland Avenue (1920), and
- 636 Alessandro Street (1924).



250 Oakland Avenue constructed in circa 1910. Main dwelling is at the right of the picture, the garage is on the left.



150 Oakland Avenue constructed in circa 1920.



636 Alessandro Street constructed in circa 1924.

Buildings Constructed Between 1930-1949

Survey area dwellings constructed in the 1930s and 1940s are classified as Modern Minimal Traditional style. The architecture of homes built prior to and during the World War II era exhibits efficiency in floor plan and materials and were forward looking yet based on historical precedent and appearances. The Minimal Traditional style was popularized in the 1930s and was in use through the 1940s, eventually being replaced with the rambling linear Ranch style in the 1950s and beyond.

Six dwellings were built in the survey area between 1930 and 1949, all in a Minimal Traditional style. The homes were originally built as detached single-story, single-family dwellings with low-pitched hipped, side gabled, or cross gabled rooflines and stucco or horizontal board siding for the exterior walls with composition roofing. Detached single-car garages were constructed at the rear of the dwelling. Many of the survey-area homes observed from the 1940-1949 period have been modified with window replacements, fenestration changes, installation of new exterior siding and roofing materials, and through small additions. The six Modern Minimal Traditional style dwellings constructed in the survey are identified as:

- 703 N. State Street (c. 1930s),
- 24795 N. State Street (c. 1930s),
- 320 Menlo Avenue (c. 1936),
- 510 Alessandro Street (1940),
- 160 Menlo Avenue (c. 1940s), and
- 761 N. State Street (c. 1940s).

Following are representative Minimal Traditional style properties observed in the survey area.



703 N. State Street constructed in circa 1930s.



24795 N. State Street constructed in circa 1930s.



320 Menlo Avenue constructed in circa 1936.



510 Alessandro Street constructed in circa1940.



160 Menlo Avenue constructed in circa 1940s.



761 N. State Street constructed in circa 1940s.

Buildings Constructed Between 1950-1960s

Four buildings were constructed in the survey area between 1950 and the 1960s. The 1950-1960s period includes both historic-era properties (built through 1964) and non-historic era properties (built from 1965 forward). Properties constructed in this period include Ranch and Modernistic styles for residential properties and utilitarian for commercial or light industrial properties. The four properties are identified as:

- 723 N. State Street (circa 1950s),
- 733 N. State Street (1951),
- 170 & 190 Oakland Avenue (1960), and
- 220 Menlo Avenue (c. 1960s).



723 N. State Street constructed in circa 1950s.



733 N. State Street constructed circa 1951.



170 & 190 Oakland Avenue constructed in phases with the rear building constructed in approximately 1960.



220 Menlo Avenue constructed in circa 1960s.

VI. Eligibility Analysis & Regulatory Interpretation

For compliance with the CEQA historical resource review process all survey area properties identified as over 45 years of age (constructed before 1965) were documented at an intensive-level on State of California Department of Parks and Recreation (DPR) 523 A (Primary Record) and B (Building, Structure, Object Record) forms, wherein each property was evaluated for observed, recorded, researched, and evaluated for eligibility under the criteria of the National Register of Historic Places, the California Register of Historical Resources, and the City of Santa Ana Local Register.

The DPR forms completed for the 13 survey area properties that are at least 45 years of age are included as Appendix B of this report.

Eligibility Analysis – National, California & Local Register

Contextual and site-specific historical research was conducted to identify potential themes under which survey area properties could be identified as significant and eligible, and to identify the names of past owners and occupants of the forty survey area buildings. The survey area was found to have been primarily undeveloped and utilized for agricultural purposes through the second half of the Twentieth Century. Prior to the 1930s few houses were constructed in the area and the two dwellings that have been identified with construction dates of 1910 (250 Oakland Avenue) and 1920 (150 Oakland Avenue) are observed as having modifications that were not considerate of the original design or appearance of the dwellings. In the 1930s and 1940s residential subdivision development began to occur on the streets immediately west of State Street (the eastern boundary of the survey area) with homes built in the Modern Minimal Traditional and transitional Ranch styles. In the 1960s and 1970s low density commercial strip shopping centers were built along the west side of State Street within the survey area, with additional commercial business buildings and multi-family complexes installed at the northwest sections of the survey area as recent as 1996.

Historical research did not reveal any significant events associated with any properties in the survey area. Similarly, a direct association with important persons in local, state, regional, or national history was not substantiated for any of the survey area properties. None of the historic-era buildings observed in the survey area were found to be significant examples of domestic, commercial, or industrial/utilitarian architecture. Some of the buildings have undergone alterations through the decades that appear to have compromised individual integrity such that any potential for eligibility has been removed, and other buildings were considered ordinary and not embodying the distinctive characteristics of a specific style, type, period, or method of construction. None of the survey area properties were identified as having the potential to yield future information important to local, state, regional, or national history.

CEQA Historical Resource Interpretation & Impacts Findings

No properties within the survey boundaries have been identified as historical resources. As a result future projects proposed within the North Hemet Revitalization Plan Area would not appear to cause a significant impact to a historical resource.

VII. Conclusions

This Historical Resource Survey Report (HRSR) was prepared by Wendy L. Tinsley Becker, AICP, Principal Historian of Urbana Preservation & Planning, LLC (Urbana) and Malia A. Bassett, Junior Planner, to inform the discretionary review process for future projects proposed within the North Hemet Revitalization Plan Area (NHRPA). The NHRPA is located within the City of Hemet municipal boundaries and is administered by the Riverside County Redevelopment Agency. The purpose of this HRSR is to notify the environmental planning team and Municipal and Redevelopment Staff of the possibility for the occurrence of historical resources within the NHRPA.

The NHRPA is bound by Alessandro Street to the west, Fruitvale Avenue to the north, N. State Street to the east and Oakland Avenue to the south. The survey area includes 40 lots. Of the 40 lots, 18 are improved with buildings (residential and commercial) and structures, and 22 are vacant and unimproved. Of the 18 buildings and structures observed, 13 are at least 45 years, and five are less than 45 years of age.

Of the 18 buildings observed:

- 1 was constructed between 1900 and 1910,
- 2 were constructed between 1920 and 1929,
- 3 were constructed between 1930 and 1939,
- 3 were constructed between 1940 and 1949,
- 2 were constructed between 1950 and 1959,
- 2 were constructed between 1960 and 1969, and
- 5 were constructed between 1970 and the present.

As part of this study the NHRPA was surveyed at an intensive level to identify, document, and evaluate all buildings or structures observed to be at least 45 years of age.

None of the survey-area buildings were found to be eligible for inclusion on the National Register of Historic Places, the California Register of Historical Resources, or the Local Hemet and Riverside County Historical Registers. Because no building were identified as eligible for inclusion on a Local Register, or for listing on the California or National Register, none of the buildings appear to meet the definition of an historical resource.

Future discretionary projects proposed within the survey boundaries would not appear to result in a significant impact to a historical resource.

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APPENDIX A
SURVEY PROPERTY SPREADSHEET

North Hemet Revitalization Plan Historical Resource Survey
Urbana Preservation & Planning, LLC - Draft May 2010

Address	Street Name	Suffix/ Resource Name	City	Zip Code	Other Identifier	APN	Condition Observed	Property Type	Year Built	Age at Survey	Historic Name	Common Name	Urbana DPR Form? Y/N	CRHR Status Code Assigned	Code Summary
510	Alessandro Street	None	Hemet	92543	None	443-050-016	Poor	Residential	1940	70	None identified	None identified	Yes	6Z	Found ineligable
636	Alessandro Street	None	Hemet	92543	None	443-050-025	Good	Residential	1924	86	None identified	None identified	Yes	6Z	Found ineligable
160	Menlo Avenue	West	Hemet	92543	None	439-060-015	Fair	Residential	1940s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
220	Menlo Avenue	West	Hemet	92543	Fuentes Tires	439-060-010	Fair	Commercial	1960s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
320	Menlo Avenue	West	Hemet	92543	310 Menlo	439-281-035	Fair	Residential	1936	74	None identified	None identified	Yes	6Z	Found ineligable
150	Oakland Avenue	West	Hemet	92543	None	443-050-012	Fair	Residential	1920	90	None identified	None identified	Yes	6Z	Found ineligable
170-190	Oakland Avenue	West	Hemet	92543	None	443-050-013	Fair	Residential	1960	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
250	Oakland Avenue	West	Hemet	92543	None	443-050-033	Good	Residential	1910	100	None identified	None identified	Yes	6Z	Found ineligable
703	State Street	North	Hemet	92543	None	439-060-016	Fair	Residential	1930s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
723	State Street	North	Hemet	92543	Entenmann's Bakery Outlet	439-060-013	Good	Commercial	1950s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
24795	State Street	North	Hemet	92543	Red Dog Hall	439-060-016	Fair	Residential	1930s-1940s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
733	State Street	North	Hemet	92543	Felipe's Classic Auto Glass	439-060-013	Fair	Residential	1950s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
761	State Street	North	Hemet	92543	None	439-060-011	Good	Residential	1940s	Exact age unknown	None identified	None identified	Yes	6Z	Found ineligable
509	State Street	North	Hemet	92543	None	443-050-036	Unknown	Commercial	1970s-1990s	Exact age unknown	None identified	None identified	No	N/A	N/A
685	State Street	North	Hemet	92543	None	443-050-001	Fair	Residential	1970s	Exact age unknown	None identified	None identified	No	N/A	N/A
749	State Street	North	Hemet	92543	None	439-060-025	Unknown	Commercial	1970s-1980s	Exact age unknown	None identified	None identified	No	N/A	N/A
785	State Street	North	Hemet	92543	None	439-060-009	Unknown	Residential	1990s	Exact age unknown	None identified	None identified	No	N/A	N/A

APPENDIX B
DEPARTMENT OF PARKS & RECREATION (DPR) 523 SERIES FORMS

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 510 Alessandro Street, Hemet, CA 92543
P1. Other Identifier: None Identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; ¼ of ¼ of **Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 510 Alessandro Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 443-050-016; Lot 13 AM 001/ 029 Assessors Map 24.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The single-story residential dwelling at 510 Alessandro Street was constructed facing west in a Modern Minimal Traditional style. Features include a side gabled roof of moderate pitch with wood-shake roofing; vertical wood siding and a porch roof extension at the front elevation. Several ancillary structures are sited throughout the property and likely serve miscellaneous storage purposes. Overall the dwelling appears to be in poor condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1940 / 70 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
Alvie J. Tucker
568 Rosario Avenue
San Jacinto, CA 92545
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #:
HRI #:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 510 Alessandro Street, Hemet, CA 92543
B1. Historic Name: None Identified
B2. Common Name: None Identified
B3. Original Use: Single-family dwelling B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modern Minimal Traditional
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Addition to front left-side of building corner (southwest corner).
***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local (Riverside County) Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 510 Alessandro Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 510 Alessandro Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.



B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

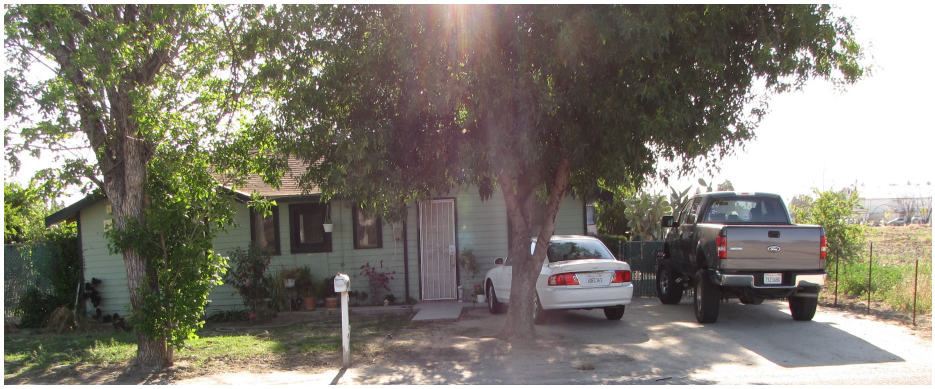
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 636 Alessandro Street, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 636 Alessandro Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 443-050-025; Lot 20 AM 001/ 029 Assessors Map 24.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The building at 636 Alessandro Street is a modified Craftsman style dwelling with a double cross gabled roof. Exterior building materials include composition shingle roofing and horizontal board siding. The original fenestration has been modified through infill of the original front door and installation of a new door in another location. Overall the dwelling appears to be in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1924 / 86 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
636 Alessandro Street
Hemet, CA 92543
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z

***Resource Name or #** (Assigned by recorder) 636 Alessandro Street, Hemet, CA 92543

B1. Historic Name: None identified

B2. Common Name: None identified

B3. Original Use: Single-family dwelling B4. Present Use: Single-family dwelling

***B5. Architectural Style:** Craftsman-Modified

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Modifications identified and observed include changes to windows and doors; addition to south side of dwelling. No documentation or records found to confirm observations.

***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A

***B8. Related Features:** none identified.

B9a. Architect: Unknown b. Builder: Unknown

***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling **Applicable Criteria:** National Register, California Register, Local Register

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 636 Alessandro Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 636 Alessandro Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 160 Menlo Avenue, Hemet, CA 92543
P1. Other Identifier: None Identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 160 Menlo Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 439-060-015; Lot 125 MB 009/410 Estudillo Land & Water Co. Addition

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 160 Menlo Avenue was constructed with a south-facing irregular rectilinear plan in a Modern Minimal Traditional architectural style. Features include a low-pitched side gabled roof with composition roofing and stucco wall coverings. A small volume extends out at the building's southeast corner and is covered by a low-pitched front gabled roof. The windows appear to be aluminum replacement windows with decorative trim around window frame. A detached structure is extant at the rear of the property but is not visible from the public right-of-way. The dwelling appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
May 2010

***P6. Date Constructed/Age and Source:**
1940s / approx. 70 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both

***P7. Owner and Address:**
40316 Clark Drive
Hemet, CA 92544

***P8. Recorded by:** (Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone

***P9. Date Recorded:**
May 2010

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 160 Menlo Avenue, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Unknown B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modern Minimal Traditional
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Windows replaced, changes to fenestration, new stucco siding (dates unknown)
***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 160 Menlo Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 160 Menlo Avenue property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 220 Menlo Avenue, Hemet, CA 92543
P1. Other Identifier: Fuentes Tires
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 220 Menlo Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 439-060-010; two buildings are at this lot. Lot 125 MB 009/410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The commercial property at 220 Menlo Avenue features two buildings constructed in the circa 1960s. The first is Utilitarian constructed in a linear plan with a side gabled roof and corrugated aluminum wall and roof panels. The building appears to serve as a mechanic's garage for the tire shop that occupies the property. The second structure is located at the southwest corner of property and appears to serve as a business office for the tire shop. It features Modernistic architectural details including a flat roof with extended eaves, and principal wall of masonry construction that project above the roofline. Both buildings appear to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP6; Commercial property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)





P5b. Description of Photo: (View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1960s / approx. 50 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
James Wilson
P.O. Box 5068,
Laguna Beach, CA 92652
***P8. Recorded by:** (Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 220 Menlo Avenue, Hemet, CA 92543
B1. Historic Name: Unknown
B2. Common Name: Fuente's Tire Shop
B3. Original Use: Unknown B4. Present Use: Tire Shop
***B5. Architectural Style:** Utilitarian/Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
No alterations identified or observed.
***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Commercial
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 220 Menlo Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 220 Menlo Avenue property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 320 Menlo Avenue, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ of _ ¼ of **Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 320 Menlo Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
439-281-035; Lot 127 MB 009/ 410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 320 Menlo Avenue is not fully visible from the public right-of-way. The building appears to be a single-story single-family dwelling constructed in a Modern Minimal Traditional style with a side gabled roof and a lower front gabled volume extending out at the southeast corner. The front porch is enclosed. The dwelling appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2: Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1936 / 74 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
James Wilson
PO Box 5068
Laguna Beach, CA 92652
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z

***Resource Name or #** (Assigned by recorder) 320 Menlo Avenue, Hemet, CA 92543

B1. Historic Name: None identified

B2. Common Name: None identified

B3. Original Use: Unknown B4. Present Use: Single- family dwelling

***B5. Architectural Style:** Unknown

***B6. Construction History:** (Construction date, alterations, and date of alterations)

Front porch enclosure.

***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A

***B8. Related Features:** none identified.

B9a. Architect: Unknown b. Builder: Unknown

***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling

Applicable Criteria: National Register, California Register, Local Register

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 320 Menlo Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 320 Menlo Avenue property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



N

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 150 Oakland Avenue, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 150 Oakland Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 443-050-012; Lot 12 AM 001/ Assessors Map 24.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 150 Oakland Avenue is a single-story modified Craftsman with a detached garage. Features include a front gabled roof, a symmetrically composed front façade with a center-set entrance marked by paired French doors, replacement vinyl slider windows, and vertical and horizontal board siding, as well as stucco for the exterior walls. A small volume attached to the front left-side corner dwelling, although no records were found to confirm observations. The detached garage has similar features as the main dwelling, including horizontal wood siding and a front gable roof. The dwelling appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1920 / 90 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
Raul Esparza
3214 Joshua Way
Hemet, CA 92545
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #:
HRI #:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 150 Oakland Avenue
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Single-family dwelling B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modified Craftsman
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Modifications observed include fenestration, vertical wood siding, window replacements and garage door.
***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 150 Oakland Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 150 Oakland Avenue property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

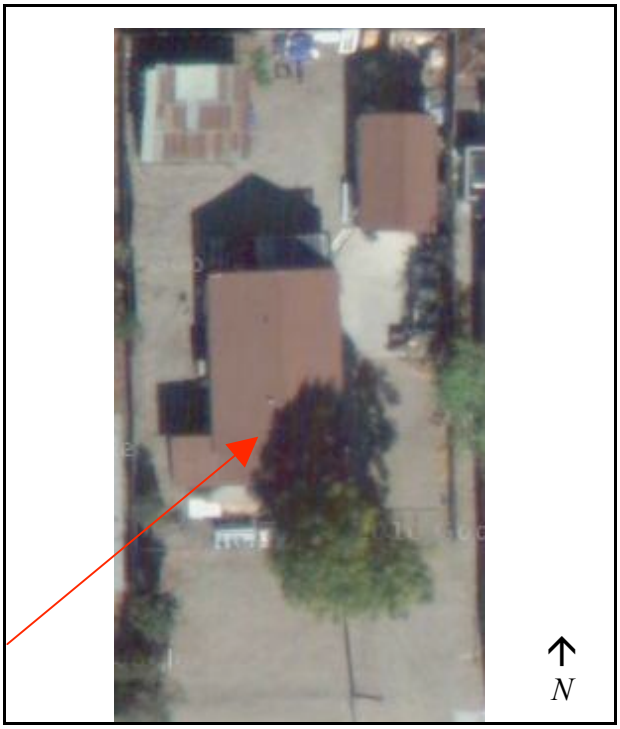
City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 170-190 Oakland Avenue, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 170- 190 Oakland Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 443-050-013; Lot 12 AM 001/ 029 Assessors Map 24.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwellings at 170-190 Oakland Avenue property contains three dwelling units constructed in phases from the circa 1920s through the 1960s, with the front building resembling a modified Craftsman style dwelling, and the rear building resembling a Ranch style. Both building feature stucco wall cladding and composition shingle roofing. From the public right-of-way it appears that a chimney is at the northeast corner of the front dwelling. All buildings observed appear to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1920s -1960s / approx 50-90 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
Puttroff
327 S. Inverness Drive
Englewood, CO 80112
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 170-190 Oakland Avenue, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Single-family dwelling B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modified Craftsman and Ranch
***B6. Construction History:** (Construction date, alterations, and date of alterations)
No alterations identified or observed.
***B7. Moved?** ☐**No** ☐**Yes** ☑**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 170-190 Oakland Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The buildings do not appear to be architecturally meritorious, and do not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 170-190 Oakland Avenue properties does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

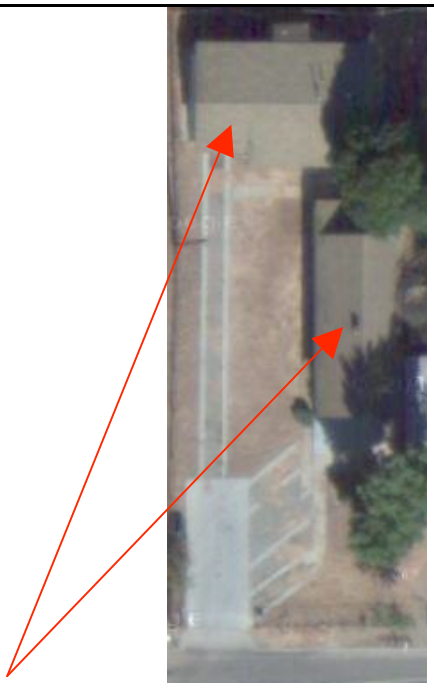
City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 250 Oakland Avenue, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 250 Oakland Avenue City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 443-050-033; Lot 13 AM 001/024 Assessors Map 20.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 250 Oakland Avenue was constructed in a Craftsman style. It is a single-story dwelling with a front-gabled roofline, and a stucco finish. A stone chimney sits at the back of the dwelling and is visible from the public right of way. A detached garage with similar architectural features and wood-and-stucco siding sits to the west of the dwelling. Both the dwelling and detached garage appear to be in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010

***P6. Date Constructed/Age and Source:**
1910 / 100 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both

***P7. Owner and Address:**
Harold T. Fairchild Trust
2200 W. Acacia Avenue, #E314
Hemet, CA 92545

***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone

***P9. Date Recorded:**
May 2010

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 250 Oakland Avenue, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Single-family dwelling B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Craftsman
***B6. Construction History:** (Construction date, alterations, and date of alterations)
Wood siding removed covered in stucco.
***B7. Moved?** ☐**No** ☐**Yes** ☑**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 250 Oakland Avenue property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 250 Oakland Avenue property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

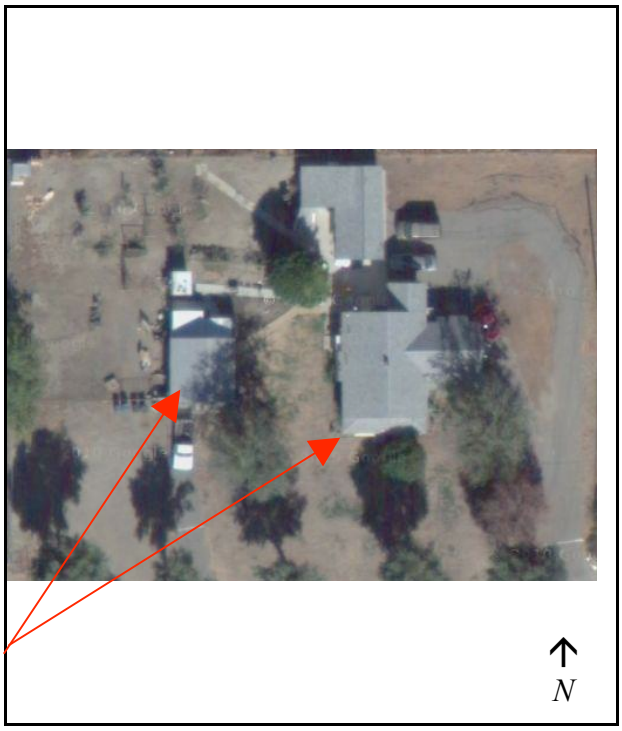
City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 703 North State Street, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 703 State Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 439-060-016; Lot 125 MB 009/ 410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 703 North State Street was constructed in a Modern Minimal Traditional architectural style. It is a single-story residence with horizontal board siding and a side-gabled roof with composition shingle roofing; decorative shutters surrounding some windows and a lattice porch support. The dwelling appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1930s / approx. 80 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
Brad Donnell
4933 Quincy Street
San Diego, CA 92109
***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 703 North State Street, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Unknown B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modern Minimal traditional
***B6. Construction History:** (Construction date, alterations, and date of alterations)
No alterations identified or observed.
***B7. Moved?** ☐**No** ☐**Yes** ☑**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 703 North State Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 703 North State Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



N

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 723 North State Street, Hemet, CA 92543
P1. Other Identifier: Entenmann's Bakery Outlet
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 723 North State Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
439-060-013; Lot 125 MB 009/ 410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The commercial building at 723 North State Street was constructed in a Modernistic style. Features include stucco wall siding with a stone veneer applied to the northeast corner wall section, and a flat roof with a shed roof cornice at east (street-facing) elevation. Overall the building appears to be in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP6: 1-3 story commercial building
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
May 2010

***P6. Date Constructed/Age and Source:**
1950s-1960s / approx. 50-60 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both

***P7. Owner and Address:**
Unknown

***P8. Recorded by:** (Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone

***P9. Date Recorded:**
May 2010

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z

***Resource Name or #** (Assigned by recorder) 723 North State Street, Hemet, CA 92543

B1. Historic Name: None identified

B2. Common Name: None identified

B3. Original Use: Unknown B4. Present Use: Entenmann's Bakery Outlet

***B5. Architectural Style:** Modernistic

***B6. Construction History:** (Construction date, alterations, and date of alterations)

No alterations identified or observed.

***B7. Moved?** ☐**No** ☐**Yes** ☑**Unknown** **Date:** N/A **Original Location:** N/A

***B8. Related Features:** none identified.

B9a. Architect: Unknown b. Builder: Unknown

***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Commercial

Applicable Criteria: National Register, California Register, Local Register

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 723 North State Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 723 North State Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 733 North State Street, Hemet, CA 92543
P1. Other Identifier: Felipe's Classic Auto Glass
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 733 North State Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
439-060-013; Lot 1 MB 001/ 014 Hemet Land Co.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The building at 733 North State Street was constructed in a Utilitarian style with a linear plan. Features includes vertical board on board siding, shed roof extensions on street facing facades, composition roll roofing and a large multi-lite metal-framed window. Full view of the building was obscured from the public right of way. The building appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP6: 1-3 story commercial building
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010

***P6. Date Constructed/Age and Source:**
1951 / 59 years old
Riverside County Assessors Office
☑Historic
☐ Prehistoric
☐ Both

***P7. Owner and Address:**
James Wilson
P.O. Box 5068
Laguna Beach, CA 92652

***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone

***P9. Date Recorded:**
May 2010

***P10. Survey Type:** (Describe)
Intensive.

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

 ***NRHP Status Code**: 6Z

***Resource Name or #** (Assigned by recorder) 733 North State Street, Hemet, CA 92543

B1. Historic Name: None identified

B2. Common Name: None identified

B3. Original Use: Single-family dwelling B4. Present Use: Commercial

***B5. Architectural Style:** Utilitarian

***B6. Construction History:** (Construction date, alterations, and date of alterations)

No alterations identified or observed.

***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A

***B8. Related Features:** none identified.

B9a. Architect: Unknown b. Builder: Unknown

***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling **Applicable Criteria:** National Register, California Register, Local Register

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 733 North State Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 733 North State Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

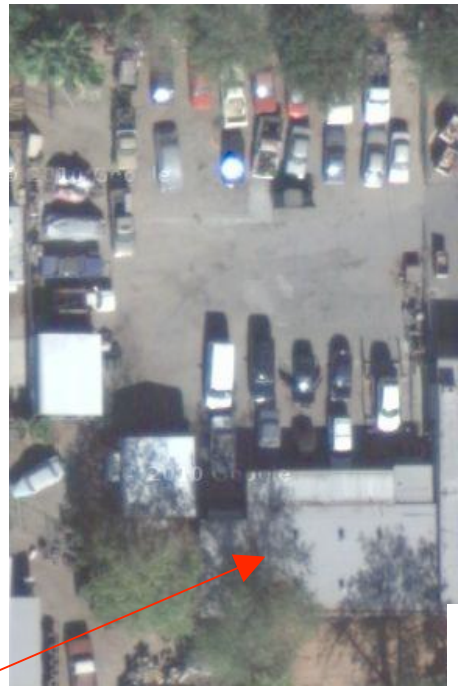
City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



N

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____

Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 761 North State Street, Hemet, CA 92543
P1. Other Identifier: None identified
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 761 North State Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
APN: 439-060-011; Lot 125 MB 009/ 410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The dwelling at 761 North State Street was designed in a Modern Minimal Traditional architectural style with concrete masonry unit (CMU) construction. Features include a low-pitched side gabled roof with modern terra cotta roofing tile and metal sash windows. A detached garage sits at the north elevation of the property and was built with similar materials as the main building. The dwelling appears to be in good condition.

***P3b. Resource Attributes:** (List attributes and codes) HP2; Single-family property
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo: (View, date, accession #)
May 2010
***P6. Date Constructed/Age and Source:**
1940s / approx. 70 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both
***P7. Owner and Address:**
James Wilson
P.O. Box 5068
Laguna Beach, CA 92652
***P8. Recorded by:** (Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone
***P9. Date Recorded:**
May 2010
***P10. Survey Type:** (Describe)
Intensive.

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 761 North State Street, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Unknown B4. Present Use: Single-family dwelling
***B5. Architectural Style:** Modern Minimal Traditional
***B6. Construction History:** (Construction date, alterations, and date of alterations)
No alterations identified or observed.
***B7. Moved?** ☐**No** ☐**Yes** ☑**Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 761 North State Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 761 North State Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary#: _____
HRI#: _____
Trinomial #: _____
NRHP Status Code: 6Z
Other Listings: _____
Review Code _____ Reviewer _____ Date

Page 1 **of** 2 ***Resource Name or #:** (Assigned by recorder) 24795 North State Street, Hemet, CA 92543
P1. Other Identifier: Red Dog Hall
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted**
***a. County** Riverside County
***b. USGS 7.5' Quad:** San Jacinto Date: 1979 **T** 5S ; **R** 1W ; _ ¼ **of** _ ¼ **of Sec** 3 ; 10 **B.M.** San Bernardino
c. Address: 24795 North State Street City: Hemet Zip: 92543
d. UTM: (Give more than one for large and/or linear resources) Zone _____, _____ mE/ _____ mN
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)
439-060-016; Lot 125 MB 009/ 410 Estudillo Land & Water Co. Addition.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The building at 24795 North State Street appears to have been constructed as a dwelling in the Modern Minimal Traditional architectural style, and was converted to commercial/public uses as the 'Red Dog Hall'. The building is covered by two separate side gabled rooflines covered in composition shingles; exterior building materials include a mix of horizontal clapboard siding and vertical board siding. Overall the building appears to be in fair condition.

***P3b. Resource Attributes:** (List attributes and codes) HP13; Community center/ Social Hall
***P4. Resources Present:** ☑Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)



P5b. Description of Photo:
(View, date, accession #)
May 2010

***P6. Date Constructed/Age and Source:**
1930s-1940s / 70-80 years old
Field survey observations
☑Historic
☐ Prehistoric
☐ Both

***P7. Owner and Address:**
Brad Donnell
4933 Quincy Street
San Diego, CA 92109

***P8. Recorded by:**
(Name, affiliation, and address)
Urbana Preservation & Planning, LLC
Wendy L. Tinsley Becker, AICP, Principal
Malia A. Bassett Junior Planner
3525 4th Avenue, San Diego, CA 92103, 619-543-0693/Phone
248 3rd Street #841, Oakland, CA 94607, 510-663-7443/Phone

***P9. Date Recorded:**
May 2010

***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation**: (Cite survey report and other sources, or enter "none.")
Urbana Preservation & Planning, LLC, *Historical Resource Survey* – North Hemet Revitalization Plan Area, May 2010.

***Attachments:** ☐NONE ☐Location Map ☐Continuation Sheet ☑Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: _____
HRI #: _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 **of** 2 ***NRHP Status Code**: 6Z
***Resource Name or #** (Assigned by recorder) 24794 North State Street, Hemet, CA 92543
B1. Historic Name: None identified
B2. Common Name: None identified
B3. Original Use: Unknown B4. Present Use: Red Dog Hall
***B5. Architectural Style:** Modern Minimal Traditional
***B6. Construction History:** (Construction date, alterations, and date of alterations)
No alterations identified or observed.
***B7. Moved?** ☐No ☐Yes ☑Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** none identified.
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme:** N/A **Area:** N/A **Period of Significance:** N/A **Property Type:** Single-family dwelling
Applicable Criteria: National Register, California Register, Local Register
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The 24794 North State Street property appears to be ineligible for listing on the National Register of Historic Places, the California Register of Historical Resources, or the Riverside County Historic Landmark Program. No information was found for the property, during the course of thematic and property-specific historical research, to support a positive statement of significance for maintaining a direct association with an important event in Hemet, Riverside County, Southern California, California, or national history; or for a direct association with important persons in local, regional, state or national history. None of the past property owners or building occupants were found to be important with respect to activities or accomplishments during the period of association with the subject property. The building does not appear to be architecturally meritorious, and it does not appear to adequately represent or embody the distinctive characteristics of a period, type, style or method of construction, and has not been identified as representing the work of a master architect or builder. Research and documentation of property has not yielded information that could be considered significant to history, and additional scientific analysis of the property, beyond what has been included in this DPR form, would not be likely to yield information important to history.

For the purposes of a discretionary project review process the 24794 North State Street property does not meet the definition of an historical resource pursuant to CEQA Guidelines Section 15064.5.

B11. Additional Resource Attributes: (List attributes and codes) None.

***B12. References:**

City of Hemet Public Library History Room.
County of Riverside Planning Department.
City of Hemet and County of Riverside Archives.

B13. Remarks: None.

***B14. Evaluator:** Wendy L. Tinsley Becker, AICP, Principal and Malia A. Bassett, Junior Planner, Urbana Preservation & Planning, LLC: 3525 4th Avenue, San Diego, CA 92103

***Date of Evaluation:** May 2010

(This space reserved for official comments.)



APPENDIX C
PREPARER QUALIFICATIONS

URBANA PRESERVATION & PLANNING LLC

WENDY L. TINSLEY BECKER, RPH, AICP, ALLIED AIA
PRINCIPAL HISTORIAN / PRESERVATION PLANNER
wendy@urbanapreservation.com

Ms. Tinsley Becker brings a solid background in history, architectural history and urban planning, with a particular emphasis on issues relating to historic preservation. Her statewide experience includes extensive historical resources survey work, design review under *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, single-site historic property research and documentation, and practice in municipal regulatory planning and cultural resources compliance issues including code compliance, revision and review, CEQA, NEPA, and Section 106 of the National Historic Preservation Act. As a preservation planning consultant she participates in the development and administration of local land use regulations, policies, programs and projects; prepares reports involving research and analysis of various planning issues; conducts site-specific project and design review; and facilitates project coordination between contractors, architects, developers, citizens and other stakeholders. Wendy meets the *Secretary of the Interior's Historic Preservation Professional Qualifications Standards* in the disciplines of History and Architectural History and the *draft standards* established for Historic Preservation and Land Use/Community Planning. She is included on the California Council for the Promotion of History's Register of Professional Historians and also maintains professional certification in the American Institute of Certified Planners (AICP).

Ms. Tinsley Becker was the founding President of the Jack London District Association, a non-profit community advocacy organization for the Jack London District, an emerging neighborhood located along the historic industrial waterfront of Oakland, California that is anchored by a ten-block district of intact historically and architecturally significant warehouse properties listed on the National Register of Historic Places. In this position Ms. Tinsley regularly facilitated community-visioning workshops, presided over community meetings, corresponded and negotiated with City Staff and Council representatives, and development interests on behalf of the Jack London District. Wendy served as a Board member of the Northern California Chapter of the American Planning Association (APA) from 2004 through 2006 where she was appointed as the San Francisco and East Bay Chair for the group's Regional Advisory Council. She currently serves as the Vice Chair of Communication for the APA's National Urban Design & Preservation Division and she previously held (2007-2008) the position of California Representative for the group. From 2006 forward Wendy has held the position of Instructor within the University of California at San Diego's (UCSD) Urban Planning & Development professional certificate program, where she teaches courses on Historic Preservation Planning, Architectural History, City Planning, and Planning History, and she also serves as a program advisory group member to further historic preservation in local planning and development education curriculums. Wendy is currently a Director/Board Member of the San Diego Architectural Foundation, where as Education Chair, she is supervising the preparation of a Built Environment Education Manual for use in San Diego area schools.

Wendy has authored invited contributions for the *Encyclopedia of the City* publication and authored the United States Research Bibliography for the book *The International Faces of Urban Sprawl*. She is currently conducting research for a publication on the planning and development history of San Diego, which will be a valuable reference resource to historic preservation and planning professionals, academics, and local historians.

Wendy has assisted jurisdictions in preservation planning program development and implementation efforts through:

- Crafting historic preservation ordinance language and related procedural and administrative guidelines;
- Reviewing existing programs for specialized use in historic preservation strategies;
- Establishing preservation incentive and benefit programs;
- Navigating proposed programs through the participatory process including educating advisory committees and established municipal historic preservation boards;
- Facilitating public workshops, and presenting conclusions and recommendations to city decision-makers;
- Conducting comprehensive historical resource/historic property surveys to identify and evaluate eligible properties and inform the current and long-range planning and development process.

She recently served as the lead historic preservation consultant for the City of Chula Vista's Proposed Municipal Preservation Planning Program where she worked closely with City Staff and the Interim-Historic Preservation Advisory Committee to develop a local historic preservation program including a historical resource survey work program, historic preservation ordinance, historic design review guidelines, and incentives and benefits for historic property owners and project applicants. Additionally Wendy provides on-call architectural history and historic preservation planning services for the Southern California Edison Company as part of the Tehachapi Renewable Transmission Project.

EDUCATION

Master of City Planning, Historic Preservation & Urban Design Concentration
Thesis Title: *How Cities Grow: A History Of San Diego Neighborhood Development Patterns, 1769-1955*
California State University, San Diego

Bachelor of Arts – History, Public History & Urban Studies Concentration
Senior Research Thesis: *Another Streetcar Suburb: The Development of Mission Beach, 1914-1930*
California State University, San Diego

PROFESSIONAL EXPERIENCE

Principal: Urbana Preservation & Planning, (Oakland & San Diego) 04/2005-present
Instructor: University of California, San Diego – Extension, 2006-forward
-Urban Planning & Development Certificate Program / Art & the Creative Process Certificate Program
-Courses Taught: *Architectural History, Historic Preservation Planning*, *Historic Preservation Planning Online, Fundamentals of City Planning, Foundations of Planning & the Built Environment*
Architectural Historian & Preservation Planner: Architectural Resources Group (San Francisco & Los Angeles), 10/2002-04/2005
Architectural Historian & Preservation Planner: HRS, (San Diego) 12/2001-10/2002
Graduate Instructor: Urban Studies & Planning Program, University of CA at San Diego, Courses Taught: USP 124-Land Use Planning, Dr. Nico Calavita, 09/2001 – 12/2001
Graduate Teaching Assistant: City Planning Graduate Program, San Diego State University, Dr. Nico Calavita, 01/2000 – 08/2000, 09/2001 – 12/2001, 01/2002 – 05/2002
Historian & Historic Preservation Planner: Office of Marie Burke Lia, Attorney at Law, (San Diego) 01/2000-11/2001
Assistant Coordinator: SHPO/CHRIS-South Coastal Information Center, 07/1998-08/1999
Consultant, East Side Survey and Oral History Program: City of Oceanside Department of Planning and Land Use, 01/1999-06/1999
Consultant, National Register of Historic Places Travel Itinerary: City of San Diego Historic Site Board, 06/1998-06/1999
Research Assistant: SHPO/CHRIS-South Coastal Information Center, 12/1996-07/1998

SELECT RELATED EXPERIENCE / CONTINUING PROFESSIONAL SEMINARS & EDUCATION

Attendee: AIA Webinar, *The 2030 Commitment: Setting and Achieving Energy Goals with Integrated Design*, 12/2009
Attendee: APA Webinar, *Balancing the Land-Use Transportation Equation: At the Community Level*, 09/2009
Attendee: APA Webinar, *LEED for Neighborhoods*, 08/2009
Attendee: San Diego APA, *Making Density Work – San Diego Density Symposium*, 10/2008
Moderator: *Planning for Preservation: A Survey of Municipal Preservation Programs Throughout San Diego County*, San Diego APA & UCSD Extension–UPD Cert. Program, 08/2008
Invited Speaker: *Local Historic Site Designation & The Mills Act Historic Property Tax Credit Program*, City of San Leandro (CA), 04/2005
Attendee: CA Preservation Foundation & CA Office of Historic Preservation, *Historical Resource Surveys for Local Governments*, San Diego (CA) 02/2004
Attendee: National Charrette Institute, *Introduction to Dynamic Planning* (Level 1 NCI Charrette Manager Certification Training), San Diego (CA) 10/2003
Attendee: CA Preservation Foundation, *Incentives for Historic Preservation Projects*, Berkeley (CA) 09/2003
Attendee: University of Southern CA, *Preservation Planning & Law*, Los Angeles (CA) 07/2003
Attendee: League of CA Cities, *Smart Growth Zoning Codes*, Lodi (CA) 12/2002
Invited Participant: *Second Natures, Redefining The Los Angeles Riverfront*, Los Angeles (CA) 01/2002 (2-Day Planning & Design Charrette hosted by MOCA & The Geffen)
Selected Smart Growth Researcher: San Diego State University Foundation & City Planning Graduate Program, Dr. Roger Caves, 01/2001 – 08/2001 (Grant Topic: Planning for Sprawl in the U.S)
Attendee: *Section 106 An Introductory Course*, National Preservation Institute, San Francisco (CA) 04/1999

SELECT MEMBERSHIPS & REGISTRATIONS

American Institute of Certified Planners (AICP – Certified Planner #022838)
American Institute of Architects (Allied AIA)
American Planning Association (APA)
Association for Preservation Technology International (APT)

SELECT MEMBERSHIPS & REGISTRATIONS (CONTINUED)

California Preservation Foundation (CPF)
National Trust for Historic Preservation (NTHP)
Register of Professional Historians, CA Council for the Promotion of History (RPH –Professional Historian #612)
Society of Architectural Historians (SAH)
Society for American City and Regional Planning History (SACRPH)

BOARDS & COMMITTEES

Vice-Chair of Communications – APA National Urban Design & Preservation Division, 01/2010-present
Nominating Committee Member – APA National Urban Design & Preservation Division, 10/2009-02/2010
Director & Education Chair – San Diego Architectural Foundation, 11/2008 forward
Appointed Public Member – City of San Diego Historical Resources Board Incentives Subcommittee, 08/2008-02/2010
Consultant Advisor – City of Chula Vista Interim Historic Preservation Advisory Committee, 2007-2008
California Representative – Urban Design & Preservation Division, American Planning Association, 2007-2008
Advisor/Member – UCSD Extension Advisory Group Urban Planning & Development Certificate Program, 2007 forward
President – Jack London District Association, 2005-2006
East Bay Co-Chair – Regional Advisory Council, APA Northern Section-CA Chapter, 2005-2006
San Francisco Chair – Regional Advisory Council, APA Northern Section-CA Chapter, 2004-2005

AWARDS

2009 Recipient – San Diego Public Library Foundation / Friends of the San Diego Public Library 2008-2009 Chapter Volunteer Award, University Heights Branch (*recognized for preservation planning work at the historic San Diego State Normal College campus*)

SELECT PUBLICATIONS

Article In-progress *The General Plan and Historic Preservation; An Overview of Historic Preservation Elements in the State of CA*.
Article In-progress *San Diego County's Municipal Preservation Report Card*
Forthcoming 2010 "Global Heritage Preservation" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "Olmsted & The American Parks Movement" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "Religion and the Environment" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "Religion and the Environment" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "The U.S. – Mexico Border Wall" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "Early Hydroelectric Development" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
Forthcoming 2010 "Niagara Hydro Development" *Encyclopedia of Global Environmental History*. Brian Black (ed.) Facts on File: New York.
2006 "United States Research Bibliography" *The International Faces of Urban Sprawl: Lessons Learned From North America*. Fritz Wagner (ed.) Geography Dept. University of Waterloo: Waterloo, Ontario.
2005 "Courtyards" *Encyclopedia Of The City*. Roger Caves (ed.) Routledge: London.
2005 "Robert Venturi" *Encyclopedia Of The City*. Roger Caves (ed.) Routledge: London.

SELECT PROJECTS / REPORTS / DOCUMENTATION

In-Progress *City of Santa Ana Warner Avenue Transportation Study Historical Resource Survey, Santa Ana, CA*
In-Progress *Proposed Heidi Square Redevelopment Project – Project Management, Preservation Planning & Subdivision Re-Design Consulting, San Lorenzo, CA*
In-Progress *Preservation Planning Study, Site Development, & Rehabilitation Analysis of the Herman Hotel Carriage House, Chula Vista, CA*
In-Progress *Historical Site Designation, Design Review, & Mills Act Property Tax Consulting for the Dennstedt Building Company's Calavo Gardens Queen Avenue Dwelling, Mt. Helix, CA*
July 2009 *City of Santa Ana Bristol & 17th Transportation Study Historical Resource Survey, Santa Ana, CA*
May 2009 *Fresno Unified School District Historical Resource Survey of the Proposed M-4 Site, Fresno, CA*

May 2009 *Section 106 Review of Casa Blanca – 716 Santa Clara Avenue, Alameda, CA*
April 2009 *Design Review Analysis for the 2110 Glenneyre Street Property, Laguna Beach, CA.*
April 2009 *Section 106 Review of the Fairfax Theatre, Oakland, CA*
March 2009 *Draft National Register of Historic Places Documentation & Eligibility Evaluation for the Middle Fork American River Hydroelectric Project, Placer County, California*
February 2009 *Historical Resource Analysis Report & Design Review – 337 Hawthorne Road, Laguna Beach, CA*
February 2009 *San Diego Normal School Campus Phase I Preservation Planning Study & Historical Resource Survey, San Diego, CA*
January 2009 *Historical Resource Analysis Report, 634 2nd Avenue, Chula Vista, CA*
October 2008 *Pier 29 National Historic Preservation Act Finding of Effects Statement, San Francisco, CA*
July 2007 – August 2008 *Lead Consultant – City of Chula Vista Historic Preservation Program Development – City of Chula Vista Historic Preservation Program Binder (ordinance, historic inventory database, historical overview statement, incentives, project review process and related permit application and processing forms*
August 2008 *Mayor John Gill Residence, Designation, Mills Act & Rehabilitation Consulting, San Leandro, CA*
July 2008 *California Portland Cement Company P&H Excavators #3 & #4 Historic Context Statement & California Register Eligibility Review, Mojave, CA.*
July 2008 *Historic Context Statement – Bean Springs Site, Rosamond, CA*
June 2008 *Cultural Resource Report & Regulatory Review, PL-SCE-Tehachapi-10H, Acton, CA*
May 2008 *Historical Resource Documentation & Review, San Diego Aqueduct, San Diego, CA*
April 2008 *Historic Site Designation & Mills Act Historic Property Tax Consulting for the Goldberg Residence, 4654 Iowa Street, San Diego, CA*
April 2008 *Storefront Improvement / Façade Revitalization Historical Resource Analysis & Design Review Assistance, 3201 Adams Avenue, San Diego, CA*
March 2008 *Lombardi Ranch CEQA Review, San Ardo, California*
February 2008 *Del-Sur Saugus Mining Complex Historical Resource Review, Grass Valley, CA*
February 2008 *Foothill Ranch Historical Resource Review, Palmdale, CA*
January 2008 *Section 106 Review 1425-1475 South Main Street, Walnut Creek, CA*
January 2008 *Historic Site Designation Report & Mills Act Property Tax Consulting - Ocean Beach Cottage Emerging Historic District Contributor, 4670 Del Monte Ave., San Diego, CA*
November 2007 *Historic Site Designation & Mills Act Historic Property Tax Consulting for the Olmstead Building Company's Calavo Gardens Project #531, Mt. Helix, CA*
October 2007 *Southern CA Edison Company's Del Sur-Saugus Transmission Line Historical Resource Review, Lancaster - Palmdale, CA*
October 2007 *Southern CA Edison Company's Antelope Substation Historical Resource Review, Lancaster, CA*
September 2007 *Historical Resource Review & Data Responses for the Proposed SDG&E Orange Grove Energy Project in Pala, CA*
September 2007 *Southern CA Edison Company's Kaiser Pass Cabin Historic Property Assessment, Fresno Co., CA*
August 2007 *USDA Forest Service Meeks Creeks Historic Bridge Assessment, Lake Tahoe, CA*
July 2007 *Historical Resource Analysis Report, 433 W. Meadow Drive, Palo Alto, CA*
May 2007 *Historic Preservation Assessment & New Project Planning and Design Consulting – 3994 Jackdaw Street, San Diego (CA)*
February 2007 *419 Park Way Historical Resource Analysis Report, Chula Vista, CA*
January 2007 *Upper Triangle Areas Historic Property Survey (Historic Context Statement and Architectural/Historical Documentation of 50 Properties over 15 City Blocks), Fresno, CA*
December 2006 *Historic Site Designation & Mills Act Historic Property Tax Consulting for the Charles Wakefield Cadman Residence, Mt. Helix, CA.*
November 2006 *Historical Resource Analysis of the 4303 Narragansett Avenue Property, San Diego, CA*
September 2006 *Section 106 Review of the 1333 Balboa Street Property, San Francisco, CA*
September 2006 *Section 106 Review of the Historic Delta-Mendota Canal, Los Banos, CA*
August 2006 *Historical Evaluation Report – 2959 East Avenue, Hayward, CA*
June 2006 *Historical Resource Analysis Report: 418-450 10th Avenue Properties, San Diego, CA*
May 2006 *Section 106 Review of the Cocoanut Grove Building – Santa Cruz Beach Boardwalk, Santa Cruz, CA*
May 2006 *Historical Resource Evaluation Report for the 70 15th Street Warehouse, San Diego, CA*
April 2006 *Historic Site Designation Report & Mills Act Property Tax Consulting - Ocean Beach Cottage Emerging Historic District Contributor, 4528 Saratoga Avenue, San Diego, CA*
March 2006 *City of Fresno Arts-Culture District Historic Property Survey (Historic Context Statement and Architectural/Historical Documentation of 90-100 Properties over 18 City Blocks), Fresno, CA*
March 2006 *South Mossdale Historic-Era House Evaluation, Lathrop, CA*
February 2006 *Westwind Barn Historic Preservation Study, Los Altos Hills, CA*
January 2006 *Section 106 Review of the 2654 Mission Street Property, San Francisco, CA*

January 2006 *Section 106 Review of the 325 Mowry Avenue Property, Fremont, CA 94536*
January 2006 *Section 106 Review of Ardenwood 34551 Ardenwood Bouevard, Fremont, CA 94555*
December 2005 *Section 106 Review of the 1230 N Street Property, Sacramento, CA 95814*
December 2005 *Section 106 Review of the Sacramento City College Water Tower, Sacramento, CA*
November 2005 *Section 106 Review of Fair Oaks Watts, 525 La Sierra Drive, Sacramento, CA*
November 2005 *Napa Valley College Bus Shelter West Historical Resource Analysis Report, Napa, CA*
October 2005 *Section 106 Review of the 1025 3rd Street Property, Sacramento, CA 95818*
September 2005 *City of Davis, Historic Anderson Bank Building Research, Documentation & Design Review Analysis, 203 G Street, Davis, CA*
September 2005 *Historical Resource Analysis Report, 1212 & 1214 Second Street, San Rafael, CA*
August 2005 *Historical Resource Analysis Report – Somky Property/Thompson's Soscol Ranch, Napa, CA 94558*
July 2005 *Walnut Creek Women's Club Environmental Impact Report, 1224 Lincoln Avenue, Walnut Creek, CA*
June 2005 *Tam Property Lot Split Historic Preservation Consulting, Castro Valley, CA*
May 2005 *Historical Resource Analysis Report, 7329-7331 Eads Avenue, San Diego, CA*
March 2005 *Ehlers Estate Historical Resource Analysis, 3222 Ehlers Lane, St. Helena, CA*
March 2005 *University of CA at Santa Cruz Preservation Consulting (Campus Wide Cultural Resources Inventory, Historic Context Statement – Campus Planning History)*
February 2005 *Hall Winery Historical Resource Analysis, St. Helena, CA*
January 2005 *Historical Resource Evaluation, 700 28th Avenue, San Mateo, CA*
January 2005 *Historical Resource Evaluation, 312 & 318 Highland Avenue, San Mateo, CA*
December 2004 *San Mateo Motel Historical Resource Report – Park Bayshore Townhomes – Environmental Impact Report* (Revised February 2005)
November 2004 *Historical Evaluation of the San Mateo Motel, 801 South Bayshore Boulevard, San Mateo, CA*
October 2004 *Stonegate Homes Subdivision Plan, and Single-and-Multi-Family Dwellings Design Review, San Mateo, CA*
September 2004 *University of CA at Santa Cruz, Getty Campus Heritage Grant Application*
September 2004 *City of Riverside Downtown Fire Station No.1 Cultural Resources Analysis, Riverside, CA*
August 2004 *Residential Remodel Design Review – Glazenwood Historic District Contributor, 929 Laurel Avenue, San Mateo, CA*
August 2004 *Odd Fellows Hall, Historic Structure Report, 113 South B Street, San Mateo, CA* (with Conservator Seth Bergstein)
July 2004 *Design Review Analysis – Schneider's Building, 208 East Third Street, San Mateo, CA 94401*
July 2004 *Embarcadero Cove Development Project Initial Study – Preliminary Historical Resource Analysis, Oakland, CA 94606*
July 2004 *Historical Resource Evaluation Report – 4830 Cape May Avenue, San Diego, CA 92107* (Revised January 2005)
June 2004 *City of Monterey Alvarado Street Mixed-Use Project - APE Survey, Monterey, CA*
June 2004 *City and County of San Francisco Historical Resource Evaluation Report – 450 Frederick Street, San Francisco, CA 94117*
June 2004 *Design Review Analysis – 117 Clark Drive, San Mateo, CA 94402*
May 2004 *Historical Evaluation of the 426 Clark Drive Residence, San Mateo, CA 94402*
April 2004 *City and County of San Francisco Historical Resource Evaluation Report – 1272 42nd Avenue, San Francisco, CA 94122*
April 2004 *City of Fresno Broadway Row Historical Resource Survey, Fresno, CA*
March 2004 *Historical Evaluation of the 117 Clark Drive Residence, San Mateo, CA 94402*
March 2004 *Historical Evaluation Of The Fresno Republican/McMahan's Building, 2030 Tulare Street, Fresno, CA 93721*
February 2004 *Crocker Bank Building Preservation Planning Considerations Memorandum*
January 2004 *Historical Evaluation of the 501 Walnut Street Residence, San Carlos, CA 94070*
January 2004 *Historical Evaluation of the 20 Madison Avenue and 29 Hobart Avenue Properties, San Mateo, CA 94402*
January 2004 *Historical Evaluation Of The Residence Located At 571 Valley Street, San Francisco, CA*
January 2004 *Historical Evaluation Of The 3925 20th Street Residence, San Francisco, CA 94131*
November 2003 *Historical Evaluation of Commercial Building Located at 1022 El Camino Real, San Carlos, CA*
November 2003 *Peer Review Statement for the K & T Foods Building, 451 University Avenue, Palo Alto, CA*
November 2003 *Historical Evaluation of the Greer-O'Brine Property, 51 Encina Avenue, Palo Alto, CA,*
November 2003 *Embarcadero Hotel Environmental Impact Report, Historical Resources Analysis and Design Review Statement*
October 2003 *City of San Leandro Historical Resources Survey, Historic Context Statement, Historic Preservation Ordinance, and Draft Historic Preservation Benefits/Incentive Program*
August 2003 *Palm Theater Environmental Impact Report, Historical Resources Analysis*

July 2003	*Historical Evaluation Of The First Christian Church Building, 2701 Flores Street, San Mateo, CA 94403*
June 2003	*Alameda Naval Air Station Reuse Project Historic Preservation Regulatory and Policy Memorandum* (Prepared for Alameda Point Community Partners-Master Developer for NAS Alameda)
May 2003	*Historical Evaluation Of The Residence Located At 606 Dorchester Road, San Mateo, CA*
March 2003	*Ames Aeronautical Laboratory 40' x 80' Wind Tunnel National Register Nomination* (Prepared for NASA Ames Research Center)
March 2003	*Ames Aeronautical Laboratory 6' x 6' Supersonic Wind Tunnel National Register Nomination* (Prepared for NASA Ames Research Center)
March 2003	*Ames Aeronautical Laboratory Administration Building National Register Nomination* (Prepared for NASA Ames Research Center)
March 2003	*Historical Evaluation Of The Residence Located At 1015 South Grant Street, San Mateo, CA*
February 2003	*8th & Market, 10 United Nations Plaza, Cell Site Impact Review, San Francisco, CA*
February 2003	*Existing Conditions and Subdivision Design Alternatives For The Proposed Hayman Homes Tract No. 7267, Proctor Road, Castro Valley, CA*
February 2003	*Historical Evaluation Of The Residence Located At 336 West Poplar Avenue, San Mateo, CA*
January 2003	*Historical Evaluation Of The Residence Located At 744 Occidental Avenue, San Mateo, CA*
January 2003	*Historical Evaluation Of The 131 and 141 West Third Avenue Apartment Buildings, San Mateo, CA*
December 2002	*CA State Capitol Building, Historical Resource Review, Sacramento, CA*
November 2002	*Wireless Antenna Site Review, Medical Arts Building, 2000 Van Ness Avenue, San Francisco, CA*
October 2002	*Historical Evaluation Of The LeDucq Winery Estate, 3222 Ehlers Lane, St. Helena, CA 94574* (Revised June 2003)
October 2002	*Historical Assessment Of The St. Patrick's Parish Community Building Located At 3585 30th Street, San Diego, CA, 92104*
September 2002	*Historical Assessment Of The Building Located At 4257 Third Street, San Diego, CA,*
April 2002	*Historical Assessment Of The Building Located At 3567 Ray Street, San Diego, CA,*
October 2001	*Historical Assessment Of The Gustafson's Furniture Building Located At 2930 El Cajon Boulevard, San Diego, CA, 92104*
September 2001	*Historical Review Of Lots A, B, K & L, Block 93, Horton's Addition Lockling, San Diego, CA*
August 2001	*Core Inventory Of All Sites Appearing To Be More Than 45 Years Of Age Not Previously Documented* (Prepared For Centre City Development Corporation)
August 2001	*Urbana Project Abstract Bibliography* (Prepared for Dr. Roger Caves, San Diego State University and San Diego State University Foundation)
July 2001	*Historical Assessment Of The Kirkland Apartments Building Located At 2309 Fifth Avenue, San Diego, CA, 92103*
July 2001	*Historical Assessment Of The Building Located At 4230 Maryland Street, San Diego, CA, 92103* (With Kathleen A. Crawford)
June 2001	*Historical Assessment Of The 2525-2529, 2537-2547, 2561 First Avenue Residences, San Diego, CA 92103*
May 2001	*Update Of The November 1988 Historic Site Inventory Of Centre City East For Centre City Development Corporation*
April 2001	*East Village Inventory Of All Sites Appearing To Be More Than 45 Years Of Age Not Previously Documented* (Prepared For Centre City Development Corporation)
April 2001	*Update Of The May 1989 Historic Site Inventory Of Bayside For Centre City Development Corporation*
January 2001	*Historic Survey Report Of The Former Teledyne-Ryan Aeronautical Complex 2701 North Harbor Drive San Diego, CA 92101*(with Scott Moomjian)
January 2001	*Historical Assessment Of The Fletcher-Salmons Building 602-624 Broadway, San Diego, CA 92101*
December 2000	*Cultural Resource Report for The Winona Avenue Area Elementary School Preferred Site, Alternative 1 Site, and Alternative 2 Site*
November 2000	*Cultural Resource Report for The Edison/Hamilton/Parks Area Elementary School Preferred Site and Alternative Sites*
November 2000	*Cultural Resource Report for The Adams/Franklin Area Elementary School Preferred Site and Alternative Site*
October 2000	*The National Register of Historic Places Travel Itinerary; Old Town San Diego*
August 2000	*Cultural Resource Report for The Winona Avenue Area Elementary School Preferred Site and Alternative Sites*
July 2000	*Cultural Resource Report, 52nd Street Area Elementary School Preferred & Alternative Sites, San Diego, CA*
July 2000	*Historical Assessment Of The 3658 Warner Street Residence, San Diego, CA 92106*
July 2000	*Historical Assessment Of The 367 Catalina Boulevard Residence, San Diego, CA 92106*
July 2000	*Historical Assessment Of The 906 West Lewis Street Residence, San Diego, CA 92103*
May 2000	*Historical Assessment Of The 501-503, 507 and 509 14th Street Residences, San Diego, CA*

May 2000 *The San Diego Flume Company System Redwood Pipeline, San Diego County, CA*
March 2000 *Historical Assessment of The Society For Crippled Children's Hydrotherapy Gymnasium Located at 851 South 35th Street, San Diego, CA 92113*

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Ms. Bassett holds a Bachelor of Arts degree from the University of California, San Diego and is a graduate student within the Master of City Planning program at San Diego State University. Malia's strength is her ability to conduct accurate and efficient property specific, thematic, and regulatory research at municipal offices, local libraries, and regional archives. She brings experience in researching and identifying environmental planning policies. Malia's interest in the field of planning is to expand and apply her knowledge of land use and public policy with a focus on the natural and built environments. With an academic background in policy and the participatory process Malia hopes to incorporate that perspective into professional projects. At Urbana Malia is a member of the field survey team and works directly with the Principal to conduct primary research for projects and assist in the preparation of regulatory reviews under the California Environmental Quality Act, the National Environmental Policy Act, and Section 106 of the National Historic Preservation Act.

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School of Public Affairs
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Bachelor of Arts - Political Science
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AWARDS/HONORS/DISTINCTIONS

Student Government Involvement Award Honor, Palomar Community College (2006)
Betty Rendel National Political Involvement Scholarship (2006)
Exceptional Student Award, Palomar Community College (2003-2006)

ACADEMIC & PROFESSIONAL EXPERIENCE

San Diego American Planning Association: Young Planners Group Subcommittee Co-Director 10/2009 - present
Junior Planner: Urbana Preservation & Planning (San Diego & Oakland, CA) 09/2009 – present
Staff Planning Assistant: Urbana Preservation & Planning (San Diego & Oakland, CA) 03/2009 – 09/2009
Research Assistant: Law Offices of J. Edward Switzer, Jr., Esq. (San Diego, CA) 05/2001 - 08/2003
Vice President: Palomar Community College Associated Student Government (San Marcos, CA) 2004 - 2006
Campaign Representative: San Diego Mayoral Campaign, 2005

RELEVANT COURSEWORK / ACADEMIC EXPERIENCE / CONTINUING PROFESSIONAL DEVELOPMENT

Attendee: Association of Environmental Planners CEQA Workshop, *Understanding the California Environmental Process,* 10/2009
Attendee: City of San Diego City Planning & Community Investment Department, *Best Practices in Historic Preservation – A One Day Seminar*, 09/2009
Sustainable Urban Planning & Development (SDSU)
City Planning & GIS Applications (SDSU)
History of Urban Planning (SDSU)
Foundations of Planning and the Built Environment (Post-Baccalaureate Course, UCSD – Spring 2009)
Environmental Law (UCSD)
Law & Politics (UCSD)
Economic History of the United States (UCSD)

MEMBERSHIPS

American Planning Association (APA)
Association of Environmental Professionals (AEP)
San Diego Young Planners Group (YPG)

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SELECT PROJECTS / REPORTS / DOCUMENTATION

In Progress	*MCP Sustainable Community Planning Education (SCOPE)-Lab, City Heights International Marketplace Redevelopment Project*
March 2010	*Imig Manor/ Lafayette Hotel Part 2 20% Federal Rehabilitation Tax Credit Application*
January 2010	*CEQA Historical Resource Analysis Report, 2629 National Avenue, San Diego CA*
November 2009	*City of San Diego Redevelopment Agency of the City of San Diego, Historical Resource Review of 4102-4122 University Avenue, San Diego, CA*
November 2009	*CEQA Historical Resource Analysis Report, 7195 Country Club Drive, La Jolla, CA*
November 2009	*Imig Manor/ Lafayette Hotel Part 1 20% Federal Rehabilitation Tax Credit Application*
October 2009	*City of Santa Ana, Warner Avenue Transportation Study Historical Resource Survey, Santa Ana, CA*
August 2009	*CEQA and NHPA Section 106 Review of the Nike Missile Defense System - LA - 14/29 Commemorative Site, unincorporated Los Angeles, CA*
August 2009	*CEQA Historical Resource Analysis Report, 5511 Calumet Avenue, La Jolla, CA*
July 2009	*Code Compliance and Historical Resource Review, 2341 Irving Avenue, San Diego, CA*
July 2009	*Historical Resource Survey of the Fresno Unified School District Proposed M-4 Site, Fresno, CA*
June 2009	*Draft National Register of Historic Places Documentation & Eligibility Evaluation for the Middle Fork American River Hydroelectric Project, Placer County, CA*
May 2009	*CEQA Historical Resource Analysis Report, 1326 Park Row, La Jolla, CA*
May 2008	*Environmental Damage Due to U.S.-Mexico Border Enforcement Policies Report*
December 2007	*Impact of U.S.-Mexico Border Enforcement on Immigrant Settlement Project*

END

Appendix E
Preliminary Geotechnical Investigation

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PRELIMINARY GEOTECHNICAL EVALUATION
FOR
NORTH HEMET REVITALIZATION PROJECT
PROPOSED RESIDENTIAL AND COMMERCIAL DEVELOPMENT
CITY OF HEMET, RIVERSIDE COUNTY, CALIFORNIA

PREPARED FOR

THE PLANNING CENTER
1580 METRO DRIVE
COSTA MESA, CALIFORNIA 92626

PREPARED BY

GEOTEK, INC.
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PROJECT NO. 0602-CR3 **JUNE 11, 2010**

GEOTEK

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June 11, 2010
Project No. 0602-CR3

The Planning Center
1580 Metro Drive
Costa Mesa, California 92626

Attention: Ms. Nicole Vermilion

Subject: Preliminary Geotechnical Evaluation
North Hemet Revitalization Project
Proposed Residential and Commercial Development
City of Hemet, Riverside County, California

Dear Ms. Vermilion:

We are pleased to provide herein the results of our preliminary geotechnical evaluation for the subject site located in the City of Hemet, County of Riverside, California. This report presents the results of our evaluation, discussion of our findings, and provides geotechnical recommendations for foundation design and construction. In our opinion, site development appears feasible from a geotechnical viewpoint provided that the recommendations included herein are incorporated into the design and construction phases of site development.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to call our office.

Respectfully submitted,
GeoTek, Inc.

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Exp. 7-31-10
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STATE OF CALIFORNIA

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TABLE OF CONTENTS

1. PURPOSE AND SCOPE OF SERVICES 1

2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT 1

2.1 SITE DESCRIPTION 1

2.2 PROPOSED DEVELOPMENT 2

3. FIELD EXPLORATION AND LABORATORY TESTING 2

3.1 FIELD EXPLORATION 2

3.2 LABORATORY TESTING 2

4. GEOLOGIC AND SOILS CONDITIONS 3

4.1 REGIONAL SETTING 3

4.2 GENERAL SOIL CONDITIONS 3

4.2.1 Older Alluvium 3

4.3 SURFACE AND GROUNDWATER 4

4.3.1 Surface Water 4

4.3.2 Groundwater 4

4.4 FAULTING AND SEISMICITY 4

4.4.1 Seismic Design Parameters 4

4.5 LIQUEFACTION AND SEISMICALLY INDUCED SETTLEMENT 5

4.6 OTHER SEISMIC HAZARDS 5

5. CONCLUSIONS AND RECOMMENDATIONS 6

5.1 GENERAL 6

5.2 EARTHWORK CONSIDERATIONS 6

5.2.1 Site Clearing 6

5.2.2 Fills 7

5.2.3 Removals 7

5.2.4 Cut and Transition Subgrade 7

5.2.5 Excavation Characteristics 7

5.2.6 Shrinkage, Bulking, and Subsidence 8

5.3 DESIGN RECOMMENDATIONS 8

5.3.1 Foundation Design Criteria 8

5.3.2 Miscellaneous Foundation and Flatwork Recommendations 10

5.3.3 Settlement 11

5.3.4 Foundation Set Backs 11

5.3.5 Soil Corrosivity 11

5.3.6 Soil Sulfate Content 12

5.4 RETAINING WALL DESIGN AND CONSTRUCTION 12

5.4.1 General Design Criteria 12

5.4.2 Cantilevered Walls 12

5.4.3 Wall Backfill and Drainage 13

5.4.4 Restrained Retaining Walls 14

5.4.5 Other Retaining Wall Design Considerations 14

5.5 POST CONSTRUCTION CONSIDERATIONS 14

5.5.1 Landscape Maintenance and Planting 14

TABLE OF CONTENTS

5.5.2 Drainage *15*
5.6 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS 15

6. INTENT **16**

7. LIMITATIONS **16**

8. SELECTED REFERENCES **18**

ENCLOSURES

Figure 1 – Site Location Map
Figure 2 – General Site Topography Map
Figure 3 – Boring Location Map

Appendix A – Logs of Exploratory Borings
Appendix B – Results of Laboratory Testing
Appendix C – Earthwork Grading Guidelines

1. PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to evaluate the geotechnical conditions across the subject site. Services provided for this study included the following:

- Research and review of available geologic data and general information pertinent to the site,
- Site exploration consisting of the excavation, logging, and sampling of six exploratory borings,
- Laboratory testing of representative sample collected during the field investigation,
- Review and evaluation of site seismicity, and
- Compilation of this geotechnical report which presents our findings, conclusions, and recommendations for site development.

2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

2.1 SITE DESCRIPTION

The site is generally bounded by Oakland Avenue to the south, Alessandro Street to the west, State Street to the east, and an existing apartment complex (Hemet Vista Apartments) to the north, in the City of Hemet, Riverside County, California (see Figure 1).

The property consists of vacant land, residential structures (single-family residences and mobile homes/trailers) and commercial structures (bakery outlet, vacant Smart and Final, convenience store, auto repair and a hall for meetings).

An existing Eastern Municipal Water District (EMWD) sewer line exists within the west central portion of the site. If this line is to remain in place as part of the site redevelopment, additional field exploration may be required in order to evaluate the existing backfill soils, based on previous experience with a similar EMWD sewer line.

Topography of the irregular shaped property is relatively flat, with surface drainage primarily directed to the west/northwest (see Figure 2), but locally variable.

2.2 PROPOSED DEVELOPMENT

Based on a review of documents provided by you, proposed development consists of medium to high density residential areas, a commercial/community facility and park areas. Construction plans for the proposed buildings are currently not available for the project area. When plans become available, GeoTek should review them for compliance with the recommendations provided herein.

Based on our knowledge of the project and the topography of the site area, minor fills and cuts will most likely be required to bring the site to a design grades for proposed development. If site development differs from the assumptions made herein, the recommendations included in this report should be subject to further review and evaluation.

3. FIELD EXPLORATION AND LABORATORY TESTING

3.1 FIELD EXPLORATION

Field exploration was conducted on May 4, 2010 and consisted of excavating six exploratory hollow-stem auger borings with a hollow-stem drill rig (CME 75), to a maximum depth of approximately 51.5 feet. A geologist from our firm logged the excavations and collected samples for use in the laboratory testing. The logs of exploratory borings are included in Appendix A. The approximate boring locations are shown on the Boring Location Map (Figure 3).

3.2 LABORATORY TESTING

Laboratory testing was performed on selected relatively undisturbed and disturbed bulk soil samples collected during the field exploration. The purpose of the laboratory testing was to confirm the field classification of the soil materials encountered and to evaluate their physical properties for use in the engineering design and analysis. Results of the laboratory testing program along with a brief description and relevant information regarding testing procedures are included in Appendix B.

4. GEOLOGIC AND SOILS CONDITIONS

4.1 REGIONAL SETTING

The subject property is situated in the Peninsular Ranges province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. Basically, it extends roughly 975 miles from the north and northeasterly adjacent Transverse Ranges geomorphic province south to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province.

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Three major fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zones trend northwest-southeast and are found in the near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province.

4.2 GENERAL SOIL CONDITIONS

A brief description of the earth materials encountered is presented in the following section. Based on our site exploration and review of published geologic maps, the site is underlain by older alluvial soils. Minor amounts of undocumented fill soils may also be encountered during earthwork construction on the site area.

4.2.1 Older Alluvium

Older alluvial materials were encountered in all of the exploratory borings to the depths explored. These alluvial materials are generally described as gray brown to dark brown, slightly moist to moist, sands, silty sands and silts. Based on the results of the laboratory testing performed on representative soil samples, the onsite alluvial materials generally possess a "very low" expansion potential ($0<E\leq20$) in accordance with ASTM D 4829. The test results are shown in Appendix B.

4.3 SURFACE AND GROUNDWATER

4.3.1 Surface Water

If encountered during the earthwork construction, surface water on this site is the result of onsite irrigation practices, precipitation or surface run-off from surrounding sites. Overall area

drainage is in a west/northwesterly direction. Provisions for surface drainage will need to be accounted for by the project civil engineer.

4.3.2 Groundwater

Groundwater was not encountered during our subsurface exploration to the depths explored. According to a review of historical groundwater data (i.e. California Department of Water Resources groundwater well data (http://wdl.water.ca.gov), depths to groundwater within the vicinity of the subject site have been recorded to be greater than 100 feet bgs. Groundwater is not anticipated to adversely affect the proposed development if recommendations provided herein are incorporated into the design and construction phases of proposed site development. Additionally, groundwater or localized seepage can occur due to variations in rainfall, irrigation practices, and other factors not evident at the time of this investigation.

4.4 FAULTING AND SEISMICITY

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The site is in a seismically active region. No active or potentially active fault is known to exist at this site nor is the site situated within an *"Alquist-Priolo"* Earthquake Fault Zone, nor a State of California Special Studies Zone. Additionally, the site is not located in a County of Riverside designated fault zone or liquefaction zone.

4.4.1 Seismic Design Parameters

The central site area is located at approximately 33.757530 Latitude and -116.972868 Longitude. Site spectral accelerations (Ss and S_1), for 0.2 and 1.0 second periods for a Class "D" site, were determined from the USGS Website, Earthquake Hazards Program, Interpolated Probabilistic Ground Motion for the Conterminous 48 States by Latitude/Longitude, 2006 Data. The results are presented in the following table:

SITE SEISMIC PARAMETERS	
Mapped 0.2 sec Period Spectral Acceleration, S_S	1.833g
Mapped 1.0 sec Period Spectral Acceleration, S_1	0.689g
Site Coefficient for Site Class "D", F_a	1.0
Site Coefficient for Site Class "D", F_v	1.5
5% Damped Design Spectral Response Acceleration Parameter at 0.2 Second, S_{DS}	1.222g
5% Damped Design Spectral Response Acceleration Parameter at 1 second, S_{D1}	0.689g
Maximum Considered Earthquake Spectral Response Acceleration for 0.2 Second, S_{MS}	1.833g
Maximum Considered Earthquake Spectral Response Acceleration for 1.0 Second, S_{M1}	1.034g

4.5 LIQUEFACTION AND SEISMICALLY INDUCED SETTLEMENT

Liquefaction describes a phenomenon in which cyclic stresses, produced by earthquake-induced ground motion, create excess pore pressures in relatively cohesionless soils. These soils may thereby acquire a high degree of mobility, which can lead to lateral movement, sliding, consolidation and settlement of loose sediments, sand boils and other damaging deformations. This phenomenon occurs only below the water table; but after liquefaction has developed, it can propagate upward into overlying non-saturated soil as excess pore water dissipates.

The factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, confining pressures, and both intensity and duration of ground shaking. In general, materials that are susceptible to liquefaction are loose, saturated granular soils having low fines content under low confining pressures.

The liquefaction potential on the site is considered very low due to a combination of factors, including the relatively dense nature of the underlying materials, material types and lack of a shallow groundwater table.

4.6 OTHER SEISMIC HAZARDS

Evidence of ancient landslides or slope instabilities at this site was not observed during our investigation. Thus, the potential for landslides is considered negligible.

The potential for secondary seismic hazards such as seiche and tsunami are considered to be negligible due to site elevation and distance from an open body of water.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL

Development of the site appears feasible from a geotechnical viewpoint provided that the following recommendations are incorporated into the design and construction phases of development.

An existing Eastern Municipal Water District (EMWD) sewer line exists within the west central portion of the site. If this line is to remain in place as part of the site redevelopment, additional field exploration may be necessary in order to evaluate the existing backfill soils, based on previous experience with similar existing utility lines.

5.2 EARTHWORK CONSIDERATIONS

Earthwork and grading should be performed in accordance with the applicable grading ordinances of the City of Hemet and/or County of Riverside, the 2007 California Building Code (CBC), and recommendations contained in this report. The Grading Guidelines included in Appendix C outline general procedures and do not anticipate all site-specific situations. In the event of conflict, the recommendations presented in the text of this report supersede those contained in Appendix C. In addition, proposed site development including structure types and locations should be taken into consideration prior to determination of final remedial earthwork recommendations.

5.2.1 Site Clearing

In areas of planned grading or improvements, the site should be cleared of existing improvements, vegetation, roots, trash and debris. These deleterious materials should be properly disposed of offsite. Voids resulting from site clearing, tree removal, old foundations and/or sanitary pits and leach lines should be replaced with properly compacted fill materials with expansion characteristics similar to the onsite materials. These voids should not be filled until they have been observed by the geotechnical engineer's representative.

5.2.2 Fills

The onsite soils are considered suitable for reuse as engineered fill provided they are free from vegetation, debris and other deleterious material. The undercut areas should be brought to final subgrade elevations with fill materials placed and compacted in accordance with the general grading guidelines presented in Appendix C.

5.2.3 Removals

For building footprint area(s), and extending out at a 1:1 projection, undocumented fill soils and the upper five to ten feet of the alluvial soils, or two feet below the deepest foundation, whichever is deeper, should be removed and replaced as engineered fill. Additionally, for proposed parking areas, the upper five feet of the existing alluvial soils are anticipated to be relatively soft and should be removed and replaced as engineered fill.

The bottom of all removals should be scarified to a minimum depth of 12 inches, brought to at or above optimum moisture content, and then recompacted to minimum project standards.

Depending on actual field conditions encountered during grading and final design plans, deeper or shallower areas of removal may be recommended.

5.2.4 Cut and Transition Subgrade

If a transition subgrade (cut/fill line) exists under a proposed settlement-sensitive structure, the subgrade soils should be over-excavated a minimum of two feet below the bottom of the deepest proposed foundation so that any proposed footings are founded and underlain entirely by engineered fill. The overexcavation should extend a minimum of five feet outside the foundation perimeter, or at a 1:1 projection to competent materials, whichever is greater.

5.2.5 Excavation Characteristics

Excavation in the onsite materials is expected to be easy using heavy-duty grading equipment in good operating conditions. All temporary excavations for grading purposes and installation of underground utilities should be constructed in accordance with local and Cal-OSHA guidelines. Temporary excavations within the onsite materials should be stable at 1:1 (h:v) inclinations for cuts less than 10 feet in height.

5.2.6 Shrinkage, Bulking, and Subsidence

Several factors will impact earthwork balancing on the site, including shrinkage, bulking, subsidence, trench spoil from utilities and footing excavations, as well as the accuracy of topography.

Shrinkage, bulking and subsidence are primarily dependent upon the degree of compactive effort achieved during construction. For planning purposes, a shrinkage factor of 10 to 20 percent may be considered for the materials requiring removal and recompaction. Subsidence could range up to 0.1 foot. Bulking is not anticipated for the onsite materials.

5.3 DESIGN RECOMMENDATIONS

5.3.1 Foundation Design Criteria

Development plans for the project site should be reviewed by GeoTek, when available. Foundation design recommendations should ultimately be provided based on specific site development plans for the project.

Foundation design criteria for a conventional foundation system, in general conformance with the 2007 CBC, are presented herein. These are typical design criteria and are not intended to supersede the design by the structural engineer.

Based on the results of this investigation, the onsite soils near subgrade may be classified as very low expansive soils (EI≤20). Additional laboratory testing should be performed at the completion of site grading to verify the expansion potential of the subgrade soils.

A summary of our foundation design recommendations are presented in Table 5.3.1 below:

TABLE 5.3.1 – MINIMUM DESIGN REQUIREMENTS

DESIGN PARAMETER	0<EI≤20 & PI<15
Foundation Depth or Minimum Perimeter Beam Depth (inches below lowest adjacent grade)	Supporting One Floor – 12 Supporting Two Floors – 18
Foundation Width (Inches)	Supporting One Floor – 12 Supporting Two Floors – 15
Minimum Slab Thickness (inches)	4
Minimum Slab Reinforcing	No. 3 rebar 18" on-center, placed in the middle 1/3 of the slab
Minimum Footing Reinforcement	Two No. 4 Reinforcing Bars, one top one bottom
Presaturation of Subgrade Soil (Percent of Optimum/Depth in Inches)	100%/12 inches

It should be noted that the above recommendations are based on soil support characteristics only. The structural engineer should design the slab and beam reinforcement based on actual loading conditions.

The following criteria for design of foundations should be implemented into design:

5.3.1.1 An allowable bearing capacity of 1500 pounds per square foot (psf) may be used for design of continuous and perimeter footings 12 inches deep and 12 inches wide, and pad footings 24 inches square and 12 inches deep. This value may be increased by 200 pounds per square foot for each additional 12 inches in depth and 100 pounds per square foot for each additional 12 inches in width to a maximum value of 2,500 psf. Additionally, an increase of one-third may be applied when considering short-term live loads (e.g. seismic and wind loads).

5.3.1.2 The passive earth pressure may be computed as an equivalent fluid having a density of 250 psf per foot of depth, to a maximum earth pressure of 2,500 psf for footings founded on engineered fill. A coefficient of friction between soil and concrete of 0.25 may be used with dead load forces. The upper one foot of soil below the adjacent grade should not be used in calculating passive pressure. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

5.3.1.3 A grade beam, 12 inches wide by 12 inches deep (minimum), should be utilized across large opening or garage entrances. The base of the grade beam should be at the same elevation as the bottom of the adjoining footings.

5.3.1.4 A moisture and vapor retarding system should be placed below slabs-on-grade where moisture migration through the slab is undesirable. The retarding system should be comprised of suitable elements to prevent the migration of water and reduce transmission of water vapor to acceptable levels. The elements should have suitable properties (i.e. thickness, composition, strength, and permeance) to achieve the desired performance level. Historically, a 10-mil polyvinyl chloride membrane sandwiched between two layers of clean sand, each layer being at least one inch thickness, has been used for this purpose. The use of this system or others can be considered at the discretion of the designer, provided the system reduces the vapor transmission rates to acceptable level.

5.3.1.5 Isolated exterior footings should be tied back to the main foundation system in two orthogonal directions.

5.3.1.6 We recommend that control joints be placed in two directions spaced the numeric equivalent of two times the thickness of the slab in inches changed to feet (e.g. a 4 inch slab would have control joints at 8 feet centers). These joints are a widely accepted means to control cracks and should be reviewed by the project structural engineer.

5.3.2 Miscellaneous Foundation and Flatwork Recommendations

5.3.2.1 To minimize moisture penetration beneath the slab on grade areas, utility trenches should be backfilled with engineered fill, lean concrete or concrete slurry where they intercept the perimeter footing or thickened slab edge.

5.3.2.2 Soils from the footing excavations should not be placed in the slab-on-grade areas unless properly compacted and tested. The excavations should be free of loose/sloughed materials and be neatly trimmed at the time of concrete placement.

5.3.2.3 Control joints should be provided in interior slabs or exterior flatwork to help reduce random cracking. One of the simplest means to control cracking is to provide weakened (control) joints for cracking to occur along. These do not prevent cracks from developing; they simply provide a relief point for the stresses that develop. These joints are a widely accepted means to control the location of cracks. While control joints are not always effective, close spacing of control joints generally

increases their effectiveness. We recommend that control joints be placed in two orthogonal directions spaced the numeric equivalent of two times the thickness of the slab in inches changed to feet (e.g. a 4 inch slab would have control joints at 8 feet centers). Control joint locations and spacing should be reviewed by the project structural engineer.

5.3.2.4 Subgrade soils for concrete flatwork should be moisture conditioned to near optimum moisture content prior to placing concrete.

5.3.3 Settlement

The anticipated total and differential settlements are estimated less than 2 inches and 1 inch over 40 feet of horizontal distance, respectively.

5.3.4 Foundation Set Backs

Where applicable, the following setbacks should apply to all foundations. Any improvements not conforming to these setbacks may be subject to lateral movements and/or differential settlements:

- The outside bottom edge of all footings should be set back a minimum of H/3 (where H is the slope height) from the face of any descending slope. The setback should be at least 7 feet and need not exceed 40 feet.
- The bottom of all footings for structures near retaining walls should be deepened so as to extend below a 1:1 projection upward from the bottom inside edge of the wall stem.
- The bottom of any existing foundations for structures should be deepened so as to extend below a 1:1 projection upward from the bottom of the nearest excavation.

5.3.5 Soil Corrosivity

The soil resistivity at this site was tested in the laboratory on representative samples collected during the field investigation. The results of the testing indicate that the onsite soils are considered moderately corrosive to corrosive to buried metal in accordance with current standards commonly used by corrosion engineers. These characteristics are considered typical of soils commonly found in southern California. We recommend that a corrosion engineer be consulted to provide recommendations for proper protection of buried metal at this site.

5.3.6 Soil Sulfate Content

The sulfate content was determined in the laboratory for two representative onsite soil samples. The results indicate that the water soluble sulfate range is less than 0.1 percent by weight, which is considered negligible as per Table 4.2.1 of ACI 318. Based upon the test results, type II cement or an equivalent may be used.

5.4 RETAINING WALL DESIGN AND CONSTRUCTION

5.4.1 General Design Criteria

Recommendations presented herein may apply to typical masonry or concrete vertical retaining walls to a maximum height of up to 10 feet. Additional review and recommendations should be requested for higher walls.

Retaining wall foundations embedded a minimum of 12 inches into engineered fill or dense formational materials should be designed using an allowable bearing capacity of 1,500 psf. An increase of one-third may be applied when considering short-term live loads (e.g. seismic and wind loads). The passive earth pressure may be computed as an equivalent fluid having a density of 250 psf per foot of depth, to a maximum earth pressure of 2,500 psf. A coefficient of friction between soil and concrete of 0.25 may be used with dead load forces. The upper one foot of soil below the adjacent grade should not be used in calculating passive pressure. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

The above values may be increased as allowed by Code to resist short-term transient loads (e.g. seismic and wind loads).

5.4.2 Cantilevered Walls

The recommendations presented below are for cantilevered retaining walls up to 10 feet high. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections. An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions such as traffic, structures, seismic events, or adverse geologic conditions.

ACTIVE EARTH PRESSURES

Surface Slope of Retained Materials (h:v)	Equivalent Fluid Pressure (pcf) Select Backfill*	Equivalent Fluid Pressure (pcf) Native Backfill
Level	35	45
2:1	50	60

*Select backfill may consist of Class 2 permeable filter materials, Class 2 aggregate base or imported Sand with an SE>30. Backfill zone includes area between back of wall to plane (1:1, h:v) up from back of wall foundation to ground surface.

Additional lateral forces can be induced on retaining walls during an earthquake. For level backfill and a Site Class "D", the minimum earthquake-induced force (F_{eq}) should be $20H^2$ (lbs/linear foot of wall). This force can be assumed to act at a distance of 0.6H above the base of the wall, where "H" is the height of the retaining wall measured from the base of the footing (in feet).

5.4.3 Wall Backfill and Drainage

The onsite soils characterized as having "very low" expansion potential may be used for backfill provided they are screened of greater than 3-inch size gravels. Wall backfill should include a minimum one foot wide section of 3/4 to 1-inch clean crushed rock (or approved equivalent). The rock should be placed immediately adjacent to the back of wall and extend up from the back drain to within approximately 12 inches of finish grade. The upper 12 inches should consist of compacted onsite materials. Presence of other materials might necessitate revision to the parameters provided and modification of wall designs. The backfill materials should be placed in lifts no greater than 8-inches in thickness and compacted at 90% relative compaction in accordance with ASTM Test Method D 1557. Proper surface drainage needs to be provided and maintained.

Retaining walls should be provided with an adequate pipe and gravel back drain system to prevent build up of hydrostatic pressures. Backdrains should consist of a 4-inch diameter perforated collector pipe embedded in a minimum of one cubic foot per lineal foot of 3/4 to one inch clean crushed rock or equivalent, wrapped in filter fabric. The drain system should be connected to a suitable outlet. A minimum of two outlets should be provided for each drain section. Spacing between drain outlets should not exceed 100 feet. Waterproofing of site walls should be performed where moisture migration through the wall is undesirable.

Walls from 2 to 4 feet in height may be drained using localized gravel packs behind weep holes at 10 feet maximum spacing (e.g. approximately 1.5 cubic feet of gravel in a woven plastic bag). Weep holes should be provided or the head joints omitted in the first course of block extended above the ground surface. However, nuisance water may still collect in front of the wall.

5.4.4 Restrained Retaining Walls

Retaining walls that will be restrained prior to placing and compacting backfill material or that have reentrant or male corners, should be designed for an at-rest equivalent fluid pressure of 65 pcf, plus any applicable surcharge loading. For areas of male or reentrant corners, the restrained wall design should extend a minimum distance of twice the height of the wall laterally from the corner.

5.4.5 Other Retaining Wall Design Considerations

- Retaining wall foundation elements should be designed in accordance with building code setback requirements.
- Passive earth pressure coefficients used in the design of retaining walls should consider descending slope conditions. Passive pressures should be reduced by one-half in the case of descending 2:1 (h:v) gradient slopes.
- Retaining wall design should consider the additional surcharge loads from superjacent slopes and/or footings, where appropriate.
- No backfill should be placed against concrete until minimum design strengths are evidenced by compression tests of cylinders.
- The retaining wall footing excavations, backcuts, and backfill materials should be approved the project geotechnical engineer or their authorized representative.

5.5 POST CONSTRUCTION CONSIDERATIONS

5.5.1 Landscape Maintenance and Planting

Water has been shown to weaken the inherent strength of soil, and slope stability is significantly reduced by overly wet conditions. Positive surface drainage away from graded slopes should be maintained and only the amount of irrigation necessary to sustain plant life should be provided for planted slopes. Controlling surface drainage and runoff, and maintaining a suitable vegetation cover can minimize erosion. Plants selected for landscaping should be

lightweight, deep-rooted types that require little water and are capable of surviving the prevailing climate.

Overwatering should be avoided. The soils should be maintained in a solid to semi-solid state as defined by the materials Atterberg Limits. Care should be taken when adding soil amendments to avoid excessive watering. Leaching as a method of soil preparation prior to planting is not recommended. An abatement program to control ground-burrowing rodents should be implemented and maintained. This is critical as burrowing rodents can decreased the long-term performance of slopes.

It is common for planting to be placed adjacent to structures in planter or lawn areas. This will result in the introduction of water into the ground adjacent to the foundation. This type of landscaping should be avoided. If used, then extreme care should be exercised with regard to the irrigation and drainage in these areas. Waterproofing of the foundation and/or subdrains may be warranted and advisable. We could discuss these issues, if desired, when plans are made available.

5.5.2 Drainage

The need to maintain proper surface drainage and subsurface systems cannot be overly emphasized. Positive site drainage should be maintained at all times. Drainage should not flow uncontrolled down any descending slope. Water should be directed away from foundations and not allowed to pond or seep into the ground. Pad drainage should be directed toward approved area(s) and not be blocked by other improvements.

It is the owner's responsibility to maintain and clean drainage devices on or contiguous to their lot. In order to be effective, maintenance should be conducted on a regular and routine schedule and necessary corrections made prior to each rainy season.

5.6 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS

We recommend that site grading, specifications, and foundation plans be reviewed by this office prior to construction to check for conformance with the recommendations of this report. We also recommend that GeoTek representatives be present during site grading and foundation construction to check for proper implementation of the geotechnical recommendations. These representatives should perform at least the following duties:

- Observe site clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe and test bottom of removals prior to fill placement.

- Evaluate the suitability of on-site and import materials for fill placement, and collect soil samples for laboratory testing where necessary.
- Observe the fill for uniformity during placement including utility trenches. Also, test the fill for field density and relative compaction.
- Observe and probe foundation materials to confirm suitability of bearing materials.

If requested, GeoTek can provide a construction observation and compaction report, to comply with the requirements of the governmental agencies having jurisdiction over the project, for the site. We recommend that these agencies be notified prior to commencement of construction so that necessary grading permits can be obtained.

6. INTENT

It is the intent of this report to aid in the design and construction of the proposed development. Implementation of the advice presented in Section 5 of this report is intended to reduce risk associated with construction projects. The professional opinions and geotechnical advice contained in this report are not intended to imply total performance of the project or guarantee that unusual or variable conditions will not be discovered during or after construction.

The scope of our evaluation is limited to the area explored as shown on the enclosed Boring Location Map (Figure 3). This evaluation does not and should in no way be construed to encompass any areas beyond the specific area of proposed improvements as indicated to us by the client. Further, no evaluation of any existing site improvements is included. The scope is based on our understanding of the project and the client's needs, our proposal (Proposal No. P3-1100607) dated October 31, 2007 and geotechnical engineering standards normally used on similar projects in this region.

7. LIMITATIONS

The materials observed on the project site appear to be representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during site construction. Site conditions may vary due to seasonal changes or other factors. GeoTek, Inc. assumes no responsibility or liability for work, testing or recommendations performed or provided by others.

Since our recommendations are based on the site conditions observed and encountered, and laboratory testing, our conclusion and recommendations are professional opinions that are limited to the extent of the available data. Observations during construction are important to allow for any change in recommendations found to be warranted. These opinions have been derived in accordance with current standards of practice and no warranty is expressed or implied. Standards of practice are subject to change with time.

8. SELECTED REFERENCES

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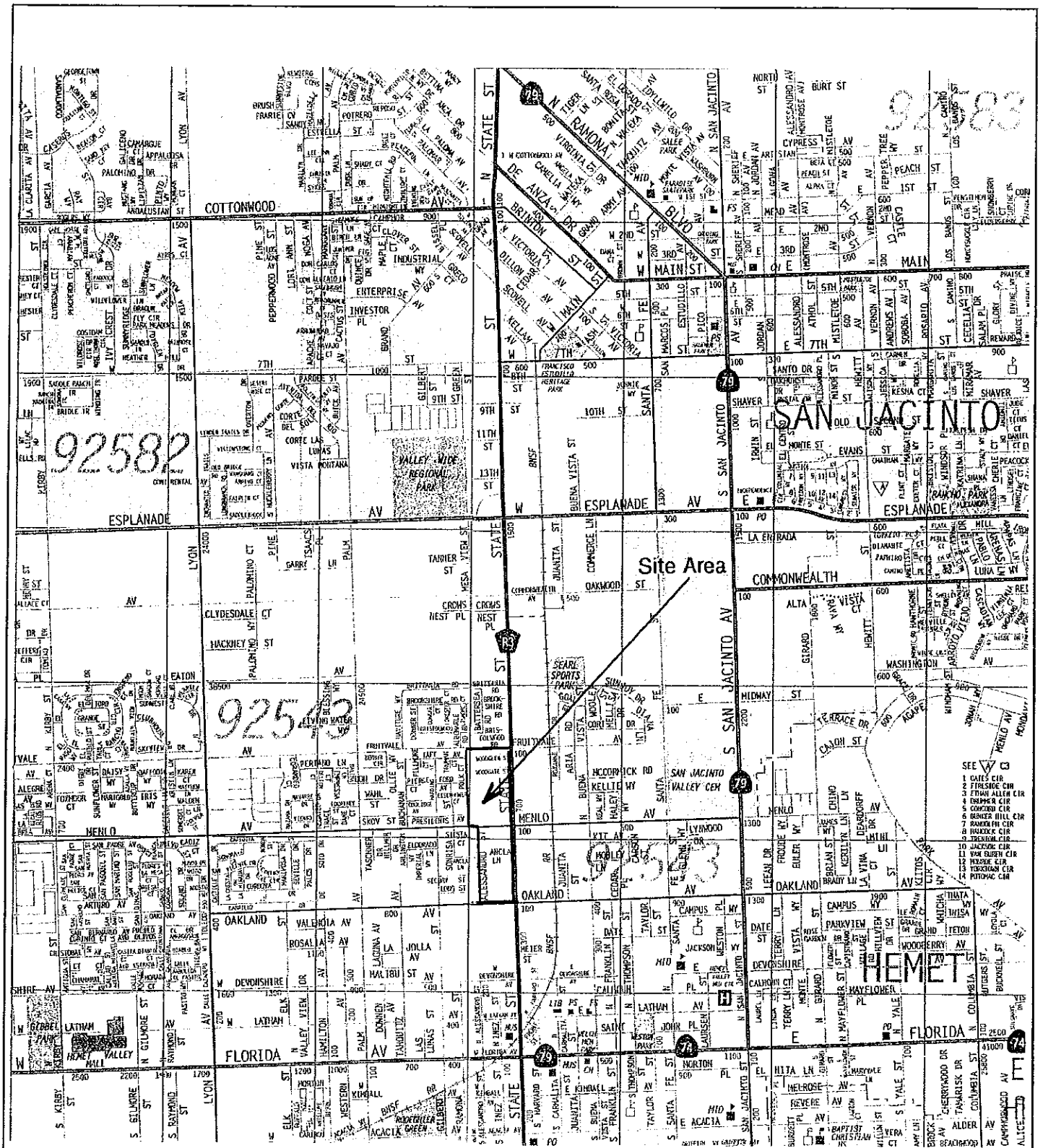
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The Planning Center
North Hemet Revitalization Project
City of Hemet
Riverside County, California

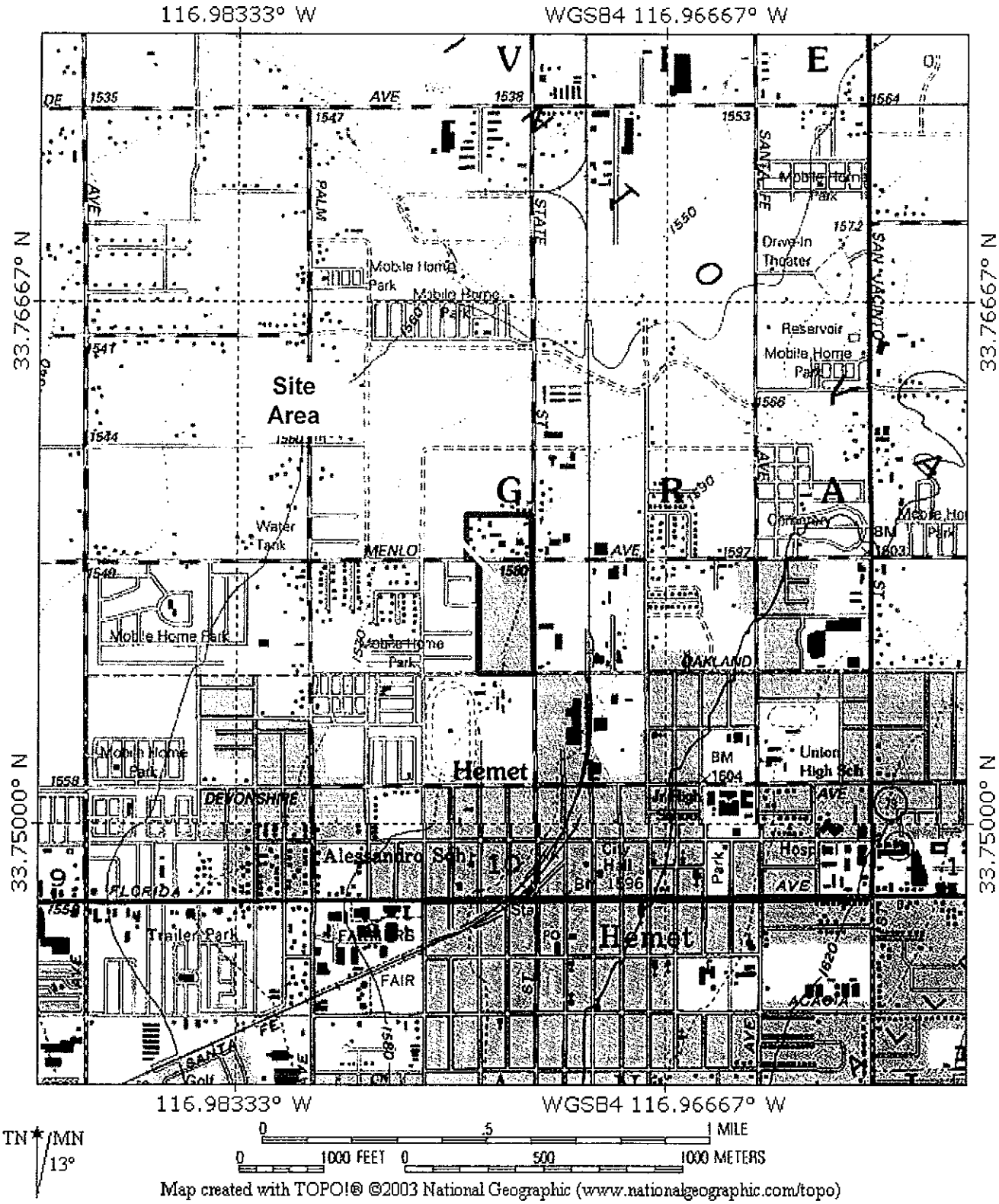
GeoTek Project No.: 0602-CR3

Modified from The Thomas Guide, Riverside County, Scale: 1" = 2400'

Figure 1

Site Location Map

GEOTEK



The Planning Center
North Hemet Revitalization Project
City of Hemet
Riverside County, California

GeoTek Project No.: 0602-CR3

Modified from USGS 7.5 Topographic Map

Figure 2

General Site Topography Map

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LEGEND

B-6 ● Approximate Location of Exploratory Boring

The Planning Center
North Hemet Revitalization Project
City of Hemet
Riverside County, California

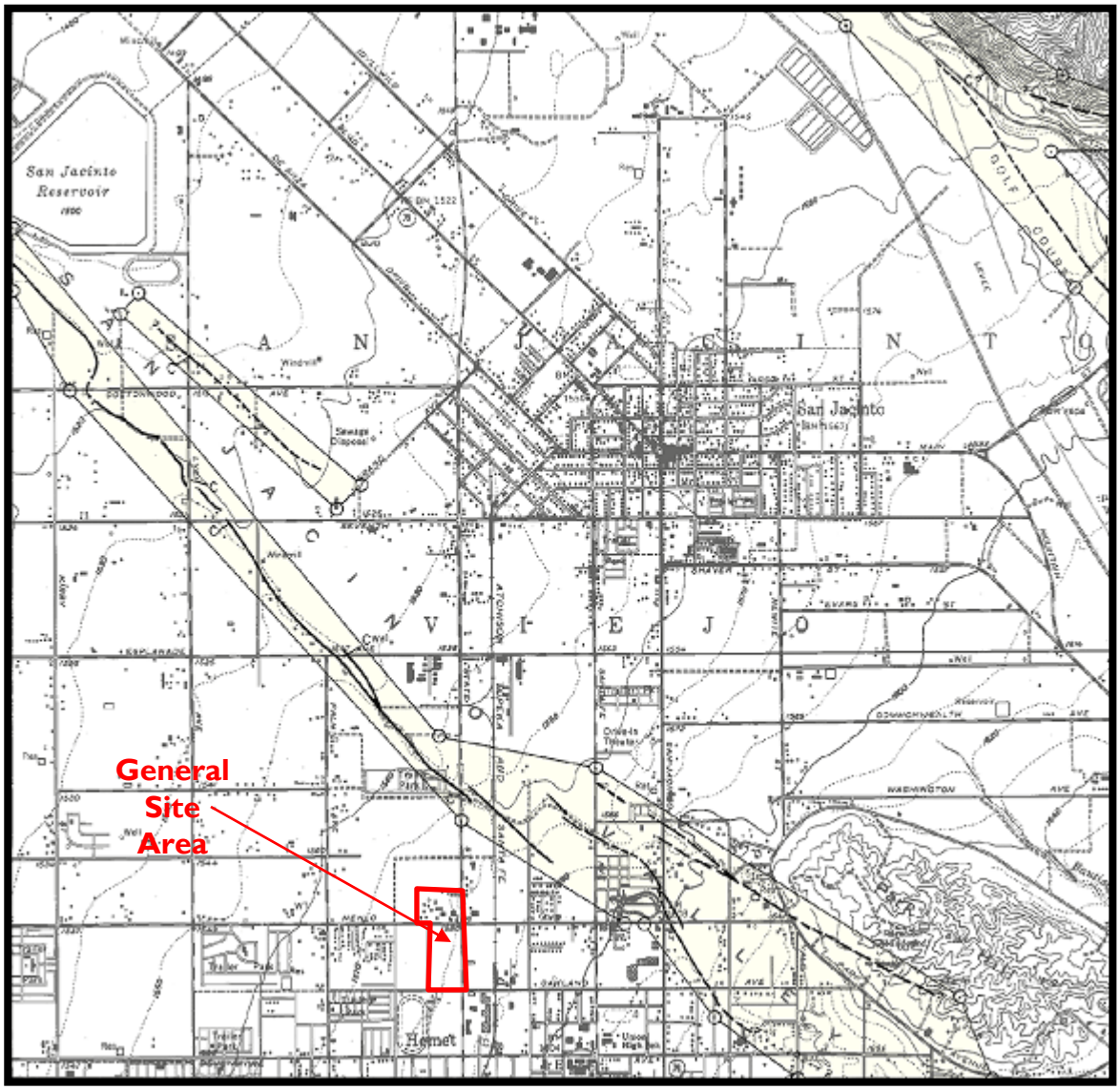
GeoTek Project No.: 0602-CR3

N

Figure 3

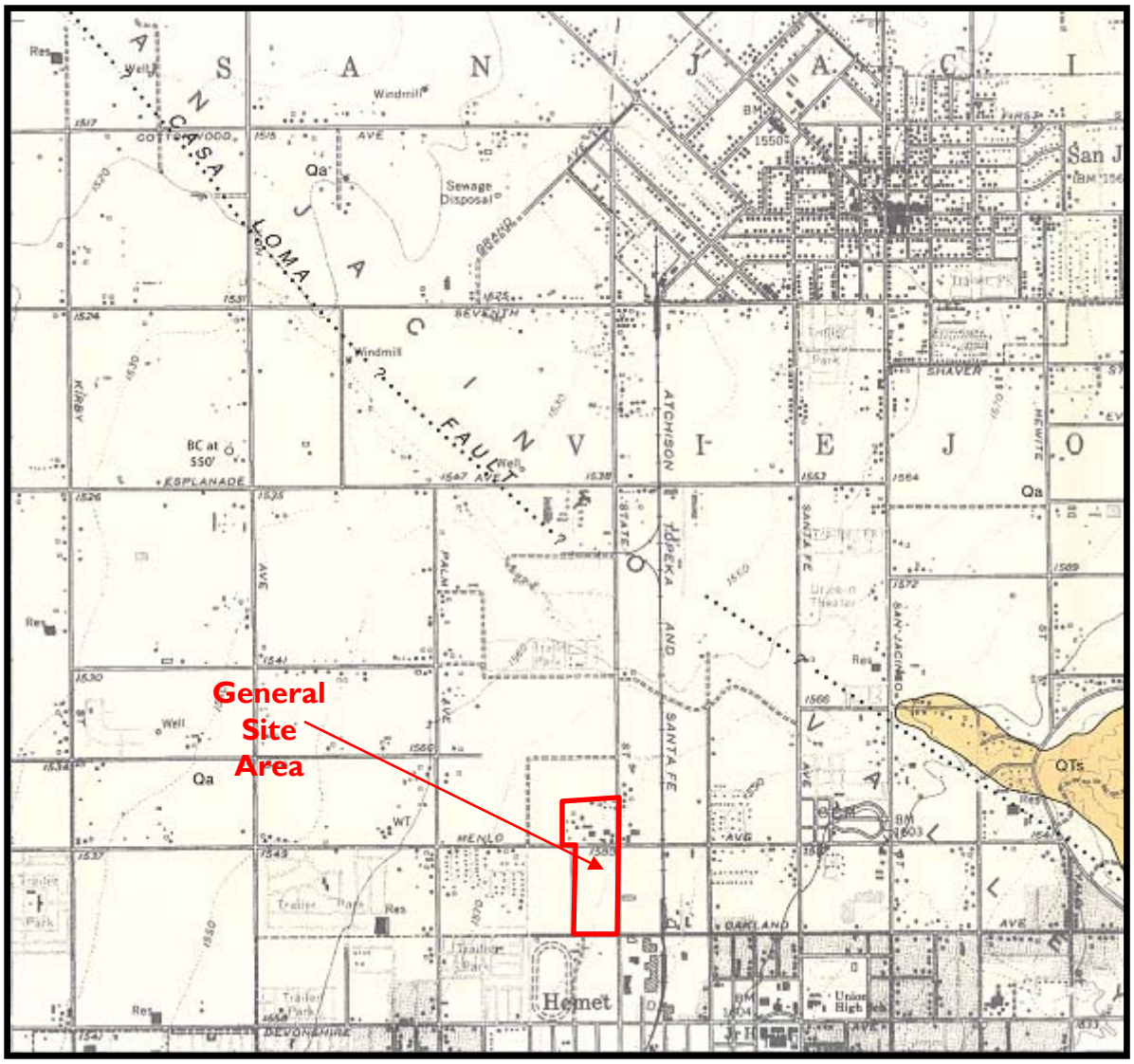
Boring Location Map

GEOTEK



Modified from State of California Special Studies Zones, San Jacinto Quadrangle, 1980, Scale: 1:24,000

The Planning Center North Hemet Revitalization Project City of Hemet Riverside County, California GeoTek Project No.: 0602-CR3	N	**Fault Location Map**	GEOTEK



LEGEND

Qg / Qa

SURFICIAL SEDIMENTS

Alluvial sediments, unconsolidated, undissected

Qg *Alluvial sand and gravel of major stream channels*

Qa *Alluvial sand and clay of valley areas, covered by gray soil, includes stream channel gravel and sand in mountain area*

Modified from Geologic Map of the San Jacinto Quadrangle, 2003, Scale: 1:24,000

The Planning Center
North Hemet Revitalization Project
City of Hemet
Riverside County, California

GeoTek Project No.: 0602-CR3

N

Geologic Map

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APPENDIX A

LOGS OF EXPLORATORY BORINGS

BORINGS B-1 THROUGH B-6

North Hemet Revitalization Project
City of Hemet, Riverside County, California
Project No. 0602-CR3

GEOTEK

A - FIELD TESTING AND SAMPLING PROCEDURES

The Standard Penetration Test (SPT)

The SPT is performed in accordance with ASTM Test Method D 1586. The SPT sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The split-barrel sampler has an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The samples of earth materials collected in the sampler are typically classified in the field, bagged, sealed and transported to the laboratory for further testing.

The Modified Split-Barrel Sampler (Ring)

The Ring sampler is driven into the ground in accordance with ASTM Test Method D 3550. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

Bulk Samples (Large)

These samples are normally large bags of representative earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of representative earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.

B - BORING LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the logs of borings:

SOILS

USCS	Unified Soil Classification System
f-c	Fine to coarse
f-m	Fine to medium

GEOLOGIC

B: Attitudes	Bedding: strike/dip
J: Attitudes	Joint: strike/dip
C:	Contact line
.....	Dashed line denotes USCS material change
_____	Solid Line denotes unit / formational change
_____	Thick solid line denotes end of boring

(Additional denotations and symbols are provided on the log of boring)

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

Depth (ft)	SAMPLES: Sample Type	SAMPLES: Blows/ 6 in	SAMPLES: Sample Number	USCS Symbol	BORING NO.: *B-1* / MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
				ML	Alluvium: Fine sandy SILT (ML), dark brown, dry, soft			SA, MD, EI, SR, SH
5		3 5 6	B1-1	ML	Fine sandy SILT (ML), dark brown, slightly moist, soft to firm	7.2	100.0	HC
10		7 12 13	B1-2	SP	Fine SAND (SP), light gray brown, slightly moist, medium dense	1.6	99.4	
15		6 11 12	B1-3	ML	Fine sandy SILT (ML), light gray brown, slightly moist, firm	7.1	94.5	
20		7 10 12	B1-4	SP/ML	Fine SAND (SP), gray and SILT (ML), gray brown, slightly moist, medium dense			
25					BORING TERMINATED AT 21.5 FEET No groundwater encountered Boring backfilled with soil cuttings			
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

BORING NO.: *B-2*

Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Water Content (%)	Dry Density (pcf)	Others
					Alluvium:			
5		2 3 7	B2-1	ML	Fine sandy SILT (ML), dark brown to gray brown, dry to slightly moist, soft	8.2	86.5	
10		5 6 9	B2-2	SM	Silty fine SAND (SM), light gray brown, slightly moist, medium dense	5.4	92.0	
15		6 15 13	B2-3	SP	Fine SAND (SP), light gray brown, slightly moist, medium dense	4.4	102.9	
		7 12 15	B2-4	SP/ML	Fine SAND (SP), light gray brown and SILT (ML), light gray brown, slightly moist, medium dense	11.5	85.4	
20					BORING TERMINATED AT 18.5 FEET No groundwater encountered Boring backfilled with soil cuttings			
25								
30								

Laboratory Testing

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

BORING NO.: *B-3*

Depth (ft)	SAMPLES: Sample Type	SAMPLES: Blows/ 6 in	SAMPLES: Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
				ML	Alluvium: Fine sandy SILT (ML), dark brown, dry, soft			
5		6 7 9	B3-1	SP	f-m SAND (SP), gray brown and gray mottled, slightly moist, medium dense	2.5	93.8	
10		6 10 12	B3-2	SP	Fine SAND (SP), light gray brown, slightly moist, medium dense	4.8	108.9	HC
15		7 11 14	B3-3	SP/ML	Fine SAND (SP) and SILT (ML), interbedded, light gray brown and gray mottled, slightly moist, medium dense	7.9	93.6	
20		11 18 24	B3-4	SP/SM	Medium SAND (SP) and silty fine SAND (SM), medium gray to light gray brown, slightly moist, medium dense	4.4	101.3	
25								
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

Depth (ft)	SAMPLES: Sample Type	SAMPLES: Blows/ 6 in	SAMPLES: Sample Number	USCS Symbol	BORING NO.: *B-3 (continued)* — MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
35		8 15 16	B3-5	SM/ML	continued: Silty fine SAND (SM) and SILT (ML), medium brown to gray, slighlty moist, medium dense			
40		10 13 30	B3-6	SP	Fine SAND (SP), light gray brown, slightly moist, dense			
45								
50		15 26 32	B3-7	SM/ML	Silty fine SAND (SM) to fine sandy SILT (ML), medium brown, slightly moist, dense			
					BORING TERMINATED AT 51.5 FEET No groundwater encountered Boring backfilled with soil cuttings			
55								
60								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

BORING NO.: *B-4*

Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
					Alluvium:			
5		2 3 4	B4-1	SM	Silty fine SAND (SM), medium brown, dry, loose	7.6	96.3	
10		5 9 10	B4-2	SM	Silty fine SAND (SM), light gray brown, slightly moist, medium dense	2.5	95.8	SA, HC
15		5 9 12	B4-3	SP	Fine SAND (SP), light gray brown, slightly moist, medium dense	4.1	99.4	
		7 12 13	B4-4	SP/SM	Fine SAND (SP) to silty fine SAND (SM), light gray brown, slightly moist, medium dense	2.9	96.5	
20					BORING TERMINATED AT 18.5 FEET No groundwater encountered Boring backfilled with soil cuttings			
25								
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME:	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

BORING NO.: *B-5*

Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Water Content (%)	Dry Density (pcf)	Others
				ML	Alluvium: Fine sandy SILT (ML), dark brown, dry, soft			
5		5 6 8	B5-1	SM	Silty fine SAND (SM), light gray brown, slightly moist, loose to medium dense	3.9	103.7	HC SH, MD, EI, SR
10		7 9 12	B5-2		SAME	2.0	107.9	
15		5 8 9	B5-3	SM/ML	Silty fine SAND (SM) to fine sandy SILT (ML), medium brown, slightly moist, dense	4.5	85.1	
20		8 14 15	B5-4	SP	F-m SAND (SP), gray brown, slightly moist, medium dense			
					BORING TERMINATED AT 21.5 FEET No groundwater encountered Boring backfilled with soil cuttings			
25								
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	The Planning Center	DRILLER:	2R Drilling	LOGGED BY:	AMS
PROJECT NAME	North Hemet Revitalization	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Rudy
PROJECT NO.:	0602-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Map			DATE:	5/4/2010

BORING NO.: *B-6*

Depth (ft)	SAMPLES: Sample Type	SAMPLES: Blows/ 6 in	SAMPLES: Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
					Alluvium:			
		4 5 6	B6-1	SM	Silty fine SAND (SM), medium brown, dry, loose			
5								
		12 14 16	B6-2	SM	Silty fine SAND (SM), medium brown to gray brown, slightly moist, medium dense	4.2	117.6	
10								
		3 5 7	B6-3	SM	Silty fine SAND (SM), medium brown, slightly moist, medium dense	6.7	96.6	SA
15								
		6 8 9	B6-4		SAME	4.8	108.7	
					BORING TERMINATED AT 18.5 FEET			
20					No groundwater encountered Boring backfilled with soil cuttings			
25								
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

APPENDIX B

RESULTS OF LABORATORY TESTING

North Hemet Revitalization Project
City of Hemet, Riverside County, California
Project No. 0602-CR3

SUMMARY OF LABORATORY TESTING

Classification

Soils were classified visually according to the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the logs of exploratory borings included in Appendix A.

Moisture-Density Relations

Laboratory testing was performed on samples collected during the subsurface exploration. The laboratory maximum dry density and optimum moisture content for representative soil types was determined in general accordance with test method ASTM Test Procedure D 1557. The results are included herein on Plates MD-1 and MD-2.

Expansion Index

Expansion Index testing was performed on selected soil samples. Testing was performed in general accordance with ASTM Test Method D 4829. The Expansion Index (EI) test results indicate a very low expansion potential. The result is included herein on Plates EI-1 and EI-2.

Sulfate Content

Analysis to determine the water-soluble sulfate content was performed by others in accordance with California Test No. 417. Results of the testing indicated a 0.0130% and 0.0440% by weight sulfate content, which is considered negligible as per Table 4.2.1 of ACI 318. The results are included herein.

Resistivity

Soil samples deemed representative were tested by others for resistivity in accordance with California Test 643. The results of the testing are included herein.

Consolidation Test

Consolidation testing was performed on selected samples of the site soils according to ASTM Test Method D 2435. The results of this testing is presented on Plates HC-1 through HC-4.

Direct Shear Test

Shear testing was performed on a remolded sample of the site soil materials in general accordance with ASTM Test Method D 3080. The test results are included herein on Plates SH-1 and SH-2.

Particle Size Analysis

Sieve analyses were performed on selected site soil samples per ASTM D 1140 and D 422. The results of these tests are presented herein.

GEOTEK

4130 Flat Rock Drive, Suite 140, Riverside, CA, 92505-5864

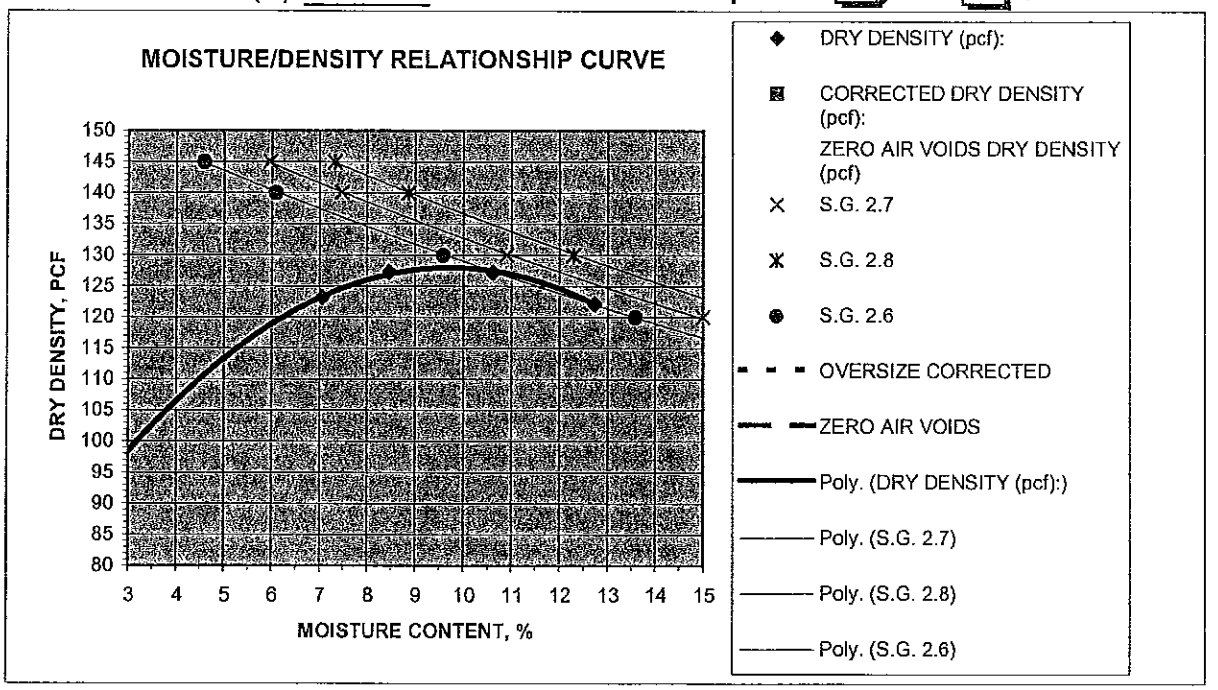
951-710-1160 Office 951-710-1167 Fax

MOISTURE/DENSITY RELATIONSHIP

Client: The Planning Center
Project: North Hemet Revitalization
Location: Hemet
Material Type: Brown Silty Fine Sand/Fine Sandy Silt
Material Supplier: N/A
Material Source: 0
Sample Location: B - 1 @ 0 - 5'
Sampled By: AMS
Received By: N/A
Tested By: EV
Reviewed By: N/A

Job No.: 0602-CR3
Lab No.: Riv
Date Sampled: 4-May-10
Date Received: 4-May-10
Date Tested: 7-May-10
Date Reviewed: 28-May-10

Test Procedure: ASTM 1557 **Method:** 0
Oversized Material (%): 0.0 **Correction Required:** ☐ yes ☐ no



MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf	128.0	**@ Optimum Moisture, %**	9.5
Corrected Maximum Dry Density, pcf		**@ Optimum Moisture, %**	

MATERIAL DESCRIPTION

Grain Size Distribution:

	% Gravel (retained on No. 4)
	% Sand (Passing No. 4, Retained on No. 200)
	% Silt and Clay (Passing No. 200)

Atterberg Limits:

	Liquid Limit, %
	Plastic Limit, %
	Plasticity Index, %

Classification:

Unified Soils Classification: SM/ML
AASHTO Soils Classification:

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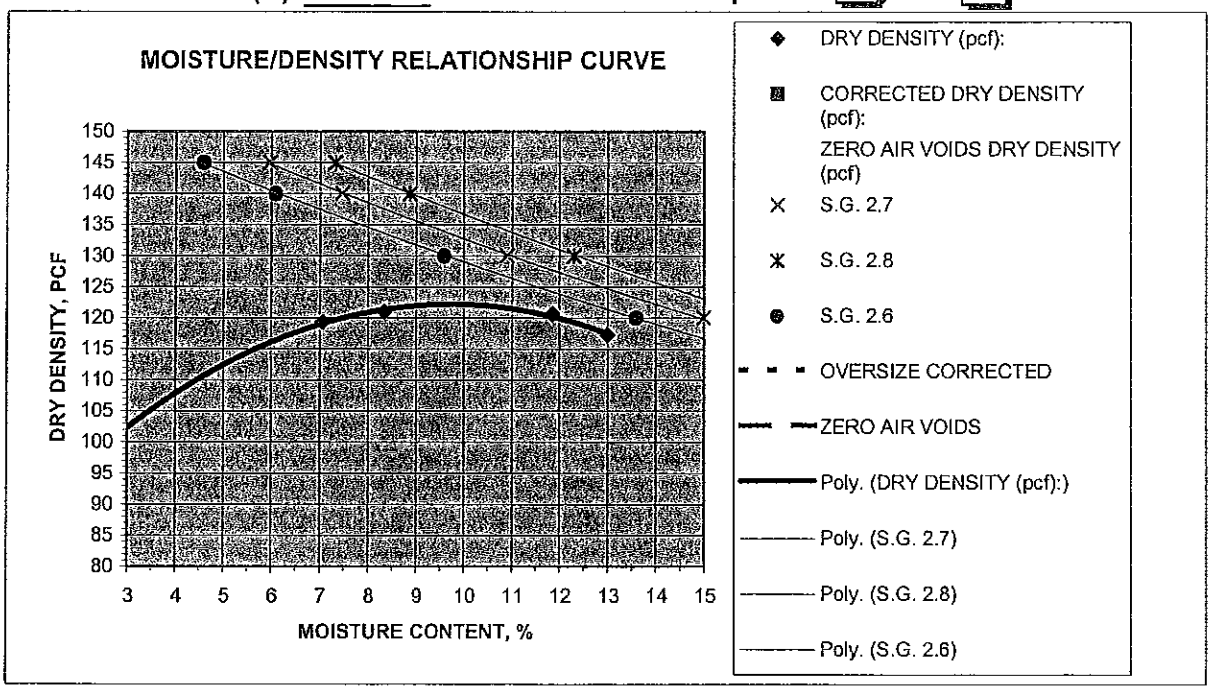
951-710-1160 Office 951-710-1167 Fax

MOISTURE/DENSITY RELATIONSHIP

Client:	The Planning Center	**Job No.:**	0602-CR3
Project:	North Hemet Revitalization	**Lab No.:**	Riv
Location:	Hemet		
Material Type:	Gray Silty Sand		
Material Supplier:	N/A		
Material Source:	0		
Sample Location:	B - 5 @ 5 - 10'		
Sampled By:	AMS	**Date Sampled:**	4-May-10
Received By:	N/A	**Date Received:**	4-May-10
Tested By:	EV	**Date Tested:**	10-May-10
Reviewed By:	N/A	**Date Reviewed:**	28-May-10

Test Procedure: ASTM 1557 **Method:** 0

Oversized Material (%): 0.0 **Correction Required:** ☐ yes ☐ no



MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf	122.0	**@ Optimum Moisture, %**	10.0
Corrected Maximum Dry Density, pcf		**@ Optimum Moisture, %**	

MATERIAL DESCRIPTION

Grain Size Distribution:

	% Gravel (retained on No. 4)
	% Sand (Passing No. 4, Retained on No. 200)
	% Silt and Clay (Passing No. 200)

Atterberg Limits:

	Liquid Limit, %
	Plastic Limit, %
	Plasticity Index, %

Classification:

Unified Soils Classification: SM

AASHTO Soils Classification:

GEOTEK

EXPANSION INDEX TEST

(ASTM D4829)

Client:	The Planning Center	***Tested/ Checked By:***	EV Lab No Riv
Project Number:	0602-CR3	***Date Tested:***	5/14/2010
Project Location:	Hemet	***Sample Source:***	B - 1 @ 0 - 5'
		Sample Description:	Brown Sandy Silt/Silty Sand

Ring Id 12 Ring Dia. " 4" Ring I 1"

Loading weight: 5516. grams

DENSITY DETERMINATION

A	Weight of compacted sample & ring	775.9
B	Weight of ring	364.1
C	Net weight of sample	411.8
D	Wet Density, lb / ft3 (C*0.3017)	124.2
E	Dry Density, lb / ft3 (D/1.F)	**114.0**

SATURATION DETERMINATION

F	Moisture Content, %	9.0
G	(E*F)	1025.8
H	(E/167.48)	0.68
I	(1.-H)	0.32
J	(62.4*I)	19.9
K	(G/J)= L % Saturation	**51.5**

READINGS

DATE	TIME	READING	
5/14/2010	10:20	0.1520	Initial
5/14/2010	10:30	0.1520	10 min/Dry
5/14/2010	10:31	0.1500	1 min/Wet
5/14/2010	10:36	0.1500	5 min/Wet
5/14/2010	3:00	0.1500	Random
5/15/2010	10:20	0.1640	Final

FINAL MOISTURE

Weight of wet sample & tare	Weight of dry sample & tare	Tare	% Moisture
804.4	745.7	364.1	**15.4%**

EXPANSION INDEX = 13

(@50% SATURATION)

E-41

Plate EI-1

GEOTEK

EXPANSION INDEX TEST

(ASTM D4829)

Client:	The Planning Center	***Tested/ Checked By:***	EV Lab No Riv
Project Number:	0602-CR3	***Date Tested:***	5/14/2010
Project Location:	Hemet	***Sample Source:***	B - 5 @ 5 - 10'
		Sample Description:	Gray Silty Sand

Ring Id 12 Ring Dia. " 4" Ring H 1"

Loading weight: 5516. grams

DENSITY DETERMINATION

A	Weight of compacted sample & ring	768.5
B	Weight of ring	364.0
C	Net weight of sample	404.5
D	Wet Density, lb / ft3 (C*0.3017)	122.0
E	Dry Density, lb / ft3 (D/1.F)	**112.0**

SATURATION DETERMINATION

F	Moisture Content, %	9.0
G	(E*F)	1007.7
H	(E/167.48)	0.67
I	(1.-H)	0.33
J	(62.4*I)	20.7
K	(G/J)= L % Saturation	**48.7**

READINGS

DATE	TIME	READING	
5/14/2010	10:20	0.3610	Initial
5/14/2010	10:30	0.3610	10 min/Dry
5/14/2010	10:31	0.3610	1 min/Wet
5/14/2010	10:36	0.3620	5 min/Wet
5/14/2010	3:00	0.3620	Random
5/15/2010	10:20	0.3680	Final

FINAL MOISTURE

Weight of wet sample & tare	Weight of dry sample & tare	Tare	% Moisture
788.7	737.4	364.0	**13.7%**

EXPANSION INDEX = 6

(@50% SATURATION)

Cal Land Engineering, Inc.
dba Quartech Consultants
Geotechnical, Environmental & Civil Engineering

May 12, 2010

Geo Tek Inc.
4130 Flatrock, Suite 140
Riverside, California 92505

Attn: Mr. Edward Lamont

RE: LABORATORY TEST RESULTS/REPORT

Client: The Planning Center
W.O. 0602- CR3
Project: Hemet
PO #1596
QCI Job No.: 10-167-5c

Gentlemen:

We have completed the testing program conducted on samples from the above project. The tests were performed in accordance with testing procedures as follows:

TEST	METHOD
Corrosion Potential	CT- 417, CT- 422, CT-532 (643)

Enclosed is Summary of Laboratory Test Results.

We appreciate the opportunity to provide testing services to Geo Tek, Inc. Should you have any questions, please call the undersigned.

Respectfully submitted,
Cal Land Engineering, Inc. (CLE)
dba Quartech Consultants (QCI)

Abe Kazemzadeh
Laboratory Manager

Enclosure

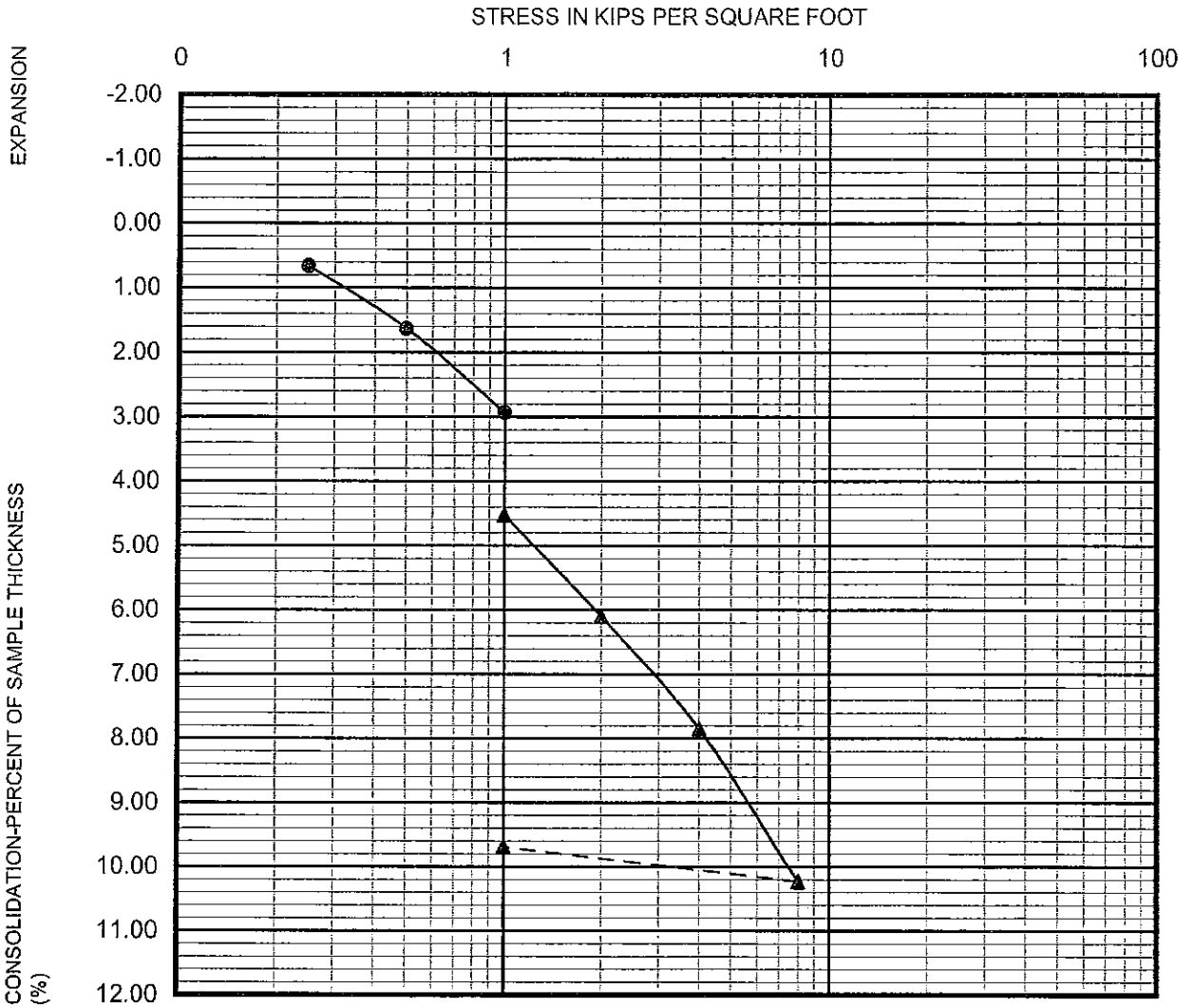
Cal Land Engineering, Inc.
dba Quartech Consultants
Geotechnical, Environmental, and Civil Engineering

For: GeoTek, Inc.
W.O.: 0602 - CR3
Client: The Planning Center
Project: Hemet
PO # 1596

Date: May 12, 2010
QCI Project No.:10-167-05C
Summarized by: ABK

Sample ID #	Sample Depth (Feet)	pH CT-532 (643)	Chloride CT-422 (ppm)	Sulfate CT-417 (% By Weight)	Resistivity CT-532 (643) (ohm-cm)
B-1	0 - 5	7.69	72	0.0130	3,050
B-5	5 - 10	7.42	103	0.0440	1,050

576 East Lambert Road, Brea, California 92821; Tel: 714-671-1050; Fax: 714-671-1090



Seating Cycle
Loading Prior to Inundation
Loading After Inundation
Rebound Cycle

Per ASTM Method D 2435

GEOTEK

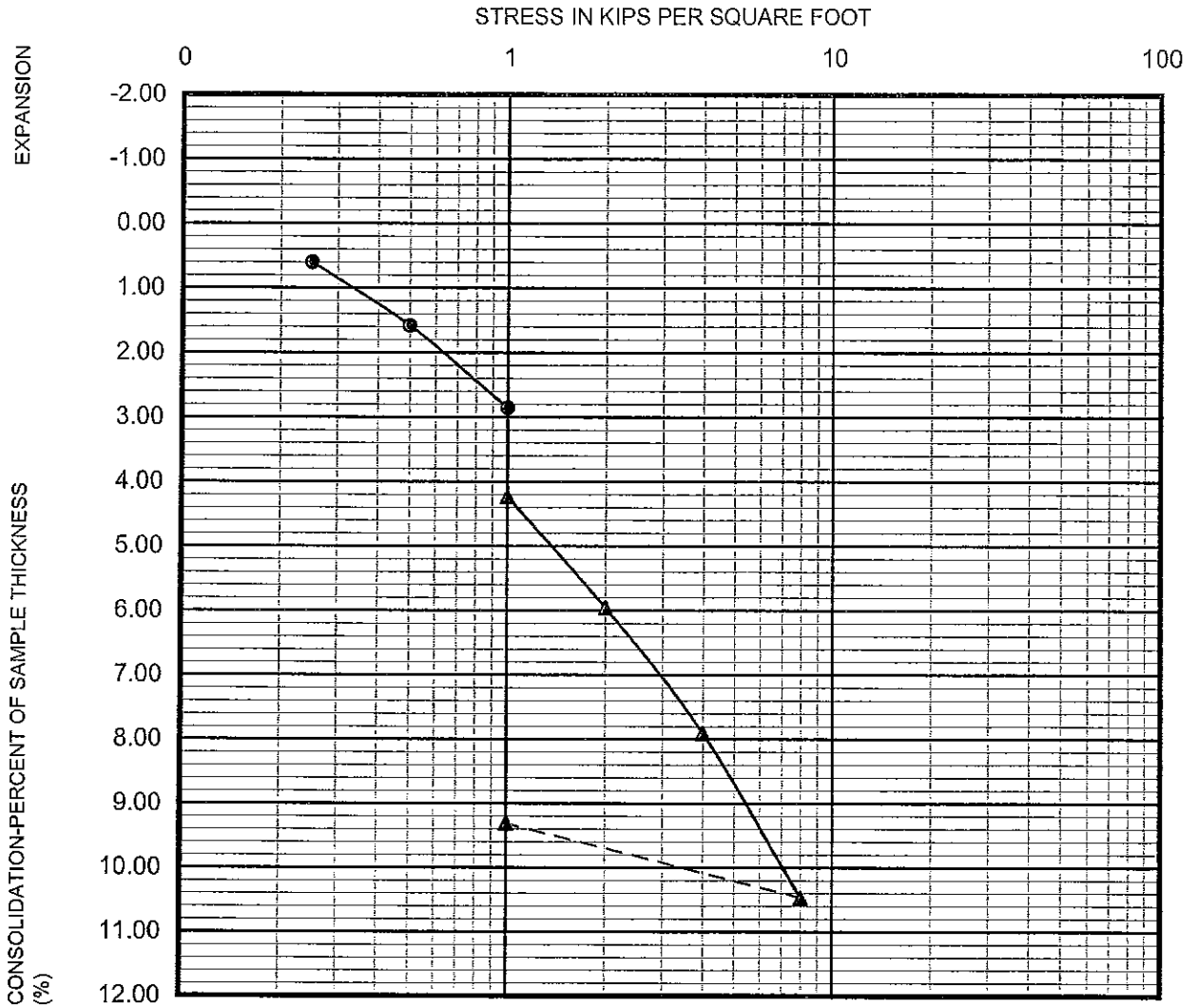
CHECKED BY: RR	Lab: RIV
PROJECT NO.: 0602-CR3	Date:05/06/10

CONSOLIDATION REPORT

Sample: B - 1 @ 5'

The Planning Center
North Hemet Revitalization

Plate HC-1



Per ASTM Method D 2435

GEOTEK

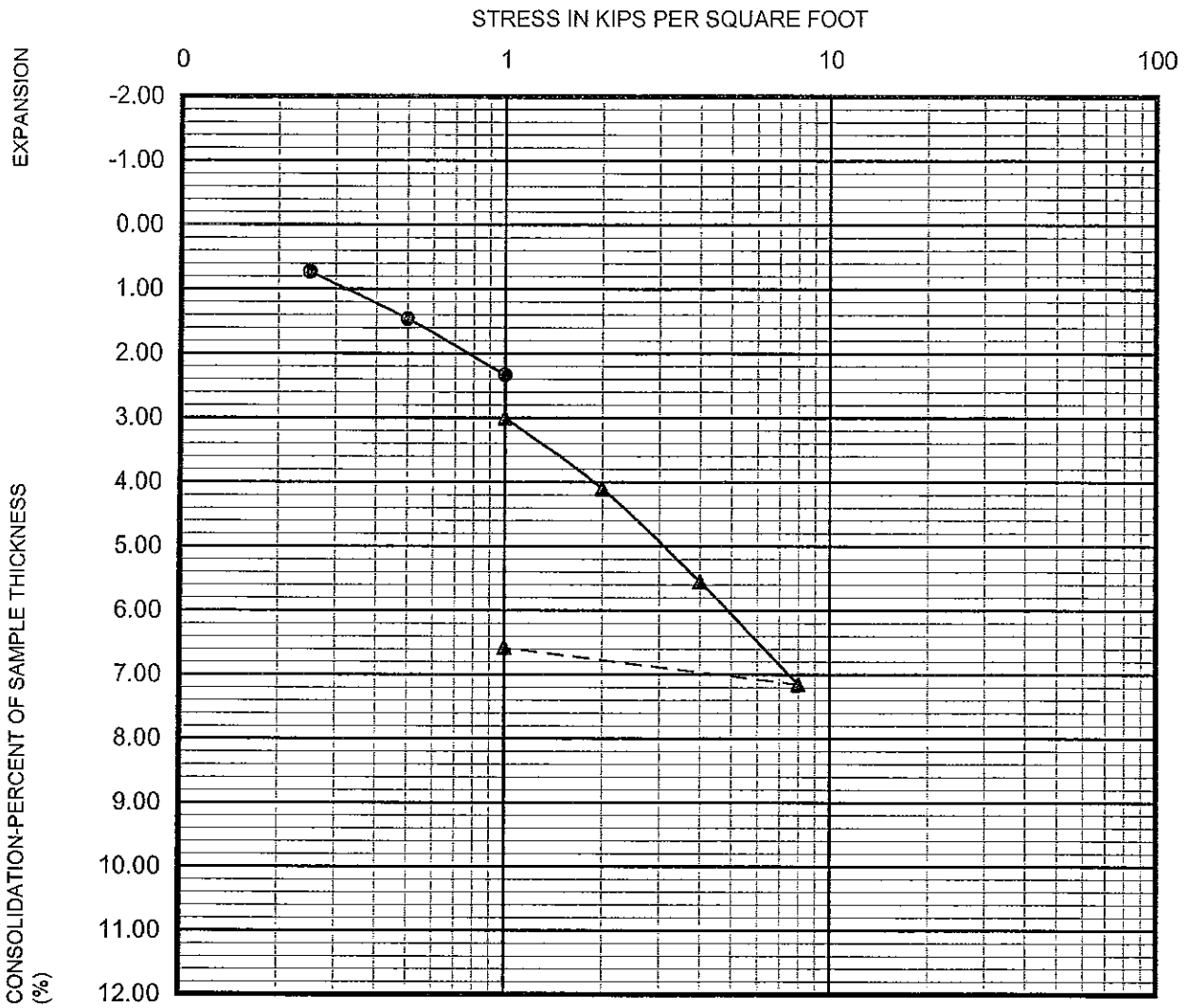
CHECKED BY: RR	Lab: RIV
PROJECT NO.: 0602-CR3	Date:05/06/10

CONSOLIDATION REPORT

Sample: B - 3 @ 10'

The Planning Center
North Hemet Revitalization

Plate HC-2



Seating Cycle
Loading Prior to Inundation
Loading After Inundation
Rebound Cycle

Per ASTM Method D 2435

GEOTEK

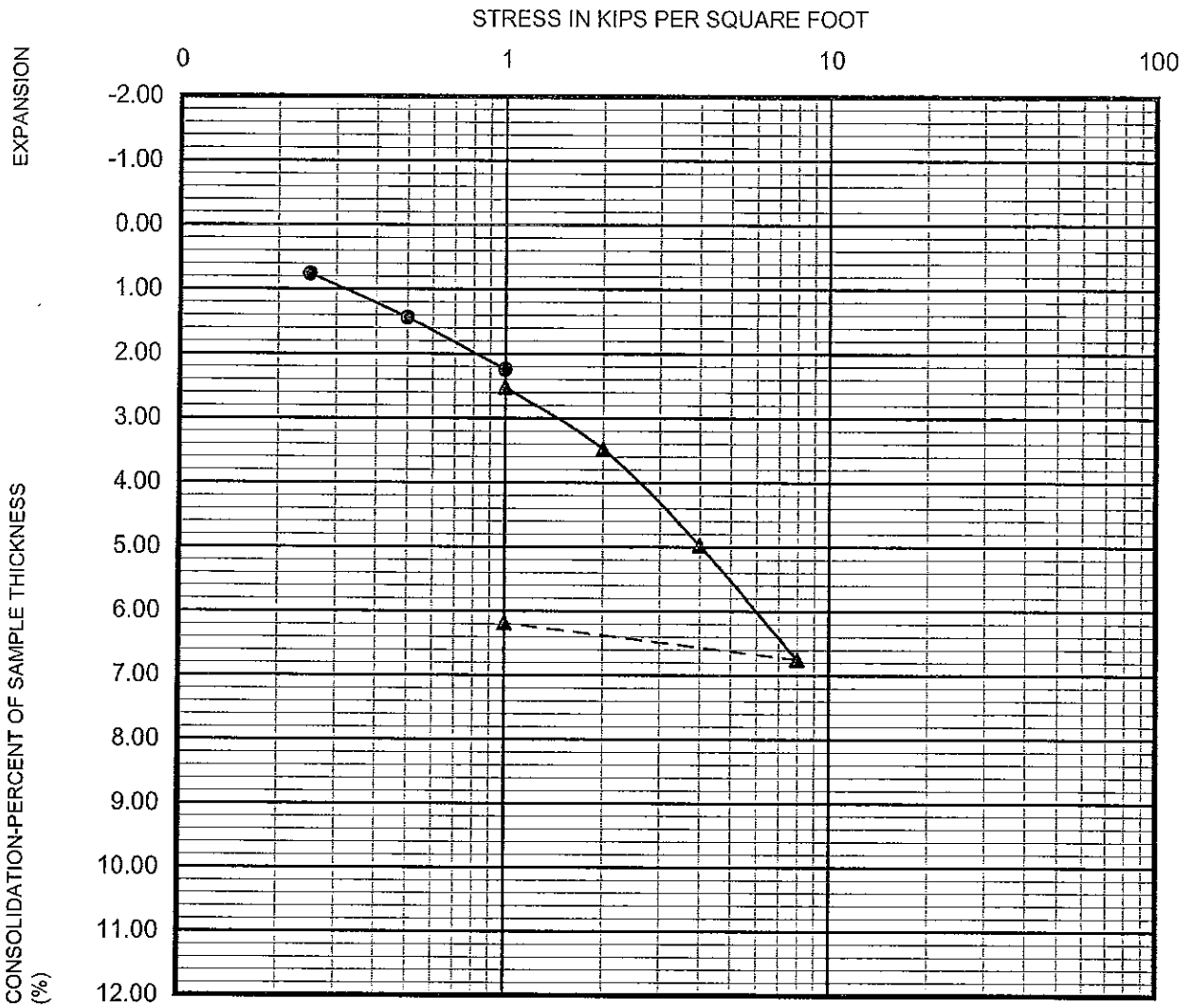
CHECKED BY: RR	Lab: RIV
PROJECT NO.: 0602-CR3	Date:05/10/10

CONSOLIDATION REPORT

Sample: B - 4 @ 7'

The Planning Center
North Hemet Revitalization

Plate HC-3



Seating Cycle
Loading Prior to Inundation
Loading After Inundation
Rebound Cycle

Per ASTM Method D 2435

GEOTEK

CHECKED BY: RR	Lab: RIV
PROJECT NO.: 0602-CR3	Date:05/10/10

CONSOLIDATION REPORT

Sample: B - 5 @ 5'

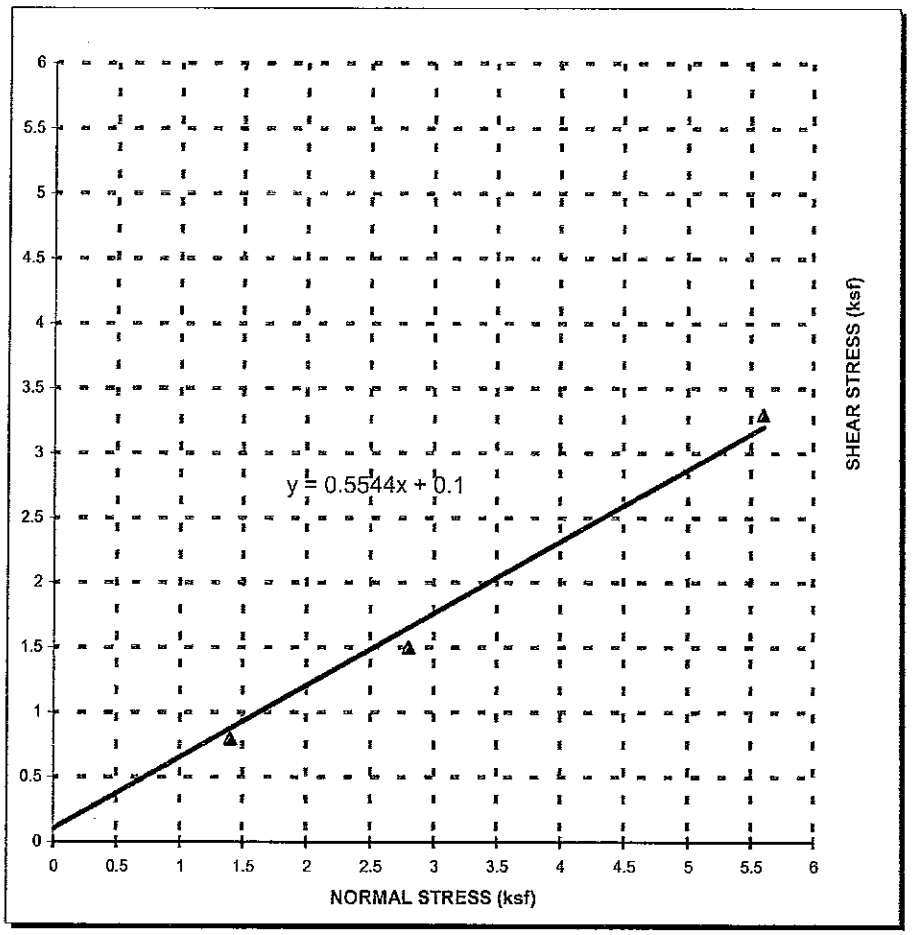
The Planning Center
North Hemet Revitalization

Plate HC-4

GEOTEK

DIRECT SHEAR TEST

Project Name:	The Planning Center	*Sample Source:*	B - 1 @ 0 - 5'
Project Number:	0602-CR3	*Date Tested:*	5/7/2010
Soil Description:	Fine Sand Silt/Silty Sand (ML/SM)		



Shear Strength: $\Phi =$ 29.0 ^{O} , **C =** 0.10 **ksf**

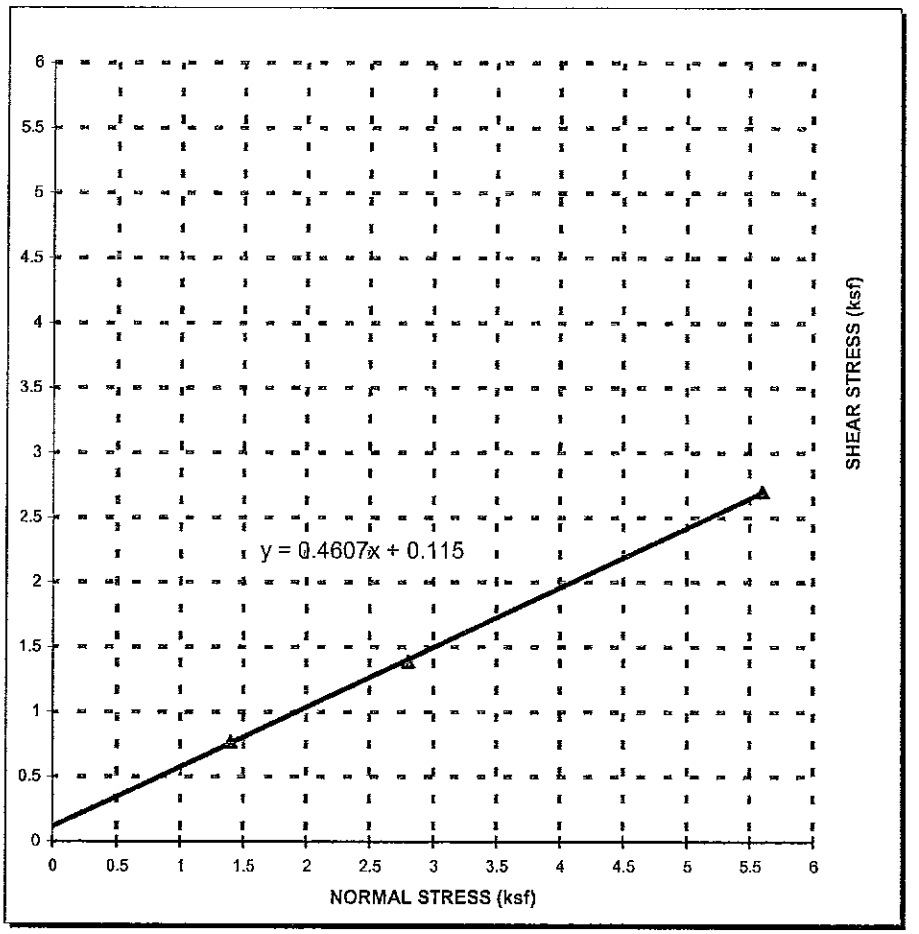
Test No.	Load (ksf)	Water Content (%)	Dry Density (pcf)
1	1.4	17.7	115.2
2	2.8	16.4	111.4
3	5.6	15.8	117.8

Notes: 1 - The soil specimen used in the shear box was remolded sample from a bulk sample collected during the field investigation.
2 - The above reflect residual shear strength at saturated conditions.
3 - The tests were ran at a shear rate of 0.025 in/min.

GEOTEK

DIRECT SHEAR TEST

Project Name:	The Planning Center	***Sample Source:***	B - 5 @ 5 - 10'
Project Number:	0602-CR3	***Date Tested:***	5/14/2010
Soil Description:	Silty Sand (SM)		

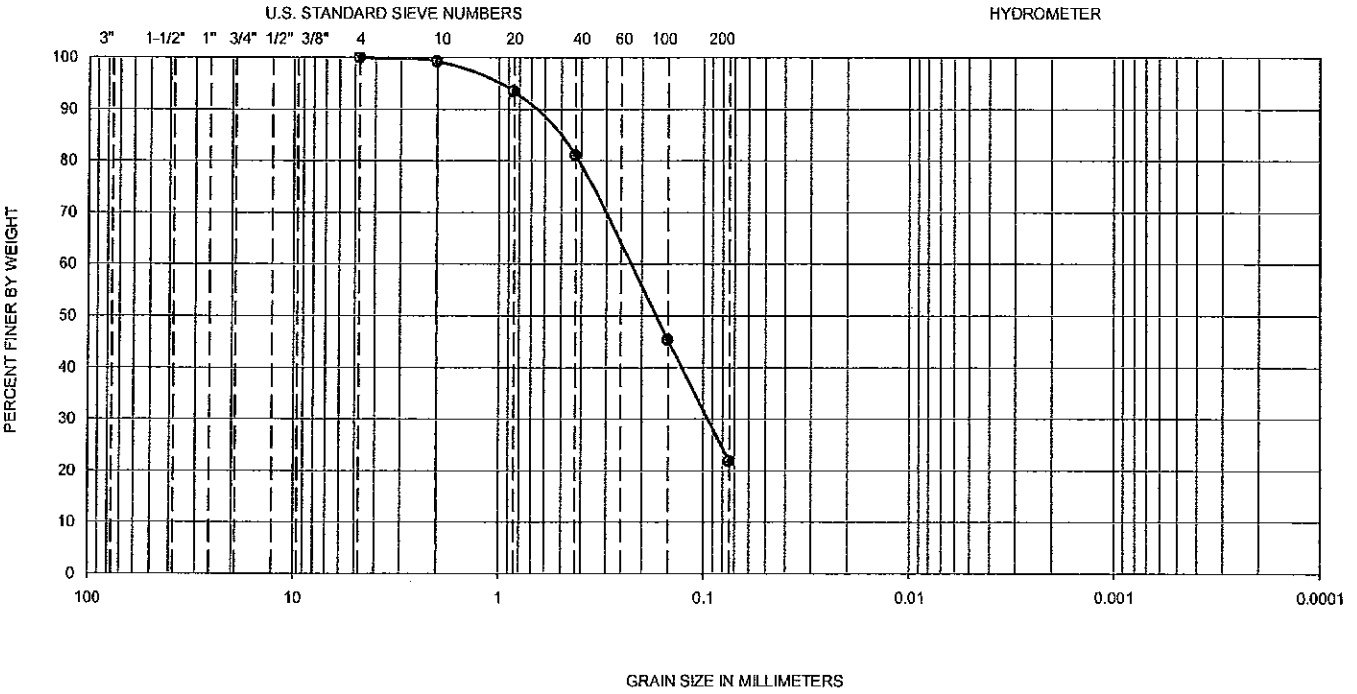


Shear Strength: $\Phi =$ 24.7 ^{O} , **C =** 0.12 **ksf**

Test No.	Load (ksf)	Water Content (%)	Dry Density (pcf)
1	1.4	17.2	111.3
2	2.8	18.4	110.2
3	5.6	17.2	111.0

Notes: 1 - The soil specimen used in the shear box was remolded sample from a bulk sample collected during the field investigation.
2 - The above reflect residual shear strength at saturated conditions.
3 - The tests were ran at a shear rate of 0.025 in/min.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	B-4	@ 7'	--	--	--	--	--	--	--	--	21.9	SM

GEOTEK

Checked By: EHL	Lab: Riverside
Project No. 0602-CR3	

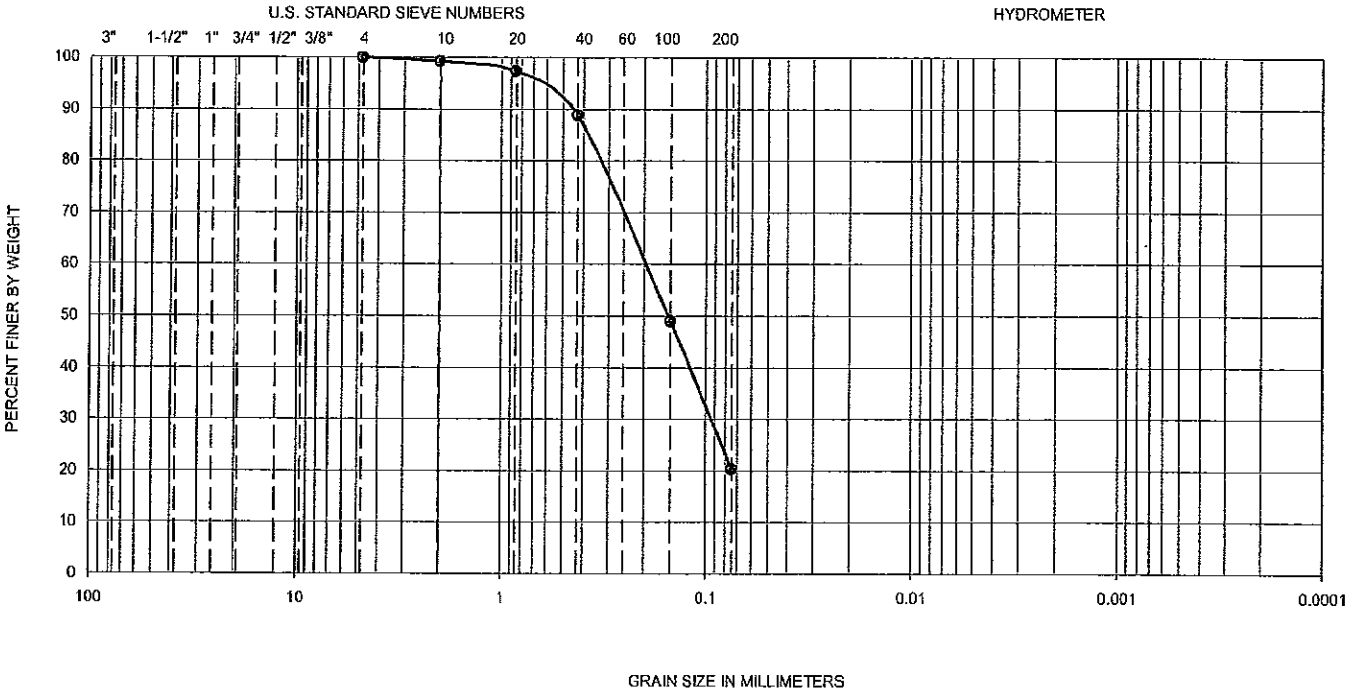
SIEVE ANALYSIS

Sample: B-4 @ 7'

The Planning Center

North Hemet Revitalization

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	B-6	@ 12'	--	--	--	--	--	--	--	--	20.3	SM

GEOTEK

Checked By: EHL	Lab: Riverside
Project No. 0602-CR3	

SIEVE ANALYSIS

Sample: B-6 @ 12'

The Planning Center

North Hemet Revitalization

APPENDIX C

GENERAL EARTHWORK AND GRADING GUIDELINES

North Hemet Revitalization Project
City of Hemet, Riverside County, California
Project No. 0602-CR3

GENERAL GRADING GUIDELINES

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines, when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

General

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the Uniform Building Code, CBC (2007) and the guidelines presented below.

Preconstruction Meeting

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

Grading Observation and Testing

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.
4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.

5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.
6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a **minimum of 48 to 72 hours to complete test procedures**. Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.
7. Procedures for testing of fill slopes are as follows:
   a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.
   b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.
8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

Site Clearing

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.
2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.
3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative. Typical procedures are similar to those indicated on Plate G-4.

Treatment of Existing Ground

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep effected bedrock, should be removed (see Plates G-1, G-2 and G-3) unless otherwise specifically indicated in the text of this report.

2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.
3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.
4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.
5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

Subdrainage

1. Subdrainage systems should be provided in canyon bottoms prior to placing fill, and behind buttress and stabilization fills and in other areas indicated in the report. Subdrains should conform to schematic diagrams G-1 and G-5, and be acceptable to our representative.
2. For canyon subdrains, runs less than 500 feet may use six-inch pipe. Typically, runs in excess of 500 feet should have the lower end as eight-inch minimum.
3. Filter material should be clean, 1/2 to 1-inch gravel wrapped in a suitable filter fabric. Class 2 permeable filter material per California Department of Transportation Standards tested by this office to verify its suitability, may be used without filter fabric. A sample of the material should be provided to the Soils Engineer by the contractor at least two working days before it is delivered to the site. The filter should be clean with a wide range of sizes.
4. Approximate delineation of anticipated subdrain locations may be offered at 40-scale plan review stage. During grading, this office would evaluate the necessity of placing additional drains.
5. All subdrainage systems should be observed by our representative during construction and prior to covering with compacted fill.
6. Subdrains should outlet into storm drains where possible. Outlets should be located and protected. The need for backflow preventers should be assessed during construction.
7. Consideration should be given to having subdrains located by the project surveyors.

Fill Placement

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).
2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.
3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:

a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.

b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D-1557.

4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:

   a) They are not placed in concentrated pockets;

   b) There is a sufficient percentage of fine-grained material to surround the rocks;

   c) The distribution of the rocks is observed by, and acceptable to, our representative.

5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal (see Plate G-4). On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.

6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

Slope Construction

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.

2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.

3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.

4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.

5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.

Keyways, Buttress and Stabilization Fills

Keyways are needed to provide support for fill slope and various corrective procedures.

1. Side-hill fills should have an equipment-width key at their toe excavated through all surficial soil and into competent material and tilted back into the hill (Plates G-2, G-3). As the fill is elevated, it should be benched through surficial soil and slopewash, and into competent bedrock or other material deemed suitable by our representatives (See Plates G-1, G-2, and G-3).
2. Fill over cut slopes should be constructed in the following manner:
   a) All surficial soils and weathered rock materials should be removed at the cut-fill interface.
   b) A key at least one and one-half (1.5) equipment width wide (or as needed for compaction), and tipped at least one (1) foot into slope, should be excavated into competent materials and observed by our representative.
   c) The cut portion of the slope should be excavated prior to fill placement to evaluate if stabilization is necessary. The contractor should be responsible for any additional earthwork created by placing fill prior to cut excavation. (see Plate G-3 for schematic details.)
3. Daylight cut lots above descending natural slopes may require removal and replacement of the outer portion of the lot. A schematic diagram for this condition is presented on Plate G-2.
4. A basal key is needed for fill slopes extending over natural slopes. A schematic diagram for this condition is presented on Plate G-2.
5. All fill slopes should be provided with a key unless within the body of a larger overall fill mass. Please refer to Plate G-3 for specific guidelines.

Anticipated buttress and stabilization fills are discussed in the text of the report. The need to stabilize other proposed cut slopes will be evaluated during construction. Plate G-5 shows a schematic of buttress construction.

1. All backcuts should be excavated at gradients of 1:1 or flatter. The backcut configuration should be determined based on the design, exposed conditions, and need to maintain a minimum fill width and provide working room for the equipment.
2. On longer slopes, backcuts and keyways should be excavated in maximum 250 feet long segments. The specific configurations will be determined during construction.
3. All keys should be a minimum of two (2) feet deep at the toe and slope toward the heel at least one foot or two (2%) percent, whichever is greater.
4. Subdrains are to be placed for all stabilization slopes exceeding 10 feet in height. Lower slopes are subject to review. Drains may be required. Guidelines for subdrains are presented on Plate G-5.

5. Benching of backcuts during fill placement is required.

Lot Capping

1. When practical, the upper three (3) feet of material placed below finish grade should be comprised of the least expansive material available. Preferably, highly and very highly expansive materials should not be used. We will attempt to offer advise based on visual evaluations of the materials during grading, but it must be realized that laboratory testing is needed to evaluate the expansive potential of soil. Minimally, this testing takes two (2) to four (4) days to complete.
2. Transition lots (cut and fill) both per plan and those created by remedial grading (e.g. lots above stabilization fills, along daylight lines, above natural slopes, etc.) should be capped with a minimum three foot thick compacted fill blanket.
3. Cut pads should be observed by our representative(s) to evaluate the need for overexcavation and replacement with fill. This may be necessary to reduce water infiltration into highly fractured bedrock or other permeable zones, and/or due to differing expansive potential of materials beneath a structure. The overexcavation should be at least three feet. Deeper overexcavation may be recommended in some cases.

ROCK PLACEMENT AND ROCK FILL GUIDELINES

It is anticipated that large quantities of oversize material would be generated during grading. It's likely that such materials may require special handling for burial. Although alternatives may be developed in the field, the following methods of rock disposal are recommended on a preliminary basis.

Limited Larger Rock

When materials encountered are principally soil with limited quantities of larger rock fragments or boulders, placement in windrows is recommended. The following procedures should be applied:

1. Oversize rock (greater than 8 inches) should be placed in windrows.
   a) Windrows are rows of single file rocks placed to avoid nesting or clusters of rock.
   b) Each adjacent rock should be approximately the same size (within ~one foot in diameter).
   c) The maximum rock size allowed in windrows is four feet
2. A minimum vertical distance of three feet between lifts should be maintained. Also, the windrows should be offset from lift to lift. Rock windrows should not be closer than 15 feet to the face of fill slopes and sufficient space must be maintained for proper slope construction (see Plate G-4).
3. Rocks greater than eight inches in diameter should not be placed within seven feet of the finished subgrade for a roadway or pads and should be held below the depth of the lowest utility. This will allow easier trenching for utility lines.

4. Rocks greater than four feet in diameter should be broken down, if possible, or they may be placed in a dozer trench. Each trench should be excavated into the compacted fill a minimum of one foot deeper than the largest diameter of rock.
   a) The rock should be placed in the trench and granular fill materials (SE>30) should be flooded into the trench to fill voids around the rock.
   b) The over size rock trenches should be no closer together than 15 feet from any slope face.
   c) Trenches at higher elevation should be staggered and there should be a minimum of four feet of compacted fill between the top of the one trench and the bottom of the next higher trench.
   d) It would be necessary to verify 90 percent relative compaction in these pits. A 24 to 72 hour delay to allow for water dissipation should be anticipated prior to additional fill placement.

Structural Rock Fills

If the materials generated for placement in structural fills contains a significant percentage of material more than six (6) inches in one dimension, then placement using conventional soil fill methods with isolated windrows would not be feasible. In such cases the following could be considered:

1. Mixes of large rock or boulders may be placed as rock fill. They should be below the depth of all utilities both on pads and in roadways and below any proposed swimming pools or other excavations. If these fills are placed within seven (7) feet of finished grade, they may effect foundation design.
2. Rock fills are required to be placed in horizontal layers that should **not exceed two feet in thickness, or the maximum rock size present, which ever is less**. All rocks exceeding two feet should be broken down to a smaller size, windrowed (see above), or disposed of in non-structural fill areas. Localized larger rock up to 3 feet in largest dimension may be placed in rock fill as follows:
   a) individual rocks are placed in a given lift so as to be roughly 50% exposed above the typical surface of the fill ,
   b) loaded rock trucks or alternate compactors are worked around the rock on all sides to the satisfaction of the soil engineer,
   c) the portion of the rock above grade is covered with a second lift.
3. Material placed in each lift should be well graded. No unfilled spaces (voids) should be permitted in the rock fill.

Compaction Procedures

Compaction of rock fills is largely procedural. The following procedures have been found to generally produce satisfactory compaction.

1. Provisions for routing of construction traffic over the fill should be implemented.

a) Placement should be by rock trucks crossing the lift being placed and dumping at its edge.
b) The trucks should be routed so that each pass across the fill is via a different path and that all areas are uniformly traversed.
c) The dumped piles should be knocked down and spread by a large dozer (D-8 or larger suggested). (Water should be applied before and during spreading.)

2. Rock fill should be generously watered (sluiced)
   a) Water should be applied by water trucks to the:
      i) dump piles,
      ii) front face of the lift being placed and,
      iii) surface of the fill prior to compaction.
   b) No material should be placed without adequate water.
   c) The number of water trucks and water supply should be sufficient to provide constant water.
   d) Rock fill placement should be suspended when water trucks are unavailable:
      i) for more than 5 minutes straight, or,
      ii) for more than 10 minutes/hour.

3. In addition to the truck pattern and at the discretion of the soil engineer, large, rubber tired compactors may be required.
   a) The need for this equipment will depend largely on the ability of the operators to provide complete and uniform coverage by wheel rolling with the trucks.
   b) Other large compactors will also be considered by the soil engineer provided that required compaction is achieved.

4. Placement and compaction of the rock fill is largely procedural. Observation by trenching should be made to check:
   a) the general segregation of rock size,
   b) for any unfilled spaces between the large blocks, and
   c) the matrix compaction and moisture content.

5. Test fills may be required to evaluate relative compaction of finer grained zones or as deemed appropriate by the soil engineer.
   a) A lift should be constructed by the methods proposed, as proposed

6. Frequency of the test trenching is to be at the discretion of the soil engineer. Control areas may be used to evaluate the contractors procedures.

7. A minimum horizontal distance of 15 feet should be maintained from the face of the rock fill and any finish slope face. At least the outer 15 feet should be built of conventional fill materials.

Piping Potential and Filter Blankets

Where conventional fill is placed over rock fill, the potential for piping (migration) of the fine grained material from the conventional fill into rock fills will need to be addressed.

The potential for particle migration is related to the grain size comparisons of the materials present and in contact with each other. Provided that 15 percent of the finer soil is larger than the effective pore size of the coarse soil, then particle migration is substantially mitigated. This can be accomplished with a well-graded matrix material for the rock fill and a zone of fill similar to the matrix above it. The specific gradation of the fill materials placed during grading must be known to evaluate the need for any type of filter that may be necessary to cap the rock fills. This, unfortunately, can only be accurately determined during construction.

In the event that poorly graded matrix is used in the rock fills, properly graded filter blankets 2 to 3 feet thick separating rock fills and conventional fill may be needed. As an alternative, use of two layers of filter fabric (Mirafi 700 x or equivalent) could be employed on top of the rock fill. In order to mitigate excess puncturing, the surface of the rock fill should be well broken down and smoothed prior to placing the filter fabric. The first layer of the fabric may then be placed and covered with relatively permeable fill material (with respect to overlying material) 1 to 2 feet thick. The relative permeable material should be compacted to fill standards. The second layer of fabric should be placed and conventional fill placement continued.

Subdrainage

Rock fill areas should be tied to a subdrainage system. If conventional fill is placed that separates the rock from the main canyon subdrain, then a secondary system should be installed. A system consisting of an adequately graded base (3 to 4 percent to the lower side) with a collector system and outlets may suffice.

Additionally, at approximately every 25 foot vertical interval, a collector system with outlets should be placed at the interface of the rock fill and the conventional fill blanketing a fill slope

Monitoring

Depending upon the depth of the rock fill and other factors, monitoring for settlement of the fill areas may be needed following completion of grading. Typically, if rock fill depths exceed 40 feet, monitoring would be recommend prior to construction of any settlement sensitive improvements. Delays of 3 to 6 months or longer can be expected prior to the start of construction.

UTILITY TRENCH CONSTRUCTION AND BACKFILL

Utility trench excavation and backfill is the contractors responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractors' methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that "worked" on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them **prior** to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.
2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:
   a) shallow (12 + inches) under slab interior trenches and,
   b) as bedding in pipe zone.

   The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.
3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.
4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.
5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractors procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractors attention.

JOB SAFETY

General

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. Safety Meetings: Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. Safety Vests: Safety vests are provided for and are to be worn by our personnel while on the job site.
3. Safety Flags: Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

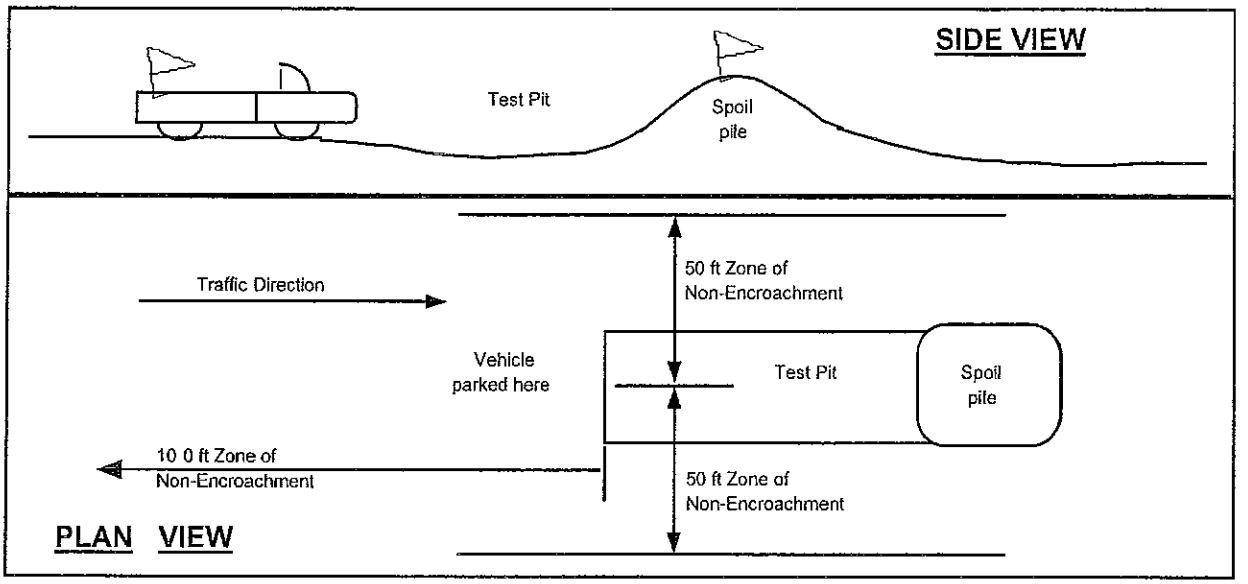
Test Pits Location, Orientation and Clearance

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

TEST PIT SAFETY PLAN



Slope Tests

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

Trench Safety

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or
4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractors representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

Procedures

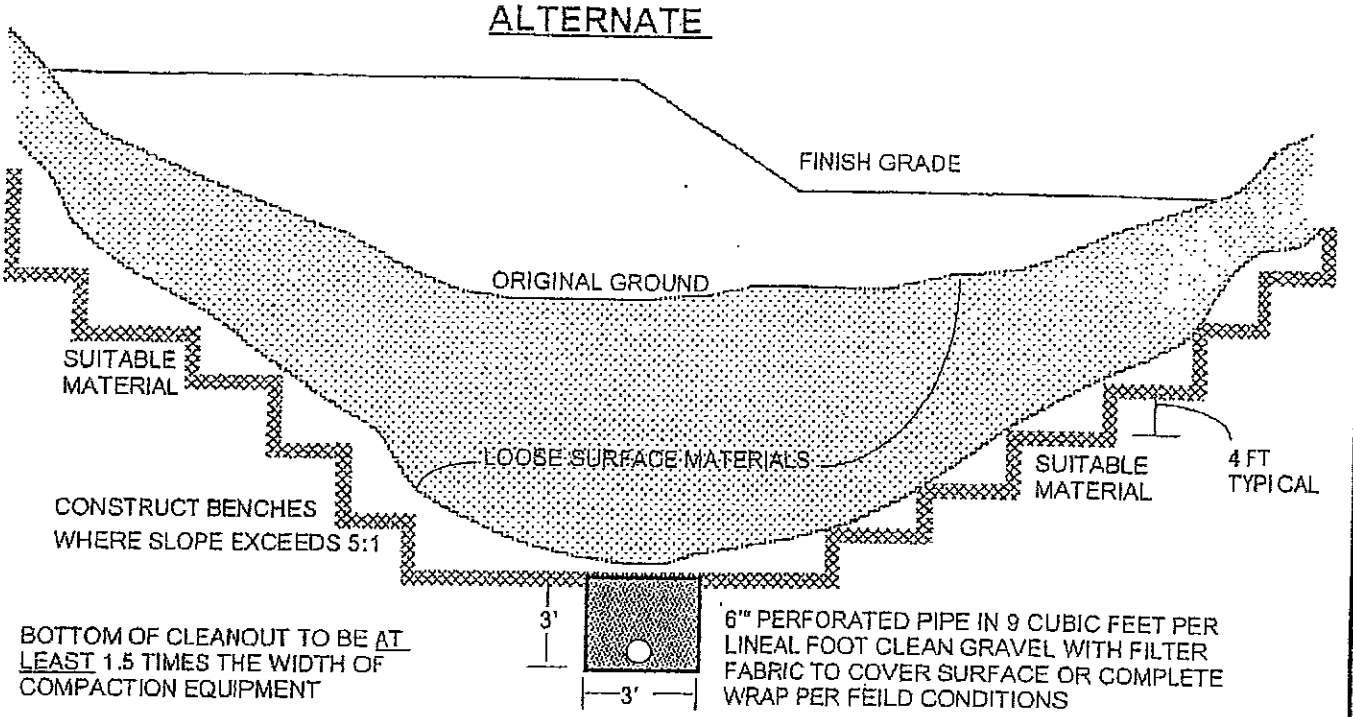
In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractors' representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

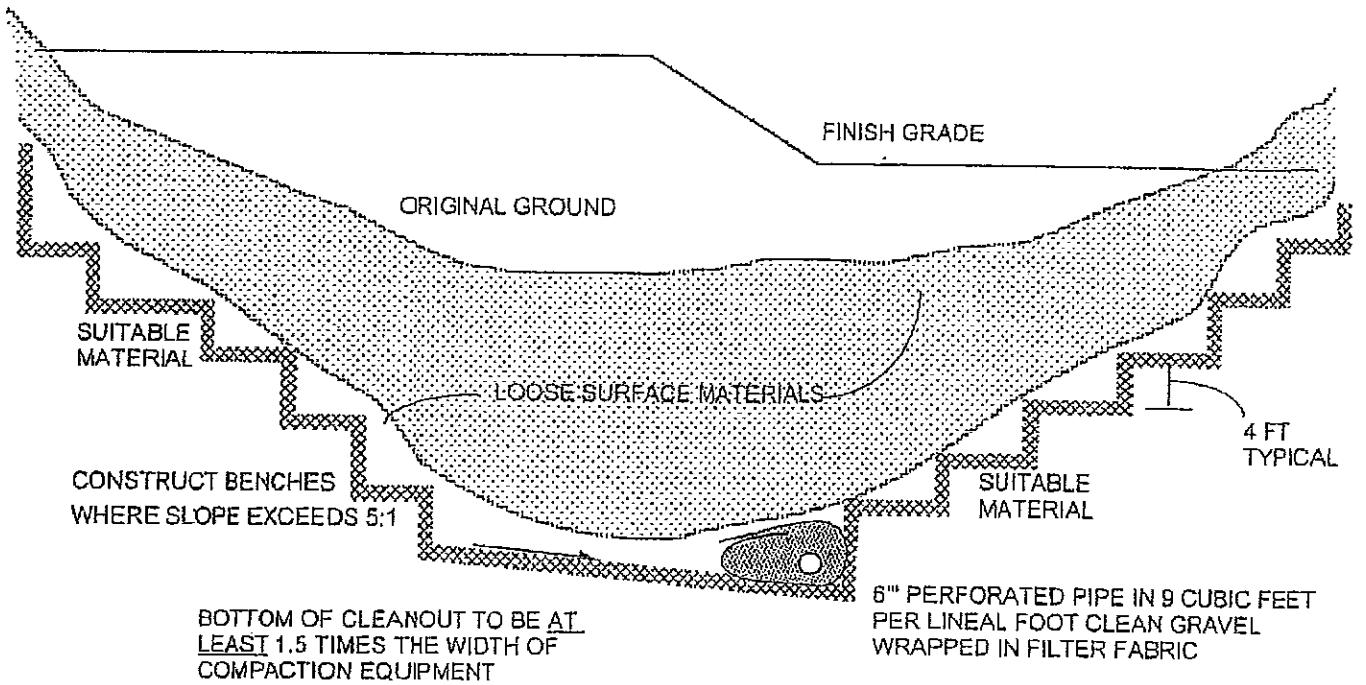
The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

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ALTERNATE

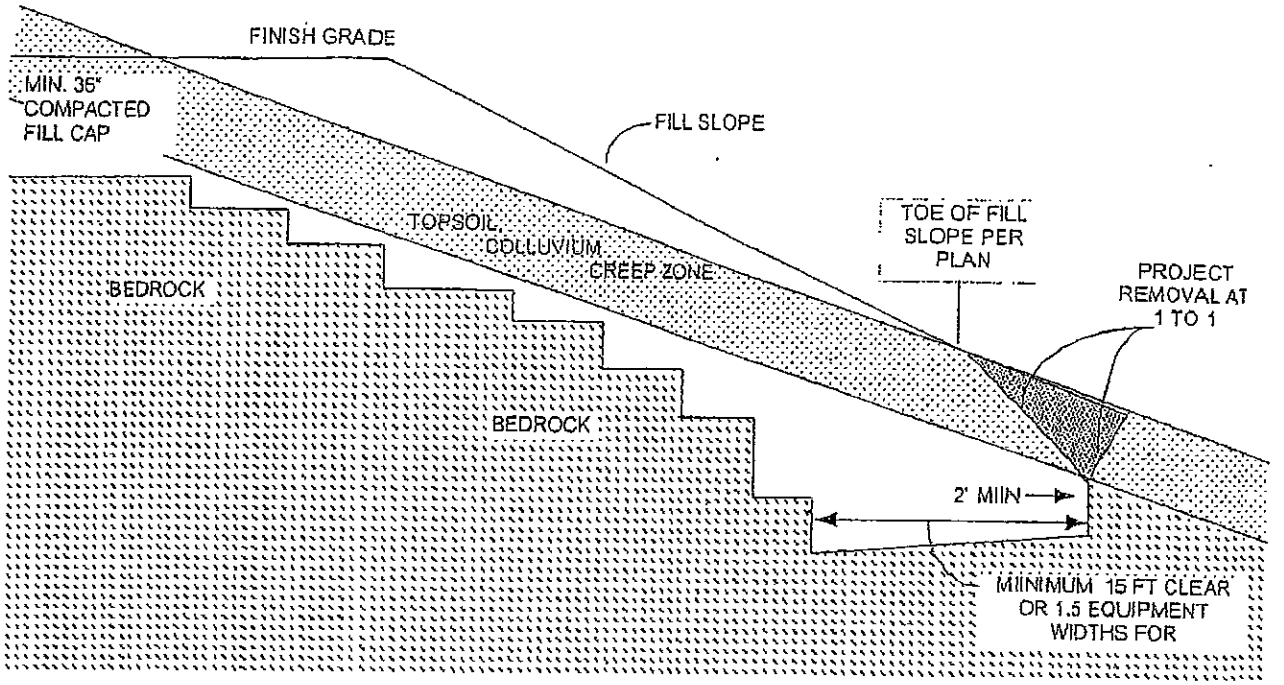


ALTERNATE

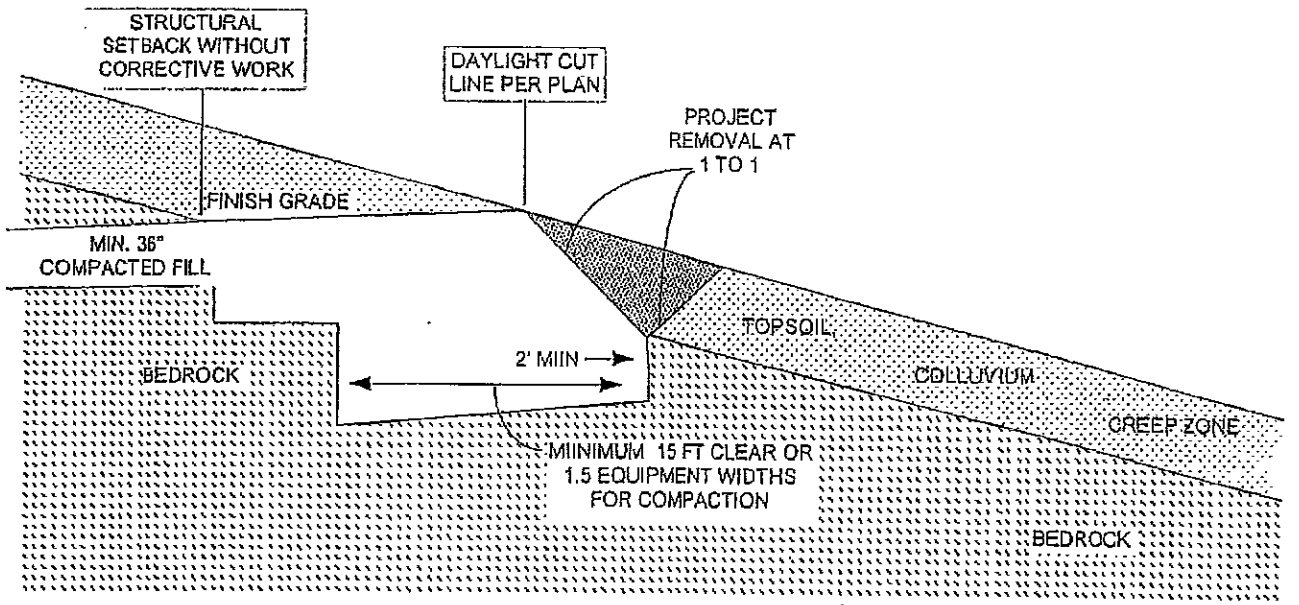


STANDARD GRADING GUIDELINES	TYPICAL CANYON CLEANOUT
GeoTek, Inc.	PLATE G - 1

TYPICAL FILL SLOPE OVER NATURAL DESCENDING SLOPE

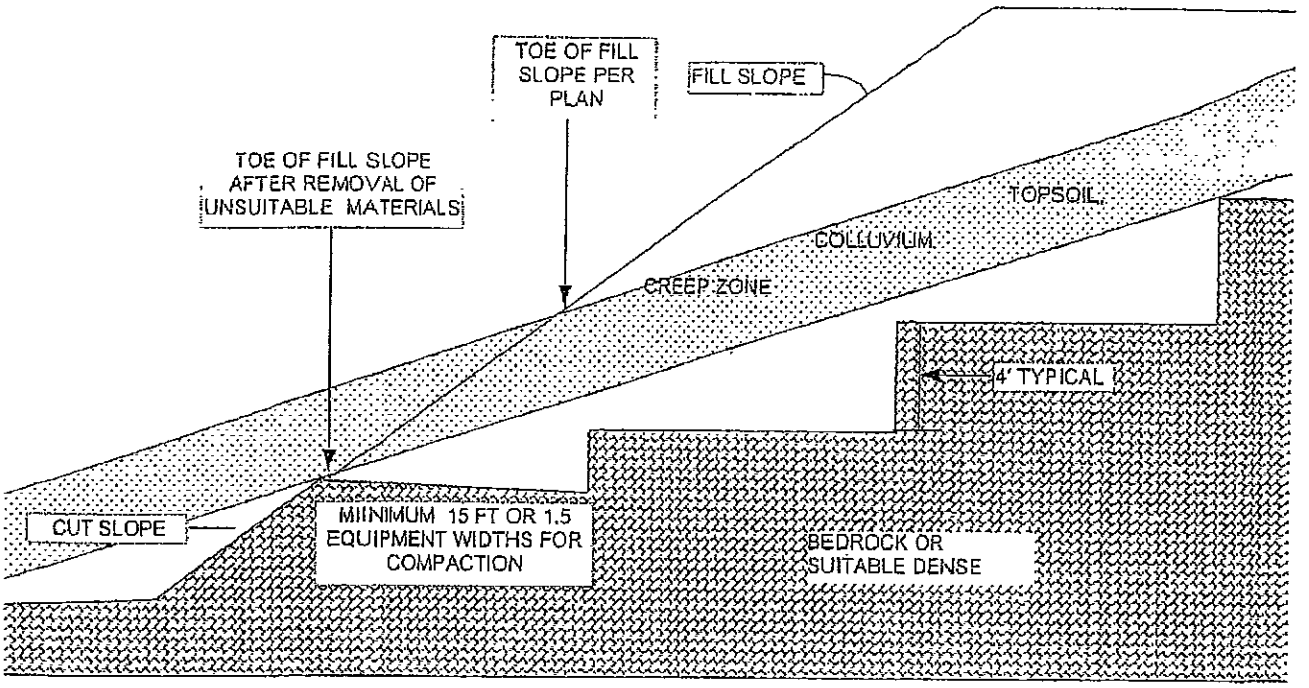


DAYLIGHT CUT AREA OVER NATURAL DESCENDING SLOPE

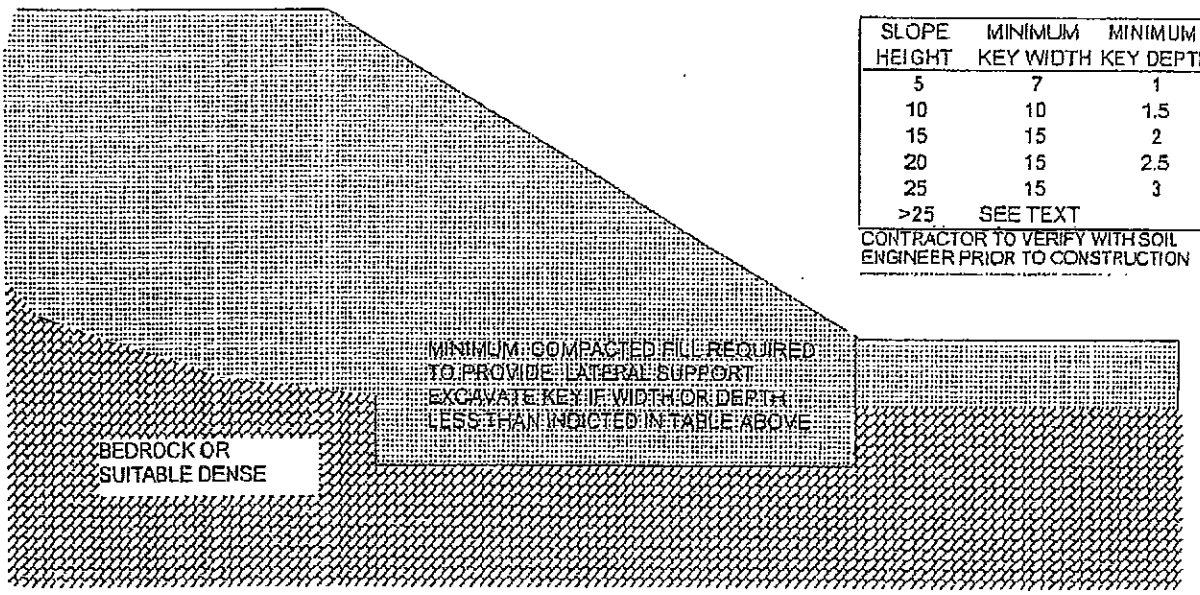


STANDARD GRADING GUIDELINES	TREATMENT ABOVE NATURAL SLOPES
GeoTek, Inc.	PLATE G - 2

TYPICAL FILL SLOPE OVER PROPOSED CUT SLOPE



TYPICAL FILL SLOPE

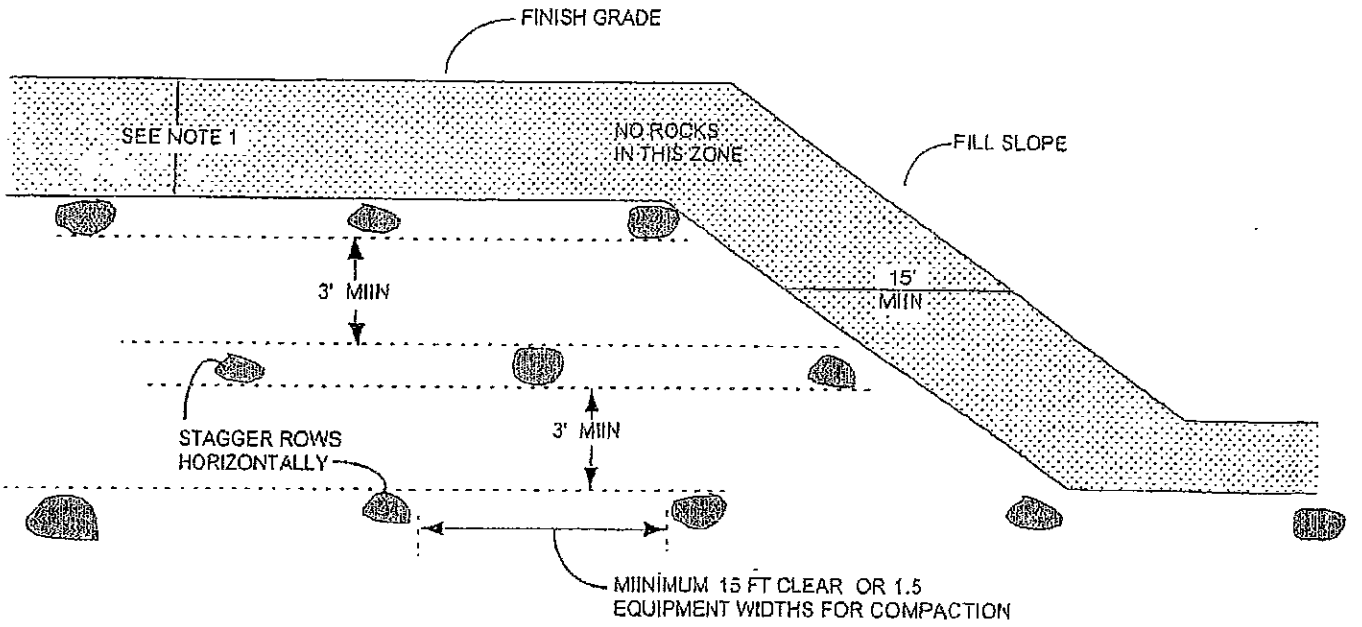


SLOPE HEIGHT	MINIMUM KEY WIDTH	MINIMUM KEY DEPTH
5	7	1
10	10	1.5
15	15	2
20	15	2.5
25	15	3
>25	SEE TEXT	

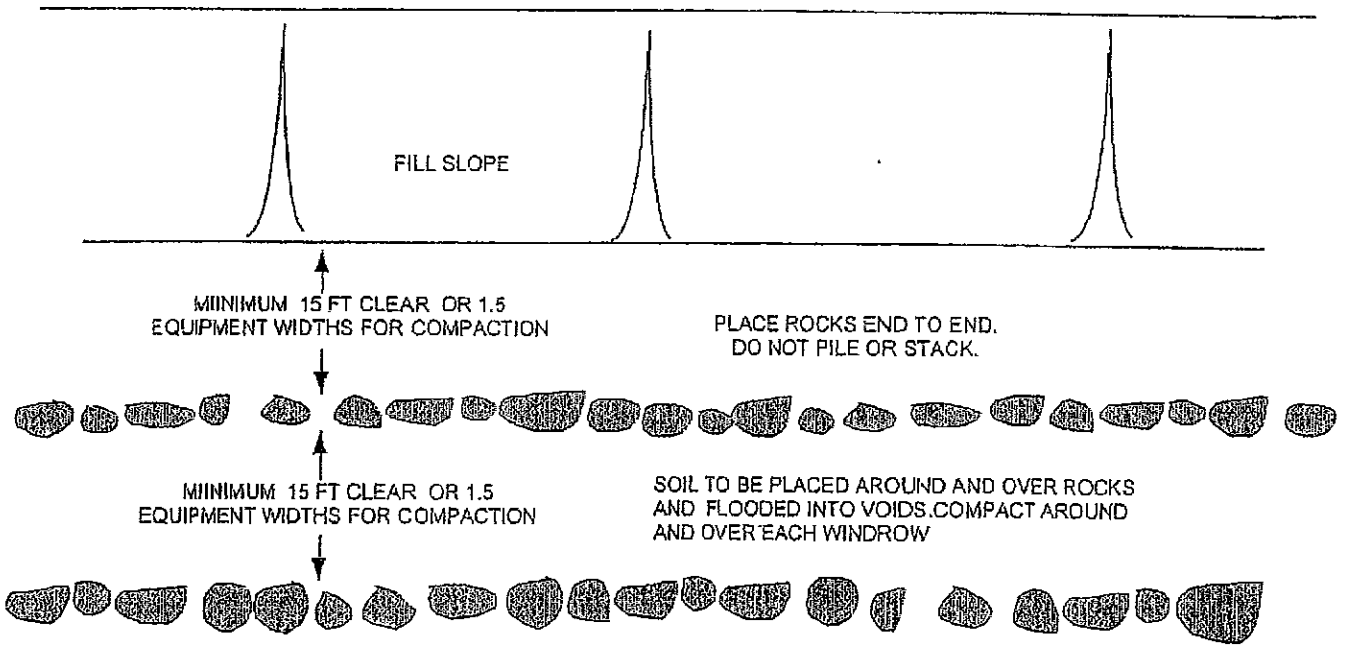
CONTRACTOR TO VERIFY WITH SOIL ENGINEER PRIOR TO CONSTRUCTION

STANDARD GRADING GUIDELINES	COMMON FILL SLOPE KEYS
GeoTek, Inc.	PLATE G-3

CROSS SECTIONAL VIEW



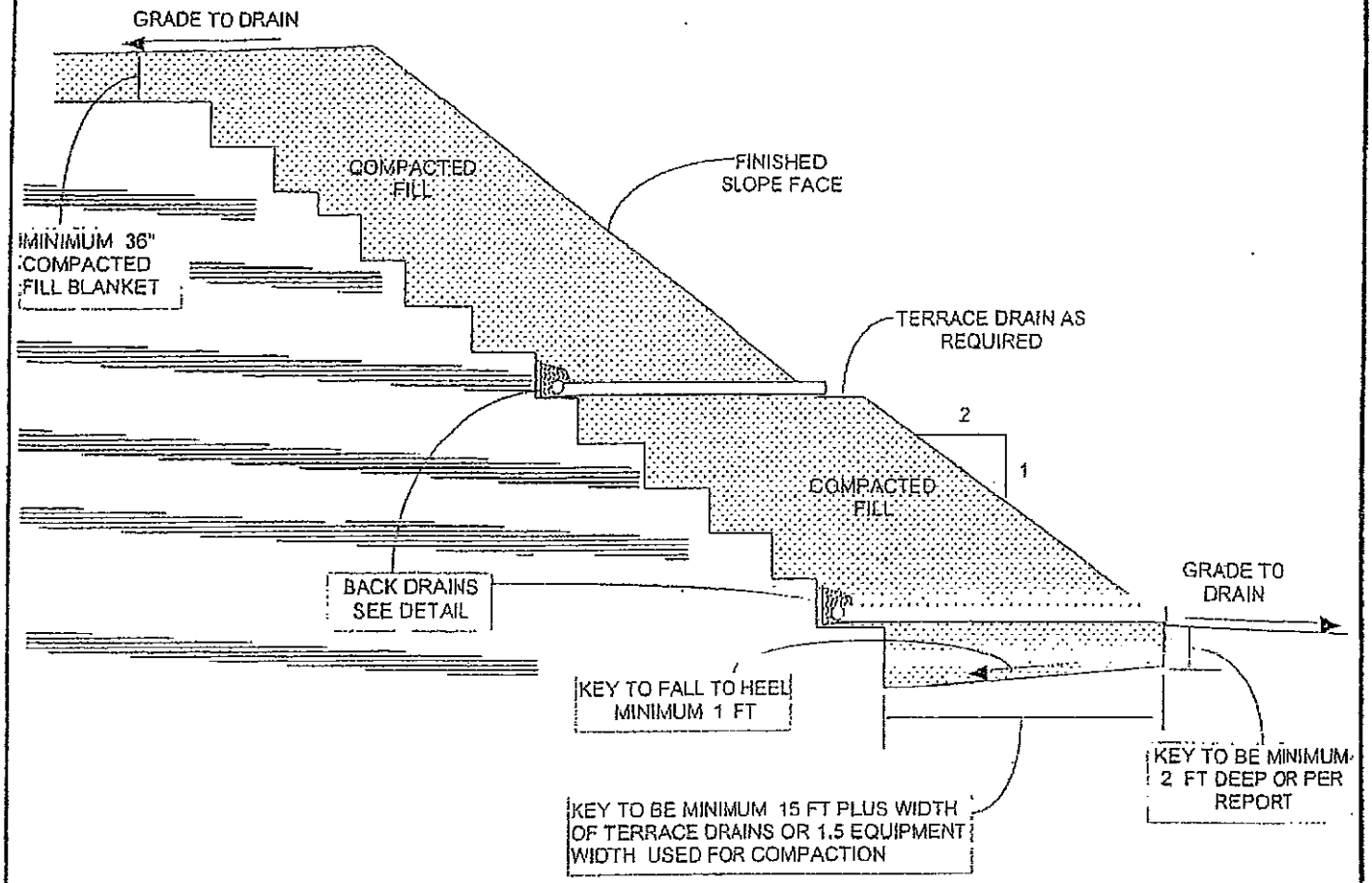
PLAN VEIW

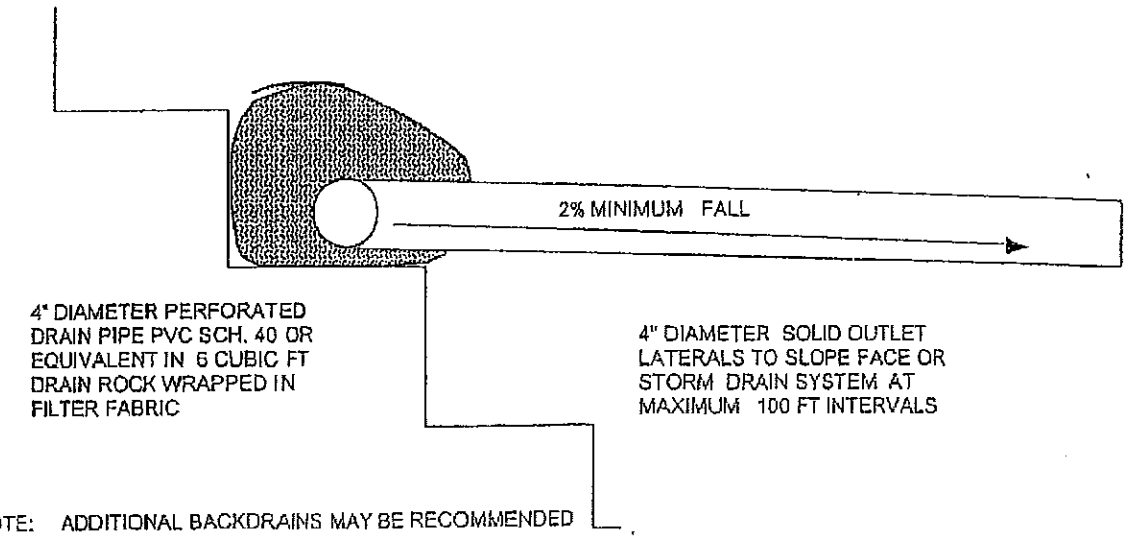


NOTES:

1) MINIMUM SOIL FILL OVER WINDROWS SHOULD BE 7 FEET AND SUFFICIENT FOR FUTURE EXCAVATIONS (e.g. SWIMMIING POOLS) TO AVOID ROCKS.
2) MAXIMUM ROCK SIZE IN WINDROWS IS 4 FEET MINIMUM DIAMETER.
3) SOIL AROUND WINDROWS TO BE SANDY MATERIAL SUBJECT TO ACCEPTANCE BY SOIL ENGINEER
4) ALL SPACING AND CLEARANCES MUST BE SUFFICIENT TO ALLOW FOR PROPER COMPACTION.

STANDARD GRADING GUIDELINES	ROCK BURIAL DETAILS
GeoTek, Inc.	PLATE G - 4





STANDARD GRADING GUIDELINES	BUTTRESS AND STABILIZATION SLOPES
GeoTek, Inc.	PLATE G - 5

Appendix F
Modified Phase I Environmental Site Assessment

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MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR:

NORTH HEMET

REVITALIZATION

PLAN

prepared for:

RIVERSIDE COUNTY ECONOMIC DEVELOPMENT AGENCY

Contact:
Ms. Rohini Dasika,
Senior Development Specialist

prepared by:

THE PLANNING CENTER

Contact:
Denise Clendening,
Ph.D., REA II, Director
Site Assessment Services

MARCH 30, 2007

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT FOR:

NORTH HEMET

REVITALIZATION

PLAN

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Table of Contents

Section	Page
EXECUTIVE SUMMARY	**III**
SECTION 1. INTRODUCTION	**1**
1.1 Purpose	1
1.2 Site Identification	2
1.3 Detailed Scope of Services	2
1.4 Non-Scope Considerations	2
1.5 Exceptions and Deviations	3
1.6 Limitations	3
SECTION 2. SITE DESCRIPTION	**9**
2.1 Site Ownership and Location	9
2.2 Site and Vicinity Description	12
2.3 Physical Setting	12
SECTION 3. PREVIOUS REPORTS	**15**
SECTION 4. SITE HISTORY	**17**
4.1 Past Usage of the Site	17
4.2 Past Usage of Adjoining Properties	19
SECTION 5. ENVIRONMENTAL RECORDS REVIEW	**21**
5.1 Standard Environmental Records Review	21
5.2 Additional Environmental Records Review	23
SECTION 6. SITE RECONNAISSANCE AND KEY PERSONNEL INTERVIEW(S)	**25**
6.1 Current Use of the Property	25
6.2 Site Visit Observations	25
6.3 Interview(s)	27
SECTION 7. DATA GAP IDENTIFICATION	**29**
SECTION 8. FINDINGS AND CONCLUSIONS	**31**
SECTION 9. CREDENTIALS	**33**
SECTION 10. REFERENCES	**35**

List of Figures

Figure	Page
Figure 1 – Site Location	5
Figure 2 – Existing Site Conditions	7

List of Appendices

Appendix A Historical Research Documentation
Appendix B Environmental Database Search Report
Appendix C Agency Records
Appendix D Site Photographs
Appendix E Qualifications of Environmental Professionals

The Planning Center has performed a Modified Phase I Environmental Site Assessment (Modified Phase I) for the approximately 28-acre area located west of State Street, north of Oakland Avenue, east of Alessandro Street and south of Woodgate Street in the City of Hemet, Riverside County, California. The scope of work is described and conditioned by our proposal dated August 18, 2006. As indicated in our proposal, the Modified Phase I was performed by adaptation of the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments. Exceptions to, or deletions from, this practice are described in Section 1 of this report. Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-05 Standard and discussed in the Introduction of this report.

The subject site consists of an irregularly shaped, approximately 28-acre area located west of State Street, north of Oakland Avenue, east of Alessandro Street and south of Woodgate Street. The subject site consists of single family residences, a mobile home park, a vacant retail building, Entenmann's Bakery Outlet, Fuentes Tires and a liquor store with vacant land interspersed throughout the site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The goal of the ASTM E 1527-05 Standard practice is to identify Recognized Environmental Conditions (RECs), as defined in the Standard and in Section 1 of this report. This assessment has not revealed any evidence of recognized environmental conditions in connection with the property following an adaptation of the ASTM standard for Phase I assessments. A drug lab was identified as having been located on the site but is not considered to be a REC due to the cleanup.

HISTORICAL RECS AND KNOWN OR SUSPECT ENVIRONMENTAL CONDITIONS

The ASTM E 1527-05 Standard also requires that historical RECs (HRECs) and other known or suspect environmental conditions, as defined in the Standard and in Section 1 of this report are identified in the Modified Phase I. This assessment has not revealed any evidence of historical recognized environmental conditions, or known or suspect environmental conditions in connection with the property following an adaptation of the ASTM standard for Phase I assessments.

Portions of the site had orchards located on them where residual pesticides may be present. However, limited soil sampling for pesticides was conducted for the school district in 2003 and low levels of pesticides below human health screening levels were reported.

Based on aerial photographs and topographic maps, structures exist and previously existed on the site that pre-date 1978. Therefore, lead-based paint and asbestos containing materials could have been used in isolated portions of the site near existing and former buildings. In addition, due to pole-mounted transformers observed on-site during the site visit, isolated portions of the site may have been impacted with polychlorinated biphenyls (PCBs). Septic tanks are reported to be used in the trailer park at 685 State Street, and may be in use in other parts of the site. By following standard protocols for abating lead-based paint and asbestos containing materials during demolition, and properly decommissioning transformers and septic tanks, these issues are not expected to impact the site based on the proposed land use.

SUMMARY

Based on the results of this assessment, RECs, HRECs, and known or suspect environmental conditions associated with the subject site were not identified. No further assessment of the site is recommended.

Observation should be made during any future site development for areas of possible contamination such as but not limited to the presence of buried debris, waste drums, stained soil, septic tanks. Should such materials be encountered, further investigation and analysis may be necessary at that time.

The remainder of this report contains additional information regarding the Modified Phase I work performed, the resulting findings summarized above, and limitations affecting this report.

1. Introduction

1.1 PURPOSE

This Modified Phase I Environmental Site Assessment (Modified Phase I) was performed by adaptation of the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05 Standard. The revitalization plan area is located in the northern portion of the City of Hemet, Riverside County, California (Figure 1). The approximately 28-acre site is located west of State Street, north of Oakland Avenue, east of Alessandro Street, and south of Woodgate Street. The site is comprised of thirty-seven parcels owned by sixteen primary property owners ranging in size from 0.03 to 2.89 acres. The Riverside County Economic Development Agency is creating a revitalization plan for the site that will identify solutions to eliminate blight.

The purpose of this assessment was to evaluate site history, existing observable conditions, current site use, and current and historic uses of surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) in connection with the subject site. RECs are defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on a property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions."

In addition, the Standard requires that historical RECs (HRECs) and known or suspect environmental conditions are identified in the Phase I report. The standard defines historical RECs as environmental conditions "which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently." The term "known or suspect environmental condition" is not specifically defined in the standard, but is used by The Planning Center to highlight environmentally-related information that is not anticipated to adversely affect the subject site and/or does not rise to the level of an REC.

Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, defined by ASTM as "a risk which can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel of commercial real estate. Consideration of environmental risk issues may involve addressing one or more non-scope considerations."

Beginning November 1, 2006, real estate transactions are subject to new federal regulations establishing environmental due diligence standards. Compliance with the new regulations is a requirement for insulating purchasers from potential liability under the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA," also known as "Superfund"). CERCLA imposes liability, without regard to fault or negligence, on past and present owners for any environmental contamination found on the property. A purchaser of land contaminated by the activities of others is nonetheless liable under CERCLA - unless it qualifies for one of few statutory defenses, such as those for bona fide prospective purchasers, innocent landowners and contiguous property owners. In order to qualify for any of these defenses, a prospective purchaser must conduct "all appropriate inquiry" on or before the date of acquiring the property. The new federal rule requires a more comprehensive investigation than the old Phase I standards. An inquiry investigation must include interviews with past and present owners, operators and occupants; reviews of historical sources of information; searches for recorded environmental cleanup liens; reviews of federal, state, tribal and local government records; and visual inspections of the property and adjoining properties.

This modified Phase I does not meet the "all appropriate inquiry" standards and should not be used for property transactions but only to evaluate potential environmental hazards at the project site. Each parcel should have a Phase I that evaluates thoroughly existing and historic land uses of that individual parcel prior to land transfer.

1.2 SITE IDENTIFICATION

The subject site is located west of State Street, north of Oakland Avenue, east of Alessandro Street and south of Woodgate Street in the City of Hemet (Figure 1). The subject site consists of single family residences, a mobile home park, a vacant retail building, Entenmann's Bakery Outlet, Fuentes Tires and a liquor store with vacant land interspersed throughout the site.

1.3 DETAILED SCOPE OF SERVICES

The Planning Center performed the following detailed scope of services to complete our Phase I assessment:

1. Visual observations of site conditions, and of abutting property use, to evaluate the nature and type of activities that have been or are being conducted at and adjacent to the site, in terms of the potential for release or threat of release of hazardous substances or petroleum products.

2. Review of federal and state environmental database information within the ASTM- specified radii from the subject property using a database service to access records. Use of 7.5-minute topographic maps to evaluate the site's physical setting.

3. Review of federal and state environmental files pertaining to the subject site and nearby sites with the potential to impact the subject site.

4. Review of previous reports (if any) prepared for the subject site.

5. Review of the following sources of historical use information:

    - Aerial Photographs

    - Historical Topographic Maps

6. Contacts with state and local agencies regarding the site and surrounding properties and structures.

7. Interviews with the Key Site Manager and property tenant representatives (if any).

8. Interpretation of information and data assembled as a result of the above work tasks, and formulation of conclusions regarding the potential presence and impact of RECs as defined by the ASTM E 1527-05 Standard.

1.4 NON-SCOPE CONSIDERATIONS

The ASTM E 1527-05 Standard includes the following list of "additional issues" that are non-scope considerations outside of the scope of the ASTM Phase I practice: Asbestos-Containing Materials, Radon, Lead-Based Paint, Lead in Drinking Water, Wetlands, Regulatory Compliance, Cultural and Historic Risks, Industrial Hygiene, Health and Safety, Ecological Resources, Endangered Species, Indoor

Air Quality, and High Voltage Power Lines. The additional issues included in this Phase I include the following:

- A review of agency records to identify high-pressure gas lines and fuel transmission lines in the vicinity of the subject property;
- A review of Division of Oil and Gas records;
- A review of geological references for the presence of naturally occurring asbestos;
- Prior usage of subject property for agricultural purposes, mining activities, illegal drug manufacturing and disposal, and U.S. Government ownership; and
- The possibility of asbestos-containing materials and lead-based paint used in building construction.

1.5 EXCEPTIONS AND DEVIATIONS

1.5.1 Exceptions

The Planning Center has completed this assessment in general conformance with ASTM E 1527-05. Exceptions were made to the ASTM work scope and this report is considered a modified Phase I. Interviews with past and present land owners, operators and occupants were not made. Searches for recorded environmental cleanup liens and property chain-of-title for each parcel were not conducted. For property transfer, a Phase I ESA that meets all ASTM E 1527-05 standards is recommended for each parcel.

1.5.2 Deviations

The Planning Center completed this modified assessment in general conformance with the ASTM E 1527-05 Standard and the assessment does not meet all requirements for the ASTM 1527-05 Standard.

1.6 LIMITATIONS

Our work for this project was performed generally consistent with the ASTM E 1527-05 Standard for Phase I Environmental Site Assessments. Several organizations other than ASTM, such as professional associations (e.g. ASFE and AGWSE) have also developed “guidelines” or “standards” for environmental site assessments. The Phase I presented herein is consistent with the ASTM E 1527-05 Standard, which may vary from the specific “guidelines” or “standards” required by other organizations.

This Report was prepared pursuant to an Agreement dated August 18, 2006 between Riverside County Economic Development Agency and The Planning Center. All uses of this Report are subject to, and deemed acceptance of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. The Planning Center has not performed any additional observations, investigations, studies or other testing not specified in the Agreement. The Planning Center shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

This Report is prepared for the exclusive use of Riverside County Economic Development Agency in connection with the North Hemet Revitalization Plan. There are no intended beneficiaries other than

Riverside County Economic Development Agency. The Planning Center shall owe no duty whatsoever to any other person or entity on account of the Agreement or the Report. Use of this Report by such other person or entity without the written authorization of Riverside County Economic Development Agency and The Planning Center shall be at such other person's or entity's sole risk, and shall be without legal exposure or liability to The Planning Center.

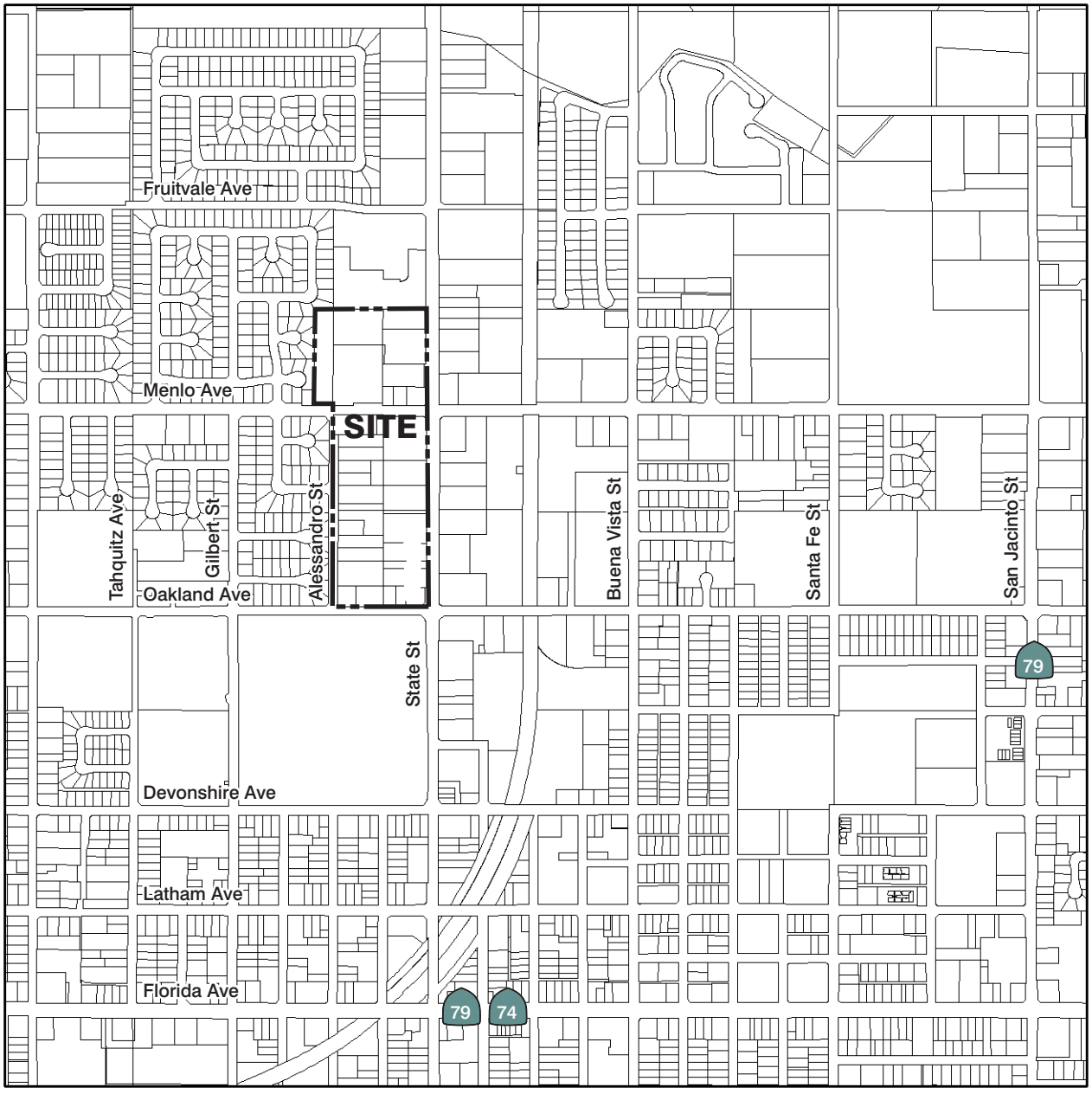
Use of this Report by any person or entity, including by Riverside County Economic Development Agency, for a purpose other than the North Hemet Revitalization Plan, is expressly prohibited unless such person or entity obtains written authorization from The Planning Center indicating that the Report is adequate for such other use. Use of this Report by any person or entity for such other purpose without written authorization by The Planning Center shall be at such person's or entity's sole risk and shall be without legal exposure or liability to The Planning Center.

This Report reflects site conditions observed and described by records available to The Planning Center as of the date of report preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the report. Accordingly, Riverside County Economic Development Agency and any other party to whom the report is provided recognize and agree that The Planning Center shall bear no liability for deviations from observed conditions or available records after the time of report preparation.

Use of this Report by any person or entity in violation of the restrictions expressed in this Report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this Report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages or other liability which may result.

This assessment did not include testing of electrical equipment for the presence of polychlorinated biphenyls (PCBs) or the collection of other environmental samples such as water, air, soil, building materials, paint, and radon or methane gas. This assessment also did not include an extensive assessment for the potential damage from earthquakes, floods, landslides, etc.

Site Location



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Existing Site Conditions



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2. Site Description

2.1 SITE OWNERSHIP AND LOCATION

2.1.1 Names of Site Owners

The following table contains the Assessor Parcel Numbers (APNs), site addresses, number of acres and the owners address and name if available.

Assessor's Parcel No.	Parcel Address	No. of Acres	Site Owner	Owner's Address
439-060-009	785 State Street	1.78	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-010	260 Menlo Avenue	2.89	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-011	761 State Street	0.9	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-013	733 State Street	0.953	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-014	None	0.2	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-015	160 Menlo Avenue	0.239	Not provided	40316 Clark Drive Hemet, CA 92544
439-060-016	703 State Street	0.386	Not provided	4933 Quincy Street San Diego, CA 92109
439-060-024	None	0.03	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
439-060-025	749 State Street	1.44	Not provided	P.O. Box 512377 Los Angeles, CA 90051
439-281-035	320 Menlo Avenue	1.79	Not provided	P.O. Box 5068 Laguna Beach, CA 92652
443-050-001	685 State Street	1.887	Camacho, Martin, Solorio & Josefin	4900 Santa Anita Boulevard, Suite 2C El Monte, CA 91731

443-050-002	645 State Street	1.092	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-003	605 State Street	1.095	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-004	None	0.150	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-006	557 State Street	0.767	Riverside County Redevelopment Agency	3525 14th Street Riverside, CA 92501
443-050-007	541 State Street	0.333	John Wessman	300 S. Palm Canyon Road Palm Springs, CA 92262
443-050-012	150 Oakland Avenue	0.209	Raul Esparza	3214 Joshua Way Hemet, CA 92545
443-050-013	190 Oakland Avenue	0.256	Puttroff	Not provided
443-050-016	510 Alessandro Street	0.387	Alvie J. Tucker	568 Rosario Avenue San Jacinto, CA 92583
443-050-017	None	1.138	Harold T. Fairchild Trust	2200 W. Acacia Avenue, #E314 Hemet, CA 92545
443-050-018	552 Alessandro Street	0.569	Harold T. Fairchild Trust	2200 W. Acacia Avenue, #E314 Hemet, CA 92545
443-050-020	566 Alessandro Street	0.568	Harold T. Fairchild Trust	2200 W. Acacia Avenue, #E314 Hemet, CA 92545
443-050-021	580 Alessandro Street	0.390	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-022	608 Alessandro Street	0.748	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-023	608 Alessandro Street	0.310	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-024	622 Alessandro Street	0.827	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722

443-050-025	636 Alessandro Street	0.407	Roger Michael Chacon	Not provided
443-050-026	650 Alessandro Street	0.408	Mary E. Justus	2052 Raymond Avenue Long Beach, CA 90806
443-050-027	647 State Street	0.322	Ralph L. Barnhart Trust	P.O. Box 223370 Princeville, HI 96722
443-050-028	664 Alessandro Street	0.569	John Wessman	300 S. Palm Canyon Road Palm Springs, CA 92262
443-050-029	678 Alessandro Street	0.569	John Wessman	300 S. Palm Canyon Road Palm Springs, CA 92262
443-050-030	211 Menlo Avenue	0.139	Ezequiel Suarez	1153 Washington Avenue San Jacinto, CA 92583
443-050-031	692 Alessandro Street	0.883	John Wessman	300 S. Palm Canyon Road Palm Springs, CA 92262
443-050-033	250 Oakland Avenue	0.543	Harold T. Fairchild Trust	2200 W. Acacia Avenue, #E314 Hemet, CA 92545
443-050-036	509 State Street	0.365	R & B Inv. Co.	415 N. Santa Fe Vista, CA 92084
443-050-039	573 State Street	1.281	Harold T. Fairchild Trust	2200 W. Acacia Avenue, #E314 Hemet, CA 92545
443-050-040	525 State Street	0.798	John Wessman	300 S. Palm Canyon Road Palm Springs, CA 92262

2.1.2 Name of Site Operators

Entenmann's Bakery Outlet is located at 733 State Street. Fuentes Tires is located at 260 Menlo Avenue. The liquor store is located at 509 State Street. The remaining parcels are either vacant or residential.

2.1.3 Site Location Map

The United States Geological Survey (USGS) topographic map for the site is the San Jacinto, California Quadrangle. The USGS topographic map was used as the source for site setting information. The site is located in Riverside County at approximately 33.7578° north latitude and 116.9719° west longitude, in portions of Sections 3 and 10 of Township 5 South, Range 1 West of the San Bernardino Base Line and Meridian.

2.2 SITE AND VICINITY DESCRIPTION

The subject site is approximately 28 acres in size. Figure 2 shows existing site and immediately adjacent property features. The subject site is currently developed with single-family residences, a liquor store, commercial buildings and a mobile home park with vacant land interspersed throughout the site. The portion of the subject site south of Menlo Avenue is currently zoned C2 for General Commercial. The portion of the subject site north of Menlo Avenue fronting State Street is currently zoned C-1 for Neighborhood Commercial, and the rest of the site north of Menlo Avenue is currently zoned R-3 for Multiple Family Residential.

The site vicinity is an area with typical Mediterranean climate, characterized by hot dry summers and mild winters. The Western Regional Climate Center collected climatic data in San Jacinto from 1948 to 1978. The mean temperature in the area ranges from a low of 33.9° Fahrenheit (°F) in the winter to a high of 99.6°F in the summer, though extremes of 16°F and 116°F have been recorded. The average annual precipitation is 11.40 inches per year and snowfall is rare in this area.

2.3 PHYSICAL SETTING

Subsurface explorations were not performed for this evaluation; therefore site geology and hydrology were evaluated on the basis of readily-available public information or references, and/or based upon our experience and understanding of subsurface conditions in the subject property area.

2.3.1 Topography

Topographically, the site generally slopes to the west-northwest. Based on a review of the USGS 7.5-minute Topographic Series, San Jacinto, California Quadrangle Map (USGS 1996) and the Riverside County Land Information System website (2007), surface elevation of the subject property ranges between approximately 1,558 feet to 1,585 feet above mean sea level (msl).

2.3.2 Geologic Information

The proposed site is located in the San Jacinto Valley, part of the Peninsular Ranges Geomorphic Province. The Peninsular Ranges.Geomorphic Province extends approximately 900 miles southward from the Los Angeles Basin to Baja California, Mexico and is characterized by elongated northwest-trending mountain ranges separated by sediment-floored valleys (Yerkes *et al.* 1965). The most dominant structural features of the province are the northwest-trending fault zones, most of which die out, merge with, or are terminated by the steep reverse faults at the southern margin of the San Gabriel and San Bernardino Mountains within the Transverse Ranges Geomorphic Province. The site itself sits atop Holocene and Pleistocene alluvium (CDMG 1966; Dibblee 1970). The closest faults are the Casa Loma segment of the San Jacinto fault about 0.3 miles north-northeast of the site, the Anza segment of the San Jacinto fault about 3.0 miles east-southeast of the site and the Claremont segment of the San Jacinto fault about 3.4 miles northeast of the site (CDMG 2000a).

A review of the Soil Survey of Western Riverside Area, California (United States Department of Agriculture Soil Conservation Service 1971) indicated that the soils in the site vicinity belong to the San Emigdio association. San Emigdio soils are formed on alluvial fans. San Emigdio soils have a surface layer of light brownish-gray fine sandy loam to 14 inches. Underlying this is light-gray fine sandy loam to more than 60 inches.

2.3.3 Naturally Occurring Asbestos Containing Minerals

According to the California Division of Mines and Geology (CDMG), no naturally-occurring serpentine rock or rock formations that may contain a significant quantity of asbestos are located in the site vicinity, upstream or within a ten-mile radius (CDMG 2000b).

2.3.4 Ground Water and Surface Water Information

Based on surface topography, surface water at the site generally flows to the west and northwest. Regional groundwater flow is anticipated to be to the south (EMWD 2006). No natural water bodies are present on the site. Hydrogeologic investigations were not performed on the site for this investigation; therefore, it is unknown to what extent localized variations in groundwater presence and flow occur on the site.

According to the US Flood Hazard Areas Map located on the FEMA website, portions of the subject site fronting State Street, Menlo Avenue and Oakland Avenue are located in Zone A, which is a 100-year flood zone. The northern portion of the site, near the condominiums, is not zoned. The remainder of the site is located in Zone C, which is outside of a 500-year flood zone. The site is serviced by Eastern Municipal Water District and Lake Hemet Municipal Water District, which provide potable water to the City of Hemet. No monitoring wells were observed on the property.

The site is located in the Hemet South subbasin of the San Jacinto Valley Groundwater Basin. The depth to groundwater as of 2005 was approximately 265 feet below ground surface (EMWD 2006). The nearest surface water is Bautista Wash, located about 1.9 miles northeast of the site. San Jacinto Reservoir is located approximately 2.7 miles northwest of the subject property (USGS 1996).

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3. Previous Reports

The Planning Center was provided with one previous report for a portion of the site and an additional report for adjoining land to the south. Tetra Tech EM, Inc. prepared letter reports titled *Results of Limited Soil Sampling, New Elementary School Project #4, Option 1* for the southern portion of the site and *Results of Limited Soil Sampling, New Elementary School Project #4, Option 2* for the adjoining land to the south on behalf of Hemet Unified School District, both dated March 13, 2003. According to Tetra Tech EM, Inc., the portion of the site south of Menlo Avenue was used as temporary residences for migrant farm workers. Adjoining land to the south, across Oakland Avenue was the former Hemet Stock Farm.

Low levels of arsenic and residual organochlorine pesticides were detected in shallow soil samples on the southern portion of the site. Twenty-seven soil samples were collected in a grid pattern across the southern portion of the site. The pesticide 4,4'-DDD was detected in 5 out of 27 samples, ranging in concentration from 6.2 to 14 micrograms per kilogram (μg/kg). 4,4'-DDE was detected in 14 out of 27 soil samples, ranging in concentration from 6.5 to 160 μg/kg. 4,4'-DDT was detected in 15 out of 27 soil samples, ranging in concentration from 6.8 to 87 μg/kg. Chlordane was detected in 13 out of 27 soil samples, ranging in concentration from 52 to 490 μg/kg. Heptachlor epoxide was detected in 2 out of 27 soil samples, with concentrations of 11 and 12 μg/kg.

California Human Health Screening Levels (CHHSLs) are concentrations of chemicals in soil that the California Environmental Protection Agency considers to be below thresholds of concern for risks to human health. The thresholds of concern used to develop CHHSLs are an excess cancer risk of one-in-a-million and a hazard quotient of 1.0 for noncancer health effects. Concentrations of all analytes detected on the southern portion of the site were below CHHSLs and are not likely to pose a risk.

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4. Site History

4.1 PAST USAGE OF THE SITE

Past usage of the site was assessed through a review of aerial photographs and historical topographic maps. Copies of historical references reviewed are included in Appendix A.

According to historical aerial photographs and topographic maps, the southern portion of the subject site along Oakland Avenue has been developed with single-family residences since at least 1938. The central portion of the site, south of Menlo Avenue, was developed with single family residences from at least 1938 to about 1996. A rural residential dwelling was located north of Menlo Avenue, west of the projection of Alessandro Street from at least 1938 to about 1967. Orchards were located on the extreme northwest corner of the site from at least 1938 to about 1967 and at the southwest corner of Menlo Avenue and State Street from at least 1938 to about 1980. Structures have been located on the northern portion of the site since at least 1953, with additional structures noted in 1967, 1972, 1976 and 1996. A mobile home park has been located at the southwest corner of Menlo Avenue and State Street since at least 1989. The liquor store building has been located at the northwest corner of Oakland Avenue and State Street since at least 1976.

4.1.1 Historical Aerial Photographs

Aerial photographs for the site were obtained from GeoSearch for the years of 1938, 1953, 1967, 1976, 1980, 1989, 1996 and 2002 and were reviewed for the subject site. Copies of the aerial photographs are included in Appendix A.

- 1938 – The portion of the site south of Menlo Avenue appears to be developed mostly with single-family residences, although the southwest corner of Menlo Avenue and State Street appears to be developed with an orchard. The portion of the site north of Menlo Avenue and west of the projection of Alessandro Street is developed with a rural residential dwelling, and the northern portion of the parcel has an orchard. The remainder of the site north of Menlo Avenue is vacant land.

- 1953 – An additional building is located at the northwest corner of Menlo Avenue and State Street. There appears to be small buildings among the orchard at the southwest corner of Menlo Avenue and State Street. The remaining areas of the subject site appear relatively unchanged in comparison to the 1938 aerial photograph.

- 1967 – The rural residential dwelling north of Menlo Avenue is less apparent. Additional structures are located on the portion of the site north of Menlo Avenue. The remaining areas of the subject site appear relatively unchanged in comparison to the 1953 aerial photograph.

- 1976 – Large buildings are located on the portion of the site north of Menlo Avenue. The orchard on the northwest corner of the site is no longer apparent. A large building is located at the northwest corner of Oakland Avenue and State Street. The remaining areas of the subject site appear relatively unchanged in comparison to the 1967 aerial photograph.

- 1980 – The subject site appears relatively unchanged in comparison to the 1976 aerial photograph.

- 1989 – The orchard at the southwest corner of Menlo Avenue and State Street is no longer apparent and additional small buildings are visible. The remaining areas of the subject site appear relatively unchanged in comparison to the 1980 aerial photograph.

- 1996 – A large building is located on the northern portion of the site. The remaining areas of the subject site appear relatively unchanged in comparison to the 1989 aerial photograph.

- 2002 – Additional land in the center of the southern portion of the site is vacant. The remaining areas of the subject site appear relatively unchanged in comparison to the 1996 aerial photograph.

4.1.2 Historical Topographic Maps

Historical topographic maps obtained from GeoSearch for the years of 1953, 1953 (photorevised 1972), 1953 (photorevised 1979) and 1996 were reviewed for the subject site. Copies of the historic topographic maps are included in Appendix A.

- 1953 – The portion of the site south of Menlo Avenue is depicted with house omission tint. The portion of the site north of Menlo Avenue is depicted with eight dwellings and two barns.

- 1953 (photorevised 1972) – Two dwellings depicted on the 1953 topographic map are no longer depicted on the northern portion of the site, although eight additional dwellings and four larger buildings are depicted north of Menlo Avenue. The remaining areas of the subject site appear unchanged in comparison to the 1953 topographic map.

- 1953 (photorevised 1979) – Two additional dwellings are depicted along State Street on the northern portion of the site. The remaining areas of the subject site appear unchanged in comparison to the 1953 (photorevised 1972) topographic map.

- 1996 – The subject site appears unchanged in comparison to the 1953 (photorevised 1979) topographic map.

4.1.3 Prior Agricultural Use

Based on a review of aerial photographs and historic topographic maps, orchards were located on the extreme northwest corner of subject site from at least 1938 to about 1967 and at the southwest corner of Menlo Avenue and State Street from at least 1938 to about 1980.

4.1.4 Mines

Based on the review of historical sources (aerial photographs and historic topographic maps) and the database search report, there is no evidence to indicate that the site was ever utilized for mining operations.

4.1.5 Illegal Drug Manufacturing

The proposed site was not identified by the California Hazardous Material Incident Report System (CHMIRS) which is maintained by the California Office of Emergency Services and contains information regarding hazardous material incidents such as accidental releases or spills. Drug-related waste was not observed on the site during the site inspection.

4.1.6 Prior U.S. Government Ownership

There is no indication that the property was owned by the U.S. Government or utilized for military operations.

4.2 PAST USAGE OF ADJOINING PROPERTIES

Based on review of historical aerial photographs and topographic maps, the Hemet Stock Farm has been located south of the site since at least 1938. Orchards were located east (north of Menlo Avenue) and west of the site from at least 1938 to about 1953. Land to the north was developed with row crops from at least 1938 to about 1953, followed by an orchard around 1967, vacant land around 1976 and multi-family residential dwellings around 2002. Single-family residential dwellings have been located west of the site since at least 1976. Land east of the site, south of Menlo Avenue, had scattered residential dwellings from at least 1938 to about 1967, a warehouse since at least 1953, and a gas station at the southeast corner of Menlo Avenue and State Street since at least 1996.

4.2.1 Aerial Photographs

Aerial photographs for the site obtained from GeoSearch for the years of 1938, 1953, 1967, 1976, 1980, 1989, 1996 and 2002 were reviewed for the adjoining properties and are included in Appendix A.

- 1938 – The Hemet Stock Farm is located south of the site, across Oakland Avenue. Orchards are located east and west of the site. Row crops are located north of the site. Vacant land and scattered residences are located to the east, south of Menlo Avenue.

- 1953 – A building is located to the southeast, across Oakland Avenue and State Street. Two long buildings and an orchard are located east of the site, south of Menlo Avenue. Two buildings are located in the orchard north of Menlo Avenue. The remaining adjoining properties appear relatively unchanged in comparison to the 1938 aerial photograph.

- 1967 – The orchards to the east and west, south of Menlo Avenue, are no longer apparent. Adjoining land to the north is developed with an orchard. The building to the southeast, across Oakland Avenue and State Street, is no longer apparent and appears to be vacant land. The remaining adjoining properties appear relatively unchanged in comparison to the 1953 aerial photograph.

- 1976 – The orchards to the north and west are no longer apparent. A residential development is located to the west, across Alessandro Street. Land to the east, south of Menlo Avenue is largely vacant, although a warehouse and two smaller buildings are located in this area, closer to Oakland Avenue. The remaining adjoining properties appear relatively unchanged in comparison to the 1967 aerial photograph.

- 1980 – Residential dwellings are located west of the site, across Alessandro Street. A large building is located east of the site, across State Street and north of Menlo Avenue. The remaining adjoining properties appear relatively unchanged in comparison to the 1976 aerial photograph.

- 1989 – Remnants of the orchard east of the site, north of Menlo Avenue, are no longer apparent. Residential dwellings are located west of the site, north of Menlo Avenue. Buildings are located southeast of the site, across Oakland Avenue and State Street. The remaining adjoining properties appear relatively unchanged in comparison to the 1980 aerial photograph.

- 1996 – A gas station is located to the east, at the southeast corner of Menlo Avenue and State Street. The remaining adjoining properties appear relatively unchanged in comparison to the 1989 aerial photograph.

- 2002 – Adjoining land to the north is developed with multi-family residential dwellings. The remaining adjoining properties appear relatively unchanged in comparison to the 1996 aerial photograph.

4.2.2 Historical Topographic Maps

Historical topographic maps obtained from GeoSearch for the years of 1953, 1953 (photorevised 1972), 1953 (photorevised 1979) and 1996 were reviewed for the adjoining properties. Copies of the historic topographic maps are included in Appendix A.

- 1953 – Orchards are depicted to the north, west and east, north of Menlo Avenue. Four dwellings, a barn and a medium-sized building are depicted in the orchard east of the site. A large building and two long buildings are depicted along with house omission tint on land to the east, south of Menlo Avenue. The Hemet Stock Yard is depicted south of the site. A building is depicted along with house omission tint southeast of the site, across Oakland Avenue and State Street.

- 1953 (photorevised 1972) – An additional medium-sized building is depicted in the orchard east of the site, north of Menlo Avenue. The adjoining land east of the site, south of Menlo Avenue, is no longer depicted with house omission tint. One of the long buildings and the large building are no longer depicted east of the site. Three dwellings and a medium-sized building are depicted south of the site. An additional dwelling is depicted west of the site in the orchard. The remaining adjoining properties are unchanged in comparison to the 1953 topographic map.

- 1953 (photorevised 1979) – Two additional dwellings, one large building and two medium-sized buildings are depicted east of the site. Four medium-sized buildings are depicted south of the site. A trailer park is depicted west of the site, across Alessandro Street. Additional streets are depicted west of Alessandro Street. The remaining adjoining properties are unchanged in comparison to the 1953 (photorevised 1972) topographic map.

- 1996 – The adjoining properties are unchanged in comparison to the 1953 (photorevised 1979) topographic map.

The Planning Center utilized the electronic database service GeoSearch to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced Agency records, located within the ASTM-specified search radii indicated below:

- NPL sites: ..... 1 mile
- CERCLIS sites: ..... 0.5 mile
- CERCLIS NFRAP sites ..... Site and Adjoining
- Federal ERNS: ..... Site only
- RCRA non-CORRACTS TSD facilities: ..... 0.5 mile
- RCRA CORRACTS TSD facilities: ..... 1 mile
- RCRA Generators: ..... Site & Adjoining
- State Hazardous Waste Sites: ..... 1 mile
- Registered Underground Storage Tanks: ..... Site & Adjoining
- State Landfills and Solid Waste Disposal Sites: ..... 0.5 mile
- State Leaking Underground Storage Tanks: ..... .0.5 mile

A review of selected regulatory agency databases for documented environmental concerns on the site, or in close proximity to the site, was conducted by GeoSearch.

A copy of the Radius Report, Dated February 19, 2007 is included in Appendix B.

The subject site was listed on only one of the databases searched, Clandestine Drug Labs (CACDL) discussed below in Section 5.1.3. The following is a summary of information provided for each of the above-listed databases.

5.1 STANDARD ENVIRONMENTAL RECORDS REVIEW

5.1.1 State Sites and State Spill Sites

The CALSITES database, maintained by the DTSC, contains both known and potential hazardous substance sites.

- The subject site is not listed as a CALSITES site.
- The database search identified one CALSITES facility within one mile of the subject site and another facility that was not mapped, but is likely to be within one mile of the subject site:
    - Cearco Company, located at 245 S. Western Avenue, about 0.98 miles southwest of the subject site, was identified as a CALSITES facility. Due to distance, this facility is not expected to impact the subject site.
    - So Cal Gas/Hemet MGP, located south of Oakland Avenue, by AT&SF railroad (based on this description, about 0.13 miles east of the subject site, was identified as a CALSITES facility. Due to the potential substances released and distance from the site, this facility is not expected to impact the subject site.

5.1.2 Statewide Environmental Evaluation and Planning System (SWEEPS)

The State Water Resources Control Board Statewide Environmental Evaluation and Planning System contains a historical inventory of active and inactive underground storage tank (UST) locations.

- The subject site is not listed on the SWEEPS list.
- The database search identified four SWEEPS facilities within a ½-mile radius of the subject site:
    - ARCO #5746, located at 690 N. State Street about 0.1 miles east of the subject site, is listed as having four 10,000-gallon gasoline USTs.
    - County Garage (Hemet), located at 826 N. State Street about 0.1 miles northeast of the subject site, is listed as having one 10,000-gallon gasoline UST.
    - Communications – Hemet, located at 880 N. State Street about 0.1 miles northeast of the subject site, is listed as having one 500-gallon gasoline UST.
    - GTE Hemet Plant Yard, located at 331 E. Menlo Street about 0.2 miles east of the subject site, is listed as having one 500-gallon waste oil UST and one 12,000-gallon gasoline UST.

Due to the distance from the subject site and/or regulatory status, these facilities are not expected to impact the subject site.

5.1.3 Clandestine Drug Labs (CACDL)

The California Department of Toxic Substances Control (DTSC) maintains this listing of illegal drug laboratories. The DTSC is required by Health and Safety Code Section 25354.5 to remove hazardous contaminants found at drug lab locations, such as highly volatile organic solvents and semi-volatile organic compounds, corrosive inorganic acids and bases, and any derivatives of the illicit drug. The list is updated annually.

- The subject site is listed on the CACDL list.
    - One illegal drug lab, located at 685 State Street, was identified on the subject site. The location was either where an illegal drug lab was operated or drug lab equipment and/or materials were stored.
- The database search identified thirty-four CACDL sites within a one-mile radius of the subject site:
    - One illegal drug lab, located at 772 N. State Street about 0.12 miles northeast of the site, was identified. The location was either where an illegal drug lab was operated or drug lab equipment and/or materials were stored.
    - Thirty-one illegal drug labs and two locations with abandoned drug lab waste were identified that were located within a one-mile radius, but greater than ¼-mile away from the subject site. The abandoned drug lab waste locations were where waste and/or equipment from an actual illegal drug lab was abandoned.

Drug lab listings are maintained by the Department of Toxic Substance Control and if a lab is listed the hazardous contaminants have been removed per Health and Safety Code 25354.5. Based on the substances released, distance from the site, topographic gradient and/or regulatory status, these locations are not expected to impact the subject site.

5.2 ADDITIONAL ENVIRONMENTAL RECORDS REVIEW

In conformance with ASTM inquiry was made with representatives of the agencies described below and with the user of this Modified Phase I.

5.2.1 Proximity to High-Pressure Gas Lines or Fuel Transmission Lines

The Underground Service Alert (USA) website was accessed to request a list of utility companies in the vicinity of the subject property that may operate transmission lines. USA provided a list of seven companies, including the Southern California Gas Company (SCGC). A letter was sent to SCGC on February 23, 2007 to determine what types of pipelines are in the area. To date, SCGC has not responded to our request. The response from SCGC will be included in future reports for the project.

5.2.2 State of California Division of Oil and Gas Records

A review of California Division of Oil, Gas and Geothermal Resources, Wildcat Map Series, Map W1-7, (California Department of Conservation 2004) indicated that there are no active or abandoned oil or gas fields on the subject site or adjoining properties. The oil and gas map pages showing the vicinity of the closest oil wells are included as Appendix C.

5.2.3 Office of the State Fire Marshal, Pipeline Safety Division

A request for pipeline location information was sent to the State Fire Marshal on February 26, 2007. The State Fire Marshal responded that there are no pipelines in the vicinity of the site that are in their jurisdiction. A copy of the response is included in Appendix C.

5.2.4 Proximity to Potable Water or Sewer Lines

Underground Service Alert (USA) provided a list of seven companies, including Eastern Municipal Water District (EMWD), which provides potable water and wastewater disposal services to portions of the site and Lake Hemet Municipal Water District (LHMWD), which provides potable water to the remainder of the site. Letters were sent to EMWD and LHMWD on February 23, 2007 to determine what facilities are in the area. To date, EMWD and LHMWD have not responded to our request. The responses from EMWD and LHMWD will be included in future reports for the project.

5.2.5 Proximity to Electromagnetic Fields (EMF)

Southern California Edison was contacted to find out information on power lines in the area of the site. Edison indicated that lines in the area are distribution lines (less than 50 kilovolts) only. The response from Edison is included in Appendix C.

5.2.6 User-Provided Information

The ASTM Standard requires disclosure in the Phase I report whether the user of the report has

specialized knowledge about previous ownership or uses of the property that may be material to identifying RECs or HRECs, or whether the user has determined that the property's Title contains environmental liens or other information related to environmental condition of the property, including engineering and institutional controls and Activity and Use Limitations, as defined by ASTM. In addition, we are required by the ASTM Standard to inquire whether the user of the report has prior knowledge that the price of the property has been reduced for environmentally-related reasons.

The Planning Center has not been informed by the user that there are liens or other information about the environmental condition of the property in the Title. In addition, the user has not indicated specialized knowledge about previous ownership or uses of the property that may be material to identifying RECs with the exception of the information provided above, and has not indicated that the price of the property has been reduced for environmentally-related reasons.

6. Site Reconnaissance and Key Personnel Interview(s)

A site visit to observe site conditions was conducted by Dr. Denise Clendening of The Planning Center on January 18, 2007. The Planning Center personnel observed the exterior portions of the property, including the property boundaries. No weather-related conditions or other conditions that would limit our ability to observe the site occurred during our site reconnaissance.

ASTM Section 9.8 requires that, prior to the site visit**,** the current site owner or Key Site Manager and user, if different from the current owner or Key Site Manager, be asked if there are any helpful documents or information that can be made available for review. These consist of environmental site assessment reports, audits, permits, tank registrations, Material Safety Data Sheets, Community Right-to-Know plans, safety plans, hydrogeologic or geotechnical reports, or hazardous waste generator reports. We were provided with site maps and previous reports.

6.1 CURRENT USE OF THE PROPERTY

The subject site consists of single family residences, a mobile home park, a vacant retail building, Entenmann's Bakery Outlet, Fuentes Tires, a liquor store and vacant land.

6.2 SITE VISIT OBSERVATIONS

6.2.1 General Description of Structures

There are about a dozen single family residences, two to three dozen mobile homes within the mobile home park, a vacant retail building, Entenmann's Bakery Outlet, a large covered building for Fuentes Tires and a liquor store on the site.

6.2.2 Heating and Cooling System

Many of the buildings on site have heating and cooling systems. Electricity is provided to the site by Southern California Edison and natural gas is provided by Southern California Gas Company.

6.2.3 Potable Water Supply and Sewage Disposal System or Septic Systems

Potable water is provided to the site by Eastern Municipal Water District (EMWD) and Lake Hemet Municipal Water District (LHMWD). All of EMWD's and LHMWD's water for Hemet is supplied by groundwater wells.

EMWD also provides sewage disposal services to the subject site.

Septic systems were reported at the subject site based on an interview with Ms. Sandy Packham, formerly a facilities planner for Hemet Unified School District, although the quantity and locations of septic tanks are unknown. A geophysical survey to locate septic tanks on site was not included in the scope of work for this project.

6.2.4 Use of Petroleum Products and Hazardous Materials

Use of petroleum products or hazardous materials was not observed at the subject site.

6.2.5 Storage of Petroleum Products and Hazardous Materials (Storage Tanks, Drums)

No petroleum products or hazardous materials were observed at the subject site.

6.2.6 Disposal of Petroleum Products and Hazardous Materials

No evidence of disposal of petroleum products or hazardous materials was observed at the subject site.

6.2.7 Hydraulic Elevators

No hydraulic elevators were observed at the subject site.

6.2.8 Vehicle Maintenance Lifts

No vehicle maintenance lifts were observed at the subject site.

6.2.9 Emergency Generators and Sprinkler System Pumps

No emergency generators or sprinkler system pumps were observed on the subject site.

6.2.10 Polychlorinated Biphenyls (PCBs) Associated with Electrical or Hydraulic Equipment

No hydraulic equipment was observed at the subject site. Pole-mounted transformers were observed along street right-of-ways.

6.2.11 Floor Drain and Sumps

No sumps or floor drains were observed at the subject site.

6.2.12 Catch Basins

No catch basins were observed at the subject site.

6.2.13 Dry Wells

No dry wells were observed at the subject site.

6.2.14 Pits, Ponds, Lagoons, and Pools of Liquid

No pits, lagoons, or pools of liquid were observed at the subject site.

6.2.15 Odors

No odors were observed at the subject site.

6.2.16 Stains or Corrosion on Floors, Walls, or Ceilings

The interiors of the structures on site were not observed. No staining or corrosion was observed on exterior floors or walls at the subject site.

6.2.17 Stained Soil or Pavement

No stained soil or pavement was observed at the subject site.

6.2.18 Stressed Vegetation

No stressed vegetation was observed at the subject property.

6.2.19 Solid Waste and Evidence of Waste Filling

Solid waste generated at the subject site is removed by the City of Hemet Integrated Waste Management Division.

No evidence of waste filling was observed on the subject property.

6.2.20 Wastewater and Stormwater Discharge

No wastewater discharge was observed on the subject property. Stormwater is expected to exit the subject site via overland flow to the City of Hemet storm drain system. Stormwater is also expected to percolate through open areas.

6.2.21 Monitoring, Water Supply, or Irrigation Wells

No monitoring, water supply or irrigation wells were observed at the subject property.



6.2.22 Sanitary Sewer and Septic Systems

The subject site is serviced by Eastern Municipal Water District. Septic systems were reported at the subject site, although the number of septic tanks and their locations are unknown. A geophysical survey to locate septic tanks was not included in the scope of this report.

6.2.23 Non-Scope Considerations

- No evidence of fill material was observed on the subject property.
- According to aerial photographs and topographic maps, structures exist on the site that pre-date 1978. Therefore, lead-based paint and asbestos containing materials could have been used on isolated portions of the subject site near existing and former buildings.

6.3 INTERVIEW(S)

As part of this Modified Phase I, interviews were not conducted.

6. Site Reconnaissance and Key Personnel Interview(s)

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7. Data Gap Identification

Because this is a Modified Phase I, several steps normally conducted in a standard Phase I were omitted. No site owners or adjacent land owners were interviewed for this Modified Phase I Environmental Site Assessment. No one was contacted to answer a standard questionnaire for the site or adjoining properties. Interiors of buildings were not observed due to access issues. Chain-of-title documentation was not reviewed for each of the parcels so it could not be ascertained if the Title reports contain environmental liens or other information related to environmental condition of the property.



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8. Findings and Conclusions

The Planning Center has performed a Modified Phase I Environmental Site Assessment (Modified Phase I) for the North Hemet Revitalization Plan area, located in the City of Hemet, Riverside County, California

The scope of work is described and conditioned by our proposal dated August 18, 2006. As indicated in our proposal, this Modified Phase I was performed by adaptation of the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Exceptions to, or deletions from, this practice are described in Section 1 of this report. Our conclusions are intended to help the user evaluate the "environmental risk" associated with the site, as defined in the ASTM E 1527-05 Standard and discussed in the Introduction section of this report.

The subject site consists of an irregularly shaped, approximately 28-acre area located west of State Street, north of Oakland Avenue, east of Alessandro Street and south of Woodgate Street. The subject site consists of single family residences, a mobile home park, a vacant retail building, Entenmann's Bakery Outlet, Fuentes Tires and a liquor store with vacant land interspersed throughout the site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The goal of the ASTM E 1527-05 Standard practice is to identify Recognized Environmental Conditions (RECs), as defined in the Standard and in Section 1 of this report. This assessment has not revealed any evidence of recognized environmental conditions in connection with the property following an adaptation of the ASTM standard for Phase I assessments. The identified drug lab on the site discussed in Section 5.1 is not considered a REC for the site.

HISTORICAL RECS AND KNOWN OR SUSPECT ENVIRONMENTAL CONDITIONS

The ASTM E 1527-05 Standard also requires that historical RECs (HRECs) and other known or suspect environmental conditions, as defined in the Standard and in Section 1 of this report are identified in the Modified Phase I. This assessment has not revealed any evidence of historical recognized environmental conditions, or known or suspect environmental conditions in connection with the property following an adaptation of the ASTM standard for Phase I assessments.

Portions of the site had orchards located on them where residual pesticides may be present. However, limited soil sampling for pesticides was conducted for the school district in 2003 and low levels of pesticides below human health screening levels were reported.

Based on aerial photographs and topographic maps, structures exist and previously existed on the site that pre-date 1978. Therefore, lead-based paint and asbestos containing materials could have been used in isolated portions of the site near existing and former buildings. In addition, due to pole-mounted transformers observed on-site during the site visit, isolated portions of the site may have been impacted with polychlorinated biphenyls (PCBs). Septic tanks are reported to be used in the trailer park at 685 State Street, and may be in use in other parts of the site. By following standard protocols for abating lead-based paint and asbestos containing materials during demolition, and properly decommissioning transformers and septic tanks, these issues are not expected to impact the site based on the proposed land use.

SUMMARY

Based on the results of this assessment, RECs, HRECs, and known or suspect environmental conditions associated with the subject site were not identified. No further assessment of the site is recommended.

Observation should be made during any future site development for areas of possible contamination such as but not limited to the presence of buried debris, waste drums, stained soil, septic tanks. Should such materials be encountered, further investigation and analysis may be necessary at that time.

9. Credentials

This report was prepared by Michael Watson, under the direct supervision of Dr. Denise Clendening, Ph.D., who served as the Project Manager of this project. Qualifications information for the project personnel is provided in Appendix E.



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10. References

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20. Yerkes, R. F., *et al.*, 1965. Geology of the Los Angeles Basin, California – An Introduction, United States Geological Survey Professional Paper 420-A.

Appendix A Historical Research Documentation

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Appendix B Environmental Database Search Report

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Appendix C Agency Records



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Appendix D Site Photographs



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Appendix E Qualifications of Environmental Professionals

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Appendix G
Preliminary Hydrology Report

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PRELIMINARY HYDROLOGY AND HYDRAULICS STUDY FOR THE NORTH HEMET REVITALIZATION PLAN

CITY OF HEMET
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SEPTEMBER 13, 2010

This report has been prepared by or under the direction of the following registered civil engineer who attests to the technical information contained herein. The registered civil engineer has also judged the qualifications of any technical specialists providing engineering data upon which recommendations, conclusions, and decisions are based.



09-13-2010



Joseph L. Castaneda RCE 59835 Registered Civil Engineer	Date	Seal

TABLE OF CONTENTS

I. PURPOSE AND SCOPE…...……..1

II. PROJECT SITE AND DRAINAGE AREA OVERVIEW……...……1-2

III. HYDROLOGY……..…..……...2-4

IV. HYDRAULICS....……..5-6

V. WATER QUALITY AND POROUS LANDSCAPE DETENTION ROUTING..……6-8

VI. FINDINGS...…….....8

VII. REFERENCES…..……..…….8-9

FIGURES

FIGURE 1: VICINITY MAP
FIGURE 2: TRIBUTARY STORM DRAIN DRAINAGE AREAS

APPENDICES

APPENDIX A: PRE-PROJECT CONDITION OFFSITE HYDROLOGY
APPENDIX A.1: RATIONAL METHOD ANALYSIS, OFFSITE AREA A
APPENDIX A.2: RATIONAL METHOD ANALYSIS, OFFSITE AREA B
APPENDIX A.3: RATIONAL METHOD ANALYSIS, OFFSITE AREA C

APPENDIX B: PRE-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY
APPENDIX B.1: AREA A
APPENDIX B.2: AREA B

APPENDIX C: POST-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY
APPENDIX C.1: AREA A
APPENDIX C.2: AREA B

APPENDIX D: PRE-PROJECT CONDITION ONSITE UNIT HYDROGRAPH HYDROLOGY
APPENDIX D.1: AREA A
APPENDIX D.2: AREA B

APPENDIX E: POST-PROJECT CONDITION ONSITE UNIT HYDROGRAPH HYDROLOGY
APPENDIX E.1: AREA A
APPENDIX E.2: AREA B

APPENDIX F: ONSITE PIPE SIZING SPREADSHEETS (SOFFIT CONTROL)
APPENDIX F.1: LINE A1 AND A2
APPENDIX F.2: LINE A2-1 AND A2-2

APPENDIX F.3: LINE B1 AND B2

APPENDIX G: EXTENDED DETENTION BASINS
APPENDIX G.1: VOLUME DESIGN CURVE
APPENDIX G.2: WATER QUALITY VOLUME SIZING SPREADSHEET AND UNIT STORAGE VOLUME GRAPH
APPENDIX G.3 EXTENDED DETENTION BASIN SIZING SPREADSHEET

EXHIBITS

EXHIBIT A: PRE-PROJECT CONDITION OFFSITE HYDROGRAPH MAP
EXHIBIT B: PRE-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY MAP
EXHIBIT C: POST-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY MAP
EXHIBIT D: DRAINAGE FACILITIES MAP
EXHIBIT E: EXISTING ONSITE LAND USE MAP
EXHIBIT F: POST-PROJECT ONSITE LAND USE MAP
EXHIBIT G: HYDROLOGIC SOILS MAP
EXHIBIT H: RAINFALL MAPS
EXHIBIT I: SLOPE OF INTENSITY DURATION CURVES
EXHIBIT J: CONCEPTUAL GRADING PLAN

I. PURPOSE AND SCOPE

The purpose of this study is to determine the 100-year and 10-year storm runoff associated with the development of the North Hemet Revitalization Plan. The North Hemet Revitalization Plan is a Specific Plan that is part of the Riverside County Mid-County Redevelopment Project Area. The study will determine the 100-year and 10-year runoff emanating from offsite and onsite area based on the pre-project and post-project conditions. The study will provide the necessary hydrology and hydraulic calculations in support of the North Hemet Revitalization Plan. Additionally, the study will identify the required drainage improvements that provide flood protection for the North Hemet Revitalization Plan from runoff emanating from the onsite areas. This study will also determine the facilities necessary to mitigate flows for increased runoff for the 2-year and 10-year, 24-hour storm events, as well as the required volume of such facilities in order to store the increase in volume associated with the North Hemet Revitalization Plan.

The scope of the study includes the following:

1. Determination of points of flow concentration and watershed subareas for onsite and offsite areas.
2. Determination of offsite flows tributary to project boundary for the 100-year and 10-year storm events utilizing the Riverside County Flood Control and Water Conservation District (RCFC&WCD) Rational Method Hydrology.
3. Determination of the 100-year, 10-year, and 2-year peak storm flows based upon the pre-project and post-project conditions for the onsite area utilizing the Riverside County Flood Control and Water Conservation District (RCFC&WCD) Rational Method Hydrology.
4. Determination of the 10-year and 2-year 24-hour storm duration peak flows based on the pre-project and post-project condition onsite area utilizing the Riverside County Flood Control and Water Conservation District (RCFC&WCD) Unit Hydrograph Method.
5. Develop storm drain improvement alignments to protect the project site from the 10-year and 100-year flooding limits.
6. Size facilities to effectively mitigate the increase in flows associated with the development of the North Hemet Revitalization Plan for the 2-year and 10-year 24-hour storm duration.
7. Preparation of the hydrology and hydraulics report, which consist of hydrological and analytical results and exhibits.

II. PROJECT SITE AND DRAINAGE AREA OVERVIEW

The North Hemet Revitalization Plan is a proposed community that will consist of commercial area, high density residential area, medium density residential area, office area, and park area. The North Hemet Revitalization Plan is a Specific Plan that is part of the Riverside County Mid-County Redevelopment Project Area. The site is located in the City

of Hemet in the County of Riverside. The North Hemet Revitalization Plan is roughly bounded by Fruitvale Avenue to the north, State Street to the east, Oakland Avenue to the South, and Alessandro Street to the west. The tributary offsite area was analyzed, however the project will not intercept or convey any offsite flows tributary to the project site.

The project proposes to collect the onsite flows (via sheet flow and subsurface storm drain systems) into three extended detention basins. There the flows will be treated for water quality purposes and mitigated for increased runoff.

III. HYDROLOGY

The RCFC&WCD Hydrology Manual (Reference 1), was used to develop the hydrological parameters for the 2-year, 10-year and 100-year storm events. The Rational Method was used for the analyses and the computations were performed using the computer program developed by Civil Cadd/Civil Design.

The 1-hour rainfall depths for the 2-year and 100-year storm events are 0.50 and 1.20 inches, and the rainfall depths for the 24-hour 2-year and 100-year storm events are 1.80 and 4.50 inches, respectively. The rainfall depths were obtained from the isohyetals maps included in the RCFC&WCD Hydrology Manual. The isohyetals maps are included in Exhibit H. The Slope of Intensity Duration Curves is included in Exhibit I.

The existing soil classification for the area consists of Hydrologic Soil Group "B", Group "C", and Group "D", as shown in Exhibit G. Exhibit G is a Soils Map obtained from the RCFC&WCD Hydrology Manual. As recommended by RCFC&WCD, an Antecedent Moisture Condition (AMC) I is used in the hydrology analyses for the 2-year storm events and an AMC II was used in the hydrology analyses for the 100-year and 10-year storm events.

The onsite and offsite areas were analyzed using the following land use designations with corresponding runoff index numbers and impervious area:

Land Use Designation	Corresponding Areas	Runoff Index (Soil B)	A_i (%)
Undeveloped (Poor Cover)	Open Space Area	76	0
Barren	Graded, Barren Land	86	0
¼ Acre Residential	¼ Acre Residential Housing	56	50
Medium Density Residential	1-2 Acre Residential Lots, Rural Residential	56	65
High Density Residential	Apartments	56	80
Commercial	Street Areas, Commercial Development, and Existing Trailer Park	56	90
Office	Office Space Area	56	90

The offsite area was analyzed using Open Space, ¼ Acre Residential Lots, and Commercial Land Use.

The onsite area for the existing condition was analyzed as commercial, high density residential, medium density residential, ¼ acre density residential, barren, and undeveloped area. The existing trailer park located on Menlo Avenue and State Street was analyzed as commercial area since it has very little pervious area. The Existing Condition Land Use Map has been included as Exhibit E.

The onsite area for the post project condition was analyzed as medium density residential, high density residential, commercial, and office area. The Post-Project Land Use Map has been included as Exhibit F.

The watershed boundaries delineated for the project are shown as follows:

- Exhibit "A" provides delineation of the overall offsite rational method hydrology watershed areas and subareas based upon the pre-project condition.
- Exhibit "B" provides delineation of the onsite rational method hydrology based upon the pre-project condition.
- Exhibit "C" provides delineation of the onsite rational method hydrology based upon the post-project condition.

A. Offsite Hydrology

The offsite hydrology was analyzed for the existing condition to determine the 100-year and 10-year flow rates that are tributary to the project boundary, however, the North Hemet Revitalization Plan does not intend to intercept any tributary offsite flows. The offsite rational method hydrology calculations have been included in Appendix A.

B. Onsite Hydrology

The onsite area was analyzed for the pre-project and post-project conditions using both the rational method and unit hydrograph methods.

Rational Method

Rational method analyses were performed for the 100-year, 10-year and 2-year storm events in order to determine the necessary drainage improvements that would provide flood protection to the project site, as well as size associated facilities. The pre-project condition was analyzed for the purpose of obtaining a time of concentration that would be used to calculate the lag time for the unit hydrograph analyses (see Unit Hydrograph paragraph below).

Area A3 (see Exhibit A) was to be broken up into two areas in order to run the hydrology calculation. When using a user defined land use type, the CivilD program will frequently be unable to calculate the correct time of concentration for an initial area, and will default to a

5.00 min initial area time of concentration. Since this value is not representative of the true time of concentration, Area A3 was broken up into the Barren/Undeveloped area and the commercial/trailer park area. Area A3 was analyzed as undeveloped area with poor cover, and Area A4 was analyzed as an Add Area with Commercial land use.

The post-project condition onsite hydrology did not encounter this same problem due to the combination of runoff index numbers and pervious percentage. The pre-project condition rational method onsite hydrology calculations have been included in Appendix B, and the post-project onsite rational method calculations have been included in Appendix C.

Unit Hydrograph

Unit hydrograph analyses were performed for the pre-project and post-project conditions for the 2-year, 24-hour and 10-year, 24-hour storm durations to determine the increases in flow rates associated with the development of the North Hemet Revitalization Plan.

The unit hydrographs were performed using a lag time calculated using the following formula:

$$\text{Lag (hrs)} = TC_{RM} \text{ (hrs)} \times 80\%,$$

where TC_{RM} is the corresponding rational method time of concentration. Below is a table that summarizes the unit hydrograph results:

	AREA A						**AREA B**					
Storm Event	**Q_{EX}**		**Q_P**		**$Q_P - Q_{EX}$**		**Q_{EX}**		**Q_P**		**$Q_P - Q_{EX}$**	
2-Year, 24-Hour	2.24	ft^3/s	2.36	ft^3/s	0.12	ft^3/s	0.38	ft^3/s	1.07	ft^3/s	0.69	ft^3/s
10-Year, 24-Hour	3.37	ft^3/s	5.50	ft^3/s	2.13	ft^3/s	1.52	ft^3/s	2.12	ft^3/s	0.60	ft^3/s

The increase in flow rates will be mitigated using Extended Detention Basins, which will also be used to treat the onsite runoff for water quality purposes (see Section IV, "Basin Routing").

The pre-project condition unit hydrograph analyses have been included in Appendix D and the post-project condition unit hydrograph analyses have been included in Appendix E.

IV. HYDRAULICS

The North Hemet Revitalization Plan will incorporate subsurface storm drain systems to collect and convey the onsite flows to one of the three proposed extended detention basins.

Storm Drain Facilities

The preliminary storm drain alignments were developed using spreadsheets that size storm drains based upon soffit control. The limits of the storm drain were determined using the following parameters:

- An upstream water surface elevation is at least 1 foot below the assumed finished surface to allow one foot of freeboard wherever feasible.
- A minimum slope of 0.30% was utilized for all storm drain due to the average slope within the project area of ranging from 0.50% to 1.40%.
- A downstream water surface elevation equal to 1 to 2 feet below the top of the basin, assuming a maximum ponded depth within the basins.
- A minimum of 2 feet of cover for storm drains.
- Streets slopes not to be less than 0.50%.

The soffit control sizing spreadsheets have been included in Appendix F, and the preliminary storm drain layout is shown on the drainage facilities map, which has been included as Exhibit D.

The flow rates for the storm drain systems were based upon yield calculations that were based upon the post-project rational method hydrology calculations. A yield (cfs/ac) was obtained by taking the total flow rate tributary to the system and dividing it by the total area. The table below summarizes the yields:

Storm Drain System	Tributary Watershed Areas	Tributary Area	Tributary Flow Rate	Flow Rate Yield
Line A1-1 and A2-2	A1 and A2	11.2 AC	25.5 ft^3/s	2.30 cfs/ac
Line A2-1 and A2-2	A3 and A4	8.99 AC	21.3 ft^3/s	2.40 cfs/ac
Line B1 and B2	B1 and B2	8.44 AC	18.3 ft^3/s	2.20 cfs/ac

The flow rates used in the soffit control sizing spreadsheets were obtained by taking the tributary watershed area to the reach of the storm drain system and multiplying it by the corresponding flow rate yield. Figure 2 shows the delineated areas tributary to the storm drain systems. The table below summarizes the flow rates tributary to the storm drain systems:

Storm Drain	Maximum Tributary Area	Flow Rate Yield	Maximum Flow Rate
Line A1-1	7.64 AC	2.30 cfs/ac	17.6 cfs
Line A1-2	3.25 AC	2.30 cfs/ac	7.5 cfs
Line A2-1, Reach 1	6.54 AC	2.40 cfs/ac	15.8 cfs
Line A2-1, Reach 2	6.54 AC	2.40 cfs/ac	15.8 cfs
Line A2-1, Reach 3	1.07 AC	2.40 cfs/ac	2.6 cfs
Lateral A2-1	2.05 AC	2.40 cfs/ac	5.0 cfs
Line A2-2	2.18 AC	2.40 cfs/ac	5.3 cfs
Line B1, Reach 3	1.32 AC	2.20 cfs/ac	2.9 cfs
Line B1, Reach 2	3.89 AC	2.20 cfs/ac	8.6 cfs
Line B1, Reach 1	6.87 AC	2.20 cfs/ac	15.1 cfs
Lateral B1	2.98 AC	2.20 cfs/ac	6. 6 cfs
Line B2	1.24 AC	2.20 cfs/ac	2.8 cfs

Below is a brief summary of the preliminary storm drain systems.

Line A1-1

Line A1-1 is the northerly most storm drain system that collects approximately 7.7 acres of onsite area and conveys the flows to Basin A1. Line A1-1 has a pipe diameter of 30" and a maximum peak flow rate of 17.6 ft^3/s.

Line A1-2

Line A1-2 is the located north of Menlo Avenue and collects approximately 3.3 acres of onsite area. The flows are conveyed to Basin A1 for treatment for water quality purposes. Line A1-2 has a pipe diameter of 30" and a maximum peak flow rate of 7.5 ft^3/s.

Line A2-1

Line A2-1 is the located south of Menlo Avenue and collects approximately 6.6 acres of onsite area. The flows are conveyed to Basin A2 for treatment for water quality purposes. Line A2-1 has pipe diameters ranging from 18" to 30" and a maximum peak flow rate of 15.8 ft^3/s.

Line A2-2

Line A2-2 is the located south of Menlo Avenue and collects approximately 2.2 acres of onsite area. The flows are conveyed to Basin A2 for treatment for water quality purposes. Line A2-2 has a pipe diameter of 18" and a maximum peak flow rate of 5.3 ft^3/s.

Line B1

Line B1 is the located north of Oakland Avenue and collects approximately 6.9 acres of onsite area. The flows are conveyed to Basin B for treatment for water quality purposes. Line B1 has pipe diameters ranging from 18" to 30" and a maximum peak flow rate of 15.2 ft^3/s.

Line B2

Line B2 is the located north of Oakland Avenue and collects approximately 1.3 acres of onsite area. The flows are conveyed to Basin B for treatment for water quality purposes. Line B1 has a pipe diameter of 18" and a maximum peak flow rate of 2.8 ft^3/s.

All the storm drain systems were designed so that the upstream water surface elevations provide at least one foot of freeboard wherever feasible. Lateral B1 has an upstream water surface elevation of 1579.52, with the existing street being at approximately 1580.00. This leaves only 0.48 feet of freeboard, however, the calculations are preliminary, and during final engineering, the 1 foot of freeboard criteria will be utilized.

V. WATER QUALITY AND BASIN ROUTING

The water quality volume required to be treated was determined using the Design Procedure for BMP Volume spreadsheets, which has been included in Appendix G.

The onsite flows will be collected through inlets and conveyed through subsurface storm drains that will discharge the flows into one of the three proposed extended detention basins, designated as Basins A1, A2, and B (see Exhibit D, Drainage Facilities Map). Basin A1 is located north of Menlo Avenue at the westerly side of the project site. It collects flows from the project site north of Menlo Avenue. Basin A2 is located south of Menlo Avenue at the westerly side of the project site. Basin A2 collects flows from the northerly half of the project site that is located between Menlo Avenue and Oakland Avenue. Basin A1 and A2 will be connected via a subsurface pipe that will cross Menlo Avenue, and will serve as one facility to treat the flows emanating from Area A. Basin B is located north of Oakland Avenue along the southerly border of the project site, and collects the flows from the southerly project site.

The required water quality volume for Area A is 0.976 ac-ft (42,525 ft^3) and 0.371 ac-ft (16,150 ft^3) for Area B. Riverside County Flood Control and Water Conservation District design practice for extended detention basins is to drain half of the water quality volume within a 24 hour period and the remaining volume within a 48 to 72 hour period. Since the extended detention basins will outlet flows utilizing a pump system, the pump will outlet the flows so that half of the water quality volume drains in approximately 24 hours, and the entire water quality volume is drained in approximately 48 to 72 hours. Detailed calculations for the extended detention basins will be performed during final engineering.

Additionally, the flows that will be pumped out of the extended detention basins will be at a rate that is equal to or less than the existing flow rates so that the project does not produce negative downstream impacts to property owners. Flows that will be pumped into Menlo Avenue and Oakland Avenue will be contained within the streets.

VI. FINDINGS

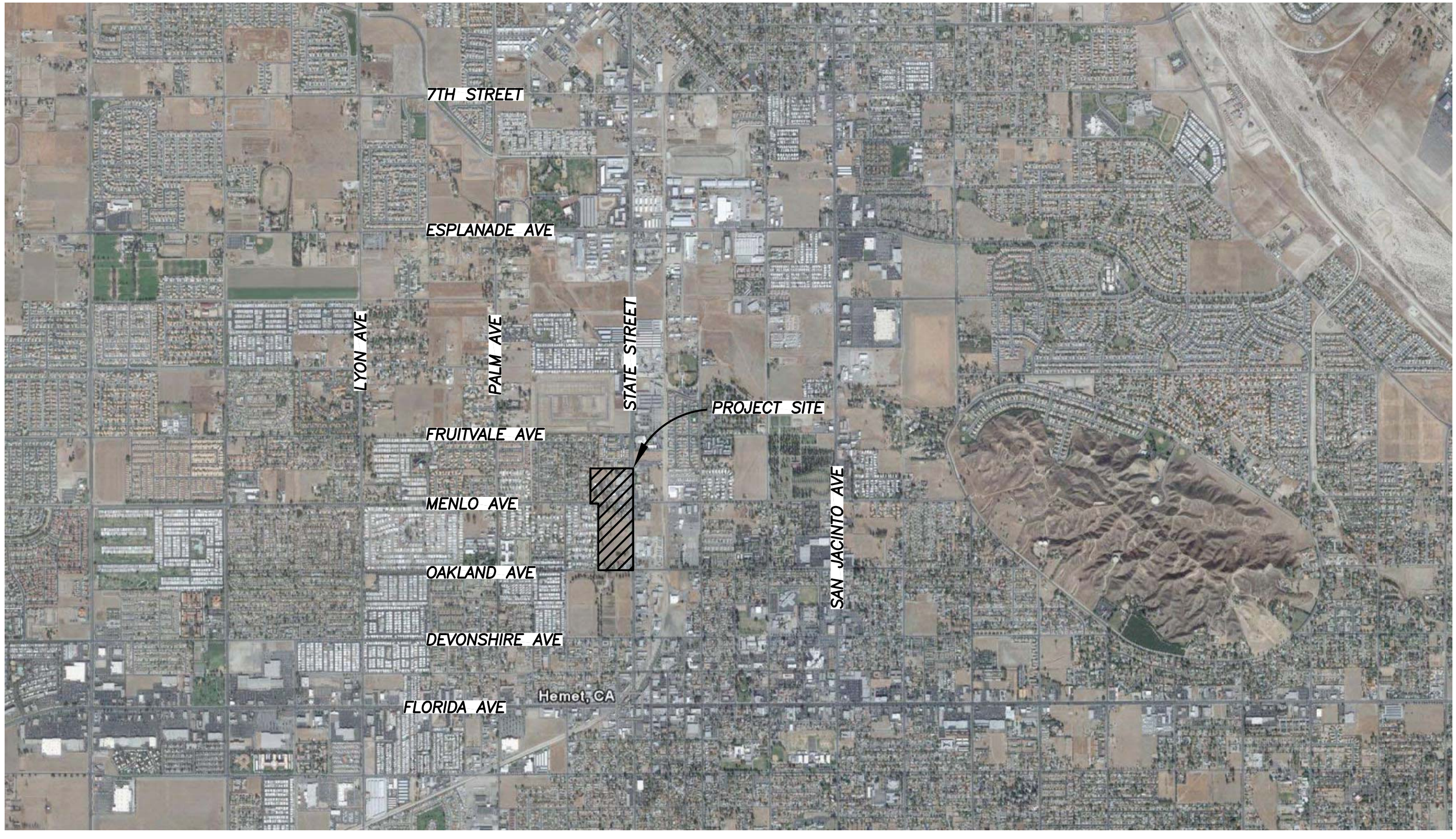
The hydrology analyses evaluated the pre-project and post-project condition to determine the necessary drainage improvements required to flood protect the site, as well as mitigate the increase in flows associated with the development of the North Hemet Revitalization Plan. It has been concluded that:

1. Offsite flows tributary to the project site will not be conveyed through onsite storm drain facilities and will continue in their existing flow patterns.
2. The proposed storm drain alignments will provide flood protection for the project site. More detailed hydraulic analyses, including street capacity calculations and inlet calculations, will be performed during final engineering.
3. The proposed extended detention basins have been sized so that they will provide adequate storage volume to store the increase in runoff associated with the development, as well as treat onsite flows for water quality purposes. Detailed basin analyses will be performed during final engineering.

VII. REFERENCES

1. Riverside County Flood Control and Water Conservation District Hydrology Manual, April 1978.
2. Los Angeles County Flood Control Design Manual, March 1982
3. Orange County Local Drainage Manual, January 1996
4. Riverside County Road Improvement Standards and Specifications, December 2007
5. Riverside County Stormwater Quality Best Management Practice Design Handbook, July 2006

FIGURE 1: VICINITY MAP



NORTH HEMET REVITALIZATION PLAN VICINITY MAP

JLC Engineering & Consulting, Inc.
40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

FIGURE 1

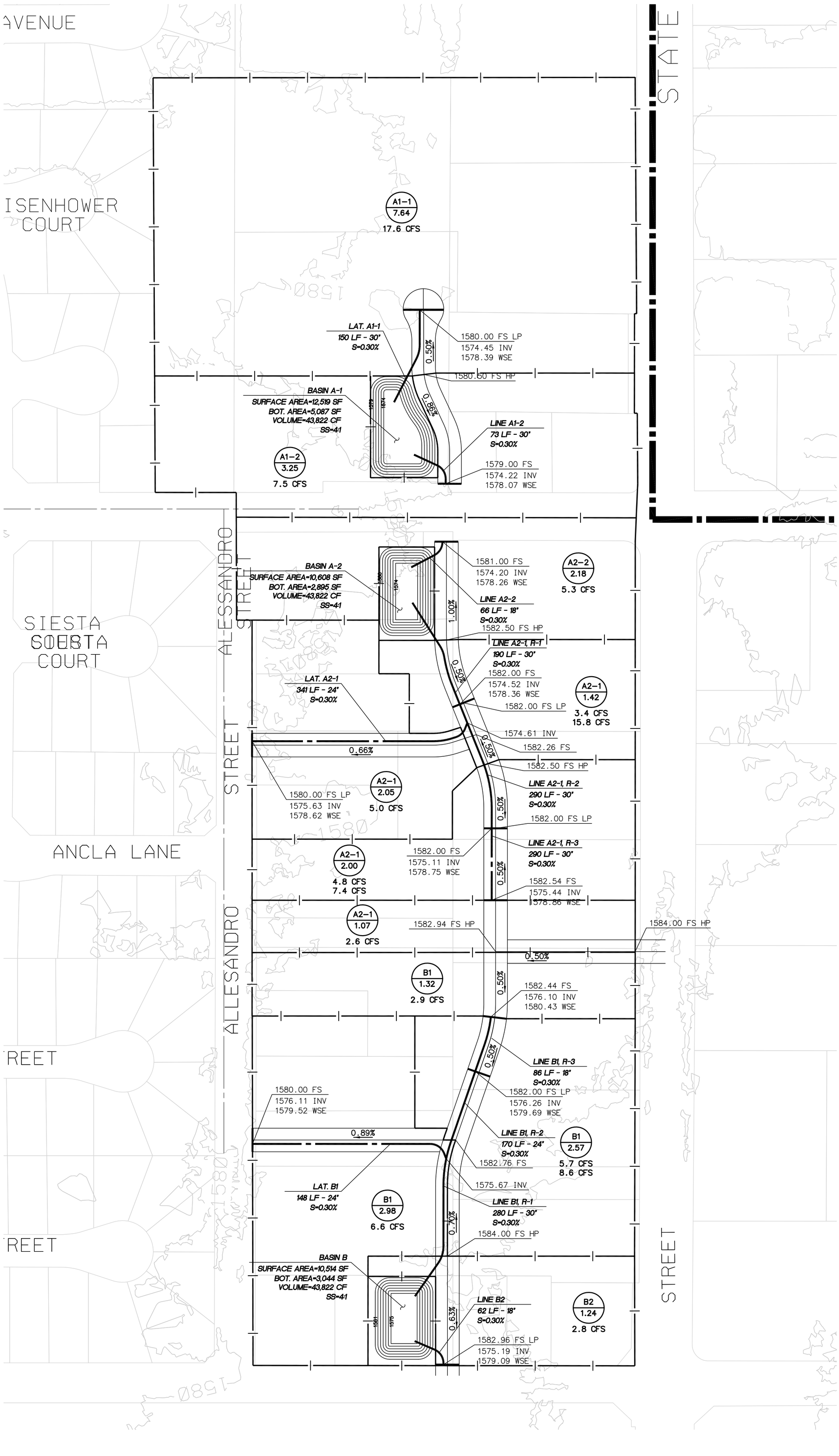
Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\Receiving waters and vicinity map.dwg
Last Opened: Sep 14, 2010 - 1:06pm by joe

FIGURE 2: TRIBUTARY STORM DRAIN DRAINAGE AREAS

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TRIBUTARY STORM DRAIN DRAINAGE AREAS



LEGEND:

WATERSHED BOUNDARY

X-X(X) / X.X — STORM DRAIN / ACRES

XXX CFS — SUB AREA FLOW RATE

XXX CFS — TOTAL TRIBUTARY FLOW RATE

GRAPHIC SCALE

80' 0 40' 80' 160'

1" = 80'

FIGURE 2

NORTH HEMET REVITALIZATION PLAN

TRIBUTARY STORM DRAIN DRAINAGE AREAS

JLC Engineering & Consulting, Inc.

36263 CALLE DE LOBO
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\FIGURE 2.dwg
Last Opened: Sep 14, 2010 – 12:52pm by jcarver

APPENDICES

APPENDIX A: PRE-PROJECT CONDITION OFFSITE HYDROLOGY

APPENDIX A.1: RATIONAL METHOD ANALYSIS, OFFSITE AREA A

100-YEAR

```
                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARA100.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
100-YR RATIONAL TABLING METHOD
AREA "A"
FN: ARA100.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      101.000 to Point/Station      102.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1606.500(Ft.)
Bottom (of initial area) elevation =  1600.500(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00600  s(percent)=       0.60
TC = k(0.376)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.562 min.
Rainfall intensity =      2.284(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.784
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.410; Impervious fraction =  0.590
Initial subarea runoff =     13.072(CFS)
Total initial stream area =        7.300(Ac.)
Pervious area fraction = 0.410


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      106.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1600.500(Ft.)
End of street segment elevation =  1590.500(Ft.)
Length of street segment  =  1329.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
```

```
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     19.966(CFS)
Depth of flow =   0.613(Ft.), Average velocity =   3.168(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    5.64(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.17(Ft/s)
Travel time =    6.99 min.     TC =   23.55  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.818
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  59.14
Pervious area fraction =  0.280; Impervious fraction =  0.720
Rainfall intensity =      1.915(In/Hr) for a   100.0 year storm
Subarea runoff =     12.066(CFS) for      7.700(Ac.)
Total runoff =     25.137(CFS)        Total area =      15.000(Ac.)
Street flow at end of street =     25.137(CFS)
Half street flow at end of street =     25.137(CFS)
Depth of flow =   0.652(Ft.), Average velocity =   3.381(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    7.62(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      106.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     15.000(Ac.)
Runoff from this stream =     25.137(CFS)
Time of concentration =   23.55 min.
Rainfall intensity =     1.915(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   963.000(Ft.)
Top (of initial area) elevation =  1601.000(Ft.)
Bottom (of initial area) elevation =  1594.500(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.00675  s(percent)=       0.67
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.691 min.
Rainfall intensity =      2.609(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.874
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
```

```
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     15.739(CFS)
Total initial stream area =        6.900(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1594.500(Ft.)
End of street segment elevation =  1592.000(Ft.)
Length of street segment  =   341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     19.845(CFS)
Depth of flow =   0.614(Ft.), Average velocity =   3.133(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    5.70(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.13(Ft/s)
Travel time =    1.81 min.     TC =   14.50  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.798
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  63.94
Pervious area fraction =  0.480; Impervious fraction =  0.520
Rainfall intensity =      2.441(In/Hr) for a   100.0 year storm
Subarea runoff =      7.014(CFS) for      3.600(Ac.)
Total runoff =     22.753(CFS)        Total area =      10.500(Ac.)
Street flow at end of street =     22.753(CFS)
Half street flow at end of street =     22.753(CFS)
Depth of flow =   0.637(Ft.), Average velocity =   3.257(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    6.86(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      105.000 to Point/Station      106.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1592.000(Ft.)
End of street segment elevation =  1590.500(Ft.)
Length of street segment  =   647.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
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Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     26.111(CFS)
Depth of flow =   0.771(Ft.), Average velocity =   2.339(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   13.54(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.34(Ft/s)
Travel time =    4.61 min.     TC =   19.12  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.769
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.440; Impervious fraction =  0.560
Rainfall intensity =      2.126(In/Hr) for a   100.0 year storm
Subarea runoff =      5.070(CFS) for      3.100(Ac.)
Total runoff =     27.823(CFS)        Total area =      13.600(Ac.)
Street flow at end of street =     27.823(CFS)
Half street flow at end of street =     27.823(CFS)
Depth of flow =   0.784(Ft.), Average velocity =   2.399(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   14.21(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      105.000 to Point/Station      106.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     13.600(Ac.)
Runoff from this stream =     27.823(CFS)
Time of concentration =   19.12 min.
Rainfall intensity =     2.126(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       25.137     23.55               1.915
2       27.823     19.12               2.126
Largest stream flow has longer or shorter time of concentration
Qp =     27.823 + sum of
          Qa          Tb/Ta
          25.137 *    0.812 =     20.401
Qp =     48.223

Total of 2 main streams to confluence:
Flow rates before confluence point:
      25.137      27.823
Area of streams before confluence:
       15.000       13.600


Results of confluence:
Total flow rate =     48.223(CFS)
Time of concentration =    19.115 min.
Effective stream area after confluence  =     28.600(Ac.)
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Process from Point/Station      106.000 to Point/Station      107.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1590.500(Ft.)
End of street segment elevation =  1585.500(Ft.)
Length of street segment  =  1323.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     71.745(CFS)
Depth of flow =   0.974(Ft.), Average velocity =   4.058(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   23.72(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   4.06(Ft/s)
Travel time =    5.43 min.     TC =   24.55  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.736
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  60.81
Pervious area fraction =  0.580; Impervious fraction =  0.420
Rainfall intensity =      1.876(In/Hr) for a   100.0 year storm
Subarea runoff =     38.524(CFS) for     27.900(Ac.)
Total runoff =     86.747(CFS)        Total area =      56.500(Ac.)
Street flow at end of street =     86.747(CFS)
Half street flow at end of street =     86.747(CFS)
Depth of flow =   1.041(Ft.), Average velocity =   4.378(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   27.05(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      107.000 to Point/Station      108.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1585.500(Ft.)
End of street segment elevation =  1580.000(Ft.)
Length of street segment  =   683.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
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 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     92.121(CFS)
Depth of flow =   0.933(Ft.), Average velocity =   5.627(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   21.67(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.63(Ft/s)
Travel time =    2.02 min.     TC =   26.57  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.745
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  75.17
Pervious area fraction =  0.880; Impervious fraction =  0.120
Rainfall intensity =      1.803(In/Hr) for a   100.0 year storm
Subarea runoff =      9.398(CFS) for      7.000(Ac.)
Total runoff =     96.145(CFS)       Total area =      63.500(Ac.)
Street flow at end of street =     96.145(CFS)
Half street flow at end of street =     96.145(CFS)
Depth of flow =   0.947(Ft.), Average velocity =   5.724(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   22.34(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)
End of computations, total study area =           63.50 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.492
Area averaged RI index number =  61.1
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10-YEAR

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              Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARA10.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
10-YR RATIONAL TABLING METHOD
AREA "A"
FN: ARA10.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.788(In/Hr)
Slope of intensity duration curve = 0.5000




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Process from Point/Station      101.000 to Point/Station      102.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1606.500(Ft.)
Bottom (of initial area) elevation =  1600.500(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00600  s(percent)=       0.60
TC = k(0.376)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.562 min.
Rainfall intensity =      1.500(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.748
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.410; Impervious fraction =  0.590
Initial subarea runoff =      8.192(CFS)
Total initial stream area =        7.300(Ac.)
Pervious area fraction = 0.410


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Process from Point/Station      102.000 to Point/Station      106.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1600.500(Ft.)
End of street segment elevation =  1590.500(Ft.)
Length of street segment  =  1329.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
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Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     12.513(CFS)
Depth of flow =   0.538(Ft.), Average velocity =   2.851(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =    1.89(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  20.557(Ft.)
Flow velocity =   2.85(Ft/s)
Travel time =    7.77 min.     TC =   24.33  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.792
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  59.14
Pervious area fraction =  0.280; Impervious fraction =  0.720
Rainfall intensity =      1.237(In/Hr) for a    10.0 year storm
Subarea runoff =      7.551(CFS) for      7.700(Ac.)
Total runoff =     15.743(CFS)        Total area =      15.000(Ac.)
Street flow at end of street =     15.743(CFS)
Half street flow at end of street =     15.743(CFS)
Depth of flow =   0.576(Ft.), Average velocity =   2.960(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    3.81(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      102.000 to Point/Station      106.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     15.000(Ac.)
Runoff from this stream =     15.743(CFS)
Time of concentration =   24.33 min.
Rainfall intensity =     1.237(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   963.000(Ft.)
Top (of initial area) elevation =  1601.000(Ft.)
Bottom (of initial area) elevation =  1594.500(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.00675  s(percent)=       0.67
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.691 min.
Rainfall intensity =      1.713(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.866
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
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Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     10.236(CFS)
Total initial stream area =        6.900(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      104.000 to Point/Station      105.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =  1594.500(Ft.)
End of street segment elevation =  1592.000(Ft.)
Length of street segment  =   341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     12.906(CFS)
Depth of flow =   0.546(Ft.), Average velocity =   2.827(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =    2.28(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  20.946(Ft.)
Flow velocity =   2.83(Ft/s)
Travel time =    2.01 min.     TC =   14.70  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.761
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  63.94
Pervious area fraction =  0.480; Impervious fraction =  0.520
Rainfall intensity =      1.592(In/Hr) for a    10.0 year storm
Subarea runoff =      4.363(CFS) for      3.600(Ac.)
Total runoff =     14.600(CFS)        Total area =      10.500(Ac.)
Street flow at end of street =     14.600(CFS)
Half street flow at end of street =     14.600(CFS)
Depth of flow =   0.567(Ft.), Average velocity =   2.869(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    3.35(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      105.000 to Point/Station      106.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =  1592.000(Ft.)
End of street segment elevation =  1590.500(Ft.)
Length of street segment  =   647.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
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Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     16.755(CFS)
Depth of flow =   0.687(Ft.), Average velocity =   1.975(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    9.34(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   1.97(Ft/s)
Travel time =    5.46 min.     TC =   20.16  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.728
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.440; Impervious fraction =  0.560
Rainfall intensity =      1.359(In/Hr) for a    10.0 year storm
Subarea runoff =      3.066(CFS) for      3.100(Ac.)
Total runoff =     17.666(CFS)       Total area =      13.600(Ac.)
Street flow at end of street =     17.666(CFS)
Half street flow at end of street =     17.666(CFS)
Depth of flow =   0.697(Ft.), Average velocity =   2.004(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    9.87(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      105.000 to Point/Station      106.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     13.600(Ac.)
Runoff from this stream =     17.666(CFS)
Time of concentration =   20.16 min.
Rainfall intensity =     1.359(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       15.743     24.33               1.237
2       17.666     20.16               1.359
Largest stream flow has longer or shorter time of concentration
Qp =     17.666 + sum of
          Qa          Tb/Ta
          15.743 *    0.829 =     13.047
Qp =     30.713

Total of 2 main streams to confluence:
Flow rates before confluence point:
      15.743      17.666
Area of streams before confluence:
       15.000       13.600


Results of confluence:
Total flow rate =     30.713(CFS)
Time of concentration =    20.163 min.
Effective stream area after confluence  =     28.600(Ac.)
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Process from Point/Station      106.000 to Point/Station      107.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1590.500(Ft.)
End of street segment elevation =  1585.500(Ft.)
Length of street segment  =  1323.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     45.693(CFS)
Depth of flow =   0.843(Ft.), Average velocity =   3.388(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   17.17(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.39(Ft/s)
Travel time =    6.51 min.     TC =   26.67  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.680
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  60.81
Pervious area fraction =  0.580; Impervious fraction =  0.420
Rainfall intensity =      1.182(In/Hr) for a    10.0 year storm
Subarea runoff =     22.431(CFS) for     27.900(Ac.)
Total runoff =     53.143(CFS)        Total area =      56.500(Ac.)
Street flow at end of street =     53.143(CFS)
Half street flow at end of street =     53.143(CFS)
Depth of flow =   0.883(Ft.), Average velocity =   3.599(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   19.17(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      107.000 to Point/Station      108.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1585.500(Ft.)
End of street segment elevation =  1580.000(Ft.)
Length of street segment  =   683.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     56.435(CFS)
```

```
Depth of flow =   0.803(Ft.), Average velocity =   4.625(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   15.16(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   4.63(Ft/s)
Travel time =    2.46 min.     TC =   29.13  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.678
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  75.17
Pervious area fraction =  0.880; Impervious fraction =  0.120
Rainfall intensity =      1.131(In/Hr) for a    10.0 year storm
Subarea runoff =      5.367(CFS) for      7.000(Ac.)
Total runoff =     58.510(CFS)        Total area =      63.500(Ac.)
Street flow at end of street =     58.510(CFS)
Half street flow at end of street =     58.510(CFS)
Depth of flow =   0.812(Ft.), Average velocity =   4.693(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   15.58(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)
End of computations, total study area =           63.50 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.492
Area averaged RI index number =  61.1
```

APPENDIX A.2: RATIONAL METHOD ANALYSIS, OFFSITE AREA B

100-YEAR

```
              Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARB100.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
100-YR RATIONAL TABLING METHOD
AREA "B"
FN: ARB100.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      201.000 to Point/Station      202.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   913.000(Ft.)
Top (of initial area) elevation =  1624.000(Ft.)
Bottom (of initial area) elevation =  1618.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00657  s(percent)=       0.66
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.490 min.
Rainfall intensity =      2.630(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.874
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      7.819(CFS)
Total initial stream area =        3.400(Ac.)
Pervious area fraction = 0.100


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      202.000 to Point/Station      203.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1618.000(Ft.)
End of street segment elevation =  1610.500(Ft.)
Length of street segment  =  1057.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
```

```
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     18.283(CFS)
Depth of flow =   0.603(Ft.), Average velocity =   3.025(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    5.17(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.03(Ft/s)
Travel time =    5.82 min.     TC =   18.31  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.871
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      2.172(In/Hr) for a   100.0 year storm
Subarea runoff =     17.211(CFS) for      9.100(Ac.)
Total runoff =     25.030(CFS)        Total area =      12.500(Ac.)
Street flow at end of street =     25.030(CFS)
Half street flow at end of street =     25.030(CFS)
Depth of flow =   0.657(Ft.), Average velocity =   3.306(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    7.85(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      203.000 to Point/Station      207.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =  1610.500(Ft.)
End of street segment elevation =  1606.000(Ft.)
Length of street segment  =   902.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     34.741(CFS)
Depth of flow =   0.751(Ft.), Average velocity =   3.300(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   12.54(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.30(Ft/s)
Travel time =    4.56 min.     TC =   22.87  min.
 Adding area flow to street
USER INPUT of soil data for subarea
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Runoff Coefficient = 0.856
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.140; Impervious fraction =  0.860
Rainfall intensity =      1.944(In/Hr) for a   100.0 year storm
Subarea runoff =     16.137(CFS) for      9.700(Ac.)
Total runoff =     41.166(CFS)        Total area =      22.200(Ac.)
Street flow at end of street =     41.166(CFS)
Half street flow at end of street =     41.166(CFS)
Depth of flow =   0.786(Ft.), Average velocity =   3.531(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   14.31(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      203.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     22.200(Ac.)
Runoff from this stream =     41.166(CFS)
Time of concentration =   22.87 min.
Rainfall intensity =     1.944(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      204.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   874.000(Ft.)
Top (of initial area) elevation =  1621.500(Ft.)
Bottom (of initial area) elevation =  1615.000(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.00744  s(percent)=       0.74
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.974 min.
Rainfall intensity =      2.686(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.875
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     16.918(CFS)
Total initial stream area =        7.200(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      205.000 to Point/Station      206.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1615.000(Ft.)
End of street segment elevation =  1614.000(Ft.)
Length of street segment  =   377.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
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Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     23.850(CFS)
Depth of flow =   0.739(Ft.), Average velocity =   2.349(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   11.96(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.35(Ft/s)
Travel time =    2.68 min.     TC =   14.65  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.824
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.59
Pervious area fraction =  0.330; Impervious fraction =  0.670
Rainfall intensity =      2.429(In/Hr) for a   100.0 year storm
Subarea runoff =     11.810(CFS) for      5.900(Ac.)
Total runoff =     28.729(CFS)        Total area =      13.100(Ac.)
Street flow at end of street =     28.729(CFS)
Half street flow at end of street =     28.729(CFS)
Depth of flow =   0.777(Ft.), Average velocity =   2.530(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   13.83(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      206.000 to Point/Station      207.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1614.000(Ft.)
End of street segment elevation =  1606.000(Ft.)
Length of street segment  =   975.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     37.501(CFS)
Depth of flow =   0.719(Ft.), Average velocity =   3.950(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   10.93(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.95(Ft/s)
Travel time =    4.11 min.     TC =   18.76  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.789
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
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Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  59.85
Pervious area fraction =  0.420; Impervious fraction =  0.580
Rainfall intensity =      2.146(In/Hr) for a   100.0 year storm
Subarea runoff =     13.541(CFS) for      8.000(Ac.)
Total runoff =     42.270(CFS)        Total area =      21.100(Ac.)
Street flow at end of street =     42.270(CFS)
Half street flow at end of street =     42.270(CFS)
Depth of flow =   0.741(Ft.), Average velocity =   4.144(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   12.03(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      206.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     21.100(Ac.)
Runoff from this stream =     42.270(CFS)
Time of concentration =   18.76 min.
Rainfall intensity =     2.146(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       41.166     22.87               1.944
2       42.270     18.76               2.146
Largest stream flow has longer or shorter time of concentration
Qp =     42.270 + sum of
          Qa          Tb/Ta
          41.166 *    0.820 =     33.776
Qp =     76.046

Total of 2 main streams to confluence:
Flow rates before confluence point:
      41.166      42.270
Area of streams before confluence:
       22.200       21.100


Results of confluence:
Total flow rate =     76.046(CFS)
Time of concentration =    18.763 min.
Effective stream area after confluence  =     43.300(Ac.)


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Process from Point/Station      207.000 to Point/Station      208.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1606.000(Ft.)
End of street segment elevation =  1605.000(Ft.)
Length of street segment  =   341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
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 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     92.203(CFS)
Depth of flow =   1.115(Ft.), Average velocity =   4.157(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   30.75(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   4.16(Ft/s)
Travel time =    1.37 min.     TC =   20.13  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.806
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.310; Impervious fraction =  0.690
Rainfall intensity =      2.072(In/Hr) for a   100.0 year storm
Subarea runoff =     30.736(CFS) for     18.400(Ac.)
Total runoff =    106.782(CFS)        Total area =      61.700(Ac.)
Street flow at end of street =    106.782(CFS)
Half street flow at end of street =    106.782(CFS)
Depth of flow =   1.179(Ft.), Average velocity =   4.409(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   33.94(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      208.000 to Point/Station      211.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1605.000(Ft.)
End of street segment elevation =  1597.500(Ft.)
Length of street segment  =   982.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    118.983(CFS)
Depth of flow =   1.028(Ft.), Average velocity =   6.135(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   26.40(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   6.13(Ft/s)
Travel time =    2.67 min.     TC =   22.80  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.755
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.460; Impervious fraction =  0.540
Rainfall intensity =      1.947(In/Hr) for a   100.0 year storm
Subarea runoff =     20.728(CFS) for     14.100(Ac.)
```

```
Total runoff =    127.510(CFS)        Total area =      75.800(Ac.)
Street flow at end of street =    127.510(CFS)
Half street flow at end of street =    127.510(CFS)
Depth of flow =   1.054(Ft.), Average velocity =   6.307(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   27.68(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      208.000 to Point/Station      211.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     75.800(Ac.)
Runoff from this stream =    127.510(CFS)
Time of concentration =   22.80 min.
Rainfall intensity =     1.947(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      209.000 to Point/Station      210.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1611.000(Ft.)
Bottom (of initial area) elevation =  1605.500(Ft.)
Difference in elevation =     5.500(Ft.)
Slope =    0.00550  s(percent)=       0.55
TC = k(0.376)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.852 min.
Rainfall intensity =      2.264(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.807
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  63.52
Pervious area fraction =  0.410; Impervious fraction =  0.590
Initial subarea runoff =     14.431(CFS)
Total initial stream area =        7.900(Ac.)
Pervious area fraction = 0.410


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Process from Point/Station      210.000 to Point/Station      211.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1605.500(Ft.)
End of street segment elevation =  1597.500(Ft.)
Length of street segment  =  1466.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     36.716(CFS)
Depth of flow =   0.753(Ft.), Average velocity =   3.465(Ft/s)
Warning: depth of flow exceeds top of curb
```

```
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   12.65(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.47(Ft/s)
Travel time =    7.05 min.     TC =   23.90  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.825
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.72
Pervious area fraction =  0.240; Impervious fraction =  0.760
Rainfall intensity =      1.901(In/Hr) for a   100.0 year storm
Subarea runoff =     38.258(CFS) for     24.400(Ac.)
Total runoff =     52.689(CFS)       Total area =      32.300(Ac.)
Street flow at end of street =     52.689(CFS)
Half street flow at end of street =     52.689(CFS)
Depth of flow =   0.833(Ft.), Average velocity =   4.004(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   16.65(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      210.000 to Point/Station      211.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     32.300(Ac.)
Runoff from this stream =     52.689(CFS)
Time of concentration =   23.90 min.
Rainfall intensity =     1.901(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1      127.510     22.80               1.947
2       52.689     23.90               1.901
Largest stream flow has longer or shorter time of concentration
Qp =    127.510 + sum of
          Qa          Tb/Ta
          52.689 *    0.954 =     50.253
Qp =    177.763

Total of 2 main streams to confluence:
Flow rates before confluence point:
     127.510      52.689
Area of streams before confluence:
       75.800       32.300


Results of confluence:
Total flow rate =    177.763(CFS)
Time of concentration =    22.798 min.
Effective stream area after confluence  =    108.100(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      211.000 to Point/Station      212.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1597.500(Ft.)
End of street segment elevation =  1591.000(Ft.)
Length of street segment  =  1067.000(Ft.)
```

```
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    194.536(CFS)
Depth of flow =   1.293(Ft.), Average velocity =   6.978(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   39.65(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   6.98(Ft/s)
Travel time =    2.55 min.     TC =   25.35  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.775
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.07
Pervious area fraction =  0.440; Impervious fraction =  0.560
Rainfall intensity =      1.846(In/Hr) for a   100.0 year storm
Subarea runoff =     29.196(CFS) for     20.400(Ac.)
Total runoff =    206.959(CFS)        Total area =     128.500(Ac.)
Street flow at end of street =    206.959(CFS)
Half street flow at end of street =    206.959(CFS)
Depth of flow =   1.326(Ft.), Average velocity =   7.153(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   41.30(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      212.000 to Point/Station      220.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =  1591.000(Ft.)
End of street segment elevation =  1586.500(Ft.)
Length of street segment  =  1262.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    214.126(CFS)
Depth of flow =   1.505(Ft.), Average velocity =   6.175(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   50.27(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   6.18(Ft/s)
```

```
Travel time =    3.41 min.     TC =   28.75  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.802
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.93
Pervious area fraction =  0.340; Impervious fraction =  0.660
Rainfall intensity =      1.733(In/Hr) for a   100.0 year storm
Subarea runoff =     12.370(CFS) for      8.900(Ac.)
Total runoff =    219.329(CFS)        Total area =     137.400(Ac.)
Street flow at end of street =    219.329(CFS)
Half street flow at end of street =    219.329(CFS)
Depth of flow =   1.521(Ft.), Average velocity =   6.235(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   51.06(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      212.000 to Point/Station      220.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =    137.400(Ac.)
Runoff from this stream =    219.329(CFS)
Time of concentration =   28.75 min.
Rainfall intensity =     1.733(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      213.000 to Point/Station      214.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   459.000(Ft.)
Top (of initial area) elevation =  1614.000(Ft.)
Bottom (of initial area) elevation =  1611.000(Ft.)
Difference in elevation =     3.000(Ft.)
Slope =    0.00654  s(percent)=       0.65
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.497 min.
Rainfall intensity =      3.016(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.877
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     16.926(CFS)
Total initial stream area =        6.400(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      214.000 to Point/Station      215.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1611.000(Ft.)
End of street segment elevation =  1605.000(Ft.)
Length of street segment  =   926.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
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Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     23.538(CFS)
Depth of flow =   0.654(Ft.), Average velocity =   3.145(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    7.71(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.14(Ft/s)
Travel time =    4.91 min.     TC =   14.40  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.784
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.430; Impervious fraction =  0.570
Rainfall intensity =      2.449(In/Hr) for a   100.0 year storm
Subarea runoff =      9.601(CFS) for      5.000(Ac.)
Total runoff =     26.527(CFS)        Total area =      11.400(Ac.)
Street flow at end of street =     26.527(CFS)
Half street flow at end of street =     26.527(CFS)
Depth of flow =   0.676(Ft.), Average velocity =   3.252(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    8.82(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      215.000 to Point/Station      216.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1605.000(Ft.)
End of street segment elevation =  1603.500(Ft.)
Length of street segment  =   776.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     40.140(CFS)
Depth of flow =   0.899(Ft.), Average velocity =   2.630(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   19.94(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.63(Ft/s)
Travel time =    4.92 min.     TC =   19.32  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.757
```

```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.480; Impervious fraction =  0.520
Rainfall intensity =      2.115(In/Hr) for a   100.0 year storm
Subarea runoff =     18.727(CFS) for     11.700(Ac.)
Total runoff =     45.254(CFS)        Total area =      23.100(Ac.)
Street flow at end of street =     45.254(CFS)
Half street flow at end of street =     45.254(CFS)
Depth of flow =   0.934(Ft.), Average velocity =   2.760(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   21.72(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      216.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1603.500(Ft.)
End of street segment elevation =  1591.500(Ft.)
Length of street segment  =  1535.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     75.717(CFS)
Depth of flow =   0.881(Ft.), Average velocity =   5.156(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   19.04(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.16(Ft/s)
Travel time =    4.96 min.     TC =   24.28  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.752
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.460; Impervious fraction =  0.540
Rainfall intensity =      1.886(In/Hr) for a   100.0 year storm
Subarea runoff =     44.126(CFS) for     31.100(Ac.)
Total runoff =     89.380(CFS)        Total area =      54.200(Ac.)
Street flow at end of street =     89.380(CFS)
Half street flow at end of street =     89.380(CFS)
Depth of flow =   0.929(Ft.), Average velocity =   5.510(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   21.44(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      216.000 to Point/Station      219.000
**** CONFLUENCE OF MINOR STREAMS ****
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```
Along Main Stream number: 2 in normal stream number 1
Stream flow area =     54.200(Ac.)
Runoff from this stream =     89.380(CFS)
Time of concentration =   24.28 min.
Rainfall intensity =     1.886(In/Hr)


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Process from Point/Station      217.000 to Point/Station      218.000
**** INITIAL AREA EVALUATION ****
------------------------------------------------------------------------
Initial area flow distance =   667.000(Ft.)
Top (of initial area) elevation =  1599.000(Ft.)
Bottom (of initial area) elevation =  1596.000(Ft.)
Difference in elevation =     3.000(Ft.)
Slope =    0.00450  s(percent)=       0.45
TC = k(0.398)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   15.802 min.
Rainfall intensity =      2.338(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.761
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      5.337(CFS)
Total initial stream area =        3.000(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      218.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
------------------------------------------------------------------------
Top of street segment elevation =  1596.000(Ft.)
End of street segment elevation =  1591.500(Ft.)
Length of street segment  =  1341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     24.282(CFS)
Depth of flow =   0.721(Ft.), Average velocity =   2.539(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   11.04(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.54(Ft/s)
Travel time =    8.80 min.     TC =   24.61  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.800
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.310; Impervious fraction =  0.690
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```
Rainfall intensity =      1.874(In/Hr) for a   100.0 year storm
Subarea runoff =     31.928(CFS) for     21.300(Ac.)
Total runoff =     37.265(CFS)       Total area =      24.300(Ac.)
Street flow at end of street =     37.265(CFS)
Half street flow at end of street =     37.265(CFS)
Depth of flow =   0.808(Ft.), Average velocity =   3.013(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   15.42(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      218.000 to Point/Station      219.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     24.300(Ac.)
Runoff from this stream =     37.265(CFS)
Time of concentration =   24.61 min.
Rainfall intensity =     1.874(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       89.380     24.28                1.886
2       37.265     24.61                1.874
Largest stream flow has longer or shorter time of concentration
Qp =     89.380 + sum of
          Qa          Tb/Ta
          37.265 *    0.987 =     36.774
Qp =    126.154

Total of 2 streams to confluence:
Flow rates before confluence point:
      89.380      37.265
Area of streams before confluence:
       54.200       24.300
Results of confluence:
Total flow rate =    126.154(CFS)
Time of concentration =    24.282 min.
Effective stream area after confluence =     78.500(Ac.)


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Process from Point/Station      219.000 to Point/Station      220.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1591.500(Ft.)
End of street segment elevation =  1586.500(Ft.)
Length of street segment  =   724.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    132.501(CFS)
Depth of flow =   1.088(Ft.), Average velocity =   6.214(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   29.41(Ft.)
```

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Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   6.21(Ft/s)
Travel time =    1.94 min.     TC =   26.22  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.776
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  58.23
Pervious area fraction =  0.400; Impervious fraction =  0.600
Rainfall intensity =      1.815(In/Hr) for a   100.0 year storm
Subarea runoff =     11.124(CFS) for      7.900(Ac.)
Total runoff =    137.278(CFS)        Total area =      86.400(Ac.)
Street flow at end of street =    137.278(CFS)
Half street flow at end of street =    137.278(CFS)
Depth of flow =   1.102(Ft.), Average velocity =   6.303(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   30.12(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      219.000 to Point/Station      220.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     86.400(Ac.)
Runoff from this stream =    137.278(CFS)
Time of concentration =   26.22 min.
Rainfall intensity =     1.815(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1      219.329     28.75               1.733
2      137.278     26.22               1.815
Largest stream flow has longer time of concentration
Qp =    219.329 + sum of
          Qb         Ia/Ib
         137.278 *    0.955 =    131.103
Qp =    350.432

Total of 2 main streams to confluence:
Flow rates before confluence point:
     219.329     137.278
Area of streams before confluence:
      137.400       86.400


Results of confluence:
Total flow rate =    350.432(CFS)
Time of concentration =    28.752 min.
Effective stream area after confluence  =    223.800(Ac.)
End of computations, total study area =          223.80 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.339
Area averaged RI index number =  57.4
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10-YEAR

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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARB10.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
10-YR RATIONAL TABLING METHOD
AREA "B"
FN: ARB10.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.788(In/Hr)
Slope of intensity duration curve = 0.5000




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Process from Point/Station      201.000 to Point/Station      202.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   913.000(Ft.)
Top (of initial area) elevation =  1624.000(Ft.)
Bottom (of initial area) elevation =  1618.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00657  s(percent)=       0.66
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   12.490 min.
Rainfall intensity =      1.727(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.866
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      5.085(CFS)
Total initial stream area =        3.400(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      202.000 to Point/Station      203.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1618.000(Ft.)
End of street segment elevation =  1610.500(Ft.)
Length of street segment  =  1057.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
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Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     11.891(CFS)
Depth of flow =   0.534(Ft.), Average velocity =   2.764(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =    1.70(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  20.364(Ft.)
Flow velocity =   2.76(Ft/s)
Travel time =    6.37 min.     TC =   18.86  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.862
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Rainfall intensity =      1.405(In/Hr) for a    10.0 year storm
Subarea runoff =     11.018(CFS) for      9.100(Ac.)
Total runoff =     16.103(CFS)        Total area =      12.500(Ac.)
Street flow at end of street =     16.103(CFS)
Half street flow at end of street =     16.103(CFS)
Depth of flow =   0.584(Ft.), Average velocity =   2.917(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    4.19(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      203.000 to Point/Station      207.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1610.500(Ft.)
End of street segment elevation =  1606.000(Ft.)
Length of street segment  =   902.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     22.352(CFS)
Depth of flow =   0.669(Ft.), Average velocity =   2.821(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    8.43(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.82(Ft/s)
Travel time =    5.33 min.     TC =   24.19  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.842
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Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.140; Impervious fraction =  0.860
Rainfall intensity =      1.241(In/Hr) for a    10.0 year storm
Subarea runoff =     10.139(CFS) for      9.700(Ac.)
Total runoff =     26.243(CFS)        Total area =      22.200(Ac.)
Street flow at end of street =     26.243(CFS)
Half street flow at end of street =     26.243(CFS)
Depth of flow =   0.700(Ft.), Average velocity =   2.950(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   10.00(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      203.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     22.200(Ac.)
Runoff from this stream =     26.243(CFS)
Time of concentration =   24.19 min.
Rainfall intensity =     1.241(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      204.000 to Point/Station      205.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   874.000(Ft.)
Top (of initial area) elevation =  1621.500(Ft.)
Bottom (of initial area) elevation =  1615.000(Ft.)
Difference in elevation =     6.500(Ft.)
Slope =    0.00744  s(percent)=       0.74
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   11.974 min.
Rainfall intensity =      1.764(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.866
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     11.004(CFS)
Total initial stream area =        7.200(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      205.000 to Point/Station      206.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1615.000(Ft.)
End of street segment elevation =  1614.000(Ft.)
Length of street segment  =   377.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
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Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     15.513(CFS)
Depth of flow =   0.660(Ft.), Average velocity =   2.029(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    7.98(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.03(Ft/s)
Travel time =    3.10 min.     TC =   15.07  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.797
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.59
Pervious area fraction =  0.330; Impervious fraction =  0.670
Rainfall intensity =      1.572(In/Hr) for a    10.0 year storm
Subarea runoff =      7.396(CFS) for      5.900(Ac.)
Total runoff =     18.400(CFS)        Total area =      13.100(Ac.)
Street flow at end of street =     18.400(CFS)
Half street flow at end of street =     18.400(CFS)
Depth of flow =   0.692(Ft.), Average velocity =   2.128(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    9.60(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      206.000 to Point/Station      207.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1614.000(Ft.)
End of street segment elevation =  1606.000(Ft.)
Length of street segment  =   975.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     24.018(CFS)
Depth of flow =   0.637(Ft.), Average velocity =   3.443(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    6.84(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.44(Ft/s)
Travel time =    4.72 min.     TC =   19.79  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.751
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
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RI index for soil(AMC 2)  =  59.85
Pervious area fraction =  0.420; Impervious fraction =  0.580
Rainfall intensity =      1.372(In/Hr) for a    10.0 year storm
Subarea runoff =      8.241(CFS) for      8.000(Ac.)
Total runoff =     26.641(CFS)        Total area =      21.100(Ac.)
Street flow at end of street =     26.641(CFS)
Half street flow at end of street =     26.641(CFS)
Depth of flow =   0.655(Ft.), Average velocity =   3.545(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    7.76(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      206.000 to Point/Station      207.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     21.100(Ac.)
Runoff from this stream =     26.641(CFS)
Time of concentration =   19.79 min.
Rainfall intensity =     1.372(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       26.243     24.19               1.241
2       26.641     19.79               1.372
Largest stream flow has longer or shorter time of concentration
Qp =     26.641 + sum of
          Qa          Tb/Ta
          26.243 *    0.818 =     21.467
Qp =     48.108

Total of 2 main streams to confluence:
Flow rates before confluence point:
      26.243      26.641
Area of streams before confluence:
       22.200       21.100


Results of confluence:
Total flow rate =     48.108(CFS)
Time of concentration =    19.790 min.
Effective stream area after confluence  =     43.300(Ac.)


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Process from Point/Station      207.000 to Point/Station      208.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1606.000(Ft.)
End of street segment elevation =  1605.000(Ft.)
Length of street segment  =   341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
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Estimated mean flow rate at midpoint of street =     58.330(CFS)
Depth of flow =   0.948(Ft.), Average velocity =   3.462(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   22.42(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   3.46(Ft/s)
Travel time =    1.64 min.     TC =   21.43  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.776
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.310; Impervious fraction =  0.690
Rainfall intensity =      1.318(In/Hr) for a    10.0 year storm
Subarea runoff =     18.837(CFS) for     18.400(Ac.)
Total runoff =     66.945(CFS)        Total area =      61.700(Ac.)
Street flow at end of street =     66.945(CFS)
Half street flow at end of street =     66.945(CFS)
Depth of flow =   0.994(Ft.), Average velocity =   3.658(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   24.69(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      208.000 to Point/Station      211.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1605.000(Ft.)
End of street segment elevation =  1597.500(Ft.)
Length of street segment  =   982.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     74.595(CFS)
Depth of flow =   0.880(Ft.), Average velocity =   5.090(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   18.99(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.09(Ft/s)
Travel time =    3.22 min.     TC =   24.65  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.710
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.460; Impervious fraction =  0.540
Rainfall intensity =      1.229(In/Hr) for a    10.0 year storm
Subarea runoff =     12.300(CFS) for     14.100(Ac.)
Total runoff =     79.245(CFS)        Total area =      75.800(Ac.)
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Street flow at end of street =     79.245(CFS)
Half street flow at end of street =     79.245(CFS)
Depth of flow =   0.897(Ft.), Average velocity =   5.214(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   19.84(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      208.000 to Point/Station      211.000
**** CONFLUENCE OF MAIN STREAMS ****
____________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     75.800(Ac.)
Runoff from this stream =     79.245(CFS)
Time of concentration =   24.65 min.
Rainfall intensity =     1.229(In/Hr)
Program is now starting with Main Stream No. 2


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Process from Point/Station      209.000 to Point/Station      210.000
**** INITIAL AREA EVALUATION ****
____________________________________________________________________________
Initial area flow distance =  1000.000(Ft.)
Top (of initial area) elevation =  1611.000(Ft.)
Bottom (of initial area) elevation =  1605.500(Ft.)
Difference in elevation =     5.500(Ft.)
Slope =    0.00550  s(percent)=       0.55
TC = k(0.376)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.852 min.
Rainfall intensity =      1.487(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.775
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  63.52
Pervious area fraction =  0.410; Impervious fraction =  0.590
Initial subarea runoff =      9.098(CFS)
Total initial stream area =        7.900(Ac.)
Pervious area fraction = 0.410


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Process from Point/Station      210.000 to Point/Station      211.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1605.500(Ft.)
End of street segment elevation =  1597.500(Ft.)
Length of street segment  =  1466.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     23.148(CFS)
Depth of flow =   0.667(Ft.), Average velocity =   2.943(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
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Distance that curb overflow reaches into property =    8.34(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.94(Ft/s)
Travel time =    8.30 min.     TC =   25.16  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.802
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.72
Pervious area fraction =  0.240; Impervious fraction =  0.760
Rainfall intensity =      1.217(In/Hr) for a    10.0 year storm
Subarea runoff =     23.804(CFS) for     24.400(Ac.)
Total runoff =     32.902(CFS)        Total area =      32.300(Ac.)
Street flow at end of street =     32.902(CFS)
Half street flow at end of street =     32.902(CFS)
Depth of flow =   0.732(Ft.), Average velocity =   3.317(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   11.59(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      210.000 to Point/Station      211.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     32.300(Ac.)
Runoff from this stream =     32.902(CFS)
Time of concentration =   25.16 min.
Rainfall intensity =     1.217(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       79.245     24.65               1.229
2       32.902     25.16               1.217
Largest stream flow has longer or shorter time of concentration
Qp =     79.245 + sum of
          Qa          Tb/Ta
          32.902 *    0.980 =     32.237
Qp =    111.482

Total of 2 main streams to confluence:
Flow rates before confluence point:
      79.245      32.902
Area of streams before confluence:
       75.800       32.300


Results of confluence:
Total flow rate =    111.482(CFS)
Time of concentration =    24.647 min.
Effective stream area after confluence  =    108.100(Ac.)


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Process from Point/Station      211.000 to Point/Station      212.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1597.500(Ft.)
End of street segment elevation =  1591.000(Ft.)
Length of street segment  =  1067.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
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Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    122.001(CFS)
Depth of flow =   1.080(Ft.), Average velocity =   5.790(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   29.01(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.79(Ft/s)
Travel time =    3.07 min.     TC =   27.72  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.732
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.07
Pervious area fraction =  0.440; Impervious fraction =  0.560
Rainfall intensity =      1.159(In/Hr) for a    10.0 year storm
Subarea runoff =     17.324(CFS) for     20.400(Ac.)
Total runoff =    128.805(CFS)        Total area =     128.500(Ac.)
Street flow at end of street =    128.805(CFS)
Half street flow at end of street =    128.805(CFS)
Depth of flow =   1.102(Ft.), Average velocity =   5.917(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   30.10(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      212.000 to Point/Station      220.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1591.000(Ft.)
End of street segment elevation =  1586.500(Ft.)
Length of street segment  =  1262.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =    133.266(CFS)
Depth of flow =   1.237(Ft.), Average velocity =   5.108(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   36.86(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.11(Ft/s)
Travel time =    4.12 min.     TC =   31.84  min.
```

```
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.768
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  61.93
Pervious area fraction =  0.340; Impervious fraction =  0.660
Rainfall intensity =      1.082(In/Hr) for a    10.0 year storm
Subarea runoff =      7.395(CFS) for      8.900(Ac.)
Total runoff =    136.200(CFS)        Total area =     137.400(Ac.)
Street flow at end of street =    136.200(CFS)
Half street flow at end of street =    136.200(CFS)
Depth of flow =   1.248(Ft.), Average velocity =   5.153(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   37.39(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      212.000 to Point/Station      220.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =    137.400(Ac.)
Runoff from this stream =    136.200(CFS)
Time of concentration =   31.84 min.
Rainfall intensity =     1.082(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      213.000 to Point/Station      214.000
**** INITIAL AREA EVALUATION ****
______________________________________________________________________________
Initial area flow distance =   459.000(Ft.)
Top (of initial area) elevation =  1614.000(Ft.)
Bottom (of initial area) elevation =  1611.000(Ft.)
Difference in elevation =     3.000(Ft.)
Slope =    0.00654  s(percent)=       0.65
TC = k(0.299)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.497 min.
Rainfall intensity =      1.981(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.869
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =     11.014(CFS)
Total initial stream area =        6.400(Ac.)
Pervious area fraction = 0.100


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Process from Point/Station      214.000 to Point/Station      215.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1611.000(Ft.)
End of street segment elevation =  1605.000(Ft.)
Length of street segment  =   926.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
```

```
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     15.316(CFS)
Depth of flow =   0.583(Ft.), Average velocity =   2.784(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    4.16(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.78(Ft/s)
Travel time =    5.54 min.     TC =   15.04  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.745
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.430; Impervious fraction =  0.570
Rainfall intensity =      1.574(In/Hr) for a    10.0 year storm
Subarea runoff =      5.865(CFS) for      5.000(Ac.)
Total runoff =     16.879(CFS)        Total area =      11.400(Ac.)
Street flow at end of street =     16.879(CFS)
Half street flow at end of street =     16.879(CFS)
Depth of flow =   0.598(Ft.), Average velocity =   2.863(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    4.90(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      215.000 to Point/Station      216.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
____________________________________________________________________________
Top of street segment elevation =  1605.000(Ft.)
End of street segment elevation =  1603.500(Ft.)
Length of street segment  =   776.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     25.541(CFS)
Depth of flow =   0.785(Ft.), Average velocity =   2.195(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   14.27(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.20(Ft/s)
Travel time =    5.89 min.     TC =   20.93  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.710
Decimal fraction soil group A = 0.000
```

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Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.480; Impervious fraction =  0.520
Rainfall intensity =      1.334(In/Hr) for a    10.0 year storm
Subarea runoff =     11.082(CFS) for     11.700(Ac.)
Total runoff =     27.962(CFS)        Total area =      23.100(Ac.)
Street flow at end of street =     27.962(CFS)
Half street flow at end of street =     27.962(CFS)
Depth of flow =   0.806(Ft.), Average velocity =   2.276(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   15.29(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      216.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1603.500(Ft.)
End of street segment elevation =  1591.500(Ft.)
Length of street segment  =  1535.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     46.784(CFS)
Depth of flow =   0.766(Ft.), Average velocity =   4.253(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   13.28(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   4.25(Ft/s)
Travel time =    6.02 min.     TC =   26.95  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.705
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.460; Impervious fraction =  0.540
Rainfall intensity =      1.176(In/Hr) for a    10.0 year storm
Subarea runoff =     25.778(CFS) for     31.100(Ac.)
Total runoff =     53.740(CFS)        Total area =      54.200(Ac.)
Street flow at end of street =     53.740(CFS)
Half street flow at end of street =     53.740(CFS)
Depth of flow =   0.795(Ft.), Average velocity =   4.495(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   14.77(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      216.000 to Point/Station      219.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
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Along Main Stream number: 2 in normal stream number 1
Stream flow area =     54.200(Ac.)
Runoff from this stream =     53.740(CFS)
Time of concentration =   26.95 min.
Rainfall intensity =     1.176(In/Hr)


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Process from Point/Station      217.000 to Point/Station      218.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   667.000(Ft.)
Top (of initial area) elevation =  1599.000(Ft.)
Bottom (of initial area) elevation =  1596.000(Ft.)
Difference in elevation =     3.000(Ft.)
Slope =    0.00450  s(percent)=       0.45
TC = k(0.398)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   15.802 min.
Rainfall intensity =      1.535(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.717
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.500; Impervious fraction =  0.500
Initial subarea runoff =      3.305(CFS)
Total initial stream area =        3.000(Ac.)
Pervious area fraction = 0.500


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Process from Point/Station      218.000 to Point/Station      219.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1596.000(Ft.)
End of street segment elevation =  1591.500(Ft.)
Length of street segment  =  1341.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     15.038(CFS)
Depth of flow =   0.633(Ft.), Average velocity =   2.189(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    6.65(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.19(Ft/s)
Travel time =   10.21 min.     TC =   26.01  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.770
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.310; Impervious fraction =  0.690
Rainfall intensity =      1.197(In/Hr) for a    10.0 year storm
```

```
Subarea runoff =     19.622(CFS) for     21.300(Ac.)
Total runoff =     22.927(CFS)        Total area =      24.300(Ac.)
Street flow at end of street =     22.927(CFS)
Half street flow at end of street =     22.927(CFS)
Depth of flow =   0.711(Ft.), Average velocity =   2.481(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   10.53(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      218.000 to Point/Station      219.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 2 in normal stream number 2
Stream flow area =     24.300(Ac.)
Runoff from this stream =     22.927(CFS)
Time of concentration =   26.01 min.
Rainfall intensity =     1.197(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       53.740     26.95                 1.176
2       22.927     26.01                 1.197
Largest stream flow has longer time of concentration
Qp =     53.740 + sum of
          Qb         Ia/Ib
          22.927 *    0.983 =     22.526
Qp =     76.266

Total of 2 streams to confluence:
Flow rates before confluence point:
      53.740      22.927
Area of streams before confluence:
       54.200       24.300
Results of confluence:
Total flow rate =     76.266(CFS)
Time of concentration =    26.947 min.
Effective stream area after confluence =     78.500(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      219.000 to Point/Station      220.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1591.500(Ft.)
End of street segment elevation =  1586.500(Ft.)
Length of street segment  =   724.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     80.103(CFS)
Depth of flow =   0.915(Ft.), Average velocity =   5.081(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   20.73(Ft.)
Streetflow hydraulics at midpoint of street travel:
```

```
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   5.08(Ft/s)
Travel time =    2.37 min.     TC =   29.32  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.735
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  58.23
Pervious area fraction =  0.400; Impervious fraction =  0.600
Rainfall intensity =      1.127(In/Hr) for a    10.0 year storm
Subarea runoff =      6.543(CFS) for      7.900(Ac.)
Total runoff =     82.809(CFS)        Total area =      86.400(Ac.)
Street flow at end of street =     82.809(CFS)
Half street flow at end of street =     82.809(CFS)
Depth of flow =   0.924(Ft.), Average velocity =   5.149(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   21.22(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


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Process from Point/Station      219.000 to Point/Station      220.000
**** CONFLUENCE OF MAIN STREAMS ****
________________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =     86.400(Ac.)
Runoff from this stream =     82.809(CFS)
Time of concentration =   29.32 min.
Rainfall intensity =     1.127(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1      136.200     31.84               1.082
2       82.809     29.32               1.127
Largest stream flow has longer time of concentration
Qp =    136.200 + sum of
          Qb         Ia/Ib
          82.809 *    0.960 =     79.471
Qp =    215.671

Total of 2 main streams to confluence:
Flow rates before confluence point:
     136.200      82.809
Area of streams before confluence:
      137.400       86.400


Results of confluence:
Total flow rate =    215.671(CFS)
Time of concentration =    31.836 min.
Effective stream area after confluence  =    223.800(Ac.)
End of computations, total study area =          223.80 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.339
Area averaged RI index number =  57.4
```

APPENDIX A.3: RATIONAL METHOD ANALYSIS, OFFSITE AREA C

100-YEAR

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                Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARC100.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
100-YR RATIONAL TABLING METHOD
AREA "C"
FN: ARC100.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5000




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Process from Point/Station      301.000 to Point/Station      302.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   987.000(Ft.)
Top (of initial area) elevation =  1591.000(Ft.)
Bottom (of initial area) elevation =  1585.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00608  s(percent)=       0.61
TC = k(0.393)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   17.187 min.
Rainfall intensity =      2.242(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.762
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.480; Impervious fraction =  0.520
Initial subarea runoff =     14.359(CFS)
Total initial stream area =        8.400(Ac.)
Pervious area fraction = 0.480


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Process from Point/Station      302.000 to Point/Station      303.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1585.000(Ft.)
End of street segment elevation =  1581.500(Ft.)
Length of street segment  =   653.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
```

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Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     22.137(CFS)
Depth of flow =   0.660(Ft.), Average velocity =   2.887(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    8.01(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.89(Ft/s)
Travel time =    3.77 min.     TC =   20.96  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.766
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  70.51
Pervious area fraction =  0.690; Impervious fraction =  0.310
Rainfall intensity =      2.030(In/Hr) for a   100.0 year storm
Subarea runoff =     14.157(CFS) for      9.100(Ac.)
Total runoff =     28.516(CFS)        Total area =      17.500(Ac.)
Street flow at end of street =     28.516(CFS)
Half street flow at end of street =     28.516(CFS)
Depth of flow =   0.708(Ft.), Average velocity =   3.115(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   10.40(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      303.000 to Point/Station      304.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
Top of street segment elevation =  1581.500(Ft.)
End of street segment elevation =  1579.500(Ft.)
Length of street segment  =  1348.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     44.078(CFS)
Depth of flow =   0.968(Ft.), Average velocity =   2.522(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   23.40(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.52(Ft/s)
Travel time =    8.91 min.     TC =   29.86  min.
 Adding area flow to street
USER INPUT of soil data for subarea
```

```
Runoff Coefficient = 0.794
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  62.68
Pervious area fraction =  0.370; Impervious fraction =  0.630
Rainfall intensity =      1.701(In/Hr) for a   100.0 year storm
Subarea runoff =     25.797(CFS) for     19.100(Ac.)
Total runoff =     54.313(CFS)       Total area =      36.600(Ac.)
Street flow at end of street =     54.313(CFS)
Half street flow at end of street =     54.313(CFS)
Depth of flow =   1.041(Ft.), Average velocity =   2.742(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   27.04(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)
End of computations, total study area =           36.60 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.475
Area averaged RI index number =  63.1
```

10-YEAR

```
              Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2001 Version 6.4
       Rational Hydrology Study        Date: 03/19/10  File:ARC10.out
------------------------------------------------------------------------
CITY OF HEMET HYDROLOGY STUDY
10-YR RATIONAL TABLING METHOD
AREA "C"
FN: ARC10.RRV
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
TRI-8 Builders - S/N   615
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation =  0.500(In.)
100 year, 1 hour precipitation =  1.200(In.)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.788(In/Hr)
Slope of intensity duration curve = 0.5000




++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      301.000 to Point/Station      302.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   987.000(Ft.)
Top (of initial area) elevation =  1591.000(Ft.)
Bottom (of initial area) elevation =  1585.000(Ft.)
Difference in elevation =     6.000(Ft.)
Slope =    0.00608  s(percent)=       0.61
TC = k(0.393)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   17.187 min.
Rainfall intensity =      1.472(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.720
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.480; Impervious fraction =  0.520
Initial subarea runoff =      8.909(CFS)
Total initial stream area =        8.400(Ac.)
Pervious area fraction = 0.480


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      302.000 to Point/Station      303.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
________________________________________________________________________
Top of street segment elevation =  1585.000(Ft.)
End of street segment elevation =  1581.500(Ft.)
Length of street segment  =   653.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
```

```
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     13.735(CFS)
Depth of flow =   0.581(Ft.), Average velocity =   2.522(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    4.05(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.52(Ft/s)
Travel time =    4.32 min.     TC =   21.50  min.
 Adding area flow to street
USER INPUT of soil data for subarea
Runoff Coefficient = 0.715
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  70.51
Pervious area fraction =  0.690; Impervious fraction =  0.310
Rainfall intensity =      1.316(In/Hr) for a    10.0 year storm
Subarea runoff =      8.567(CFS) for      9.100(Ac.)
Total runoff =     17.476(CFS)        Total area =      17.500(Ac.)
Street flow at end of street =     17.476(CFS)
Half street flow at end of street =     17.476(CFS)
Depth of flow =   0.619(Ft.), Average velocity =   2.702(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =    5.94(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      303.000 to Point/Station      304.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
______________________________________________________________________________
Top of street segment elevation =  1581.500(Ft.)
End of street segment elevation =  1579.500(Ft.)
Length of street segment  =  1348.000(Ft.)
Height of curb above gutter flowline  =    6.0(In.)
Width of half street (curb to crown)  =  22.000(Ft.)
Distance from crown to crossfall grade break  =  20.000(Ft.)
Slope from gutter to grade break (v/hz) =   0.053
Slope from grade break to crown (v/hz)  =   0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line  =  10.000(Ft.)
Slope from curb to property line (v/hz) =   0.020
Gutter width =   2.000(Ft.)
Gutter hike from flowline =  2.000(In.)
 Manning's N in gutter =  0.0150
 Manning's N from gutter to grade break =  0.0150
 Manning's N from grade break to crown =  0.0150
Estimated mean flow rate at midpoint of street =     27.013(CFS)
Depth of flow =   0.829(Ft.), Average velocity =   2.074(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   16.45(Ft.)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width =  22.000(Ft.)
Flow velocity =   2.07(Ft/s)
Travel time =   10.83 min.     TC =   32.34  min.
 Adding area flow to street
USER INPUT of soil data for subarea
```

```
Runoff Coefficient = 0.758
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  62.68
Pervious area fraction =  0.370; Impervious fraction =  0.630
Rainfall intensity =      1.073(In/Hr) for a    10.0 year storm
Subarea runoff =     15.549(CFS) for     19.100(Ac.)
Total runoff =     33.025(CFS)       Total area =      36.600(Ac.)
Street flow at end of street =     33.025(CFS)
Half street flow at end of street =     33.025(CFS)
Depth of flow =   0.881(Ft.), Average velocity =   2.247(Ft/s)
Warning: depth of flow exceeds top of curb
Note:  depth of flow exceeds top of street crown.
Distance that curb overflow reaches into property =   19.05(Ft.)
Flow width (from curb towards crown)=  22.000(Ft.)
End of computations, total study area =           36.60 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.475
Area averaged RI index number =  63.1
```

APPENDIX B: PRE-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY

APPENDIX B.1: AREA A

100-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/29/10 File:ARAE100.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 100-YEAR STORM EVENT
FILENAME: ARAE100

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity = 1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.356)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 12.038 min.
Rainfall intensity = 2.679(In/Hr) for a 100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.822
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.310; Impervious fraction = 0.690
Initial subarea runoff = 7.660(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.310

++

Process from Point/Station 102.000 to Point/Station 106.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     14.940(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     14.940(CFS)
Depth of flow =   0.368(Ft.), Average velocity =   2.206(Ft/s)
Channel flow top width =   36.803(Ft.)
Flow Velocity =    2.21(Ft/s)
Travel time  =    3.19 min.
Time of concentration =   15.23 min.

Sub-Channel No. 1 Critical depth =      0.354(Ft.)
  '     '       '     Critical flow top width =     35.352(Ft.)
  '     '       '     Critical flow velocity=    2.391(Ft/s)
  '     '       '     Critical flow area =      6.249(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.787
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.410; Impervious fraction =  0.590
Rainfall intensity =      2.382(In/Hr) for a   100.0 year storm
Subarea runoff =     14.478(CFS) for      7.720(Ac.)
Total runoff =     22.138(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.427(Ft.), Average velocity =   2.434(Ft/s)

Sub-Channel No. 1 Critical depth =      0.414(Ft.)
  '     '       '     Critical flow top width =     41.406(Ft.)
  '     '       '     Critical flow velocity=    2.582(Ft/s)
  '     '       '     Critical flow area =      8.572(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      106.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =     22.138(CFS)
Time of concentration =   15.23 min.
Rainfall intensity =     2.382(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.213 min.
Rainfall intensity =      2.308(In/Hr) for a   100.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.774
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  78.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      4.127(CFS)
```

```
Total initial stream area =        2.310(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** SUBAREA FLOW ADDITION ****
----------------------------------------------------------------------------
COMMERCIAL subarea type
Runoff Coefficient = 0.872
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.21 min.
Rainfall intensity =      2.308(In/Hr) for a   100.0 year storm
Subarea runoff =      0.463(CFS) for      0.230(Ac.)
Total runoff =      4.590(CFS)        Total area =       2.540(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
----------------------------------------------------------------------------
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     10.048(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     10.048(CFS)
Depth of flow =   0.281(Ft.), Average velocity =   2.548(Ft/s)
Channel flow top width =   28.082(Ft.)
Flow Velocity =    2.55(Ft/s)
Travel time  =    2.88 min.
Time of concentration =   19.10 min.

Sub-Channel No. 1 Critical depth =      0.301(Ft.)
  '     '       '     Critical flow top width =     30.078(Ft.)
  '     '       '     Critical flow velocity=    2.221(Ft/s)
  '     '       '     Critical flow area =      4.523(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.792
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  74.19
Pervious area fraction =  0.670; Impervious fraction =  0.330
Rainfall intensity =      2.127(In/Hr) for a   100.0 year storm
Subarea runoff =     10.866(CFS) for      6.450(Ac.)
Total runoff =     15.456(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.330(Ft.), Average velocity =   2.838(Ft/s)

Sub-Channel No. 1 Critical depth =      0.359(Ft.)
  '     '       '     Critical flow top width =     35.938(Ft.)
  '     '       '     Critical flow velocity=    2.394(Ft/s)
  '     '       '     Critical flow area =      6.458(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
```

```
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =     15.456(CFS)
Time of concentration =   19.10 min.
Rainfall intensity =     2.127(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       22.138     15.23                 2.382
2       15.456     19.10                 2.127
Largest stream flow has longer or shorter time of concentration
Qp =     22.138 + sum of
          Qa           Tb/Ta
          15.456 *    0.797 =     12.323
Qp =     34.461

Total of 2 streams to confluence:
Flow rates before confluence point:
      22.138      15.456
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     34.461(CFS)
Time of concentration =    15.226 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.540
Area averaged RI index number =  64.3
```

10-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/29/10 File:ARAE10.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARAE10

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.788(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.356)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 12.038 min.
Rainfall intensity = 1.759(In/Hr) for a 10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.796
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.310; Impervious fraction = 0.690
Initial subarea runoff = 4.872(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.310

++

Process from Point/Station 102.000 to Point/Station 106.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      9.379(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      9.379(CFS)
Depth of flow =   0.309(Ft.), Average velocity =   1.964(Ft/s)
Channel flow top width =   30.907(Ft.)
Flow Velocity =    1.96(Ft/s)
Travel time  =    3.58 min.
Time of concentration =   15.62 min.

Sub-Channel No. 1 Critical depth =      0.293(Ft.)
  '     '       '     Critical flow top width =     29.297(Ft.)
  '     '       '     Critical flow velocity=    2.186(Ft/s)
  '     '       '     Critical flow area =      4.292(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.751
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.410; Impervious fraction =  0.590
Rainfall intensity =      1.544(In/Hr) for a    10.0 year storm
Subarea runoff =      8.952(CFS) for      7.720(Ac.)
Total runoff =     13.825(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.357(Ft.), Average velocity =   2.164(Ft/s)

Sub-Channel No. 1 Critical depth =      0.344(Ft.)
  '     '       '     Critical flow top width =     34.375(Ft.)
  '     '       '     Critical flow velocity=    2.340(Ft/s)
  '     '       '     Critical flow area =      5.908(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      106.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =     13.825(CFS)
Time of concentration =   15.62 min.
Rainfall intensity =     1.544(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.213 min.
Rainfall intensity =      1.516(In/Hr) for a    10.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.721
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  78.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.525(CFS)
```

```
Total initial stream area =        2.310(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** SUBAREA FLOW ADDITION ****
_____________________________________________________________________________
COMMERCIAL subarea type
Runoff Coefficient = 0.863
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.21 min.
Rainfall intensity =      1.516(In/Hr) for a    10.0 year storm
Subarea runoff =      0.301(CFS) for      0.230(Ac.)
Total runoff =      2.826(CFS)        Total area =       2.540(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
_____________________________________________________________________________
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      6.198(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      6.198(CFS)
Depth of flow =   0.234(Ft.), Average velocity =   2.258(Ft/s)
Channel flow top width =   23.427(Ft.)
Flow Velocity =    2.26(Ft/s)
Travel time  =    3.25 min.
Time of concentration =   19.47 min.

Sub-Channel No. 1 Critical depth =      0.248(Ft.)
  '     '       '     Critical flow top width =     24.805(Ft.)
  '     '       '     Critical flow velocity=    2.015(Ft/s)
  '     '       '     Critical flow area =      3.076(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.749
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  74.19
Pervious area fraction =  0.670; Impervious fraction =  0.330
Rainfall intensity =      1.383(In/Hr) for a    10.0 year storm
Subarea runoff =      6.679(CFS) for      6.450(Ac.)
Total runoff =      9.505(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.275(Ft.), Average velocity =   2.513(Ft/s)

Sub-Channel No. 1 Critical depth =      0.295(Ft.)
  '     '       '     Critical flow top width =     29.492(Ft.)
  '     '       '     Critical flow velocity=    2.186(Ft/s)
  '     '       '     Critical flow area =      4.349(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
```

```
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =      9.505(CFS)
Time of concentration =   19.47 min.
Rainfall intensity =     1.383(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       13.825     15.62                 1.544
2        9.505     19.47                 1.383
Largest stream flow has longer or shorter time of concentration
Qp =     13.825 + sum of
          Qa          Tb/Ta
           9.505 *    0.802 =      7.626
Qp =     21.451

Total of 2 streams to confluence:
Flow rates before confluence point:
      13.825       9.505
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     21.451(CFS)
Time of concentration =    15.619 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.540
Area averaged RI index number =  64.3
```

2-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 08/02/10 File:ARAE2.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARAE2

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 2.00 Antecedent Moisture Condition = 1

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 2.0
Calculated rainfall intensity data:
1 hour intensity = 0.500(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.356)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 12.038 min.
Rainfall intensity = 1.116(In/Hr) for a 2.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.710
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1) = 36.00
Pervious area fraction = 0.310; Impervious fraction = 0.690
Initial subarea runoff = 2.759(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.310

++

Process from Point/Station 102.000 to Point/Station 106.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      5.173(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      5.173(CFS)
Depth of flow =   0.247(Ft.), Average velocity =   1.692(Ft/s)
Channel flow top width =   24.726(Ft.)
Flow Velocity =    1.69(Ft/s)
Travel time  =    4.16 min.
Time of concentration =   16.19 min.

Sub-Channel No. 1 Critical depth =      0.232(Ft.)
  '     '       '     Critical flow top width =     23.242(Ft.)
  '     '       '     Critical flow velocity=    1.915(Ft/s)
  '     '       '     Critical flow area =      2.701(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.638
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.410; Impervious fraction =  0.590
Rainfall intensity =      0.962(In/Hr) for a     2.0 year storm
Subarea runoff =      4.737(CFS) for      7.720(Ac.)
Total runoff =      7.496(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.284(Ft.), Average velocity =   1.857(Ft/s)

Sub-Channel No. 1 Critical depth =      0.270(Ft.)
  '     '       '     Critical flow top width =     26.953(Ft.)
  '     '       '     Critical flow velocity=    2.064(Ft/s)
  '     '       '     Critical flow area =      3.632(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      106.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =      7.496(CFS)
Time of concentration =   16.19 min.
Rainfall intensity =     0.962(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.530)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   16.213 min.
Rainfall intensity =      0.962(In/Hr) for a     2.0 year storm
UNDEVELOPED (poor cover) subarea
Runoff Coefficient = 0.473
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  60.60
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      1.052(CFS)
```

```
Total initial stream area =        2.310(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** SUBAREA FLOW ADDITION ****
----------------------------------------------------------------------
COMMERCIAL subarea type
Runoff Coefficient = 0.836
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Time of concentration =    16.21 min.
Rainfall intensity =      0.962(In/Hr) for a     2.0 year storm
Subarea runoff =      0.185(CFS) for      0.230(Ac.)
Total runoff =      1.237(CFS)        Total area =       2.540(Ac.)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
----------------------------------------------------------------------
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      2.807(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      2.807(CFS)
Depth of flow =   0.174(Ft.), Average velocity =   1.853(Ft/s)
Channel flow top width =   17.407(Ft.)
Flow Velocity =    1.85(Ft/s)
Travel time  =    3.97 min.
Time of concentration =   20.18 min.

Sub-Channel No. 1 Critical depth =      0.182(Ft.)
  '     '       '     Critical flow top width =     18.164(Ft.)
  '     '       '     Critical flow velocity=    1.702(Ft/s)
  '     '       '     Critical flow area =      1.650(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.569
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  56.03
Pervious area fraction =  0.670; Impervious fraction =  0.330
Rainfall intensity =      0.862(In/Hr) for a     2.0 year storm
Subarea runoff =      3.166(CFS) for      6.450(Ac.)
Total runoff =      4.403(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.206(Ft.), Average velocity =   2.073(Ft/s)

Sub-Channel No. 1 Critical depth =      0.217(Ft.)
  '     '       '     Critical flow top width =     21.680(Ft.)
  '     '       '     Critical flow velocity=    1.874(Ft/s)
  '     '       '     Critical flow area =      2.350(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
```

```
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =      4.403(CFS)
Time of concentration =   20.18 min.
Rainfall intensity =     0.862(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        7.496     16.19                 0.962
2        4.403     20.18                 0.862
Largest stream flow has longer or shorter time of concentration
Qp =      7.496 + sum of
          Qa          Tb/Ta
           4.403 *    0.802 =      3.533
Qp =     11.030

Total of 2 streams to confluence:
Flow rates before confluence point:
       7.496       4.403
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     11.030(CFS)
Time of concentration =    16.194 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.540
Area averaged RI index number =  64.3
```

APPENDIX B.2: AREA B

100-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARBE100.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 100-YEAR STORM EVENT
FILENAME: ARBE100

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity = 1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.518)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 18.599 min.
Rainfall intensity = 2.155(In/Hr) for a 100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.818
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 86.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Initial subarea runoff = 4.282(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 1.000

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      8.962(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      8.962(CFS)
Depth of flow =   0.284(Ft.), Average velocity =   2.223(Ft/s)
Channel flow top width =   28.394(Ft.)
Flow Velocity =    2.22(Ft/s)
Travel time  =    3.31 min.
Time of concentration =   21.90 min.

Sub-Channel No. 1 Critical depth =      0.289(Ft.)
  '     '       '     Critical flow top width =     28.906(Ft.)
  '     '       '     Critical flow velocity=    2.145(Ft/s)
  '     '       '     Critical flow area =      4.178(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.777
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  77.31
Pervious area fraction =  0.830; Impervious fraction =  0.170
Rainfall intensity =      1.986(In/Hr) for a   100.0 year storm
Subarea runoff =      9.275(CFS) for      6.010(Ac.)
Total runoff =     13.557(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.332(Ft.), Average velocity =   2.466(Ft/s)

Sub-Channel No. 1 Critical depth =      0.340(Ft.)
  '     '       '     Critical flow top width =     33.984(Ft.)
  '     '       '     Critical flow velocity=    2.348(Ft/s)
  '     '       '     Critical flow area =      5.775(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.879
Area averaged RI index number =  79.8
```

10-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARBE10.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARBE10

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.788(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.518)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 18.599 min.
Rainfall intensity = 1.415(In/Hr) for a 10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.780
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 86.00
Pervious area fraction = 1.000; Impervious fraction = 0.000
Initial subarea runoff = 2.684(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 1.000

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      5.535(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      5.535(CFS)
Depth of flow =   0.237(Ft.), Average velocity =   1.971(Ft/s)
Channel flow top width =   23.700(Ft.)
Flow Velocity =    1.97(Ft/s)
Travel time  =    3.73 min.
Time of concentration =   22.33 min.

Sub-Channel No. 1 Critical depth =      0.238(Ft.)
  '     '       '     Critical flow top width =     23.828(Ft.)
  '     '       '     Critical flow velocity=    1.950(Ft/s)
  '     '       '     Critical flow area =      2.839(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.726
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  77.31
Pervious area fraction =  0.830; Impervious fraction =  0.170
Rainfall intensity =      1.292(In/Hr) for a    10.0 year storm
Subarea runoff =      5.639(CFS) for      6.010(Ac.)
Total runoff =      8.322(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.276(Ft.), Average velocity =   2.183(Ft/s)

Sub-Channel No. 1 Critical depth =      0.279(Ft.)
  '     '       '     Critical flow top width =     27.930(Ft.)
  '     '       '     Critical flow velocity=    2.134(Ft/s)
  '     '       '     Critical flow area =      3.900(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.879
Area averaged RI index number =  79.8
```

2-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 08/02/10 File:ARBE2.out

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARBE2

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 2.00 Antecedent Moisture Condition = 1

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 2.0
Calculated rainfall intensity data:
1 hour intensity = 0.500(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.518)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 18.599 min.
Rainfall intensity = 0.898(In/Hr) for a 2.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.566
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1) = 71.60
Pervious area fraction = 1.000; Impervious fraction = 0.000
Initial subarea runoff = 1.236(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 1.000

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      2.500(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      2.500(CFS)
Depth of flow =   0.176(Ft.), Average velocity =   1.616(Ft/s)
Channel flow top width =   17.591(Ft.)
Flow Velocity =    1.62(Ft/s)
Travel time  =    4.55 min.
Time of concentration =   23.15 min.

Sub-Channel No. 1 Critical depth =      0.173(Ft.)
  '     '       '     Critical flow top width =     17.285(Ft.)
  '     '       '     Critical flow velocity=    1.673(Ft/s)
  '     '       '     Critical flow area =      1.494(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.506
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  59.77
Pervious area fraction =  0.830; Impervious fraction =  0.170
Rainfall intensity =      0.805(In/Hr) for a     2.0 year storm
Subarea runoff =      2.449(CFS) for      6.010(Ac.)
Total runoff =      3.685(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.203(Ft.), Average velocity =   1.780(Ft/s)

Sub-Channel No. 1 Critical depth =      0.202(Ft.)
  '     '       '     Critical flow top width =     20.215(Ft.)
  '     '       '     Critical flow velocity=    1.804(Ft/s)
  '     '       '     Critical flow area =      2.043(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.879
Area averaged RI index number =  79.8
```

APPENDIX C: POST-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY

APPENDIX C.1: AREA A

100-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARAP100.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 100-YEAR STORM EVENT
FILENAME: ARAP100

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity = 1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 10.366 min.
Rainfall intensity = 2.887(In/Hr) for a 100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.869
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 8.729(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 102.000 to Point/Station 105.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     17.141(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     17.141(CFS)
Depth of flow =   0.387(Ft.), Average velocity =   2.283(Ft/s)
Channel flow top width =   38.749(Ft.)
Flow Velocity =    2.28(Ft/s)
Travel time  =    3.08 min.
Time of concentration =   13.45 min.

Sub-Channel No. 1 Critical depth =      0.375(Ft.)
  '     '       '     Critical flow top width =     37.500(Ft.)
  '     '       '     Critical flow velocity=    2.438(Ft/s)
  '     '       '     Critical flow area =      7.031(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.855
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.170; Impervious fraction =  0.830
Rainfall intensity =      2.535(In/Hr) for a   100.0 year storm
Subarea runoff =     16.737(CFS) for      7.720(Ac.)
Total runoff =     25.466(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.450(Ft.), Average velocity =   2.521(Ft/s)

Sub-Channel No. 1 Critical depth =      0.438(Ft.)
  '     '       '     Critical flow top width =     43.750(Ft.)
  '     '       '     Critical flow velocity=    2.661(Ft/s)
  '     '       '     Critical flow area =      9.570(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =     25.466(CFS)
Time of concentration =   13.45 min.
Rainfall intensity =     2.535(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.388 min.
Rainfall intensity =      3.034(In/Hr) for a   100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.870
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.130; Impervious fraction =  0.870
Initial subarea runoff =      6.703(CFS)
```

```
Total initial stream area =        2.540(Ac.)
Pervious area fraction = 0.130


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     14.038(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     14.038(CFS)
Depth of flow =   0.318(Ft.), Average velocity =   2.771(Ft/s)
Channel flow top width =   31.833(Ft.)
Flow Velocity =    2.77(Ft/s)
Travel time  =    2.65 min.
Time of concentration =   12.04 min.

Sub-Channel No. 1 Critical depth =      0.344(Ft.)
  '     '       '     Critical flow top width =     34.375(Ft.)
  '     '       '     Critical flow velocity=    2.376(Ft/s)
  '     '       '     Critical flow area =      5.908(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.844
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.220; Impervious fraction =  0.780
Rainfall intensity =      2.679(In/Hr) for a   100.0 year storm
Subarea runoff =     14.588(CFS) for      6.450(Ac.)
Total runoff =     21.291(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.372(Ft.), Average velocity =   3.075(Ft/s)

Sub-Channel No. 1 Critical depth =      0.406(Ft.)
  '     '       '     Critical flow top width =     40.625(Ft.)
  '     '       '     Critical flow velocity=    2.580(Ft/s)
  '     '       '     Critical flow area =      8.252(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =     21.291(CFS)
Time of concentration =   12.04 min.
Rainfall intensity =     2.679(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       25.466     13.45                2.535
2       21.291     12.04                2.679
Largest stream flow has longer time of concentration
Qp =     25.466 + sum of
          Qb         Ia/Ib
          21.291 *    0.946 =     20.148
```

```
Qp =     45.614

Total of 2 streams to confluence:
Flow rates before confluence point:
      25.466      21.291
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     45.614(CFS)
Time of concentration =    13.446 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.174
Area averaged RI index number =  56.0
```

10-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARAP10.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARAP10

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.788(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 10.366 min.
Rainfall intensity = 1.896(In/Hr) for a 10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.858
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 5.663(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 102.000 to Point/Station 105.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     11.024(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     11.024(CFS)
Depth of flow =   0.328(Ft.), Average velocity =   2.045(Ft/s)
Channel flow top width =   32.837(Ft.)
Flow Velocity =    2.04(Ft/s)
Travel time  =    3.44 min.
Time of concentration =   13.81 min.

Sub-Channel No. 1 Critical depth =      0.313(Ft.)
  '     '       '     Critical flow top width =     31.250(Ft.)
  '     '       '     Critical flow velocity=    2.258(Ft/s)
  '     '       '     Critical flow area =      4.883(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.840
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.170; Impervious fraction =  0.830
Rainfall intensity =      1.643(In/Hr) for a    10.0 year storm
Subarea runoff =     10.658(CFS) for      7.720(Ac.)
Total runoff =     16.321(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.380(Ft.), Average velocity =   2.255(Ft/s)

Sub-Channel No. 1 Critical depth =      0.367(Ft.)
  '     '       '     Critical flow top width =     36.719(Ft.)
  '     '       '     Critical flow velocity=    2.421(Ft/s)
  '     '       '     Critical flow area =      6.741(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =     16.321(CFS)
Time of concentration =   13.81 min.
Rainfall intensity =     1.643(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.388 min.
Rainfall intensity =      1.992(In/Hr) for a    10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.860
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.130; Impervious fraction =  0.870
Initial subarea runoff =      4.350(CFS)
```

```
Total initial stream area =        2.540(Ac.)
Pervious area fraction = 0.130


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
________________________________________________________________________
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      9.003(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      9.003(CFS)
Depth of flow =   0.269(Ft.), Average velocity =   2.479(Ft/s)
Channel flow top width =   26.949(Ft.)
Flow Velocity =    2.48(Ft/s)
Travel time  =    2.96 min.
Time of concentration =   12.35 min.

Sub-Channel No. 1 Critical depth =      0.289(Ft.)
  '     '       '     Critical flow top width =     28.906(Ft.)
  '     '       '     Critical flow velocity=    2.155(Ft/s)
  '     '       '     Critical flow area =      4.178(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.825
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.220; Impervious fraction =  0.780
Rainfall intensity =      1.737(In/Hr) for a    10.0 year storm
Subarea runoff =      9.247(CFS) for      6.450(Ac.)
Total runoff =     13.596(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.315(Ft.), Average velocity =   2.749(Ft/s)

Sub-Channel No. 1 Critical depth =      0.340(Ft.)
  '     '       '     Critical flow top width =     33.984(Ft.)
  '     '       '     Critical flow velocity=    2.355(Ft/s)
  '     '       '     Critical flow area =      5.775(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =     13.596(CFS)
Time of concentration =   12.35 min.
Rainfall intensity =     1.737(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1       16.321     13.81                1.643
2       13.596     12.35                1.737
Largest stream flow has longer time of concentration
Qp =     16.321 + sum of
          Qb         Ia/Ib
          13.596 *    0.946 =     12.861
```

```
Qp =     29.182

Total of 2 streams to confluence:
Flow rates before confluence point:
      16.321      13.596
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     29.182(CFS)
Time of concentration =    13.806 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.174
Area averaged RI index number =  56.0
```

2-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 08/02/10 File:ARAP2.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARAP2

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 2.00 Antecedent Moisture Condition = 1

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 2.0
Calculated rainfall intensity data:
1 hour intensity = 0.500(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 509.000(Ft.)
Top (of initial area) elevation = 1583.000(Ft.)
Bottom (of initial area) elevation = 1580.000(Ft.)
Difference in elevation = 3.000(Ft.)
Slope = 0.00589 s(percent)= 0.59
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 10.366 min.
Rainfall intensity = 1.203(In/Hr) for a 2.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.822
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1) = 36.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 3.443(CFS)
Total initial stream area = 3.480(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 102.000 to Point/Station 105.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1580.000(Ft.)
Downstream point elevation = 1578.000(Ft.)
Channel length thru subarea = 422.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      6.626(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      6.626(CFS)
Depth of flow =   0.271(Ft.), Average velocity =   1.800(Ft/s)
Channel flow top width =   27.131(Ft.)
Flow Velocity =    1.80(Ft/s)
Travel time  =    3.91 min.
Time of concentration =   14.27 min.

Sub-Channel No. 1 Critical depth =      0.256(Ft.)
  '     '       '     Critical flow top width =     25.586(Ft.)
  '     '       '     Critical flow velocity=    2.024(Ft/s)
  '     '       '     Critical flow area =      3.273(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.793
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.170; Impervious fraction =  0.830
Rainfall intensity =      1.025(In/Hr) for a     2.0 year storm
Subarea runoff =      6.278(CFS) for      7.720(Ac.)
Total runoff =      9.720(CFS)        Total area =      11.200(Ac.)
Depth of flow =   0.313(Ft.), Average velocity =   1.981(Ft/s)

Sub-Channel No. 1 Critical depth =      0.297(Ft.)
  '     '       '     Critical flow top width =     29.688(Ft.)
  '     '       '     Critical flow velocity=    2.206(Ft/s)
  '     '       '     Critical flow area =      4.407(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      102.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
________________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     11.200(Ac.)
Runoff from this stream =      9.720(CFS)
Time of concentration =   14.27 min.
Rainfall intensity =     1.025(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      103.000 to Point/Station      104.000
**** INITIAL AREA EVALUATION ****
________________________________________________________________________
Initial area flow distance =   377.000(Ft.)
Top (of initial area) elevation =  1584.000(Ft.)
Bottom (of initial area) elevation =  1582.000(Ft.)
Difference in elevation =     2.000(Ft.)
Slope =    0.00531  s(percent)=       0.53
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    9.388 min.
Rainfall intensity =      1.264(In/Hr) for a     2.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.824
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.130; Impervious fraction =  0.870
Initial subarea runoff =      2.645(CFS)
```

```
Total initial stream area =        2.540(Ac.)
Pervious area fraction = 0.130


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** IMPROVED CHANNEL TRAVEL TIME ****
______________________________________________________________________________
Upstream point elevation =  1582.000(Ft.)
Downstream point elevation =  1578.000(Ft.)
Channel length thru subarea  =   441.000(Ft.)
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      5.361(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      5.361(CFS)
Depth of flow =   0.222(Ft.), Average velocity =   2.178(Ft/s)
Channel flow top width =   22.188(Ft.)
Flow Velocity =    2.18(Ft/s)
Travel time  =    3.37 min.
Time of concentration =   12.76 min.

Sub-Channel No. 1 Critical depth =      0.234(Ft.)
  '     '       '     Critical flow top width =     23.438(Ft.)
  '     '       '     Critical flow velocity=    1.952(Ft/s)
  '     '       '     Critical flow area =      2.747(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.764
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.220; Impervious fraction =  0.780
Rainfall intensity =      1.084(In/Hr) for a     2.0 year storm
Subarea runoff =      5.343(CFS) for      6.450(Ac.)
Total runoff =      7.988(CFS)        Total area =       8.990(Ac.)
Depth of flow =   0.258(Ft.), Average velocity =   2.406(Ft/s)

Sub-Channel No. 1 Critical depth =      0.275(Ft.)
  '     '       '     Critical flow top width =     27.539(Ft.)
  '     '       '     Critical flow velocity=    2.106(Ft/s)
  '     '       '     Critical flow area =      3.792(Sq.Ft)



++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      104.000 to Point/Station      105.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      8.990(Ac.)
Runoff from this stream =      7.988(CFS)
Time of concentration =   12.76 min.
Rainfall intensity =     1.084(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                (In/Hr)


1        9.720     14.27                1.025
2        7.988     12.76                1.084
Largest stream flow has longer time of concentration
Qp =      9.720 + sum of
          Qb         Ia/Ib
           7.988 *    0.946 =      7.554
```

```
Qp =     17.274

Total of 2 streams to confluence:
Flow rates before confluence point:
       9.720       7.988
Area of streams before confluence:
       11.200        8.990
Results of confluence:
Total flow rate =     17.274(CFS)
Time of concentration =    14.273 min.
Effective stream area after confluence =     20.190(Ac.)
End of computations, total study area =           20.19 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.174
Area averaged RI index number =  56.0
```

APPENDIX C.2: AREA B

100-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARBP100.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 100-YEAR STORM EVENT
FILENAME: ARBP100

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 100.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity = 1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 11.023 min.
Rainfall intensity = 2.800(In/Hr) for a 100.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.868
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 5.906(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =     12.123(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =     12.123(CFS)
Depth of flow =   0.318(Ft.), Average velocity =   2.398(Ft/s)
Channel flow top width =   31.800(Ft.)
Flow Velocity =    2.40(Ft/s)
Travel time  =    3.07 min.
Time of concentration =   14.09 min.

Sub-Channel No. 1 Critical depth =      0.324(Ft.)
  '     '       '     Critical flow top width =     32.422(Ft.)
  '     '       '     Critical flow velocity=    2.307(Ft/s)
  '     '       '     Critical flow area =      5.256(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.830
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.260; Impervious fraction =  0.740
Rainfall intensity =      2.476(In/Hr) for a   100.0 year storm
Subarea runoff =     12.360(CFS) for      6.010(Ac.)
Total runoff =     18.266(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.371(Ft.), Average velocity =   2.656(Ft/s)

Sub-Channel No. 1 Critical depth =      0.383(Ft.)
  '     '       '     Critical flow top width =     38.281(Ft.)
  '     '       '     Critical flow velocity=    2.493(Ft/s)
  '     '       '     Critical flow area =      7.327(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.223
Area averaged RI index number =  56.0
```

10-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 07/30/10 File:ARBP10.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARBP10

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 10.00 Antecedent Moisture Condition = 2

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 10.0
Calculated rainfall intensity data:
1 hour intensity = 0.788(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 11.023 min.
Rainfall intensity = 1.838(In/Hr) for a 10.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.858
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2) = 56.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 3.831(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      7.756(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      7.756(CFS)
Depth of flow =   0.269(Ft.), Average velocity =   2.144(Ft/s)
Channel flow top width =   26.895(Ft.)
Flow Velocity =    2.14(Ft/s)
Travel time  =    3.43 min.
Time of concentration =   14.45 min.

Sub-Channel No. 1 Critical depth =      0.271(Ft.)
  '     '       '     Critical flow top width =     27.148(Ft.)
  '     '       '     Critical flow velocity=    2.105(Ft/s)
  '     '       '     Critical flow area =      3.685(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.808
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.260; Impervious fraction =  0.740
Rainfall intensity =      1.606(In/Hr) for a    10.0 year storm
Subarea runoff =      7.793(CFS) for      6.010(Ac.)
Total runoff =     11.624(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.313(Ft.), Average velocity =   2.373(Ft/s)

Sub-Channel No. 1 Critical depth =      0.320(Ft.)
  '     '       '     Critical flow top width =     32.031(Ft.)
  '     '       '     Critical flow velocity=    2.266(Ft/s)
  '     '       '     Critical flow area =      5.130(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.223
Area averaged RI index number =  56.0
```

2-YEAR

Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study Date: 08/02/10 File:ARBP2.out

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
RATIONAL METHOD ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARBP10

********* Hydrology Study Control Information **********

English (in-lb) Units used in input data file

Program License Serial Number 6045

Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) = 2.00 Antecedent Moisture Condition = 1

2 year, 1 hour precipitation = 0.500(In.)
100 year, 1 hour precipitation = 1.200(In.)

Storm event year = 2.0
Calculated rainfall intensity data:
1 hour intensity = 0.500(In/Hr)
Slope of intensity duration curve = 0.5000

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

Initial area flow distance = 391.000(Ft.)
Top (of initial area) elevation = 1584.000(Ft.)
Bottom (of initial area) elevation = 1583.000(Ft.)
Difference in elevation = 1.000(Ft.)
Slope = 0.00256 s(percent)= 0.26
TC = k(0.307)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 11.023 min.
Rainfall intensity = 1.167(In/Hr) for a 2.0 year storm
USER INPUT of soil data for subarea
Runoff Coefficient = 0.822
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1) = 36.00
Pervious area fraction = 0.130; Impervious fraction = 0.870
Initial subarea runoff = 2.329(CFS)
Total initial stream area = 2.430(Ac.)
Pervious area fraction = 0.130

++

Process from Point/Station 202.000 to Point/Station 203.000
**** IMPROVED CHANNEL TRAVEL TIME ****

Upstream point elevation = 1583.000(Ft.)
Downstream point elevation = 1580.000(Ft.)
Channel length thru subarea = 441.000(Ft.)

```
Channel base width     =    0.000(Ft.)
Slope or 'Z' of left channel bank =  50.000
Slope or 'Z' of right channel bank =  50.000
Estimated mean flow rate at midpoint of channel =      4.588(CFS)
Manning's 'N'    = 0.015
Maximum depth of channel  =    1.000(Ft.)
Flow(q) thru subarea =      4.588(CFS)
Depth of flow =   0.221(Ft.), Average velocity =   1.881(Ft/s)
Channel flow top width =   22.089(Ft.)
Flow Velocity =    1.88(Ft/s)
Travel time  =    3.91 min.
Time of concentration =   14.93 min.

Sub-Channel No. 1 Critical depth =      0.221(Ft.)
  '     '       '     Critical flow top width =     22.070(Ft.)
  '     '       '     Critical flow velocity=    1.884(Ft/s)
  '     '       '     Critical flow area =      2.435(Sq.Ft)

 Adding area flow to channel
USER INPUT of soil data for subarea
Runoff Coefficient = 0.736
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 1)  =  36.00
Pervious area fraction =  0.260; Impervious fraction =  0.740
Rainfall intensity =      1.002(In/Hr) for a     2.0 year storm
Subarea runoff =      4.431(CFS) for      6.010(Ac.)
Total runoff =      6.760(CFS)        Total area =       8.440(Ac.)
Depth of flow =   0.255(Ft.), Average velocity =   2.072(Ft/s)

Sub-Channel No. 1 Critical depth =      0.258(Ft.)
  '     '       '     Critical flow top width =     25.781(Ft.)
  '     '       '     Critical flow velocity=    2.034(Ft/s)
  '     '       '     Critical flow area =      3.323(Sq.Ft)

End of computations, total study area =            8.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.223
Area averaged RI index number =  56.0
```

APPENDIX D: PRE-PROJECT CONDITION ONSITE UNIT HYDROGRAPH HYDROLOGY

APPENDIX D.1: AREA A

10-YEAR, 24-HOUR

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
              Study date  08/02/10 File: ARAEX2410.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 6045

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARAEX

------------------------------------------------------------------------
Drainage Area =      20.19(Ac.)  =      0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      20.19(Ac.)  =      0.032 Sq. Mi.
USER Entry of lag time in hours
Lag time =    0.208 Hr.
Lag time =    12.50 Min.
25% of lag time =     3.12 Min.
40% of lag time =     5.00 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           1.80                 36.34

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           4.50                 90.86

STORM EVENT (YEAR) =   10.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    4.500(In)

Point rain (area averaged) =    2.911(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    2.911(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    20.190           64.30          0.460
 Total Area Entered =     20.19(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-2     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
64.3  64.3      0.424     0.460        0.248       1.000      0.248
                                                 Sum (F) =   0.248
```

Area averaged mean soil loss (F) (In/Hr) = 0.248
Minimum soil loss rate ((In/Hr)) = 0.124
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.532

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	40.006	4.357	0.887
2	0.167	80.013	17.893	3.641
3	0.250	120.019	26.757	5.444
4	0.333	160.026	17.443	3.549
5	0.417	200.032	8.522	1.734
6	0.500	240.038	5.376	1.094
7	0.583	280.045	4.016	0.817
8	0.667	320.051	3.079	0.627
9	0.750	360.058	2.440	0.496
10	0.833	400.064	1.940	0.395
11	0.917	440.070	1.519	0.309
12	1.000	480.077	1.258	0.256
13	1.083	520.083	1.162	0.237
14	1.167	560.090	0.915	0.186
15	1.250	600.096	0.765	0.156
16	1.333	640.102	0.640	0.130
17	1.417	680.109	0.515	0.105
18	1.500	720.115	0.405	0.082
19	1.583	760.122	0.400	0.081
20	1.667	800.128	0.599	0.122
		Sum = 100.000	Sum=	20.348

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.023	0.440	0.012	0.01
2	0.17	0.07	0.023	0.438	0.012	0.01
3	0.25	0.07	0.023	0.437	0.012	0.01
4	0.33	0.10	0.035	0.435	0.019	0.02
5	0.42	0.10	0.035	0.433	0.019	0.02
6	0.50	0.10	0.035	0.432	0.019	0.02
7	0.58	0.10	0.035	0.430	0.019	0.02
8	0.67	0.10	0.035	0.428	0.019	0.02
9	0.75	0.10	0.035	0.426	0.019	0.02
10	0.83	0.13	0.047	0.425	0.025	0.02
11	0.92	0.13	0.047	0.423	0.025	0.02
12	1.00	0.13	0.047	0.421	0.025	0.02
13	1.08	0.10	0.035	0.420	0.019	0.02
14	1.17	0.10	0.035	0.418	0.019	0.02
15	1.25	0.10	0.035	0.416	0.019	0.02
16	1.33	0.10	0.035	0.415	0.019	0.02
17	1.42	0.10	0.035	0.413	0.019	0.02
18	1.50	0.10	0.035	0.412	0.019	0.02
19	1.58	0.10	0.035	0.410	0.019	0.02
20	1.67	0.10	0.035	0.408	0.019	0.02
21	1.75	0.10	0.035	0.407	0.019	0.02
22	1.83	0.13	0.047	0.405	0.025	0.02
23	1.92	0.13	0.047	0.403	0.025	0.02
24	2.00	0.13	0.047	0.402	0.025	0.02
25	2.08	0.13	0.047	0.400	0.025	0.02
26	2.17	0.13	0.047	0.398	0.025	0.02
27	2.25	0.13	0.047	0.397	0.025	0.02
28	2.33	0.13	0.047	0.395	0.025	0.02
29	2.42	0.13	0.047	0.394	0.025	0.02
30	2.50	0.13	0.047	0.392	0.025	0.02
31	2.58	0.17	0.058	0.390	0.031	0.03

32	2.67	0.17	0.058	0.389	0.031	0.03
33	2.75	0.17	0.058	0.387	0.031	0.03
34	2.83	0.17	0.058	0.386	0.031	0.03
35	2.92	0.17	0.058	0.384	0.031	0.03
36	3.00	0.17	0.058	0.382	0.031	0.03
37	3.08	0.17	0.058	0.381	0.031	0.03
38	3.17	0.17	0.058	0.379	0.031	0.03
39	3.25	0.17	0.058	0.378	0.031	0.03
40	3.33	0.17	0.058	0.376	0.031	0.03
41	3.42	0.17	0.058	0.375	0.031	0.03
42	3.50	0.17	0.058	0.373	0.031	0.03
43	3.58	0.17	0.058	0.371	0.031	0.03
44	3.67	0.17	0.058	0.370	0.031	0.03
45	3.75	0.17	0.058	0.368	0.031	0.03
46	3.83	0.20	0.070	0.367	0.037	0.03
47	3.92	0.20	0.070	0.365	0.037	0.03
48	4.00	0.20	0.070	0.364	0.037	0.03
49	4.08	0.20	0.070	0.362	0.037	0.03
50	4.17	0.20	0.070	0.361	0.037	0.03
51	4.25	0.20	0.070	0.359	0.037	0.03
52	4.33	0.23	0.081	0.358	0.043	0.04
53	4.42	0.23	0.081	0.356	0.043	0.04
54	4.50	0.23	0.081	0.354	0.043	0.04
55	4.58	0.23	0.081	0.353	0.043	0.04
56	4.67	0.23	0.081	0.351	0.043	0.04
57	4.75	0.23	0.081	0.350	0.043	0.04
58	4.83	0.27	0.093	0.348	0.050	0.04
59	4.92	0.27	0.093	0.347	0.050	0.04
60	5.00	0.27	0.093	0.345	0.050	0.04
61	5.08	0.20	0.070	0.344	0.037	0.03
62	5.17	0.20	0.070	0.342	0.037	0.03
63	5.25	0.20	0.070	0.341	0.037	0.03
64	5.33	0.23	0.081	0.339	0.043	0.04
65	5.42	0.23	0.081	0.338	0.043	0.04
66	5.50	0.23	0.081	0.336	0.043	0.04
67	5.58	0.27	0.093	0.335	0.050	0.04
68	5.67	0.27	0.093	0.333	0.050	0.04
69	5.75	0.27	0.093	0.332	0.050	0.04
70	5.83	0.27	0.093	0.331	0.050	0.04
71	5.92	0.27	0.093	0.329	0.050	0.04
72	6.00	0.27	0.093	0.328	0.050	0.04
73	6.08	0.30	0.105	0.326	0.056	0.05
74	6.17	0.30	0.105	0.325	0.056	0.05
75	6.25	0.30	0.105	0.323	0.056	0.05
76	6.33	0.30	0.105	0.322	0.056	0.05
77	6.42	0.30	0.105	0.320	0.056	0.05
78	6.50	0.30	0.105	0.319	0.056	0.05
79	6.58	0.33	0.116	0.318	0.062	0.05
80	6.67	0.33	0.116	0.316	0.062	0.05
81	6.75	0.33	0.116	0.315	0.062	0.05
82	6.83	0.33	0.116	0.313	0.062	0.05
83	6.92	0.33	0.116	0.312	0.062	0.05
84	7.00	0.33	0.116	0.310	0.062	0.05
85	7.08	0.33	0.116	0.309	0.062	0.05
86	7.17	0.33	0.116	0.308	0.062	0.05
87	7.25	0.33	0.116	0.306	0.062	0.05
88	7.33	0.37	0.128	0.305	0.068	0.06
89	7.42	0.37	0.128	0.303	0.068	0.06
90	7.50	0.37	0.128	0.302	0.068	0.06
91	7.58	0.40	0.140	0.301	0.074	0.07
92	7.67	0.40	0.140	0.299	0.074	0.07
93	7.75	0.40	0.140	0.298	0.074	0.07
94	7.83	0.43	0.151	0.296	0.081	0.07
95	7.92	0.43	0.151	0.295	0.081	0.07
96	8.00	0.43	0.151	0.294	0.081	0.07
97	8.08	0.50	0.175	0.292	0.093	0.08
98	8.17	0.50	0.175	0.291	0.093	0.08
99	8.25	0.50	0.175	0.290	0.093	0.08
100	8.33	0.50	0.175	0.288	0.093	0.08
101	8.42	0.50	0.175	0.287	0.093	0.08
102	8.50	0.50	0.175	0.286	0.093	0.08

103	8.58	0.53	0.186	0.284	0.099	0.09
104	8.67	0.53	0.186	0.283	0.099	0.09
105	8.75	0.53	0.186	0.282	0.099	0.09
106	8.83	0.57	0.198	0.280	0.105	0.09
107	8.92	0.57	0.198	0.279	0.105	0.09
108	9.00	0.57	0.198	0.278	0.105	0.09
109	9.08	0.63	0.221	0.276	0.118	0.10
110	9.17	0.63	0.221	0.275	0.118	0.10
111	9.25	0.63	0.221	0.274	0.118	0.10
112	9.33	0.67	0.233	0.272	0.124	0.11
113	9.42	0.67	0.233	0.271	0.124	0.11
114	9.50	0.67	0.233	0.270	0.124	0.11
115	9.58	0.70	0.244	0.269	0.130	0.11
116	9.67	0.70	0.244	0.267	0.130	0.11
117	9.75	0.70	0.244	0.266	0.130	0.11
118	9.83	0.73	0.256	0.265	0.136	0.12
119	9.92	0.73	0.256	0.263	0.136	0.12
120	10.00	0.73	0.256	0.262	0.136	0.12
121	10.08	0.50	0.175	0.261	0.093	0.08
122	10.17	0.50	0.175	0.260	0.093	0.08
123	10.25	0.50	0.175	0.258	0.093	0.08
124	10.33	0.50	0.175	0.257	0.093	0.08
125	10.42	0.50	0.175	0.256	0.093	0.08
126	10.50	0.50	0.175	0.255	0.093	0.08
127	10.58	0.67	0.233	0.253	0.124	0.11
128	10.67	0.67	0.233	0.252	0.124	0.11
129	10.75	0.67	0.233	0.251	0.124	0.11
130	10.83	0.67	0.233	0.250	0.124	0.11
131	10.92	0.67	0.233	0.248	0.124	0.11
132	11.00	0.67	0.233	0.247	0.124	0.11
133	11.08	0.63	0.221	0.246	0.118	0.10
134	11.17	0.63	0.221	0.245	0.118	0.10
135	11.25	0.63	0.221	0.244	0.118	0.10
136	11.33	0.63	0.221	0.242	0.118	0.10
137	11.42	0.63	0.221	0.241	0.118	0.10
138	11.50	0.63	0.221	0.240	0.118	0.10
139	11.58	0.57	0.198	0.239	0.105	0.09
140	11.67	0.57	0.198	0.238	0.105	0.09
141	11.75	0.57	0.198	0.236	0.105	0.09
142	11.83	0.60	0.210	0.235	0.111	0.10
143	11.92	0.60	0.210	0.234	0.111	0.10
144	12.00	0.60	0.210	0.233	0.111	0.10
145	12.08	0.83	0.291	0.232	---	0.06
146	12.17	0.83	0.291	0.231	---	0.06
147	12.25	0.83	0.291	0.229	---	0.06
148	12.33	0.87	0.303	0.228	---	0.07
149	12.42	0.87	0.303	0.227	---	0.08
150	12.50	0.87	0.303	0.226	---	0.08
151	12.58	0.93	0.326	0.225	---	0.10
152	12.67	0.93	0.326	0.224	---	0.10
153	12.75	0.93	0.326	0.223	---	0.10
154	12.83	0.97	0.338	0.221	---	0.12
155	12.92	0.97	0.338	0.220	---	0.12
156	13.00	0.97	0.338	0.219	---	0.12
157	13.08	1.13	0.396	0.218	---	0.18
158	13.17	1.13	0.396	0.217	---	0.18
159	13.25	1.13	0.396	0.216	---	0.18
160	13.33	1.13	0.396	0.215	---	0.18
161	13.42	1.13	0.396	0.214	---	0.18
162	13.50	1.13	0.396	0.213	---	0.18
163	13.58	0.77	0.268	0.212	---	0.06
164	13.67	0.77	0.268	0.210	---	0.06
165	13.75	0.77	0.268	0.209	---	0.06
166	13.83	0.77	0.268	0.208	---	0.06
167	13.92	0.77	0.268	0.207	---	0.06
168	14.00	0.77	0.268	0.206	---	0.06
169	14.08	0.90	0.314	0.205	---	0.11
170	14.17	0.90	0.314	0.204	---	0.11
171	14.25	0.90	0.314	0.203	---	0.11
172	14.33	0.87	0.303	0.202	---	0.10
173	14.42	0.87	0.303	0.201	---	0.10

174	14.50	0.87	0.303	0.200	---	0.10
175	14.58	0.87	0.303	0.199	---	0.10
176	14.67	0.87	0.303	0.198	---	0.10
177	14.75	0.87	0.303	0.197	---	0.11
178	14.83	0.83	0.291	0.196	---	0.10
179	14.92	0.83	0.291	0.195	---	0.10
180	15.00	0.83	0.291	0.194	---	0.10
181	15.08	0.80	0.279	0.193	---	0.09
182	15.17	0.80	0.279	0.192	---	0.09
183	15.25	0.80	0.279	0.191	---	0.09
184	15.33	0.77	0.268	0.190	---	0.08
185	15.42	0.77	0.268	0.189	---	0.08
186	15.50	0.77	0.268	0.188	---	0.08
187	15.58	0.63	0.221	0.187	---	0.03
188	15.67	0.63	0.221	0.186	---	0.04
189	15.75	0.63	0.221	0.185	---	0.04
190	15.83	0.63	0.221	0.184	---	0.04
191	15.92	0.63	0.221	0.183	---	0.04
192	16.00	0.63	0.221	0.182	---	0.04
193	16.08	0.13	0.047	0.181	0.025	0.02
194	16.17	0.13	0.047	0.180	0.025	0.02
195	16.25	0.13	0.047	0.179	0.025	0.02
196	16.33	0.13	0.047	0.179	0.025	0.02
197	16.42	0.13	0.047	0.178	0.025	0.02
198	16.50	0.13	0.047	0.177	0.025	0.02
199	16.58	0.10	0.035	0.176	0.019	0.02
200	16.67	0.10	0.035	0.175	0.019	0.02
201	16.75	0.10	0.035	0.174	0.019	0.02
202	16.83	0.10	0.035	0.173	0.019	0.02
203	16.92	0.10	0.035	0.172	0.019	0.02
204	17.00	0.10	0.035	0.171	0.019	0.02
205	17.08	0.17	0.058	0.171	0.031	0.03
206	17.17	0.17	0.058	0.170	0.031	0.03
207	17.25	0.17	0.058	0.169	0.031	0.03
208	17.33	0.17	0.058	0.168	0.031	0.03
209	17.42	0.17	0.058	0.167	0.031	0.03
210	17.50	0.17	0.058	0.166	0.031	0.03
211	17.58	0.17	0.058	0.166	0.031	0.03
212	17.67	0.17	0.058	0.165	0.031	0.03
213	17.75	0.17	0.058	0.164	0.031	0.03
214	17.83	0.13	0.047	0.163	0.025	0.02
215	17.92	0.13	0.047	0.162	0.025	0.02
216	18.00	0.13	0.047	0.161	0.025	0.02
217	18.08	0.13	0.047	0.161	0.025	0.02
218	18.17	0.13	0.047	0.160	0.025	0.02
219	18.25	0.13	0.047	0.159	0.025	0.02
220	18.33	0.13	0.047	0.158	0.025	0.02
221	18.42	0.13	0.047	0.158	0.025	0.02
222	18.50	0.13	0.047	0.157	0.025	0.02
223	18.58	0.10	0.035	0.156	0.019	0.02
224	18.67	0.10	0.035	0.155	0.019	0.02
225	18.75	0.10	0.035	0.155	0.019	0.02
226	18.83	0.07	0.023	0.154	0.012	0.01
227	18.92	0.07	0.023	0.153	0.012	0.01
228	19.00	0.07	0.023	0.152	0.012	0.01
229	19.08	0.10	0.035	0.152	0.019	0.02
230	19.17	0.10	0.035	0.151	0.019	0.02
231	19.25	0.10	0.035	0.150	0.019	0.02
232	19.33	0.13	0.047	0.149	0.025	0.02
233	19.42	0.13	0.047	0.149	0.025	0.02
234	19.50	0.13	0.047	0.148	0.025	0.02
235	19.58	0.10	0.035	0.147	0.019	0.02
236	19.67	0.10	0.035	0.147	0.019	0.02
237	19.75	0.10	0.035	0.146	0.019	0.02
238	19.83	0.07	0.023	0.145	0.012	0.01
239	19.92	0.07	0.023	0.145	0.012	0.01
240	20.00	0.07	0.023	0.144	0.012	0.01
241	20.08	0.10	0.035	0.143	0.019	0.02
242	20.17	0.10	0.035	0.143	0.019	0.02
243	20.25	0.10	0.035	0.142	0.019	0.02
244	20.33	0.10	0.035	0.142	0.019	0.02

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245  20.42     0.10      0.035         0.141     0.019         0.02
246  20.50     0.10      0.035         0.140     0.019         0.02
247  20.58     0.10      0.035         0.140     0.019         0.02
248  20.67     0.10      0.035         0.139     0.019         0.02
249  20.75     0.10      0.035         0.139     0.019         0.02
250  20.83     0.07      0.023         0.138     0.012         0.01
251  20.92     0.07      0.023         0.138     0.012         0.01
252  21.00     0.07      0.023         0.137     0.012         0.01
253  21.08     0.10      0.035         0.136     0.019         0.02
254  21.17     0.10      0.035         0.136     0.019         0.02
255  21.25     0.10      0.035         0.135     0.019         0.02
256  21.33     0.07      0.023         0.135     0.012         0.01
257  21.42     0.07      0.023         0.134     0.012         0.01
258  21.50     0.07      0.023         0.134     0.012         0.01
259  21.58     0.10      0.035         0.133     0.019         0.02
260  21.67     0.10      0.035         0.133     0.019         0.02
261  21.75     0.10      0.035         0.132     0.019         0.02
262  21.83     0.07      0.023         0.132     0.012         0.01
263  21.92     0.07      0.023         0.131     0.012         0.01
264  22.00     0.07      0.023         0.131     0.012         0.01
265  22.08     0.10      0.035         0.131     0.019         0.02
266  22.17     0.10      0.035         0.130     0.019         0.02
267  22.25     0.10      0.035         0.130     0.019         0.02
268  22.33     0.07      0.023         0.129     0.012         0.01
269  22.42     0.07      0.023         0.129     0.012         0.01
270  22.50     0.07      0.023         0.129     0.012         0.01
271  22.58     0.07      0.023         0.128     0.012         0.01
272  22.67     0.07      0.023         0.128     0.012         0.01
273  22.75     0.07      0.023         0.128     0.012         0.01
274  22.83     0.07      0.023         0.127     0.012         0.01
275  22.92     0.07      0.023         0.127     0.012         0.01
276  23.00     0.07      0.023         0.127     0.012         0.01
277  23.08     0.07      0.023         0.126     0.012         0.01
278  23.17     0.07      0.023         0.126     0.012         0.01
279  23.25     0.07      0.023         0.126     0.012         0.01
280  23.33     0.07      0.023         0.125     0.012         0.01
281  23.42     0.07      0.023         0.125     0.012         0.01
282  23.50     0.07      0.023         0.125     0.012         0.01
283  23.58     0.07      0.023         0.125     0.012         0.01
284  23.67     0.07      0.023         0.125     0.012         0.01
285  23.75     0.07      0.023         0.124     0.012         0.01
286  23.83     0.07      0.023         0.124     0.012         0.01
287  23.92     0.07      0.023         0.124     0.012         0.01
288  24.00     0.07      0.023         0.124     0.012         0.01
    Sum =     100.0                                 Sum =    14.1
      Flood volume = Effective rainfall      1.17(In)
       times area      20.2(Ac.)/[(In)/(Ft.)] =       2.0(Ac.Ft)
      Total soil loss =      1.74(In)
      Total soil loss =     2.922(Ac.Ft)
      Total rainfall =      2.91(In)
      Flood volume =       86055.9 Cubic Feet
      Total soil loss =      127267.5 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      3.366(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ------------------------------------------------------------------------
   0+ 5       0.0001      0.01  Q         |         |         |         |
   0+10       0.0004      0.05  Q         |         |         |         |
   0+15       0.0012      0.11  Q         |         |         |         |
   0+20       0.0022      0.15  Q         |         |         |         |
   0+25       0.0035      0.19  Q         |         |         |         |
   0+30       0.0051      0.23  Q         |         |         |         |
   0+35       0.0069      0.26  VQ        |         |         |         |
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0+40      0.0088      0.28  VQ       |         |         |         |
0+45      0.0108      0.29  VQ       |         |         |         |
0+50      0.0129      0.30  VQ       |         |         |         |
0+55      0.0152      0.33  VQ       |         |         |         |
1+ 0      0.0177      0.36  VQ       |         |         |         |
1+ 5      0.0203      0.38  VQ       |         |         |         |
1+10      0.0229      0.38  VQ       |         |         |         |
1+15      0.0253      0.36  VQ       |         |         |         |
1+20      0.0277      0.34  VQ       |         |         |         |
1+25      0.0301      0.34  VQ       |         |         |         |
1+30      0.0324      0.34  VQ       |         |         |         |
1+35      0.0347      0.34  VQ       |         |         |         |
1+40      0.0370      0.34  VQ       |         |         |         |
1+45      0.0394      0.34  VQ       |         |         |         |
1+50      0.0417      0.34  VQ       |         |         |         |
1+55      0.0442      0.36  VQ       |         |         |         |
2+ 0      0.0469      0.39  VQ       |         |         |         |
2+ 5      0.0497      0.41  |Q       |         |         |         |
2+10      0.0526      0.42  |Q       |         |         |         |
2+15      0.0555      0.42  |Q       |         |         |         |
2+20      0.0584      0.43  |Q       |         |         |         |
2+25      0.0614      0.43  |Q       |         |         |         |
2+30      0.0644      0.43  |Q       |         |         |         |
2+35      0.0674      0.44  |Q       |         |         |         |
2+40      0.0706      0.46  |Q       |         |         |         |
2+45      0.0740      0.49  |Q       |         |         |         |
2+50      0.0775      0.51  |VQ      |         |         |         |
2+55      0.0811      0.52  |VQ      |         |         |         |
3+ 0      0.0848      0.53  |VQ      |         |         |         |
3+ 5      0.0885      0.54  |VQ      |         |         |         |
3+10      0.0922      0.54  |VQ      |         |         |         |
3+15      0.0959      0.54  |VQ      |         |         |         |
3+20      0.0997      0.54  | Q      |         |         |         |
3+25      0.1034      0.55  | Q      |         |         |         |
3+30      0.1072      0.55  | Q      |         |         |         |
3+35      0.1110      0.55  | Q      |         |         |         |
3+40      0.1148      0.55  | Q      |         |         |         |
3+45      0.1186      0.55  | Q      |         |         |         |
3+50      0.1224      0.56  | Q      |         |         |         |
3+55      0.1264      0.58  | Q      |         |         |         |
4+ 0      0.1306      0.61  | Q      |         |         |         |
4+ 5      0.1349      0.63  | Q      |         |         |         |
4+10      0.1393      0.64  | Q      |         |         |         |
4+15      0.1438      0.64  | Q      |         |         |         |
4+20      0.1482      0.65  | QV     |         |         |         |
4+25      0.1529      0.68  | QV     |         |         |         |
4+30      0.1578      0.71  | QV     |         |         |         |
4+35      0.1628      0.73  | QV     |         |         |         |
4+40      0.1679      0.74  | QV     |         |         |         |
4+45      0.1731      0.75  | QV     |         |         |         |
4+50      0.1783      0.76  |  Q     |         |         |         |
4+55      0.1837      0.78  |  Q     |         |         |         |
5+ 0      0.1893      0.82  |  Q     |         |         |         |
5+ 5      0.1950      0.83  |  Q     |         |         |         |
5+10      0.2006      0.80  |  QV    |         |         |         |
5+15      0.2057      0.75  | Q V    |         |         |         |
5+20      0.2107      0.72  | Q V    |         |         |         |
5+25      0.2157      0.73  | Q V    |         |         |         |
5+30      0.2209      0.75  | Q V    |         |         |         |
5+35      0.2262      0.77  |  QV    |         |         |         |
5+40      0.2316      0.79  |  QV    |         |         |         |
5+45      0.2373      0.82  |  QV    |         |         |         |
5+50      0.2431      0.85  |  QV    |         |         |         |
5+55      0.2490      0.86  |  Q V   |         |         |         |
6+ 0      0.2550      0.86  |  Q V   |         |         |         |
6+ 5      0.2610      0.87  |  Q V   |         |         |         |
6+10      0.2672      0.90  |  Q V   |         |         |         |
6+15      0.2736      0.93  |  Q V   |         |         |         |
6+20      0.2801      0.95  |  Q V   |         |         |         |
6+25      0.2867      0.96  |  Q V   |         |         |         |
6+30      0.2934      0.97  |  Q V   |         |         |         |
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6+35	0.3002	0.98	Q V				
6+40	0.3071	1.00	Q V				
6+45	0.3142	1.04	Q V				
6+50	0.3215	1.06	Q V				
6+55	0.3289	1.07	Q V				
7+ 0	0.3364	1.08	Q V				
7+ 5	0.3438	1.09	Q V				
7+10	0.3514	1.09	Q V				
7+15	0.3589	1.10	Q V				
7+20	0.3665	1.10	Q V				
7+25	0.3742	1.13	Q V				
7+30	0.3822	1.16	Q V				
7+35	0.3904	1.18	Q V				
7+40	0.3987	1.21	Q V				
7+45	0.4073	1.25	Q V				
7+50	0.4161	1.28	Q V				
7+55	0.4252	1.31	Q V				
8+ 0	0.4345	1.35	Q V				
8+ 5	0.4440	1.39	Q V				
8+10	0.4540	1.44	Q V				
8+15	0.4644	1.51	Q V				
8+20	0.4751	1.56	Q V				
8+25	0.4860	1.58	Q V				
8+30	0.4970	1.60	Q V				
8+35	0.5082	1.62	Q V				
8+40	0.5195	1.65	Q V				
8+45	0.5311	1.69	Q V				
8+50	0.5430	1.72	Q V				
8+55	0.5550	1.75	Q V				
9+ 0	0.5674	1.79	Q V				
9+ 5	0.5800	1.83	Q V				
9+10	0.5929	1.88	Q V				
9+15	0.6064	1.95	Q V				
9+20	0.6202	2.01	Q V				
9+25	0.6344	2.05	Q V				
9+30	0.6488	2.10	Q V				
9+35	0.6635	2.14	Q V				
9+40	0.6785	2.18	Q V				
9+45	0.6938	2.22	Q V				
9+50	0.7093	2.25	Q V				
9+55	0.7251	2.29	Q V				
10+ 0	0.7412	2.33	Q V				
10+ 5	0.7573	2.33	Q V				
10+10	0.7725	2.21	Q V				
10+15	0.7863	2.01	Q V				
10+20	0.7993	1.89	Q V				
10+25	0.8120	1.83	Q V				
10+30	0.8243	1.79	Q V				
10+35	0.8367	1.79	Q V				
10+40	0.8495	1.87	Q V				
10+45	0.8633	2.00	Q V				
10+50	0.8777	2.09	Q V				
10+55	0.8924	2.13	Q V				
11+ 0	0.9072	2.15	Q V				
11+ 5	0.9220	2.16	Q V				
11+10	0.9368	2.15	Q V				
11+15	0.9515	2.13	Q V				
11+20	0.9660	2.11	Q V				
11+25	0.9806	2.11	Q V				
11+30	0.9951	2.11	Q V				
11+35	1.0095	2.10	Q V				
11+40	1.0236	2.05	Q V				
11+45	1.0374	2.00	Q V				
11+50	1.0509	1.96	Q V				
11+55	1.0645	1.97	Q V				
12+ 0	1.0781	1.98	Q V				
12+ 5	1.0916	1.96	Q V				
12+10	1.1042	1.83	Q V				
12+15	1.1154	1.62	Q V				
12+20	1.1257	1.50	Q V				
12+25	1.1360	1.49	Q V				

12+30	1.1466	1.53	Q		V	
12+35	1.1575	1.58	Q		V	
12+40	1.1690	1.68	Q		V	
12+45	1.1816	1.82	Q		V	
12+50	1.1949	1.93	Q		V	
12+55	1.2088	2.03	Q		V	
13+ 0	1.2235	2.13	Q		V	
13+ 5	1.2391	2.26	Q		V	
13+10	1.2565	2.53	Q		V	
13+15	1.2764	2.89	Q		V	
13+20	1.2980	3.13	Q		V	
13+25	1.3205	3.27	Q		V	
13+30	1.3437	3.37	Q		V	
13+35	1.3666	3.33	Q		V	
13+40	1.3868	2.93	Q		V	
13+45	1.4025	2.29	Q		V	
13+50	1.4155	1.89	Q		V	
13+55	1.4273	1.71	Q		V	
14+ 0	1.4384	1.61	Q		V	
14+ 5	1.4493	1.59	Q		V	
14+10	1.4611	1.71	Q		V	
14+15	1.4744	1.93	Q		V	
14+20	1.4886	2.07	Q		V	
14+25	1.5031	2.10	Q		V	
14+30	1.5174	2.08	Q		V	
14+35	1.5316	2.07	Q		V	
14+40	1.5459	2.08	Q		V	
14+45	1.5604	2.09	Q		V	
14+50	1.5748	2.10	Q		V	
14+55	1.5890	2.07	Q		V	
15+ 0	1.6030	2.02	Q		V	
15+ 5	1.6166	1.99	Q		V	
15+10	1.6300	1.93	Q		V	
15+15	1.6429	1.88	Q		V	
15+20	1.6556	1.84	Q		V	
15+25	1.6680	1.80	Q		V	
15+30	1.6800	1.74	Q		V	
15+35	1.6914	1.66	Q		V	
15+40	1.7017	1.49	Q		V	
15+45	1.7101	1.23	Q		V	
15+50	1.7175	1.07	Q		V	
15+55	1.7243	0.99	Q		V	
16+ 0	1.7308	0.95	Q		V	
16+ 5	1.7371	0.91	Q		V	
16+10	1.7427	0.82	Q		V	
16+15	1.7476	0.71	Q		V	
16+20	1.7520	0.63	Q		V	
16+25	1.7560	0.59	Q		V	
16+30	1.7599	0.56	Q		V	
16+35	1.7635	0.53	Q		V	
16+40	1.7669	0.49	Q		V	
16+45	1.7699	0.44	Q		V	
16+50	1.7728	0.41	Q		V	
16+55	1.7755	0.39	Q		V	
17+ 0	1.7781	0.38	Q		V	
17+ 5	1.7807	0.38	Q		V	
17+10	1.7835	0.41	Q		V	
17+15	1.7867	0.46	Q		V	
17+20	1.7901	0.50	Q		V	
17+25	1.7936	0.51	Q		V	
17+30	1.7972	0.52	Q		V	
17+35	1.8008	0.53	Q		V	
17+40	1.8045	0.53	Q		V	
17+45	1.8081	0.54	Q		V	
17+50	1.8118	0.53	Q		V	
17+55	1.8154	0.52	Q		V	
18+ 0	1.8188	0.49	Q		V	
18+ 5	1.8220	0.47	Q		V	
18+10	1.8252	0.46	Q		V	
18+15	1.8284	0.46	Q		V	
18+20	1.8315	0.46	Q		V	

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18+25      1.8346      0.45  |Q        |         |         |      V  |
18+30      1.8378      0.45  |Q        |         |         |      V  |
18+35      1.8408      0.45  |Q        |         |         |      V  |
18+40      1.8438      0.43  |Q        |         |         |      V  |
18+45      1.8465      0.40  |Q        |         |         |      V  |
18+50      1.8490      0.37  |Q        |         |         |      V  |
18+55      1.8514      0.34  |Q        |         |         |      V  |
19+ 0      1.8535      0.30  |Q        |         |         |      V  |
19+ 5      1.8554      0.28  |Q        |         |         |      V  |
19+10      1.8574      0.29  |Q        |         |         |      V  |
19+15      1.8596      0.31  |Q        |         |         |      V  |
19+20      1.8618      0.33  |Q        |         |         |      V  |
19+25      1.8642      0.35  |Q        |         |         |      V  |
19+30      1.8669      0.38  |Q        |         |         |      V  |
19+35      1.8696      0.40  |Q        |         |         |      V  |
19+40      1.8723      0.39  |Q        |         |         |      V  |
19+45      1.8748      0.37  |Q        |         |         |      V  |
19+50      1.8772      0.35  |Q        |         |         |       V |
19+55      1.8794      0.32  |Q        |         |         |       V |
20+ 0      1.8814      0.29  |Q        |         |         |       V |
20+ 5      1.8832      0.27  |Q        |         |         |       V |
20+10      1.8851      0.28  |Q        |         |         |       V |
20+15      1.8872      0.30  |Q        |         |         |       V |
20+20      1.8894      0.32  |Q        |         |         |       V |
20+25      1.8916      0.32  |Q        |         |         |       V |
20+30      1.8938      0.32  |Q        |         |         |       V |
20+35      1.8961      0.33  |Q        |         |         |       V |
20+40      1.8983      0.33  |Q        |         |         |       V |
20+45      1.9006      0.33  |Q        |         |         |       V |
20+50      1.9028      0.33  |Q        |         |         |       V |
20+55      1.9050      0.31  |Q        |         |         |       V |
21+ 0      1.9069      0.28  |Q        |         |         |       V |
21+ 5      1.9087      0.26  |Q        |         |         |       V |
21+10      1.9105      0.27  |Q        |         |         |       V |
21+15      1.9126      0.30  |Q        |         |         |       V |
21+20      1.9147      0.31  |Q        |         |         |       V |
21+25      1.9167      0.29  |Q        |         |         |       V |
21+30      1.9185      0.27  |Q        |         |         |       V |
21+35      1.9203      0.25  |Q        |         |         |       V |
21+40      1.9221      0.27  |Q        |         |         |       V |
21+45      1.9242      0.29  |Q        |         |         |       V |
21+50      1.9262      0.30  |Q        |         |         |        V|
21+55      1.9282      0.29  |Q        |         |         |        V|
22+ 0      1.9301      0.26  |Q        |         |         |        V|
22+ 5      1.9318      0.25  |Q        |         |         |        V|
22+10      1.9336      0.27  |Q        |         |         |        V|
22+15      1.9356      0.29  |Q        |         |         |        V|
22+20      1.9377      0.30  |Q        |         |         |        V|
22+25      1.9397      0.29  |Q        |         |         |        V|
22+30      1.9415      0.26  |Q        |         |         |        V|
22+35      1.9432      0.25  Q         |         |         |        V|
22+40      1.9449      0.24  Q         |         |         |        V|
22+45      1.9465      0.24  Q         |         |         |        V|
22+50      1.9481      0.23  Q         |         |         |        V|
22+55      1.9497      0.23  Q         |         |         |        V|
23+ 0      1.9513      0.23  Q         |         |         |        V|
23+ 5      1.9529      0.23  Q         |         |         |        V|
23+10      1.9544      0.23  Q         |         |         |        V|
23+15      1.9560      0.23  Q         |         |         |        V|
23+20      1.9575      0.23  Q         |         |         |        V|
23+25      1.9591      0.22  Q         |         |         |        V|
23+30      1.9606      0.22  Q         |         |         |        V|
23+35      1.9622      0.22  Q         |         |         |        V|
23+40      1.9637      0.22  Q         |         |         |        V|
23+45      1.9652      0.22  Q         |         |         |        V|
23+50      1.9668      0.22  Q         |         |         |        V|
23+55      1.9683      0.22  Q         |         |         |        V|
24+ 0      1.9698      0.22  Q         |         |         |        V|
24+ 5      1.9713      0.21  Q         |         |         |        V|
24+10      1.9725      0.17  Q         |         |         |        V|
24+15      1.9733      0.11  Q         |         |         |        V|
```

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   24+20       1.9738      0.07  Q         |         |         |        V|
   24+25       1.9741      0.06  Q         |         |         |        V|
   24+30       1.9744      0.04  Q         |         |         |        V|
   24+35       1.9747      0.03  Q         |         |         |        V|
   24+40       1.9749      0.03  Q         |         |         |        V|
   24+45       1.9750      0.02  Q         |         |         |        V|
   24+50       1.9752      0.02  Q         |         |         |        V|
   24+55       1.9753      0.01  Q         |         |         |        V|
   25+ 0       1.9753      0.01  Q         |         |         |        V|
   25+ 5       1.9754      0.01  Q         |         |         |        V|
   25+10       1.9755      0.01  Q         |         |         |        V|
   25+15       1.9755      0.01  Q         |         |         |        V|
   25+20       1.9755      0.00  Q         |         |         |        V|
   25+25       1.9755      0.00  Q         |         |         |        V|
   25+30       1.9756      0.00  Q         |         |         |        V|
   25+35       1.9756      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

2-YEAR, 24-HOUR

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
              Study date  08/02/10 File: ARAEX242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 6045

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARAEX

------------------------------------------------------------------------
Drainage Area =      20.19(Ac.)  =      0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      20.19(Ac.)  =      0.032 Sq. Mi.
USER Entry of lag time in hours
Lag time =    0.216 Hr.
Lag time =    12.95 Min.
25% of lag time =     3.24 Min.
40% of lag time =     5.18 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           1.80                 36.34

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           4.50                 90.86

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    4.500(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    20.190           64.30          0.460
 Total Area Entered =     20.19(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
64.3  44.3      0.628     0.460        0.368       1.000      0.368
                                                 Sum (F) =   0.368
```

Area averaged mean soil loss (F) (In/Hr) = 0.368
Minimum soil loss rate ((In/Hr)) = 0.184
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.532

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	38.598	4.130	0.840
2	0.167	77.196	16.793	3.417
3	0.250	115.794	25.928	5.276
4	0.333	154.392	18.130	3.689
5	0.417	192.991	8.951	1.821
6	0.500	231.589	5.514	1.122
7	0.583	270.187	4.080	0.830
8	0.667	308.785	3.201	0.651
9	0.750	347.383	2.459	0.500
10	0.833	385.981	2.048	0.417
11	0.917	424.579	1.606	0.327
12	1.000	463.177	1.261	0.257
13	1.083	501.776	1.174	0.239
14	1.167	540.374	0.990	0.201
15	1.250	578.972	0.806	0.164
16	1.333	617.570	0.684	0.139
17	1.417	656.168	0.561	0.114
18	1.500	694.766	0.440	0.090
19	1.583	733.364	0.386	0.079
20	1.667	771.962	0.386	0.079
21	1.750	810.560	0.473	0.096
		Sum = 100.000	Sum=	20.348

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	0.652	0.008	0.01
2	0.17	0.07	0.014	0.650	0.008	0.01
3	0.25	0.07	0.014	0.647	0.008	0.01
4	0.33	0.10	0.022	0.645	0.011	0.01
5	0.42	0.10	0.022	0.642	0.011	0.01
6	0.50	0.10	0.022	0.640	0.011	0.01
7	0.58	0.10	0.022	0.637	0.011	0.01
8	0.67	0.10	0.022	0.635	0.011	0.01
9	0.75	0.10	0.022	0.632	0.011	0.01
10	0.83	0.13	0.029	0.630	0.015	0.01
11	0.92	0.13	0.029	0.627	0.015	0.01
12	1.00	0.13	0.029	0.625	0.015	0.01
13	1.08	0.10	0.022	0.622	0.011	0.01
14	1.17	0.10	0.022	0.620	0.011	0.01
15	1.25	0.10	0.022	0.617	0.011	0.01
16	1.33	0.10	0.022	0.615	0.011	0.01
17	1.42	0.10	0.022	0.612	0.011	0.01
18	1.50	0.10	0.022	0.610	0.011	0.01
19	1.58	0.10	0.022	0.608	0.011	0.01
20	1.67	0.10	0.022	0.605	0.011	0.01
21	1.75	0.10	0.022	0.603	0.011	0.01
22	1.83	0.13	0.029	0.600	0.015	0.01
23	1.92	0.13	0.029	0.598	0.015	0.01
24	2.00	0.13	0.029	0.595	0.015	0.01
25	2.08	0.13	0.029	0.593	0.015	0.01
26	2.17	0.13	0.029	0.591	0.015	0.01
27	2.25	0.13	0.029	0.588	0.015	0.01
28	2.33	0.13	0.029	0.586	0.015	0.01
29	2.42	0.13	0.029	0.583	0.015	0.01
30	2.50	0.13	0.029	0.581	0.015	0.01

31	2.58	0.17	0.036	0.579	0.019	0.02
32	2.67	0.17	0.036	0.576	0.019	0.02
33	2.75	0.17	0.036	0.574	0.019	0.02
34	2.83	0.17	0.036	0.572	0.019	0.02
35	2.92	0.17	0.036	0.569	0.019	0.02
36	3.00	0.17	0.036	0.567	0.019	0.02
37	3.08	0.17	0.036	0.565	0.019	0.02
38	3.17	0.17	0.036	0.562	0.019	0.02
39	3.25	0.17	0.036	0.560	0.019	0.02
40	3.33	0.17	0.036	0.558	0.019	0.02
41	3.42	0.17	0.036	0.555	0.019	0.02
42	3.50	0.17	0.036	0.553	0.019	0.02
43	3.58	0.17	0.036	0.551	0.019	0.02
44	3.67	0.17	0.036	0.548	0.019	0.02
45	3.75	0.17	0.036	0.546	0.019	0.02
46	3.83	0.20	0.043	0.544	0.023	0.02
47	3.92	0.20	0.043	0.541	0.023	0.02
48	4.00	0.20	0.043	0.539	0.023	0.02
49	4.08	0.20	0.043	0.537	0.023	0.02
50	4.17	0.20	0.043	0.534	0.023	0.02
51	4.25	0.20	0.043	0.532	0.023	0.02
52	4.33	0.23	0.050	0.530	0.027	0.02
53	4.42	0.23	0.050	0.528	0.027	0.02
54	4.50	0.23	0.050	0.525	0.027	0.02
55	4.58	0.23	0.050	0.523	0.027	0.02
56	4.67	0.23	0.050	0.521	0.027	0.02
57	4.75	0.23	0.050	0.519	0.027	0.02
58	4.83	0.27	0.058	0.516	0.031	0.03
59	4.92	0.27	0.058	0.514	0.031	0.03
60	5.00	0.27	0.058	0.512	0.031	0.03
61	5.08	0.20	0.043	0.510	0.023	0.02
62	5.17	0.20	0.043	0.508	0.023	0.02
63	5.25	0.20	0.043	0.505	0.023	0.02
64	5.33	0.23	0.050	0.503	0.027	0.02
65	5.42	0.23	0.050	0.501	0.027	0.02
66	5.50	0.23	0.050	0.499	0.027	0.02
67	5.58	0.27	0.058	0.497	0.031	0.03
68	5.67	0.27	0.058	0.494	0.031	0.03
69	5.75	0.27	0.058	0.492	0.031	0.03
70	5.83	0.27	0.058	0.490	0.031	0.03
71	5.92	0.27	0.058	0.488	0.031	0.03
72	6.00	0.27	0.058	0.486	0.031	0.03
73	6.08	0.30	0.065	0.483	0.034	0.03
74	6.17	0.30	0.065	0.481	0.034	0.03
75	6.25	0.30	0.065	0.479	0.034	0.03
76	6.33	0.30	0.065	0.477	0.034	0.03
77	6.42	0.30	0.065	0.475	0.034	0.03
78	6.50	0.30	0.065	0.473	0.034	0.03
79	6.58	0.33	0.072	0.471	0.038	0.03
80	6.67	0.33	0.072	0.469	0.038	0.03
81	6.75	0.33	0.072	0.466	0.038	0.03
82	6.83	0.33	0.072	0.464	0.038	0.03
83	6.92	0.33	0.072	0.462	0.038	0.03
84	7.00	0.33	0.072	0.460	0.038	0.03
85	7.08	0.33	0.072	0.458	0.038	0.03
86	7.17	0.33	0.072	0.456	0.038	0.03
87	7.25	0.33	0.072	0.454	0.038	0.03
88	7.33	0.37	0.079	0.452	0.042	0.04
89	7.42	0.37	0.079	0.450	0.042	0.04
90	7.50	0.37	0.079	0.448	0.042	0.04
91	7.58	0.40	0.086	0.446	0.046	0.04
92	7.67	0.40	0.086	0.444	0.046	0.04
93	7.75	0.40	0.086	0.442	0.046	0.04
94	7.83	0.43	0.094	0.439	0.050	0.04
95	7.92	0.43	0.094	0.437	0.050	0.04
96	8.00	0.43	0.094	0.435	0.050	0.04
97	8.08	0.50	0.108	0.433	0.057	0.05
98	8.17	0.50	0.108	0.431	0.057	0.05
99	8.25	0.50	0.108	0.429	0.057	0.05
100	8.33	0.50	0.108	0.427	0.057	0.05
101	8.42	0.50	0.108	0.425	0.057	0.05

102	8.50	0.50	0.108	0.423	0.057	0.05
103	8.58	0.53	0.115	0.421	0.061	0.05
104	8.67	0.53	0.115	0.419	0.061	0.05
105	8.75	0.53	0.115	0.417	0.061	0.05
106	8.83	0.57	0.122	0.415	0.065	0.06
107	8.92	0.57	0.122	0.414	0.065	0.06
108	9.00	0.57	0.122	0.412	0.065	0.06
109	9.08	0.63	0.137	0.410	0.073	0.06
110	9.17	0.63	0.137	0.408	0.073	0.06
111	9.25	0.63	0.137	0.406	0.073	0.06
112	9.33	0.67	0.144	0.404	0.077	0.07
113	9.42	0.67	0.144	0.402	0.077	0.07
114	9.50	0.67	0.144	0.400	0.077	0.07
115	9.58	0.70	0.151	0.398	0.080	0.07
116	9.67	0.70	0.151	0.396	0.080	0.07
117	9.75	0.70	0.151	0.394	0.080	0.07
118	9.83	0.73	0.158	0.392	0.084	0.07
119	9.92	0.73	0.158	0.390	0.084	0.07
120	10.00	0.73	0.158	0.389	0.084	0.07
121	10.08	0.50	0.108	0.387	0.057	0.05
122	10.17	0.50	0.108	0.385	0.057	0.05
123	10.25	0.50	0.108	0.383	0.057	0.05
124	10.33	0.50	0.108	0.381	0.057	0.05
125	10.42	0.50	0.108	0.379	0.057	0.05
126	10.50	0.50	0.108	0.377	0.057	0.05
127	10.58	0.67	0.144	0.376	0.077	0.07
128	10.67	0.67	0.144	0.374	0.077	0.07
129	10.75	0.67	0.144	0.372	0.077	0.07
130	10.83	0.67	0.144	0.370	0.077	0.07
131	10.92	0.67	0.144	0.368	0.077	0.07
132	11.00	0.67	0.144	0.366	0.077	0.07
133	11.08	0.63	0.137	0.365	0.073	0.06
134	11.17	0.63	0.137	0.363	0.073	0.06
135	11.25	0.63	0.137	0.361	0.073	0.06
136	11.33	0.63	0.137	0.359	0.073	0.06
137	11.42	0.63	0.137	0.357	0.073	0.06
138	11.50	0.63	0.137	0.356	0.073	0.06
139	11.58	0.57	0.122	0.354	0.065	0.06
140	11.67	0.57	0.122	0.352	0.065	0.06
141	11.75	0.57	0.122	0.350	0.065	0.06
142	11.83	0.60	0.130	0.349	0.069	0.06
143	11.92	0.60	0.130	0.347	0.069	0.06
144	12.00	0.60	0.130	0.345	0.069	0.06
145	12.08	0.83	0.180	0.343	0.096	0.08
146	12.17	0.83	0.180	0.342	0.096	0.08
147	12.25	0.83	0.180	0.340	0.096	0.08
148	12.33	0.87	0.187	0.338	0.100	0.09
149	12.42	0.87	0.187	0.337	0.100	0.09
150	12.50	0.87	0.187	0.335	0.100	0.09
151	12.58	0.93	0.202	0.333	0.107	0.09
152	12.67	0.93	0.202	0.332	0.107	0.09
153	12.75	0.93	0.202	0.330	0.107	0.09
154	12.83	0.97	0.209	0.328	0.111	0.10
155	12.92	0.97	0.209	0.327	0.111	0.10
156	13.00	0.97	0.209	0.325	0.111	0.10
157	13.08	1.13	0.245	0.323	0.130	0.11
158	13.17	1.13	0.245	0.322	0.130	0.11
159	13.25	1.13	0.245	0.320	0.130	0.11
160	13.33	1.13	0.245	0.318	0.130	0.11
161	13.42	1.13	0.245	0.317	0.130	0.11
162	13.50	1.13	0.245	0.315	0.130	0.11
163	13.58	0.77	0.166	0.314	0.088	0.08
164	13.67	0.77	0.166	0.312	0.088	0.08
165	13.75	0.77	0.166	0.310	0.088	0.08
166	13.83	0.77	0.166	0.309	0.088	0.08
167	13.92	0.77	0.166	0.307	0.088	0.08
168	14.00	0.77	0.166	0.306	0.088	0.08
169	14.08	0.90	0.194	0.304	0.103	0.09
170	14.17	0.90	0.194	0.303	0.103	0.09
171	14.25	0.90	0.194	0.301	0.103	0.09
172	14.33	0.87	0.187	0.299	0.100	0.09

173	14.42	0.87	0.187	0.298	0.100	0.09
174	14.50	0.87	0.187	0.296	0.100	0.09
175	14.58	0.87	0.187	0.295	0.100	0.09
176	14.67	0.87	0.187	0.293	0.100	0.09
177	14.75	0.87	0.187	0.292	0.100	0.09
178	14.83	0.83	0.180	0.290	0.096	0.08
179	14.92	0.83	0.180	0.289	0.096	0.08
180	15.00	0.83	0.180	0.287	0.096	0.08
181	15.08	0.80	0.173	0.286	0.092	0.08
182	15.17	0.80	0.173	0.284	0.092	0.08
183	15.25	0.80	0.173	0.283	0.092	0.08
184	15.33	0.77	0.166	0.282	0.088	0.08
185	15.42	0.77	0.166	0.280	0.088	0.08
186	15.50	0.77	0.166	0.279	0.088	0.08
187	15.58	0.63	0.137	0.277	0.073	0.06
188	15.67	0.63	0.137	0.276	0.073	0.06
189	15.75	0.63	0.137	0.274	0.073	0.06
190	15.83	0.63	0.137	0.273	0.073	0.06
191	15.92	0.63	0.137	0.272	0.073	0.06
192	16.00	0.63	0.137	0.270	0.073	0.06
193	16.08	0.13	0.029	0.269	0.015	0.01
194	16.17	0.13	0.029	0.267	0.015	0.01
195	16.25	0.13	0.029	0.266	0.015	0.01
196	16.33	0.13	0.029	0.265	0.015	0.01
197	16.42	0.13	0.029	0.263	0.015	0.01
198	16.50	0.13	0.029	0.262	0.015	0.01
199	16.58	0.10	0.022	0.261	0.011	0.01
200	16.67	0.10	0.022	0.259	0.011	0.01
201	16.75	0.10	0.022	0.258	0.011	0.01
202	16.83	0.10	0.022	0.257	0.011	0.01
203	16.92	0.10	0.022	0.255	0.011	0.01
204	17.00	0.10	0.022	0.254	0.011	0.01
205	17.08	0.17	0.036	0.253	0.019	0.02
206	17.17	0.17	0.036	0.252	0.019	0.02
207	17.25	0.17	0.036	0.250	0.019	0.02
208	17.33	0.17	0.036	0.249	0.019	0.02
209	17.42	0.17	0.036	0.248	0.019	0.02
210	17.50	0.17	0.036	0.247	0.019	0.02
211	17.58	0.17	0.036	0.245	0.019	0.02
212	17.67	0.17	0.036	0.244	0.019	0.02
213	17.75	0.17	0.036	0.243	0.019	0.02
214	17.83	0.13	0.029	0.242	0.015	0.01
215	17.92	0.13	0.029	0.241	0.015	0.01
216	18.00	0.13	0.029	0.239	0.015	0.01
217	18.08	0.13	0.029	0.238	0.015	0.01
218	18.17	0.13	0.029	0.237	0.015	0.01
219	18.25	0.13	0.029	0.236	0.015	0.01
220	18.33	0.13	0.029	0.235	0.015	0.01
221	18.42	0.13	0.029	0.234	0.015	0.01
222	18.50	0.13	0.029	0.232	0.015	0.01
223	18.58	0.10	0.022	0.231	0.011	0.01
224	18.67	0.10	0.022	0.230	0.011	0.01
225	18.75	0.10	0.022	0.229	0.011	0.01
226	18.83	0.07	0.014	0.228	0.008	0.01
227	18.92	0.07	0.014	0.227	0.008	0.01
228	19.00	0.07	0.014	0.226	0.008	0.01
229	19.08	0.10	0.022	0.225	0.011	0.01
230	19.17	0.10	0.022	0.224	0.011	0.01
231	19.25	0.10	0.022	0.223	0.011	0.01
232	19.33	0.13	0.029	0.222	0.015	0.01
233	19.42	0.13	0.029	0.221	0.015	0.01
234	19.50	0.13	0.029	0.220	0.015	0.01
235	19.58	0.10	0.022	0.219	0.011	0.01
236	19.67	0.10	0.022	0.218	0.011	0.01
237	19.75	0.10	0.022	0.217	0.011	0.01
238	19.83	0.07	0.014	0.216	0.008	0.01
239	19.92	0.07	0.014	0.215	0.008	0.01
240	20.00	0.07	0.014	0.214	0.008	0.01
241	20.08	0.10	0.022	0.213	0.011	0.01
242	20.17	0.10	0.022	0.212	0.011	0.01
243	20.25	0.10	0.022	0.211	0.011	0.01

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244  20.33     0.10      0.022         0.210     0.011         0.01
245  20.42     0.10      0.022         0.209     0.011         0.01
246  20.50     0.10      0.022         0.208     0.011         0.01
247  20.58     0.10      0.022         0.207     0.011         0.01
248  20.67     0.10      0.022         0.206     0.011         0.01
249  20.75     0.10      0.022         0.206     0.011         0.01
250  20.83     0.07      0.014         0.205     0.008         0.01
251  20.92     0.07      0.014         0.204     0.008         0.01
252  21.00     0.07      0.014         0.203     0.008         0.01
253  21.08     0.10      0.022         0.202     0.011         0.01
254  21.17     0.10      0.022         0.201     0.011         0.01
255  21.25     0.10      0.022         0.201     0.011         0.01
256  21.33     0.07      0.014         0.200     0.008         0.01
257  21.42     0.07      0.014         0.199     0.008         0.01
258  21.50     0.07      0.014         0.198     0.008         0.01
259  21.58     0.10      0.022         0.198     0.011         0.01
260  21.67     0.10      0.022         0.197     0.011         0.01
261  21.75     0.10      0.022         0.196     0.011         0.01
262  21.83     0.07      0.014         0.196     0.008         0.01
263  21.92     0.07      0.014         0.195     0.008         0.01
264  22.00     0.07      0.014         0.194     0.008         0.01
265  22.08     0.10      0.022         0.194     0.011         0.01
266  22.17     0.10      0.022         0.193     0.011         0.01
267  22.25     0.10      0.022         0.192     0.011         0.01
268  22.33     0.07      0.014         0.192     0.008         0.01
269  22.42     0.07      0.014         0.191     0.008         0.01
270  22.50     0.07      0.014         0.191     0.008         0.01
271  22.58     0.07      0.014         0.190     0.008         0.01
272  22.67     0.07      0.014         0.190     0.008         0.01
273  22.75     0.07      0.014         0.189     0.008         0.01
274  22.83     0.07      0.014         0.189     0.008         0.01
275  22.92     0.07      0.014         0.188     0.008         0.01
276  23.00     0.07      0.014         0.188     0.008         0.01
277  23.08     0.07      0.014         0.187     0.008         0.01
278  23.17     0.07      0.014         0.187     0.008         0.01
279  23.25     0.07      0.014         0.186     0.008         0.01
280  23.33     0.07      0.014         0.186     0.008         0.01
281  23.42     0.07      0.014         0.186     0.008         0.01
282  23.50     0.07      0.014         0.185     0.008         0.01
283  23.58     0.07      0.014         0.185     0.008         0.01
284  23.67     0.07      0.014         0.185     0.008         0.01
285  23.75     0.07      0.014         0.184     0.008         0.01
286  23.83     0.07      0.014         0.184     0.008         0.01
287  23.92     0.07      0.014         0.184     0.008         0.01
288  24.00     0.07      0.014         0.184     0.008         0.01
    Sum =     100.0                                 Sum =    10.1
      Flood volume = Effective rainfall      0.84(In)
       times area      20.2(Ac.)/[(In)/(Ft.)] =       1.4(Ac.Ft)
      Total soil loss =      0.96(In)
      Total soil loss =     1.611(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       61736.8 Cubic Feet
      Total soil loss =       70179.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      2.238(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ------------------------------------------------------------------------
   0+ 5       0.0000      0.01  Q         |         |         |         |
   0+10       0.0002      0.03  Q         |         |         |         |
   0+15       0.0007      0.06  Q         |         |         |         |
   0+20       0.0013      0.09  Q         |         |         |         |
   0+25       0.0021      0.12  Q         |         |         |         |
   0+30       0.0031      0.14  Q         |         |         |         |
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0+35      0.0042      0.16  Q         |         |         |         |
0+40      0.0053      0.17  Q         |         |         |         |
0+45      0.0066      0.18  Q         |         |         |         |
0+50      0.0078      0.19  Q         |         |         |         |
0+55      0.0092      0.20  Q         |         |         |         |
1+ 0      0.0108      0.22  Q         |         |         |         |
1+ 5      0.0124      0.24  Q         |         |         |         |
1+10      0.0140      0.23  Q         |         |         |         |
1+15      0.0155      0.22  Q         |         |         |         |
1+20      0.0170      0.21  Q         |         |         |         |
1+25      0.0184      0.21  Q         |         |         |         |
1+30      0.0198      0.21  Q         |         |         |         |
1+35      0.0213      0.21  Q         |         |         |         |
1+40      0.0227      0.21  Q         |         |         |         |
1+45      0.0241      0.21  Q         |         |         |         |
1+50      0.0256      0.21  Q         |         |         |         |
1+55      0.0271      0.22  Q         |         |         |         |
2+ 0      0.0288      0.24  Q         |         |         |         |
2+ 5      0.0305      0.25  VQ        |         |         |         |
2+10      0.0323      0.26  VQ        |         |         |         |
2+15      0.0341      0.26  VQ        |         |         |         |
2+20      0.0359      0.26  |Q        |         |         |         |
2+25      0.0377      0.27  |Q        |         |         |         |
2+30      0.0396      0.27  |Q        |         |         |         |
2+35      0.0415      0.27  |Q        |         |         |         |
2+40      0.0434      0.28  |Q        |         |         |         |
2+45      0.0455      0.30  |Q        |         |         |         |
2+50      0.0477      0.32  |Q        |         |         |         |
2+55      0.0499      0.32  |Q        |         |         |         |
3+ 0      0.0521      0.33  |Q        |         |         |         |
3+ 5      0.0544      0.33  |Q        |         |         |         |
3+10      0.0567      0.33  |Q        |         |         |         |
3+15      0.0590      0.33  |Q        |         |         |         |
3+20      0.0613      0.34  |Q        |         |         |         |
3+25      0.0637      0.34  |Q        |         |         |         |
3+30      0.0660      0.34  |Q        |         |         |         |
3+35      0.0683      0.34  |Q        |         |         |         |
3+40      0.0707      0.34  |Q        |         |         |         |
3+45      0.0730      0.34  |QV       |         |         |         |
3+50      0.0754      0.34  |QV       |         |         |         |
3+55      0.0778      0.36  |QV       |         |         |         |
4+ 0      0.0804      0.37  |QV       |         |         |         |
4+ 5      0.0831      0.39  |QV       |         |         |         |
4+10      0.0858      0.39  |QV       |         |         |         |
4+15      0.0885      0.40  |QV       |         |         |         |
4+20      0.0913      0.40  |QV       |         |         |         |
4+25      0.0942      0.42  |QV       |         |         |         |
4+30      0.0972      0.44  |QV       |         |         |         |
4+35      0.1003      0.45  |QV       |         |         |         |
4+40      0.1034      0.46  |QV       |         |         |         |
4+45      0.1066      0.46  |Q V      |         |         |         |
4+50      0.1098      0.47  |Q V      |         |         |         |
4+55      0.1132      0.48  |Q V      |         |         |         |
5+ 0      0.1166      0.50  | QV      |         |         |         |
5+ 5      0.1202      0.51  | QV      |         |         |         |
5+10      0.1236      0.50  |Q V      |         |         |         |
5+15      0.1268      0.47  |Q V      |         |         |         |
5+20      0.1299      0.45  |Q V      |         |         |         |
5+25      0.1330      0.45  |Q V      |         |         |         |
5+30      0.1361      0.46  |Q V      |         |         |         |
5+35      0.1394      0.47  |Q V      |         |         |         |
5+40      0.1428      0.49  |Q  V     |         |         |         |
5+45      0.1463      0.51  | Q V     |         |         |         |
5+50      0.1499      0.52  | Q V     |         |         |         |
5+55      0.1535      0.53  | Q V     |         |         |         |
6+ 0      0.1572      0.53  | Q V     |         |         |         |
6+ 5      0.1609      0.54  | Q V     |         |         |         |
6+10      0.1647      0.55  | Q V     |         |         |         |
6+15      0.1686      0.57  | Q V     |         |         |         |
6+20      0.1727      0.59  | Q V     |         |         |         |
6+25      0.1768      0.59  | Q V     |         |         |         |
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 6+30      0.1809      0.60  | Q  V    |         |         |         |
 6+35      0.1851      0.61  | Q  V    |         |         |         |
 6+40      0.1893      0.62  | Q  V    |         |         |         |
 6+45      0.1937      0.64  | Q  V    |         |         |         |
 6+50      0.1982      0.65  | Q  V    |         |         |         |
 6+55      0.2028      0.66  | Q  V    |         |         |         |
 7+ 0      0.2074      0.67  | Q  V    |         |         |         |
 7+ 5      0.2120      0.67  | Q  V    |         |         |         |
 7+10      0.2167      0.67  | Q   V   |         |         |         |
 7+15      0.2213      0.68  | Q   V   |         |         |         |
 7+20      0.2260      0.68  | Q   V   |         |         |         |
 7+25      0.2308      0.69  | Q   V   |         |         |         |
 7+30      0.2357      0.71  | Q   V   |         |         |         |
 7+35      0.2407      0.73  | Q   V   |         |         |         |
 7+40      0.2459      0.75  | Q   V   |         |         |         |
 7+45      0.2512      0.77  |  Q   V  |         |         |         |
 7+50      0.2566      0.79  |  Q   V  |         |         |         |
 7+55      0.2622      0.81  |  Q   V  |         |         |         |
 8+ 0      0.2679      0.83  |  Q   V  |         |         |         |
 8+ 5      0.2738      0.86  |  Q   V  |         |         |         |
 8+10      0.2799      0.89  |  Q   V  |         |         |         |
 8+15      0.2863      0.93  |  Q    V |         |         |         |
 8+20      0.2930      0.96  |  Q    V |         |         |         |
 8+25      0.2997      0.98  |  Q    V |         |         |         |
 8+30      0.3065      0.99  |  Q    V |         |         |         |
 8+35      0.3134      1.00  |  Q    V |         |         |         |
 8+40      0.3204      1.02  |   Q    V|         |         |         |
 8+45      0.3275      1.04  |   Q    V|         |         |         |
 8+50      0.3348      1.06  |   Q    V|         |         |         |
 8+55      0.3422      1.08  |   Q    V|         |         |         |
 9+ 0      0.3499      1.10  |   Q    V|         |         |         |
 9+ 5      0.3576      1.13  |   Q     V         |         |         |
 9+10      0.3656      1.16  |   Q     V         |         |         |
 9+15      0.3739      1.20  |   Q     V         |         |         |
 9+20      0.3824      1.24  |   Q     V         |         |         |
 9+25      0.3911      1.27  |    Q    |V        |         |         |
 9+30      0.4001      1.29  |    Q    |V        |         |         |
 9+35      0.4091      1.32  |    Q    |V        |         |         |
 9+40      0.4184      1.34  |    Q    |V        |         |         |
 9+45      0.4278      1.37  |    Q    | V       |         |         |
 9+50      0.4374      1.39  |    Q    | V       |         |         |
 9+55      0.4471      1.41  |    Q    | V       |         |         |
10+ 0      0.4570      1.44  |    Q    | V       |         |         |
10+ 5      0.4670      1.44  |    Q    |  V      |         |         |
10+10      0.4764      1.37  |    Q    |  V      |         |         |
10+15      0.4850      1.25  |    Q    |  V      |         |         |
10+20      0.4931      1.17  |   Q     |  V      |         |         |
10+25      0.5009      1.13  |   Q     |   V     |         |         |
10+30      0.5086      1.11  |   Q     |   V     |         |         |
10+35      0.5162      1.11  |   Q     |   V     |         |         |
10+40      0.5242      1.16  |   Q     |   V     |         |         |
10+45      0.5327      1.23  |   Q     |    V    |         |         |
10+50      0.5416      1.29  |    Q    |    V    |         |         |
10+55      0.5506      1.31  |    Q    |    V    |         |         |
11+ 0      0.5597      1.33  |    Q    |    V    |         |         |
11+ 5      0.5689      1.33  |    Q    |     V   |         |         |
11+10      0.5781      1.33  |    Q    |     V   |         |         |
11+15      0.5871      1.32  |    Q    |     V   |         |         |
11+20      0.5961      1.31  |    Q    |     V   |         |         |
11+25      0.6051      1.30  |    Q    |      V  |         |         |
11+30      0.6141      1.30  |    Q    |      V  |         |         |
11+35      0.6230      1.30  |    Q    |      V  |         |         |
11+40      0.6318      1.27  |    Q    |      V  |         |         |
11+45      0.6403      1.24  |   Q     |       V |         |         |
11+50      0.6487      1.22  |   Q     |       V |         |         |
11+55      0.6571      1.22  |   Q     |       V |         |         |
12+ 0      0.6655      1.23  |   Q     |       V |         |         |
12+ 5      0.6741      1.25  |    Q    |        V|         |         |
12+10      0.6833      1.34  |    Q    |        V|         |         |
12+15      0.6934      1.46  |    Q    |        V|         |         |
12+20      0.7041      1.55  |     Q   |        V|         |         |
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12+25	0.7152	1.61	| Q |	V |	|	|
12+30	0.7265	1.65	| Q |	V |	|	|
12+35	0.7381	1.69	| Q |	V |	|	|
12+40	0.7501	1.73	| Q |	|V |	|	|
12+45	0.7623	1.78	| Q |	|V |	|	|
12+50	0.7749	1.82	| Q |	|V |	|	|
12+55	0.7877	1.86	| Q |	| V |	|	|
13+ 0	0.8007	1.89	| Q |	| V |	|	|
13+ 5	0.8139	1.93	| Q |	| V |	|	|
13+10	0.8277	2.00	| Q |	| V |	|	|
13+15	0.8422	2.10	| Q |	| V |	|	|
13+20	0.8572	2.17	| Q |	| V |	|	|
13+25	0.8724	2.21	| Q |	| V |	|	|
13+30	0.8878	2.24	| Q |	| V |	|	|
13+35	0.9032	2.23	| Q |	| V |	|	|
13+40	0.9177	2.12	| Q |	| V |	|	|
13+45	0.9311	1.93	| Q |	| V |	|	|
13+50	0.9435	1.80	| Q |	| V |	|	|
13+55	0.9555	1.74	| Q |	| V |	|	|
14+ 0	0.9673	1.71	| Q |	| V |	|	|
14+ 5	0.9789	1.69	| Q |	| V |	|	|
14+10	0.9908	1.72	| Q |	| V |	|	|
14+15	1.0030	1.78	| Q |	| V |	|	|
14+20	1.0155	1.81	| Q |	| V |	|	|
14+25	1.0280	1.81	| Q |	| V|	|	|
14+30	1.0404	1.80	| Q |	| V|	|	|
14+35	1.0528	1.80	| Q |	| V|	|	|
14+40	1.0651	1.79	| Q |	| V |	|	|
14+45	1.0774	1.79	| Q |	| V |	|	|
14+50	1.0897	1.78	| Q |	| V |	|	|
14+55	1.1019	1.77	| Q |	| |V |	|	|
15+ 0	1.1140	1.75	| Q |	| |V |	|	|
15+ 5	1.1260	1.74	| Q |	| |V |	|	|
15+10	1.1378	1.72	| Q |	| | V |	|	|
15+15	1.1494	1.69	| Q |	| | V |	|	|
15+20	1.1610	1.68	| Q |	| | V |	|	|
15+25	1.1724	1.66	| Q |	| | V |	|	|
15+30	1.1836	1.63	| Q |	| | V |	|	|
15+35	1.1947	1.61	| Q |	| | V |	|	|
15+40	1.2054	1.55	| Q |	| | V |	|	|
15+45	1.2156	1.48	| Q |	| | V |	|	|
15+50	1.2254	1.42	| Q |	| | V |	|	|
15+55	1.2349	1.39	| Q |	| | V |	|	|
16+ 0	1.2444	1.37	| Q |	| | V |	|	|
16+ 5	1.2535	1.32	| Q |	| | V |	|	|
16+10	1.2613	1.13	| Q |	| | V |	|	|
16+15	1.2672	0.86	| Q |	| | V |	|	|
16+20	1.2717	0.66	| Q |	| | V |	|	|
16+25	1.2756	0.57	| Q |	| | V |	|	|
16+30	1.2791	0.50	| Q |	| | V |	|	|
16+35	1.2823	0.46	|Q |	| | V |	|	|
16+40	1.2851	0.41	|Q |	| | V |	|	|
16+45	1.2876	0.36	|Q |	| | V |	|	|
16+50	1.2898	0.33	|Q |	| | V |	|	|
16+55	1.2919	0.30	|Q |	| | V |	|	|
17+ 0	1.2939	0.28	|Q |	| | V |	|	|
17+ 5	1.2957	0.27	|Q |	| | V |	|	|
17+10	1.2977	0.28	|Q |	| | V |	|	|
17+15	1.2998	0.31	|Q |	| | V |	|	|
17+20	1.3021	0.32	|Q |	| | V |	|	|
17+25	1.3043	0.33	|Q |	| | V |	|	|
17+30	1.3066	0.33	|Q |	| | V |	|	|
17+35	1.3089	0.33	|Q |	| | V |	|	|
17+40	1.3112	0.33	|Q |	| | V |	|	|
17+45	1.3135	0.33	|Q |	| | V |	|	|
17+50	1.3157	0.33	|Q |	| | V |	|	|
17+55	1.3179	0.32	|Q |	| | V |	|	|
18+ 0	1.3200	0.30	|Q |	| | V |	|	|
18+ 5	1.3220	0.29	|Q |	| | V |	|	|
18+10	1.3240	0.29	|Q |	| | V |	|	|
18+15	1.3260	0.28	|Q |	| | V |	|	|

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18+20      1.3279      0.28  |Q        |         |         |      V  |
18+25      1.3299      0.28  |Q        |         |         |      V  |
18+30      1.3318      0.28  |Q        |         |         |      V  |
18+35      1.3337      0.28  |Q        |         |         |      V  |
18+40      1.3355      0.26  |Q        |         |         |      V  |
18+45      1.3372      0.25  Q         |         |         |      V  |
18+50      1.3388      0.23  Q         |         |         |      V  |
18+55      1.3403      0.21  Q         |         |         |      V  |
19+ 0      1.3416      0.19  Q         |         |         |      V  |
19+ 5      1.3428      0.18  Q         |         |         |      V  |
19+10      1.3440      0.18  Q         |         |         |      V  |
19+15      1.3453      0.19  Q         |         |         |      V  |
19+20      1.3467      0.20  Q         |         |         |       V |
19+25      1.3482      0.22  Q         |         |         |       V |
19+30      1.3498      0.24  Q         |         |         |       V |
19+35      1.3515      0.25  Q         |         |         |       V |
19+40      1.3532      0.24  Q         |         |         |       V |
19+45      1.3547      0.23  Q         |         |         |       V |
19+50      1.3562      0.21  Q         |         |         |       V |
19+55      1.3576      0.20  Q         |         |         |       V |
20+ 0      1.3588      0.18  Q         |         |         |       V |
20+ 5      1.3600      0.17  Q         |         |         |       V |
20+10      1.3612      0.17  Q         |         |         |       V |
20+15      1.3625      0.19  Q         |         |         |       V |
20+20      1.3638      0.19  Q         |         |         |       V |
20+25      1.3652      0.20  Q         |         |         |       V |
20+30      1.3665      0.20  Q         |         |         |       V |
20+35      1.3679      0.20  Q         |         |         |       V |
20+40      1.3693      0.20  Q         |         |         |       V |
20+45      1.3707      0.20  Q         |         |         |       V |
20+50      1.3721      0.20  Q         |         |         |       V |
20+55      1.3734      0.19  Q         |         |         |       V |
21+ 0      1.3746      0.17  Q         |         |         |       V |
21+ 5      1.3757      0.16  Q         |         |         |       V |
21+10      1.3769      0.17  Q         |         |         |       V |
21+15      1.3781      0.18  Q         |         |         |       V |
21+20      1.3795      0.19  Q         |         |         |       V |
21+25      1.3807      0.18  Q         |         |         |       V |
21+30      1.3818      0.17  Q         |         |         |       V |
21+35      1.3829      0.16  Q         |         |         |        V|
21+40      1.3841      0.16  Q         |         |         |        V|
21+45      1.3853      0.18  Q         |         |         |        V|
21+50      1.3866      0.19  Q         |         |         |        V|
21+55      1.3878      0.18  Q         |         |         |        V|
22+ 0      1.3890      0.16  Q         |         |         |        V|
22+ 5      1.3901      0.16  Q         |         |         |        V|
22+10      1.3912      0.16  Q         |         |         |        V|
22+15      1.3924      0.18  Q         |         |         |        V|
22+20      1.3937      0.19  Q         |         |         |        V|
22+25      1.3949      0.18  Q         |         |         |        V|
22+30      1.3961      0.16  Q         |         |         |        V|
22+35      1.3971      0.15  Q         |         |         |        V|
22+40      1.3982      0.15  Q         |         |         |        V|
22+45      1.3992      0.15  Q         |         |         |        V|
22+50      1.4002      0.14  Q         |         |         |        V|
22+55      1.4012      0.14  Q         |         |         |        V|
23+ 0      1.4021      0.14  Q         |         |         |        V|
23+ 5      1.4031      0.14  Q         |         |         |        V|
23+10      1.4041      0.14  Q         |         |         |        V|
23+15      1.4050      0.14  Q         |         |         |        V|
23+20      1.4060      0.14  Q         |         |         |        V|
23+25      1.4070      0.14  Q         |         |         |        V|
23+30      1.4079      0.14  Q         |         |         |        V|
23+35      1.4089      0.14  Q         |         |         |        V|
23+40      1.4098      0.14  Q         |         |         |        V|
23+45      1.4108      0.14  Q         |         |         |        V|
23+50      1.4117      0.14  Q         |         |         |        V|
23+55      1.4127      0.14  Q         |         |         |        V|
24+ 0      1.4136      0.14  Q         |         |         |        V|
24+ 5      1.4145      0.13  Q         |         |         |        V|
24+10      1.4152      0.11  Q         |         |         |        V|
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   24+15       1.4158      0.07  Q         |         |         |        V|
   24+20       1.4161      0.05  Q         |         |         |        V|
   24+25       1.4163      0.04  Q         |         |         |        V|
   24+30       1.4165      0.03  Q         |         |         |        V|
   24+35       1.4167      0.02  Q         |         |         |        V|
   24+40       1.4168      0.02  Q         |         |         |        V|
   24+45       1.4169      0.01  Q         |         |         |        V|
   24+50       1.4170      0.01  Q         |         |         |        V|
   24+55       1.4171      0.01  Q         |         |         |        V|
   25+ 0       1.4171      0.01  Q         |         |         |        V|
   25+ 5       1.4172      0.01  Q         |         |         |        V|
   25+10       1.4172      0.01  Q         |         |         |        V|
   25+15       1.4172      0.00  Q         |         |         |        V|
   25+20       1.4172      0.00  Q         |         |         |        V|
   25+25       1.4173      0.00  Q         |         |         |        V|
   25+30       1.4173      0.00  Q         |         |         |        V|
   25+35       1.4173      0.00  Q         |         |         |        V|
   25+40       1.4173      0.00  Q         |         |         |         V
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APPENDIX D.2: AREA B

10-YEAR, 24-HOUR

U n i t H y d r o g r a p h A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
Study date 08/02/10 File: ARBEX2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6045

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARBEX

Drainage Area = 8.44(Ac.) = 0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.44(Ac.) = 0.013 Sq. Mi.
USER Entry of lag time in hours
Lag time = 0.298 Hr.
Lag time = 17.86 Min.
25% of lag time = 4.47 Min.
40% of lag time = 7.14 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	1.80	15.19

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	4.50	37.98

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 4.500(In)

Point rain (area averaged) = 2.911(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.911(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
8.440	79.80	0.121

Total Area Entered = 8.44(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
79.8	79.8	0.246	0.121	0.220	1.000	0.220
					Sum (F) =	0.220

Area averaged mean soil loss (F) (In/Hr) = 0.220
Minimum soil loss rate ((In/Hr)) = 0.110
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.803

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	27.992	2.646	0.225
2	0.167	55.985	9.367	0.797
3	0.250	83.977	16.599	1.412
4	0.333	111.970	19.434	1.653
5	0.417	139.962	13.971	1.188
6	0.500	167.954	8.181	0.696
7	0.583	195.947	5.111	0.435
8	0.667	223.939	3.876	0.330
9	0.750	251.931	3.107	0.264
10	0.833	279.924	2.602	0.221
11	0.917	307.916	2.154	0.183
12	1.000	335.909	1.766	0.150
13	1.083	363.901	1.624	0.138
14	1.167	391.893	1.288	0.110
15	1.250	419.886	1.147	0.098
16	1.333	447.878	0.910	0.077
17	1.417	475.871	0.872	0.074
18	1.500	503.863	0.838	0.071
19	1.583	531.855	0.699	0.059
20	1.667	559.848	0.609	0.052
21	1.750	587.840	0.527	0.045
22	1.833	615.832	0.486	0.041
23	1.917	643.825	0.402	0.034
24	2.000	671.817	0.358	0.030
25	2.083	699.810	0.283	0.024
26	2.167	727.802	0.280	0.024
27	2.250	755.794	0.280	0.024
28	2.333	783.787	0.280	0.024
29	2.417	811.779	0.302	0.026
		Sum = 100.000	Sum=	8.506

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.023	0.389	0.019	0.00
2	0.17	0.07	0.023	0.388	0.019	0.00
3	0.25	0.07	0.023	0.386	0.019	0.00
4	0.33	0.10	0.035	0.385	0.028	0.01
5	0.42	0.10	0.035	0.383	0.028	0.01
6	0.50	0.10	0.035	0.382	0.028	0.01
7	0.58	0.10	0.035	0.380	0.028	0.01
8	0.67	0.10	0.035	0.379	0.028	0.01
9	0.75	0.10	0.035	0.377	0.028	0.01
10	0.83	0.13	0.047	0.376	0.037	0.01
11	0.92	0.13	0.047	0.374	0.037	0.01
12	1.00	0.13	0.047	0.373	0.037	0.01
13	1.08	0.10	0.035	0.371	0.028	0.01
14	1.17	0.10	0.035	0.370	0.028	0.01
15	1.25	0.10	0.035	0.368	0.028	0.01
16	1.33	0.10	0.035	0.367	0.028	0.01
17	1.42	0.10	0.035	0.365	0.028	0.01
18	1.50	0.10	0.035	0.364	0.028	0.01
19	1.58	0.10	0.035	0.363	0.028	0.01
20	1.67	0.10	0.035	0.361	0.028	0.01
21	1.75	0.10	0.035	0.360	0.028	0.01
22	1.83	0.13	0.047	0.358	0.037	0.01

23	1.92	0.13	0.047	0.357	0.037	0.01
24	2.00	0.13	0.047	0.355	0.037	0.01
25	2.08	0.13	0.047	0.354	0.037	0.01
26	2.17	0.13	0.047	0.352	0.037	0.01
27	2.25	0.13	0.047	0.351	0.037	0.01
28	2.33	0.13	0.047	0.350	0.037	0.01
29	2.42	0.13	0.047	0.348	0.037	0.01
30	2.50	0.13	0.047	0.347	0.037	0.01
31	2.58	0.17	0.058	0.345	0.047	0.01
32	2.67	0.17	0.058	0.344	0.047	0.01
33	2.75	0.17	0.058	0.342	0.047	0.01
34	2.83	0.17	0.058	0.341	0.047	0.01
35	2.92	0.17	0.058	0.340	0.047	0.01
36	3.00	0.17	0.058	0.338	0.047	0.01
37	3.08	0.17	0.058	0.337	0.047	0.01
38	3.17	0.17	0.058	0.335	0.047	0.01
39	3.25	0.17	0.058	0.334	0.047	0.01
40	3.33	0.17	0.058	0.333	0.047	0.01
41	3.42	0.17	0.058	0.331	0.047	0.01
42	3.50	0.17	0.058	0.330	0.047	0.01
43	3.58	0.17	0.058	0.329	0.047	0.01
44	3.67	0.17	0.058	0.327	0.047	0.01
45	3.75	0.17	0.058	0.326	0.047	0.01
46	3.83	0.20	0.070	0.324	0.056	0.01
47	3.92	0.20	0.070	0.323	0.056	0.01
48	4.00	0.20	0.070	0.322	0.056	0.01
49	4.08	0.20	0.070	0.320	0.056	0.01
50	4.17	0.20	0.070	0.319	0.056	0.01
51	4.25	0.20	0.070	0.318	0.056	0.01
52	4.33	0.23	0.082	0.316	0.065	0.02
53	4.42	0.23	0.082	0.315	0.065	0.02
54	4.50	0.23	0.082	0.313	0.065	0.02
55	4.58	0.23	0.082	0.312	0.065	0.02
56	4.67	0.23	0.082	0.311	0.065	0.02
57	4.75	0.23	0.082	0.309	0.065	0.02
58	4.83	0.27	0.093	0.308	0.075	0.02
59	4.92	0.27	0.093	0.307	0.075	0.02
60	5.00	0.27	0.093	0.305	0.075	0.02
61	5.08	0.20	0.070	0.304	0.056	0.01
62	5.17	0.20	0.070	0.303	0.056	0.01
63	5.25	0.20	0.070	0.302	0.056	0.01
64	5.33	0.23	0.082	0.300	0.065	0.02
65	5.42	0.23	0.082	0.299	0.065	0.02
66	5.50	0.23	0.082	0.298	0.065	0.02
67	5.58	0.27	0.093	0.296	0.075	0.02
68	5.67	0.27	0.093	0.295	0.075	0.02
69	5.75	0.27	0.093	0.294	0.075	0.02
70	5.83	0.27	0.093	0.292	0.075	0.02
71	5.92	0.27	0.093	0.291	0.075	0.02
72	6.00	0.27	0.093	0.290	0.075	0.02
73	6.08	0.30	0.105	0.288	0.084	0.02
74	6.17	0.30	0.105	0.287	0.084	0.02
75	6.25	0.30	0.105	0.286	0.084	0.02
76	6.33	0.30	0.105	0.285	0.084	0.02
77	6.42	0.30	0.105	0.283	0.084	0.02
78	6.50	0.30	0.105	0.282	0.084	0.02
79	6.58	0.33	0.116	0.281	0.094	0.02
80	6.67	0.33	0.116	0.280	0.094	0.02
81	6.75	0.33	0.116	0.278	0.094	0.02
82	6.83	0.33	0.116	0.277	0.094	0.02
83	6.92	0.33	0.116	0.276	0.094	0.02
84	7.00	0.33	0.116	0.275	0.094	0.02
85	7.08	0.33	0.116	0.273	0.094	0.02
86	7.17	0.33	0.116	0.272	0.094	0.02
87	7.25	0.33	0.116	0.271	0.094	0.02
88	7.33	0.37	0.128	0.270	0.103	0.03
89	7.42	0.37	0.128	0.268	0.103	0.03
90	7.50	0.37	0.128	0.267	0.103	0.03
91	7.58	0.40	0.140	0.266	0.112	0.03
92	7.67	0.40	0.140	0.265	0.112	0.03
93	7.75	0.40	0.140	0.263	0.112	0.03

94	7.83	0.43	0.151	0.262	0.122	0.03
95	7.92	0.43	0.151	0.261	0.122	0.03
96	8.00	0.43	0.151	0.260	0.122	0.03
97	8.08	0.50	0.175	0.259	0.140	0.03
98	8.17	0.50	0.175	0.257	0.140	0.03
99	8.25	0.50	0.175	0.256	0.140	0.03
100	8.33	0.50	0.175	0.255	0.140	0.03
101	8.42	0.50	0.175	0.254	0.140	0.03
102	8.50	0.50	0.175	0.253	0.140	0.03
103	8.58	0.53	0.186	0.251	0.150	0.04
104	8.67	0.53	0.186	0.250	0.150	0.04
105	8.75	0.53	0.186	0.249	0.150	0.04
106	8.83	0.57	0.198	0.248	0.159	0.04
107	8.92	0.57	0.198	0.247	0.159	0.04
108	9.00	0.57	0.198	0.246	0.159	0.04
109	9.08	0.63	0.221	0.244	0.178	0.04
110	9.17	0.63	0.221	0.243	0.178	0.04
111	9.25	0.63	0.221	0.242	0.178	0.04
112	9.33	0.67	0.233	0.241	0.187	0.05
113	9.42	0.67	0.233	0.240	0.187	0.05
114	9.50	0.67	0.233	0.239	0.187	0.05
115	9.58	0.70	0.245	0.237	---	0.01
116	9.67	0.70	0.245	0.236	---	0.01
117	9.75	0.70	0.245	0.235	---	0.01
118	9.83	0.73	0.256	0.234	---	0.02
119	9.92	0.73	0.256	0.233	---	0.02
120	10.00	0.73	0.256	0.232	---	0.02
121	10.08	0.50	0.175	0.231	0.140	0.03
122	10.17	0.50	0.175	0.230	0.140	0.03
123	10.25	0.50	0.175	0.228	0.140	0.03
124	10.33	0.50	0.175	0.227	0.140	0.03
125	10.42	0.50	0.175	0.226	0.140	0.03
126	10.50	0.50	0.175	0.225	0.140	0.03
127	10.58	0.67	0.233	0.224	---	0.01
128	10.67	0.67	0.233	0.223	---	0.01
129	10.75	0.67	0.233	0.222	---	0.01
130	10.83	0.67	0.233	0.221	---	0.01
131	10.92	0.67	0.233	0.220	---	0.01
132	11.00	0.67	0.233	0.219	---	0.01
133	11.08	0.63	0.221	0.218	---	0.00
134	11.17	0.63	0.221	0.216	---	0.00
135	11.25	0.63	0.221	0.215	---	0.01
136	11.33	0.63	0.221	0.214	---	0.01
137	11.42	0.63	0.221	0.213	---	0.01
138	11.50	0.63	0.221	0.212	---	0.01
139	11.58	0.57	0.198	0.211	0.159	0.04
140	11.67	0.57	0.198	0.210	0.159	0.04
141	11.75	0.57	0.198	0.209	0.159	0.04
142	11.83	0.60	0.210	0.208	---	0.00
143	11.92	0.60	0.210	0.207	---	0.00
144	12.00	0.60	0.210	0.206	---	0.00
145	12.08	0.83	0.291	0.205	---	0.09
146	12.17	0.83	0.291	0.204	---	0.09
147	12.25	0.83	0.291	0.203	---	0.09
148	12.33	0.87	0.303	0.202	---	0.10
149	12.42	0.87	0.303	0.201	---	0.10
150	12.50	0.87	0.303	0.200	---	0.10
151	12.58	0.93	0.326	0.199	---	0.13
152	12.67	0.93	0.326	0.198	---	0.13
153	12.75	0.93	0.326	0.197	---	0.13
154	12.83	0.97	0.338	0.196	---	0.14
155	12.92	0.97	0.338	0.195	---	0.14
156	13.00	0.97	0.338	0.194	---	0.14
157	13.08	1.13	0.396	0.193	---	0.20
158	13.17	1.13	0.396	0.192	---	0.20
159	13.25	1.13	0.396	0.191	---	0.20
160	13.33	1.13	0.396	0.190	---	0.21
161	13.42	1.13	0.396	0.189	---	0.21
162	13.50	1.13	0.396	0.188	---	0.21
163	13.58	0.77	0.268	0.187	---	0.08
164	13.67	0.77	0.268	0.186	---	0.08

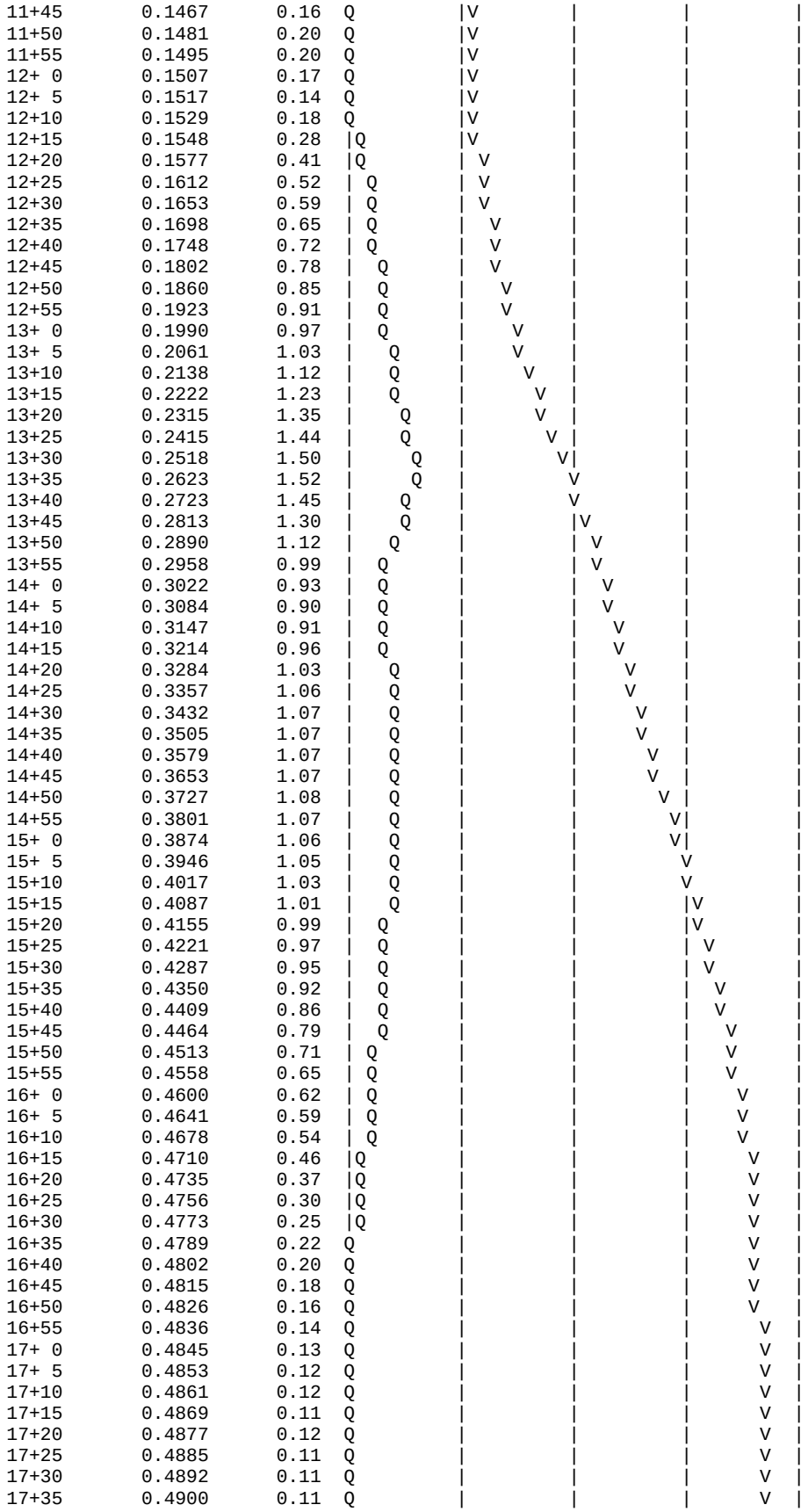
165	13.75	0.77	0.268	0.185	---	0.08
166	13.83	0.77	0.268	0.184	---	0.08
167	13.92	0.77	0.268	0.183	---	0.08
168	14.00	0.77	0.268	0.182	---	0.09
169	14.08	0.90	0.314	0.181	---	0.13
170	14.17	0.90	0.314	0.180	---	0.13
171	14.25	0.90	0.314	0.180	---	0.13
172	14.33	0.87	0.303	0.179	---	0.12
173	14.42	0.87	0.303	0.178	---	0.12
174	14.50	0.87	0.303	0.177	---	0.13
175	14.58	0.87	0.303	0.176	---	0.13
176	14.67	0.87	0.303	0.175	---	0.13
177	14.75	0.87	0.303	0.174	---	0.13
178	14.83	0.83	0.291	0.173	---	0.12
179	14.92	0.83	0.291	0.172	---	0.12
180	15.00	0.83	0.291	0.171	---	0.12
181	15.08	0.80	0.279	0.171	---	0.11
182	15.17	0.80	0.279	0.170	---	0.11
183	15.25	0.80	0.279	0.169	---	0.11
184	15.33	0.77	0.268	0.168	---	0.10
185	15.42	0.77	0.268	0.167	---	0.10
186	15.50	0.77	0.268	0.166	---	0.10
187	15.58	0.63	0.221	0.165	---	0.06
188	15.67	0.63	0.221	0.165	---	0.06
189	15.75	0.63	0.221	0.164	---	0.06
190	15.83	0.63	0.221	0.163	---	0.06
191	15.92	0.63	0.221	0.162	---	0.06
192	16.00	0.63	0.221	0.161	---	0.06
193	16.08	0.13	0.047	0.160	0.037	0.01
194	16.17	0.13	0.047	0.160	0.037	0.01
195	16.25	0.13	0.047	0.159	0.037	0.01
196	16.33	0.13	0.047	0.158	0.037	0.01
197	16.42	0.13	0.047	0.157	0.037	0.01
198	16.50	0.13	0.047	0.156	0.037	0.01
199	16.58	0.10	0.035	0.156	0.028	0.01
200	16.67	0.10	0.035	0.155	0.028	0.01
201	16.75	0.10	0.035	0.154	0.028	0.01
202	16.83	0.10	0.035	0.153	0.028	0.01
203	16.92	0.10	0.035	0.152	0.028	0.01
204	17.00	0.10	0.035	0.152	0.028	0.01
205	17.08	0.17	0.058	0.151	0.047	0.01
206	17.17	0.17	0.058	0.150	0.047	0.01
207	17.25	0.17	0.058	0.149	0.047	0.01
208	17.33	0.17	0.058	0.149	0.047	0.01
209	17.42	0.17	0.058	0.148	0.047	0.01
210	17.50	0.17	0.058	0.147	0.047	0.01
211	17.58	0.17	0.058	0.146	0.047	0.01
212	17.67	0.17	0.058	0.146	0.047	0.01
213	17.75	0.17	0.058	0.145	0.047	0.01
214	17.83	0.13	0.047	0.144	0.037	0.01
215	17.92	0.13	0.047	0.144	0.037	0.01
216	18.00	0.13	0.047	0.143	0.037	0.01
217	18.08	0.13	0.047	0.142	0.037	0.01
218	18.17	0.13	0.047	0.141	0.037	0.01
219	18.25	0.13	0.047	0.141	0.037	0.01
220	18.33	0.13	0.047	0.140	0.037	0.01
221	18.42	0.13	0.047	0.139	0.037	0.01
222	18.50	0.13	0.047	0.139	0.037	0.01
223	18.58	0.10	0.035	0.138	0.028	0.01
224	18.67	0.10	0.035	0.137	0.028	0.01
225	18.75	0.10	0.035	0.137	0.028	0.01
226	18.83	0.07	0.023	0.136	0.019	0.00
227	18.92	0.07	0.023	0.135	0.019	0.00
228	19.00	0.07	0.023	0.135	0.019	0.00
229	19.08	0.10	0.035	0.134	0.028	0.01
230	19.17	0.10	0.035	0.133	0.028	0.01
231	19.25	0.10	0.035	0.133	0.028	0.01
232	19.33	0.13	0.047	0.132	0.037	0.01
233	19.42	0.13	0.047	0.132	0.037	0.01
234	19.50	0.13	0.047	0.131	0.037	0.01
235	19.58	0.10	0.035	0.130	0.028	0.01

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236  19.67     0.10      0.035         0.130     0.028         0.01
237  19.75     0.10      0.035         0.129     0.028         0.01
238  19.83     0.07      0.023         0.129     0.019         0.00
239  19.92     0.07      0.023         0.128     0.019         0.00
240  20.00     0.07      0.023         0.127     0.019         0.00
241  20.08     0.10      0.035         0.127     0.028         0.01
242  20.17     0.10      0.035         0.126     0.028         0.01
243  20.25     0.10      0.035         0.126     0.028         0.01
244  20.33     0.10      0.035         0.125     0.028         0.01
245  20.42     0.10      0.035         0.125     0.028         0.01
246  20.50     0.10      0.035         0.124     0.028         0.01
247  20.58     0.10      0.035         0.124     0.028         0.01
248  20.67     0.10      0.035         0.123     0.028         0.01
249  20.75     0.10      0.035         0.123     0.028         0.01
250  20.83     0.07      0.023         0.122     0.019         0.00
251  20.92     0.07      0.023         0.122     0.019         0.00
252  21.00     0.07      0.023         0.121     0.019         0.00
253  21.08     0.10      0.035         0.121     0.028         0.01
254  21.17     0.10      0.035         0.120     0.028         0.01
255  21.25     0.10      0.035         0.120     0.028         0.01
256  21.33     0.07      0.023         0.119     0.019         0.00
257  21.42     0.07      0.023         0.119     0.019         0.00
258  21.50     0.07      0.023         0.118     0.019         0.00
259  21.58     0.10      0.035         0.118     0.028         0.01
260  21.67     0.10      0.035         0.118     0.028         0.01
261  21.75     0.10      0.035         0.117     0.028         0.01
262  21.83     0.07      0.023         0.117     0.019         0.00
263  21.92     0.07      0.023         0.116     0.019         0.00
264  22.00     0.07      0.023         0.116     0.019         0.00
265  22.08     0.10      0.035         0.116     0.028         0.01
266  22.17     0.10      0.035         0.115     0.028         0.01
267  22.25     0.10      0.035         0.115     0.028         0.01
268  22.33     0.07      0.023         0.114     0.019         0.00
269  22.42     0.07      0.023         0.114     0.019         0.00
270  22.50     0.07      0.023         0.114     0.019         0.00
271  22.58     0.07      0.023         0.113     0.019         0.00
272  22.67     0.07      0.023         0.113     0.019         0.00
273  22.75     0.07      0.023         0.113     0.019         0.00
274  22.83     0.07      0.023         0.112     0.019         0.00
275  22.92     0.07      0.023         0.112     0.019         0.00
276  23.00     0.07      0.023         0.112     0.019         0.00
277  23.08     0.07      0.023         0.112     0.019         0.00
278  23.17     0.07      0.023         0.111     0.019         0.00
279  23.25     0.07      0.023         0.111     0.019         0.00
280  23.33     0.07      0.023         0.111     0.019         0.00
281  23.42     0.07      0.023         0.111     0.019         0.00
282  23.50     0.07      0.023         0.111     0.019         0.00
283  23.58     0.07      0.023         0.110     0.019         0.00
284  23.67     0.07      0.023         0.110     0.019         0.00
285  23.75     0.07      0.023         0.110     0.019         0.00
286  23.83     0.07      0.023         0.110     0.019         0.00
287  23.92     0.07      0.023         0.110     0.019         0.00
288  24.00     0.07      0.023         0.110     0.019         0.00
    Sum =     100.0                                 Sum =     8.9
      Flood volume = Effective rainfall      0.74(In)
       times area       8.4(Ac.)/[(In)/(Ft.)] =       0.5(Ac.Ft)
      Total soil loss =      2.17(In)
      Total soil loss =     1.525(Ac.Ft)
      Total rainfall =      2.91(In)
      Flood volume =       22742.6 Cubic Feet
      Total soil loss =       66434.7 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      1.519(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
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Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0001	0.01	Q				
0+20	0.0002	0.02	Q				
0+25	0.0004	0.03	Q				
0+30	0.0007	0.03	Q				
0+35	0.0009	0.04	Q				
0+40	0.0012	0.04	Q				
0+45	0.0015	0.05	Q				
0+50	0.0019	0.05	Q				
0+55	0.0022	0.05	Q				
1+ 0	0.0026	0.06	Q				
1+ 5	0.0030	0.06	Q				
1+10	0.0035	0.06	Q				
1+15	0.0039	0.06	Q				
1+20	0.0043	0.06	Q				
1+25	0.0047	0.06	Q				
1+30	0.0051	0.06	Q				
1+35	0.0055	0.06	Q				
1+40	0.0059	0.06	Q				
1+45	0.0063	0.06	Q				
1+50	0.0067	0.06	Q				
1+55	0.0071	0.06	Q				
2+ 0	0.0075	0.06	Q				
2+ 5	0.0080	0.07	Q				
2+10	0.0085	0.07	Q				
2+15	0.0090	0.07	Q				
2+20	0.0095	0.07	Q				
2+25	0.0100	0.07	Q				
2+30	0.0105	0.07	Q				
2+35	0.0110	0.08	Q				
2+40	0.0116	0.08	Q				
2+45	0.0121	0.08	Q				
2+50	0.0127	0.09	Q				
2+55	0.0133	0.09	QV				
3+ 0	0.0140	0.09	QV				
3+ 5	0.0146	0.09	QV				
3+10	0.0152	0.09	QV				
3+15	0.0159	0.09	QV				
3+20	0.0165	0.09	QV				
3+25	0.0172	0.09	QV				
3+30	0.0178	0.09	QV				
3+35	0.0185	0.10	QV				
3+40	0.0191	0.10	QV				
3+45	0.0198	0.10	QV				
3+50	0.0205	0.10	QV				
3+55	0.0211	0.10	QV				
4+ 0	0.0219	0.10	QV				
4+ 5	0.0226	0.11	QV				
4+10	0.0233	0.11	QV				
4+15	0.0241	0.11	QV				
4+20	0.0249	0.11	QV				
4+25	0.0257	0.11	QV				
4+30	0.0265	0.12	Q V				
4+35	0.0273	0.12	Q V				
4+40	0.0282	0.13	Q V				
4+45	0.0291	0.13	Q V				
4+50	0.0300	0.13	Q V				
4+55	0.0309	0.13	Q V				
5+ 0	0.0318	0.14	Q V				
5+ 5	0.0328	0.14	Q V				
5+10	0.0338	0.14	Q V				
5+15	0.0347	0.14	Q V				
5+20	0.0356	0.13	Q V				
5+25	0.0365	0.13	Q V				
5+30	0.0374	0.13	Q V				
5+35	0.0383	0.13	Q V				
5+40	0.0392	0.14	Q V				
5+45	0.0402	0.14	Q V				

```
 5+50      0.0412      0.14  Q  V      |         |         |         |
 5+55      0.0422      0.15  Q  V      |         |         |         |
 6+ 0      0.0432      0.15  Q  V      |         |         |         |
 6+ 5      0.0443      0.15  Q  V      |         |         |         |
 6+10      0.0453      0.15  Q  V      |         |         |         |
 6+15      0.0464      0.16  Q  V      |         |         |         |
 6+20      0.0475      0.16  Q  V      |         |         |         |
 6+25      0.0487      0.17  Q  V      |         |         |         |
 6+30      0.0498      0.17  Q  V      |         |         |         |
 6+35      0.0510      0.17  Q  V      |         |         |         |
 6+40      0.0522      0.17  Q  V      |         |         |         |
 6+45      0.0534      0.18  Q   V     |         |         |         |
 6+50      0.0546      0.18  Q   V     |         |         |         |
 6+55      0.0559      0.18  Q   V     |         |         |         |
 7+ 0      0.0572      0.19  Q   V     |         |         |         |
 7+ 5      0.0585      0.19  Q   V     |         |         |         |
 7+10      0.0598      0.19  Q   V     |         |         |         |
 7+15      0.0611      0.19  Q   V     |         |         |         |
 7+20      0.0624      0.19  Q   V     |         |         |         |
 7+25      0.0637      0.19  Q   V     |         |         |         |
 7+30      0.0651      0.20  Q   V     |         |         |         |
 7+35      0.0665      0.20  Q    V    |         |         |         |
 7+40      0.0679      0.21  Q    V    |         |         |         |
 7+45      0.0693      0.21  Q    V    |         |         |         |
 7+50      0.0708      0.22  Q    V    |         |         |         |
 7+55      0.0724      0.22  Q    V    |         |         |         |
 8+ 0      0.0740      0.23  Q    V    |         |         |         |
 8+ 5      0.0756      0.24  Q    V    |         |         |         |
 8+10      0.0773      0.24  Q    V    |         |         |         |
 8+15      0.0790      0.25  |Q    V    |         |         |         |
 8+20      0.0808      0.26  |Q    V    |         |         |         |
 8+25      0.0827      0.27  |Q    V    |         |         |         |
 8+30      0.0845      0.27  |Q    V    |         |         |         |
 8+35      0.0864      0.28  |Q    V    |         |         |         |
 8+40      0.0884      0.28  |Q    V    |         |         |         |
 8+45      0.0904      0.29  |Q    V    |         |         |         |
 8+50      0.0924      0.29  |Q     V   |         |         |         |
 8+55      0.0944      0.30  |Q     V   |         |         |         |
 9+ 0      0.0965      0.30  |Q     V   |         |         |         |
 9+ 5      0.0987      0.31  |Q     V   |         |         |         |
 9+10      0.1009      0.32  |Q     V   |         |         |         |
 9+15      0.1031      0.33  |Q     V   |         |         |         |
 9+20      0.1055      0.34  |Q      V  |         |         |         |
 9+25      0.1079      0.35  |Q      V  |         |         |         |
 9+30      0.1103      0.36  |Q      V  |         |         |         |
 9+35      0.1128      0.35  |Q      V  |         |         |         |
 9+40      0.1150      0.33  |Q      V  |         |         |         |
 9+45      0.1170      0.28  |Q      V  |         |         |         |
 9+50      0.1185      0.22  Q        V|         |         |         |
 9+55      0.1198      0.19  Q        V|         |         |         |
10+ 0      0.1211      0.19  Q        V|         |         |         |
10+ 5      0.1225      0.20  Q        V|         |         |         |
10+10      0.1241      0.22  Q        V|         |         |         |
10+15      0.1257      0.24  Q        V|         |         |         |
10+20      0.1275      0.26  |Q       V|         |         |         |
10+25      0.1293      0.27  |Q       V|         |         |         |
10+30      0.1312      0.27  |Q        V         |         |         |
10+35      0.1330      0.27  |Q        V         |         |         |
10+40      0.1348      0.25  |Q        V         |         |         |
10+45      0.1363      0.22  Q         V         |         |         |
10+50      0.1376      0.18  Q         V         |         |         |
10+55      0.1387      0.16  Q         V         |         |         |
11+ 0      0.1397      0.15  Q         V         |         |         |
11+ 5      0.1407      0.14  Q         V         |         |         |
11+10      0.1416      0.13  Q         V         |         |         |
11+15      0.1424      0.12  Q         V         |         |         |
11+20      0.1430      0.10  Q         V         |         |         |
11+25      0.1436      0.09  Q         |V        |         |         |
11+30      0.1442      0.08  Q         |V        |         |         |
11+35      0.1449      0.09  Q         |V        |         |         |
11+40      0.1457      0.12  Q         |V        |         |         |
```



11+45	0.1467	0.16	Q	V			
11+50	0.1481	0.20	Q	V			
11+55	0.1495	0.20	Q	V			
12+ 0	0.1507	0.17	Q	V			
12+ 5	0.1517	0.14	Q	V			
12+10	0.1529	0.18	Q	V			
12+15	0.1548	0.28	Q	V			
12+20	0.1577	0.41	Q	V			
12+25	0.1612	0.52	Q	V			
12+30	0.1653	0.59	Q	V			
12+35	0.1698	0.65	Q	V			
12+40	0.1748	0.72	Q	V			
12+45	0.1802	0.78	Q	V			
12+50	0.1860	0.85	Q	V			
12+55	0.1923	0.91	Q	V			
13+ 0	0.1990	0.97	Q	V			
13+ 5	0.2061	1.03	Q	V			
13+10	0.2138	1.12	Q	V			
13+15	0.2222	1.23	Q	V			
13+20	0.2315	1.35	Q	V			
13+25	0.2415	1.44	Q	V			
13+30	0.2518	1.50	Q	V			
13+35	0.2623	1.52	Q	V			
13+40	0.2723	1.45	Q	V			
13+45	0.2813	1.30	Q	V			
13+50	0.2890	1.12	Q	V			
13+55	0.2958	0.99	Q	V			
14+ 0	0.3022	0.93	Q	V			
14+ 5	0.3084	0.90	Q	V			
14+10	0.3147	0.91	Q	V			
14+15	0.3214	0.96	Q	V			
14+20	0.3284	1.03	Q	V			
14+25	0.3357	1.06	Q	V			
14+30	0.3432	1.07	Q	V			
14+35	0.3505	1.07	Q	V			
14+40	0.3579	1.07	Q	V			
14+45	0.3653	1.07	Q	V			
14+50	0.3727	1.08	Q	V			
14+55	0.3801	1.07	Q	V			
15+ 0	0.3874	1.06	Q	V			
15+ 5	0.3946	1.05	Q	V			
15+10	0.4017	1.03	Q	V			
15+15	0.4087	1.01	Q	V			
15+20	0.4155	0.99	Q	V			
15+25	0.4221	0.97	Q	V			
15+30	0.4287	0.95	Q	V			
15+35	0.4350	0.92	Q	V			
15+40	0.4409	0.86	Q	V			
15+45	0.4464	0.79	Q	V			
15+50	0.4513	0.71	Q	V			
15+55	0.4558	0.65	Q	V			
16+ 0	0.4600	0.62	Q	V			
16+ 5	0.4641	0.59	Q	V			
16+10	0.4678	0.54	Q	V			
16+15	0.4710	0.46	Q	V			
16+20	0.4735	0.37	Q	V			
16+25	0.4756	0.30	Q	V			
16+30	0.4773	0.25	Q	V			
16+35	0.4789	0.22	Q	V			
16+40	0.4802	0.20	Q	V			
16+45	0.4815	0.18	Q	V			
16+50	0.4826	0.16	Q	V			
16+55	0.4836	0.14	Q	V			
17+ 0	0.4845	0.13	Q	V			
17+ 5	0.4853	0.12	Q	V			
17+10	0.4861	0.12	Q	V			
17+15	0.4869	0.11	Q	V			
17+20	0.4877	0.12	Q	V			
17+25	0.4885	0.11	Q	V			
17+30	0.4892	0.11	Q	V			
17+35	0.4900	0.11	Q	V			

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17+40       0.4907      0.11  Q         |         |         |      V  |
17+45       0.4915      0.11  Q         |         |         |      V  |
17+50       0.4922      0.10  Q         |         |         |      V  |
17+55       0.4928      0.10  Q         |         |         |      V  |
18+ 0       0.4935      0.09  Q         |         |         |      V  |
18+ 5       0.4941      0.09  Q         |         |         |      V  |
18+10       0.4947      0.09  Q         |         |         |      V  |
18+15       0.4953      0.08  Q         |         |         |      V  |
18+20       0.4959      0.08  Q         |         |         |      V  |
18+25       0.4964      0.08  Q         |         |         |       V |
18+30       0.4970      0.08  Q         |         |         |       V |
18+35       0.4975      0.08  Q         |         |         |       V |
18+40       0.4980      0.08  Q         |         |         |       V |
18+45       0.4985      0.07  Q         |         |         |       V |
18+50       0.4990      0.07  Q         |         |         |       V |
18+55       0.4995      0.06  Q         |         |         |       V |
19+ 0       0.4999      0.06  Q         |         |         |       V |
19+ 5       0.5003      0.06  Q         |         |         |       V |
19+10       0.5006      0.05  Q         |         |         |       V |
19+15       0.5010      0.05  Q         |         |         |       V |
19+20       0.5014      0.06  Q         |         |         |       V |
19+25       0.5018      0.06  Q         |         |         |       V |
19+30       0.5023      0.06  Q         |         |         |       V |
19+35       0.5027      0.07  Q         |         |         |       V |
19+40       0.5032      0.07  Q         |         |         |       V |
19+45       0.5037      0.07  Q         |         |         |       V |
19+50       0.5041      0.06  Q         |         |         |       V |
19+55       0.5045      0.06  Q         |         |         |       V |
20+ 0       0.5049      0.06  Q         |         |         |       V |
20+ 5       0.5052      0.05  Q         |         |         |       V |
20+10       0.5056      0.05  Q         |         |         |       V |
20+15       0.5059      0.05  Q         |         |         |       V |
20+20       0.5063      0.05  Q         |         |         |       V |
20+25       0.5067      0.06  Q         |         |         |       V |
20+30       0.5071      0.06  Q         |         |         |       V |
20+35       0.5075      0.06  Q         |         |         |       V |
20+40       0.5079      0.06  Q         |         |         |       V |
20+45       0.5083      0.06  Q         |         |         |       V |
20+50       0.5087      0.06  Q         |         |         |       V |
20+55       0.5091      0.06  Q         |         |         |        V|
21+ 0       0.5094      0.05  Q         |         |         |        V|
21+ 5       0.5098      0.05  Q         |         |         |        V|
21+10       0.5101      0.05  Q         |         |         |        V|
21+15       0.5104      0.05  Q         |         |         |        V|
21+20       0.5108      0.05  Q         |         |         |        V|
21+25       0.5112      0.05  Q         |         |         |        V|
21+30       0.5115      0.05  Q         |         |         |        V|
21+35       0.5118      0.05  Q         |         |         |        V|
21+40       0.5122      0.05  Q         |         |         |        V|
21+45       0.5125      0.05  Q         |         |         |        V|
21+50       0.5129      0.05  Q         |         |         |        V|
21+55       0.5132      0.05  Q         |         |         |        V|
22+ 0       0.5135      0.05  Q         |         |         |        V|
22+ 5       0.5139      0.05  Q         |         |         |        V|
22+10       0.5142      0.05  Q         |         |         |        V|
22+15       0.5145      0.05  Q         |         |         |        V|
22+20       0.5149      0.05  Q         |         |         |        V|
22+25       0.5152      0.05  Q         |         |         |        V|
22+30       0.5156      0.05  Q         |         |         |        V|
22+35       0.5159      0.05  Q         |         |         |        V|
22+40       0.5162      0.04  Q         |         |         |        V|
22+45       0.5165      0.04  Q         |         |         |        V|
22+50       0.5168      0.04  Q         |         |         |        V|
22+55       0.5171      0.04  Q         |         |         |        V|
23+ 0       0.5173      0.04  Q         |         |         |        V|
23+ 5       0.5176      0.04  Q         |         |         |        V|
23+10       0.5179      0.04  Q         |         |         |        V|
23+15       0.5182      0.04  Q         |         |         |        V|
23+20       0.5185      0.04  Q         |         |         |        V|
23+25       0.5187      0.04  Q         |         |         |        V|
23+30       0.5190      0.04  Q         |         |         |        V|
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  23+35      0.5193     0.04  Q        |         |         |        V|
  23+40      0.5196     0.04  Q        |         |         |        V|
  23+45      0.5198     0.04  Q        |         |         |        V|
  23+50      0.5201     0.04  Q        |         |         |        V|
  23+55      0.5204     0.04  Q        |         |         |        V|
  24+ 0      0.5206     0.04  Q        |         |         |        V|
  24+ 5      0.5209     0.04  Q        |         |         |        V|
  24+10      0.5211     0.03  Q        |         |         |        V|
  24+15      0.5213     0.03  Q        |         |         |        V|
  24+20      0.5215     0.02  Q        |         |         |        V|
  24+25      0.5216     0.01  Q        |         |         |        V|
  24+30      0.5217     0.01  Q        |         |         |        V|
  24+35      0.5217     0.01  Q        |         |         |        V|
  24+40      0.5218     0.01  Q        |         |         |        V|
  24+45      0.5218     0.01  Q        |         |         |        V|
  24+50      0.5219     0.01  Q        |         |         |        V|
  24+55      0.5219     0.01  Q        |         |         |        V|
  25+ 0      0.5219     0.00  Q        |         |         |        V|
  25+ 5      0.5220     0.00  Q        |         |         |        V|
  25+10      0.5220     0.00  Q        |         |         |        V|
  25+15      0.5220     0.00  Q        |         |         |        V|
  25+20      0.5220     0.00  Q        |         |         |        V|
  25+25      0.5220     0.00  Q        |         |         |        V|
  25+30      0.5221     0.00  Q        |         |         |        V|
  25+35      0.5221     0.00  Q        |         |         |        V|
  25+40      0.5221     0.00  Q        |         |         |        V|
  25+45      0.5221     0.00  Q        |         |         |        V|
  25+50      0.5221     0.00  Q        |         |         |        V|
  25+55      0.5221     0.00  Q        |         |         |        V|
  26+ 0      0.5221     0.00  Q        |         |         |        V|
  26+ 5      0.5221     0.00  Q        |         |         |        V|
  26+10      0.5221     0.00  Q        |         |         |        V|
  26+15      0.5221     0.00  Q        |         |         |        V|
  26+20      0.5221     0.00  Q        |         |         |         V
-------------------------------------------------------------------------
```

2-YEAR, 24-HOUR

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
              Study date  08/02/10 File: ARBEX242.out

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------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 6045

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
NORTH HEMET REVITALIZATION PLAN PRE-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARBEX

------------------------------------------------------------------------
Drainage Area =       8.44(Ac.)  =      0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =       8.44(Ac.)  =      0.013 Sq. Mi.
USER Entry of lag time in hours
Lag time =    0.309 Hr.
Lag time =    18.52 Min.
25% of lag time =     4.63 Min.
40% of lag time =     7.41 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.44           1.80                 15.19

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
        8.44           4.50                 37.98

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    4.500(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
     8.440           79.80         0.121
 Total Area Entered =      8.44(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
79.8  62.8      0.440     0.121        0.392       1.000      0.392
                                                 Sum (F) =   0.392
```

Area averaged mean soil loss (F) (In/Hr) = 0.392
Minimum soil loss rate ((In/Hr)) = 0.196
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.803

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	26.995	2.526	0.215
2	0.167	53.990	8.770	0.746
3	0.250	80.985	15.608	1.328
4	0.333	107.980	18.895	1.607
5	0.417	134.975	14.484	1.232
6	0.500	161.970	8.613	0.733
7	0.583	188.964	5.398	0.459
8	0.667	215.959	3.939	0.335
9	0.750	242.954	3.183	0.271
10	0.833	269.949	2.641	0.225
11	0.917	296.944	2.244	0.191
12	1.000	323.939	1.824	0.155
13	1.083	350.934	1.622	0.138
14	1.167	377.929	1.389	0.118
15	1.250	404.924	1.182	0.101
16	1.333	431.919	0.972	0.083
17	1.417	458.914	0.861	0.073
18	1.500	485.909	0.822	0.070
19	1.583	512.904	0.785	0.067
20	1.667	539.898	0.623	0.053
21	1.750	566.893	0.573	0.049
22	1.833	593.888	0.493	0.042
23	1.917	620.883	0.454	0.039
24	2.000	647.878	0.381	0.032
25	2.083	674.873	0.332	0.028
26	2.167	701.868	0.270	0.023
27	2.250	728.863	0.270	0.023
28	2.333	755.858	0.270	0.023
29	2.417	782.853	0.270	0.023
30	2.500	809.848	0.306	0.026
		Sum = 100.000	Sum=	8.506

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	0.695	0.012	0.00
2	0.17	0.07	0.014	0.693	0.012	0.00
3	0.25	0.07	0.014	0.690	0.012	0.00
4	0.33	0.10	0.022	0.687	0.017	0.00
5	0.42	0.10	0.022	0.685	0.017	0.00
6	0.50	0.10	0.022	0.682	0.017	0.00
7	0.58	0.10	0.022	0.679	0.017	0.00
8	0.67	0.10	0.022	0.677	0.017	0.00
9	0.75	0.10	0.022	0.674	0.017	0.00
10	0.83	0.13	0.029	0.671	0.023	0.01
11	0.92	0.13	0.029	0.669	0.023	0.01
12	1.00	0.13	0.029	0.666	0.023	0.01
13	1.08	0.10	0.022	0.663	0.017	0.00
14	1.17	0.10	0.022	0.661	0.017	0.00
15	1.25	0.10	0.022	0.658	0.017	0.00
16	1.33	0.10	0.022	0.656	0.017	0.00
17	1.42	0.10	0.022	0.653	0.017	0.00
18	1.50	0.10	0.022	0.650	0.017	0.00
19	1.58	0.10	0.022	0.648	0.017	0.00
20	1.67	0.10	0.022	0.645	0.017	0.00
21	1.75	0.10	0.022	0.643	0.017	0.00

22	1.83	0.13	0.029	0.640	0.023	0.01
23	1.92	0.13	0.029	0.637	0.023	0.01
24	2.00	0.13	0.029	0.635	0.023	0.01
25	2.08	0.13	0.029	0.632	0.023	0.01
26	2.17	0.13	0.029	0.630	0.023	0.01
27	2.25	0.13	0.029	0.627	0.023	0.01
28	2.33	0.13	0.029	0.625	0.023	0.01
29	2.42	0.13	0.029	0.622	0.023	0.01
30	2.50	0.13	0.029	0.620	0.023	0.01
31	2.58	0.17	0.036	0.617	0.029	0.01
32	2.67	0.17	0.036	0.614	0.029	0.01
33	2.75	0.17	0.036	0.612	0.029	0.01
34	2.83	0.17	0.036	0.609	0.029	0.01
35	2.92	0.17	0.036	0.607	0.029	0.01
36	3.00	0.17	0.036	0.604	0.029	0.01
37	3.08	0.17	0.036	0.602	0.029	0.01
38	3.17	0.17	0.036	0.599	0.029	0.01
39	3.25	0.17	0.036	0.597	0.029	0.01
40	3.33	0.17	0.036	0.594	0.029	0.01
41	3.42	0.17	0.036	0.592	0.029	0.01
42	3.50	0.17	0.036	0.589	0.029	0.01
43	3.58	0.17	0.036	0.587	0.029	0.01
44	3.67	0.17	0.036	0.584	0.029	0.01
45	3.75	0.17	0.036	0.582	0.029	0.01
46	3.83	0.20	0.043	0.580	0.035	0.01
47	3.92	0.20	0.043	0.577	0.035	0.01
48	4.00	0.20	0.043	0.575	0.035	0.01
49	4.08	0.20	0.043	0.572	0.035	0.01
50	4.17	0.20	0.043	0.570	0.035	0.01
51	4.25	0.20	0.043	0.567	0.035	0.01
52	4.33	0.23	0.050	0.565	0.040	0.01
53	4.42	0.23	0.050	0.563	0.040	0.01
54	4.50	0.23	0.050	0.560	0.040	0.01
55	4.58	0.23	0.050	0.558	0.040	0.01
56	4.67	0.23	0.050	0.555	0.040	0.01
57	4.75	0.23	0.050	0.553	0.040	0.01
58	4.83	0.27	0.058	0.551	0.046	0.01
59	4.92	0.27	0.058	0.548	0.046	0.01
60	5.00	0.27	0.058	0.546	0.046	0.01
61	5.08	0.20	0.043	0.543	0.035	0.01
62	5.17	0.20	0.043	0.541	0.035	0.01
63	5.25	0.20	0.043	0.539	0.035	0.01
64	5.33	0.23	0.050	0.536	0.040	0.01
65	5.42	0.23	0.050	0.534	0.040	0.01
66	5.50	0.23	0.050	0.532	0.040	0.01
67	5.58	0.27	0.058	0.529	0.046	0.01
68	5.67	0.27	0.058	0.527	0.046	0.01
69	5.75	0.27	0.058	0.525	0.046	0.01
70	5.83	0.27	0.058	0.522	0.046	0.01
71	5.92	0.27	0.058	0.520	0.046	0.01
72	6.00	0.27	0.058	0.518	0.046	0.01
73	6.08	0.30	0.065	0.515	0.052	0.01
74	6.17	0.30	0.065	0.513	0.052	0.01
75	6.25	0.30	0.065	0.511	0.052	0.01
76	6.33	0.30	0.065	0.509	0.052	0.01
77	6.42	0.30	0.065	0.506	0.052	0.01
78	6.50	0.30	0.065	0.504	0.052	0.01
79	6.58	0.33	0.072	0.502	0.058	0.01
80	6.67	0.33	0.072	0.500	0.058	0.01
81	6.75	0.33	0.072	0.497	0.058	0.01
82	6.83	0.33	0.072	0.495	0.058	0.01
83	6.92	0.33	0.072	0.493	0.058	0.01
84	7.00	0.33	0.072	0.491	0.058	0.01
85	7.08	0.33	0.072	0.488	0.058	0.01
86	7.17	0.33	0.072	0.486	0.058	0.01
87	7.25	0.33	0.072	0.484	0.058	0.01
88	7.33	0.37	0.079	0.482	0.064	0.02
89	7.42	0.37	0.079	0.479	0.064	0.02
90	7.50	0.37	0.079	0.477	0.064	0.02
91	7.58	0.40	0.086	0.475	0.069	0.02
92	7.67	0.40	0.086	0.473	0.069	0.02

93	7.75	0.40	0.086	0.471	0.069	0.02
94	7.83	0.43	0.094	0.469	0.075	0.02
95	7.92	0.43	0.094	0.466	0.075	0.02
96	8.00	0.43	0.094	0.464	0.075	0.02
97	8.08	0.50	0.108	0.462	0.087	0.02
98	8.17	0.50	0.108	0.460	0.087	0.02
99	8.25	0.50	0.108	0.458	0.087	0.02
100	8.33	0.50	0.108	0.456	0.087	0.02
101	8.42	0.50	0.108	0.454	0.087	0.02
102	8.50	0.50	0.108	0.451	0.087	0.02
103	8.58	0.53	0.115	0.449	0.093	0.02
104	8.67	0.53	0.115	0.447	0.093	0.02
105	8.75	0.53	0.115	0.445	0.093	0.02
106	8.83	0.57	0.122	0.443	0.098	0.02
107	8.92	0.57	0.122	0.441	0.098	0.02
108	9.00	0.57	0.122	0.439	0.098	0.02
109	9.08	0.63	0.137	0.437	0.110	0.03
110	9.17	0.63	0.137	0.435	0.110	0.03
111	9.25	0.63	0.137	0.433	0.110	0.03
112	9.33	0.67	0.144	0.430	0.116	0.03
113	9.42	0.67	0.144	0.428	0.116	0.03
114	9.50	0.67	0.144	0.426	0.116	0.03
115	9.58	0.70	0.151	0.424	0.121	0.03
116	9.67	0.70	0.151	0.422	0.121	0.03
117	9.75	0.70	0.151	0.420	0.121	0.03
118	9.83	0.73	0.158	0.418	0.127	0.03
119	9.92	0.73	0.158	0.416	0.127	0.03
120	10.00	0.73	0.158	0.414	0.127	0.03
121	10.08	0.50	0.108	0.412	0.087	0.02
122	10.17	0.50	0.108	0.410	0.087	0.02
123	10.25	0.50	0.108	0.408	0.087	0.02
124	10.33	0.50	0.108	0.406	0.087	0.02
125	10.42	0.50	0.108	0.404	0.087	0.02
126	10.50	0.50	0.108	0.402	0.087	0.02
127	10.58	0.67	0.144	0.400	0.116	0.03
128	10.67	0.67	0.144	0.398	0.116	0.03
129	10.75	0.67	0.144	0.396	0.116	0.03
130	10.83	0.67	0.144	0.394	0.116	0.03
131	10.92	0.67	0.144	0.393	0.116	0.03
132	11.00	0.67	0.144	0.391	0.116	0.03
133	11.08	0.63	0.137	0.389	0.110	0.03
134	11.17	0.63	0.137	0.387	0.110	0.03
135	11.25	0.63	0.137	0.385	0.110	0.03
136	11.33	0.63	0.137	0.383	0.110	0.03
137	11.42	0.63	0.137	0.381	0.110	0.03
138	11.50	0.63	0.137	0.379	0.110	0.03
139	11.58	0.57	0.122	0.377	0.098	0.02
140	11.67	0.57	0.122	0.375	0.098	0.02
141	11.75	0.57	0.122	0.374	0.098	0.02
142	11.83	0.60	0.130	0.372	0.104	0.03
143	11.92	0.60	0.130	0.370	0.104	0.03
144	12.00	0.60	0.130	0.368	0.104	0.03
145	12.08	0.83	0.180	0.366	0.145	0.04
146	12.17	0.83	0.180	0.364	0.145	0.04
147	12.25	0.83	0.180	0.363	0.145	0.04
148	12.33	0.87	0.187	0.361	0.150	0.04
149	12.42	0.87	0.187	0.359	0.150	0.04
150	12.50	0.87	0.187	0.357	0.150	0.04
151	12.58	0.93	0.202	0.355	0.162	0.04
152	12.67	0.93	0.202	0.353	0.162	0.04
153	12.75	0.93	0.202	0.352	0.162	0.04
154	12.83	0.97	0.209	0.350	0.168	0.04
155	12.92	0.97	0.209	0.348	0.168	0.04
156	13.00	0.97	0.209	0.346	0.168	0.04
157	13.08	1.13	0.245	0.345	0.197	0.05
158	13.17	1.13	0.245	0.343	0.197	0.05
159	13.25	1.13	0.245	0.341	0.197	0.05
160	13.33	1.13	0.245	0.339	0.197	0.05
161	13.42	1.13	0.245	0.338	0.197	0.05
162	13.50	1.13	0.245	0.336	0.197	0.05
163	13.58	0.77	0.166	0.334	0.133	0.03

164	13.67	0.77	0.166	0.333	0.133	0.03
165	13.75	0.77	0.166	0.331	0.133	0.03
166	13.83	0.77	0.166	0.329	0.133	0.03
167	13.92	0.77	0.166	0.328	0.133	0.03
168	14.00	0.77	0.166	0.326	0.133	0.03
169	14.08	0.90	0.194	0.324	0.156	0.04
170	14.17	0.90	0.194	0.323	0.156	0.04
171	14.25	0.90	0.194	0.321	0.156	0.04
172	14.33	0.87	0.187	0.319	0.150	0.04
173	14.42	0.87	0.187	0.318	0.150	0.04
174	14.50	0.87	0.187	0.316	0.150	0.04
175	14.58	0.87	0.187	0.314	0.150	0.04
176	14.67	0.87	0.187	0.313	0.150	0.04
177	14.75	0.87	0.187	0.311	0.150	0.04
178	14.83	0.83	0.180	0.310	0.145	0.04
179	14.92	0.83	0.180	0.308	0.145	0.04
180	15.00	0.83	0.180	0.306	0.145	0.04
181	15.08	0.80	0.173	0.305	0.139	0.03
182	15.17	0.80	0.173	0.303	0.139	0.03
183	15.25	0.80	0.173	0.302	0.139	0.03
184	15.33	0.77	0.166	0.300	0.133	0.03
185	15.42	0.77	0.166	0.299	0.133	0.03
186	15.50	0.77	0.166	0.297	0.133	0.03
187	15.58	0.63	0.137	0.296	0.110	0.03
188	15.67	0.63	0.137	0.294	0.110	0.03
189	15.75	0.63	0.137	0.293	0.110	0.03
190	15.83	0.63	0.137	0.291	0.110	0.03
191	15.92	0.63	0.137	0.290	0.110	0.03
192	16.00	0.63	0.137	0.288	0.110	0.03
193	16.08	0.13	0.029	0.287	0.023	0.01
194	16.17	0.13	0.029	0.285	0.023	0.01
195	16.25	0.13	0.029	0.284	0.023	0.01
196	16.33	0.13	0.029	0.282	0.023	0.01
197	16.42	0.13	0.029	0.281	0.023	0.01
198	16.50	0.13	0.029	0.279	0.023	0.01
199	16.58	0.10	0.022	0.278	0.017	0.00
200	16.67	0.10	0.022	0.277	0.017	0.00
201	16.75	0.10	0.022	0.275	0.017	0.00
202	16.83	0.10	0.022	0.274	0.017	0.00
203	16.92	0.10	0.022	0.272	0.017	0.00
204	17.00	0.10	0.022	0.271	0.017	0.00
205	17.08	0.17	0.036	0.270	0.029	0.01
206	17.17	0.17	0.036	0.268	0.029	0.01
207	17.25	0.17	0.036	0.267	0.029	0.01
208	17.33	0.17	0.036	0.266	0.029	0.01
209	17.42	0.17	0.036	0.264	0.029	0.01
210	17.50	0.17	0.036	0.263	0.029	0.01
211	17.58	0.17	0.036	0.262	0.029	0.01
212	17.67	0.17	0.036	0.260	0.029	0.01
213	17.75	0.17	0.036	0.259	0.029	0.01
214	17.83	0.13	0.029	0.258	0.023	0.01
215	17.92	0.13	0.029	0.256	0.023	0.01
216	18.00	0.13	0.029	0.255	0.023	0.01
217	18.08	0.13	0.029	0.254	0.023	0.01
218	18.17	0.13	0.029	0.253	0.023	0.01
219	18.25	0.13	0.029	0.251	0.023	0.01
220	18.33	0.13	0.029	0.250	0.023	0.01
221	18.42	0.13	0.029	0.249	0.023	0.01
222	18.50	0.13	0.029	0.248	0.023	0.01
223	18.58	0.10	0.022	0.247	0.017	0.00
224	18.67	0.10	0.022	0.245	0.017	0.00
225	18.75	0.10	0.022	0.244	0.017	0.00
226	18.83	0.07	0.014	0.243	0.012	0.00
227	18.92	0.07	0.014	0.242	0.012	0.00
228	19.00	0.07	0.014	0.241	0.012	0.00
229	19.08	0.10	0.022	0.240	0.017	0.00
230	19.17	0.10	0.022	0.238	0.017	0.00
231	19.25	0.10	0.022	0.237	0.017	0.00
232	19.33	0.13	0.029	0.236	0.023	0.01
233	19.42	0.13	0.029	0.235	0.023	0.01
234	19.50	0.13	0.029	0.234	0.023	0.01

235	19.58	0.10	0.022	0.233	0.017	0.00
236	19.67	0.10	0.022	0.232	0.017	0.00
237	19.75	0.10	0.022	0.231	0.017	0.00
238	19.83	0.07	0.014	0.230	0.012	0.00
239	19.92	0.07	0.014	0.229	0.012	0.00
240	20.00	0.07	0.014	0.228	0.012	0.00
241	20.08	0.10	0.022	0.227	0.017	0.00
242	20.17	0.10	0.022	0.226	0.017	0.00
243	20.25	0.10	0.022	0.225	0.017	0.00
244	20.33	0.10	0.022	0.224	0.017	0.00
245	20.42	0.10	0.022	0.223	0.017	0.00
246	20.50	0.10	0.022	0.222	0.017	0.00
247	20.58	0.10	0.022	0.221	0.017	0.00
248	20.67	0.10	0.022	0.220	0.017	0.00
249	20.75	0.10	0.022	0.219	0.017	0.00
250	20.83	0.07	0.014	0.218	0.012	0.00
251	20.92	0.07	0.014	0.217	0.012	0.00
252	21.00	0.07	0.014	0.216	0.012	0.00
253	21.08	0.10	0.022	0.216	0.017	0.00
254	21.17	0.10	0.022	0.215	0.017	0.00
255	21.25	0.10	0.022	0.214	0.017	0.00
256	21.33	0.07	0.014	0.213	0.012	0.00
257	21.42	0.07	0.014	0.212	0.012	0.00
258	21.50	0.07	0.014	0.212	0.012	0.00
259	21.58	0.10	0.022	0.211	0.017	0.00
260	21.67	0.10	0.022	0.210	0.017	0.00
261	21.75	0.10	0.022	0.209	0.017	0.00
262	21.83	0.07	0.014	0.209	0.012	0.00
263	21.92	0.07	0.014	0.208	0.012	0.00
264	22.00	0.07	0.014	0.207	0.012	0.00
265	22.08	0.10	0.022	0.206	0.017	0.00
266	22.17	0.10	0.022	0.206	0.017	0.00
267	22.25	0.10	0.022	0.205	0.017	0.00
268	22.33	0.07	0.014	0.204	0.012	0.00
269	22.42	0.07	0.014	0.204	0.012	0.00
270	22.50	0.07	0.014	0.203	0.012	0.00
271	22.58	0.07	0.014	0.203	0.012	0.00
272	22.67	0.07	0.014	0.202	0.012	0.00
273	22.75	0.07	0.014	0.202	0.012	0.00
274	22.83	0.07	0.014	0.201	0.012	0.00
275	22.92	0.07	0.014	0.200	0.012	0.00
276	23.00	0.07	0.014	0.200	0.012	0.00
277	23.08	0.07	0.014	0.200	0.012	0.00
278	23.17	0.07	0.014	0.199	0.012	0.00
279	23.25	0.07	0.014	0.199	0.012	0.00
280	23.33	0.07	0.014	0.198	0.012	0.00
281	23.42	0.07	0.014	0.198	0.012	0.00
282	23.50	0.07	0.014	0.198	0.012	0.00
283	23.58	0.07	0.014	0.197	0.012	0.00
284	23.67	0.07	0.014	0.197	0.012	0.00
285	23.75	0.07	0.014	0.197	0.012	0.00
286	23.83	0.07	0.014	0.196	0.012	0.00
287	23.92	0.07	0.014	0.196	0.012	0.00
288	24.00	0.07	0.014	0.196	0.012	0.00
Sum =		100.0			Sum =	4.3

Flood volume = Effective rainfall 0.35(In)
times area 8.4(Ac.)/[(In)/(Ft.)] = 0.2(Ac.Ft)
Total soil loss = 1.45(In)
Total soil loss = 1.017(Ac.Ft)
Total rainfall = 1.80(In)
Flood volume = 10852.7 Cubic Feet
Total soil loss = 44293.3 Cubic Feet

Peak flow rate of this hydrograph = 0.382(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0000	0.00	Q				
0+15	0.0001	0.01	Q				
0+20	0.0001	0.01	Q				
0+25	0.0003	0.02	Q				
0+30	0.0004	0.02	Q				
0+35	0.0006	0.02	Q				
0+40	0.0007	0.03	Q				
0+45	0.0009	0.03	Q				
0+50	0.0011	0.03	Q				
0+55	0.0013	0.03	Q				
1+ 0	0.0016	0.03	Q				
1+ 5	0.0018	0.04	Q				
1+10	0.0021	0.04	Q				
1+15	0.0024	0.04	Q				
1+20	0.0026	0.04	Q				
1+25	0.0029	0.04	Q				
1+30	0.0031	0.04	Q				
1+35	0.0034	0.04	Q				
1+40	0.0036	0.04	Q				
1+45	0.0038	0.04	Q				
1+50	0.0041	0.04	Q				
1+55	0.0043	0.04	Q				
2+ 0	0.0046	0.04	Q				
2+ 5	0.0049	0.04	Q				
2+10	0.0052	0.04	Q				
2+15	0.0055	0.04	Q				
2+20	0.0058	0.05	Q				
2+25	0.0061	0.05	Q				
2+30	0.0064	0.05	QV				
2+35	0.0068	0.05	QV				
2+40	0.0071	0.05	QV				
2+45	0.0074	0.05	QV				
2+50	0.0078	0.05	QV				
2+55	0.0082	0.05	QV				
3+ 0	0.0086	0.06	QV				
3+ 5	0.0090	0.06	QV				
3+10	0.0094	0.06	QV				
3+15	0.0097	0.06	QV				
3+20	0.0101	0.06	QV				
3+25	0.0105	0.06	QV				
3+30	0.0110	0.06	QV				
3+35	0.0114	0.06	QV				
3+40	0.0118	0.06	QV				
3+45	0.0122	0.06	QV				
3+50	0.0126	0.06	Q V				
3+55	0.0130	0.06	Q V				
4+ 0	0.0134	0.06	Q V				
4+ 5	0.0139	0.07	Q V				
4+10	0.0143	0.07	Q V				
4+15	0.0148	0.07	Q V				
4+20	0.0153	0.07	Q V				
4+25	0.0158	0.07	Q V				
4+30	0.0163	0.07	Q V				
4+35	0.0168	0.08	Q V				
4+40	0.0173	0.08	Q V				
4+45	0.0179	0.08	Q V				
4+50	0.0184	0.08	Q V				
4+55	0.0190	0.08	Q V				
5+ 0	0.0196	0.08	Q V				
5+ 5	0.0202	0.09	Q V				
5+10	0.0208	0.09	Q V				
5+15	0.0214	0.08	Q V				
5+20	0.0219	0.08	Q V				
5+25	0.0225	0.08	Q V				
5+30	0.0230	0.08	Q V				
5+35	0.0236	0.08	Q V				
5+40	0.0241	0.08	Q V				

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 5+45      0.0247      0.09  Q  V      |          |          |          |
 5+50      0.0253      0.09  Q   V     |          |          |          |
 5+55      0.0260      0.09  Q   V     |          |          |          |
 6+ 0      0.0266      0.09  Q   V     |          |          |          |
 6+ 5      0.0272      0.09  Q   V     |          |          |          |
 6+10      0.0279      0.09  Q   V     |          |          |          |
 6+15      0.0286      0.10  Q   V     |          |          |          |
 6+20      0.0293      0.10  Q   V     |          |          |          |
 6+25      0.0300      0.10  Q   V     |          |          |          |
 6+30      0.0307      0.10  Q   V     |          |          |          |
 6+35      0.0314      0.10  Q    V    |          |          |          |
 6+40      0.0321      0.11  Q    V    |          |          |          |
 6+45      0.0329      0.11  Q    V    |          |          |          |
 6+50      0.0336      0.11  Q    V    |          |          |          |
 6+55      0.0344      0.11  Q    V    |          |          |          |
 7+ 0      0.0352      0.11  Q    V    |          |          |          |
 7+ 5      0.0360      0.12  Q    V    |          |          |          |
 7+10      0.0368      0.12  Q    V    |          |          |          |
 7+15      0.0376      0.12  Q     V   |          |          |          |
 7+20      0.0384      0.12  Q     V   |          |          |          |
 7+25      0.0392      0.12  Q     V   |          |          |          |
 7+30      0.0401      0.12  Q     V   |          |          |          |
 7+35      0.0409      0.12  Q     V   |          |          |          |
 7+40      0.0418      0.13  Q     V   |          |          |          |
 7+45      0.0427      0.13  Q     V   |          |          |          |
 7+50      0.0436      0.13  Q      V  |          |          |          |
 7+55      0.0446      0.14  Q      V  |          |          |          |
 8+ 0      0.0456      0.14  Q      V  |          |          |          |
 8+ 5      0.0466      0.15  Q      V  |          |          |          |
 8+10      0.0476      0.15  Q      V  |          |          |          |
 8+15      0.0487      0.16  Q      V  |          |          |          |
 8+20      0.0498      0.16  Q      V  |          |          |          |
 8+25      0.0509      0.17  Q       V |          |          |          |
 8+30      0.0521      0.17  Q       V |          |          |          |
 8+35      0.0532      0.17  Q       V |          |          |          |
 8+40      0.0544      0.17  Q       V |          |          |          |
 8+45      0.0557      0.18  Q       V |          |          |          |
 8+50      0.0569      0.18  Q        V|          |          |          |
 8+55      0.0582      0.18  Q        V|          |          |          |
 9+ 0      0.0595      0.19  Q        V|          |          |          |
 9+ 5      0.0608      0.19  Q        V|          |          |          |
 9+10      0.0621      0.20  Q        V|          |          |          |
 9+15      0.0635      0.20  Q         V          |          |          |
 9+20      0.0650      0.21  Q         V          |          |          |
 9+25      0.0664      0.21  Q         V          |          |          |
 9+30      0.0680      0.22  Q         V          |          |          |
 9+35      0.0695      0.22  Q         |V         |          |          |
 9+40      0.0711      0.23  Q         |V         |          |          |
 9+45      0.0727      0.23  Q         |V         |          |          |
 9+50      0.0743      0.24  Q         |V         |          |          |
 9+55      0.0760      0.24  Q         | V        |          |          |
10+ 0      0.0777      0.25  Q         | V        |          |          |
10+ 5      0.0794      0.25  Q         | V        |          |          |
10+10      0.0810      0.24  Q         |  V       |          |          |
10+15      0.0826      0.23  Q         |  V       |          |          |
10+20      0.0841      0.22  Q         |  V       |          |          |
10+25      0.0856      0.21  Q         |  V       |          |          |
10+30      0.0869      0.20  Q         |  V       |          |          |
10+35      0.0883      0.20  Q         |   V      |          |          |
10+40      0.0897      0.20  Q         |   V      |          |          |
10+45      0.0911      0.21  Q         |   V      |          |          |
10+50      0.0926      0.22  Q         |   V      |          |          |
10+55      0.0942      0.23  Q         |    V     |          |          |
11+ 0      0.0958      0.23  Q         |    V     |          |          |
11+ 5      0.0974      0.23  Q         |    V     |          |          |
11+10      0.0990      0.23  Q         |    V     |          |          |
11+15      0.1006      0.23  Q         |     V    |          |          |
11+20      0.1022      0.23  Q         |     V    |          |          |
11+25      0.1037      0.23  Q         |     V    |          |          |
11+30      0.1053      0.23  Q         |     V    |          |          |
11+35      0.1069      0.23  Q         |      V   |          |          |
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11+40      0.1085      0.23  Q         |      V  |         |         |
11+45      0.1100      0.22  Q         |      V  |         |         |
11+50      0.1115      0.22  Q         |      V  |         |         |
11+55      0.1130      0.22  Q         |       V |         |         |
12+ 0      0.1145      0.22  Q         |       V |         |         |
12+ 5      0.1160      0.22  Q         |       V |         |         |
12+10      0.1175      0.23  Q         |       V |         |         |
12+15      0.1192      0.24  Q         |        V|         |         |
12+20      0.1210      0.26  |Q        |        V|         |         |
12+25      0.1228      0.27  |Q        |        V|         |         |
12+30      0.1247      0.28  |Q        |         V         |         |
12+35      0.1267      0.29  |Q        |         V         |         |
12+40      0.1287      0.29  |Q        |         V         |         |
12+45      0.1308      0.30  |Q        |         V         |         |
12+50      0.1329      0.31  |Q        |         |V        |         |
12+55      0.1351      0.32  |Q        |         |V        |         |
13+ 0      0.1373      0.32  |Q        |         | V       |         |
13+ 5      0.1396      0.33  |Q        |         | V       |         |
13+10      0.1419      0.34  |Q        |         | V       |         |
13+15      0.1443      0.35  |Q        |         |  V      |         |
13+20      0.1468      0.36  |Q        |         |  V      |         |
13+25      0.1494      0.37  |Q        |         |  V      |         |
13+30      0.1520      0.38  |Q        |         |   V     |         |
13+35      0.1546      0.38  |Q        |         |   V     |         |
13+40      0.1572      0.37  |Q        |         |    V    |         |
13+45      0.1597      0.36  |Q        |         |    V    |         |
13+50      0.1620      0.33  |Q        |         |     V   |         |
13+55      0.1642      0.32  |Q        |         |     V   |         |
14+ 0      0.1663      0.31  |Q        |         |     V   |         |
14+ 5      0.1684      0.30  |Q        |         |      V  |         |
14+10      0.1705      0.30  |Q        |         |      V  |         |
14+15      0.1726      0.31  |Q        |         |      V  |         |
14+20      0.1747      0.31  |Q        |         |       V |         |
14+25      0.1769      0.32  |Q        |         |       V |         |
14+30      0.1791      0.32  |Q        |         |       V |         |
14+35      0.1813      0.32  |Q        |         |        V|         |
14+40      0.1835      0.32  |Q        |         |        V|         |
14+45      0.1857      0.32  |Q        |         |        V|         |
14+50      0.1879      0.32  |Q        |         |         V         |
14+55      0.1900      0.31  |Q        |         |         V         |
15+ 0      0.1922      0.31  |Q        |         |         V         |
15+ 5      0.1943      0.31  |Q        |         |         |V        |
15+10      0.1964      0.31  |Q        |         |         |V        |
15+15      0.1985      0.30  |Q        |         |         |V        |
15+20      0.2006      0.30  |Q        |         |         | V       |
15+25      0.2026      0.30  |Q        |         |         | V       |
15+30      0.2046      0.29  |Q        |         |         | V       |
15+35      0.2066      0.29  |Q        |         |         |  V      |
15+40      0.2085      0.28  |Q        |         |         |  V      |
15+45      0.2104      0.27  |Q        |         |         |  V      |
15+50      0.2122      0.26  |Q        |         |         |   V     |
15+55      0.2140      0.25  |Q        |         |         |   V     |
16+ 0      0.2157      0.25  Q         |         |         |   V     |
16+ 5      0.2173      0.24  Q         |         |         |   V     |
16+10      0.2189      0.22  Q         |         |         |    V    |
16+15      0.2202      0.19  Q         |         |         |    V    |
16+20      0.2213      0.16  Q         |         |         |    V    |
16+25      0.2222      0.13  Q         |         |         |    V    |
16+30      0.2229      0.11  Q         |         |         |    V    |
16+35      0.2236      0.10  Q         |         |         |    V    |
16+40      0.2243      0.09  Q         |         |         |     V   |
16+45      0.2248      0.08  Q         |         |         |     V   |
16+50      0.2254      0.08  Q         |         |         |     V   |
16+55      0.2258      0.07  Q         |         |         |     V   |
17+ 0      0.2263      0.06  Q         |         |         |     V   |
17+ 5      0.2267      0.06  Q         |         |         |     V   |
17+10      0.2271      0.06  Q         |         |         |     V   |
17+15      0.2275      0.06  Q         |         |         |     V   |
17+20      0.2280      0.06  Q         |         |         |     V   |
17+25      0.2284      0.06  Q         |         |         |     V   |
17+30      0.2288      0.06  Q         |         |         |     V   |
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17+35      0.2293      0.06  Q        |         |         |     V   |
17+40      0.2297      0.06  Q        |         |         |     V   |
17+45      0.2301      0.06  Q        |         |         |     V   |
17+50      0.2306      0.06  Q        |         |         |      V  |
17+55      0.2310      0.06  Q        |         |         |      V  |
18+ 0      0.2314      0.06  Q        |         |         |      V  |
18+ 5      0.2318      0.06  Q        |         |         |      V  |
18+10      0.2321      0.05  Q        |         |         |      V  |
18+15      0.2325      0.05  Q        |         |         |      V  |
18+20      0.2328      0.05  Q        |         |         |      V  |
18+25      0.2332      0.05  Q        |         |         |      V  |
18+30      0.2335      0.05  Q        |         |         |      V  |
18+35      0.2339      0.05  Q        |         |         |      V  |
18+40      0.2342      0.05  Q        |         |         |      V  |
18+45      0.2345      0.05  Q        |         |         |      V  |
18+50      0.2348      0.04  Q        |         |         |      V  |
18+55      0.2351      0.04  Q        |         |         |      V  |
19+ 0      0.2353      0.04  Q        |         |         |      V  |
19+ 5      0.2356      0.03  Q        |         |         |      V  |
19+10      0.2358      0.03  Q        |         |         |      V  |
19+15      0.2360      0.03  Q        |         |         |      V  |
19+20      0.2363      0.04  Q        |         |         |      V  |
19+25      0.2365      0.04  Q        |         |         |      V  |
19+30      0.2368      0.04  Q        |         |         |       V |
19+35      0.2371      0.04  Q        |         |         |       V |
19+40      0.2374      0.04  Q        |         |         |       V |
19+45      0.2377      0.04  Q        |         |         |       V |
19+50      0.2380      0.04  Q        |         |         |       V |
19+55      0.2382      0.04  Q        |         |         |       V |
20+ 0      0.2385      0.03  Q        |         |         |       V |
20+ 5      0.2387      0.03  Q        |         |         |       V |
20+10      0.2389      0.03  Q        |         |         |       V |
20+15      0.2391      0.03  Q        |         |         |       V |
20+20      0.2393      0.03  Q        |         |         |       V |
20+25      0.2396      0.03  Q        |         |         |       V |
20+30      0.2398      0.04  Q        |         |         |       V |
20+35      0.2401      0.04  Q        |         |         |       V |
20+40      0.2403      0.04  Q        |         |         |       V |
20+45      0.2406      0.04  Q        |         |         |       V |
20+50      0.2408      0.04  Q        |         |         |       V |
20+55      0.2410      0.03  Q        |         |         |       V |
21+ 0      0.2413      0.03  Q        |         |         |       V |
21+ 5      0.2415      0.03  Q        |         |         |       V |
21+10      0.2417      0.03  Q        |         |         |       V |
21+15      0.2419      0.03  Q        |         |         |       V |
21+20      0.2421      0.03  Q        |         |         |       V |
21+25      0.2423      0.03  Q        |         |         |       V |
21+30      0.2426      0.03  Q        |         |         |       V |
21+35      0.2428      0.03  Q        |         |         |       V |
21+40      0.2430      0.03  Q        |         |         |        V|
21+45      0.2432      0.03  Q        |         |         |        V|
21+50      0.2434      0.03  Q        |         |         |        V|
21+55      0.2436      0.03  Q        |         |         |        V|
22+ 0      0.2438      0.03  Q        |         |         |        V|
22+ 5      0.2440      0.03  Q        |         |         |        V|
22+10      0.2442      0.03  Q        |         |         |        V|
22+15      0.2444      0.03  Q        |         |         |        V|
22+20      0.2446      0.03  Q        |         |         |        V|
22+25      0.2449      0.03  Q        |         |         |        V|
22+30      0.2451      0.03  Q        |         |         |        V|
22+35      0.2453      0.03  Q        |         |         |        V|
22+40      0.2455      0.03  Q        |         |         |        V|
22+45      0.2456      0.03  Q        |         |         |        V|
22+50      0.2458      0.03  Q        |         |         |        V|
22+55      0.2460      0.03  Q        |         |         |        V|
23+ 0      0.2462      0.03  Q        |         |         |        V|
23+ 5      0.2463      0.03  Q        |         |         |        V|
23+10      0.2465      0.03  Q        |         |         |        V|
23+15      0.2467      0.02  Q        |         |         |        V|
23+20      0.2469      0.02  Q        |         |         |        V|
23+25      0.2470      0.02  Q        |         |         |        V|
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  23+30      0.2472     0.02  Q        |         |         |        V|
  23+35      0.2474     0.02  Q        |         |         |        V|
  23+40      0.2475     0.02  Q        |         |         |        V|
  23+45      0.2477     0.02  Q        |         |         |        V|
  23+50      0.2479     0.02  Q        |         |         |        V|
  23+55      0.2480     0.02  Q        |         |         |        V|
  24+ 0      0.2482     0.02  Q        |         |         |        V|
  24+ 5      0.2484     0.02  Q        |         |         |        V|
  24+10      0.2485     0.02  Q        |         |         |        V|
  24+15      0.2486     0.02  Q        |         |         |        V|
  24+20      0.2487     0.01  Q        |         |         |        V|
  24+25      0.2488     0.01  Q        |         |         |        V|
  24+30      0.2489     0.01  Q        |         |         |        V|
  24+35      0.2489     0.01  Q        |         |         |        V|
  24+40      0.2489     0.01  Q        |         |         |        V|
  24+45      0.2490     0.00  Q        |         |         |        V|
  24+50      0.2490     0.00  Q        |         |         |        V|
  24+55      0.2490     0.00  Q        |         |         |        V|
  25+ 0      0.2490     0.00  Q        |         |         |        V|
  25+ 5      0.2491     0.00  Q        |         |         |        V|
  25+10      0.2491     0.00  Q        |         |         |        V|
  25+15      0.2491     0.00  Q        |         |         |        V|
  25+20      0.2491     0.00  Q        |         |         |        V|
  25+25      0.2491     0.00  Q        |         |         |        V|
  25+30      0.2491     0.00  Q        |         |         |        V|
  25+35      0.2491     0.00  Q        |         |         |        V|
  25+40      0.2491     0.00  Q        |         |         |        V|
  25+45      0.2491     0.00  Q        |         |         |        V|
  25+50      0.2491     0.00  Q        |         |         |        V|
  25+55      0.2491     0.00  Q        |         |         |        V|
  26+ 0      0.2491     0.00  Q        |         |         |        V|
  26+ 5      0.2491     0.00  Q        |         |         |        V|
  26+10      0.2491     0.00  Q        |         |         |        V|
  26+15      0.2491     0.00  Q        |         |         |        V|
  26+20      0.2491     0.00  Q        |         |         |        V|
  26+25      0.2491     0.00  Q        |         |         |         V
-------------------------------------------------------------------------
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APPENDIX E: POST-PROJECT CONDITION ONSITE UNIT HYDROGRAPH HYDROLOGY

APPENDIX E.1: AREA A

10-YEAR, 24-HOUR

U n i t H y d r o g r a p h A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
Study date 08/02/10 File: ARAP2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6045

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARAP

Drainage Area = 20.19(Ac.) = 0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 20.19(Ac.) = 0.032 Sq. Mi.
USER Entry of lag time in hours
Lag time = 0.184 Hr.
Lag time = 11.05 Min.
25% of lag time = 2.76 Min.
40% of lag time = 4.42 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
20.19	1.80	36.34

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
20.19	4.50	90.86

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 4.500(In)

Point rain (area averaged) = 2.911(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.911(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
20.190	56.00	0.826

Total Area Entered = 20.19(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
56.0	56.0	0.511	0.826	0.131	1.000	0.131
					Sum (F) =	0.131

Area averaged mean soil loss (F) (In/Hr) = 0.131
Minimum soil loss rate ((In/Hr)) = 0.066
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.239

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	45.265	5.258	1.070
2	0.167	90.531	22.153	4.508
3	0.250	135.796	28.656	5.831
4	0.333	181.061	14.910	3.034
5	0.417	226.326	7.354	1.496
6	0.500	271.592	5.002	1.018
7	0.583	316.857	3.710	0.755
8	0.667	362.122	2.799	0.570
9	0.750	407.387	2.179	0.443
10	0.833	452.653	1.639	0.333
11	0.917	497.918	1.398	0.284
12	1.000	543.183	1.193	0.243
13	1.083	588.448	0.931	0.189
14	1.167	633.714	0.767	0.156
15	1.250	678.979	0.603	0.123
16	1.333	724.244	0.464	0.094
17	1.417	769.509	0.453	0.092
18	1.500	814.775	0.531	0.108
		Sum = 100.000	Sum=	20.348

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.023	0.232	0.006	0.02
2	0.17	0.07	0.023	0.231	0.006	0.02
3	0.25	0.07	0.023	0.231	0.006	0.02
4	0.33	0.10	0.035	0.230	0.008	0.03
5	0.42	0.10	0.035	0.229	0.008	0.03
6	0.50	0.10	0.035	0.228	0.008	0.03
7	0.58	0.10	0.035	0.227	0.008	0.03
8	0.67	0.10	0.035	0.226	0.008	0.03
9	0.75	0.10	0.035	0.225	0.008	0.03
10	0.83	0.13	0.047	0.224	0.011	0.04
11	0.92	0.13	0.047	0.223	0.011	0.04
12	1.00	0.13	0.047	0.223	0.011	0.04
13	1.08	0.10	0.035	0.222	0.008	0.03
14	1.17	0.10	0.035	0.221	0.008	0.03
15	1.25	0.10	0.035	0.220	0.008	0.03
16	1.33	0.10	0.035	0.219	0.008	0.03
17	1.42	0.10	0.035	0.218	0.008	0.03
18	1.50	0.10	0.035	0.217	0.008	0.03
19	1.58	0.10	0.035	0.216	0.008	0.03
20	1.67	0.10	0.035	0.216	0.008	0.03
21	1.75	0.10	0.035	0.215	0.008	0.03
22	1.83	0.13	0.047	0.214	0.011	0.04
23	1.92	0.13	0.047	0.213	0.011	0.04
24	2.00	0.13	0.047	0.212	0.011	0.04
25	2.08	0.13	0.047	0.211	0.011	0.04
26	2.17	0.13	0.047	0.210	0.011	0.04
27	2.25	0.13	0.047	0.210	0.011	0.04
28	2.33	0.13	0.047	0.209	0.011	0.04
29	2.42	0.13	0.047	0.208	0.011	0.04
30	2.50	0.13	0.047	0.207	0.011	0.04
31	2.58	0.17	0.058	0.206	0.014	0.04
32	2.67	0.17	0.058	0.205	0.014	0.04
33	2.75	0.17	0.058	0.204	0.014	0.04

34	2.83	0.17	0.058	0.204	0.014	0.04
35	2.92	0.17	0.058	0.203	0.014	0.04
36	3.00	0.17	0.058	0.202	0.014	0.04
37	3.08	0.17	0.058	0.201	0.014	0.04
38	3.17	0.17	0.058	0.200	0.014	0.04
39	3.25	0.17	0.058	0.199	0.014	0.04
40	3.33	0.17	0.058	0.199	0.014	0.04
41	3.42	0.17	0.058	0.198	0.014	0.04
42	3.50	0.17	0.058	0.197	0.014	0.04
43	3.58	0.17	0.058	0.196	0.014	0.04
44	3.67	0.17	0.058	0.195	0.014	0.04
45	3.75	0.17	0.058	0.194	0.014	0.04
46	3.83	0.20	0.070	0.194	0.017	0.05
47	3.92	0.20	0.070	0.193	0.017	0.05
48	4.00	0.20	0.070	0.192	0.017	0.05
49	4.08	0.20	0.070	0.191	0.017	0.05
50	4.17	0.20	0.070	0.190	0.017	0.05
51	4.25	0.20	0.070	0.190	0.017	0.05
52	4.33	0.23	0.081	0.189	0.019	0.06
53	4.42	0.23	0.081	0.188	0.019	0.06
54	4.50	0.23	0.081	0.187	0.019	0.06
55	4.58	0.23	0.081	0.186	0.019	0.06
56	4.67	0.23	0.081	0.186	0.019	0.06
57	4.75	0.23	0.081	0.185	0.019	0.06
58	4.83	0.27	0.093	0.184	0.022	0.07
59	4.92	0.27	0.093	0.183	0.022	0.07
60	5.00	0.27	0.093	0.182	0.022	0.07
61	5.08	0.20	0.070	0.182	0.017	0.05
62	5.17	0.20	0.070	0.181	0.017	0.05
63	5.25	0.20	0.070	0.180	0.017	0.05
64	5.33	0.23	0.081	0.179	0.019	0.06
65	5.42	0.23	0.081	0.178	0.019	0.06
66	5.50	0.23	0.081	0.178	0.019	0.06
67	5.58	0.27	0.093	0.177	0.022	0.07
68	5.67	0.27	0.093	0.176	0.022	0.07
69	5.75	0.27	0.093	0.175	0.022	0.07
70	5.83	0.27	0.093	0.175	0.022	0.07
71	5.92	0.27	0.093	0.174	0.022	0.07
72	6.00	0.27	0.093	0.173	0.022	0.07
73	6.08	0.30	0.105	0.172	0.025	0.08
74	6.17	0.30	0.105	0.171	0.025	0.08
75	6.25	0.30	0.105	0.171	0.025	0.08
76	6.33	0.30	0.105	0.170	0.025	0.08
77	6.42	0.30	0.105	0.169	0.025	0.08
78	6.50	0.30	0.105	0.168	0.025	0.08
79	6.58	0.33	0.116	0.168	0.028	0.09
80	6.67	0.33	0.116	0.167	0.028	0.09
81	6.75	0.33	0.116	0.166	0.028	0.09
82	6.83	0.33	0.116	0.165	0.028	0.09
83	6.92	0.33	0.116	0.165	0.028	0.09
84	7.00	0.33	0.116	0.164	0.028	0.09
85	7.08	0.33	0.116	0.163	0.028	0.09
86	7.17	0.33	0.116	0.162	0.028	0.09
87	7.25	0.33	0.116	0.162	0.028	0.09
88	7.33	0.37	0.128	0.161	0.031	0.10
89	7.42	0.37	0.128	0.160	0.031	0.10
90	7.50	0.37	0.128	0.159	0.031	0.10
91	7.58	0.40	0.140	0.159	0.033	0.11
92	7.67	0.40	0.140	0.158	0.033	0.11
93	7.75	0.40	0.140	0.157	0.033	0.11
94	7.83	0.43	0.151	0.157	0.036	0.12
95	7.92	0.43	0.151	0.156	0.036	0.12
96	8.00	0.43	0.151	0.155	0.036	0.12
97	8.08	0.50	0.175	0.154	---	0.02
98	8.17	0.50	0.175	0.154	---	0.02
99	8.25	0.50	0.175	0.153	---	0.02
100	8.33	0.50	0.175	0.152	---	0.02
101	8.42	0.50	0.175	0.152	---	0.02
102	8.50	0.50	0.175	0.151	---	0.02
103	8.58	0.53	0.186	0.150	---	0.04
104	8.67	0.53	0.186	0.149	---	0.04

105	8.75	0.53	0.186	0.149	---	0.04
106	8.83	0.57	0.198	0.148	---	0.05
107	8.92	0.57	0.198	0.147	---	0.05
108	9.00	0.57	0.198	0.147	---	0.05
109	9.08	0.63	0.221	0.146	---	0.08
110	9.17	0.63	0.221	0.145	---	0.08
111	9.25	0.63	0.221	0.145	---	0.08
112	9.33	0.67	0.233	0.144	---	0.09
113	9.42	0.67	0.233	0.143	---	0.09
114	9.50	0.67	0.233	0.142	---	0.09
115	9.58	0.70	0.244	0.142	---	0.10
116	9.67	0.70	0.244	0.141	---	0.10
117	9.75	0.70	0.244	0.140	---	0.10
118	9.83	0.73	0.256	0.140	---	0.12
119	9.92	0.73	0.256	0.139	---	0.12
120	10.00	0.73	0.256	0.138	---	0.12
121	10.08	0.50	0.175	0.138	---	0.04
122	10.17	0.50	0.175	0.137	---	0.04
123	10.25	0.50	0.175	0.136	---	0.04
124	10.33	0.50	0.175	0.136	---	0.04
125	10.42	0.50	0.175	0.135	---	0.04
126	10.50	0.50	0.175	0.134	---	0.04
127	10.58	0.67	0.233	0.134	---	0.10
128	10.67	0.67	0.233	0.133	---	0.10
129	10.75	0.67	0.233	0.132	---	0.10
130	10.83	0.67	0.233	0.132	---	0.10
131	10.92	0.67	0.233	0.131	---	0.10
132	11.00	0.67	0.233	0.131	---	0.10
133	11.08	0.63	0.221	0.130	---	0.09
134	11.17	0.63	0.221	0.129	---	0.09
135	11.25	0.63	0.221	0.129	---	0.09
136	11.33	0.63	0.221	0.128	---	0.09
137	11.42	0.63	0.221	0.127	---	0.09
138	11.50	0.63	0.221	0.127	---	0.09
139	11.58	0.57	0.198	0.126	---	0.07
140	11.67	0.57	0.198	0.125	---	0.07
141	11.75	0.57	0.198	0.125	---	0.07
142	11.83	0.60	0.210	0.124	---	0.09
143	11.92	0.60	0.210	0.124	---	0.09
144	12.00	0.60	0.210	0.123	---	0.09
145	12.08	0.83	0.291	0.122	---	0.17
146	12.17	0.83	0.291	0.122	---	0.17
147	12.25	0.83	0.291	0.121	---	0.17
148	12.33	0.87	0.303	0.121	---	0.18
149	12.42	0.87	0.303	0.120	---	0.18
150	12.50	0.87	0.303	0.119	---	0.18
151	12.58	0.93	0.326	0.119	---	0.21
152	12.67	0.93	0.326	0.118	---	0.21
153	12.75	0.93	0.326	0.118	---	0.21
154	12.83	0.97	0.338	0.117	---	0.22
155	12.92	0.97	0.338	0.116	---	0.22
156	13.00	0.97	0.338	0.116	---	0.22
157	13.08	1.13	0.396	0.115	---	0.28
158	13.17	1.13	0.396	0.115	---	0.28
159	13.25	1.13	0.396	0.114	---	0.28
160	13.33	1.13	0.396	0.113	---	0.28
161	13.42	1.13	0.396	0.113	---	0.28
162	13.50	1.13	0.396	0.112	---	0.28
163	13.58	0.77	0.268	0.112	---	0.16
164	13.67	0.77	0.268	0.111	---	0.16
165	13.75	0.77	0.268	0.111	---	0.16
166	13.83	0.77	0.268	0.110	---	0.16
167	13.92	0.77	0.268	0.109	---	0.16
168	14.00	0.77	0.268	0.109	---	0.16
169	14.08	0.90	0.314	0.108	---	0.21
170	14.17	0.90	0.314	0.108	---	0.21
171	14.25	0.90	0.314	0.107	---	0.21
172	14.33	0.87	0.303	0.107	---	0.20
173	14.42	0.87	0.303	0.106	---	0.20
174	14.50	0.87	0.303	0.106	---	0.20
175	14.58	0.87	0.303	0.105	---	0.20

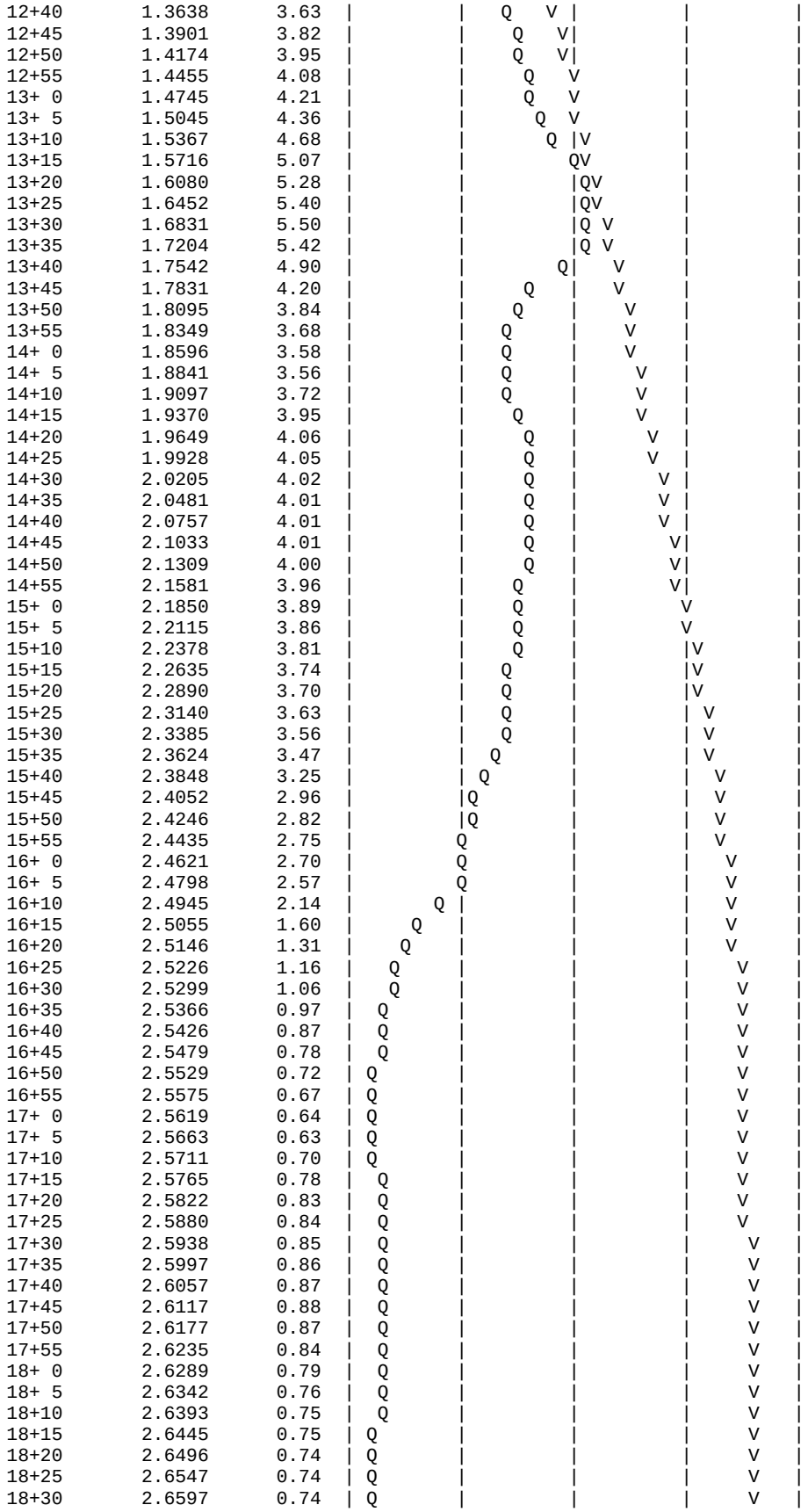
176	14.67	0.87	0.303	0.104	---	0.20
177	14.75	0.87	0.303	0.104	---	0.20
178	14.83	0.83	0.291	0.103	---	0.19
179	14.92	0.83	0.291	0.103	---	0.19
180	15.00	0.83	0.291	0.102	---	0.19
181	15.08	0.80	0.279	0.102	---	0.18
182	15.17	0.80	0.279	0.101	---	0.18
183	15.25	0.80	0.279	0.101	---	0.18
184	15.33	0.77	0.268	0.100	---	0.17
185	15.42	0.77	0.268	0.100	---	0.17
186	15.50	0.77	0.268	0.099	---	0.17
187	15.58	0.63	0.221	0.099	---	0.12
188	15.67	0.63	0.221	0.098	---	0.12
189	15.75	0.63	0.221	0.098	---	0.12
190	15.83	0.63	0.221	0.097	---	0.12
191	15.92	0.63	0.221	0.097	---	0.12
192	16.00	0.63	0.221	0.096	---	0.12
193	16.08	0.13	0.047	0.096	0.011	0.04
194	16.17	0.13	0.047	0.095	0.011	0.04
195	16.25	0.13	0.047	0.095	0.011	0.04
196	16.33	0.13	0.047	0.094	0.011	0.04
197	16.42	0.13	0.047	0.094	0.011	0.04
198	16.50	0.13	0.047	0.093	0.011	0.04
199	16.58	0.10	0.035	0.093	0.008	0.03
200	16.67	0.10	0.035	0.092	0.008	0.03
201	16.75	0.10	0.035	0.092	0.008	0.03
202	16.83	0.10	0.035	0.091	0.008	0.03
203	16.92	0.10	0.035	0.091	0.008	0.03
204	17.00	0.10	0.035	0.091	0.008	0.03
205	17.08	0.17	0.058	0.090	0.014	0.04
206	17.17	0.17	0.058	0.090	0.014	0.04
207	17.25	0.17	0.058	0.089	0.014	0.04
208	17.33	0.17	0.058	0.089	0.014	0.04
209	17.42	0.17	0.058	0.088	0.014	0.04
210	17.50	0.17	0.058	0.088	0.014	0.04
211	17.58	0.17	0.058	0.087	0.014	0.04
212	17.67	0.17	0.058	0.087	0.014	0.04
213	17.75	0.17	0.058	0.087	0.014	0.04
214	17.83	0.13	0.047	0.086	0.011	0.04
215	17.92	0.13	0.047	0.086	0.011	0.04
216	18.00	0.13	0.047	0.085	0.011	0.04
217	18.08	0.13	0.047	0.085	0.011	0.04
218	18.17	0.13	0.047	0.084	0.011	0.04
219	18.25	0.13	0.047	0.084	0.011	0.04
220	18.33	0.13	0.047	0.084	0.011	0.04
221	18.42	0.13	0.047	0.083	0.011	0.04
222	18.50	0.13	0.047	0.083	0.011	0.04
223	18.58	0.10	0.035	0.082	0.008	0.03
224	18.67	0.10	0.035	0.082	0.008	0.03
225	18.75	0.10	0.035	0.082	0.008	0.03
226	18.83	0.07	0.023	0.081	0.006	0.02
227	18.92	0.07	0.023	0.081	0.006	0.02
228	19.00	0.07	0.023	0.080	0.006	0.02
229	19.08	0.10	0.035	0.080	0.008	0.03
230	19.17	0.10	0.035	0.080	0.008	0.03
231	19.25	0.10	0.035	0.079	0.008	0.03
232	19.33	0.13	0.047	0.079	0.011	0.04
233	19.42	0.13	0.047	0.079	0.011	0.04
234	19.50	0.13	0.047	0.078	0.011	0.04
235	19.58	0.10	0.035	0.078	0.008	0.03
236	19.67	0.10	0.035	0.077	0.008	0.03
237	19.75	0.10	0.035	0.077	0.008	0.03
238	19.83	0.07	0.023	0.077	0.006	0.02
239	19.92	0.07	0.023	0.076	0.006	0.02
240	20.00	0.07	0.023	0.076	0.006	0.02
241	20.08	0.10	0.035	0.076	0.008	0.03
242	20.17	0.10	0.035	0.075	0.008	0.03
243	20.25	0.10	0.035	0.075	0.008	0.03
244	20.33	0.10	0.035	0.075	0.008	0.03
245	20.42	0.10	0.035	0.074	0.008	0.03
246	20.50	0.10	0.035	0.074	0.008	0.03

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247  20.58     0.10      0.035         0.074     0.008         0.03
248  20.67     0.10      0.035         0.074     0.008         0.03
249  20.75     0.10      0.035         0.073     0.008         0.03
250  20.83     0.07      0.023         0.073     0.006         0.02
251  20.92     0.07      0.023         0.073     0.006         0.02
252  21.00     0.07      0.023         0.072     0.006         0.02
253  21.08     0.10      0.035         0.072     0.008         0.03
254  21.17     0.10      0.035         0.072     0.008         0.03
255  21.25     0.10      0.035         0.071     0.008         0.03
256  21.33     0.07      0.023         0.071     0.006         0.02
257  21.42     0.07      0.023         0.071     0.006         0.02
258  21.50     0.07      0.023         0.071     0.006         0.02
259  21.58     0.10      0.035         0.070     0.008         0.03
260  21.67     0.10      0.035         0.070     0.008         0.03
261  21.75     0.10      0.035         0.070     0.008         0.03
262  21.83     0.07      0.023         0.070     0.006         0.02
263  21.92     0.07      0.023         0.069     0.006         0.02
264  22.00     0.07      0.023         0.069     0.006         0.02
265  22.08     0.10      0.035         0.069     0.008         0.03
266  22.17     0.10      0.035         0.069     0.008         0.03
267  22.25     0.10      0.035         0.069     0.008         0.03
268  22.33     0.07      0.023         0.068     0.006         0.02
269  22.42     0.07      0.023         0.068     0.006         0.02
270  22.50     0.07      0.023         0.068     0.006         0.02
271  22.58     0.07      0.023         0.068     0.006         0.02
272  22.67     0.07      0.023         0.068     0.006         0.02
273  22.75     0.07      0.023         0.067     0.006         0.02
274  22.83     0.07      0.023         0.067     0.006         0.02
275  22.92     0.07      0.023         0.067     0.006         0.02
276  23.00     0.07      0.023         0.067     0.006         0.02
277  23.08     0.07      0.023         0.067     0.006         0.02
278  23.17     0.07      0.023         0.067     0.006         0.02
279  23.25     0.07      0.023         0.066     0.006         0.02
280  23.33     0.07      0.023         0.066     0.006         0.02
281  23.42     0.07      0.023         0.066     0.006         0.02
282  23.50     0.07      0.023         0.066     0.006         0.02
283  23.58     0.07      0.023         0.066     0.006         0.02
284  23.67     0.07      0.023         0.066     0.006         0.02
285  23.75     0.07      0.023         0.066     0.006         0.02
286  23.83     0.07      0.023         0.066     0.006         0.02
287  23.92     0.07      0.023         0.066     0.006         0.02
288  24.00     0.07      0.023         0.066     0.006         0.02
    Sum =     100.0                                    Sum =    20.6
      Flood volume = Effective rainfall      1.71(In)
       times area      20.2(Ac.)/[(In)/(Ft.)] =       2.9(Ac.Ft)
      Total soil loss =      1.20(In)
      Total soil loss =     2.016(Ac.Ft)
      Total rainfall =      2.91(In)
      Flood volume =      125516.4 Cubic Feet
      Total soil loss =       87807.0 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      5.496(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0001      0.02  Q         |         |         |         |
   0+10       0.0008      0.10  Q         |         |         |         |
   0+15       0.0022      0.20  Q         |         |         |         |
   0+20       0.0040      0.27  VQ        |         |         |         |
   0+25       0.0063      0.33  VQ        |         |         |         |
   0+30       0.0091      0.40  VQ        |         |         |         |
   0+35       0.0121      0.44  VQ        |         |         |         |
   0+40       0.0153      0.47  VQ        |         |         |         |
   0+45       0.0187      0.48  VQ        |         |         |         |
```

```
0+50      0.0221     0.50  V Q       |         |         |         |
0+55      0.0259     0.55  V Q       |         |         |         |
1+ 0      0.0302     0.61  V Q       |         |         |         |
1+ 5      0.0346     0.64  V Q       |         |         |         |
1+10      0.0388     0.62  V Q       |         |         |         |
1+15      0.0428     0.58  V Q       |         |         |         |
1+20      0.0467     0.56  V Q       |         |         |         |
1+25      0.0505     0.56  V Q       |         |         |         |
1+30      0.0543     0.55  V Q       |         |         |         |
1+35      0.0581     0.55  V Q       |         |         |         |
1+40      0.0619     0.55  V Q       |         |         |         |
1+45      0.0657     0.55  V Q       |         |         |         |
1+50      0.0695     0.56  V Q       |         |         |         |
1+55      0.0736     0.60  |VQ       |         |         |         |
2+ 0      0.0781     0.65  |VQ       |         |         |         |
2+ 5      0.0827     0.67  |VQ       |         |         |         |
2+10      0.0874     0.68  |VQ       |         |         |         |
2+15      0.0922     0.69  |VQ       |         |         |         |
2+20      0.0970     0.70  |VQ       |         |         |         |
2+25      0.1018     0.70  |VQ       |         |         |         |
2+30      0.1067     0.71  |VQ       |         |         |         |
2+35      0.1117     0.72  |VQ       |         |         |         |
2+40      0.1169     0.76  |V Q      |         |         |         |
2+45      0.1225     0.82  |V Q      |         |         |         |
2+50      0.1283     0.84  |V Q      |         |         |         |
2+55      0.1343     0.86  |V Q      |         |         |         |
3+ 0      0.1402     0.87  |V Q      |         |         |         |
3+ 5      0.1463     0.88  | VQ      |         |         |         |
3+10      0.1524     0.88  | VQ      |         |         |         |
3+15      0.1585     0.89  | VQ      |         |         |         |
3+20      0.1646     0.89  | VQ      |         |         |         |
3+25      0.1708     0.89  | VQ      |         |         |         |
3+30      0.1769     0.89  | VQ      |         |         |         |
3+35      0.1831     0.90  | VQ      |         |         |         |
3+40      0.1893     0.90  | VQ      |         |         |         |
3+45      0.1955     0.90  | VQ      |         |         |         |
3+50      0.2017     0.91  | VQ      |         |         |         |
3+55      0.2083     0.95  | VQ      |         |         |         |
4+ 0      0.2152     1.00  | V Q     |         |         |         |
4+ 5      0.2223     1.03  |  VQ     |         |         |         |
4+10      0.2295     1.04  |  VQ     |         |         |         |
4+15      0.2367     1.05  |  VQ     |         |         |         |
4+20      0.2441     1.07  |  VQ     |         |         |         |
4+25      0.2517     1.11  |  VQ     |         |         |         |
4+30      0.2598     1.17  |  VQ     |         |         |         |
4+35      0.2680     1.20  |  VQ     |         |         |         |
4+40      0.2764     1.21  |  VQ     |         |         |         |
4+45      0.2848     1.23  |  VQ     |         |         |         |
4+50      0.2934     1.24  |   Q     |         |         |         |
4+55      0.3023     1.29  |   VQ    |         |         |         |
5+ 0      0.3115     1.35  |   VQ    |         |         |         |
5+ 5      0.3209     1.36  |   VQ    |         |         |         |
5+10      0.3298     1.29  |   VQ    |         |         |         |
5+15      0.3381     1.20  |   Q     |         |         |         |
5+20      0.3461     1.17  |   Q     |         |         |         |
5+25      0.3543     1.19  |   Q     |         |         |         |
5+30      0.3628     1.23  |   QV    |         |         |         |
5+35      0.3714     1.25  |    Q    |         |         |         |
5+40      0.3803     1.30  |    Q    |         |         |         |
5+45      0.3897     1.36  |    Q    |         |         |         |
5+50      0.3992     1.38  |    Q    |         |         |         |
5+55      0.4089     1.40  |    Q    |         |         |         |
6+ 0      0.4186     1.41  |    Q    |         |         |         |
6+ 5      0.4284     1.43  |    Q    |         |         |         |
6+10      0.4385     1.47  |    QV   |         |         |         |
6+15      0.4490     1.53  |     Q   |         |         |         |
6+20      0.4598     1.56  |     Q   |         |         |         |
6+25      0.4706     1.57  |     Q   |         |         |         |
6+30      0.4815     1.58  |     Q   |         |         |         |
6+35      0.4925     1.60  |     Q   |         |         |         |
6+40      0.5039     1.65  |     Q   |         |         |         |
```

```
 6+45      0.5157      1.71  |     QV  |         |         |         |
 6+50      0.5276      1.74  |     QV  |         |         |         |
 6+55      0.5397      1.75  |      Q  |         |         |         |
 7+ 0      0.5519      1.77  |      Q  |         |         |         |
 7+ 5      0.5641      1.77  |      Q  |         |         |         |
 7+10      0.5764      1.78  |      QV |         |         |         |
 7+15      0.5887      1.79  |      QV |         |         |         |
 7+20      0.6011      1.80  |      QV |         |         |         |
 7+25      0.6137      1.84  |      QV |         |         |         |
 7+30      0.6268      1.90  |      QV |         |         |         |
 7+35      0.6401      1.94  |      QV |         |         |         |
 7+40      0.6539      1.99  |      Q V|         |         |         |
 7+45      0.6680      2.05  |       QV|         |         |         |
 7+50      0.6824      2.10  |       QV|         |         |         |
 7+55      0.6973      2.16  |       QV|         |         |         |
 8+ 0      0.7126      2.22  |       QV|         |         |         |
 8+ 5      0.7274      2.16  |       Q V         |         |         |
 8+10      0.7394      1.75  |     Q   V         |         |         |
 8+15      0.7478      1.21  |   Q     V         |         |         |
 8+20      0.7543      0.95  |  Q      V         |         |         |
 8+25      0.7600      0.82  |  Q      V         |         |         |
 8+30      0.7651      0.75  | Q       V         |         |         |
 8+35      0.7700      0.70  | Q       V         |         |         |
 8+40      0.7749      0.72  | Q       V         |         |         |
 8+45      0.7802      0.76  |  Q      V         |         |         |
 8+50      0.7856      0.79  |  Q      V         |         |         |
 8+55      0.7915      0.85  |  Q      V         |         |         |
 9+ 0      0.7979      0.92  |  Q      |V        |         |         |
 9+ 5      0.8047      0.99  |  Q      |V        |         |         |
 9+10      0.8124      1.12  |   Q     |V        |         |         |
 9+15      0.8212      1.28  |    Q    |V        |         |         |
 9+20      0.8307      1.38  |    Q    |V        |         |         |
 9+25      0.8409      1.48  |    Q    |V        |         |         |
 9+30      0.8518      1.58  |     Q   |V        |         |         |
 9+35      0.8633      1.67  |     Q   |V        |         |         |
 9+40      0.8754      1.77  |      Q  | V       |         |         |
 9+45      0.8884      1.88  |      Q  | V       |         |         |
 9+50      0.9019      1.96  |      Q  | V       |         |         |
 9+55      0.9161      2.06  |       Q | V       |         |         |
10+ 0      0.9310      2.17  |       Q | V       |         |         |
10+ 5      0.9458      2.15  |       Q |  V      |         |         |
10+10      0.9584      1.83  |      Q  |  V      |         |         |
10+15      0.9679      1.39  |    Q    |  V      |         |         |
10+20      0.9760      1.17  |   Q     |  V      |         |         |
10+25      0.9834      1.08  |   Q     |  V      |         |         |
10+30      0.9904      1.02  |   Q     |  V      |         |         |
10+35      0.9976      1.04  |   Q     |  V      |         |         |
10+40      1.0064      1.28  |    Q    |  V      |         |         |
10+45      1.0174      1.60  |     Q   |   V     |         |         |
10+50      1.0295      1.76  |      Q  |   V     |         |         |
10+55      1.0422      1.84  |      Q  |   V     |         |         |
11+ 0      1.0553      1.90  |      Q  |   V     |         |         |
11+ 5      1.0686      1.93  |      Q  |   V     |         |         |
11+10      1.0818      1.91  |      Q  |    V    |         |         |
11+15      1.0947      1.88  |      Q  |    V    |         |         |
11+20      1.1076      1.86  |      Q  |    V    |         |         |
11+25      1.1204      1.87  |      Q  |    V    |         |         |
11+30      1.1334      1.88  |      Q  |    V    |         |         |
11+35      1.1462      1.87  |      Q  |    V    |         |         |
11+40      1.1584      1.78  |      Q  |     V   |         |         |
11+45      1.1698      1.66  |     Q   |     V   |         |         |
11+50      1.1809      1.61  |     Q   |     V   |         |         |
11+55      1.1923      1.64  |     Q   |     V   |         |         |
12+ 0      1.2040      1.70  |     Q   |     V   |         |         |
12+ 5      1.2165      1.82  |      Q  |     V   |         |         |
12+10      1.2317      2.20  |       Q |      V  |         |         |
12+15      1.2502      2.69  |         Q      V  |         |         |
12+20      1.2706      2.96  |         |Q     V  |         |         |
12+25      1.2923      3.15  |         | Q    V  |         |         |
12+30      1.3151      3.31  |         |  Q    V |         |         |
12+35      1.3389      3.44  |         |  Q    V |         |         |
```



12+40	1.3638	3.63	
12+45	1.3901	3.82	
12+50	1.4174	3.95	
12+55	1.4455	4.08	
13+ 0	1.4745	4.21	
13+ 5	1.5045	4.36	
13+10	1.5367	4.68	
13+15	1.5716	5.07	
13+20	1.6080	5.28	
13+25	1.6452	5.40	
13+30	1.6831	5.50	
13+35	1.7204	5.42	
13+40	1.7542	4.90	
13+45	1.7831	4.20	
13+50	1.8095	3.84	
13+55	1.8349	3.68	
14+ 0	1.8596	3.58	
14+ 5	1.8841	3.56	
14+10	1.9097	3.72	
14+15	1.9370	3.95	
14+20	1.9649	4.06	
14+25	1.9928	4.05	
14+30	2.0205	4.02	
14+35	2.0481	4.01	
14+40	2.0757	4.01	
14+45	2.1033	4.01	
14+50	2.1309	4.00	
14+55	2.1581	3.96	
15+ 0	2.1850	3.89	
15+ 5	2.2115	3.86	
15+10	2.2378	3.81	
15+15	2.2635	3.74	
15+20	2.2890	3.70	
15+25	2.3140	3.63	
15+30	2.3385	3.56	
15+35	2.3624	3.47	
15+40	2.3848	3.25	
15+45	2.4052	2.96	
15+50	2.4246	2.82	
15+55	2.4435	2.75	
16+ 0	2.4621	2.70	
16+ 5	2.4798	2.57	
16+10	2.4945	2.14	
16+15	2.5055	1.60	
16+20	2.5146	1.31	
16+25	2.5226	1.16	
16+30	2.5299	1.06	
16+35	2.5366	0.97	
16+40	2.5426	0.87	
16+45	2.5479	0.78	
16+50	2.5529	0.72	
16+55	2.5575	0.67	
17+ 0	2.5619	0.64	
17+ 5	2.5663	0.63	
17+10	2.5711	0.70	
17+15	2.5765	0.78	
17+20	2.5822	0.83	
17+25	2.5880	0.84	
17+30	2.5938	0.85	
17+35	2.5997	0.86	
17+40	2.6057	0.87	
17+45	2.6117	0.88	
17+50	2.6177	0.87	
17+55	2.6235	0.84	
18+ 0	2.6289	0.79	
18+ 5	2.6342	0.76	
18+10	2.6393	0.75	
18+15	2.6445	0.75	
18+20	2.6496	0.74	
18+25	2.6547	0.74	
18+30	2.6597	0.74	

```
18+35      2.6647     0.72  | Q       |         |         |     V   |
18+40      2.6694     0.68  | Q       |         |         |      V  |
18+45      2.6737     0.63  | Q       |         |         |      V  |
18+50      2.6778     0.59  | Q       |         |         |      V  |
18+55      2.6815     0.53  | Q       |         |         |      V  |
19+ 0      2.6847     0.47  |Q        |         |         |      V  |
19+ 5      2.6878     0.45  |Q        |         |         |      V  |
19+10      2.6910     0.47  |Q        |         |         |      V  |
19+15      2.6945     0.51  | Q       |         |         |      V  |
19+20      2.6982     0.53  | Q       |         |         |      V  |
19+25      2.7022     0.58  | Q       |         |         |      V  |
19+30      2.7065     0.63  | Q       |         |         |      V  |
19+35      2.7110     0.65  | Q       |         |         |      V  |
19+40      2.7153     0.63  | Q       |         |         |      V  |
19+45      2.7194     0.59  | Q       |         |         |      V  |
19+50      2.7232     0.56  | Q       |         |         |      V  |
19+55      2.7267     0.51  | Q       |         |         |      V  |
20+ 0      2.7298     0.45  |Q        |         |         |      V  |
20+ 5      2.7328     0.43  |Q        |         |         |      V  |
20+10      2.7359     0.46  |Q        |         |         |      V  |
20+15      2.7393     0.50  |Q        |         |         |       V |
20+20      2.7429     0.52  | Q       |         |         |       V |
20+25      2.7465     0.52  | Q       |         |         |       V |
20+30      2.7502     0.53  | Q       |         |         |       V |
20+35      2.7538     0.53  | Q       |         |         |       V |
20+40      2.7575     0.53  | Q       |         |         |       V |
20+45      2.7612     0.54  | Q       |         |         |       V |
20+50      2.7648     0.53  | Q       |         |         |       V |
20+55      2.7682     0.49  |Q        |         |         |       V |
21+ 0      2.7712     0.44  |Q        |         |         |       V |
21+ 5      2.7741     0.42  |Q        |         |         |       V |
21+10      2.7771     0.45  |Q        |         |         |       V |
21+15      2.7805     0.49  |Q        |         |         |       V |
21+20      2.7840     0.50  | Q       |         |         |       V |
21+25      2.7872     0.47  |Q        |         |         |       V |
21+30      2.7901     0.42  |Q        |         |         |       V |
21+35      2.7929     0.41  |Q        |         |         |       V |
21+40      2.7960     0.44  |Q        |         |         |       V |
21+45      2.7993     0.48  |Q        |         |         |       V |
21+50      2.8027     0.50  |Q        |         |         |       V |
21+55      2.8059     0.47  |Q        |         |         |       V |
22+ 0      2.8088     0.42  |Q        |         |         |       V |
22+ 5      2.8116     0.41  |Q        |         |         |        V|
22+10      2.8146     0.44  |Q        |         |         |        V|
22+15      2.8180     0.48  |Q        |         |         |        V|
22+20      2.8214     0.49  |Q        |         |         |        V|
22+25      2.8246     0.46  |Q        |         |         |        V|
22+30      2.8274     0.42  |Q        |         |         |        V|
22+35      2.8302     0.40  |Q        |         |         |        V|
22+40      2.8329     0.39  |Q        |         |         |        V|
22+45      2.8355     0.38  |Q        |         |         |        V|
22+50      2.8381     0.38  |Q        |         |         |        V|
22+55      2.8406     0.37  |Q        |         |         |        V|
23+ 0      2.8432     0.37  |Q        |         |         |        V|
23+ 5      2.8457     0.37  |Q        |         |         |        V|
23+10      2.8483     0.37  |Q        |         |         |        V|
23+15      2.8508     0.36  |Q        |         |         |        V|
23+20      2.8533     0.36  |Q        |         |         |        V|
23+25      2.8558     0.36  |Q        |         |         |        V|
23+30      2.8583     0.36  |Q        |         |         |        V|
23+35      2.8608     0.36  |Q        |         |         |        V|
23+40      2.8633     0.36  |Q        |         |         |        V|
23+45      2.8657     0.36  |Q        |         |         |        V|
23+50      2.8682     0.36  |Q        |         |         |        V|
23+55      2.8707     0.36  |Q        |         |         |        V|
24+ 0      2.8732     0.36  |Q        |         |         |        V|
24+ 5      2.8756     0.34  |Q        |         |         |        V|
24+10      2.8774     0.26  |Q        |         |         |        V|
24+15      2.8784     0.16  Q        |         |         |        V|
24+20      2.8792     0.10  Q        |         |         |        V|
24+25      2.8797     0.08  Q        |         |         |        V|
```

```
   24+30       2.8801      0.06  Q         |         |         |        V|
   24+35       2.8804      0.05  Q         |         |         |        V|
   24+40       2.8807      0.04  Q         |         |         |        V|
   24+45       2.8809      0.03  Q         |         |         |        V|
   24+50       2.8810      0.02  Q         |         |         |        V|
   24+55       2.8812      0.02  Q         |         |         |        V|
   25+ 0       2.8813      0.01  Q         |         |         |        V|
   25+ 5       2.8813      0.01  Q         |         |         |        V|
   25+10       2.8814      0.01  Q         |         |         |        V|
   25+15       2.8814      0.01  Q         |         |         |        V|
   25+20       2.8814      0.00  Q         |         |         |        V|
   25+25       2.8815      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

2-YEAR, 24-HOUR

```
       U n i t   H y d r o g r a p h   A n a l y s i s

       Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
              Study date  08/02/10 File: ARAP242.out

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
------------------------------------------------------------------------------

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978


Program License Serial Number 6045

------------------------------------------------------------------------
 English (in-lb) Input Units Used
 English Rainfall Data (Inches) Input Values Used

 English Units used in output format



------------------------------------------------------------------------
NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARAP

------------------------------------------------------------------------
Drainage Area =      20.19(Ac.)  =      0.032 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment =      20.19(Ac.)  =      0.032 Sq. Mi.
USER Entry of lag time in hours
Lag time =    0.190 Hr.
Lag time =    11.42 Min.
25% of lag time =     2.85 Min.
40% of lag time =     4.57 Min.
Unit time =     5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow =     0.00(CFS)

2 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           1.80                 36.34

100 YEAR Area rainfall data:


Area(Ac.)[1]       Rainfall(In)[2]      Weighting[1*2]
       20.19           4.50                 90.86

STORM EVENT (YEAR) =    2.00
Area Averaged 2-Year Rainfall =    1.800(In)
Area Averaged 100-Year Rainfall =    4.500(In)

Point rain (area averaged) =    1.800(In)
Areal adjustment factor =  100.00 %
Adjusted average point rain =    1.800(In)

Sub-Area Data:
Area(Ac.)         Runoff Index   Impervious %
    20.190           56.00          0.826
 Total Area Entered =     20.19(Ac.)


RI    RI   Infil. Rate Impervious   Adj. Infil. Rate  Area%     F
AMC2 AMC-1     (In/Hr)    (Dec.%)     (In/Hr)      (Dec.)    (In/Hr)
56.0  36.0      0.706     0.826        0.181       1.000      0.181
                                                 Sum (F) =   0.181
```

Area averaged mean soil loss (F) (In/Hr) = 0.181
Minimum soil loss rate ((In/Hr)) = 0.091
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.239

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	43.791	4.998	1.017
2	0.167	87.581	20.937	4.260
3	0.250	131.372	28.317	5.762
4	0.333	175.162	15.587	3.172
5	0.417	218.953	7.611	1.549
6	0.500	262.743	5.105	1.039
7	0.583	306.534	3.806	0.775
8	0.667	350.324	2.845	0.579
9	0.750	394.115	2.272	0.462
10	0.833	437.905	1.730	0.352
11	0.917	481.696	1.383	0.281
12	1.000	525.486	1.258	0.256
13	1.083	569.277	0.977	0.199
14	1.167	613.067	0.808	0.164
15	1.250	656.858	0.654	0.133
16	1.333	700.648	0.500	0.102
17	1.417	744.439	0.438	0.089
18	1.500	788.229	0.438	0.089
19	1.583	832.020	0.337	0.069
		Sum = 100.000	Sum=	20.348

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	0.321	0.003	0.01
2	0.17	0.07	0.014	0.320	0.003	0.01
3	0.25	0.07	0.014	0.319	0.003	0.01
4	0.33	0.10	0.022	0.317	0.005	0.02
5	0.42	0.10	0.022	0.316	0.005	0.02
6	0.50	0.10	0.022	0.315	0.005	0.02
7	0.58	0.10	0.022	0.314	0.005	0.02
8	0.67	0.10	0.022	0.313	0.005	0.02
9	0.75	0.10	0.022	0.311	0.005	0.02
10	0.83	0.13	0.029	0.310	0.007	0.02
11	0.92	0.13	0.029	0.309	0.007	0.02
12	1.00	0.13	0.029	0.308	0.007	0.02
13	1.08	0.10	0.022	0.306	0.005	0.02
14	1.17	0.10	0.022	0.305	0.005	0.02
15	1.25	0.10	0.022	0.304	0.005	0.02
16	1.33	0.10	0.022	0.303	0.005	0.02
17	1.42	0.10	0.022	0.302	0.005	0.02
18	1.50	0.10	0.022	0.300	0.005	0.02
19	1.58	0.10	0.022	0.299	0.005	0.02
20	1.67	0.10	0.022	0.298	0.005	0.02
21	1.75	0.10	0.022	0.297	0.005	0.02
22	1.83	0.13	0.029	0.296	0.007	0.02
23	1.92	0.13	0.029	0.294	0.007	0.02
24	2.00	0.13	0.029	0.293	0.007	0.02
25	2.08	0.13	0.029	0.292	0.007	0.02
26	2.17	0.13	0.029	0.291	0.007	0.02
27	2.25	0.13	0.029	0.290	0.007	0.02
28	2.33	0.13	0.029	0.288	0.007	0.02
29	2.42	0.13	0.029	0.287	0.007	0.02
30	2.50	0.13	0.029	0.286	0.007	0.02
31	2.58	0.17	0.036	0.285	0.009	0.03
32	2.67	0.17	0.036	0.284	0.009	0.03

33	2.75	0.17	0.036	0.283	0.009	0.03
34	2.83	0.17	0.036	0.281	0.009	0.03
35	2.92	0.17	0.036	0.280	0.009	0.03
36	3.00	0.17	0.036	0.279	0.009	0.03
37	3.08	0.17	0.036	0.278	0.009	0.03
38	3.17	0.17	0.036	0.277	0.009	0.03
39	3.25	0.17	0.036	0.276	0.009	0.03
40	3.33	0.17	0.036	0.275	0.009	0.03
41	3.42	0.17	0.036	0.273	0.009	0.03
42	3.50	0.17	0.036	0.272	0.009	0.03
43	3.58	0.17	0.036	0.271	0.009	0.03
44	3.67	0.17	0.036	0.270	0.009	0.03
45	3.75	0.17	0.036	0.269	0.009	0.03
46	3.83	0.20	0.043	0.268	0.010	0.03
47	3.92	0.20	0.043	0.267	0.010	0.03
48	4.00	0.20	0.043	0.265	0.010	0.03
49	4.08	0.20	0.043	0.264	0.010	0.03
50	4.17	0.20	0.043	0.263	0.010	0.03
51	4.25	0.20	0.043	0.262	0.010	0.03
52	4.33	0.23	0.050	0.261	0.012	0.04
53	4.42	0.23	0.050	0.260	0.012	0.04
54	4.50	0.23	0.050	0.259	0.012	0.04
55	4.58	0.23	0.050	0.258	0.012	0.04
56	4.67	0.23	0.050	0.256	0.012	0.04
57	4.75	0.23	0.050	0.255	0.012	0.04
58	4.83	0.27	0.058	0.254	0.014	0.04
59	4.92	0.27	0.058	0.253	0.014	0.04
60	5.00	0.27	0.058	0.252	0.014	0.04
61	5.08	0.20	0.043	0.251	0.010	0.03
62	5.17	0.20	0.043	0.250	0.010	0.03
63	5.25	0.20	0.043	0.249	0.010	0.03
64	5.33	0.23	0.050	0.248	0.012	0.04
65	5.42	0.23	0.050	0.247	0.012	0.04
66	5.50	0.23	0.050	0.246	0.012	0.04
67	5.58	0.27	0.058	0.244	0.014	0.04
68	5.67	0.27	0.058	0.243	0.014	0.04
69	5.75	0.27	0.058	0.242	0.014	0.04
70	5.83	0.27	0.058	0.241	0.014	0.04
71	5.92	0.27	0.058	0.240	0.014	0.04
72	6.00	0.27	0.058	0.239	0.014	0.04
73	6.08	0.30	0.065	0.238	0.015	0.05
74	6.17	0.30	0.065	0.237	0.015	0.05
75	6.25	0.30	0.065	0.236	0.015	0.05
76	6.33	0.30	0.065	0.235	0.015	0.05
77	6.42	0.30	0.065	0.234	0.015	0.05
78	6.50	0.30	0.065	0.233	0.015	0.05
79	6.58	0.33	0.072	0.232	0.017	0.05
80	6.67	0.33	0.072	0.231	0.017	0.05
81	6.75	0.33	0.072	0.230	0.017	0.05
82	6.83	0.33	0.072	0.229	0.017	0.05
83	6.92	0.33	0.072	0.228	0.017	0.05
84	7.00	0.33	0.072	0.227	0.017	0.05
85	7.08	0.33	0.072	0.226	0.017	0.05
86	7.17	0.33	0.072	0.225	0.017	0.05
87	7.25	0.33	0.072	0.223	0.017	0.05
88	7.33	0.37	0.079	0.222	0.019	0.06
89	7.42	0.37	0.079	0.221	0.019	0.06
90	7.50	0.37	0.079	0.220	0.019	0.06
91	7.58	0.40	0.086	0.219	0.021	0.07
92	7.67	0.40	0.086	0.218	0.021	0.07
93	7.75	0.40	0.086	0.217	0.021	0.07
94	7.83	0.43	0.094	0.216	0.022	0.07
95	7.92	0.43	0.094	0.215	0.022	0.07
96	8.00	0.43	0.094	0.214	0.022	0.07
97	8.08	0.50	0.108	0.213	0.026	0.08
98	8.17	0.50	0.108	0.212	0.026	0.08
99	8.25	0.50	0.108	0.211	0.026	0.08
100	8.33	0.50	0.108	0.210	0.026	0.08
101	8.42	0.50	0.108	0.209	0.026	0.08
102	8.50	0.50	0.108	0.208	0.026	0.08
103	8.58	0.53	0.115	0.207	0.028	0.09

104	8.67	0.53	0.115	0.207	0.028	0.09
105	8.75	0.53	0.115	0.206	0.028	0.09
106	8.83	0.57	0.122	0.205	0.029	0.09
107	8.92	0.57	0.122	0.204	0.029	0.09
108	9.00	0.57	0.122	0.203	0.029	0.09
109	9.08	0.63	0.137	0.202	0.033	0.10
110	9.17	0.63	0.137	0.201	0.033	0.10
111	9.25	0.63	0.137	0.200	0.033	0.10
112	9.33	0.67	0.144	0.199	0.034	0.11
113	9.42	0.67	0.144	0.198	0.034	0.11
114	9.50	0.67	0.144	0.197	0.034	0.11
115	9.58	0.70	0.151	0.196	0.036	0.12
116	9.67	0.70	0.151	0.195	0.036	0.12
117	9.75	0.70	0.151	0.194	0.036	0.12
118	9.83	0.73	0.158	0.193	0.038	0.12
119	9.92	0.73	0.158	0.192	0.038	0.12
120	10.00	0.73	0.158	0.191	0.038	0.12
121	10.08	0.50	0.108	0.190	0.026	0.08
122	10.17	0.50	0.108	0.189	0.026	0.08
123	10.25	0.50	0.108	0.189	0.026	0.08
124	10.33	0.50	0.108	0.188	0.026	0.08
125	10.42	0.50	0.108	0.187	0.026	0.08
126	10.50	0.50	0.108	0.186	0.026	0.08
127	10.58	0.67	0.144	0.185	0.034	0.11
128	10.67	0.67	0.144	0.184	0.034	0.11
129	10.75	0.67	0.144	0.183	0.034	0.11
130	10.83	0.67	0.144	0.182	0.034	0.11
131	10.92	0.67	0.144	0.181	0.034	0.11
132	11.00	0.67	0.144	0.180	0.034	0.11
133	11.08	0.63	0.137	0.180	0.033	0.10
134	11.17	0.63	0.137	0.179	0.033	0.10
135	11.25	0.63	0.137	0.178	0.033	0.10
136	11.33	0.63	0.137	0.177	0.033	0.10
137	11.42	0.63	0.137	0.176	0.033	0.10
138	11.50	0.63	0.137	0.175	0.033	0.10
139	11.58	0.57	0.122	0.174	0.029	0.09
140	11.67	0.57	0.122	0.173	0.029	0.09
141	11.75	0.57	0.122	0.173	0.029	0.09
142	11.83	0.60	0.130	0.172	0.031	0.10
143	11.92	0.60	0.130	0.171	0.031	0.10
144	12.00	0.60	0.130	0.170	0.031	0.10
145	12.08	0.83	0.180	0.169	---	0.01
146	12.17	0.83	0.180	0.168	---	0.01
147	12.25	0.83	0.180	0.167	---	0.01
148	12.33	0.87	0.187	0.167	---	0.02
149	12.42	0.87	0.187	0.166	---	0.02
150	12.50	0.87	0.187	0.165	---	0.02
151	12.58	0.93	0.202	0.164	---	0.04
152	12.67	0.93	0.202	0.163	---	0.04
153	12.75	0.93	0.202	0.162	---	0.04
154	12.83	0.97	0.209	0.162	---	0.05
155	12.92	0.97	0.209	0.161	---	0.05
156	13.00	0.97	0.209	0.160	---	0.05
157	13.08	1.13	0.245	0.159	---	0.09
158	13.17	1.13	0.245	0.158	---	0.09
159	13.25	1.13	0.245	0.158	---	0.09
160	13.33	1.13	0.245	0.157	---	0.09
161	13.42	1.13	0.245	0.156	---	0.09
162	13.50	1.13	0.245	0.155	---	0.09
163	13.58	0.77	0.166	0.154	---	0.01
164	13.67	0.77	0.166	0.154	---	0.01
165	13.75	0.77	0.166	0.153	---	0.01
166	13.83	0.77	0.166	0.152	---	0.01
167	13.92	0.77	0.166	0.151	---	0.01
168	14.00	0.77	0.166	0.150	---	0.02
169	14.08	0.90	0.194	0.150	---	0.04
170	14.17	0.90	0.194	0.149	---	0.05
171	14.25	0.90	0.194	0.148	---	0.05
172	14.33	0.87	0.187	0.147	---	0.04
173	14.42	0.87	0.187	0.147	---	0.04
174	14.50	0.87	0.187	0.146	---	0.04

175	14.58	0.87	0.187	0.145	---	0.04
176	14.67	0.87	0.187	0.144	---	0.04
177	14.75	0.87	0.187	0.144	---	0.04
178	14.83	0.83	0.180	0.143	---	0.04
179	14.92	0.83	0.180	0.142	---	0.04
180	15.00	0.83	0.180	0.141	---	0.04
181	15.08	0.80	0.173	0.141	---	0.03
182	15.17	0.80	0.173	0.140	---	0.03
183	15.25	0.80	0.173	0.139	---	0.03
184	15.33	0.77	0.166	0.139	---	0.03
185	15.42	0.77	0.166	0.138	---	0.03
186	15.50	0.77	0.166	0.137	---	0.03
187	15.58	0.63	0.137	0.136	---	0.00
188	15.67	0.63	0.137	0.136	---	0.00
189	15.75	0.63	0.137	0.135	---	0.00
190	15.83	0.63	0.137	0.134	---	0.00
191	15.92	0.63	0.137	0.134	---	0.00
192	16.00	0.63	0.137	0.133	---	0.00
193	16.08	0.13	0.029	0.132	0.007	0.02
194	16.17	0.13	0.029	0.132	0.007	0.02
195	16.25	0.13	0.029	0.131	0.007	0.02
196	16.33	0.13	0.029	0.130	0.007	0.02
197	16.42	0.13	0.029	0.130	0.007	0.02
198	16.50	0.13	0.029	0.129	0.007	0.02
199	16.58	0.10	0.022	0.128	0.005	0.02
200	16.67	0.10	0.022	0.128	0.005	0.02
201	16.75	0.10	0.022	0.127	0.005	0.02
202	16.83	0.10	0.022	0.126	0.005	0.02
203	16.92	0.10	0.022	0.126	0.005	0.02
204	17.00	0.10	0.022	0.125	0.005	0.02
205	17.08	0.17	0.036	0.125	0.009	0.03
206	17.17	0.17	0.036	0.124	0.009	0.03
207	17.25	0.17	0.036	0.123	0.009	0.03
208	17.33	0.17	0.036	0.123	0.009	0.03
209	17.42	0.17	0.036	0.122	0.009	0.03
210	17.50	0.17	0.036	0.121	0.009	0.03
211	17.58	0.17	0.036	0.121	0.009	0.03
212	17.67	0.17	0.036	0.120	0.009	0.03
213	17.75	0.17	0.036	0.120	0.009	0.03
214	17.83	0.13	0.029	0.119	0.007	0.02
215	17.92	0.13	0.029	0.118	0.007	0.02
216	18.00	0.13	0.029	0.118	0.007	0.02
217	18.08	0.13	0.029	0.117	0.007	0.02
218	18.17	0.13	0.029	0.117	0.007	0.02
219	18.25	0.13	0.029	0.116	0.007	0.02
220	18.33	0.13	0.029	0.116	0.007	0.02
221	18.42	0.13	0.029	0.115	0.007	0.02
222	18.50	0.13	0.029	0.114	0.007	0.02
223	18.58	0.10	0.022	0.114	0.005	0.02
224	18.67	0.10	0.022	0.113	0.005	0.02
225	18.75	0.10	0.022	0.113	0.005	0.02
226	18.83	0.07	0.014	0.112	0.003	0.01
227	18.92	0.07	0.014	0.112	0.003	0.01
228	19.00	0.07	0.014	0.111	0.003	0.01
229	19.08	0.10	0.022	0.111	0.005	0.02
230	19.17	0.10	0.022	0.110	0.005	0.02
231	19.25	0.10	0.022	0.110	0.005	0.02
232	19.33	0.13	0.029	0.109	0.007	0.02
233	19.42	0.13	0.029	0.109	0.007	0.02
234	19.50	0.13	0.029	0.108	0.007	0.02
235	19.58	0.10	0.022	0.108	0.005	0.02
236	19.67	0.10	0.022	0.107	0.005	0.02
237	19.75	0.10	0.022	0.107	0.005	0.02
238	19.83	0.07	0.014	0.106	0.003	0.01
239	19.92	0.07	0.014	0.106	0.003	0.01
240	20.00	0.07	0.014	0.105	0.003	0.01
241	20.08	0.10	0.022	0.105	0.005	0.02
242	20.17	0.10	0.022	0.104	0.005	0.02
243	20.25	0.10	0.022	0.104	0.005	0.02
244	20.33	0.10	0.022	0.103	0.005	0.02
245	20.42	0.10	0.022	0.103	0.005	0.02

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246  20.50     0.10      0.022         0.102     0.005         0.02
247  20.58     0.10      0.022         0.102     0.005         0.02
248  20.67     0.10      0.022         0.102     0.005         0.02
249  20.75     0.10      0.022         0.101     0.005         0.02
250  20.83     0.07      0.014         0.101     0.003         0.01
251  20.92     0.07      0.014         0.100     0.003         0.01
252  21.00     0.07      0.014         0.100     0.003         0.01
253  21.08     0.10      0.022         0.100     0.005         0.02
254  21.17     0.10      0.022         0.099     0.005         0.02
255  21.25     0.10      0.022         0.099     0.005         0.02
256  21.33     0.07      0.014         0.098     0.003         0.01
257  21.42     0.07      0.014         0.098     0.003         0.01
258  21.50     0.07      0.014         0.098     0.003         0.01
259  21.58     0.10      0.022         0.097     0.005         0.02
260  21.67     0.10      0.022         0.097     0.005         0.02
261  21.75     0.10      0.022         0.097     0.005         0.02
262  21.83     0.07      0.014         0.096     0.003         0.01
263  21.92     0.07      0.014         0.096     0.003         0.01
264  22.00     0.07      0.014         0.096     0.003         0.01
265  22.08     0.10      0.022         0.095     0.005         0.02
266  22.17     0.10      0.022         0.095     0.005         0.02
267  22.25     0.10      0.022         0.095     0.005         0.02
268  22.33     0.07      0.014         0.094     0.003         0.01
269  22.42     0.07      0.014         0.094     0.003         0.01
270  22.50     0.07      0.014         0.094     0.003         0.01
271  22.58     0.07      0.014         0.094     0.003         0.01
272  22.67     0.07      0.014         0.093     0.003         0.01
273  22.75     0.07      0.014         0.093     0.003         0.01
274  22.83     0.07      0.014         0.093     0.003         0.01
275  22.92     0.07      0.014         0.093     0.003         0.01
276  23.00     0.07      0.014         0.092     0.003         0.01
277  23.08     0.07      0.014         0.092     0.003         0.01
278  23.17     0.07      0.014         0.092     0.003         0.01
279  23.25     0.07      0.014         0.092     0.003         0.01
280  23.33     0.07      0.014         0.092     0.003         0.01
281  23.42     0.07      0.014         0.091     0.003         0.01
282  23.50     0.07      0.014         0.091     0.003         0.01
283  23.58     0.07      0.014         0.091     0.003         0.01
284  23.67     0.07      0.014         0.091     0.003         0.01
285  23.75     0.07      0.014         0.091     0.003         0.01
286  23.83     0.07      0.014         0.091     0.003         0.01
287  23.92     0.07      0.014         0.091     0.003         0.01
288  24.00     0.07      0.014         0.091     0.003         0.01
    Sum =     100.0                                 Sum =    11.3
      Flood volume = Effective rainfall      0.94(In)
       times area      20.2(Ac.)/[(In)/(Ft.)] =       1.6(Ac.Ft)
      Total soil loss =      0.86(In)
      Total soil loss =     1.439(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       69229.4 Cubic Feet
      Total soil loss =       62686.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      2.362(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ------------------------------------------------------------------------
   0+ 5       0.0001      0.01  Q         |         |         |         |
   0+10       0.0005      0.06  Q         |         |         |         |
   0+15       0.0013      0.12  Q         |         |         |         |
   0+20       0.0024      0.16  Q         |         |         |         |
   0+25       0.0038      0.20  Q         |         |         |         |
   0+30       0.0055      0.24  Q         |         |         |         |
   0+35       0.0074      0.27  VQ        |         |         |         |
   0+40       0.0093      0.29  VQ        |         |         |         |
```

```
0+45      0.0114      0.30  VQ        |         |         |         |
0+50      0.0135      0.31  VQ        |         |         |         |
0+55      0.0158      0.34  VQ        |         |         |         |
1+ 0      0.0184      0.38  VQ        |         |         |         |
1+ 5      0.0211      0.39  VQ        |         |         |         |
1+10      0.0237      0.38  VQ        |         |         |         |
1+15      0.0262      0.36  VQ        |         |         |         |
1+20      0.0286      0.35  VQ        |         |         |         |
1+25      0.0310      0.34  VQ        |         |         |         |
1+30      0.0333      0.34  VQ        |         |         |         |
1+35      0.0357      0.34  VQ        |         |         |         |
1+40      0.0380      0.34  VQ        |         |         |         |
1+45      0.0403      0.34  |Q        |         |         |         |
1+50      0.0427      0.34  |Q        |         |         |         |
1+55      0.0452      0.37  |Q        |         |         |         |
2+ 0      0.0480      0.40  |Q        |         |         |         |
2+ 5      0.0508      0.41  |Q        |         |         |         |
2+10      0.0537      0.42  |Q        |         |         |         |
2+15      0.0567      0.43  |Q        |         |         |         |
2+20      0.0597      0.43  |Q        |         |         |         |
2+25      0.0627      0.43  |Q        |         |         |         |
2+30      0.0657      0.44  |Q        |         |         |         |
2+35      0.0687      0.44  |Q        |         |         |         |
2+40      0.0720      0.47  |Q        |         |         |         |
2+45      0.0754      0.50  |VQ       |         |         |         |
2+50      0.0790      0.52  |VQ       |         |         |         |
2+55      0.0826      0.53  | Q       |         |         |         |
3+ 0      0.0863      0.54  | Q       |         |         |         |
3+ 5      0.0901      0.54  | Q       |         |         |         |
3+10      0.0938      0.54  | Q       |         |         |         |
3+15      0.0976      0.55  | Q       |         |         |         |
3+20      0.1014      0.55  | Q       |         |         |         |
3+25      0.1052      0.55  | Q       |         |         |         |
3+30      0.1090      0.55  | Q       |         |         |         |
3+35      0.1128      0.55  | Q       |         |         |         |
3+40      0.1166      0.55  | Q       |         |         |         |
3+45      0.1204      0.56  | QV      |         |         |         |
3+50      0.1243      0.56  | QV      |         |         |         |
3+55      0.1283      0.59  | QV      |         |         |         |
4+ 0      0.1326      0.62  | QV      |         |         |         |
4+ 5      0.1370      0.64  | QV      |         |         |         |
4+10      0.1414      0.64  | QV      |         |         |         |
4+15      0.1459      0.65  | QV      |         |         |         |
4+20      0.1504      0.66  | QV      |         |         |         |
4+25      0.1552      0.69  | QV      |         |         |         |
4+30      0.1601      0.72  | Q V     |         |         |         |
4+35      0.1652      0.74  | Q V     |         |         |         |
4+40      0.1704      0.75  | Q V     |         |         |         |
4+45      0.1756      0.76  |  QV     |         |         |         |
4+50      0.1809      0.77  |  QV     |         |         |         |
4+55      0.1863      0.79  |  QV     |         |         |         |
5+ 0      0.1920      0.83  |  QV     |         |         |         |
5+ 5      0.1978      0.84  |  QV     |         |         |         |
5+10      0.2033      0.80  |  Q V    |         |         |         |
5+15      0.2085      0.75  | Q  V    |         |         |         |
5+20      0.2135      0.72  | Q  V    |         |         |         |
5+25      0.2185      0.73  | Q  V    |         |         |         |
5+30      0.2237      0.76  |  Q V    |         |         |         |
5+35      0.2291      0.77  |  Q V    |         |         |         |
5+40      0.2346      0.80  |  Q V    |         |         |         |
5+45      0.2403      0.84  |  Q  V   |         |         |         |
5+50      0.2462      0.85  |  Q  V   |         |         |         |
5+55      0.2522      0.86  |  Q  V   |         |         |         |
6+ 0      0.2582      0.87  |  Q  V   |         |         |         |
6+ 5      0.2642      0.88  |  Q  V   |         |         |         |
6+10      0.2705      0.91  |  Q  V   |         |         |         |
6+15      0.2770      0.94  |  Q  V   |         |         |         |
6+20      0.2836      0.96  |  Q   V  |         |         |         |
6+25      0.2903      0.97  |  Q   V  |         |         |         |
6+30      0.2970      0.98  |  Q   V  |         |         |         |
6+35      0.3038      0.99  |  Q   V  |         |         |         |
```

```
 6+40      0.3108      1.02  |   Q  V  |         |         |         |
 6+45      0.3181      1.05  |   Q   V |         |         |         |
 6+50      0.3255      1.07  |   Q   V |         |         |         |
 6+55      0.3329      1.08  |   Q   V |         |         |         |
 7+ 0      0.3405      1.09  |   Q   V |         |         |         |
 7+ 5      0.3480      1.10  |   Q   V |         |         |         |
 7+10      0.3556      1.10  |   Q   V |         |         |         |
 7+15      0.3632      1.10  |   Q    V|         |         |         |
 7+20      0.3708      1.11  |   Q    V|         |         |         |
 7+25      0.3787      1.14  |   Q    V|         |         |         |
 7+30      0.3867      1.17  |   Q    V|         |         |         |
 7+35      0.3950      1.20  |   Q    V|         |         |         |
 7+40      0.4034      1.23  |   Q     V         |         |         |
 7+45      0.4121      1.27  |    Q    V         |         |         |
 7+50      0.4210      1.29  |    Q    V         |         |         |
 7+55      0.4302      1.33  |    Q    V         |         |         |
 8+ 0      0.4396      1.37  |    Q    |V        |         |         |
 8+ 5      0.4493      1.40  |    Q    |V        |         |         |
 8+10      0.4594      1.46  |    Q    |V        |         |         |
 8+15      0.4700      1.54  |     Q   |V        |         |         |
 8+20      0.4808      1.58  |     Q   | V       |         |         |
 8+25      0.4919      1.60  |     Q   | V       |         |         |
 8+30      0.5030      1.62  |     Q   | V       |         |         |
 8+35      0.5143      1.64  |     Q   | V       |         |         |
 8+40      0.5258      1.67  |     Q   |  V      |         |         |
 8+45      0.5375      1.71  |     Q   |  V      |         |         |
 8+50      0.5495      1.74  |     Q   |  V      |         |         |
 8+55      0.5617      1.77  |      Q  |   V     |         |         |
 9+ 0      0.5742      1.81  |      Q  |   V     |         |         |
 9+ 5      0.5869      1.85  |      Q  |   V     |         |         |
 9+10      0.6001      1.91  |      Q  |    V    |         |         |
 9+15      0.6137      1.98  |      Q  |    V    |         |         |
 9+20      0.6277      2.03  |       Q |    V    |         |         |
 9+25      0.6420      2.08  |       Q |     V   |         |         |
 9+30      0.6567      2.13  |       Q |     V   |         |         |
 9+35      0.6716      2.16  |       Q |     V   |         |         |
 9+40      0.6867      2.20  |       Q |      V  |         |         |
 9+45      0.7022      2.25  |       Q |      V  |         |         |
 9+50      0.7179      2.28  |        Q|       V |         |         |
 9+55      0.7338      2.32  |        Q|       V |         |         |
10+ 0      0.7501      2.36  |        Q|       V |         |         |
10+ 5      0.7663      2.35  |        Q|        V|         |         |
10+10      0.7814      2.20  |       Q |        V|         |         |
10+15      0.7952      1.99  |      Q  |         V         |         |
10+20      0.8081      1.88  |      Q  |         V         |         |
10+25      0.8207      1.83  |      Q  |         V         |         |
10+30      0.8330      1.79  |      Q  |         V         |         |
10+35      0.8454      1.79  |      Q  |         |V        |         |
10+40      0.8584      1.89  |      Q  |         |V        |         |
10+45      0.8724      2.03  |       Q |         |V        |         |
10+50      0.8870      2.11  |       Q |         | V       |         |
10+55      0.9017      2.14  |       Q |         | V       |         |
11+ 0      0.9166      2.16  |       Q |         |  V      |         |
11+ 5      0.9316      2.17  |       Q |         |  V      |         |
11+10      0.9465      2.16  |       Q |         |  V      |         |
11+15      0.9612      2.14  |       Q |         |   V     |         |
11+20      0.9758      2.12  |       Q |         |   V     |         |
11+25      0.9904      2.12  |       Q |         |   V     |         |
11+30      1.0050      2.12  |       Q |         |    V    |         |
11+35      1.0195      2.11  |       Q |         |    V    |         |
11+40      1.0337      2.06  |       Q |         |     V   |         |
11+45      1.0474      2.00  |      Q  |         |     V   |         |
11+50      1.0610      1.97  |      Q  |         |     V   |         |
11+55      1.0746      1.98  |      Q  |         |      V  |         |
12+ 0      1.0883      2.00  |      Q  |         |      V  |         |
12+ 5      1.1016      1.92  |      Q  |         |      V  |         |
12+10      1.1122      1.55  |     Q   |         |      V  |         |
12+15      1.1194      1.05  |   Q     |         |       V |         |
12+20      1.1248      0.78  |  Q      |         |       V |         |
12+25      1.1296      0.69  | Q       |         |       V |         |
12+30      1.1340      0.65  | Q       |         |       V |         |
```

12+35	1.1384	0.64	Q			V	
12+40	1.1431	0.67	Q			V	
12+45	1.1481	0.74	Q			V	
12+50	1.1535	0.78	Q			V	
12+55	1.1592	0.83	Q			V	
13+ 0	1.1653	0.88	Q			V	
13+ 5	1.1718	0.95	Q			V	
13+10	1.1796	1.13	Q			V	
13+15	1.1890	1.36	Q			V	
13+20	1.1992	1.49	Q			V	
13+25	1.2100	1.57	Q			V	
13+30	1.2212	1.62	Q			V	
13+35	1.2321	1.58	Q			V	
13+40	1.2409	1.29	Q			V	
13+45	1.2469	0.87	Q			V	
13+50	1.2514	0.65	Q			V	
13+55	1.2552	0.56	Q			V	
14+ 0	1.2587	0.50	Q			V	
14+ 5	1.2621	0.49	Q			V	
14+10	1.2661	0.59	Q			V	
14+15	1.2713	0.74	Q			V	
14+20	1.2769	0.82	Q			V	
14+25	1.2826	0.83	Q			V	
14+30	1.2882	0.82	Q			V	
14+35	1.2939	0.82	Q			V	
14+40	1.2995	0.83	Q			V	
14+45	1.3053	0.84	Q			V	
14+50	1.3111	0.84	Q			V	
14+55	1.3168	0.82	Q			V	
15+ 0	1.3222	0.79	Q			V	
15+ 5	1.3276	0.78	Q			V	
15+10	1.3327	0.75	Q			V	
15+15	1.3377	0.72	Q			V	
15+20	1.3425	0.70	Q			V	
15+25	1.3471	0.67	Q			V	
15+30	1.3515	0.63	Q			V	
15+35	1.3555	0.59	Q			V	
15+40	1.3587	0.46	Q			V	
15+45	1.3608	0.30	Q			V	
15+50	1.3622	0.21	Q			V	
15+55	1.3634	0.17	Q			V	
16+ 0	1.3645	0.15	Q			V	
16+ 5	1.3655	0.16	Q			V	
16+10	1.3671	0.22	Q			V	
16+15	1.3693	0.32	Q			V	
16+20	1.3718	0.37	Q			V	
16+25	1.3745	0.39	Q			V	
16+30	1.3772	0.40	Q			V	
16+35	1.3800	0.40	Q			V	
16+40	1.3827	0.39	Q			V	
16+45	1.3852	0.36	Q			V	
16+50	1.3876	0.35	Q			V	
16+55	1.3899	0.34	Q			V	
17+ 0	1.3922	0.34	Q			V	
17+ 5	1.3946	0.35	Q			V	
17+10	1.3974	0.40	Q			V	
17+15	1.4005	0.46	Q			V	
17+20	1.4039	0.49	Q			V	
17+25	1.4074	0.51	Q			V	
17+30	1.4110	0.52	Q			V	
17+35	1.4147	0.53	Q			V	
17+40	1.4184	0.54	Q			V	
17+45	1.4221	0.54	Q			V	
17+50	1.4258	0.54	Q			V	
17+55	1.4294	0.52	Q			V	
18+ 0	1.4327	0.49	Q			V	
18+ 5	1.4360	0.47	Q			V	
18+10	1.4392	0.47	Q			V	
18+15	1.4424	0.46	Q			V	
18+20	1.4455	0.46	Q			V	
18+25	1.4487	0.46	Q			V	

```
18+30      1.4518      0.45  |Q        |         |         |     V   |
18+35      1.4549      0.45  |Q        |         |         |     V   |
18+40      1.4578      0.42  |Q        |         |         |     V   |
18+45      1.4605      0.39  |Q        |         |         |     V   |
18+50      1.4630      0.37  |Q        |         |         |     V   |
18+55      1.4653      0.33  |Q        |         |         |     V   |
19+ 0      1.4673      0.30  |Q        |         |         |     V   |
19+ 5      1.4693      0.28  |Q        |         |         |     V   |
19+10      1.4713      0.29  |Q        |         |         |      V  |
19+15      1.4734      0.31  |Q        |         |         |      V  |
19+20      1.4757      0.33  |Q        |         |         |      V  |
19+25      1.4781      0.36  |Q        |         |         |      V  |
19+30      1.4808      0.39  |Q        |         |         |      V  |
19+35      1.4836      0.40  |Q        |         |         |      V  |
19+40      1.4863      0.39  |Q        |         |         |      V  |
19+45      1.4888      0.36  |Q        |         |         |      V  |
19+50      1.4911      0.34  |Q        |         |         |      V  |
19+55      1.4933      0.32  |Q        |         |         |      V  |
20+ 0      1.4953      0.28  |Q        |         |         |      V  |
20+ 5      1.4971      0.27  |Q        |         |         |      V  |
20+10      1.4990      0.28  |Q        |         |         |      V  |
20+15      1.5012      0.31  |Q        |         |         |      V  |
20+20      1.5034      0.32  |Q        |         |         |      V  |
20+25      1.5056      0.32  |Q        |         |         |      V  |
20+30      1.5078      0.33  |Q        |         |         |      V  |
20+35      1.5101      0.33  |Q        |         |         |       V |
20+40      1.5124      0.33  |Q        |         |         |       V |
20+45      1.5147      0.33  |Q        |         |         |       V |
20+50      1.5169      0.33  |Q        |         |         |       V |
20+55      1.5190      0.30  |Q        |         |         |       V |
21+ 0      1.5209      0.27  |Q        |         |         |       V |
21+ 5      1.5227      0.26  |Q        |         |         |       V |
21+10      1.5246      0.28  |Q        |         |         |       V |
21+15      1.5266      0.30  |Q        |         |         |       V |
21+20      1.5288      0.31  |Q        |         |         |       V |
21+25      1.5308      0.29  |Q        |         |         |       V |
21+30      1.5326      0.26  |Q        |         |         |       V |
21+35      1.5343      0.25  |Q        |         |         |       V |
21+40      1.5362      0.27  |Q        |         |         |       V |
21+45      1.5383      0.30  |Q        |         |         |       V |
21+50      1.5404      0.31  |Q        |         |         |       V |
21+55      1.5424      0.29  |Q        |         |         |       V |
22+ 0      1.5442      0.26  |Q        |         |         |       V |
22+ 5      1.5459      0.25  |Q        |         |         |       V |
22+10      1.5478      0.27  |Q        |         |         |       V |
22+15      1.5498      0.30  |Q        |         |         |        V|
22+20      1.5519      0.31  |Q        |         |         |        V|
22+25      1.5539      0.29  |Q        |         |         |        V|
22+30      1.5557      0.26  |Q        |         |         |        V|
22+35      1.5574      0.25  Q        |         |         |        V|
22+40      1.5590      0.24  Q        |         |         |        V|
22+45      1.5607      0.24  Q        |         |         |        V|
22+50      1.5623      0.23  Q        |         |         |        V|
22+55      1.5639      0.23  Q        |         |         |        V|
23+ 0      1.5654      0.23  Q        |         |         |        V|
23+ 5      1.5670      0.23  Q        |         |         |        V|
23+10      1.5686      0.23  Q        |         |         |        V|
23+15      1.5701      0.23  Q        |         |         |        V|
23+20      1.5717      0.23  Q        |         |         |        V|
23+25      1.5732      0.22  Q        |         |         |        V|
23+30      1.5748      0.22  Q        |         |         |        V|
23+35      1.5763      0.22  Q        |         |         |        V|
23+40      1.5779      0.22  Q        |         |         |        V|
23+45      1.5794      0.22  Q        |         |         |        V|
23+50      1.5809      0.22  Q        |         |         |        V|
23+55      1.5825      0.22  Q        |         |         |        V|
24+ 0      1.5840      0.22  Q        |         |         |        V|
24+ 5      1.5855      0.21  Q        |         |         |        V|
24+10      1.5866      0.17  Q        |         |         |        V|
24+15      1.5873      0.10  Q        |         |         |        V|
24+20      1.5878      0.07  Q        |         |         |        V|
```

```
   24+25       1.5881      0.05  Q         |         |         |        V|
   24+30       1.5884      0.04  Q         |         |         |        V|
   24+35       1.5886      0.03  Q         |         |         |        V|
   24+40       1.5888      0.02  Q         |         |         |        V|
   24+45       1.5889      0.02  Q         |         |         |        V|
   24+50       1.5890      0.02  Q         |         |         |        V|
   24+55       1.5891      0.01  Q         |         |         |        V|
   25+ 0       1.5891      0.01  Q         |         |         |        V|
   25+ 5       1.5892      0.01  Q         |         |         |        V|
   25+10       1.5892      0.01  Q         |         |         |        V|
   25+15       1.5893      0.00  Q         |         |         |        V|
   25+20       1.5893      0.00  Q         |         |         |        V|
   25+25       1.5893      0.00  Q         |         |         |        V|
   25+30       1.5893      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

APPENDIX E.2: AREA B

10-YEAR, 24-HOUR

U n i t H y d r o g r a p h A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
Study date 08/02/10 File: ARBP2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6045

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 10-YEAR STORM EVENT
FILENAME: ARBP

Drainage Area = 8.44(Ac.) = 0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.44(Ac.) = 0.013 Sq. Mi.
USER Entry of lag time in hours
Lag time = 0.193 Hr.
Lag time = 11.56 Min.
25% of lag time = 2.89 Min.
40% of lag time = 4.62 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	1.80	15.19

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	4.50	37.98

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 4.500(In)

Point rain (area averaged) = 2.911(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.911(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
8.440	56.00	0.777

Total Area Entered = 8.44(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
56.0	56.0	0.511	0.777	0.154	1.000	0.154
					Sum (F) =	0.154

Area averaged mean soil loss (F) (In/Hr) = 0.154
Minimum soil loss rate ((In/Hr)) = 0.077
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.278

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	43.245	4.903	0.417
2	0.167	86.490	20.491	1.743
3	0.250	129.735	28.154	2.395
4	0.333	172.980	15.843	1.348
5	0.417	216.226	7.723	0.657
6	0.500	259.471	5.140	0.437
7	0.583	302.716	3.839	0.327
8	0.667	345.961	2.867	0.244
9	0.750	389.206	2.310	0.197
10	0.833	432.451	1.760	0.150
11	0.917	475.696	1.385	0.118
12	1.000	518.941	1.271	0.108
13	1.083	562.186	0.999	0.085
14	1.167	605.432	0.822	0.070
15	1.250	648.677	0.672	0.057
16	1.333	691.922	0.524	0.045
17	1.417	735.167	0.433	0.037
18	1.500	778.412	0.432	0.037
19	1.583	821.657	0.432	0.037
		Sum = 100.000	Sum=	8.506

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.023	0.272	0.006	0.02
2	0.17	0.07	0.023	0.271	0.006	0.02
3	0.25	0.07	0.023	0.270	0.006	0.02
4	0.33	0.10	0.035	0.269	0.010	0.03
5	0.42	0.10	0.035	0.268	0.010	0.03
6	0.50	0.10	0.035	0.267	0.010	0.03
7	0.58	0.10	0.035	0.266	0.010	0.03
8	0.67	0.10	0.035	0.265	0.010	0.03
9	0.75	0.10	0.035	0.264	0.010	0.03
10	0.83	0.13	0.047	0.263	0.013	0.03
11	0.92	0.13	0.047	0.262	0.013	0.03
12	1.00	0.13	0.047	0.261	0.013	0.03
13	1.08	0.10	0.035	0.260	0.010	0.03
14	1.17	0.10	0.035	0.259	0.010	0.03
15	1.25	0.10	0.035	0.258	0.010	0.03
16	1.33	0.10	0.035	0.257	0.010	0.03
17	1.42	0.10	0.035	0.256	0.010	0.03
18	1.50	0.10	0.035	0.255	0.010	0.03
19	1.58	0.10	0.035	0.254	0.010	0.03
20	1.67	0.10	0.035	0.253	0.010	0.03
21	1.75	0.10	0.035	0.252	0.010	0.03
22	1.83	0.13	0.047	0.251	0.013	0.03
23	1.92	0.13	0.047	0.250	0.013	0.03
24	2.00	0.13	0.047	0.249	0.013	0.03
25	2.08	0.13	0.047	0.248	0.013	0.03
26	2.17	0.13	0.047	0.247	0.013	0.03
27	2.25	0.13	0.047	0.246	0.013	0.03
28	2.33	0.13	0.047	0.245	0.013	0.03
29	2.42	0.13	0.047	0.244	0.013	0.03
30	2.50	0.13	0.047	0.243	0.013	0.03
31	2.58	0.17	0.058	0.242	0.016	0.04
32	2.67	0.17	0.058	0.241	0.016	0.04

33	2.75	0.17	0.058	0.240	0.016	0.04
34	2.83	0.17	0.058	0.239	0.016	0.04
35	2.92	0.17	0.058	0.238	0.016	0.04
36	3.00	0.17	0.058	0.237	0.016	0.04
37	3.08	0.17	0.058	0.236	0.016	0.04
38	3.17	0.17	0.058	0.235	0.016	0.04
39	3.25	0.17	0.058	0.234	0.016	0.04
40	3.33	0.17	0.058	0.233	0.016	0.04
41	3.42	0.17	0.058	0.232	0.016	0.04
42	3.50	0.17	0.058	0.231	0.016	0.04
43	3.58	0.17	0.058	0.230	0.016	0.04
44	3.67	0.17	0.058	0.229	0.016	0.04
45	3.75	0.17	0.058	0.228	0.016	0.04
46	3.83	0.20	0.070	0.227	0.019	0.05
47	3.92	0.20	0.070	0.226	0.019	0.05
48	4.00	0.20	0.070	0.225	0.019	0.05
49	4.08	0.20	0.070	0.224	0.019	0.05
50	4.17	0.20	0.070	0.223	0.019	0.05
51	4.25	0.20	0.070	0.222	0.019	0.05
52	4.33	0.23	0.082	0.221	0.023	0.06
53	4.42	0.23	0.082	0.220	0.023	0.06
54	4.50	0.23	0.082	0.219	0.023	0.06
55	4.58	0.23	0.082	0.218	0.023	0.06
56	4.67	0.23	0.082	0.217	0.023	0.06
57	4.75	0.23	0.082	0.217	0.023	0.06
58	4.83	0.27	0.093	0.216	0.026	0.07
59	4.92	0.27	0.093	0.215	0.026	0.07
60	5.00	0.27	0.093	0.214	0.026	0.07
61	5.08	0.20	0.070	0.213	0.019	0.05
62	5.17	0.20	0.070	0.212	0.019	0.05
63	5.25	0.20	0.070	0.211	0.019	0.05
64	5.33	0.23	0.082	0.210	0.023	0.06
65	5.42	0.23	0.082	0.209	0.023	0.06
66	5.50	0.23	0.082	0.208	0.023	0.06
67	5.58	0.27	0.093	0.207	0.026	0.07
68	5.67	0.27	0.093	0.206	0.026	0.07
69	5.75	0.27	0.093	0.205	0.026	0.07
70	5.83	0.27	0.093	0.205	0.026	0.07
71	5.92	0.27	0.093	0.204	0.026	0.07
72	6.00	0.27	0.093	0.203	0.026	0.07
73	6.08	0.30	0.105	0.202	0.029	0.08
74	6.17	0.30	0.105	0.201	0.029	0.08
75	6.25	0.30	0.105	0.200	0.029	0.08
76	6.33	0.30	0.105	0.199	0.029	0.08
77	6.42	0.30	0.105	0.198	0.029	0.08
78	6.50	0.30	0.105	0.197	0.029	0.08
79	6.58	0.33	0.116	0.196	0.032	0.08
80	6.67	0.33	0.116	0.196	0.032	0.08
81	6.75	0.33	0.116	0.195	0.032	0.08
82	6.83	0.33	0.116	0.194	0.032	0.08
83	6.92	0.33	0.116	0.193	0.032	0.08
84	7.00	0.33	0.116	0.192	0.032	0.08
85	7.08	0.33	0.116	0.191	0.032	0.08
86	7.17	0.33	0.116	0.190	0.032	0.08
87	7.25	0.33	0.116	0.189	0.032	0.08
88	7.33	0.37	0.128	0.189	0.036	0.09
89	7.42	0.37	0.128	0.188	0.036	0.09
90	7.50	0.37	0.128	0.187	0.036	0.09
91	7.58	0.40	0.140	0.186	0.039	0.10
92	7.67	0.40	0.140	0.185	0.039	0.10
93	7.75	0.40	0.140	0.184	0.039	0.10
94	7.83	0.43	0.151	0.183	0.042	0.11
95	7.92	0.43	0.151	0.183	0.042	0.11
96	8.00	0.43	0.151	0.182	0.042	0.11
97	8.08	0.50	0.175	0.181	0.049	0.13
98	8.17	0.50	0.175	0.180	0.049	0.13
99	8.25	0.50	0.175	0.179	0.049	0.13
100	8.33	0.50	0.175	0.178	0.049	0.13
101	8.42	0.50	0.175	0.178	0.049	0.13
102	8.50	0.50	0.175	0.177	0.049	0.13
103	8.58	0.53	0.186	0.176	---	0.01

104	8.67	0.53	0.186	0.175	---	0.01
105	8.75	0.53	0.186	0.174	---	0.01
106	8.83	0.57	0.198	0.173	---	0.02
107	8.92	0.57	0.198	0.173	---	0.03
108	9.00	0.57	0.198	0.172	---	0.03
109	9.08	0.63	0.221	0.171	---	0.05
110	9.17	0.63	0.221	0.170	---	0.05
111	9.25	0.63	0.221	0.169	---	0.05
112	9.33	0.67	0.233	0.169	---	0.06
113	9.42	0.67	0.233	0.168	---	0.07
114	9.50	0.67	0.233	0.167	---	0.07
115	9.58	0.70	0.245	0.166	---	0.08
116	9.67	0.70	0.245	0.165	---	0.08
117	9.75	0.70	0.245	0.165	---	0.08
118	9.83	0.73	0.256	0.164	---	0.09
119	9.92	0.73	0.256	0.163	---	0.09
120	10.00	0.73	0.256	0.162	---	0.09
121	10.08	0.50	0.175	0.161	---	0.01
122	10.17	0.50	0.175	0.161	---	0.01
123	10.25	0.50	0.175	0.160	---	0.01
124	10.33	0.50	0.175	0.159	---	0.02
125	10.42	0.50	0.175	0.158	---	0.02
126	10.50	0.50	0.175	0.158	---	0.02
127	10.58	0.67	0.233	0.157	---	0.08
128	10.67	0.67	0.233	0.156	---	0.08
129	10.75	0.67	0.233	0.155	---	0.08
130	10.83	0.67	0.233	0.154	---	0.08
131	10.92	0.67	0.233	0.154	---	0.08
132	11.00	0.67	0.233	0.153	---	0.08
133	11.08	0.63	0.221	0.152	---	0.07
134	11.17	0.63	0.221	0.151	---	0.07
135	11.25	0.63	0.221	0.151	---	0.07
136	11.33	0.63	0.221	0.150	---	0.07
137	11.42	0.63	0.221	0.149	---	0.07
138	11.50	0.63	0.221	0.148	---	0.07
139	11.58	0.57	0.198	0.148	---	0.05
140	11.67	0.57	0.198	0.147	---	0.05
141	11.75	0.57	0.198	0.146	---	0.05
142	11.83	0.60	0.210	0.146	---	0.06
143	11.92	0.60	0.210	0.145	---	0.06
144	12.00	0.60	0.210	0.144	---	0.07
145	12.08	0.83	0.291	0.143	---	0.15
146	12.17	0.83	0.291	0.143	---	0.15
147	12.25	0.83	0.291	0.142	---	0.15
148	12.33	0.87	0.303	0.141	---	0.16
149	12.42	0.87	0.303	0.141	---	0.16
150	12.50	0.87	0.303	0.140	---	0.16
151	12.58	0.93	0.326	0.139	---	0.19
152	12.67	0.93	0.326	0.138	---	0.19
153	12.75	0.93	0.326	0.138	---	0.19
154	12.83	0.97	0.338	0.137	---	0.20
155	12.92	0.97	0.338	0.136	---	0.20
156	13.00	0.97	0.338	0.136	---	0.20
157	13.08	1.13	0.396	0.135	---	0.26
158	13.17	1.13	0.396	0.134	---	0.26
159	13.25	1.13	0.396	0.134	---	0.26
160	13.33	1.13	0.396	0.133	---	0.26
161	13.42	1.13	0.396	0.132	---	0.26
162	13.50	1.13	0.396	0.132	---	0.26
163	13.58	0.77	0.268	0.131	---	0.14
164	13.67	0.77	0.268	0.130	---	0.14
165	13.75	0.77	0.268	0.130	---	0.14
166	13.83	0.77	0.268	0.129	---	0.14
167	13.92	0.77	0.268	0.128	---	0.14
168	14.00	0.77	0.268	0.128	---	0.14
169	14.08	0.90	0.314	0.127	---	0.19
170	14.17	0.90	0.314	0.126	---	0.19
171	14.25	0.90	0.314	0.126	---	0.19
172	14.33	0.87	0.303	0.125	---	0.18
173	14.42	0.87	0.303	0.124	---	0.18
174	14.50	0.87	0.303	0.124	---	0.18

175	14.58	0.87	0.303	0.123	---	0.18
176	14.67	0.87	0.303	0.122	---	0.18
177	14.75	0.87	0.303	0.122	---	0.18
178	14.83	0.83	0.291	0.121	---	0.17
179	14.92	0.83	0.291	0.121	---	0.17
180	15.00	0.83	0.291	0.120	---	0.17
181	15.08	0.80	0.279	0.119	---	0.16
182	15.17	0.80	0.279	0.119	---	0.16
183	15.25	0.80	0.279	0.118	---	0.16
184	15.33	0.77	0.268	0.118	---	0.15
185	15.42	0.77	0.268	0.117	---	0.15
186	15.50	0.77	0.268	0.116	---	0.15
187	15.58	0.63	0.221	0.116	---	0.11
188	15.67	0.63	0.221	0.115	---	0.11
189	15.75	0.63	0.221	0.115	---	0.11
190	15.83	0.63	0.221	0.114	---	0.11
191	15.92	0.63	0.221	0.113	---	0.11
192	16.00	0.63	0.221	0.113	---	0.11
193	16.08	0.13	0.047	0.112	0.013	0.03
194	16.17	0.13	0.047	0.112	0.013	0.03
195	16.25	0.13	0.047	0.111	0.013	0.03
196	16.33	0.13	0.047	0.111	0.013	0.03
197	16.42	0.13	0.047	0.110	0.013	0.03
198	16.50	0.13	0.047	0.109	0.013	0.03
199	16.58	0.10	0.035	0.109	0.010	0.03
200	16.67	0.10	0.035	0.108	0.010	0.03
201	16.75	0.10	0.035	0.108	0.010	0.03
202	16.83	0.10	0.035	0.107	0.010	0.03
203	16.92	0.10	0.035	0.107	0.010	0.03
204	17.00	0.10	0.035	0.106	0.010	0.03
205	17.08	0.17	0.058	0.106	0.016	0.04
206	17.17	0.17	0.058	0.105	0.016	0.04
207	17.25	0.17	0.058	0.105	0.016	0.04
208	17.33	0.17	0.058	0.104	0.016	0.04
209	17.42	0.17	0.058	0.103	0.016	0.04
210	17.50	0.17	0.058	0.103	0.016	0.04
211	17.58	0.17	0.058	0.102	0.016	0.04
212	17.67	0.17	0.058	0.102	0.016	0.04
213	17.75	0.17	0.058	0.101	0.016	0.04
214	17.83	0.13	0.047	0.101	0.013	0.03
215	17.92	0.13	0.047	0.100	0.013	0.03
216	18.00	0.13	0.047	0.100	0.013	0.03
217	18.08	0.13	0.047	0.099	0.013	0.03
218	18.17	0.13	0.047	0.099	0.013	0.03
219	18.25	0.13	0.047	0.098	0.013	0.03
220	18.33	0.13	0.047	0.098	0.013	0.03
221	18.42	0.13	0.047	0.097	0.013	0.03
222	18.50	0.13	0.047	0.097	0.013	0.03
223	18.58	0.10	0.035	0.097	0.010	0.03
224	18.67	0.10	0.035	0.096	0.010	0.03
225	18.75	0.10	0.035	0.096	0.010	0.03
226	18.83	0.07	0.023	0.095	0.006	0.02
227	18.92	0.07	0.023	0.095	0.006	0.02
228	19.00	0.07	0.023	0.094	0.006	0.02
229	19.08	0.10	0.035	0.094	0.010	0.03
230	19.17	0.10	0.035	0.093	0.010	0.03
231	19.25	0.10	0.035	0.093	0.010	0.03
232	19.33	0.13	0.047	0.092	0.013	0.03
233	19.42	0.13	0.047	0.092	0.013	0.03
234	19.50	0.13	0.047	0.092	0.013	0.03
235	19.58	0.10	0.035	0.091	0.010	0.03
236	19.67	0.10	0.035	0.091	0.010	0.03
237	19.75	0.10	0.035	0.090	0.010	0.03
238	19.83	0.07	0.023	0.090	0.006	0.02
239	19.92	0.07	0.023	0.090	0.006	0.02
240	20.00	0.07	0.023	0.089	0.006	0.02
241	20.08	0.10	0.035	0.089	0.010	0.03
242	20.17	0.10	0.035	0.088	0.010	0.03
243	20.25	0.10	0.035	0.088	0.010	0.03
244	20.33	0.10	0.035	0.088	0.010	0.03
245	20.42	0.10	0.035	0.087	0.010	0.03

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246  20.50     0.10      0.035         0.087     0.010         0.03
247  20.58     0.10      0.035         0.087     0.010         0.03
248  20.67     0.10      0.035         0.086     0.010         0.03
249  20.75     0.10      0.035         0.086     0.010         0.03
250  20.83     0.07      0.023         0.085     0.006         0.02
251  20.92     0.07      0.023         0.085     0.006         0.02
252  21.00     0.07      0.023         0.085     0.006         0.02
253  21.08     0.10      0.035         0.084     0.010         0.03
254  21.17     0.10      0.035         0.084     0.010         0.03
255  21.25     0.10      0.035         0.084     0.010         0.03
256  21.33     0.07      0.023         0.083     0.006         0.02
257  21.42     0.07      0.023         0.083     0.006         0.02
258  21.50     0.07      0.023         0.083     0.006         0.02
259  21.58     0.10      0.035         0.083     0.010         0.03
260  21.67     0.10      0.035         0.082     0.010         0.03
261  21.75     0.10      0.035         0.082     0.010         0.03
262  21.83     0.07      0.023         0.082     0.006         0.02
263  21.92     0.07      0.023         0.081     0.006         0.02
264  22.00     0.07      0.023         0.081     0.006         0.02
265  22.08     0.10      0.035         0.081     0.010         0.03
266  22.17     0.10      0.035         0.081     0.010         0.03
267  22.25     0.10      0.035         0.080     0.010         0.03
268  22.33     0.07      0.023         0.080     0.006         0.02
269  22.42     0.07      0.023         0.080     0.006         0.02
270  22.50     0.07      0.023         0.080     0.006         0.02
271  22.58     0.07      0.023         0.079     0.006         0.02
272  22.67     0.07      0.023         0.079     0.006         0.02
273  22.75     0.07      0.023         0.079     0.006         0.02
274  22.83     0.07      0.023         0.079     0.006         0.02
275  22.92     0.07      0.023         0.079     0.006         0.02
276  23.00     0.07      0.023         0.078     0.006         0.02
277  23.08     0.07      0.023         0.078     0.006         0.02
278  23.17     0.07      0.023         0.078     0.006         0.02
279  23.25     0.07      0.023         0.078     0.006         0.02
280  23.33     0.07      0.023         0.078     0.006         0.02
281  23.42     0.07      0.023         0.077     0.006         0.02
282  23.50     0.07      0.023         0.077     0.006         0.02
283  23.58     0.07      0.023         0.077     0.006         0.02
284  23.67     0.07      0.023         0.077     0.006         0.02
285  23.75     0.07      0.023         0.077     0.006         0.02
286  23.83     0.07      0.023         0.077     0.006         0.02
287  23.92     0.07      0.023         0.077     0.006         0.02
288  24.00     0.07      0.023         0.077     0.006         0.02
    Sum =     100.0                                 Sum =    18.9
      Flood volume = Effective rainfall      1.57(In)
       times area       8.4(Ac.)/[(In)/(Ft.)] =       1.1(Ac.Ft)
      Total soil loss =      1.34(In)
      Total soil loss =     0.941(Ac.Ft)
      Total rainfall =      2.91(In)
      Flood volume =       48208.9 Cubic Feet
      Total soil loss =       40968.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      2.119(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ------------------------------------------------------------------------
   0+ 5       0.0000      0.01  Q         |         |         |         |
   0+10       0.0003      0.04  Q         |         |         |         |
   0+15       0.0008      0.08  Q         |         |         |         |
   0+20       0.0015      0.10  Q         |         |         |         |
   0+25       0.0024      0.13  Q         |         |         |         |
   0+30       0.0035      0.16  Q         |         |         |         |
   0+35       0.0047      0.17  Q         |         |         |         |
   0+40       0.0059      0.18  Q         |         |         |         |
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0+45      0.0072      0.19  Q         |         |         |         |
0+50      0.0086      0.20  Q         |         |         |         |
0+55      0.0101      0.22  Q         |         |         |         |
1+ 0      0.0118      0.24  Q         |         |         |         |
1+ 5      0.0135      0.25  VQ        |         |         |         |
1+10      0.0152      0.24  Q         |         |         |         |
1+15      0.0167      0.23  Q         |         |         |         |
1+20      0.0183      0.22  Q         |         |         |         |
1+25      0.0198      0.22  Q         |         |         |         |
1+30      0.0213      0.22  Q         |         |         |         |
1+35      0.0228      0.22  Q         |         |         |         |
1+40      0.0243      0.22  Q         |         |         |         |
1+45      0.0258      0.22  Q         |         |         |         |
1+50      0.0273      0.22  Q         |         |         |         |
1+55      0.0289      0.23  QV        |         |         |         |
2+ 0      0.0307      0.25  |Q        |         |         |         |
2+ 5      0.0325      0.27  |Q        |         |         |         |
2+10      0.0344      0.27  |Q        |         |         |         |
2+15      0.0363      0.27  |Q        |         |         |         |
2+20      0.0382      0.28  |Q        |         |         |         |
2+25      0.0401      0.28  |Q        |         |         |         |
2+30      0.0420      0.28  |Q        |         |         |         |
2+35      0.0440      0.28  |Q        |         |         |         |
2+40      0.0461      0.30  |Q        |         |         |         |
2+45      0.0483      0.32  |Q        |         |         |         |
2+50      0.0506      0.33  |Q        |         |         |         |
2+55      0.0529      0.34  |Q        |         |         |         |
3+ 0      0.0553      0.34  |Q        |         |         |         |
3+ 5      0.0577      0.35  |QV       |         |         |         |
3+10      0.0601      0.35  |QV       |         |         |         |
3+15      0.0625      0.35  |QV       |         |         |         |
3+20      0.0649      0.35  |QV       |         |         |         |
3+25      0.0673      0.35  |QV       |         |         |         |
3+30      0.0698      0.35  |QV       |         |         |         |
3+35      0.0722      0.36  |QV       |         |         |         |
3+40      0.0747      0.36  |QV       |         |         |         |
3+45      0.0771      0.36  |QV       |         |         |         |
3+50      0.0796      0.36  |QV       |         |         |         |
3+55      0.0822      0.38  |QV       |         |         |         |
4+ 0      0.0849      0.40  |Q V      |         |         |         |
4+ 5      0.0877      0.41  |Q V      |         |         |         |
4+10      0.0906      0.41  |Q V      |         |         |         |
4+15      0.0934      0.42  |Q V      |         |         |         |
4+20      0.0963      0.42  |Q V      |         |         |         |
4+25      0.0994      0.44  |Q V      |         |         |         |
4+30      0.1025      0.46  |Q V      |         |         |         |
4+35      0.1058      0.47  |Q V      |         |         |         |
4+40      0.1091      0.48  |Q V      |         |         |         |
4+45      0.1124      0.48  |Q  V     |         |         |         |
4+50      0.1158      0.49  |Q  V     |         |         |         |
4+55      0.1193      0.51  | Q V     |         |         |         |
5+ 0      0.1230      0.53  | Q V     |         |         |         |
5+ 5      0.1267      0.54  | Q V     |         |         |         |
5+10      0.1302      0.51  | Q V     |         |         |         |
5+15      0.1335      0.48  |Q  V     |         |         |         |
5+20      0.1367      0.46  |Q  V     |         |         |         |
5+25      0.1400      0.47  |Q   V    |         |         |         |
5+30      0.1433      0.49  |Q   V    |         |         |         |
5+35      0.1467      0.50  |Q   V    |         |         |         |
5+40      0.1503      0.51  | Q  V    |         |         |         |
5+45      0.1540      0.54  | Q  V    |         |         |         |
5+50      0.1577      0.55  | Q  V    |         |         |         |
5+55      0.1615      0.55  | Q  V    |         |         |         |
6+ 0      0.1654      0.56  | Q  V    |         |         |         |
6+ 5      0.1693      0.56  | Q   V   |         |         |         |
6+10      0.1733      0.58  | Q   V   |         |         |         |
6+15      0.1774      0.60  | Q   V   |         |         |         |
6+20      0.1817      0.62  | Q   V   |         |         |         |
6+25      0.1860      0.62  | Q   V   |         |         |         |
6+30      0.1903      0.63  | Q   V   |         |         |         |
6+35      0.1946      0.63  | Q    V  |         |         |         |
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 6+40      0.1991      0.65  | Q    V  |         |         |         |
 6+45      0.2038      0.67  | Q    V  |         |         |         |
 6+50      0.2085      0.69  | Q    V  |         |         |         |
 6+55      0.2133      0.69  | Q    V  |         |         |         |
 7+ 0      0.2181      0.70  | Q    V  |         |         |         |
 7+ 5      0.2229      0.70  | Q     V |         |         |         |
 7+10      0.2278      0.71  | Q     V |         |         |         |
 7+15      0.2327      0.71  | Q     V |         |         |         |
 7+20      0.2376      0.71  | Q     V |         |         |         |
 7+25      0.2426      0.73  | Q     V |         |         |         |
 7+30      0.2478      0.75  | Q     V |         |         |         |
 7+35      0.2530      0.77  |  Q     V|         |         |         |
 7+40      0.2584      0.79  |  Q     V|         |         |         |
 7+45      0.2640      0.81  |  Q     V|         |         |         |
 7+50      0.2697      0.83  |  Q     V|         |         |         |
 7+55      0.2756      0.85  |  Q     V|         |         |         |
 8+ 0      0.2816      0.88  |  Q      V         |         |         |
 8+ 5      0.2878      0.90  |  Q      V         |         |         |
 8+10      0.2943      0.94  |  Q      V         |         |         |
 8+15      0.3011      0.98  |  Q      V         |         |         |
 8+20      0.3080      1.01  |   Q     |V        |         |         |
 8+25      0.3151      1.03  |   Q     |V        |         |         |
 8+30      0.3222      1.04  |   Q     |V        |         |         |
 8+35      0.3291      1.00  |  Q      |V        |         |         |
 8+40      0.3346      0.80  |  Q      | V       |         |         |
 8+45      0.3383      0.53  | Q       | V       |         |         |
 8+50      0.3409      0.39  |Q        | V       |         |         |
 8+55      0.3433      0.34  |Q        | V       |         |         |
 9+ 0      0.3455      0.32  |Q        | V       |         |         |
 9+ 5      0.3477      0.32  |Q        | V       |         |         |
 9+10      0.3501      0.35  |Q        | V       |         |         |
 9+15      0.3528      0.39  |Q        | V       |         |         |
 9+20      0.3557      0.42  |Q        | V       |         |         |
 9+25      0.3588      0.45  |Q        | V       |         |         |
 9+30      0.3622      0.49  |Q        |  V      |         |         |
 9+35      0.3658      0.52  | Q       |  V      |         |         |
 9+40      0.3696      0.55  | Q       |  V      |         |         |
 9+45      0.3736      0.59  | Q       |  V      |         |         |
 9+50      0.3779      0.62  | Q       |  V      |         |         |
 9+55      0.3824      0.66  | Q       |  V      |         |         |
10+ 0      0.3872      0.70  | Q       |  V      |         |         |
10+ 5      0.3920      0.69  | Q       |   V     |         |         |
10+10      0.3959      0.57  | Q       |   V     |         |         |
10+15      0.3986      0.39  |Q        |   V     |         |         |
10+20      0.4006      0.30  |Q        |   V     |         |         |
10+25      0.4024      0.25  |Q        |   V     |         |         |
10+30      0.4040      0.23  Q         |   V     |         |         |
10+35      0.4056      0.24  Q         |   V     |         |         |
10+40      0.4079      0.33  |Q        |   V     |         |         |
10+45      0.4110      0.46  |Q        |   V     |         |         |
10+50      0.4147      0.54  | Q       |   V     |         |         |
10+55      0.4187      0.57  | Q       |    V    |         |         |
11+ 0      0.4228      0.60  | Q       |    V    |         |         |
11+ 5      0.4270      0.61  | Q       |    V    |         |         |
11+10      0.4312      0.61  | Q       |    V    |         |         |
11+15      0.4353      0.59  | Q       |    V    |         |         |
11+20      0.4393      0.59  | Q       |    V    |         |         |
11+25      0.4434      0.59  | Q       |     V   |         |         |
11+30      0.4475      0.60  | Q       |     V   |         |         |
11+35      0.4516      0.59  | Q       |     V   |         |         |
11+40      0.4554      0.56  | Q       |     V   |         |         |
11+45      0.4589      0.51  | Q       |     V   |         |         |
11+50      0.4623      0.49  |Q        |     V   |         |         |
11+55      0.4658      0.50  | Q       |     V   |         |         |
12+ 0      0.4694      0.53  | Q       |     V   |         |         |
12+ 5      0.4734      0.58  | Q       |      V  |         |         |
12+10      0.4784      0.73  | Q       |      V  |         |         |
12+15      0.4847      0.93  |  Q      |      V  |         |         |
12+20      0.4920      1.05  |   Q     |      V  |         |         |
12+25      0.4997      1.13  |   Q     |       V |         |         |
12+30      0.5080      1.20  |   Q     |       V |         |         |
```

12+35	0.5166	1.25	| Q |	V |	|	|
12+40	0.5257	1.33	| Q |	V|	|	|
12+45	0.5355	1.41	| Q |	V|	|	|
12+50	0.5456	1.47	| Q |	V|	|	|
12+55	0.5561	1.52	| Q |	V |	|	|
13+ 0	0.5669	1.58	| Q |	V |	|	|
13+ 5	0.5782	1.64	| Q |	V |	|	|
13+10	0.5904	1.77	| Q |	|V |	|	|
13+15	0.6037	1.93	| Q |	|V |	|	|
13+20	0.6176	2.03	| Q |	| V |	|	|
13+25	0.6320	2.08	| Q |	| V |	|	|
13+30	0.6465	2.12	| Q |	| V |	|	|
13+35	0.6610	2.10	| Q |	| V |	|	|
13+40	0.6741	1.90	| Q |	| V |	|	|
13+45	0.6852	1.61	| Q |	| V |	|	|
13+50	0.6952	1.46	| Q |	| V |	|	|
13+55	0.7047	1.39	| Q |	| V |	|	|
14+ 0	0.7140	1.34	| Q |	| V |	|	|
14+ 5	0.7232	1.33	| Q |	| V |	|	|
14+10	0.7327	1.39	| Q |	| V |	|	|
14+15	0.7430	1.49	| Q |	| V |	|	|
14+20	0.7536	1.54	| Q |	| V |	|	|
14+25	0.7642	1.54	| Q |	| V |	|	|
14+30	0.7747	1.52	| Q |	| V |	|	|
14+35	0.7851	1.52	| Q |	| V |	|	|
14+40	0.7956	1.52	| Q |	| V |	|	|
14+45	0.8061	1.52	| Q |	| V|	|	|
14+50	0.8166	1.52	| Q |	| V|	|	|
14+55	0.8270	1.50	| Q |	| V|	|	|
15+ 0	0.8371	1.48	| Q |	| V |	|	|
15+ 5	0.8472	1.46	| Q |	| V |	|	|
15+10	0.8571	1.44	| Q |	| V |	|	|
15+15	0.8669	1.42	| Q |	| |V |	|	|
15+20	0.8765	1.40	| Q |	| |V |	|	|
15+25	0.8860	1.37	| Q |	| | V |	|	|
15+30	0.8952	1.34	| Q |	| | V |	|	|
15+35	0.9042	1.31	| Q |	| | V |	|	|
15+40	0.9126	1.22	| Q |	| | V |	|	|
15+45	0.9202	1.11	| Q |	| | | V |	|	|
15+50	0.9274	1.04	| Q |	| | | V |	|	|
15+55	0.9344	1.01	| Q |	| | | V |	|	|
16+ 0	0.9412	0.99	| Q |	| | | | V |	|	|
16+ 5	0.9477	0.95	| Q |	| | | | V |	|	|
16+10	0.9532	0.80	| Q |	| | | | V |	|	|
16+15	0.9575	0.62	| Q |	| | | | V |	|	|
16+20	0.9610	0.51	| Q |	| | | | V |	|	|
16+25	0.9641	0.45	|Q |	| | | | V |	|	|
16+30	0.9670	0.42	|Q |	| | | | V |	|	|
16+35	0.9696	0.38	|Q |	| | | | V |	|	|
16+40	0.9720	0.35	|Q |	| | | | V |	|	|
16+45	0.9741	0.31	|Q |	| | | | V |	|	|
16+50	0.9761	0.28	|Q |	| | | | V |	|	|
16+55	0.9779	0.27	|Q |	| | | | V |	|	|
17+ 0	0.9797	0.26	|Q |	| | | | V |	|	|
17+ 5	0.9814	0.25	|Q |	| | | | V |	|	|
17+10	0.9833	0.27	|Q |	| | | | V |	|	|
17+15	0.9855	0.31	|Q |	| | | | V |	|	|
17+20	0.9877	0.33	|Q |	| | | | V |	|	|
17+25	0.9900	0.33	|Q |	| | | | V |	|	|
17+30	0.9923	0.34	|Q |	| | | | V |	|	|
17+35	0.9947	0.34	|Q |	| | | | V |	|	|
17+40	0.9970	0.34	|Q |	| | | | V |	|	|
17+45	0.9994	0.35	|Q |	| | | | V |	|	|
17+50	1.0018	0.34	|Q |	| | | | V |	|	|
17+55	1.0041	0.33	|Q |	| | | | V |	|	|
18+ 0	1.0062	0.31	|Q |	| | | | V |	|	|
18+ 5	1.0083	0.30	|Q |	| | | | V |	|	|
18+10	1.0104	0.30	|Q |	| | | | V |	|	|
18+15	1.0124	0.30	|Q |	| | | | V |	|	|
18+20	1.0145	0.29	|Q |	| | | | V |	|	|
18+25	1.0165	0.29	|Q |	| | | | V |	|	|

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18+30      1.0185      0.29  |Q        |         |         |     V   |
18+35      1.0205      0.29  |Q        |         |         |     V   |
18+40      1.0223      0.27  |Q        |         |         |     V   |
18+45      1.0241      0.25  |Q        |         |         |      V  |
18+50      1.0257      0.24  Q         |         |         |      V  |
18+55      1.0272      0.21  Q         |         |         |      V  |
19+ 0      1.0285      0.19  Q         |         |         |      V  |
19+ 5      1.0297      0.18  Q         |         |         |      V  |
19+10      1.0310      0.19  Q         |         |         |      V  |
19+15      1.0324      0.20  Q         |         |         |      V  |
19+20      1.0338      0.21  Q         |         |         |      V  |
19+25      1.0354      0.23  Q         |         |         |      V  |
19+30      1.0371      0.25  Q         |         |         |      V  |
19+35      1.0389      0.26  |Q        |         |         |      V  |
19+40      1.0406      0.25  Q         |         |         |      V  |
19+45      1.0422      0.23  Q         |         |         |      V  |
19+50      1.0437      0.22  Q         |         |         |      V  |
19+55      1.0451      0.20  Q         |         |         |      V  |
20+ 0      1.0464      0.18  Q         |         |         |      V  |
20+ 5      1.0476      0.17  Q         |         |         |      V  |
20+10      1.0488      0.18  Q         |         |         |      V  |
20+15      1.0502      0.20  Q         |         |         |      V  |
20+20      1.0516      0.20  Q         |         |         |       V |
20+25      1.0530      0.21  Q         |         |         |       V |
20+30      1.0544      0.21  Q         |         |         |       V |
20+35      1.0559      0.21  Q         |         |         |       V |
20+40      1.0573      0.21  Q         |         |         |       V |
20+45      1.0588      0.21  Q         |         |         |       V |
20+50      1.0603      0.21  Q         |         |         |       V |
20+55      1.0616      0.19  Q         |         |         |       V |
21+ 0      1.0628      0.17  Q         |         |         |       V |
21+ 5      1.0639      0.17  Q         |         |         |       V |
21+10      1.0652      0.18  Q         |         |         |       V |
21+15      1.0665      0.19  Q         |         |         |       V |
21+20      1.0679      0.20  Q         |         |         |       V |
21+25      1.0691      0.19  Q         |         |         |       V |
21+30      1.0703      0.17  Q         |         |         |       V |
21+35      1.0714      0.16  Q         |         |         |       V |
21+40      1.0726      0.17  Q         |         |         |       V |
21+45      1.0739      0.19  Q         |         |         |       V |
21+50      1.0753      0.20  Q         |         |         |       V |
21+55      1.0766      0.19  Q         |         |         |       V |
22+ 0      1.0777      0.17  Q         |         |         |       V |
22+ 5      1.0789      0.16  Q         |         |         |       V |
22+10      1.0800      0.17  Q         |         |         |        V|
22+15      1.0813      0.19  Q         |         |         |        V|
22+20      1.0827      0.20  Q         |         |         |        V|
22+25      1.0840      0.19  Q         |         |         |        V|
22+30      1.0851      0.17  Q         |         |         |        V|
22+35      1.0862      0.16  Q         |         |         |        V|
22+40      1.0873      0.15  Q         |         |         |        V|
22+45      1.0883      0.15  Q         |         |         |        V|
22+50      1.0893      0.15  Q         |         |         |        V|
22+55      1.0904      0.15  Q         |         |         |        V|
23+ 0      1.0914      0.15  Q         |         |         |        V|
23+ 5      1.0924      0.15  Q         |         |         |        V|
23+10      1.0934      0.15  Q         |         |         |        V|
23+15      1.0944      0.15  Q         |         |         |        V|
23+20      1.0954      0.14  Q         |         |         |        V|
23+25      1.0964      0.14  Q         |         |         |        V|
23+30      1.0974      0.14  Q         |         |         |        V|
23+35      1.0984      0.14  Q         |         |         |        V|
23+40      1.0994      0.14  Q         |         |         |        V|
23+45      1.1003      0.14  Q         |         |         |        V|
23+50      1.1013      0.14  Q         |         |         |        V|
23+55      1.1023      0.14  Q         |         |         |        V|
24+ 0      1.1033      0.14  Q         |         |         |        V|
24+ 5      1.1042      0.14  Q         |         |         |        V|
24+10      1.1050      0.11  Q         |         |         |        V|
24+15      1.1054      0.07  Q         |         |         |        V|
24+20      1.1057      0.04  Q         |         |         |        V|
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   24+25       1.1060      0.03  Q         |         |         |        V|
   24+30       1.1061      0.03  Q         |         |         |        V|
   24+35       1.1063      0.02  Q         |         |         |        V|
   24+40       1.1064      0.02  Q         |         |         |        V|
   24+45       1.1065      0.01  Q         |         |         |        V|
   24+50       1.1065      0.01  Q         |         |         |        V|
   24+55       1.1066      0.01  Q         |         |         |        V|
   25+ 0       1.1066      0.01  Q         |         |         |        V|
   25+ 5       1.1067      0.00  Q         |         |         |        V|
   25+10       1.1067      0.00  Q         |         |         |        V|
   25+15       1.1067      0.00  Q         |         |         |        V|
   25+20       1.1067      0.00  Q         |         |         |        V|
   25+25       1.1067      0.00  Q         |         |         |        V|
   25+30       1.1067      0.00  Q         |         |         |         V
-------------------------------------------------------------------------
```

2-YEAR, 24-HOUR

U n i t H y d r o g r a p h A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0
Study date 08/02/10 File: ARBP242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6045

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

NORTH HEMET REVITALIZATION PLAN POST-PROJECT ONSITE HYDROLOGY
UNIT HYDROGRAPH ANALYSIS, 2-YEAR STORM EVENT
FILENAME: ARBP

Drainage Area = 8.44(Ac.) = 0.013 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 8.44(Ac.) = 0.013 Sq. Mi.
USER Entry of lag time in hours
Lag time = 0.199 Hr.
Lag time = 11.95 Min.
25% of lag time = 2.99 Min.
40% of lag time = 4.78 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	1.80	15.19

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
8.44	4.50	37.98

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.800(In)
Area Averaged 100-Year Rainfall = 4.500(In)

Point rain (area averaged) = 1.800(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.800(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
8.440	56.00	0.777

Total Area Entered = 8.44(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
56.0	36.0	0.706	0.777	0.212	1.000	0.212
					Sum (F) =	0.212

Area averaged mean soil loss (F) (In/Hr) = 0.212
Minimum soil loss rate ((In/Hr)) = 0.106
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.278

U n i t H y d r o g r a p h
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	41.855	4.665	0.397
2	0.167	83.710	19.365	1.647
3	0.250	125.565	27.644	2.351
4	0.333	167.420	16.523	1.405
5	0.417	209.275	8.035	0.683
6	0.500	251.130	5.229	0.445
7	0.583	292.985	3.918	0.333
8	0.667	334.840	2.948	0.251
9	0.750	376.695	2.382	0.203
10	0.833	418.550	1.836	0.156
11	0.917	460.405	1.415	0.120
12	1.000	502.260	1.279	0.109
13	1.083	544.115	1.071	0.091
14	1.167	585.970	0.859	0.073
15	1.250	627.825	0.718	0.061
16	1.333	669.680	0.577	0.049
17	1.417	711.535	0.442	0.038
18	1.500	753.390	0.419	0.036
19	1.583	795.245	0.419	0.036
20	1.667	837.100	0.257	0.022
		Sum = 100.000	Sum=	8.506

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	0.07	0.014	0.376	0.004	0.01
2	0.17	0.07	0.014	0.375	0.004	0.01
3	0.25	0.07	0.014	0.373	0.004	0.01
4	0.33	0.10	0.022	0.372	0.006	0.02
5	0.42	0.10	0.022	0.371	0.006	0.02
6	0.50	0.10	0.022	0.369	0.006	0.02
7	0.58	0.10	0.022	0.368	0.006	0.02
8	0.67	0.10	0.022	0.366	0.006	0.02
9	0.75	0.10	0.022	0.365	0.006	0.02
10	0.83	0.13	0.029	0.363	0.008	0.02
11	0.92	0.13	0.029	0.362	0.008	0.02
12	1.00	0.13	0.029	0.360	0.008	0.02
13	1.08	0.10	0.022	0.359	0.006	0.02
14	1.17	0.10	0.022	0.358	0.006	0.02
15	1.25	0.10	0.022	0.356	0.006	0.02
16	1.33	0.10	0.022	0.355	0.006	0.02
17	1.42	0.10	0.022	0.353	0.006	0.02
18	1.50	0.10	0.022	0.352	0.006	0.02
19	1.58	0.10	0.022	0.351	0.006	0.02
20	1.67	0.10	0.022	0.349	0.006	0.02
21	1.75	0.10	0.022	0.348	0.006	0.02
22	1.83	0.13	0.029	0.346	0.008	0.02
23	1.92	0.13	0.029	0.345	0.008	0.02
24	2.00	0.13	0.029	0.344	0.008	0.02
25	2.08	0.13	0.029	0.342	0.008	0.02
26	2.17	0.13	0.029	0.341	0.008	0.02
27	2.25	0.13	0.029	0.339	0.008	0.02
28	2.33	0.13	0.029	0.338	0.008	0.02
29	2.42	0.13	0.029	0.337	0.008	0.02
30	2.50	0.13	0.029	0.335	0.008	0.02
31	2.58	0.17	0.036	0.334	0.010	0.03

32	2.67	0.17	0.036	0.333	0.010	0.03
33	2.75	0.17	0.036	0.331	0.010	0.03
34	2.83	0.17	0.036	0.330	0.010	0.03
35	2.92	0.17	0.036	0.328	0.010	0.03
36	3.00	0.17	0.036	0.327	0.010	0.03
37	3.08	0.17	0.036	0.326	0.010	0.03
38	3.17	0.17	0.036	0.324	0.010	0.03
39	3.25	0.17	0.036	0.323	0.010	0.03
40	3.33	0.17	0.036	0.322	0.010	0.03
41	3.42	0.17	0.036	0.320	0.010	0.03
42	3.50	0.17	0.036	0.319	0.010	0.03
43	3.58	0.17	0.036	0.318	0.010	0.03
44	3.67	0.17	0.036	0.316	0.010	0.03
45	3.75	0.17	0.036	0.315	0.010	0.03
46	3.83	0.20	0.043	0.314	0.012	0.03
47	3.92	0.20	0.043	0.312	0.012	0.03
48	4.00	0.20	0.043	0.311	0.012	0.03
49	4.08	0.20	0.043	0.310	0.012	0.03
50	4.17	0.20	0.043	0.308	0.012	0.03
51	4.25	0.20	0.043	0.307	0.012	0.03
52	4.33	0.23	0.050	0.306	0.014	0.04
53	4.42	0.23	0.050	0.304	0.014	0.04
54	4.50	0.23	0.050	0.303	0.014	0.04
55	4.58	0.23	0.050	0.302	0.014	0.04
56	4.67	0.23	0.050	0.301	0.014	0.04
57	4.75	0.23	0.050	0.299	0.014	0.04
58	4.83	0.27	0.058	0.298	0.016	0.04
59	4.92	0.27	0.058	0.297	0.016	0.04
60	5.00	0.27	0.058	0.295	0.016	0.04
61	5.08	0.20	0.043	0.294	0.012	0.03
62	5.17	0.20	0.043	0.293	0.012	0.03
63	5.25	0.20	0.043	0.292	0.012	0.03
64	5.33	0.23	0.050	0.290	0.014	0.04
65	5.42	0.23	0.050	0.289	0.014	0.04
66	5.50	0.23	0.050	0.288	0.014	0.04
67	5.58	0.27	0.058	0.286	0.016	0.04
68	5.67	0.27	0.058	0.285	0.016	0.04
69	5.75	0.27	0.058	0.284	0.016	0.04
70	5.83	0.27	0.058	0.283	0.016	0.04
71	5.92	0.27	0.058	0.281	0.016	0.04
72	6.00	0.27	0.058	0.280	0.016	0.04
73	6.08	0.30	0.065	0.279	0.018	0.05
74	6.17	0.30	0.065	0.278	0.018	0.05
75	6.25	0.30	0.065	0.277	0.018	0.05
76	6.33	0.30	0.065	0.275	0.018	0.05
77	6.42	0.30	0.065	0.274	0.018	0.05
78	6.50	0.30	0.065	0.273	0.018	0.05
79	6.58	0.33	0.072	0.272	0.020	0.05
80	6.67	0.33	0.072	0.270	0.020	0.05
81	6.75	0.33	0.072	0.269	0.020	0.05
82	6.83	0.33	0.072	0.268	0.020	0.05
83	6.92	0.33	0.072	0.267	0.020	0.05
84	7.00	0.33	0.072	0.265	0.020	0.05
85	7.08	0.33	0.072	0.264	0.020	0.05
86	7.17	0.33	0.072	0.263	0.020	0.05
87	7.25	0.33	0.072	0.262	0.020	0.05
88	7.33	0.37	0.079	0.261	0.022	0.06
89	7.42	0.37	0.079	0.260	0.022	0.06
90	7.50	0.37	0.079	0.258	0.022	0.06
91	7.58	0.40	0.086	0.257	0.024	0.06
92	7.67	0.40	0.086	0.256	0.024	0.06
93	7.75	0.40	0.086	0.255	0.024	0.06
94	7.83	0.43	0.094	0.254	0.026	0.07
95	7.92	0.43	0.094	0.252	0.026	0.07
96	8.00	0.43	0.094	0.251	0.026	0.07
97	8.08	0.50	0.108	0.250	0.030	0.08
98	8.17	0.50	0.108	0.249	0.030	0.08
99	8.25	0.50	0.108	0.248	0.030	0.08
100	8.33	0.50	0.108	0.247	0.030	0.08
101	8.42	0.50	0.108	0.245	0.030	0.08
102	8.50	0.50	0.108	0.244	0.030	0.08

103	8.58	0.53	0.115	0.243	0.032	0.08
104	8.67	0.53	0.115	0.242	0.032	0.08
105	8.75	0.53	0.115	0.241	0.032	0.08
106	8.83	0.57	0.122	0.240	0.034	0.09
107	8.92	0.57	0.122	0.239	0.034	0.09
108	9.00	0.57	0.122	0.237	0.034	0.09
109	9.08	0.63	0.137	0.236	0.038	0.10
110	9.17	0.63	0.137	0.235	0.038	0.10
111	9.25	0.63	0.137	0.234	0.038	0.10
112	9.33	0.67	0.144	0.233	0.040	0.10
113	9.42	0.67	0.144	0.232	0.040	0.10
114	9.50	0.67	0.144	0.231	0.040	0.10
115	9.58	0.70	0.151	0.230	0.042	0.11
116	9.67	0.70	0.151	0.229	0.042	0.11
117	9.75	0.70	0.151	0.227	0.042	0.11
118	9.83	0.73	0.158	0.226	0.044	0.11
119	9.92	0.73	0.158	0.225	0.044	0.11
120	10.00	0.73	0.158	0.224	0.044	0.11
121	10.08	0.50	0.108	0.223	0.030	0.08
122	10.17	0.50	0.108	0.222	0.030	0.08
123	10.25	0.50	0.108	0.221	0.030	0.08
124	10.33	0.50	0.108	0.220	0.030	0.08
125	10.42	0.50	0.108	0.219	0.030	0.08
126	10.50	0.50	0.108	0.218	0.030	0.08
127	10.58	0.67	0.144	0.217	0.040	0.10
128	10.67	0.67	0.144	0.216	0.040	0.10
129	10.75	0.67	0.144	0.215	0.040	0.10
130	10.83	0.67	0.144	0.214	0.040	0.10
131	10.92	0.67	0.144	0.212	0.040	0.10
132	11.00	0.67	0.144	0.211	0.040	0.10
133	11.08	0.63	0.137	0.210	0.038	0.10
134	11.17	0.63	0.137	0.209	0.038	0.10
135	11.25	0.63	0.137	0.208	0.038	0.10
136	11.33	0.63	0.137	0.207	0.038	0.10
137	11.42	0.63	0.137	0.206	0.038	0.10
138	11.50	0.63	0.137	0.205	0.038	0.10
139	11.58	0.57	0.122	0.204	0.034	0.09
140	11.67	0.57	0.122	0.203	0.034	0.09
141	11.75	0.57	0.122	0.202	0.034	0.09
142	11.83	0.60	0.130	0.201	0.036	0.09
143	11.92	0.60	0.130	0.200	0.036	0.09
144	12.00	0.60	0.130	0.199	0.036	0.09
145	12.08	0.83	0.180	0.198	0.050	0.13
146	12.17	0.83	0.180	0.197	0.050	0.13
147	12.25	0.83	0.180	0.196	0.050	0.13
148	12.33	0.87	0.187	0.195	0.052	0.14
149	12.42	0.87	0.187	0.194	0.052	0.14
150	12.50	0.87	0.187	0.193	0.052	0.14
151	12.58	0.93	0.202	0.192	---	0.01
152	12.67	0.93	0.202	0.191	---	0.01
153	12.75	0.93	0.202	0.190	---	0.01
154	12.83	0.97	0.209	0.189	---	0.02
155	12.92	0.97	0.209	0.188	---	0.02
156	13.00	0.97	0.209	0.187	---	0.02
157	13.08	1.13	0.245	0.187	---	0.06
158	13.17	1.13	0.245	0.186	---	0.06
159	13.25	1.13	0.245	0.185	---	0.06
160	13.33	1.13	0.245	0.184	---	0.06
161	13.42	1.13	0.245	0.183	---	0.06
162	13.50	1.13	0.245	0.182	---	0.06
163	13.58	0.77	0.166	0.181	0.046	0.12
164	13.67	0.77	0.166	0.180	0.046	0.12
165	13.75	0.77	0.166	0.179	0.046	0.12
166	13.83	0.77	0.166	0.178	0.046	0.12
167	13.92	0.77	0.166	0.177	0.046	0.12
168	14.00	0.77	0.166	0.176	0.046	0.12
169	14.08	0.90	0.194	0.175	---	0.02
170	14.17	0.90	0.194	0.175	---	0.02
171	14.25	0.90	0.194	0.174	---	0.02
172	14.33	0.87	0.187	0.173	---	0.01
173	14.42	0.87	0.187	0.172	---	0.02

174	14.50	0.87	0.187	0.171	---	0.02
175	14.58	0.87	0.187	0.170	---	0.02
176	14.67	0.87	0.187	0.169	---	0.02
177	14.75	0.87	0.187	0.168	---	0.02
178	14.83	0.83	0.180	0.168	---	0.01
179	14.92	0.83	0.180	0.167	---	0.01
180	15.00	0.83	0.180	0.166	---	0.01
181	15.08	0.80	0.173	0.165	---	0.01
182	15.17	0.80	0.173	0.164	---	0.01
183	15.25	0.80	0.173	0.163	---	0.01
184	15.33	0.77	0.166	0.162	---	0.00
185	15.42	0.77	0.166	0.162	---	0.00
186	15.50	0.77	0.166	0.161	---	0.00
187	15.58	0.63	0.137	0.160	0.038	0.10
188	15.67	0.63	0.137	0.159	0.038	0.10
189	15.75	0.63	0.137	0.158	0.038	0.10
190	15.83	0.63	0.137	0.158	0.038	0.10
191	15.92	0.63	0.137	0.157	0.038	0.10
192	16.00	0.63	0.137	0.156	0.038	0.10
193	16.08	0.13	0.029	0.155	0.008	0.02
194	16.17	0.13	0.029	0.154	0.008	0.02
195	16.25	0.13	0.029	0.154	0.008	0.02
196	16.33	0.13	0.029	0.153	0.008	0.02
197	16.42	0.13	0.029	0.152	0.008	0.02
198	16.50	0.13	0.029	0.151	0.008	0.02
199	16.58	0.10	0.022	0.150	0.006	0.02
200	16.67	0.10	0.022	0.150	0.006	0.02
201	16.75	0.10	0.022	0.149	0.006	0.02
202	16.83	0.10	0.022	0.148	0.006	0.02
203	16.92	0.10	0.022	0.147	0.006	0.02
204	17.00	0.10	0.022	0.147	0.006	0.02
205	17.08	0.17	0.036	0.146	0.010	0.03
206	17.17	0.17	0.036	0.145	0.010	0.03
207	17.25	0.17	0.036	0.144	0.010	0.03
208	17.33	0.17	0.036	0.144	0.010	0.03
209	17.42	0.17	0.036	0.143	0.010	0.03
210	17.50	0.17	0.036	0.142	0.010	0.03
211	17.58	0.17	0.036	0.142	0.010	0.03
212	17.67	0.17	0.036	0.141	0.010	0.03
213	17.75	0.17	0.036	0.140	0.010	0.03
214	17.83	0.13	0.029	0.139	0.008	0.02
215	17.92	0.13	0.029	0.139	0.008	0.02
216	18.00	0.13	0.029	0.138	0.008	0.02
217	18.08	0.13	0.029	0.137	0.008	0.02
218	18.17	0.13	0.029	0.137	0.008	0.02
219	18.25	0.13	0.029	0.136	0.008	0.02
220	18.33	0.13	0.029	0.135	0.008	0.02
221	18.42	0.13	0.029	0.135	0.008	0.02
222	18.50	0.13	0.029	0.134	0.008	0.02
223	18.58	0.10	0.022	0.133	0.006	0.02
224	18.67	0.10	0.022	0.133	0.006	0.02
225	18.75	0.10	0.022	0.132	0.006	0.02
226	18.83	0.07	0.014	0.132	0.004	0.01
227	18.92	0.07	0.014	0.131	0.004	0.01
228	19.00	0.07	0.014	0.130	0.004	0.01
229	19.08	0.10	0.022	0.130	0.006	0.02
230	19.17	0.10	0.022	0.129	0.006	0.02
231	19.25	0.10	0.022	0.128	0.006	0.02
232	19.33	0.13	0.029	0.128	0.008	0.02
233	19.42	0.13	0.029	0.127	0.008	0.02
234	19.50	0.13	0.029	0.127	0.008	0.02
235	19.58	0.10	0.022	0.126	0.006	0.02
236	19.67	0.10	0.022	0.126	0.006	0.02
237	19.75	0.10	0.022	0.125	0.006	0.02
238	19.83	0.07	0.014	0.124	0.004	0.01
239	19.92	0.07	0.014	0.124	0.004	0.01
240	20.00	0.07	0.014	0.123	0.004	0.01
241	20.08	0.10	0.022	0.123	0.006	0.02
242	20.17	0.10	0.022	0.122	0.006	0.02
243	20.25	0.10	0.022	0.122	0.006	0.02
244	20.33	0.10	0.022	0.121	0.006	0.02

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245  20.42     0.10      0.022         0.121     0.006         0.02
246  20.50     0.10      0.022         0.120     0.006         0.02
247  20.58     0.10      0.022         0.120     0.006         0.02
248  20.67     0.10      0.022         0.119     0.006         0.02
249  20.75     0.10      0.022         0.119     0.006         0.02
250  20.83     0.07      0.014         0.118     0.004         0.01
251  20.92     0.07      0.014         0.118     0.004         0.01
252  21.00     0.07      0.014         0.117     0.004         0.01
253  21.08     0.10      0.022         0.117     0.006         0.02
254  21.17     0.10      0.022         0.116     0.006         0.02
255  21.25     0.10      0.022         0.116     0.006         0.02
256  21.33     0.07      0.014         0.115     0.004         0.01
257  21.42     0.07      0.014         0.115     0.004         0.01
258  21.50     0.07      0.014         0.114     0.004         0.01
259  21.58     0.10      0.022         0.114     0.006         0.02
260  21.67     0.10      0.022         0.114     0.006         0.02
261  21.75     0.10      0.022         0.113     0.006         0.02
262  21.83     0.07      0.014         0.113     0.004         0.01
263  21.92     0.07      0.014         0.112     0.004         0.01
264  22.00     0.07      0.014         0.112     0.004         0.01
265  22.08     0.10      0.022         0.112     0.006         0.02
266  22.17     0.10      0.022         0.111     0.006         0.02
267  22.25     0.10      0.022         0.111     0.006         0.02
268  22.33     0.07      0.014         0.111     0.004         0.01
269  22.42     0.07      0.014         0.110     0.004         0.01
270  22.50     0.07      0.014         0.110     0.004         0.01
271  22.58     0.07      0.014         0.110     0.004         0.01
272  22.67     0.07      0.014         0.109     0.004         0.01
273  22.75     0.07      0.014         0.109     0.004         0.01
274  22.83     0.07      0.014         0.109     0.004         0.01
275  22.92     0.07      0.014         0.109     0.004         0.01
276  23.00     0.07      0.014         0.108     0.004         0.01
277  23.08     0.07      0.014         0.108     0.004         0.01
278  23.17     0.07      0.014         0.108     0.004         0.01
279  23.25     0.07      0.014         0.108     0.004         0.01
280  23.33     0.07      0.014         0.107     0.004         0.01
281  23.42     0.07      0.014         0.107     0.004         0.01
282  23.50     0.07      0.014         0.107     0.004         0.01
283  23.58     0.07      0.014         0.107     0.004         0.01
284  23.67     0.07      0.014         0.107     0.004         0.01
285  23.75     0.07      0.014         0.106     0.004         0.01
286  23.83     0.07      0.014         0.106     0.004         0.01
287  23.92     0.07      0.014         0.106     0.004         0.01
288  24.00     0.07      0.014         0.106     0.004         0.01
    Sum =     100.0                                 Sum =    12.0
      Flood volume = Effective rainfall      1.00(In)
       times area       8.4(Ac.)/[(In)/(Ft.)] =       0.7(Ac.Ft)
      Total soil loss =      0.80(In)
      Total soil loss =     0.564(Ac.Ft)
      Total rainfall =      1.80(In)
      Flood volume =       30579.9 Cubic Feet
      Total soil loss =       24566.2 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      1.071(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ------------------------------------------------------------------------
   0+ 5       0.0000      0.00  Q         |         |         |         |
   0+10       0.0002      0.02  Q         |         |         |         |
   0+15       0.0005      0.05  Q         |         |         |         |
   0+20       0.0009      0.06  Q         |         |         |         |
   0+25       0.0015      0.08  Q         |         |         |         |
   0+30       0.0021      0.09  Q         |         |         |         |
   0+35       0.0028      0.11  Q         |         |         |         |
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0+40      0.0036      0.11  Q          |          |          |          |
0+45      0.0044      0.12  Q          |          |          |          |
0+50      0.0052      0.12  Q          |          |          |          |
0+55      0.0062      0.13  Q          |          |          |          |
1+ 0      0.0072      0.15  Q          |          |          |          |
1+ 5      0.0082      0.15  Q          |          |          |          |
1+10      0.0093      0.15  Q          |          |          |          |
1+15      0.0102      0.14  Q          |          |          |          |
1+20      0.0112      0.14  Q          |          |          |          |
1+25      0.0121      0.14  Q          |          |          |          |
1+30      0.0131      0.14  Q          |          |          |          |
1+35      0.0140      0.13  Q          |          |          |          |
1+40      0.0149      0.13  Q          |          |          |          |
1+45      0.0158      0.13  Q          |          |          |          |
1+50      0.0168      0.14  Q          |          |          |          |
1+55      0.0178      0.14  QV         |          |          |          |
2+ 0      0.0189      0.16  QV         |          |          |          |
2+ 5      0.0200      0.16  QV         |          |          |          |
2+10      0.0211      0.17  QV         |          |          |          |
2+15      0.0223      0.17  QV         |          |          |          |
2+20      0.0235      0.17  QV         |          |          |          |
2+25      0.0247      0.17  QV         |          |          |          |
2+30      0.0259      0.17  QV         |          |          |          |
2+35      0.0271      0.18  QV         |          |          |          |
2+40      0.0283      0.18  QV         |          |          |          |
2+45      0.0297      0.20  QV         |          |          |          |
2+50      0.0311      0.21  QV         |          |          |          |
2+55      0.0326      0.21  QV         |          |          |          |
3+ 0      0.0340      0.21  QV         |          |          |          |
3+ 5      0.0355      0.21  Q V        |          |          |          |
3+10      0.0370      0.22  Q V        |          |          |          |
3+15      0.0385      0.22  Q V        |          |          |          |
3+20      0.0400      0.22  Q V        |          |          |          |
3+25      0.0415      0.22  Q V        |          |          |          |
3+30      0.0430      0.22  Q V        |          |          |          |
3+35      0.0445      0.22  Q V        |          |          |          |
3+40      0.0460      0.22  Q V        |          |          |          |
3+45      0.0475      0.22  Q V        |          |          |          |
3+50      0.0490      0.22  Q V        |          |          |          |
3+55      0.0506      0.23  Q V        |          |          |          |
4+ 0      0.0523      0.24  Q V        |          |          |          |
4+ 5      0.0540      0.25  |Q V       |          |          |          |
4+10      0.0558      0.25  |Q V       |          |          |          |
4+15      0.0576      0.26  |Q V       |          |          |          |
4+20      0.0594      0.26  |Q V       |          |          |          |
4+25      0.0612      0.27  |Q V       |          |          |          |
4+30      0.0632      0.28  |Q V       |          |          |          |
4+35      0.0652      0.29  |Q V       |          |          |          |
4+40      0.0672      0.30  |Q V       |          |          |          |
4+45      0.0693      0.30  |Q V       |          |          |          |
4+50      0.0714      0.30  |Q  V      |          |          |          |
4+55      0.0736      0.31  |Q  V      |          |          |          |
5+ 0      0.0758      0.33  |Q  V      |          |          |          |
5+ 5      0.0781      0.33  |Q  V      |          |          |          |
5+10      0.0803      0.32  |Q  V      |          |          |          |
5+15      0.0823      0.30  |Q  V      |          |          |          |
5+20      0.0843      0.29  |Q  V      |          |          |          |
5+25      0.0863      0.29  |Q  V      |          |          |          |
5+30      0.0884      0.30  |Q   V     |          |          |          |
5+35      0.0905      0.31  |Q   V     |          |          |          |
5+40      0.0927      0.32  |Q   V     |          |          |          |
5+45      0.0949      0.33  |Q   V     |          |          |          |
5+50      0.0973      0.34  |Q   V     |          |          |          |
5+55      0.0996      0.34  |Q   V     |          |          |          |
6+ 0      0.1020      0.34  |Q   V     |          |          |          |
6+ 5      0.1044      0.35  |Q   V     |          |          |          |
6+10      0.1069      0.36  |Q    V    |          |          |          |
6+15      0.1094      0.37  |Q    V    |          |          |          |
6+20      0.1121      0.38  |Q    V    |          |          |          |
6+25      0.1147      0.38  |Q    V    |          |          |          |
6+30      0.1174      0.39  |Q    V    |          |          |          |
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 6+35      0.1201      0.39  |Q    V   |         |         |         |
 6+40      0.1228      0.40  |Q    V   |         |         |         |
 6+45      0.1257      0.42  |Q     V  |         |         |         |
 6+50      0.1286      0.42  |Q     V  |         |         |         |
 6+55      0.1316      0.43  |Q     V  |         |         |         |
 7+ 0      0.1345      0.43  |Q     V  |         |         |         |
 7+ 5      0.1375      0.43  |Q     V  |         |         |         |
 7+10      0.1405      0.44  |Q      V |         |         |         |
 7+15      0.1435      0.44  |Q      V |         |         |         |
 7+20      0.1466      0.44  |Q      V |         |         |         |
 7+25      0.1497      0.45  |Q      V |         |         |         |
 7+30      0.1528      0.46  |Q      V |         |         |         |
 7+35      0.1561      0.47  |Q      V |         |         |         |
 7+40      0.1594      0.49  |Q       V|         |         |         |
 7+45      0.1629      0.50  | Q      V|         |         |         |
 7+50      0.1664      0.51  | Q      V|         |         |         |
 7+55      0.1700      0.53  | Q      V|         |         |         |
 8+ 0      0.1738      0.54  | Q      V|         |         |         |
 8+ 5      0.1776      0.55  | Q       V         |         |         |
 8+10      0.1816      0.58  | Q       V         |         |         |
 8+15      0.1857      0.61  | Q       V         |         |         |
 8+20      0.1900      0.62  | Q       V         |         |         |
 8+25      0.1944      0.63  | Q       |V        |         |         |
 8+30      0.1988      0.64  | Q       |V        |         |         |
 8+35      0.2032      0.65  | Q       |V        |         |         |
 8+40      0.2078      0.66  | Q       |V        |         |         |
 8+45      0.2124      0.67  | Q       | V       |         |         |
 8+50      0.2172      0.69  | Q       | V       |         |         |
 8+55      0.2220      0.70  | Q       | V       |         |         |
 9+ 0      0.2269      0.72  | Q       | V       |         |         |
 9+ 5      0.2320      0.73  | Q       |  V      |         |         |
 9+10      0.2371      0.75  |  Q      |  V      |         |         |
 9+15      0.2425      0.78  |  Q      |  V      |         |         |
 9+20      0.2481      0.80  |  Q      |   V     |         |         |
 9+25      0.2537      0.82  |  Q      |   V     |         |         |
 9+30      0.2595      0.84  |  Q      |   V     |         |         |
 9+35      0.2654      0.85  |  Q      |    V    |         |         |
 9+40      0.2714      0.87  |  Q      |    V    |         |         |
 9+45      0.2775      0.89  |  Q      |    V    |         |         |
 9+50      0.2837      0.90  |  Q      |     V   |         |         |
 9+55      0.2900      0.92  |  Q      |     V   |         |         |
10+ 0      0.2964      0.93  |  Q      |     V   |         |         |
10+ 5      0.3028      0.93  |  Q      |      V  |         |         |
10+10      0.3089      0.88  |  Q      |      V  |         |         |
10+15      0.3144      0.80  |  Q      |      V  |         |         |
10+20      0.3195      0.75  | Q       |       V |         |         |
10+25      0.3245      0.73  | Q       |       V |         |         |
10+30      0.3294      0.71  | Q       |       V |         |         |
10+35      0.3344      0.71  | Q       |        V|         |         |
10+40      0.3395      0.75  | Q       |        V|         |         |
10+45      0.3450      0.80  |  Q      |        V|         |         |
10+50      0.3508      0.83  |  Q      |        V|         |         |
10+55      0.3566      0.85  |  Q      |         V         |         |
11+ 0      0.3625      0.86  |  Q      |         V         |         |
11+ 5      0.3685      0.86  |  Q      |         V         |         |
11+10      0.3744      0.86  |  Q      |         |V        |         |
11+15      0.3802      0.85  |  Q      |         |V        |         |
11+20      0.3860      0.84  |  Q      |         |V        |         |
11+25      0.3918      0.84  |  Q      |         | V       |         |
11+30      0.3976      0.84  |  Q      |         | V       |         |
11+35      0.4033      0.84  |  Q      |         | V       |         |
11+40      0.4089      0.82  |  Q      |         |  V      |         |
11+45      0.4144      0.79  |  Q      |         |  V      |         |
11+50      0.4198      0.78  |  Q      |         |  V      |         |
11+55      0.4252      0.78  |  Q      |         |   V     |         |
12+ 0      0.4306      0.79  |  Q      |         |   V     |         |
12+ 5      0.4362      0.81  |  Q      |         |   V     |         |
12+10      0.4422      0.87  |  Q      |         |    V    |         |
12+15      0.4488      0.96  |  Q      |         |    V    |         |
12+20      0.4558      1.01  |   Q     |         |    V    |         |
12+25      0.4630      1.04  |   Q     |         |     V   |         |
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12+30      0.4703     1.07  |   Q     |         |     V   |         |
12+35      0.4775     1.04  |   Q     |         |      V  |         |
12+40      0.4833     0.85  |  Q      |         |      V  |         |
12+45      0.4872     0.56  | Q       |         |      V  |         |
12+50      0.4899     0.40  |Q        |         |      V  |         |
12+55      0.4923     0.34  |Q        |         |       V |         |
13+ 0      0.4944     0.31  |Q        |         |       V |         |
13+ 5      0.4965     0.30  |Q        |         |       V |         |
13+10      0.4988     0.34  |Q        |         |       V |         |
13+15      0.5017     0.42  |Q        |         |       V |         |
13+20      0.5049     0.46  |Q        |         |       V |         |
13+25      0.5082     0.48  |Q        |         |       V |         |
13+30      0.5116     0.49  |Q        |         |        V|         |
13+35      0.5152     0.53  | Q       |         |        V|         |
13+40      0.5195     0.63  | Q       |         |        V|         |
13+45      0.5248     0.76  |  Q      |         |        V|         |
13+50      0.5306     0.85  |  Q      |         |         V         |
13+55      0.5368     0.89  |  Q      |         |         V         |
14+ 0      0.5430     0.91  |  Q      |         |         V         |
14+ 5      0.5492     0.89  |  Q      |         |          V        |
14+10      0.5543     0.74  | Q       |         |          V        |
14+15      0.5579     0.52  | Q       |         |          V        |
14+20      0.5606     0.39  |Q        |         |          V        |
14+25      0.5629     0.33  |Q        |         |           V       |
14+30      0.5648     0.28  |Q        |         |           V       |
14+35      0.5665     0.25  Q         |         |           V       |
14+40      0.5681     0.23  Q         |         |           V       |
14+45      0.5696     0.22  Q         |         |           V       |
14+50      0.5710     0.21  Q         |         |           V       |
14+55      0.5723     0.19  Q         |         |           V       |
15+ 0      0.5735     0.17  Q         |         |           V       |
15+ 5      0.5745     0.15  Q         |         |           V       |
15+10      0.5755     0.14  Q         |         |           V       |
15+15      0.5763     0.12  Q         |         |           V       |
15+20      0.5770     0.10  Q         |         |           V       |
15+25      0.5776     0.09  Q         |         |           V       |
15+30      0.5781     0.07  Q         |         |           V       |
15+35      0.5787     0.10  Q         |         |           V       |
15+40      0.5804     0.25  Q         |         |            V      |
15+45      0.5836     0.46  |Q        |         |            V      |
15+50      0.5877     0.59  | Q       |         |            V      |
15+55      0.5922     0.66  | Q       |         |            V      |
16+ 0      0.5970     0.70  | Q       |         |             V     |
16+ 5      0.6018     0.70  | Q       |         |             V     |
16+10      0.6059     0.59  | Q       |         |             V     |
16+15      0.6088     0.43  |Q        |         |             V     |
16+20      0.6111     0.33  |Q        |         |             V     |
16+25      0.6131     0.29  |Q        |         |             V     |
16+30      0.6149     0.26  |Q        |         |              V    |
16+35      0.6166     0.24  Q         |         |              V    |
16+40      0.6181     0.22  Q         |         |              V    |
16+45      0.6195     0.20  Q         |         |              V    |
16+50      0.6207     0.18  Q         |         |              V    |
16+55      0.6219     0.17  Q         |         |              V    |
17+ 0      0.6231     0.17  Q         |         |              V    |
17+ 5      0.6242     0.17  Q         |         |              V    |
17+10      0.6254     0.18  Q         |         |              V    |
17+15      0.6268     0.20  Q         |         |              V    |
17+20      0.6282     0.21  Q         |         |              V    |
17+25      0.6297     0.21  Q         |         |              V    |
17+30      0.6311     0.21  Q         |         |              V    |
17+35      0.6326     0.21  Q         |         |               V   |
17+40      0.6340     0.21  Q         |         |               V   |
17+45      0.6355     0.21  Q         |         |               V   |
17+50      0.6370     0.21  Q         |         |               V   |
17+55      0.6384     0.21  Q         |         |               V   |
18+ 0      0.6397     0.19  Q         |         |               V   |
18+ 5      0.6410     0.19  Q         |         |               V   |
18+10      0.6423     0.18  Q         |         |               V   |
18+15      0.6436     0.18  Q         |         |               V   |
18+20      0.6448     0.18  Q         |         |               V   |
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18+25      0.6461     0.18  Q        |         |         |     V   |
18+30      0.6473     0.18  Q        |         |         |     V   |
18+35      0.6485     0.18  Q        |         |         |     V   |
18+40      0.6497     0.17  Q        |         |         |      V  |
18+45      0.6508     0.16  Q        |         |         |      V  |
18+50      0.6518     0.15  Q        |         |         |      V  |
18+55      0.6527     0.13  Q        |         |         |      V  |
19+ 0      0.6535     0.12  Q        |         |         |      V  |
19+ 5      0.6543     0.11  Q        |         |         |      V  |
19+10      0.6551     0.12  Q        |         |         |      V  |
19+15      0.6559     0.12  Q        |         |         |      V  |
19+20      0.6568     0.13  Q        |         |         |      V  |
19+25      0.6578     0.14  Q        |         |         |      V  |
19+30      0.6589     0.15  Q        |         |         |      V  |
19+35      0.6599     0.16  Q        |         |         |      V  |
19+40      0.6610     0.15  Q        |         |         |      V  |
19+45      0.6620     0.14  Q        |         |         |      V  |
19+50      0.6630     0.14  Q        |         |         |      V  |
19+55      0.6638     0.13  Q        |         |         |      V  |
20+ 0      0.6646     0.11  Q        |         |         |      V  |
20+ 5      0.6653     0.11  Q        |         |         |      V  |
20+10      0.6661     0.11  Q        |         |         |      V  |
20+15      0.6669     0.12  Q        |         |         |       V |
20+20      0.6678     0.13  Q        |         |         |       V |
20+25      0.6687     0.13  Q        |         |         |       V |
20+30      0.6696     0.13  Q        |         |         |       V |
20+35      0.6705     0.13  Q        |         |         |       V |
20+40      0.6714     0.13  Q        |         |         |       V |
20+45      0.6723     0.13  Q        |         |         |       V |
20+50      0.6732     0.13  Q        |         |         |       V |
20+55      0.6740     0.12  Q        |         |         |       V |
21+ 0      0.6748     0.11  Q        |         |         |       V |
21+ 5      0.6755     0.10  Q        |         |         |       V |
21+10      0.6762     0.11  Q        |         |         |       V |
21+15      0.6770     0.12  Q        |         |         |       V |
21+20      0.6779     0.12  Q        |         |         |       V |
21+25      0.6787     0.12  Q        |         |         |       V |
21+30      0.6794     0.11  Q        |         |         |       V |
21+35      0.6801     0.10  Q        |         |         |       V |
21+40      0.6808     0.11  Q        |         |         |       V |
21+45      0.6817     0.12  Q        |         |         |       V |
21+50      0.6825     0.12  Q        |         |         |       V |
21+55      0.6833     0.12  Q        |         |         |       V |
22+ 0      0.6840     0.10  Q        |         |         |       V |
22+ 5      0.6847     0.10  Q        |         |         |        V|
22+10      0.6854     0.11  Q        |         |         |        V|
22+15      0.6862     0.12  Q        |         |         |        V|
22+20      0.6871     0.12  Q        |         |         |        V|
22+25      0.6879     0.11  Q        |         |         |        V|
22+30      0.6886     0.10  Q        |         |         |        V|
22+35      0.6892     0.10  Q        |         |         |        V|
22+40      0.6899     0.10  Q        |         |         |        V|
22+45      0.6906     0.09  Q        |         |         |        V|
22+50      0.6912     0.09  Q        |         |         |        V|
22+55      0.6918     0.09  Q        |         |         |        V|
23+ 0      0.6925     0.09  Q        |         |         |        V|
23+ 5      0.6931     0.09  Q        |         |         |        V|
23+10      0.6937     0.09  Q        |         |         |        V|
23+15      0.6943     0.09  Q        |         |         |        V|
23+20      0.6949     0.09  Q        |         |         |        V|
23+25      0.6955     0.09  Q        |         |         |        V|
23+30      0.6962     0.09  Q        |         |         |        V|
23+35      0.6968     0.09  Q        |         |         |        V|
23+40      0.6974     0.09  Q        |         |         |        V|
23+45      0.6980     0.09  Q        |         |         |        V|
23+50      0.6986     0.09  Q        |         |         |        V|
23+55      0.6992     0.09  Q        |         |         |        V|
24+ 0      0.6998     0.09  Q        |         |         |        V|
24+ 5      0.7004     0.08  Q        |         |         |        V|
24+10      0.7009     0.07  Q        |         |         |        V|
24+15      0.7012     0.04  Q        |         |         |        V|
```

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   24+20       0.7014      0.03  Q          |          |          |         V|
   24+25       0.7015      0.02  Q          |          |          |         V|
   24+30       0.7016      0.02  Q          |          |          |         V|
   24+35       0.7017      0.01  Q          |          |          |         V|
   24+40       0.7018      0.01  Q          |          |          |         V|
   24+45       0.7018      0.01  Q          |          |          |         V|
   24+50       0.7019      0.01  Q          |          |          |         V|
   24+55       0.7019      0.01  Q          |          |          |         V|
   25+ 0       0.7019      0.00  Q          |          |          |         V|
   25+ 5       0.7020      0.00  Q          |          |          |         V|
   25+10       0.7020      0.00  Q          |          |          |         V|
   25+15       0.7020      0.00  Q          |          |          |         V|
   25+20       0.7020      0.00  Q          |          |          |         V|
   25+25       0.7020      0.00  Q          |          |          |         V|
   25+30       0.7020      0.00  Q          |          |          |         V|
   25+35       0.7020      0.00  Q          |          |          |         V|
-------------------------------------------------------------------------
```

APPENDIX F: ONSITE PIPE SIZING SPREADSHEETS (SOFFIT CONTROL)

APPENDIX F.1: LINE A1 AND A2

PIPE SIZING (SOFFIT CONTROL) BASED ON 100-YEAR WATER SURFACE ELEVATIONS

LINE A1-1

PIPE SIZING (SOFFIT CONTROL)

DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN	LOSSES	US WSE	
1579.00	LINE A1	30	150.00	17.6	1.0	410.16	0.0030	1575.00	1575.45	0.0018	3.5901	0.0556	2.0000	0.1113	1579.39	215-216
																206-207

LOSS		
TRANSITION STRUCTURE	0.25	0.25
WALL ENTRANCE	0.25	0.25
JUNCTION STRUCTURE	0.25	1.00
		2.50

LINE A1-2

PIPE SIZING (SOFFIT CONTROL)

DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN T	LOSSES	US WSE	
1579.00	LATERAL A-1	30	73.00	7.5	1.0	410.16	0.0030	1575.00	1575.22	0.0003	1.5299	0.0237	2.0000	0.0474	1579.07	213-214
																211-213

LOSS		
TRANSITION STRUCTURE	0.25	0.25
WALL ENTRANCE	0.25	0.25
JUNCTION STRUCTURE	0.50	0.50
		2.00

APPENDIX F.2: LINE A2-1 AND A2-2

PIPE SIZING (SOFFIT CONTROL) BASED ON 100-YEAR WATER SURFACE ELEVATIONS

LINE A2-1

PIPE SIZING (SOFFIT CONTROL)

DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN	LOSSES	US WSE	
1578.00	LINE A2	30	173.00	15.8	1.0	410.16	0.0030	1574.00	1574.52	0.0015	3.2230	0.0500	2.0000	0.0999	1578.36	130-131
1578.36	LINE A2	30	198.00	15.8	1.0	410.16	0.0030	1574.52	1575.11	0.0015	3.2230	0.0500	2.0000	0.0999	1578.75	125-130
1578.75	LINE A2	18	110.00	2.6	1.0	105.04	0.0030	1575.11	1575.44	0.0006	1.4732	0.0228	2.0000	0.0457	1578.86	

LOSS		
TRANSITION STRUCTURE	0.25	0.25
WALL ENTRANCE	0.25	0.25
JUNCTION STRUCTURE	0.50	0.50
		2.00

LATERAL A2-1

PIPE SIZING (SOFFIT CONTROL)

DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN T	LOSSES	US WSE	
1578.40	LATERAL A2-1	24	341.00	5.0	1.0	226.22	0.0030	1574.61	1575.63	0.0005	1.5936	0.0247	2.0000	0.0494	1578.62	105-106

LINE A2-2

PIPE SIZING (SOFFIT CONTROL)

DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN T	LOSSES	US WSE	
1578.00	LINE A2	18	66.00	5.3	1.0	105.04	0.0030	1574.00	1574.20	0.0025	3.0031	0.0465	2.0000	0.0931	1578.26	102-103

APPENDIX F.3: LINE B1 AND B2

LINE B-1

PIPE SIZING (SOFFIT CONTROL)															
DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN	LOSSES	US WSE
1579.00	LINE B	30	223.00	15.2	1.0	410.16	0.0030	1575.00	1575.67	0.0014	3.1006	0.0481	2.0000	0.0961	1579.40
1579.40	LINE B	24	141.00	8.6	1.0	226.22	0.0030	1575.84	1576.26	0.0014	2.7410	0.0425	2.0000	0.0850	1579.69
1579.69	LINE B	18	87.00	8.6	1.0	105.04	0.0030	1575.84	1576.10	0.0067	4.8730	0.0755	2.0000	0.1511	1580.43

LOSS		
TRANSITION STRUCTURE	0.25	0.25
WALL ENTRANCE	0.25	0.25
JUNCTION STRUCTURE	0.50	0.50
		2.00

LATERAL B-1

PIPE SIZING (SOFFIT CONTROL)															
DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIENT	LOSSES	US WSE
1579.40	LATERAL B-1	30	308.00	6.6	1.0	410.16	0.0030	1575.67	1576.59	0.0003	1.3463	0.0209	2.0000	0.0417	1579.52

LINE B-2

PIPE SIZING (SOFFIT CONTROL)															
DS WSE	SYSTEM	PIPE DIA.	PIPE LENGTH	Q (cfs)	NO. of PIPES	K	PIPE SLOPE	DS INVERT	US INVERT	FRICTION SLOPE	VELOCITY	VELOCITY HEAD	LOSS COEFFICIEN	LOSSES	US WSE
1579.00	LINE B	18	62.00	2.8	1.0	105.04	0.0030	1575.00	1575.19	0.0007	1.5865	0.0246	2.0000	0.0492	1579.09

APPENDIX G: EXTENDED DETENTION BASINS

R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E

T1S T2S T3S T4S T5S T6S T7S T8S

SAN BERNARDINO MOUNTAINS

SANTA ANA MOUNTAINS

SAN JACINTO MOUNTAINS

G-240

Mira Loma 1.21

Riverside North 0.78

Pigeon Pass 0.81

Riverside South 0.83

Banning Bench 1.15

Beaumont 1.23

Desert Hot Springs East 0.92

1.06 Cabazon

Prado Dam 1.20

Lake Mathews 0.81

Tachevah Dam 1.10

San Jacinto 0.92

Idyllwild 1.36

Cathedral City 0.94

Winchester 0.92

El Cariso Station 1.31

Elsinore 1.13

Red Mountain 1.19

Hurkey Creek Park 1.13

La Cresta 1.25

Temecula 1.24

Anza 0.95

Aguanga Valley 0.95

1.20 1.10 1.00 0.90

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

N

N.T.S.

● Rain Gage Location

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Slope of the Design Volume Curve

May 2004

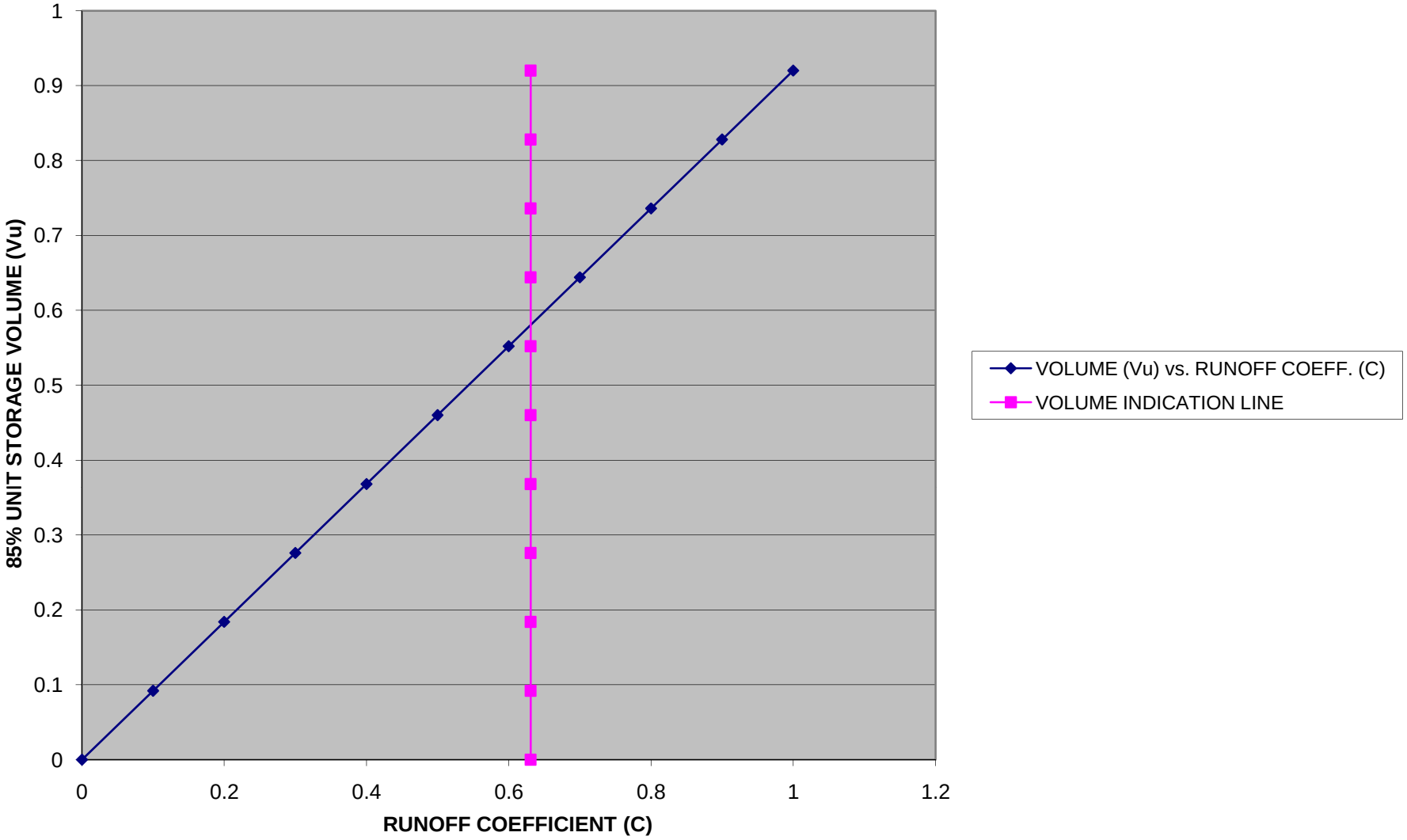
APPENDIX G.1: VOLUME DESIGN CURVE

AREA A EXTENDED DETENTION BASIN WATER QUALITY CALCULATIONS
DESIGN PROCEDURE FOR BMP VOLUME

DESIGNER JILLEEN CARVER
COMPANY JLC ENGINEERING AND CONSULTING, INC.
DATE 8/3/2010
PROJECT NORTH HEMET REVITALIZATION PLAN
LOCATION HEMET, CA

CREATE UNIT STORAGE VOLUME GRAPH				
		TOWNSHIP	RANGE	(1)
A	SITE LOCATION	SECTION		
B	SLOPE VALUE FOR DESIGN VOLUME CURVE APPENDIX A		0.92	(2)
C	SEE CURVE APPENDIX A			
D	CURVE FOR UNIT VOLUME GRAPH			
DETERMINE RUNOFF COEFFICIENT				
	DETERMINE TOTAL IMPERVIOUS AREA		16.677	(5)
	DETERMINE TOTAL AREA		20.190	(6)
	DETERMINE IMPERVIOUS FRACTION (I)		0.826	(7)
	DETERMINE RUNOFF COEFFICIENT C $C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$		0.631	(8)
DETERMINE 85% UNIT STORAGE VOLUME				
	USE FIGURE 2 AND DRAW VERTICAL LINE TO Vu		0.580	(9)
DETERMINE DESIGN STORAGE VOLUME				
	VOLUME OF BMP (IN-ACRES) V_{bmp} = (9) x (6)		11.715	(10)
	VOLUME OF BMP (FT-ACRES) V_{bmp} = (10) /12		0.976	(11)
	VOLUME OF BMP (FT^3) V_{bmp} = (11) x 43,560		42524.775	(12)

FIGURE 2: UNIT STORAGE VOLUME GRAPH

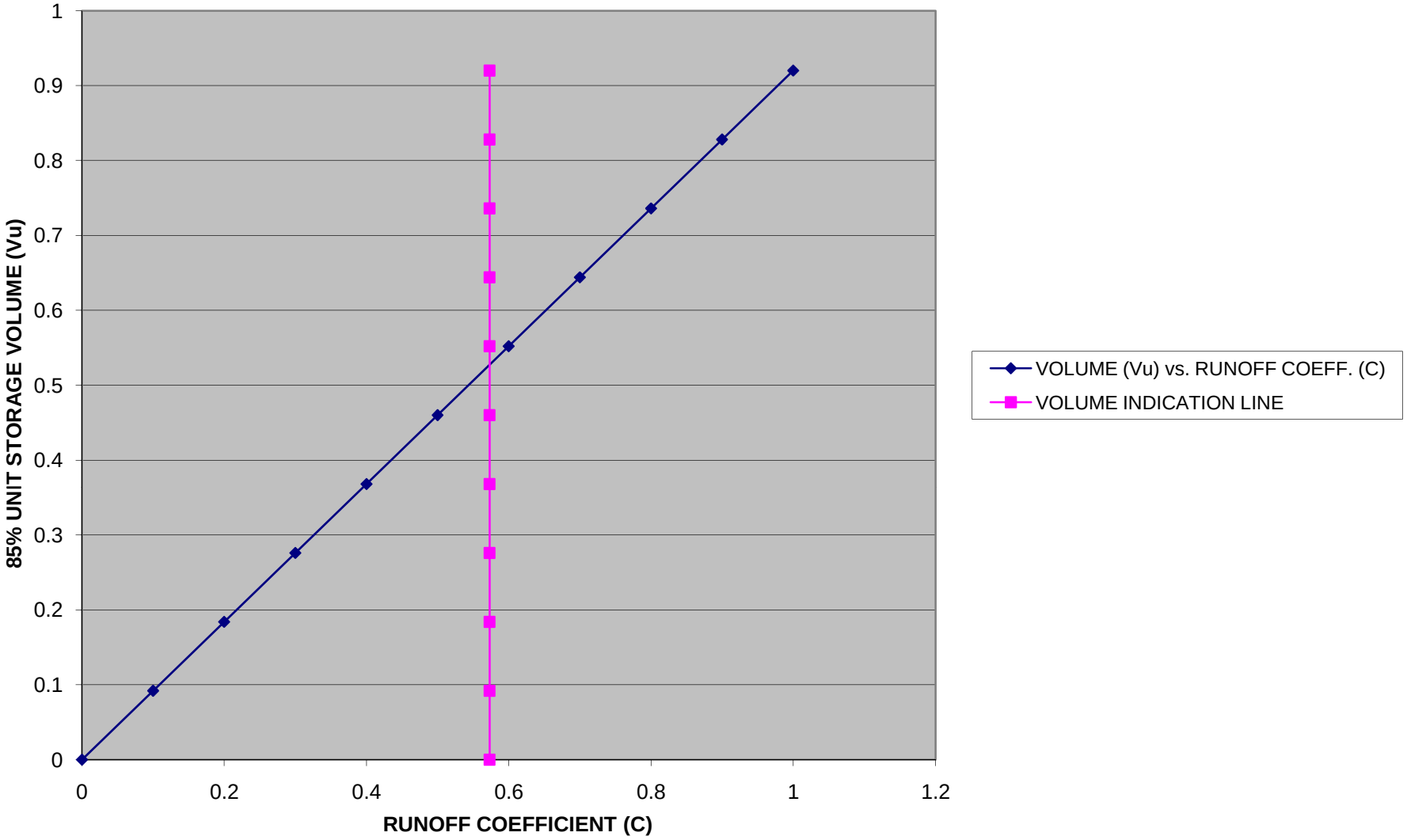


AREA B EXTENDED DETENTION BASIN WATER QUALITY CALCULATIONS
DESIGN PROCEDURE FOR BMP VOLUME

DESIGNER JILLEEN CARVER
COMPANY JLC ENGINEERING AND CONSULTING, INC.
DATE 6/18/2009
PROJECT TENTATIVE TRACT MAP 36218
LOCATION TEMECULA, CA

CREATE UNIT STORAGE VOLUME GRAPH				
A	SITE LOCATION	TOWNSHIP SECTION	RANGE	(1)
B	SLOPE VALUE FOR DESIGN VOLUME CURVE APPENDIX A		0.92	(2)
C	SEE CURVE APPENDIX A			
D	CURVE FOR UNIT VOLUME GRAPH			
DETERMINE RUNOFF COEFFICIENT				
	DETERMINE TOTAL IMPERVIOUS AREA		6.558	(5)
	DETERMINE TOTAL AREA		8.440	(6)
	DETERMINE IMPERVIOUS FRACTION (I)		0.777	(7)
	DETERMINE RUNOFF COEFFICIENT C $C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$		0.573	(8)
DETERMINE 85% UNIT STORAGE VOLUME				
	USE FIGURE 2 AND DRAW VERTICAL LINE TO Vu		0.527	(9)
DETERMINE DESIGN STORAGE VOLUME				
	VOLUME OF BMP (IN-ACRES) V_{bmp} = (9) x (6)		4.449	(10)
	VOLUME OF BMP (FT-ACRES) V_{bmp} = (10) /12		0.371	(11)
	VOLUME OF BMP (FT^3) V_{bmp} = (11) x 43,560		16150.001	(12)

FIGURE 2: UNIT STORAGE VOLUME GRAPH



APPENDIX G.2: WATER QUALITY VOLUME SIZING SPREADSHEET AND UNIT STORAGE VOLUME GRAPH

EXTENDED DETENTION BASIN A-1

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1573.5	0.0	0.000		0	0.000
			0.019		
1574	5086.39	0.117		0.019	0.055
			0.131		
1575	6371.79	0.146		0.151	0.056
			0.162		
1576	7757.72	0.178		0.313	0.057
			0.195		
1577	9244.19	0.212		0.508	0.057
			0.230		
1578	10831.19	0.249		0.738	0.057
			0.268		
1579	12518.71	0.287		1.006	0.057

EXTENDED DETENTION BASIN A-2

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1573.5	0.0	0.000		0	0.000
			0.011		
1574	2894.58	0.066		0.011	0.055
			0.078		
1575	3917.29	0.090		0.089	0.056
			0.103		
1576	5054.26	0.116		0.192	0.057
			0.130		
1577	6291.77	0.144		0.322	0.057
			0.160		
1578	7629.81	0.175		0.481	0.057
			0.191		
1579	9068.37	0.208		0.673	0.057
			0.226		
1580	10607.47	0.244		0.898	0.057

EXTENDED DETENTION BASIN B

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1574.5	0.0	0.000		0	0.000
			0.012		
1575	3043.86	0.070		0.012	0.122
			0.081		
1576	4034.6	0.093		0.093	0.123
			0.105		
1577	5129.31	0.118		0.198	0.124
			0.131		
1578	6324.56	0.145		0.329	0.124
			0.160		
1579	7620.33	0.175		0.489	0.124
			0.191		
1580	9016.63	0.207		0.679	0.124
			0.224		
1581	10513.47	0.241		0.903	0.124

APPENDIX G.3 EXTENDED DETENTION BASIN SIZING SPREADSHEET

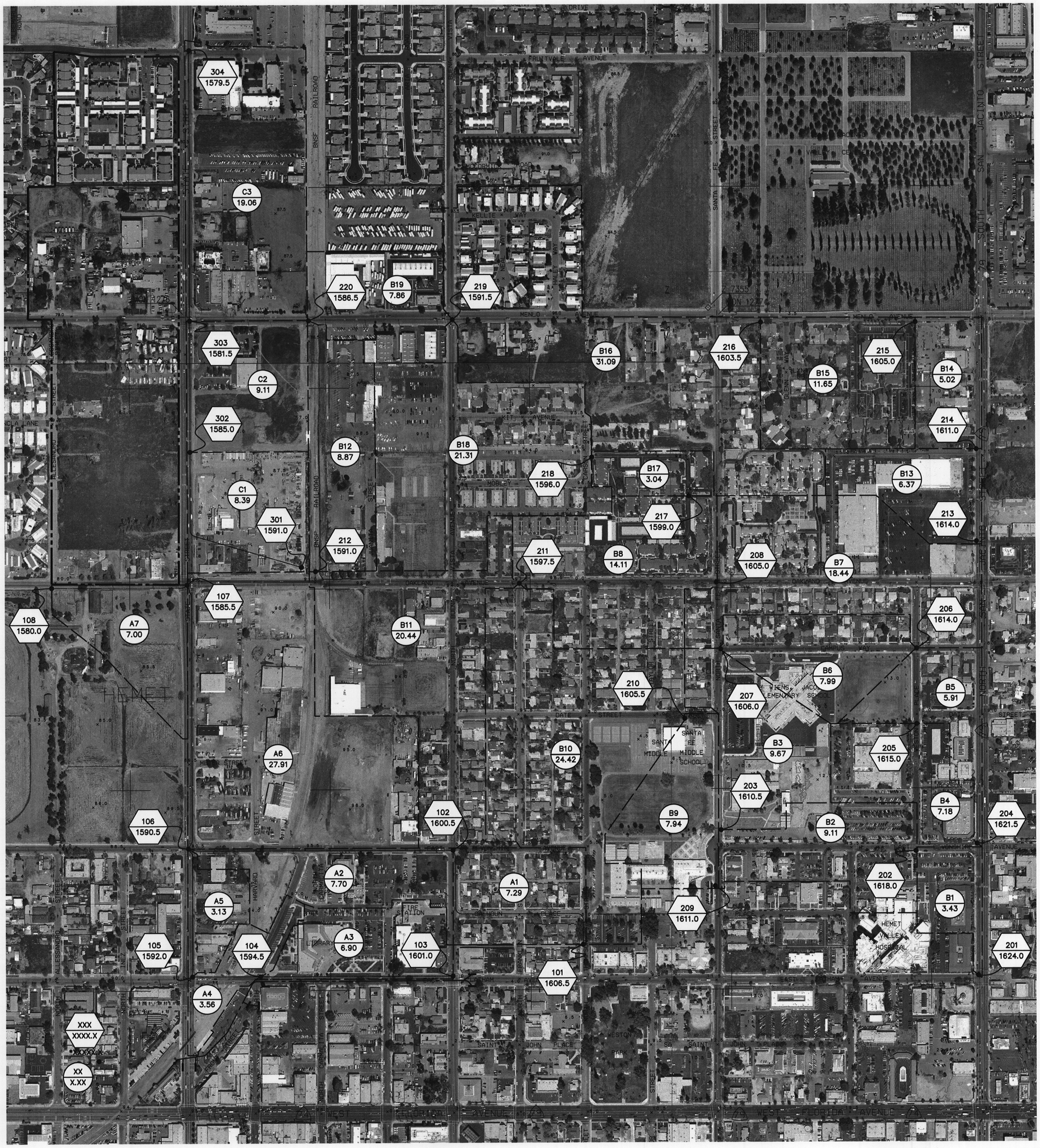
EXHIBITS

EXHIBIT A: PRE-PROJECT CONDITION OFFSITE HYDROGRAPH MAP

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

EXISTING CONDITION OFFSITE HYDROLOGY MAP



SITE

VICINITY MAP

N.T.S.

TXXN – RXXW SECTION XX

HYDROLOGY SUMMARY TABLE

NODAL POINT	Q10 (CFS)	Tc (MIN)	Q100 (CFS)	Tc (MIN)
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX
XXX–XXX	XX.X	XX.X	XX.X	XXXX

* DENOTES CONFLUENCE POINT

LEGEND:

- X.X / X.X — NODE/CONCENTRATION POINT / FLOWLINE ELEVATION
- XXXX.X — APPROXIMATE INVERT ELEVATION
- XXX / X.X — SUB AREA / ACRES
- L=XXX' — FLOW DISTANCE
- FLOW PATH
- WATERSHED SUB-BOUNDARY
- WATERSHED BOUNDARY

GRAPHIC SCALE

200' 0 100' 200' 400'

1" = 200'

EXHIBIT "A"

NORTH HEMET REVITALIZATION PLAN

EXISTING CONDITION OFFSITE HYDROLOGY MAP

JLC Engineering & Consulting, Inc.
40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

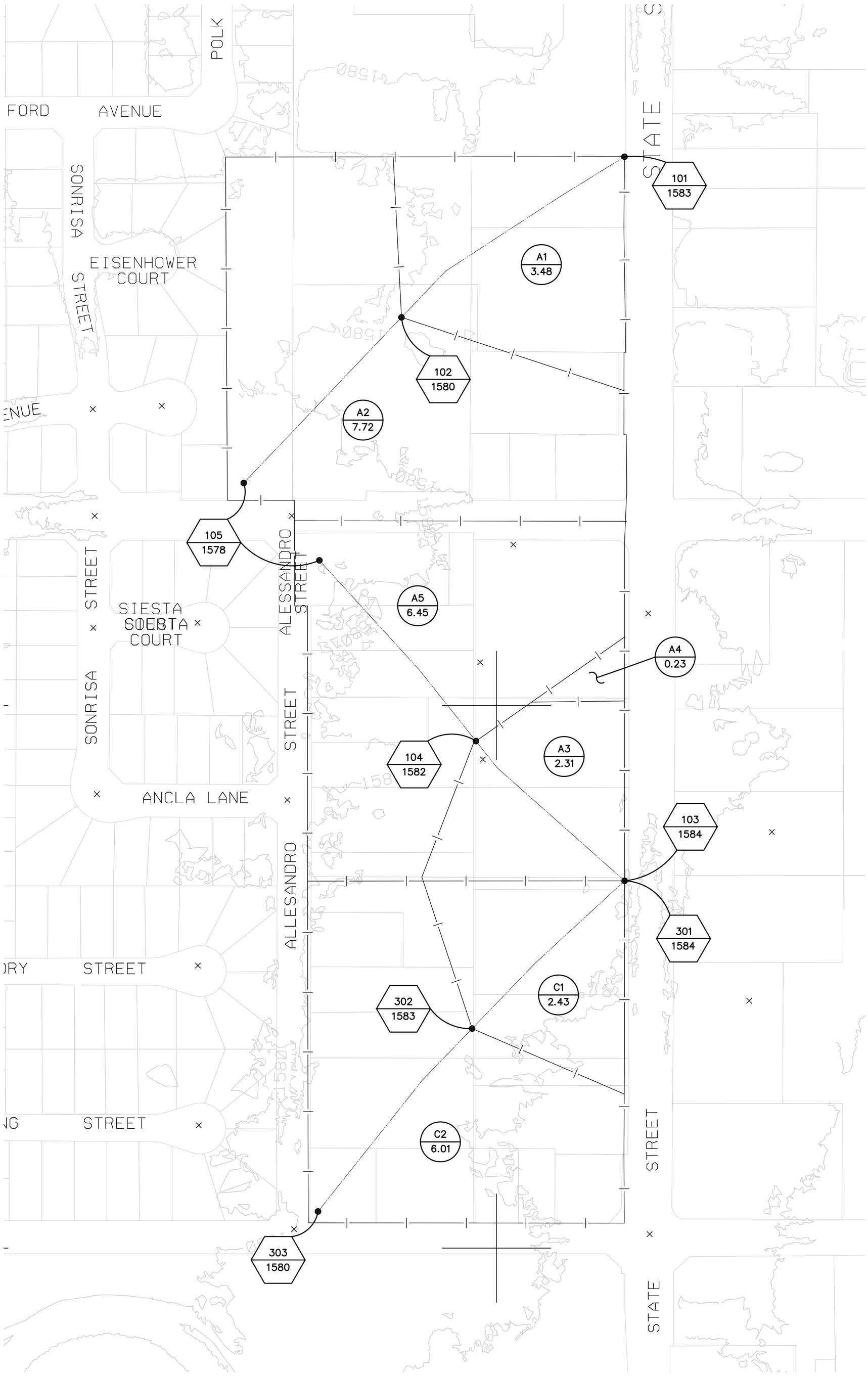
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Last Dramtc: Sep 13, 2010 - 3:49pm by jcarver

EXHIBIT B: **PRE-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY MAP**

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PRE-PROJECT CONDITION ONSITE HYDROLOGY MAP



LEGEND:

WATERSHED BOUNDARY

XXX / X.X — AREA / ACRES

GRAPHIC SCALE
100' 0 50' 100' 200'
1" = 100'

EXHIBIT "B"

NORTH HEMET REVITALIZATION PLAN

EXISTING ONSITE HYDROLOGY MAP

JLC Engineering & Consulting, Inc.
36263 CALLE DE LOBO
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

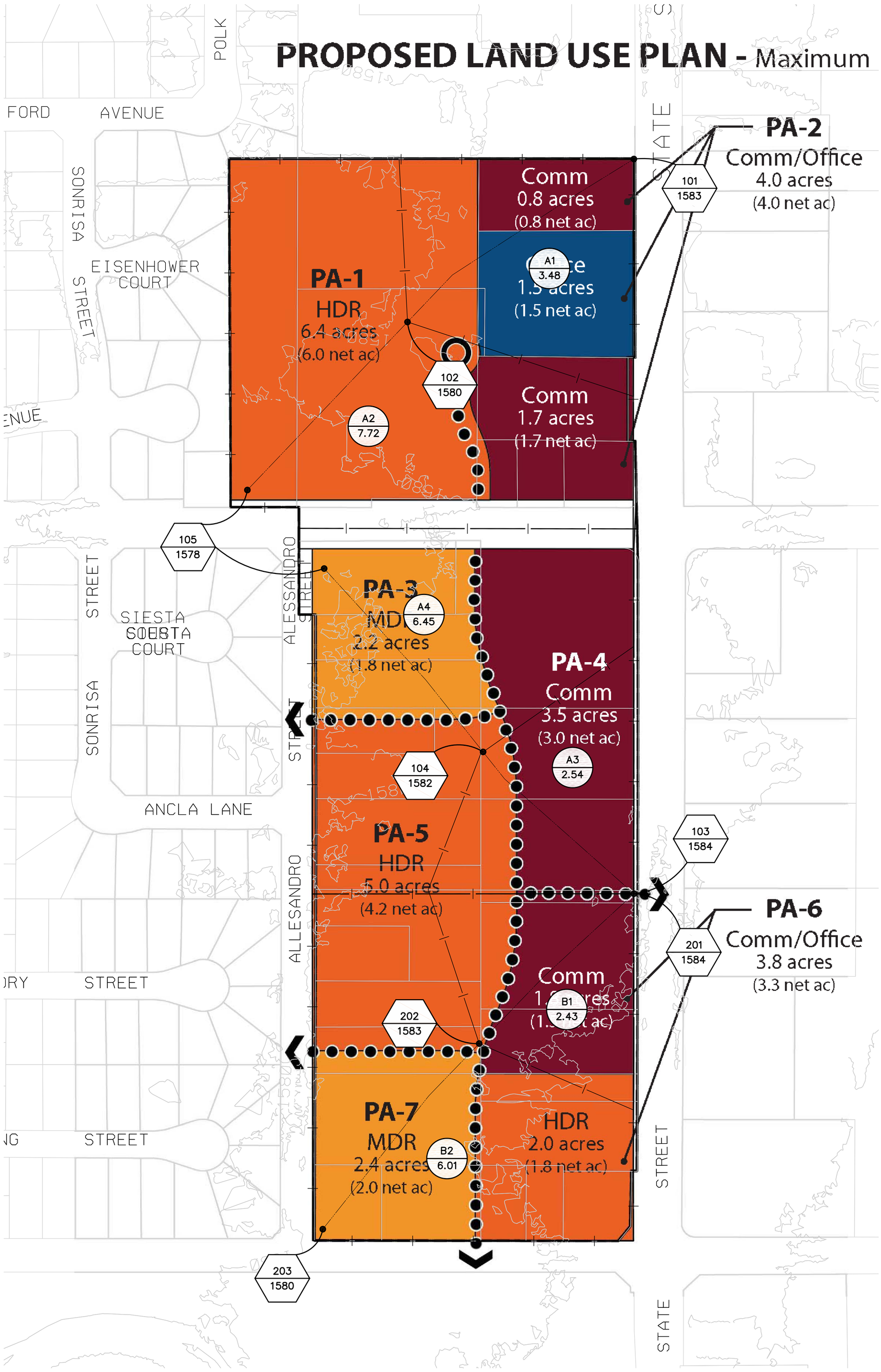
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Last Opened: Sep 13, 2010 - 5:23pm by jcarver

EXHIBIT C: **POST-PROJECT CONDITION ONSITE RATIONAL METHOD HYDROLOGY MAP**

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

POST-PROJECT ONSITE HYDROLOGY MAP



LEGEND:

WATERSHED BOUNDARY

XXX / X.X — AREA / ACRES

GRAPHIC SCALE
100' 0 50' 100' 200'
1" = 100'

EXHIBIT "C"

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NORTH HEMET REVITALIZATION PLAN

POST-PROJECT ONSITE HYDROLOGY MAP

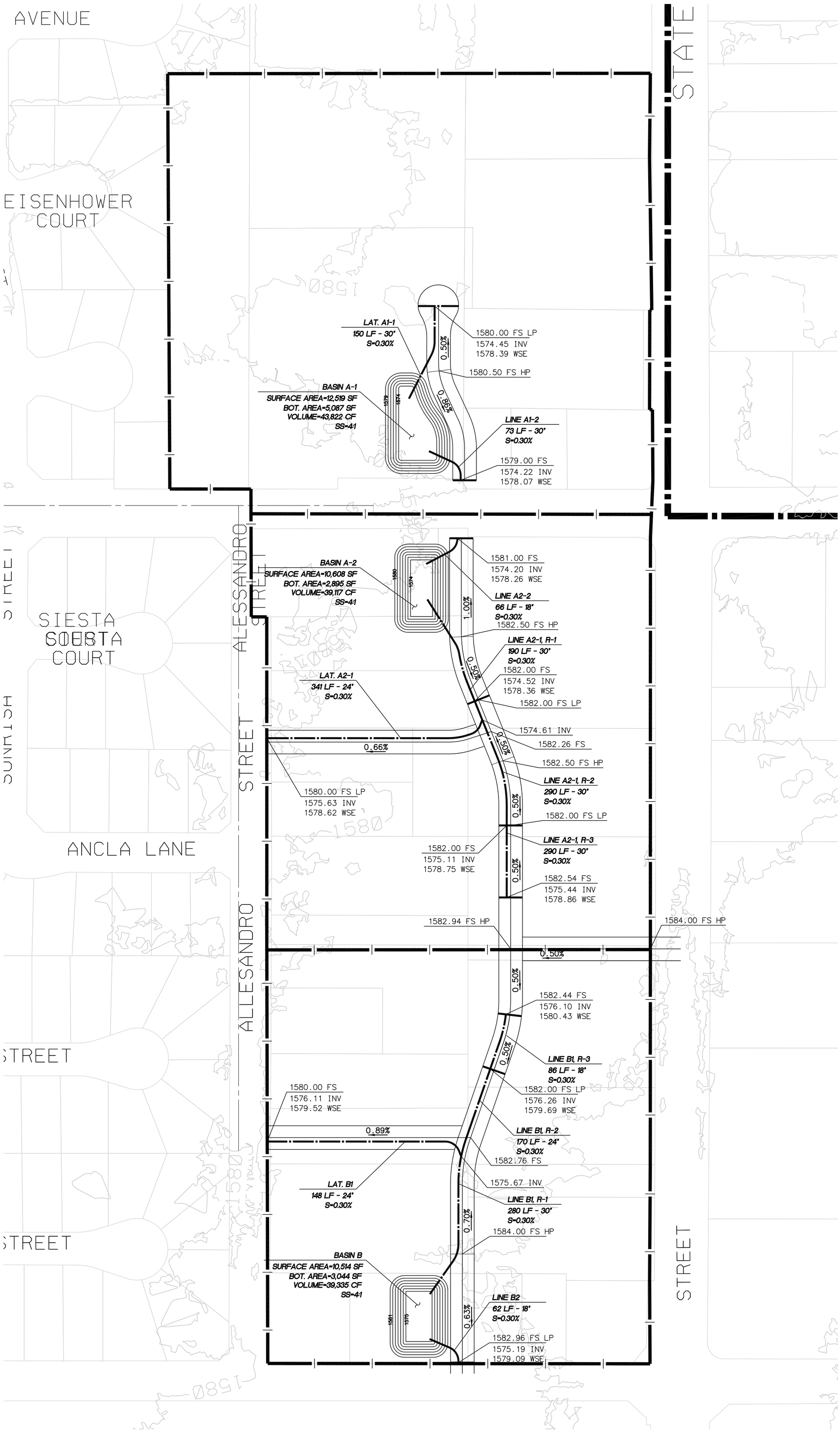
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Last Opened: Sep 13, 2010 - 5:25pm by jcarver

EXHIBIT D: DRAINAGE FACILITIES MAP

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

DRAINAGE FACILITIES MAP



N

GRAPHIC SCALE

80' 0 40' 80' 160'

1" = 80'

EXHIBIT "D"

JLC Engineering & Consulting, Inc.

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NORTH HEMET REVITALIZATION PLAN

DRAINAGE FACILITIES MAP

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\DRAINAGE FACILITIES MAP.dwg
Last Opened: Sep 13, 2010 – 5:22pm by jcarver

EXHIBIT E: EXISTING ONSITE LAND USE MAP

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

EXISTING CONDITION ONSITE LANDUSE MAP



LEGEND:

- COMMERCIAL
- MEDIUM DENSITY RESIDENTIAL
- LOW DENSITY RESIDENTIAL
- BARREN

N

GRAPHIC SCALE

100' 0 50' 100' 200'

1" = 100'

EXHIBIT "E"

NORTH HEMET REVITALIZATION PLAN

EXISTING CONDITION ONSITE LANDUSE MAP

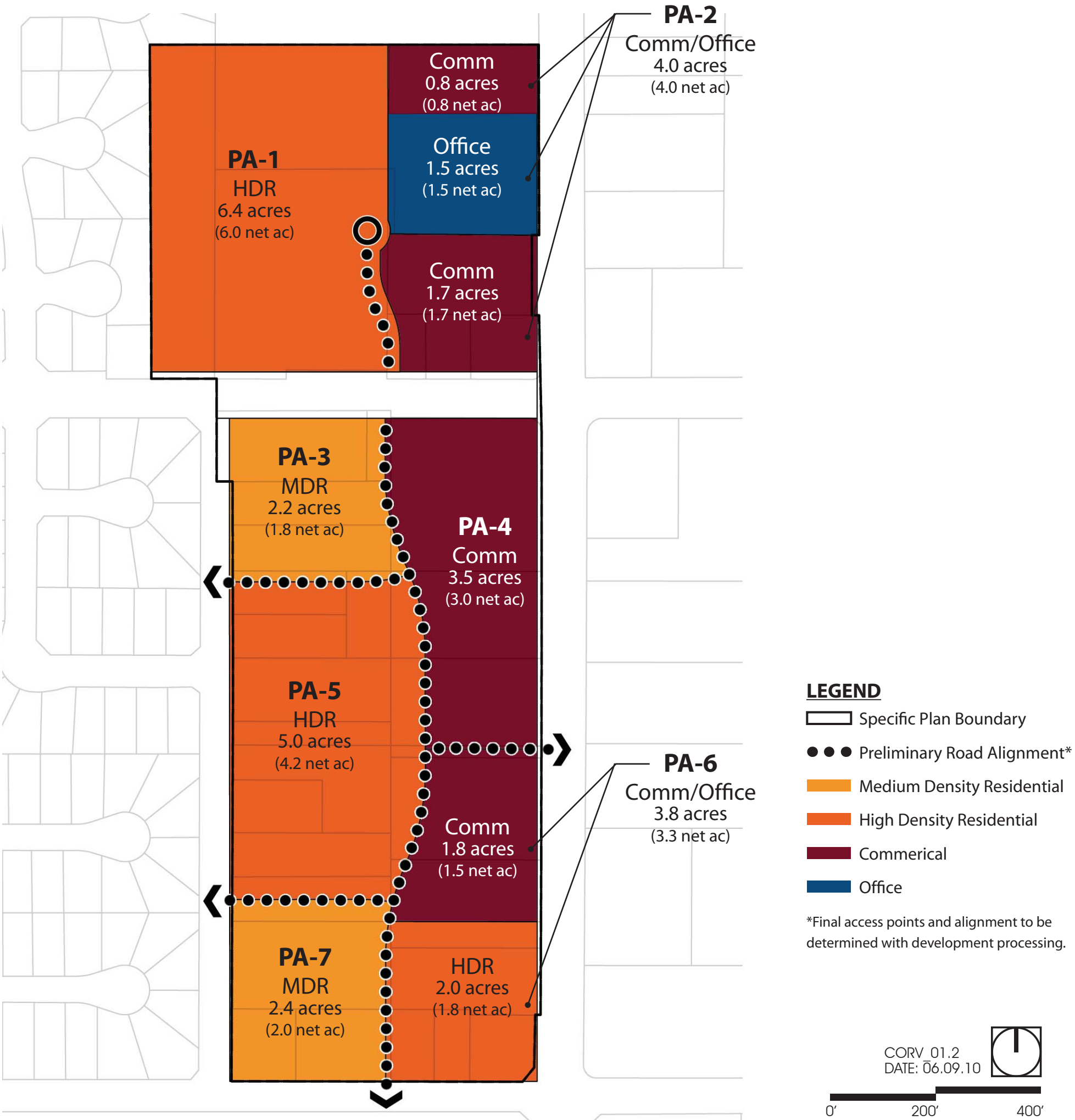
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PH. 951.304.9552 FAX 951.304.3568

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Last Opened: Sep 13, 2010 – 5:35pm by jcarver

EXHIBIT F: POST-PROJECT ONSITE LAND USE MAP

PROPOSED LAND USE PLAN - Maximum Intensity



Land Use Plan (Maximum Intensity)											
Planning Area	**Acres***	**Land Use Mix**		**Min. Density**	**Max. Density**	**Min. Units**	**Max. Units**	**FAR**	**Retail SF**	**Office SF**	**Product Types**
1	6.40	6.15	High Density	18	30	115	192				Motorcourt, Garden Apartments, Assisted Living
		0.25	Detention Basin								
2	4.00	2.50	Commercial					0.35	38,115		
		1.50	Office					0.25		16,335	
3	2.20	1.88	Med Density	8	18	18	40				Cottage Clusters, Row Towns, Greencourt Homes, Live-Work, Garden Apartments
		0.32	Detention Basin								
4	3.50	3.50	Commercial					0.35	53,361		
5	5.00	5.00	High Density	18	30	90	150				Motorcourt, Garden and Family Apartments, Cottage Clusters, Row Towns, Live-Work,
6	3.80	1.80	Commercial					0.35	27,443		
		2.00	High Density	18	30	36	60				Motorcourt, Garden and Family Apartments, Cottage Clusters, Row Towns, Live-Work,
7	2.40	2.06	Med Density	8	18	19	43				Cottage Clusters, Row Towns, Greencourt Homes, Live-Work, Garden Apartments
		0.34	Detention Basin								
Public St ROW	1.30										
Totals	**28.60**					**278**	**485**		**118,919**	**16,335**	

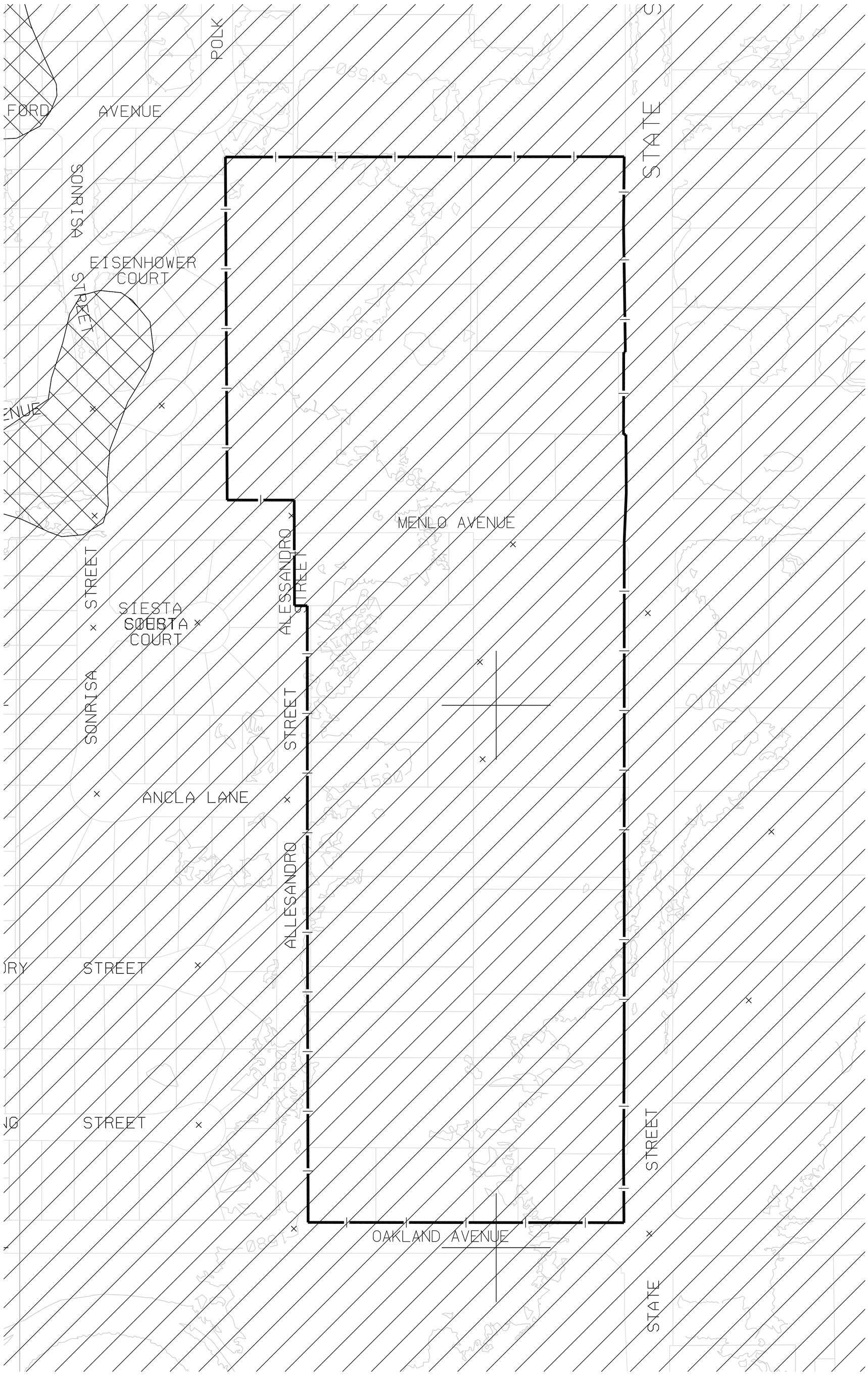
*Acres for each Planning Area is defined as gross site area, including internal local roads and any area devoted to detention areas.
It does not include any existing public right-of-way. Units are based on gross acres multiplied by density.

EXHIBIT G: HYDROLOGIC SOILS MAP

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

HYDROLOGIC SOILS MAP



LEGEND:

WATERSHED BOUNDARY

SOIL A

SOIL B

N

GRAPHIC SCALE

100' 0 50' 100' 200'

1" = 100'

EXHIBIT "G"

NORTH HEMET REVITALIZATION PLAN

HYDROLOGIC SOILS MAP

JLC Engineering & Consulting, Inc.

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PH. 951.304.9552 FAX 951.304.3568

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\Soils Map.dwg
Last Opened: Sep 13, 2010 – 5:40pm by jcarver

EXHIBIT H: RAINFALL MAPS

2 YEAR, 1 HOUR

NORTH HEMET REVITALIZATION PLAN RAINFALL VALUE = 0.50

JLC Engineering & Consulting, Inc.

40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

Isohyetals based on NOAA Atlas 2, Volume XI - California, 1973

RCFC & WCD

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

2-YEAR — 1-HOUR PRECIPITATION

APPROVED CHIEF ENGINEER R.E. NO. 8882 | DRAWN BY A.A.S. | SHEET NO | PLATE D-4.7

G-267

2 YEAR, 24 HOUR

NORTH HEMET REVITALIZATION PLAN RAINFALL VALUE = 1.80

JLC Engineering & Consulting, Inc.

40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

NOTES:
1. Isohyetals from NOAA Atlas 2, Volume XI - California, 1973.

RCFC & WCD

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

2-YEAR — 24-HOUR PRECIPITATION

APPROVED CHIEF ENGINEER R.E. NO. 8822 DATE	DRAWN BY R.A.S.	SHEET NO
	PLATE E-5.5	DR NO

G-268

100 YEAR, 1 HOUR

NORTH HEMET REVITALIZATION PLAN RAINFALL VALUE = 1.20

JLC Engineering & Consulting, Inc.

40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

Notes:
Isohyetals based on NOAA Atlas 2, Volume XI - California, 1973

RCFC & WCD
HYDROLOGY MANUAL

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100-YEAR — 1-HOUR PRECIPITATION

APPROVED: CHIEF ENGINEER R.C. NO. 6822 DATE
DRAWN BY: A.A.S.
PLATE D-4.4
SHEET NO
DR NO

G-269

100 YEAR, 24 HOUR

NORTH HEMET
REVITALIZATION PLAN
RAINFALL VALUE = 4.50

JLC Engineering & Consulting, Inc.

40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

Isohyetals from NOAA Atlas 2
Volume XI - California, 1973

RCFC & WCD
HYDROLOGY MANUAL

RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT

100-YEAR — 24-HOUR
PRECIPITATION

APPROVED CHIEF ENGINEER R.C.E. NO. 8532	DRAWN BY	SHEET NO
DATE	PLATE E-5.6	DR. NO

G-270

EXHIBIT I: SLOPE OF INTENSITY DURATION CURVES

SLOPE INTENSITY CURVE

NORTH HEMET REVITALIZATION PLAN
SLOPE VALUE = 0.50

JLC Engineering & Consulting, Inc.

40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

Notes:
1) Slope of Intensity Duration Curve Based on District analysis of automatic recording rain gage records

RCFC & WCD

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

SLOPE OF INTENSITY DURATION CURVE

APPROVED CHIEF ENGINEER R.E. NO. 8885 DATE	DRAWN BY R.A.S.	SHEET NO
	PLATE D-4.6	DR NO

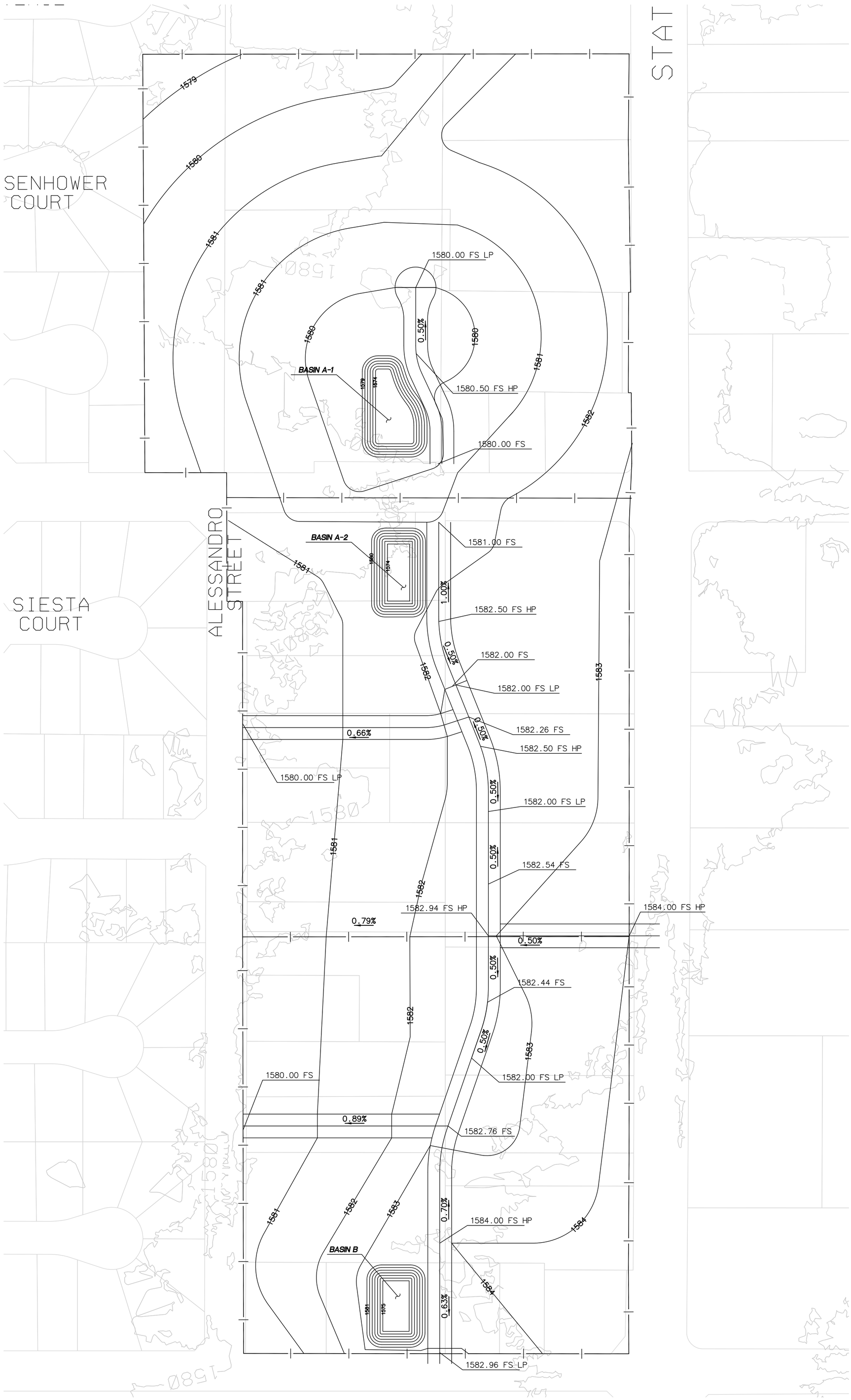
G-272

EXHIBIT J: CONCEPTUAL GRADING PLAN

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

CONCEPTUAL GRADING PLAN



GRAPHIC SCALE
80' 0 40' 80' 160'
1" = 80'

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\CONCEPTUAL GRADING.dwg
Last Opened: Sep 13, 2010 – 5:41pm by jcarver

JLC Engineering & Consulting, Inc.
36263 CALLE DE LOBO
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EXHIBIT "J"

NORTH HEMET REVITALIZATION PLAN

CONCEPTUAL GRADING PLAN

Appendix H
Preliminary Water Quality Management Plan



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Project Specific
Preliminary Water Quality Management Plan

For: **The North Hemet Revitalization Plan**

On State Street between Fruitvale Avenue and Oakland Avenue in the City of Hemet

DEVELOPMENT NO.	**APN 439-060-009 TO 011, 013 TO 016, 024, 025, 030, & 031; 439-281-035; 443-050-001 TO 004, 006, 007, 012, 013, 016 TO 018, 020 TO 031, 033, 036, 039, & 040**
DESIGN REVIEW NO.	**PRELIMINARY**

Prepared for:

The Planning Center
1580 Metro Drive
Costa Mesa, CA 92626
Telephone: (714) 966-9220

The City of Hemet
445 E. Florida Avenue
Hemet, CA 92543
Telephone: (951) 765-2300

Prepared by:
Joe Castaneda, P.E.
JLC Engineering and Consulting, Inc.
36263 Calle de Lobo
Murrieta, CA 92562
Telephone: (951) 304-9552
Fax: (951) 304-3568

WQMP Preparation Date: August 15, 2010

OWNER'S CERTIFICATION

This project-specific Water Quality Management Plan (WQMP) has been prepared for:

The North Hemet Revitalization Plan

by JLC Engineering and Consulting, Inc. for the project known as **The North Hemet Revitalization located on State Street between Fruitvale Avenue and Oakland Avenue in the City of Hemet, County of Riverside.**

This WQMP is intended to comply with the requirements of the City of Hemet for **THE NORTH HEMET REVITALIZATION PLAN**, which includes the requirement for the preparation and implementation of a project-specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the City of Hemet Stormwater/Urban Runoff Management and Discharge Controls Ordinance (Ordinance No. 1531). Any subsequent final WQMP prepared for this project shall replace any Preliminary WQMP.

If the undersigned transfers its interest in the subject property/project, its successor in interest the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

The City of Hemet
445 E. Florida Avenue
Hemet, CA 92543
(951) 765-2300

Contents

Section			Page
I	PROJECT DESCRIPTION		A-1
II	SITE CHARACTERIZATION		A-5
III	POLLUTANTS OF CONCERN		A-7
IV	HYDROLOGIC CONDITIONS OF CONCERN		A-8
V	BEST MANAGEMENT PRACTICES		A-8
	V.1	Site Design BMPs	A-9
	V.2	Source Control BMPs	A-16
	V.3	Treatment Control BMPs	A-18
	V.4	Equivalent Treatment Control Alternatives	A-22
	V.5	Regionally-Based Treatment Control BMPs	A-22
VI	OPERATION AND MAINTENANCE RESPONSIBILITY FOR TREATMENT CONTROL BMPS		A-23
VII	FUNDING		A-24

APPENDICES

A. CONDITIONS OF APPROVAL

B. VICINITY MAP, WQMP SITE PLAN, AND RECEIVING WATERS MAP

C. SUPPORTING DETAIL RELATED TO HYDRAULIC CONDITIONS OF CONCERN (IF APPLICABLE)

D. EDUCATIONAL MATERIALS

E. SOILS REPORT (IF APPLICABLE)

F. TREATMENT CONTROL BMP SIZING CALCULATIONS AND DESIGN DETAILS

G. AGREEMENTS – CC&RS, COVENANT AND AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP

H. PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS

I. Project Description

Instructions:

The project description shall be completely and accurately described in narrative form. In the field provided on page A-3, describe and with supporting figures (maps or exhibits), where facilities will be located, what activities will be conducted and where, what kinds of materials will be used and/or stored, how and where materials will be delivered, and the types of wastes that will be generated. The following information shall be described and/or addressed in the "Project Description" section of the project-specific WQMP:

- Project owner and WQMP preparer;
- Project location;
- Project size;
- Standard Industrial Classification (SIC), if applicable;
- Location of facilities;
- Activities and location of activities;
- Materials Storage and Delivery Areas;
- Wastes generated by project activities.

Project Owner: The City of Hemet
445 E. Florida Avenue
Hemet, CA 92543
Telephone: 951-765-2300

WQMP Preparer: Joe Castaneda, P.E.
36263 Calle de Lobo
Murrieta, CA 92562
Telephone: 951-304-9552

Project Site Address:	Located along State Street between Fruitvale Avenue and Oakland Avenue in the City of Hemet
Planning Area/ Community Name/ Development Name:	The North Hemet Revitalization Plan
APN Number(s):	439-060-009 to 011, 013 to 016, 024, 025, 030, & 031; 439-281-035; 443-050-001 to 004, 006, 007, 012, 013, 016 to 018, 020 to 031, 033, 036, 039, &040
Thomas Bros. Map:	810-J5, 811-A5, 811-A6
Project Watershed:	San Jacinto (HA 802.20)
Sub-watershed:	Gilman Springs (HSA 802.21) and Hemet (HAS 802.15)
Project Site Size:	28.63 acres
Standard Industrial Classification (SIC) Code:	5331, 5399, 5411, 5499, 5531, 5699, 5912, 5921, 5999, 8082, 8322

Formation of Home Owners' Association (HOA) or Property Owners Association (POA): POA

Y ☒ N ☐

Additional Permits/Approvals required for the Project

AGENCY	Permit required
State Department of Fish and Game, 1601 Streambed Alteration Agreement	Y ☐ N☒
State Water Resources Control Board, Clean Water Act (CWA) section 401 Water Quality Certification	Y ☐ N☒
US Army Corps of Engineers, CWA section 404 permit	Y ☐ N☒
US Fish and Wildlife, Endangered Species Act section 7 biological opinion	Y ☐ N☒
Other *(please list in the space below as required)* 1. State General Construction Activities Stormwater Permit (Order No. 99-08-DWQ)	Y ☒ N☐
2. State General Industrial Activities Stormwater Permit (Order No. 97-03-DWQ)	Y ☒ N☐

The North Hemet Revitalization Plan is a proposed community that will consist of commercial area, high density residential area, medium density residential area, office area, and park area. The North Hemet Revitalization Plan is a Specific Plan that is part of the Riverside County Mid-County Redevelopment Project Area. The site is located in the City of Hemet in the County of Riverside. The North Hemet Revitalization Plan is roughly bounded by Fruitvale Avenue to the north, State Street to the east, Oakland Avenue to the South, and Alessandro Street to the west. The project site is located in sections 3 and 10 of Township 5 South, Range 1 West.

The existing project site consists of commercial area, ¼ acre residential area, medium density residential area, high density residential area, and open space/barren area. The North Hemet Revitalization Plan proposes to redevelop the area into commercial/retail, office, high density residential, medium density residential, and park area. Some existing commercial buildings are to remain, with the majority of the project site being redeveloped.

The North Hemet Revitalization Plan proposes to collect onsite flows via subsurface storm drains and convey the flows to one of three extended detention basins. The extended detention basins will treat the flows for water quality purposes as well as mitigate the flows for increased runoff. The Hemet Master Drainage Plan indicates that flows tributary to Menlo Avenue are ultimately tributary to the San Jacinto River, and flows tributary to Oakland Avenue are ultimately tributary to Salt Creek. The project proposes to perpetuate these existing flow patterns so that the flows pumped out of the extended detention basins will discharge back into Menlo Avenue and Oakland Avenue.

Appendix A of this project-specific WQMP includes a complete copy of the final Conditions of Approval. Appendix B of this project-specific WQMP shall include:

1. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail to allow the project site to be plotted on Co-Permittee base mapping; and
2. A Site Plan for the project. The Site Plan included as part of Appendix B depicts the following project features:
    - Location and identification of all structural BMPs, including Treatment Control BMPs.
    - Landscaped areas.
    - Paved areas and intended uses (i.e., parking, outdoor work area, outdoor material storage area, sidewalks, patios, tennis courts, etc.).
    - Number and type of structures and intended uses (i.e., buildings, tenant spaces, dwelling units, community facilities such as pools, recreation facilities, tot lots, etc.).
    - Infrastructure (i.e., streets, storm drains, etc.) that will revert to public agency ownership and operation.
    - Location of existing and proposed public and private storm drainage facilities (i.e., storm drains, channels, basins, etc.), including catch basins and other inlets/outlet structures. Existing and proposed drainage facilities should be clearly differentiated.
    - Location(s) of Receiving Waters to which the project directly or indirectly discharges.
    - Location of points where onsite (or tributary offsite) flows exit the property/project site.
    - Proposed drainage areas boundaries, including tributary offsite areas, for each location where flows exits the property/project site. Each tributary area should be clearly denoted.
    - Pre- and post-project topography.

Appendix G of this project-specific WQMP shall include copies of CC&Rs, Covenant and Agreements, and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements.

II. Site Characterization

Land Use Designation or Zoning: Mixed Use (MU-2)

Current Property Use: Commercial, Residential (1/4 Acre to High Density), and Undeveloped Area

Proposed Property Use: Mixed Use – Commercial, Park Area, Residential

Availability of Soils Report: Y ☐ N ☒ *Note: A soils report is required if infiltration BMPs are utilized. Attach report in Appendix E.*
A Soils Report will be submitted with the final WQMP.

Phase 1 Site Assessment: Y ☐ N ☒ *Note: If prepared, attached remediation summary and use restrictions in Appendix H.*

Receiving Waters for Urban Runoff from Site

Instructions:

On the following page, list in order of upstream to downstream, the receiving waters that the project is tributary to. Continue to fill each row with the receiving water's 303(d) listed impairments, designated beneficial uses, and proximity, if any, to a RARE beneficial use.

Receiving Waters for Urban Runoff from Site

Receiving Waters	303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
San Jacinto River	None	MUN, AGR, GWR, REC(1), REC(2), WARM, WILD	Not a RARE water body, 1.71 miles
Canyon Lake	Nutrients, Pathogens	MUN, AGR(1), GWR(1), REC(1), REC(2), WARM, WILD,	A RARE water body, 16.43 miles
Lake Elsinore	Nutrients, Organic Enrichment – Low Dissolved Oxygen, Sediment/Siltation, Unknown Toxicity, Polychlorinated Biphenyls	MUN, REC(1), REC(2), WARM, WILD	A RARE water body, 20.73 miles

III. Pollutants of Concern

Potential pollutants associated with Urban Runoff from the proposed project must be identified. Exhibit B of the WQMP provides brief descriptions of typical pollutants associated with Urban Runoff and a table that associates typical potential pollutants with types of development (land use). It should be noted that at the Co-Permittees discretion, the Co-Permittees may also accept updated studies from the California Association of Stormwater Quality Agencies (CASQA), USEPA, SWRCB and/or other commonly accepted agencies/associations acceptable to the Co-Permittee for determination of Pollutants of Concern associated with given land use. Additionally, in identifying Pollutants of Concern, the presence of legacy pesticides, nutrients, or hazardous substances in the site's soils as a result of past uses and their potential for exposure to Urban Runoff must be addressed in project-specific WQMPs. The Co-Permittee may also require specific pollutants commonly associated with urban runoff to be addressed based on known problems in the watershed. The list of potential Urban Runoff pollutants identified for the project must be compared with the pollutants identified as causing an impairment of Receiving Waters, if any. To identify pollutants impairing proximate Receiving Waters, each project proponent preparing a project-specific WQMP shall, at a minimum, do the following:

1. For each of the proposed project discharge points, identify the proximate Receiving Water for each discharge point, using hydrologic unit basin numbers as identified in the most recent version of the Water Quality Control Plan for the Santa Ana River Basin or the San Diego Region.
2. Identify each proximate identified above that is listed on the most recent list of Clean Water Act Section 303(d) list of impaired water bodies, which can be found at website www.swrcb.ca.gov/tmdl/303d_lists.html. List all pollutants for which the proximate Receiving Waters are impaired.
3. Compare the list of pollutants for which the proximate Receiving Waters are impaired with the potential pollutants to be generated by the project.

Urban Runoff Pollutants: Expected pollutants for the project site include Sediment/Turbidity, Nutrients, Organic Compounds (petroleum hydrocarbons), Trash & Debris, Oxygen Demanding Substances, Bacteria & Viruses, Oil & Grease, Pesticides, and Metals.

POLLUTANTS		EXPECTED/POTENTIAL SOURCE	303 (d) LISTING
Expected	Potential		
Sediment/Turbidity		Attached & Detached Residential Development, Streets	Yes
Nutrients		Attached & Detached Residential Development	Yes
Organic Compounds (Petroleum Hydrocarbons and Polychlorinated Biphenyls)		Automotive Repair Shops[1], Parking Lots, Streets	Yes
Trash and Debris		Attached & Detached Residential Development, Commercial/Industrial Development, Automotive Repair Shops[1], Restaurants, Parking Lots, Streets	No
Oxygen Demanding Substances		Detached Residential Development, Restaurants	Yes
Bacteria and Viruses		Detached Residential Development, Restaurants	Yes
Oil and Grease		Attached Residential Development, Commercial/Industrial Development, Automotive Repair Shops[1], Restaurants, Parking Lots, Streets	No
Pesticides		Attached & Detached Residential Development	No
Metals		Parking Lots, Streets	No

IV. Hydrologic Conditions of Concern

Impacts to the hydrologic regime resulting from the Project may include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. Under certain circumstances, changes could also result in the reduction in the amount of available sediment for transport; storm flows could fill this sediment-carrying capacity by eroding the downstream channel. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to the hydrologic regime of a Project's site would be considered a hydrologic condition of concern if the change would have a significant impact on downstream erosion compared to the pre-development condition or have significant impacts on stream habitat, alone or as part of a cumulative impact from development in the watershed.

This project-specific WQMP must address the issue of Hydrologic Conditions of Concern unless one of the following conditions are met:

- **Condition A:** Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4; the discharge is in full compliance with Co-Permittee requirements for connections and discharges to the MS4 (including both quality and quantity requirements); the discharge would not significantly impact stream habitat in proximate Receiving Waters; and the discharge is authorized by the Co-Permittee.
- **Condition B:** The project disturbs less than 1 acre. The disturbed area calculation should include all disturbances associated with larger plans of development.
- **Condition C:** The project's runoff flow rate, volume, velocity and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition can be achieved by minimizing impervious area on a site and incorporating other site-design concepts that mimic pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the Co-Permittee.

  This Project meets the following condition: This project satisfies Condition A.

  Supporting engineering studies, calculations, and reports are included in Appendix C.

	2 year – 24 hour		10 year – 24 hour	
	Precondition	**Post-condition**	**Precondition**	**Post-condition**
Discharge (cfs) [3]	2.62	3.43	4.89	7.62
Velocity (fps)[1]	XXX	XXX	XXX	XXX
Volume (cubic feet)[2] [3]	72,588	99,809	108,800	173,726
Duration (minutes)	1440	1440	1440	1440

(1) Post-project condition velocities have increased due to the development, however the exact increase is unknown since detailed analyses have not yet been performed. During Final Engineering, velocity calculations will be performed to determine the necessary structures required to reduce the velocities.
(2) The post-project condition volumes resulted in higher volumes than the pre-project conditions. These increase in volumes will be stored in the extended detention basins, which have been designed for the maximum increase in volume.
(3) The total flow rate and volumes are based upon the total for Area A plus Area B.

V. Best Management Practices

V.1 SITE DESIGN BMPS

Project proponents shall implement Site Design concepts that achieve each of the following:

1) Minimize Urban Runoff
2) Minimize Impervious Footprint
3) Conserve Natural Areas
4) Minimize Directly Connected Impervious Areas (DCIAs)

The project proponent should identify the specific BMPs implemented to achieve each Site Design concept and provide a brief explanation for those Site Design concepts considered not applicable.

Instructions:

In field below, provide narrative describing which site design concepts were incorporated into project plans. If the project proponent implements a Co-Permittee approved alternative or equally-effective Site Design BMP not specifically described below, the Site Design BMP checkbox in Table I should be marked and an additional description indicating the nature of the BMP and how it addresses the Site Design concept should be provided. Continue with completion of Table 1.

***Note:** The Co-Permittees general plan or other land use regulations/documents may require several measures that are effectively site design BMPs (such as minimization of directly connected impervious areas and/or setbacks from natural stream courses). The Project Proponent should work with Co-Permittee staff to determine if those requirements may be interpreted as site design BMPs for use in this table/narrative. See Section 4.5.1 of the WQMP for additional guidance on Site Design BMPs.*

*Following Table 1: if a particular Site Design BMP concept is found to be not applicable, please provide a brief explanation as to why the concept cannot be implemented. Also include descriptions explaining how each **included** BMP will be implemented. In those areas where Site Design BMPs require ongoing maintenance, the inspection and maintenance frequency, the inspection criteria, and the entity or party responsible for implementation, maintenance, and/or inspection shall be described. The location of each Site Design BMP must also be shown on the WQMP Site Plan included in Appendix B.*

The North Hemet Revitalization Plan proposes to construct three extended detention basins that will be utilized for treatment of onsite flows for water quality purposes. The project will ultimately discharge flows using a pump system back into the existing flow patterns, which is Menlo Avenue and Oakland Avenue. Menlo Avenue and Oakland Avenue are designated as MS4 facilities, and the flows that will discharge from the extended detention basins will not exceed the street capacities.

Table 1. Site Design BMPs

Design Concept	Technique	Specific BMP	Included: Yes	Included: No	Included: N/A
Site Design Concept 1	*Minimize Urban Runoff*	Maximize the permeable area (See Section 4.5.1 of the WQMP).	☒	☐	☐
		Incorporate landscaped buffer areas between sidewalks and streets.	☒	☐	☐
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	☒	☐	☐
		Use natural drainage systems.	☐	☐	☒
		Where soils conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	☒	☐	☐
		Construct onsite ponding areas or retention facilities to increase opportunities for infiltration consistent with vector control objectives.	☒	☐	☐
		Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required to describe BMP and how it addresses Site Design concept).	☒	☐	☐

Table 1. Site Design BMPs (Cont.)

Design Concept	Technique	Specific BMP	Included		
			Yes	No	N/A
Site Design Concept 2	*Minimize Impervious Footprint*	Maximize the permeable area (See Section 4.5.1 of the WQMP).	☒	☐	☐
		Construct walkways, trails, patios, overflow parking lots, alleys, driveways, low-traffic streets and other low -traffic areas with open-jointed paving materials or permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.	☒	☐	☐
		Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walk able environment for pedestrians are not compromised.	☒	☐	☐
		Reduce widths of street where off-street parking is available.	☒	☐	☐
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	☒	☐	☐
		Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	☒	☐	☐
Site Design Concept 3	*Conserve Natural Areas*	Conserve natural areas (See WQMP Section 4.5.1).	☐	☒	☐
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	☒	☐	☐
		Use natural drainage systems.	☐	☐	☒
		Other comparable and equally effective site design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	☒	☐	☐

Table 1. Site Design BMPs (Cont.)

Design Concept	Technique	Specific BMP	Included: Yes	Included: No	Included: N/A
Site Design Concept 4	*Minimize Directly Connected Impervious Areas (DCIAs)*	Residential and commercial sites must be designed to contain and infiltrate roof runoff, or direct roof runoff to vegetative swales or buffer areas, where feasible.	☒	☐	☐
		Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	☒	☐	☐
		Increase the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales.	☒	☐	☐
		Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings.	☒	☐	☐
		Urban curb/swale system: street slopes to curb; periodic swale inlets drain to vegetated swale/biofilter.	☒	☐	☐
		Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to MS4s.	☒	☐	☐
		Design driveways with shared access, flared (single lane at street) or wheel strips (paving only under tires); or, drain into landscaping prior to discharging to the MS4.	☒	☐	☐
		Uncovered temporary or guest parking on private residential lots may be paved with a permeable surface, or designed to drain into landscaping prior to discharging to the MS4.	☒	☐	☐
		Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.	☒	☐	☐
		Overflow parking (parking stalls provided in excess of the Co-Permittee's minimum parking requirements) may be constructed with permeable paving.	☒	☐	☐
		Other comparable and equally effective design concepts as approved by the Co-Permittee (Note: Additional narrative required describing BMP and how it addresses Site Design concept).	☒	☐	☐

Non-applicable Site Design BMPs:

- Use natural drainage systems – ***N/A***
  - The proposed project does not have natural drainage systems in the existing condition.
- Use natural drainage systems. – ***N/A***
  - The proposed project does not have natural drainage systems in the existing condition.

- Uncovered temporary or guest parking on private residential lots may be paved with a permeable surface, or designed to drain into landscaping prior to discharging to the MS4. – ***N/A***
    - The proposed project does not incorporate temporary or guest parking on private residential lots.

Project Site Design BMPs:

Site Design Concept #1

Minimize Urban Runoff

- Maximize the permeable area – ***YES***
    - The City of Hemet guidelines were utilized in order to determine the minimum pavement width for public streets, minimum width for driveways, and minimum widths for sidewalks, as well as evaluations of low impact developed materials such as landscape buffers.
- Incorporate Landscaped buffer areas between sidewalks and streets – ***YES***
    - The proposed project incorporates landscaped areas between the developments and street areas.
- Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs– ***YES***
    - It is highly recommended that the development incorporate native or drought tolerant trees and large shrubs within the landscaping. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration – ***YES***
    - The project incorporates three extended detention basins that will promote infiltration.
- Construct onsite ponding areas or retention facilities to increase opportunities for infiltration consistent with vector control objectives – ***YES***
    - The proposed project incorporates three extended detention basin in which ponding and infiltration will be imminent.
- Other comparable and equally effective site design concepts as approved by the Co-Permittee – ***YES***
    - The proposed project utilizes three extended detention basins that promote infiltration.

Site Design Concept #2

Minimize Impervious Footprint

- Maximize the permeable area – ***YES***
    - The City of Hemet guidelines were utilized in order to determine the minimum pavement width for public streets, minimum width for driveways, and minimum widths for sidewalks, as well as evaluations of low impact developed materials such as landscape buffers.
- Construct walkways, trails, patios, overflow parking lots, alleys, driveways, low-traffic streets and other low-traffic areas with open-jointed paving materials or permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials – ***YES***

  - The proposed project incorporates walkways, driveways, etc. and it is recommended that the development incorporate permeable surfaces wherever possible within the residential and commercial areas. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.

- Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walk able environment for pedestrians are not compromised. – ***YES***
  - Streets and parking lot aisles are to be constructed per the City of Hemet Guidelines.
- Reduce widths of street where off-street parking is available. – ***YES***
  - Streets and sidewalks are to be constructed per the City of Hemet Guidelines.
- Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design – ***YES***
  - It is highly recommended that the development minimize the use of impervious surfaces, such as decorative concrete, within the landscape design. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Other comparable and equally effective site design concepts as approved by the Co-Permittee – ***YES***
  - The proposed project utilizes three extended detention basins that promote infiltration.

Site Design Concept #3

Conserve Natural Areas

- Conserve natural areas – ***NO***
  - The proposed project does not conserve the existing natural areas.
- Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs– ***YES***
  - It is highly recommended that the development incorporate native or drought tolerant trees and large shrubs within the landscaping. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Other comparable and equally effective site design concepts as approved by the Co-Permittee – ***YES***
  - The proposed project utilizes three extended detention basins that promote infiltration.

Site Design Concept #4

Minimize Directly Connected Impervious Areas (DCIAs)

- Residential and commercial sites must be designed to contain and infiltrate roof runoff, or direct roof runoff to vegetative swales or buffer areas, where feasible - ***YES***
  - It is recommended that the project incorporates landscaped areas between the parking areas and buildings. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping. – ***YES***

  - It is recommended that the project incorporates landscaped areas between the parking areas and buildings. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.

- Increase the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales – ***YES***
  - It is recommended that the project incorporate vegetated drainage swales within the development wherever possible. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Urban curb/swale system: street slopes to curb; periodic swale inlets drain to vegetated swale/biofilter – ***YES***
  - It is recommended that the project incorporate vegetated drainage swales within the development wherever possible. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to MS4s. – ***YES***
  - The proposed project will collect flows with inlets and catch basins that will discharge flows into one of the three extended detention basins. The flows will then discharge into the MS4.
- Design driveways with shared access, flared (single lane at street) or wheel strips (paving only under tires); or, drain into landscaping prior to discharging to the MS4. – ***YES***
  - It is highly recommended that the development design driveways with a permeable strip or thin gutter with a grate cover to intercept runoff from residential driveways and drain to landscaped areas prior to being discharged into the streets. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design – ***YES***
  - It is highly recommended that the development incorporate landscaped areas/landscaped infiltration areas within the landscape design for the commercial areas. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Overflow parking (parking stalls provided in excess of the Co-Permittee's minimum parking requirements) may be constructed with permeable paving – ***YES***
  - It is highly recommended that the development incorporate permeable surfaces or additional infiltration/landscaped areas within overflow parking for the commercial areas. This is a Specific Plan WQMP for the North Hemet Revitalization Plan, and this recommendation will be addressed within the final site-specific WQMPs.
- Other comparable and equally effective site design concepts as approved by the Co-Permittee – ***YES***
  - The proposed project utilizes three extended detention basins that promote infiltration.

V.2 SOURCE CONTROL BMPS

Instructions: *Complete Table 2.*

Table 2. Source Control BMPs

BMP Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Non-Structural Source Control BMPs			
Education for Property Owners, Operators, Tenants, Occupants, or Employees	☒	☐	
Activity Restrictions	☒	☐	
Irrigation System and Landscape Maintenance	☒	☐	
Common Area Litter Control	☒	☐	
Street Sweeping Private Streets and Parking Lots	☒	☐	
Drainage Facility Inspection and Maintenance	☒	☐	
Structural Source Control BMPs			
MS4 Stenciling and Signage	☒	☐	
Landscape and Irrigation System Design	☒	☐	
Protect Slopes and Channels	☒	☐	
Provide Community Car Wash Racks	☐	☒	N/A for Project Development
Properly Design:	☒	☐	
Fueling Areas	☒	☐	
Air/Water Supply Area Drainage	☒	☐	
Trash Storage Areas	☒	☐	
Loading Docks	☒	☐	
Maintenance Bays	☒	☐	
Vehicle and Equipment Wash Areas	☐	☒	N/A for project development
Outdoor Material Storage Areas	☒	☐	
Outdoor Work Areas or Processing Areas	☒	☐	
Provide Wash Water Controls for Food Preparation Areas	☒	☐	

Instructions: *Provide narrative below describing how each* ***included*** *BMP will be implemented, the implementation frequency, inspection and maintenance frequency, inspection criteria, and the entity or party responsible for implementation, maintenance, and/or inspection. The location of each structural BMP must also be shown on the WQMP Site Plan included in Appendix B.*

Non-Structural Source Control BMP's

Non-Structural Source Control BMP's

- Education for Property Owners, Tenants, and Occupants – ***YES***
  - Education materials will be provided to property owners, occupants, operators and employees at the time of purchase, occupancy or hire. These materials are included in Appendix D.
- Activity Restrictions – ***YES***
  - Activity restrictions will be enforced. These restrictions include:

- Prohibit onsite power washes.
- Prohibit blowing of landscaping and debris into catch basins and extended detention basins.
- Prohibit dumping of oils into the streets.
- Prohibit discharges of fertilizer, pesticides, or animal wastes into streets or storm drains.
- Requirement to keep trash receptacles covered or sheltered by a roof overhang or canopy.
- Prohibit discharges of paint or masonry wastes into streets or storm drains.

Irrigation System and Landscape Maintenance - ***YES***

- The irrigation system and landscape maintenance shall be maintained by professional contractors. The professional contractors shall be determined by the City of Hemet.

- Common Area Litter Control – ***YES***
  - Street sweeping and waste management will be implemented. The frequency is yet to be determined.
- Drainage Facility Inspection and Maintenance - ***YES***
  - All drainage facilities will be inspected and maintained by the City of Hemet.

Structural Source Control BMP's

Structural Source Control BMP's

- MS4 Stenciling and Signage **– *YES***
  - Proposed project will incorporate prohibitive language and graphical icons to discourage illegal dumping within the inlets throughout the North Hemet Revitalization Plan and the extended detention basins. Such signs will also identify the party responsible for maintaining the legibility of stencils and signs.
- Landscape and Irrigation System Design - ***YES***
  - Landscaping and associated irrigation will be incorporated into the commercial, park, and residential areas.
- Protect Slopes and Channels – ***YES***
  - Slopes and channels will be protected by landscaping.
- Properly Design:
  - Fueling Areas
  - Air/Water Supply Area Drainage
  - Trash Storage Areas
  - Loading Docks
  - Maintenance Bays
  - Outdoor Material Storage Areas
  - Outdoor Work Areas or Processing Areas

Appendix D includes copies of the educational materials that will be used in implementing this project-specific WQMP.

V.3 TREATMENT CONTROL BMPS

Instructions:

1. *Provide narrative below describing each Treatment Control BMP. Include location, identify the sizing criteria [i.e., Urban Runoff quality design flow (QBMP) or the Urban Runoff quality design volume (VBMP), preliminary design calculations, for sizing BMPs, maintenance procedures, and the frequency of maintenance procedures necessary to sustain BMP effectiveness. The location of each Treatment Control BMP must also be shown on the Site Plan included in Appendix B.*
2. *Complete Table 3: Treatment Control BMP Selection Matrix*

   Directions for completing Table 3:

   - *For each pollutant of concern enter "yes" if identified using Exhibit B (Riverside County WQMP - General Categories of Pollutants of Concern per the instructions specified in Section III of this Template), or "no" if not identified for the project.*
   - *Check the boxes of selected BMPs that will be implemented for the project to address each pollutant of concern from the project as identified using Exhibit B. Treatment Control BMPs must be selected and installed with respect to identified pollutant characteristics and concentrations that will be discharged from the site.*
   - *For any identified pollutants of concern not listed in the Treatment Control BMP Selection Matrix, provide an explanation (in space below) of how they will be addressed by Treatment Control BMPs.*
3. *In addition to completing Table 3, provide detailed descriptions on the location, implementation, installation, and long-term O&M of planned Treatment* Control BMPs.

*For identified pollutants of concern that are **causing an impairment in receiving waters**, the project WQMP shall incorporate one or more Treatment Control BMPs of medium or high effectiveness in reducing those pollutants. It is the responsibility of the project proponent to demonstrate, and document in the project WQMP, that all pollutants of concern will be fully addressed. The Agency may require information beyond the minimum requirements of this WQMP to demonstrate that adequate pollutant treatment is being accomplished.*

Supporting engineering calculations for Q_{BMP} and/or V_{BMP}, and Treatment Control BMP design details are included in Appendix F.

***Note**: Projects that will utilize infiltration-based Treatment Control BMPs (e.g., Infiltration Basins, Infiltration Trenches, Porous Pavement) must include a copy of the property/project soils report as Appendix E to the project-specific WQMP. The selection of a Treatment Control BMP (or BMPs) for the project must specifically consider the effectiveness of the Treatment Control BMP for pollutants identified as causing an impairment of Receiving Waters to which the project will discharge Urban Runoff.*

The North Hemet Revitalization Plan will incorporate three extended detention basins that will treat the onsite flows for water quality purposes prior to the flows being discharged into the MS4 facilities (Menlo Avenue and Oakland Avenue). Mitigation for increased runoff is not required when discharging to an MS4 facility, however, the flows that will be pumped out of the extended detention basins will not exceed the capacity of the streets to ensure the flows are conveyed through the MS4 facilities.

WATER QUALITY

The water quality volume required to be treated was determined using the Design Procedure for BMP Volume spreadsheets, which has been included in Appendix F.

The onsite flows will be collected through inlets and conveyed through subsurface storm drains that will discharge the flows into one of the three proposed extended detention basins, designated as Basins A1, A2, and B (see Figure 3, Site Plan). Basin A1 is located north of Menlo Avenue at the westerly side of the project site. It collects flows from the

project site north of Menlo Avenue. Basin A2 is located south of Menlo Avenue at the westerly side of the project site. Basin A2 collects flows from the northerly half of the project site that is located between Menlo Avenue and Oakland Avenue. Basin A1 and A2 will be connected via a subsurface pipe that will cross Menlo Avenue, and will serve as one facility to treat the flows emanating from Area A. Basin B is located north of Oakland Avenue along the southerly border of the project site, and collects the flows from the southerly project site.

The required water quality volume for Area A is 0.976 ac-ft (42,525 ft^3) and 0.371 ac-ft (16,150 ft^3) for Area B. Riverside County Flood Control and Water Conservation District design practice for extended detention basins is to drain half of the water quality volume within a 24 hour period and the remaining volume within a 48 to 72 hour period. Since the extended detention basins will outlet flows utilizing a pump system, the pump will outlet the flows so that half of the water quality volume drains in approximately 24 hours, and the entire water quality volume is drained in approximately 48 to 72 hours. Detailed calculations for the extended detention basins will be performed during final engineering.

The project incorporates residential area, commercial area, and park/landscaped areas that are generally defined for the specific plan. In order to best treat for all possible constituents of concern, it is assumed for the specific plan that all pollutants will be generated and therefore, a constituent of concern. An extended detention basin has low to high removal effectiveness for all pollutants per the California Stormwater BMP Handbook for New Development and Redevelopment (see Appendix F). However, other water quality measures that are specific to a development may be necessary during final engineering.

Table 3: Treatment Control BMP Selection Matrix

Pollutant of Concern	Treatment Control BMP Categories[9]							
	Veg. Swale /Veg. Filter Strips[2]	Detention Basins[3]	Infiltration Basins & Trenches/Porous Pavement[4][10]	Wet Ponds or Wetlands[5]	Sand Filter or Filtration[6]	Water Quality Inlets	Hydrodynamic Separator Systems[7]	Manufactured/ Proprietary Devices[8]
Sediment/Turbidity	H/M	M	H/M	H/M	H/M	L	H/M (L for turbidity)	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Nutrients	L	M	H/M	H/M	L/M	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Organic Compounds	U	U	U	U	H/M	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Trash & Debris	L	M	U	U	H/M	M	H/M	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Oxygen Demanding Substances	L	M	H/M	H/M	H/M	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Bacteria & Viruses	U	U	H/M	U	H/M	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Oils & Grease	H/M	M	U	U	H/M	M	L/M	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Pesticides (non-soil bound)	U	U	U	U	U	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐
Metals	H/M	M	H	H	H	L	L	U
Y ☒ N ☐	☐	☒	☐	☐	☐	☐	☐	☐

Note: See Extended Detention Basin documentation obtained from the California Stormwater BMP Handbook for New Development and Redevelopment. Extended Basins treat Sediment, Nutrients, Trash, Metals, Bacteria, Oil and Grease and Organics with Low to High Removal Effectiveness.

Abbreviations:

L: Low removal efficiency H/M: High or medium removal efficiency U: Unknown removal efficiency

Notes:

(1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.

(2) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.

(3) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.

(4) Includes infiltration basins, infiltration trenches, and porous pavements.

(5) Includes permanent pool wet ponds and constructed wetlands.

(6) Includes sand filters and media filters.

(7) Also known as hydrodynamic devices, baffle boxes, swirl concentrators, or cyclone separators.

(8) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in this WQMP, or newly developed/emerging stormwater treatment technologies.

(9) Project proponents should base BMP designs on the Riverside County Stormwater Quality Best Management Practice Design Handbook. However, project proponents may also wish to reference the California Stormwater BMP Handbook – New Development and Redevelopment (www.cabmphandbooks.com). The Handbook contains additional information on BMP operation and maintenance.

(10) Note: Projects that will utilize infiltration-based Treatment Control BMPs (e.g., Infiltration Basins, Infiltration Trenches, Porous Pavement) must include a copy of the property/project soils report as Appendix E to the project-specific WQMP. The selection of a Treatment Control BMP (or BMPs) for the project must specifically consider the effectiveness of the Treatment Control BMP for pollutants identified as causing an impairment of Receiving Waters to which the project will discharge Urban Runoff.

V.4 EQUIVALENT TREATMENT CONTROL ALTERNATIVES

Not Applicable

V.5 REGIONALLY-BASED TREATMENT CONTROL BMPS

Not Applicable

VI. Operation and Maintenance Responsibility for Treatment Control BMPs

Operation and maintenance (O&M) requirements for all structural Source Control and Treatment Control BMPs shall be identified in the project-specific WQMP. The project-specific WQMP shall address the following:

- Identification of each BMP that requires O&M.
- Thorough description of O&M activities, the O&M process, and the handling and placement of any wastes.
- BMP start-up dates.
- Schedule of the frequency of O&M for each BMP.
- Identification of the parties (name, address, and telephone number) responsible for O&M, including a written agreement with the entities responsible for O&M. This agreement can take the form of a Covenant and Agreement recorded by the Project Proponent with the County Recorder, HOA or POA CC&Rs, formation of a maintenance district or assessment district or other instrument sufficient to guarantee perpetual O&M. The preparer of this project-specific WQMP should carefully review Section 4.6 of the WQMP prior to completing this section of the project-specific WQMP.
- Self-inspections and record-keeping requirements for BMPs (review local specific requirements regarding self-inspections and/or annual reporting), including identification of responsible parties for inspection and record- keeping.
- Thorough descriptions of water quality monitoring, if required by the Co-Permittee.

Instructions: *Identify below all operations and maintenance requirements, as described above, for each structural BMP. Where a public agency is identified as the funding source and responsible party for a Treatment Control BMP, a copy of the written agreement stating the public agency's acceptance of these responsibilities must be provided in Appendix G.*

This section will be completed and addressed at the time of the final WQMP.

VII. Funding

A funding source or sources for the O&M of each Treatment Control BMP identified in the project-specific WQMP must be identified. By certifying the project-specific WQMP, the Project applicant is certifying that the funding responsibilities have been addressed and will be transferred to future owners. One example of how to adhere to the requirement to transfer O&M responsibilities is to record the project-specific WQMP against the title to the property.

This section will be completed and addressed at the time of the final WQMP.

Appendix A

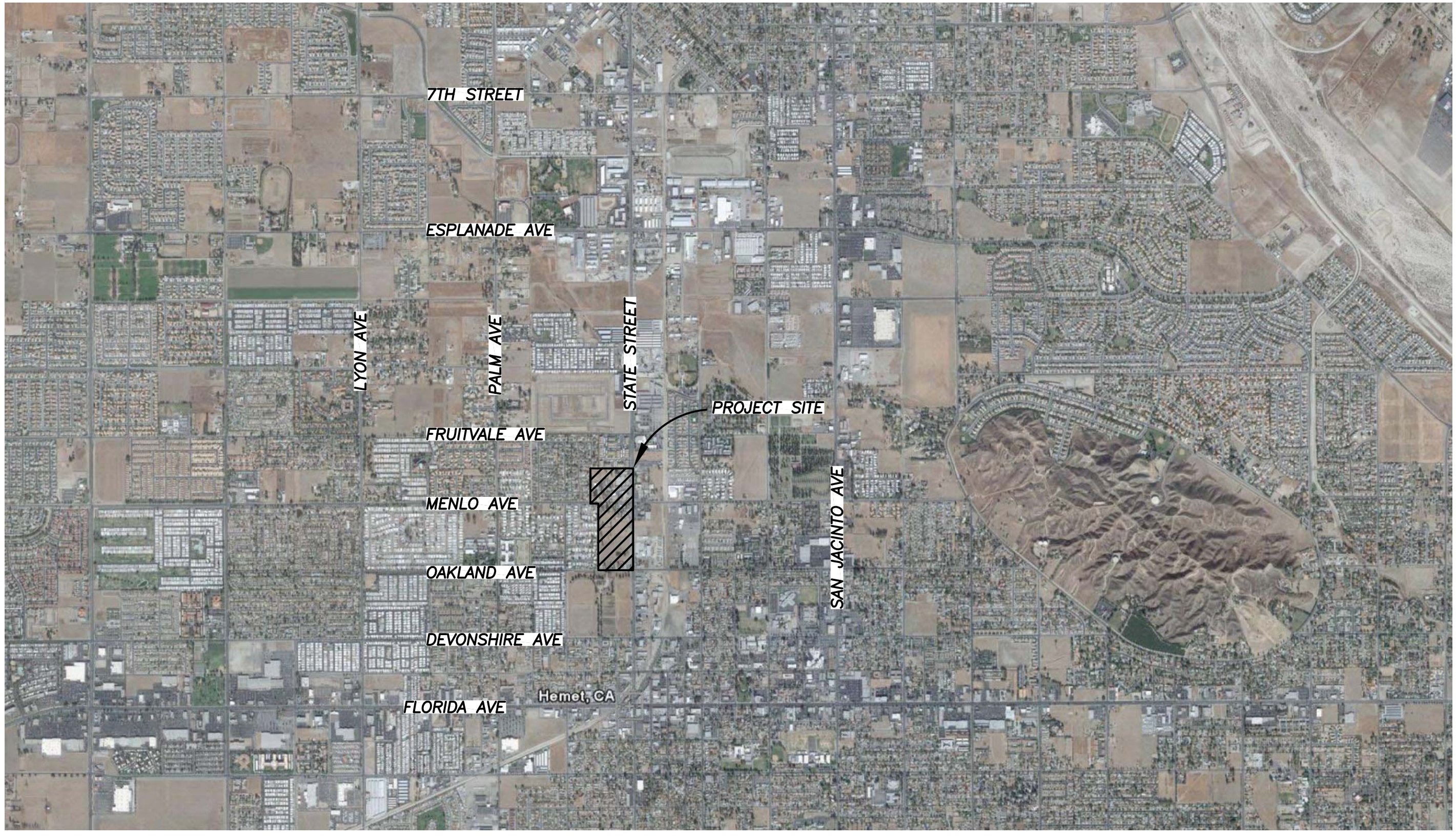
Conditions of Approval

Planning Commission Resolution TBD

Dated TBD

Appendix B

Vicinity Map, WQMP Site Plan, and Receiving Waters Map



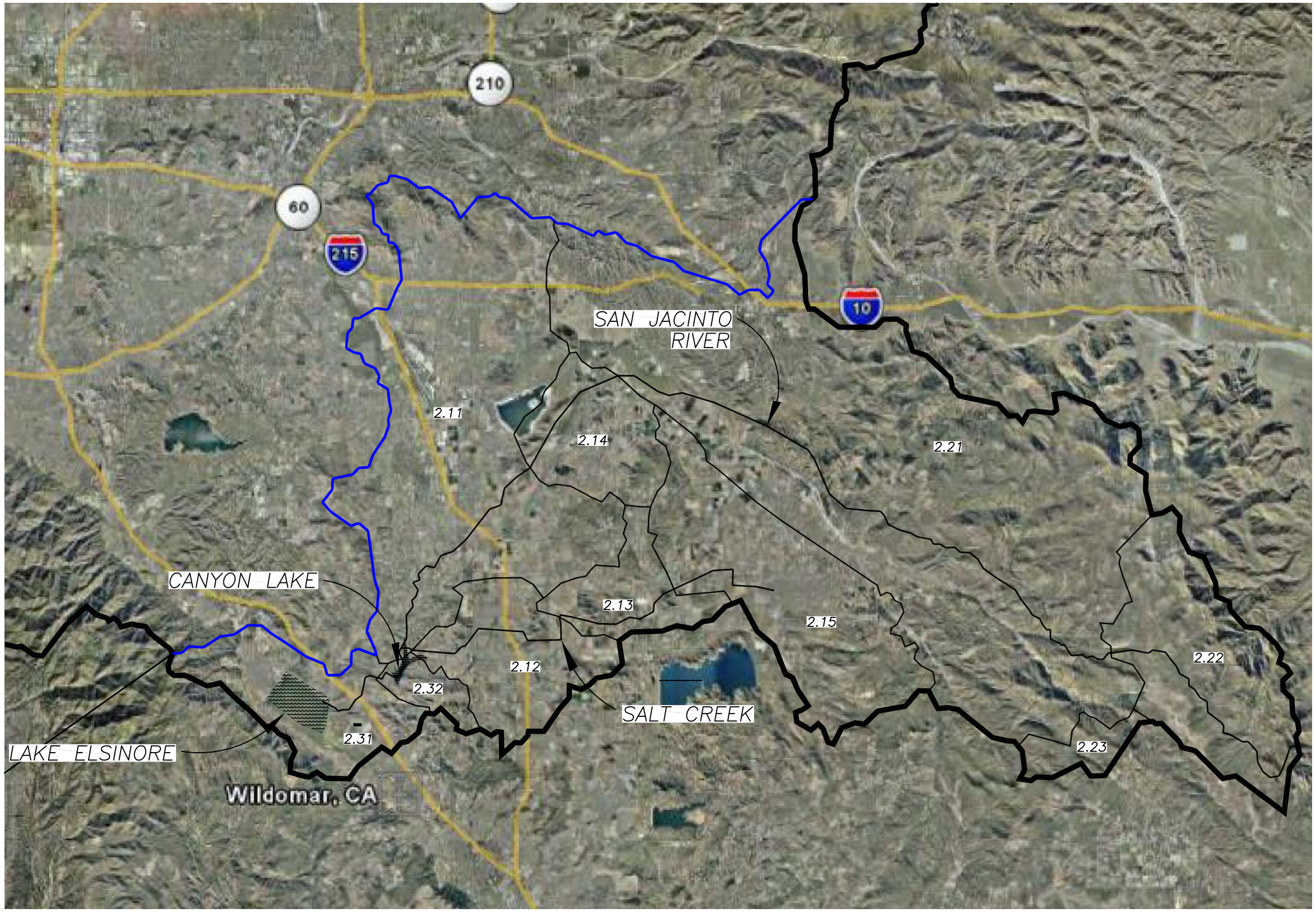
NORTH HEMET REVITALIZATION PLAN VICINITY MAP

JLC Engineering & Consulting, Inc.
40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

FIGURE 1

H-30

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\Receiving waters and vicinity map.dwg
Last Opened: Sep 14, 2010 - 1:06pm by joe



LEGEND

- Regional Boundary
- Hydrologic Unit Boundary (HU)
- Hydrologic Subarea Boundary (SA)
- FLOW PATH

NORTH HEMET REVITALIZATION PLAN RECEIVING WATERS MAP

JLC Engineering & Consulting, Inc.
40040 COLISEUM WAY
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

FIGURE 2

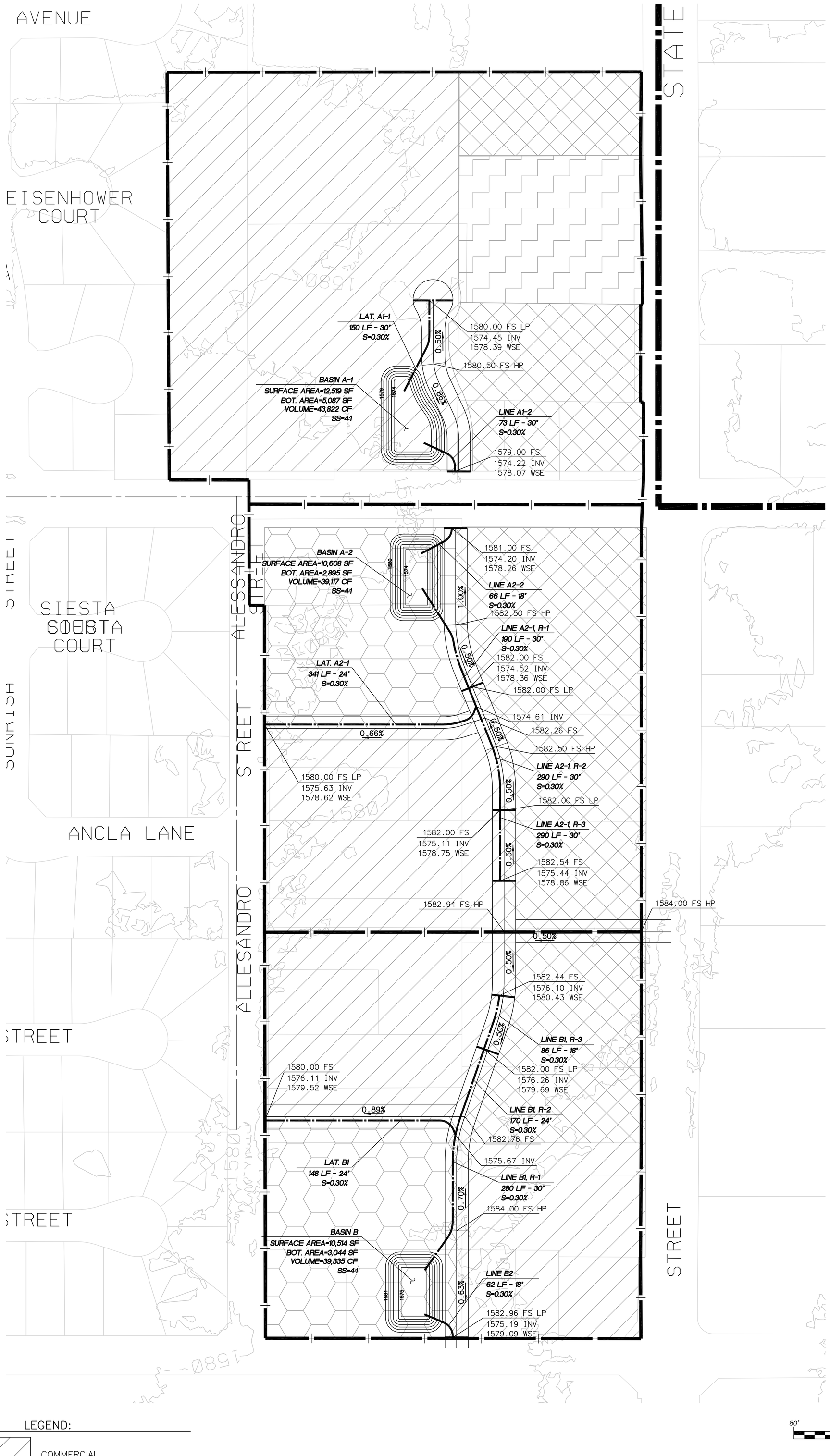
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Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\Receiving waters and vicinity map.dwg
Last Opened: Sep 21, 2010 - 1:33pm by jcarver

NORTH HEMET REVITALIZATION PLAN

IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SITE PLAN



LEGEND:

- COMMERCIAL
- HIGH DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- OFFICE

Drawing Name: O:\155.01.09\Tentative_Tract_Map\Engineering\Hydrology_Plan\Exhibits\Site Plan.dwg
Last Opened: Sep 21, 2010 – 1:16pm by jcarver

FIGURE "3"

JLC Engineering & Consulting, Inc.
36263 CALLE DE LOBO
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

NORTH HEMET REVITALIZATION PLAN

SITE PLAN

Appendix C

Supporting Detail Related to Hydraulic Conditions of Concern

Will be included in the Final WQMP

Appendix D

Educational Materials

Will be included in the Final WQMP

Appendix E

Soils Report

Will be included in the Final WQMP

Appendix F

Treatment Control BMP Sizing Calculations and Design Details

R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E

T1S T2S T3S T4S T5S T6S T7S T8S

SAN BERNARDINO MOUNTAINS

SANTA ANA MOUNTAINS

SAN JACINTO MOUNTAINS

H-37

Mira Loma 1.21

Riverside North 0.78

Pigeon Pass 0.81

Riverside South 0.83

Banning Bench 1.15

Beaumont 1.23

Desert Hot Springs East 0.92

1.06 Cabazon

Tachevah Dam 1.10

Prado Dam 1.20

Lake Mathews 0.81

San Jacinto 0.92

Idyllwild 1.36

Cathedral City 0.94

Winchester 0.92

Elsinore 1.13

El Cariso Station 1.31

Red Mountain 1.19

Hurkey Creek Park 1.13

La Cresta 1.25

Anza 0.95

Temecula 1.24

Aguanga Valley 0.95

1.20 1.10 1.00 0.90

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

N

N.T.S.

● Rain Gage Location

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Slope of the Design Volume Curve

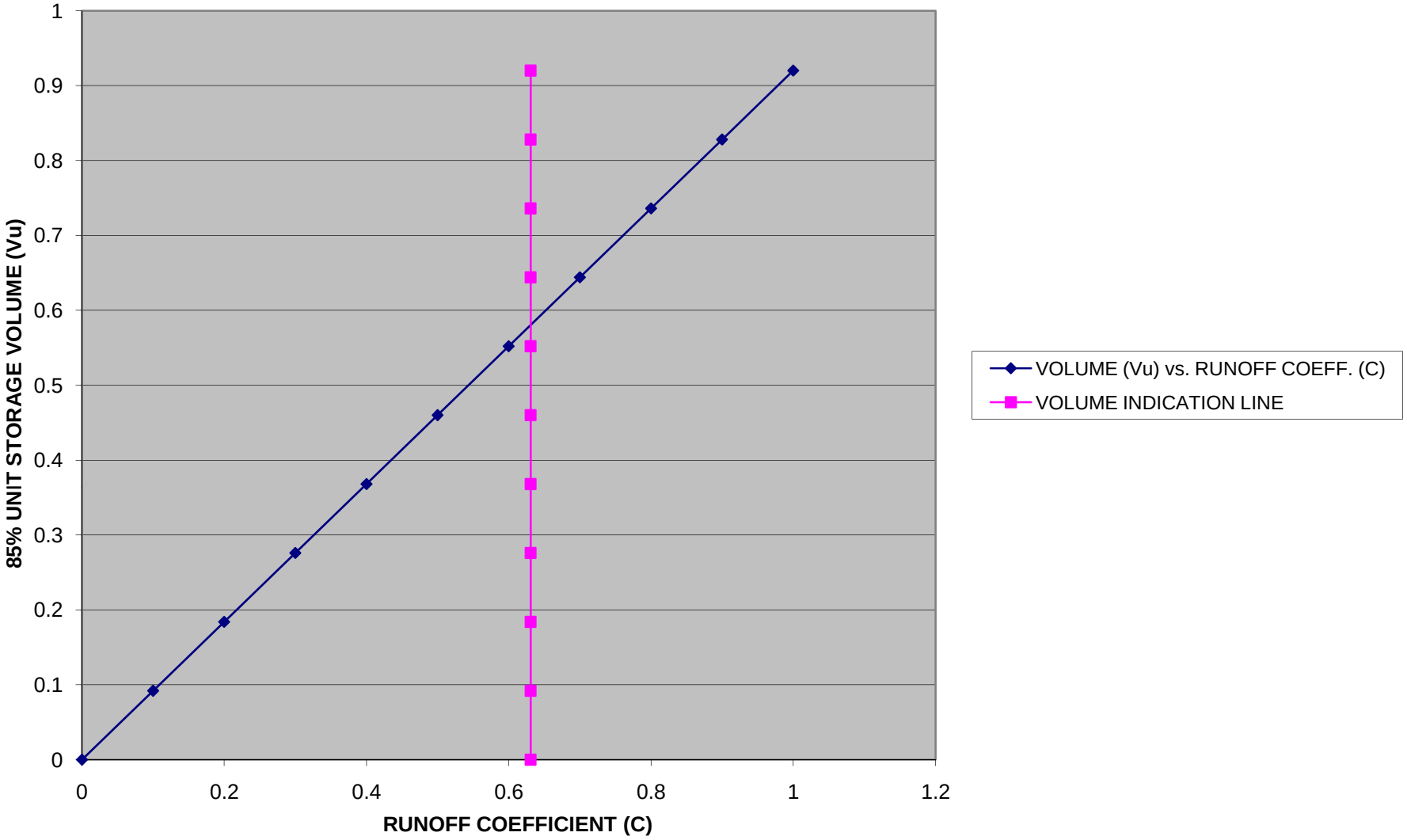
May 2004

AREA A EXTENDED DETENTION BASIN WATER QUALITY CALCULATIONS
DESIGN PROCEDURE FOR BMP VOLUME

DESIGNER JILLEEN CARVER
COMPANY JLC ENGINEERING AND CONSULTING, INC.
DATE 8/3/2010
PROJECT NORTH HEMET REVITALIZATION PLAN
LOCATION HEMET, CA

CREATE UNIT STORAGE VOLUME GRAPH				
		TOWNSHIP	RANGE	(1)
A	SITE LOCATION	SECTION		
B	SLOPE VALUE FOR DESIGN VOLUME CURVE APPENDIX A		0.92	(2)
C	SEE CURVE APPENDIX A			
D	CURVE FOR UNIT VOLUME GRAPH			
DETERMINE RUNOFF COEFFICIENT				
	DETERMINE TOTAL IMPERVIOUS AREA		16.677	(5)
	DETERMINE TOTAL AREA		20.190	(6)
	DETERMINE IMPERVIOUS FRACTION (I)		0.826	(7)
	DETERMINE RUNOFF COEFFICIENT C $C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$		0.631	(8)
DETERMINE 85% UNIT STORAGE VOLUME				
	USE FIGURE 2 AND DRAW VERTICAL LINE TO Vu		0.580	(9)
DETERMINE DESIGN STORAGE VOLUME				
	VOLUME OF BMP (IN-ACRES) V_{bmp} = (9) x (6)		11.715	(10)
	VOLUME OF BMP (FT-ACRES) V_{bmp} = (10) /12		0.976	(11)
	VOLUME OF BMP (FT^3) V_{bmp} = (11) x 43,560		42524.775	(12)

FIGURE 2: UNIT STORAGE VOLUME GRAPH

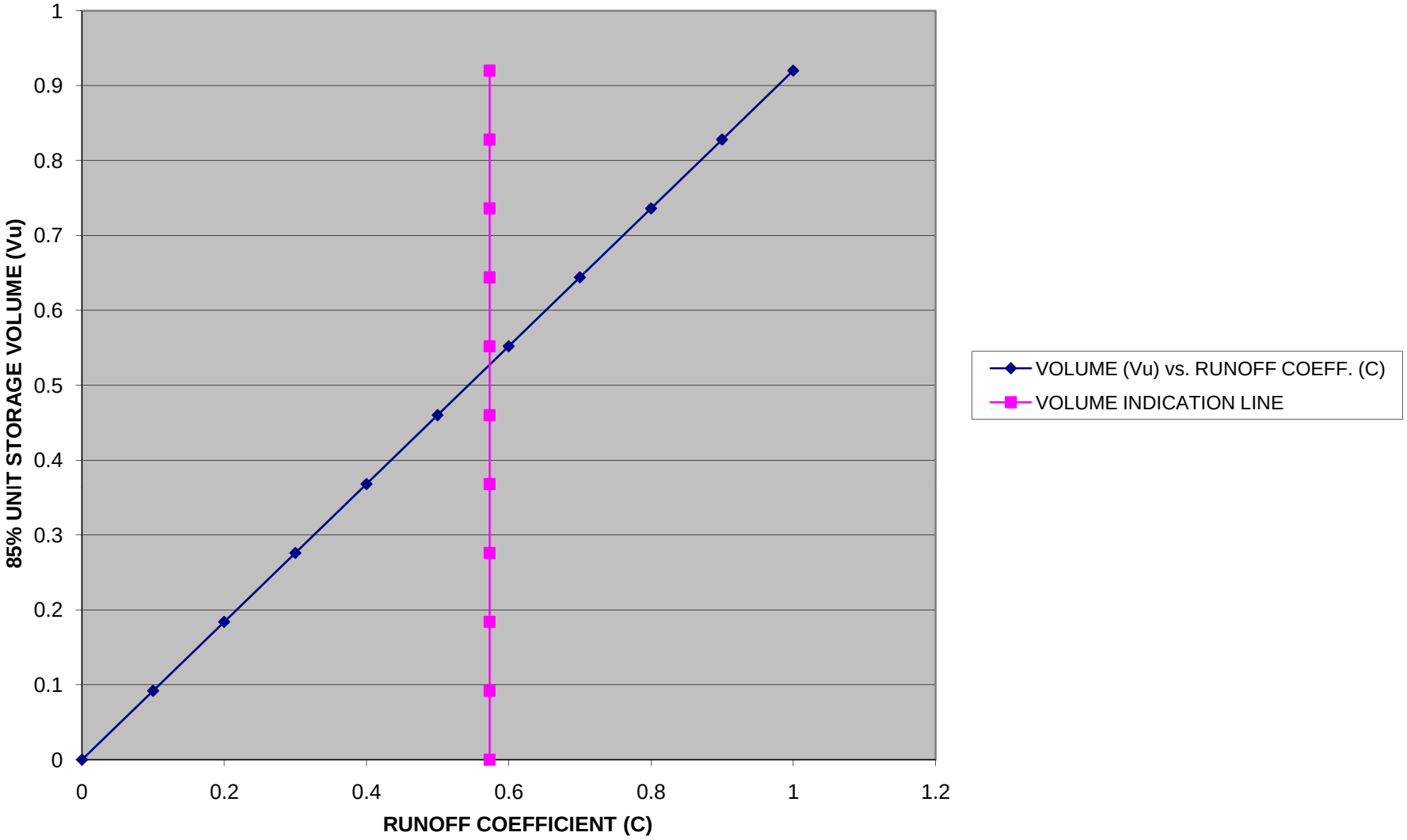


AREA B EXTENDED DETENTION BASIN WATER QUALITY CALCULATIONS
DESIGN PROCEDURE FOR BMP VOLUME

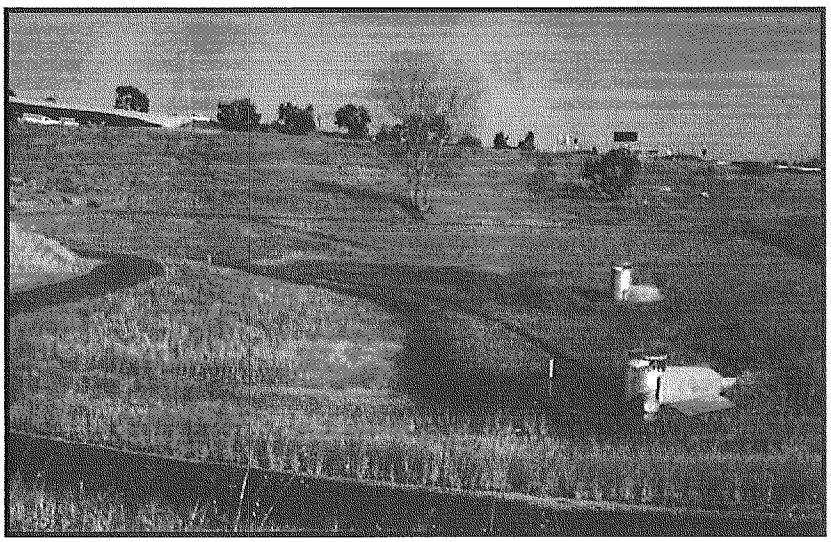
DESIGNER JILLEEN CARVER
COMPANY JLC ENGINEERING AND CONSULTING, INC.
DATE 6/18/2009
PROJECT TENTATIVE TRACT MAP 36218
LOCATION TEMECULA, CA

CREATE UNIT STORAGE VOLUME GRAPH				
		TOWNSHIP	RANGE	(1)
A	SITE LOCATION	SECTION		
B	SLOPE VALUE FOR DESIGN VOLUME CURVE APPENDIX A		0.92	(2)
C	SEE CURVE APPENDIX A			
D	CURVE FOR UNIT VOLUME GRAPH			
DETERMINE RUNOFF COEFFICIENT				
	DETERMINE TOTAL IMPERVIOUS AREA		6.558	(5)
	DETERMINE TOTAL AREA		8.440	(6)
	DETERMINE IMPERVIOUS FRACTION (I)		0.777	(7)
	DETERMINE RUNOFF COEFFICIENT C $C = 0.858i^3 - 0.78i^2 + 0.774i + 0.04$		0.573	(8)
DETERMINE 85% UNIT STORAGE VOLUME				
	USE FIGURE 2 AND DRAW VERTICAL LINE TO Vu		0.527	(9)
DETERMINE DESIGN STORAGE VOLUME				
	VOLUME OF BMP (IN-ACRES) V_{bmp} = (9) x (6)		4.449	(10)
	VOLUME OF BMP (FT-ACRES) V_{bmp} = (10) /12		0.371	(11)
	VOLUME OF BMP (FT^3) V_{bmp} = (11) x 43,560		16150.001	(12)

FIGURE 2: UNIT STORAGE VOLUME GRAPH



Extended Detention Basin TC-22



Maintenance Concerns, Objectives, and Goals

- Vector/Pest Control
- Sediment and Trash Removal
- Vegetation/Landscape Maintenance
- Re-suspension of settled material
- Clogging of the Outlet

General Description

Dry extended detention ponds (a.k.a. dry ponds, extended detention basins, detention ponds, extended detention ponds) are basins whose outlets have been designed to detain the stormwater runoff from a water quality design storm for some minimum time (e.g., 72 hours) to allow particles and associated pollutants to settle. Unlike wet ponds, these facilities do not have a large permanent pool. They can also be used to provide flood control by including additional flood detention storage.

Inspection/Maintenance Considerations

Inspections should be conducted semi-annually and after significant storm events to identify potential problems early. Most maintenance efforts will need to be directed toward vegetation management and vector control, which may focus on basic housekeeping practices such as removal of debris accumulations and vegetation management to ensure that the basin dewaters completely (recommended 72 hour residence time or less) to prevent creating mosquito and other vector habitats.

Targeted Constituents

✓	Sediment	▲
✓	Nutrients	●
✓	Trash	■
✓	Metals	▲
✓	Bacteria	▲
✓	Oil and Grease	▲
✓	Organics	▲

Legend ***(Removal Effectiveness)***

● Low ■ High

▲ Medium

CASQA California Stormwater Quality Association

TC-22 Extended Detention Basin

Inspection Activities	Suggested Frequency
■ Inspect after several storm events for bank stability, vegetation growth, and to determine if the desired residence time has been achieved. ■ Inspect outlet structure for evidence of clogging or outflow release velocities that are greater than design flow.	Post construction
■ Inspect for the following issues: differential settlement, cracking; erosion of pond banks or bottom, leakage, or tree growth on the embankment; the condition of the riprap in the inlet, clogging of outlet and pilot channels; standing water, slope stability, presence of burrows; sediment accumulation in the basin, forebay, and outlet structures; trash and debris, and the vigor and density of the grass turf on the basin side slopes and floor.	Semi-annual, after significant storms, or more frequent
■ Inspect for the following issues: subsidence, damage to the emergency spillway; inadequacy of the inlet/outlet channel erosion control measures; changes in the condition of the pilot channel, accumulated sediment volume, and semi-annual inspection items.	Annual
■ During inspections, changes to the extended storage pond or the contributing watershed should be noted, as these may affect basin performance.	Annual inspection
Maintenance Activities	**Suggested Frequency**
■ If necessary, modify the outlet orifice to achieve design values if inspection indicates modifications are necessary. ■ Repair undercut or eroded areas. ■ Mow side slopes. ■ Manage pesticide and nutrients. ■ Remove litter and debris. ■ Control mosquitoes as necessary.	As needed
■ Remove accumulated trash and debris from the basin, around the riser pipe, side slopes, embankment, emergency spillway, and outflow trash racks. The frequency of this activity may be altered to meet specific site conditions. ■ Trim vegetation at the beginning and end of the wet season to prevent establishment of woody vegetation and for aesthetic and vector reasons.	Semi-annual, or more frequent, as needed
■ Seed or sod to restore dead or damaged ground cover. ■ Repair erosion to banks and bottom as required.	Annual maintenance (as needed)
■ Supplement wetland plants if a significant portion have not been established (at least 50% of the surface area). ■ Remove nuisance plant species.	Annual maintenance (if needed)
■ Remove sediment from the forebay to reduce frequency of main basin cleaning.	3- to 5-year maintenance
■ Monitor sediment accumulation and remove accumulated sediment and regrade about every 10 years or when the accumulated sediment volume exceeds 10-20% of the basin volume, or when accumulation reaches 6 inches or if resuspension is observed. Clean in early spring so vegetation damaged during cleaning has time to re-establish.	Every 10-25 years

Additional Information

In most cases, sediment from extended detention basin does not contain toxins at levels posing a hazardous concern. Studies to date indicate that pond sediments are likely to meet toxicity limits and can be safely landfilled or disposed of onsite. Onsite sediment disposal is always preferable (if local authorities permit it) as long as the sediments are deposited away from the shoreline to prevent their re-entry into the pond.

Sediments should be tested for toxin in compliance with current disposal requirements if land uses in the catchment include commercial or industrial zones, or if visual or olfactory indications of pollution are noticed.

References

Metropolitan Council, Urban Small Sites Best Management Practices Manual. Available at: http://www.metrocouncil.org/environment/Watershed/BMP/manual.htm

U.S. Environmental Protection Agency, Post-Construction Stormwater Management in New Development & Redevelopment BMP Factsheets. Available at: cfpub.epa.gov/npdes/stormwater/menuofbmps/bmp_files.cfm

Ventura Countywide Stormwater Quality Management Program, Technical Guidance Manual for Stormwater Quality Control Measures. July, 2002.

Extended Detention Basins

General

An extended detention Basin is a permanent basin sized to detain and slowly release the design volume of stormwater, allowing particles and associated pollutants to settle out. An inlet forebay section and an inlet energy dissipater minimize erosion from entering flows, while erosion protection at the outlet prevents damage from exiting flows. The bottom of the basin slopes towards the outlet at an approximate grade of two percent, and a low flow channel conveys incidental flows directly to the outlet end of the basin. The basin should be vegetated earth in order to allow some infiltration to occur, although highly pervious soils may require an impermeable liner to prevent groundwater contamination. Proper turf management is also required to ensure that the vegetation does not contribute to water pollution through pesticides, herbicides, or fertilizers. A permanent micropool should not be included due to vector concerns. See Figure 3 for a typical basin design and Figure 5 for several outlet options. Extended detention basins can also be used to reduce the peaks of storm events for flood control purposes.

The basin outlet is designed to release the design runoff over a 48-hour drawdown period. The drawdown time refers to the minimum amount of time the design volume must be retained. In order to avoid vector breeding problems, the design volume should always empty within 72 hours. To function properly, the outlet must also be sized to retain the first half of the design volume for a minimum of 24 hours.

Extended Detention Basin Design Criteria:

Design Parameter	Unit	Design Criteria
Design Volume	ft^3	V_{BMP}
Drawdown time (total)	hrs	48 hrs [3]
Drawdown time for 50% V_{BMP} (minimum)	hrs	24 hrs [3]
Minimum tributary area	acre	5 acres [3]
Inlet/outlet erosion control	-	Energy dissipater to reduce velocities [1]
Forebay volume	%	5 to 10 % of V_{BMP} [1]
Forebay drain time	min	Drain time < 45 minutes [1]
Low-flow channel depth	in	9 [1]
Low-flow chan. flow capacity	-	2 times the forebay outlet rate [1]
Bottom slope of upper stage	%	2.0 [1]
Length to width ratio (min.)	-	2:1 (larger preferred) [1]
Upper stage depth/width (min.)	ft	2’ depth / 30’ width [1]
Bottom stage volume	%	10 to 25 % of V_{BMP} [1]

Bottom stage depth	ft	1.5 to 3 ft deeper than top stage [1]
Freeboard (minimum)	ft	1.0 [1]
Embankment side slope (H:V)	-	≥ 2:1 inside / ≥ 4:1 outside (w/o retaining walls) [1]
Maintenance access ramp slope	%	10 % or flatter [1]
Maintenance access ramp width	ft	15' – approach paved with asphalt concrete [1]

1. Ventura County's Technical Guidance Manual for Stormwater Quality Control Measures
2. City of Modesto's Guidance Manual for New Development Stormwater Quality Control Measures
3. CA Stormwater BMP Handbook for New Development and Significant Redevelopment
4. Riverside County DAMP Supplement A Attachment

Extended Detention Basin Design Procedure

1. Design Volume
   Use Worksheet 1- Design Procedure Form for Design Volume, V_{BMP}.

1. Basin Shape
   Whenever possible, shape the basin with a gradual expansion from the inlet toward the middle and a gradual contraction from middle toward the outlet. The length to width ratio should be a minimum of 2:1. Internal baffling with berms may be necessary to achieve this ratio.

2. Two-Stage Design
   Whenever feasible, provide a two-stage design with a pool that fills often with frequently occurring runoff. This minimizes standing water and sediment deposition in the remainder of the basin.

   a. Upper stage: The upper stage should be a minimum of 2 feet deep with the bottom sloped at 2 percent toward the low flow channel. Minimum width of the upper stage should be 30 feet.

   b. Bottom stage: The active storage basin of the bottom stage should be 1.5 to 3 feet deeper than the top stage and store 10 to 25 percent of the design volume.

3. Forebay Design
   The forebay provides a location for sedimentation of larger particles that has a solid bottom surface to facilitate mechanical removal of accumulated sediment. The forebay volume should be 5 to 10 percent of the V_{BMP}. A berm should separate the forebay from the upper stage of the basin. The outlet pipe from the forebay to the low-flow channel should be sized to drain the forebay volume in 45 minutes. The outlet pipe entrance should be offset from the forebay inlet to prevent short circuiting.

4. Low-flow Channel
   The low flow channel conveys flow from the forebay to the bottom stage. Erosion protection should be provided where the low-flow channel enters the bottom stage. Lining of the low flow channel with concrete is recommended. The depth of the channel should be at least 9 inches. The flow capacity of the channel should be twice the release capacity of the forebay outlet.

5. Trash Rack/Gravel Pack
   A trash rack or gravel pack around perforated risers shall be provided to protect outlet orifices from clogging. Trash racks are better suited for use with perforated vertical plates for outlet control and allow easier access to outlet orifices for purposes of inspection and cleaning. Trash rack shall be sized to prevent clogging of the primary water quality outlet without restricting the hydraulic capacity of the outlet control orifices.

6. Basin Outlet
   The basin outlet should be sized to release the design volume, V_{BMP} over a 48-hour period, with no more than 50 percent released in 24 hours. The outflow structure should have a trash rack or other acceptable means to prevent clogging, and a valve that can stop discharge from being released in case of an accidental spill in the watershed (Figure 5). The discharge through a control orifice can be calculated using the following steps:

   a. Develop a Stage vs. Discharge curve for the outlet structure
   b. For example: If using an orifice, select the orifice size and use the following equation to develop a Stage vs. Discharge relationship for this outlet:

$$Q = CA[2g(H-H_o)]^{0.5}$$

   Where: Q = discharge (ft^3/s)
   C = orifice coefficient
   A = area of the orifice (ft)
   G = gravitational constant (32.2 ft^2/s)
   H = water surface elevation (ft)
   H_o = orifice elevation (ft)

   Recommended values for C are 0.66 for thin material (e.g. CMP riser) and 0.8 when the material is thicker than the orifice diameter (e.g. concrete riser). Alternative non-mechanical hydraulic control structures are acceptable (e.g. weirs, risers, etc).

   c. Develop a Stage vs. Volume curve for the basin
   Based on the shape and size of the basin, develop a relationship between the stage and the volume of water in the basin.

d. Create an Inflow Hydrograph
Create an inflow hydrograph that delivers the design volume V_{BMP} instantaneously to the basin. This can be approximated by creating a hydrograph with two 5-minute intervals that together convey the entire $V_{BMP.}$

e. Route the Volume through the Basin
Route the volume of water through the basin using these curves. If this meets the hydraulic retention time requirements (50% of the volume empties in not less than 24 hours, 100% of the volume empties in not less than 48 hours and not more than 72 hours) the outlet is correctly sized. If these requirements are not met, select a new outlet size or configuration and repeat the process.

7. Inlet/Outlet Design
Basin inlet and outlet points should be provided with an energy dissipation structure and/or erosion protection.

8. Turf Management
Basin vegetation provides erosion protection and improves sediment entrapment. Basin bottoms, berms, and side slopes may be planted with native grasses or with irrigated turf. Several BMPs must be implemented to ensure that this vegetation does not contribute to water pollution through pesticides, herbicides, or fertilizers. These BMPs shall include, at a minimum: (1) educational activities, permits, certifications, and other measures for local applicators and distributors; (2) integrated pest management measures that rely on non-chemical solutions; (3) the use of native vegetation; (4) schedules for irrigation and chemical application; and (5) the collection and proper disposal of unused pesticides, herbicides, and fertilizers.

9. Embankment
Embankment designs must conform to requirements of the State of California Division of Safety of Dams, if the basin dimensions cause it to fall under that agency's jurisdiction. Interior slopes should be no steeper than 2:1 and exterior slopes no steeper than 4:1. Flatter slopes are preferable. Embankment fill is discouraged and should never be higher than three feet unless the basin is to be publicly maintained.

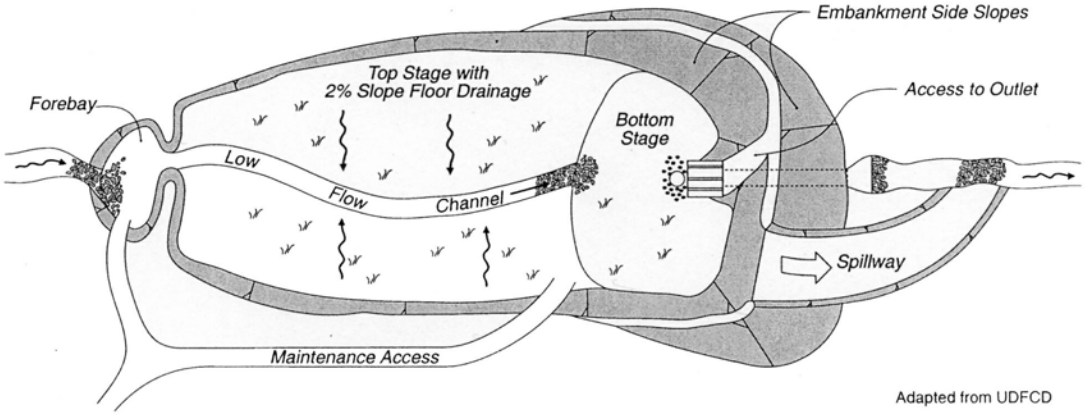
10. Access
All-weather access to the bottom, forebay, and outlet works shall be provided for maintenance vehicles. Maximum grades of access ramps should be 10 percent and minimum width should be 15 feet.

11. Bypass
    Provide for bypass or overflow of runoff volumes in excess of the design volume. Spillway and overflow structures should be designed in accordance with applicable standards of the Riverside County Flood Control District.

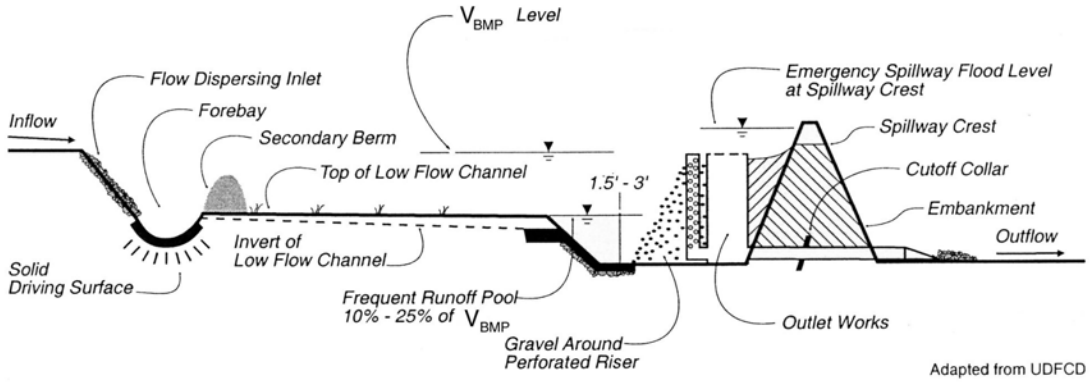
12. Geotextile Fabric
    Non-woven geotextile fabric used in conjunction with gravel packs around perforated risers shall conform with the specifications located in Table 5.

Table 5. Non-woven Geotextile Fabric Specifications

Property	Test Reference	Minimum Specification
Grab Strength	ASTM D4632	90 lbs
Elongation at peak load	ASTM D4632	50 %
Puncture Strength	ASTM D3787	45 lbs
Permitivity	ASTM D4491	0.7 sec^{-1}
Burst Strength	ASTM D3786	180 psi
Toughness	% Elongation x Grab Strength	5,500 lbs
Ultraviolet Resistance (% strength retained at 500 Weatherometer hours)	ASTM D4355	70 %



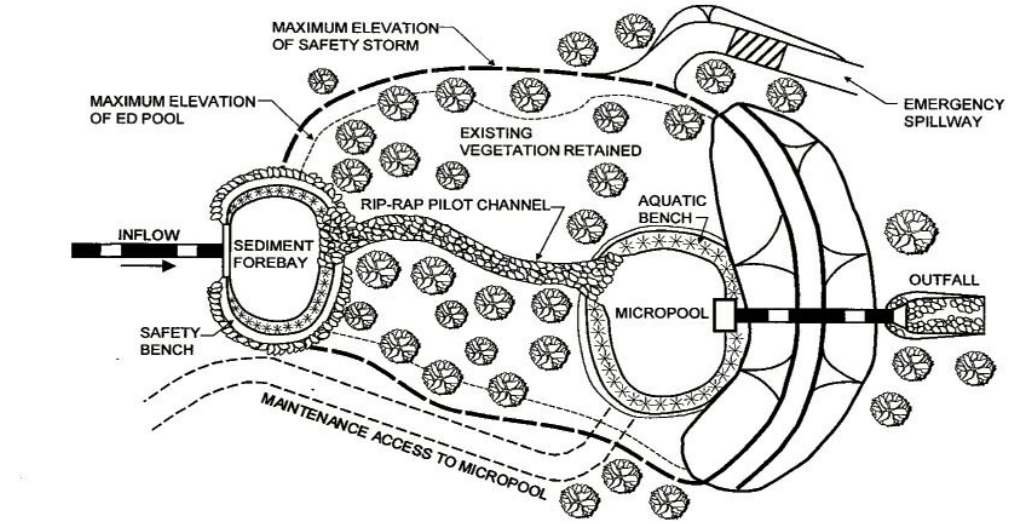
Plan View



Section View

Figure 3: EXTENDED DETENTION BASIN

Source: Ventura County Guidance Manual



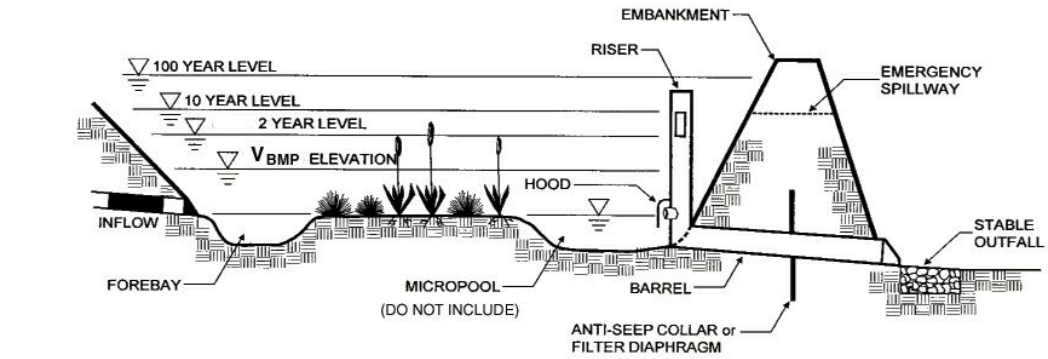
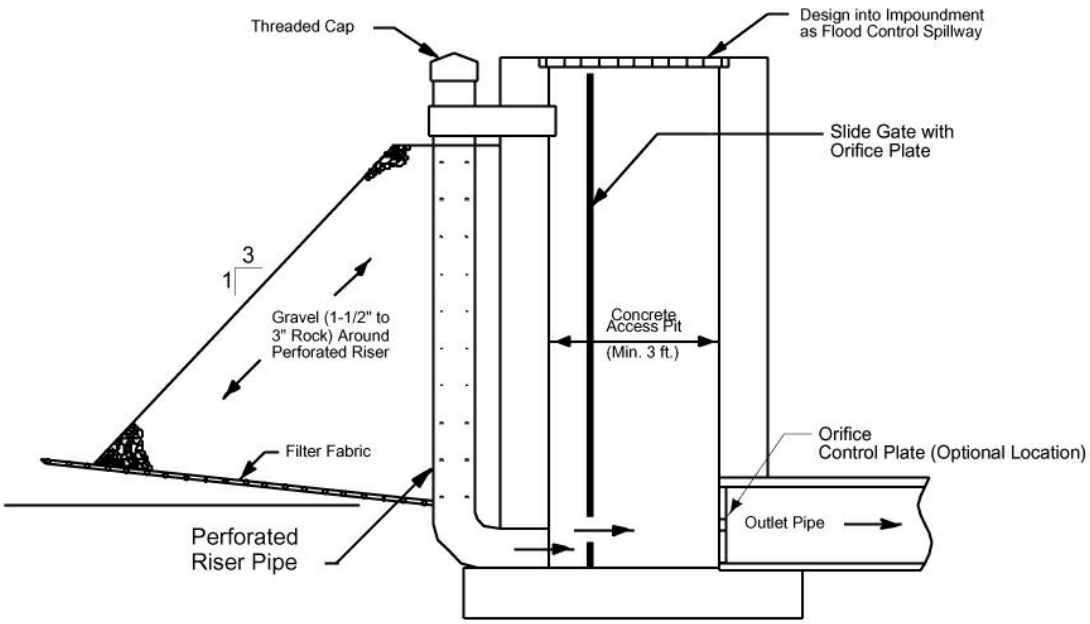


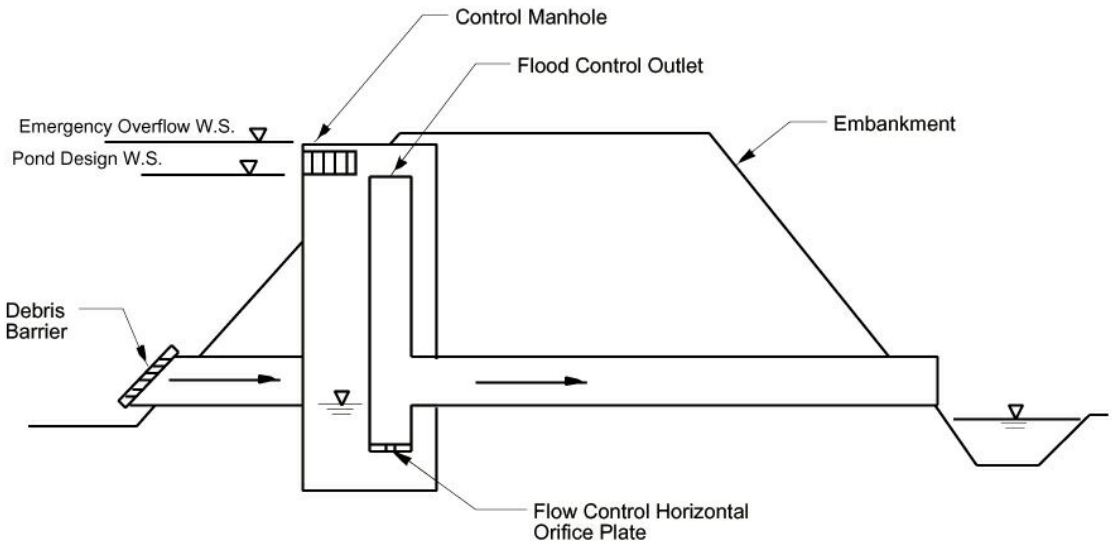
Figure 4: EXTENDED DETENTION / INCREASED RUNOFF BASIN

Source: CA BMP Handbook (2003)



PERFORATED RISER PIPE WITH VERTICAL FLOW CONTROL ORIFICE

NOT TO SCALE



CONTROL MANHOLE WITH SUBMERGED HORIZONTAL ORIFICE PLATE

NOT TO SCALE

Figure 5: EXTENDED DETENTION BASIN TYPICAL OUTLETS

Source: Ventura County Guidance Manual

EXTENDED DETENTION BASIN A-1

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1573.5	0.0	0.000		0	0.000
			0.019		
1574	5086.39	0.117		0.019	0.055
			0.131		
1575	6371.79	0.146		0.151	0.056
			0.162		
1576	7757.72	0.178		0.313	0.057
			0.195		
1577	9244.19	0.212		0.508	0.057
			0.230		
1578	10831.19	0.249		0.738	0.057
			0.268		
1579	12518.71	0.287		1.006	0.057

EXTENDED DETENTION BASIN A-2

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1573.5	0.0	0.000		0	0.000
			0.011		
1574	2894.58	0.066		0.011	0.055
			0.078		
1575	3917.29	0.090		0.089	0.056
			0.103		
1576	5054.26	0.116		0.192	0.057
			0.130		
1577	6291.77	0.144		0.322	0.057
			0.160		
1578	7629.81	0.175		0.481	0.057
			0.191		
1579	9068.37	0.208		0.673	0.057
			0.226		
1580	10607.47	0.244		0.898	0.057

EXTENDED DETENTION BASIN B

Contour Elevation	Contour Area (sf)	Contour Area (ac)	Contour Interval Volume (ac-ft)	Total Basin Volume (ac-ft)	Outflow (cfs)
1574.5	0.0	0.000		0	0.000
			0.012		
1575	3043.86	0.070		0.012	0.122
			0.081		
1576	4034.6	0.093		0.093	0.123
			0.105		
1577	5129.31	0.118		0.198	0.124
			0.131		
1578	6324.56	0.145		0.329	0.124
			0.160		
1579	7620.33	0.175		0.489	0.124
			0.191		
1580	9016.63	0.207		0.679	0.124
			0.224		
1581	10513.47	0.241		0.903	0.124

Appendix G

AGREEMENTS – CC&RS, COVENANT AND AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP

Appendix H

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS

Appendix I
Noise Modeling

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Measurement	Time	Leq	SEL	Lmax	Lmin	Peak	Uwpk	L(2)	L(8)	L(16)	L(25)	L(50)	L(90)
	---------	----	------	------	------	------	------	------	------	------	-		
1	13:10:58	64.9	82.7	70.5	55.9	82.5	95.3	70.4	68.9	66.6	65.4	64.1	57.7
1	13:11:58	60.2	78.0	70.4	54.9	84.5	91.3	68.0	63.1	60.7	59.9	58.5	55.7
1	13:12:58	63.9	81.7	69.3	57.7	84.3	94.5	69.0	67.7	66.5	65.1	62.5	58.4
1	13:13:58	63.7	81.5	67.8	58.8	81.0	91.3	67.0	66.2	65.2	64.6	63.3	61.2
1	13:14:58	63.2	80.9	67.1	57.7	79.9	94.5	66.7	65.6	64.9	64.5	62.6	59.8
1	13:15:58	66.3	84.0	74.6	54.6	84.8	97.4	73.9	71.5	68.9	66.6	62.6	57.4
1	13:16:58	67.5	85.3	77.1	58.1	89.5	101.7	76.6	72.2	68.9	67.4	63.5	58.9
1	13:17:58	62.2	79.9	69.4	53.9	81.3	90.0	69.0	67.6	63.8	62.9	59.3	55.8
1	13:18:58	64.9	82.6	71.1	55.4	82.6	92.5	70.4	68.3	66.9	66.1	63.7	58.7
1	13:19:58	59.8	77.6	63.3	56.2	81.9	92.5	63.3	62.3	61.2	60.7	59.4	57.2
1	13:20:58	65.5	83.3	71.6	52.7	85.0	96.0	71.1	69.5	68.5	67.4	64.2	55.3
1	13:21:58	61.0	78.7	68.2	54.4	81.3	95.3	68.0	65.5	63.9	62.4	57.2	54.7
1	13:22:58	64.0	81.8	68.9	57.2	85.4	95.3	68.5	67.2	65.6	64.9	63.6	58.4
1	13:23:58	66.0	83.8	72.6	56.2	85.2	96.0	72.3	70.6	69.1	67.3	64.1	58.0
1	13:24:58	63.3	81.1	71.6	57.1	84.3	97.4	70.6	67.5	64.8	63.5	61.3	57.8
1	13:25:58	65.8	83.6	72.6	55.0	84.7	94.5	72.3	70.2	68.0	67.0	63.9	57.2
1	**SUMMARY**	**64.1**		**77.1**	**52.7**								
2	13:34:07	63.3	81.0	69.7	45.1	84.7	91.3	69.4	68.0	65.7	64.6	61.8	45.6
2	13:35:07	64.0	81.7	69.5	45.8	82.5	88.4	69.3	68.1	67.2	66.0	62.4	49.0
2	13:36:07	65.9	83.6	70.8	49.3	84.1	91.3	70.6	69.6	68.4	67.4	65.2	51.6
2	13:37:07	60.3	78.0	69.2	44.7	82.0	86.5	66.9	65.6	64.5	63.0	51.6	45.1
2	13:38:07	65.2	83.0	71.9	50.6	83.7	93.6	71.6	70.4	69.3	68.0	61.4	51.7
2	13:39:07	62.4	80.2	69.7	43.8	82.8	86.5	69.6	68.4	66.7	65.0	53.0	45.0
2	13:40:07	65.4	83.2	73.8	44.2	86.9	93.6	73.5	71.0	69.1	65.9	55.8	44.5
2	13:41:07	64.2	82.0	69.8	47.7	82.2	88.4	69.4	68.4	67.5	66.4	62.7	53.9
2	13:42:07	64.0	81.8	70.3	48.7	82.4	88.4	70.0	69.1	67.7	66.6	59.5	49.8
2	13:43:07	61.7	79.5	66.8	50.4	80.4	88.4	66.5	65.2	64.0	63.3	61.3	52.8
2	13:44:07	66.4	84.1	76.6	50.5	89.2	96.0	76.2	71.1	67.4	65.3	62.5	51.9
2	13:45:07	66.4	84.2	73.3	54.3	87.2	97.9	72.9	71.7	68.9	67.2	63.7	58.0
2	13:46:07	65.1	82.9	72.8	53.5	85.4	90.0	72.5	70.1	67.2	65.0	63.1	55.4
2	13:47:07	64.9	82.6	69.0	55.0	81.3	88.4	68.9	68.5	68.0	67.1	63.8	57.3
2	13:48:07	64.2	81.9	70.7	53.1	83.4	91.3	70.5	68.2	66.3	64.9	63.0	55.1
2	13:49:07	64.7	82.5	71.7	50.9	83.6	98.5	71.4	70.0	68.5	67.0	59.6	52.4
2	**SUMMARY**	**64.1**		**76.6**	**43.8**								

Measurement	Time	Leq	SEL	Lmax	Lmin	Peak	Uwpk	L(2)	L(8)	L(16)	L(25)	L(50)	L(90)
	---------	----	------	------	------	------	------	------	------	------	-		
3	13:53:35	54.5	72.3	66.2	46.7	79.5	86.5	65.2	59.5	52.9	50.1	48.3	47.0
3	13:54:35	48.7	66.5	52.6	45.8	68.4	84.0	51.9	50.9	50.1	49.5	48.2	46.3
3	13:55:35	48.1	65.9	55.7	45.6	79.0	90.0	52.0	50.4	49.6	49.0	47.1	45.6
3	13:56:35	53.6	71.3	61.0	46.1	84.6	86.5	60.1	57.5	55.5	54.5	52.1	47.6
3	13:57:35	51.3	69.1	61.2	44.8	74.5	88.4	60.3	55.9	51.1	49.2	48.0	45.8
3	13:58:35	46.9	64.6	48.9	44.8	65.2	86.5	48.8	48.4	47.9	47.6	46.7	45.3
3	13:59:35	46.2	63.9	50.7	44.6	71.1	88.4	49.0	47.8	47.0	46.6	45.8	44.9
3	14:00:35	46.8	64.6	49.8	44.8	68.4	82.4	49.3	48.4	47.7	47.0	46.5	45.4
3	14:01:35	48.6	66.3	55.9	45.8	86.6	88.4	53.6	51.5	49.3	48.6	47.6	46.3
3	14:02:35	47.3	65.1	51.1	46.0	72.4	84.0	50.3	48.9	48.3	47.6	46.7	46.1
3	14:03:35	47.5	65.3	49.1	45.7	62.6	84.0	49.0	48.7	48.4	48.1	47.4	46.1
3	14:04:35	47.1	64.9	50.9	45.2	73.4	88.4	49.0	48.5	48.0	47.7	46.9	45.5
3	14:05:35	48.1	65.8	54.1	45.5	77.2	88.4	52.0	49.9	48.8	48.5	47.6	46.2
3	14:06:35	52.9	70.6	63.4	46.0	75.8	89.3	62.1	57.3	54.3	52.7	48.4	46.5
3	**SUMMARY**	**49.1**		**66.2**	**44.6**								
4	14:10:33	60.1	77.9	68.9	44.9	83.6	95.3	68.3	66.1	62.1	59.5	56.6	45.8
4	14:11:33	55.0	72.8	60.4	46.6	79.3	84.0	60.4	59.4	58.2	56.6	53.0	48.0
4	14:12:33	58.4	76.2	64.2	45.8	77.2	88.4	63.8	62.7	61.3	60.2	56.8	49.1
4	14:13:33	56.8	74.6	64.3	44.1	84.5	92.5	63.7	61.7	60.4	59.1	51.3	44.6
4	14:14:33	57.4	75.2	63.9	47.7	78.0	90.0	63.4	61.0	59.4	58.3	56.6	50.6
4	14:15:33	55.9	73.7	60.3	47.7	75.8	86.5	60.3	59.6	58.5	57.6	54.6	49.0
4	14:16:33	58.3	76.1	67.0	46.8	85.5	90.0	64.5	62.5	60.1	59.5	57.1	49.4
4	14:17:33	54.1	71.9	60.6	45.6	73.9	86.5	60.6	59.6	57.6	54.4	51.1	45.9
4	14:18:33	59.7	77.4	64.8	45.8	80.4	94.5	64.7	63.8	63.1	62.3	56.8	48.7
4	14:19:33	54.0	71.8	58.4	45.2	74.5	84.0	58.4	57.9	57.1	55.4	52.7	46.5
4	14:20:33	57.1	74.9	64.7	43.9	82.2	92.5	64.2	61.0	59.9	58.3	55.4	45.1
4	14:21:33	53.7	71.5	63.1	45.1	75.8	92.5	60.8	58.7	56.7	54.6	49.6	45.9
4	14:22:33	60.4	78.2	69.4	49.6	80.6	97.7	68.6	65.9	62.6	60.1	57.4	51.1
4	14:23:33	53.2	71.0	57.0	48.8	83.4	84.0	56.4	55.0	54.6	54.2	53.0	50.4
4	14:24:33	49.8	67.6	53.1	46.5	88.1	90.0	52.5	51.7	51.2	50.8	49.7	47.8
4	**SUMMARY**	**56.9**		**69.4**	**43.9**								

Measurement	Time	Leq	SEL	Lmax	Lmin	Peak	Uwpk	L(2)	L(8)	L(16)	L(25)	L(50)	L(90)
	---------	----	------	------	------	------	------	------	------	------	-		
5	14:31:22	58.2	76.0	68.6	42.4	84.2	92.5	67.4	63.7	60.9	58.0	53.0	43.8
5	14:32:22	64.2	82.0	69.9	49.6	87.5	91.3	69.7	68.9	68.1	66.4	61.3	53.4
5	14:33:22	61.1	78.9	69.7	45.3	82.9	90.0	69.1	67.2	63.1	61.4	57.1	46.4
5	14:34:22	58.5	76.3	65.2	46.1	79.0	91.3	64.6	63.5	62.2	60.8	52.8	47.0
5	14:35:22	60.6	78.4	68.2	43.4	82.1	86.5	67.9	66.6	64.7	62.4	51.4	44.7
5	14:36:22	59.5	77.3	70.8	47.2	83.7	93.6	69.1	64.4	62.3	58.9	52.3	48.6
5	14:37:22	60.6	78.3	68.6	46.9	83.7	92.5	68.1	66.6	64.2	61.6	53.9	48.1
5	14:38:22	58.7	76.5	67.7	44.1	81.3	86.5	67.1	66.2	61.2	56.1	49.3	46.1
5	14:39:22	61.4	79.2	68.1	47.3	82.9	88.4	67.4	66.1	64.6	63.5	58.6	49.5
5	14:40:22	62.0	79.8	70.5	48.6	84.8	88.4	69.8	67.0	65.5	63.4	56.8	51.1
5	14:41:22	59.6	77.3	67.1	43.1	81.6	86.5	66.7	65.4	63.5	60.3	53.7	44.6
5	14:42:22	58.4	76.2	68.3	43.7	83.9	88.4	67.6	64.8	60.2	57.4	50.9	44.7
5	14:43:22	60.8	78.6	67.7	44.2	82.0	88.4	67.4	65.8	63.8	62.5	58.8	47.7
5	14:44:22	59.6	77.3	68.9	44.6	84.2	98.5	68.4	65.8	62.7	59.5	49.6	46.6
5	14:45:22	62.0	79.7	69.7	49.1	84.4	90.0	69.2	67.7	64.7	63.2	57.9	50.9
5	**SUMMARY**	**60.0**		**70.8**	**42.4**								

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,384
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	382	27	3	158	11	1	96	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.5	-8.8	-20.3	-30.3	-10.9	-22.4	-32.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.9	59.2	54.3	57.1	55.3	50.5	54.9	53.2	48.3
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.8	Leq	NIGHT=	57.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.4**
			CNEL=	**65.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**53**	**115**
	CNEL:	**26**	**56**	**121**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,912
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	414	29	3	171	12	1	104	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.6	-16.1	-26.1	-8.4	-19.9	-30.0	-10.6	-22.1	-32.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.3	59.5	54.7	57.4	55.7	50.8	55.3	53.5	48.7
VEHICULAR NOISE	DAY=	64.0	Leq	EVENING=	60.2	Leq	NIGHT=	58.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.8**
			CNEL=	**66.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**26**	**56**	**121**
	CNEL:	**27**	**59**	**127**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,896
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	472	34	3	195	14	1	119	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.0	-15.5	-25.5	-7.8	-19.3	-29.4	-10.0	-21.5	-31.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.9	60.1	55.2	58.0	56.2	51.4	55.9	54.1	49.3
VEHICULAR NOISE	DAY=	64.6	Leq	EVENING=	60.8	Leq	NIGHT=	58.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**66.3**
			CNEL=	**66.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**29**	**62**	**133**
	CNEL:	**30**	**65**	**139**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,692
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	460	33	3	190	13	1	116	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.1	-15.6	-25.7	-8.0	-19.4	-29.5	-10.1	-21.6	-31.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.7	60.0	55.1	57.9	56.1	51.3	55.7	54.0	49.1
VEHICULAR NOISE	DAY=	64.5	Leq	EVENING=	60.7	Leq	NIGHT=	58.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**66.2**
			CNEL=	**66.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**60**	**130**
	CNEL:	**29**	**63**	**137**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,656
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	458	32	3	189	13	1	115	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.1	-15.6	-25.7	-8.0	-19.5	-29.5	-10.1	-21.6	-31.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.7	59.9	55.1	57.9	56.1	51.3	55.7	54.0	49.1
VEHICULAR NOISE	DAY=	64.5	Leq	EVENING=	60.6	Leq	NIGHT=	58.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.2** **CNEL= 66.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**60**	**130**
	CNEL:	**29**	**63**	**136**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,196
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	670	48	5	277	20	2	168	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.5	-14.0	-24.0	-6.3	-17.8	-27.9	-8.5	-20.0	-30.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.4	61.6	56.8	59.5	57.8	52.9	57.4	55.6	50.8
VEHICULAR NOISE	DAY=	66.1	Leq	EVENING=	62.3	Leq	NIGHT=	60.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.9**
			CNEL=	**68.2**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**78**	**167**
	CNEL:	**38**	**81**	**175**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,616
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	157	11	1	65	5	0	39	3	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-8.1	-19.6	-29.7	-12.0	-23.5	-33.5	-14.1	-25.6	-35.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.3	53.4	49.0	50.5	49.6	45.2	48.3	47.4	43.0
VEHICULAR NOISE	DAY=	57.6	Leq	EVENING=	53.7	Leq	NIGHT=	51.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.3**
			CNEL=	**59.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**45**
	CNEL:	**10**	**22**	**47**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,860
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	111	8	1	46	3	0	28	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-9.6	-21.1	-31.2	-13.4	-24.9	-35.0	-15.6	-27.1	-37.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.8	52.0	47.5	49.0	48.1	43.7	46.8	46.0	41.6
VEHICULAR NOISE	DAY=	56.1	Leq	EVENING=	52.2	Leq	NIGHT=	50.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**57.8**
			CNEL=	**58.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**36**
	CNEL:	**8**	**17**	**38**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,984
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	238	17	2	99	7	1	60	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.3	-17.8	-27.8	-10.1	-21.6	-31.7	-12.3	-23.8	-33.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.2	55.3	50.9	52.3	51.4	47.0	50.2	49.3	44.9
VEHICULAR NOISE	DAY=	59.4	Leq	EVENING=	55.6	Leq	NIGHT=	53.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.1**
			CNEL=	**61.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**28**	**60**
	CNEL:	**13**	**29**	**62**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,416
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	264	19	2	109	8	1	66	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.9	-17.3	-27.4	-9.7	-21.2	-31.2	-11.9	-23.3	-33.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.6	55.7	51.3	52.8	51.9	47.5	50.6	49.7	45.3
VEHICULAR NOISE	DAY=	59.8	Leq	EVENING=	56.0	Leq	NIGHT=	53.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 61.6**, **CNEL= 61.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**30**	**64**
	CNEL:	**14**	**31**	**67**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,536
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	271	19	2	112	8	1	68	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.7	-17.2	-27.3	-9.6	-21.1	-31.1	-11.7	-23.2	-33.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	55.8	51.4	52.9	52.0	47.6	50.7	49.8	45.4
VEHICULAR NOISE	DAY=	60.0	Leq	EVENING=	56.1	Leq	NIGHT=	54.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.7**
			CNEL=	**62.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**30**	**65**
	CNEL:	**15**	**32**	**68**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,842
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	350	25	2	145	10	1	88	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.6	-16.1	-26.2	-8.5	-20.0	-30.0	-10.6	-22.1	-32.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.8	56.9	52.5	54.0	53.1	48.7	51.8	50.9	46.5
VEHICULAR NOISE	DAY=	61.1	Leq	EVENING=	57.2	Leq	NIGHT=	55.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.8**
			CNEL=	**63.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**36**	**77**
	CNEL:	**17**	**37**	**81**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,624
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	277	20	2	114	8	1	70	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.7	-17.1	-27.2	-9.5	-21.0	-31.0	-11.7	-23.1	-33.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.8	55.9	51.5	53.0	52.1	47.7	50.8	49.9	45.5
VEHICULAR NOISE	DAY=	60.0	Leq	EVENING=	56.2	Leq	NIGHT=	54.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 61.8**, **CNEL= 62.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**31**	**66**
	CNEL:	**15**	**32**	**69**

Scenario: Existing
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,274
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	196	14	1	81	6	1	49	3	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-7.2	-18.6	-28.7	-11.0	-22.5	-32.5	-13.2	-24.6	-34.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.3	54.4	50.0	51.5	50.6	46.2	49.3	48.4	44.0
VEHICULAR NOISE	DAY=	58.5	Leq	EVENING=	54.7	Leq	NIGHT=	52.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.3**
			CNEL=	**60.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**25**	**55**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,224
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	492	35	3	203	14	1	124	9	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.8	-15.3	-25.4	-7.7	-19.2	-29.2	-9.8	-21.3	-31.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.0	60.3	55.4	58.2	56.4	51.6	56.0	54.3	49.4
VEHICULAR NOISE	DAY=	64.8	Leq	EVENING=	60.9	Leq	NIGHT=	58.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.5** **CNEL= 66.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**29**	**63**	**136**
	CNEL:	**31**	**66**	**143**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,354
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	500	35	4	207	15	1	126	9	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.8	-15.2	-25.3	-7.6	-19.1	-29.1	-9.8	-21.2	-31.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.1	60.3	55.5	58.3	56.5	51.7	56.1	54.3	49.5
VEHICULAR NOISE	DAY=	64.8	Leq	EVENING=	61.0	Leq	NIGHT=	58.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.6**, **CNEL= 66.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**30**	**64**	**138**
	CNEL:	**31**	**67**	**144**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,166
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	309	22	2	128	9	1	78	6	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.8	-17.3	-27.4	-9.7	-21.2	-31.2	-11.8	-23.3	-33.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.0	58.2	53.4	56.2	54.4	49.6	54.0	52.2	47.4
VEHICULAR NOISE	DAY=	62.8	Leq	EVENING=	58.9	Leq	NIGHT=	56.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**64.5**
			CNEL=	**64.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**22**	**46**	**100**
	CNEL:	**23**	**49**	**105**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,752
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	284	20	2	118	8	1	72	5	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-6.2	-17.7	-27.8	-10.0	-21.5	-31.6	-12.2	-23.7	-33.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	59.6	57.9	53.0	55.8	54.0	49.2	53.7	51.9	47.0
VEHICULAR NOISE	DAY=	62.4	Leq	EVENING=	58.6	Leq	NIGHT=	56.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**64.1**
			CNEL=	**64.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**20**	**44**	**94**
	CNEL:	**21**	**46**	**99**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,120
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	67	5	0	28	2	0	17	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-12.5	-24.0	-34.0	-16.3	-27.8	-37.9	-18.5	-30.0	-40.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.6	50.8	46.0	48.7	47.0	42.1	46.6	44.8	40.0
VEHICULAR NOISE	DAY=	55.3	Leq	EVENING=	51.5	Leq	NIGHT=	49.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.1**
CNEL= 57.4

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**7**	**15**	**32**
	CNEL:	**7**	**16**	**33**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,084
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	65	5	0	27	2	0	16	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-12.6	-24.1	-34.2	-16.5	-28.0	-38.0	-18.6	-30.1	-40.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.4	50.7	45.8	48.6	46.8	42.0	46.4	44.7	39.8
VEHICULAR NOISE	DAY=	55.2	Leq	EVENING=	51.3	Leq	NIGHT=	49.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**56.9**
			CNEL=	**57.2**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**7**	**14**	**31**
	CNEL:	**7**	**15**	**33**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	148
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	9	1	0	4	0	0	2	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-21.3	-32.8	-42.8	-25.1	-36.6	-46.7	-27.3	-38.8	-48.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	43.8	42.0	37.2	39.9	38.2	33.3	37.8	36.0	31.2
VEHICULAR NOISE	DAY=	46.5	Leq	EVENING=	42.7	Leq	NIGHT=	40.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 48.3**
CNEL= 48.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**2**	**4**	**8**
	CNEL:	**2**	**4**	**9**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	288
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	17	1	0	7	1	0	4	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-18.4	-29.9	-39.9	-22.2	-33.7	-43.8	-24.4	-35.9	-45.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	46.7	44.9	40.1	42.8	41.1	36.2	40.7	38.9	34.1
VEHICULAR NOISE	DAY=	49.4	Leq	EVENING=	45.6	Leq	NIGHT=	43.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.2**, **CNEL= 51.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**13**
	CNEL:	**3**	**6**	**14**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,452
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1044	74	7	432	31	3	263	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.6	-13.1	-23.2	-5.5	-17.0	-27.0	-7.6	-19.1	-29.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.4	65.2	59.7	64.6	61.4	55.9	62.4	59.2	53.7
VEHICULAR NOISE	DAY=	70.5	Leq	EVENING=	66.7	Leq	NIGHT=	64.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.3**
			CNEL=	**72.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**71**	**152**	**328**
	CNEL:	**74**	**160**	**344**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	18,114
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1084	77	8	448	32	3	273	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.5	-13.0	-23.0	-5.3	-16.8	-26.9	-7.5	-19.0	-29.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.6	65.4	59.9	64.8	61.6	56.0	62.6	59.4	53.9
VEHICULAR NOISE	DAY=	70.7	Leq	EVENING=	66.8	Leq	NIGHT=	64.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.4**
			CNEL=	**72.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**72**	**156**	**336**
	CNEL:	**76**	**164**	**353**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Menlo Av. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	15,470
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	926	66	6	383	27	3	233	17	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-2.2	-13.7	-23.7	-6.0	-17.5	-27.6	-8.2	-19.7	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	67.9	64.7	59.2	64.1	60.9	55.3	61.9	58.7	53.2
VEHICULAR NOISE	DAY=	70.0	Leq	EVENING=	66.2	Leq	NIGHT=	64.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 71.7**, **CNEL= 72.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**65**	**141**	**303**
	CNEL:	**68**	**148**	**318**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	14,146
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	846	60	6	350	25	2	213	15	1
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-2.6	-14.1	-24.1	-6.4	-17.9	-27.9	-8.6	-20.0	-30.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	67.5	64.3	58.8	63.7	60.5	54.9	61.5	58.3	52.8
VEHICULAR NOISE	DAY=	69.6	Leq	EVENING=	65.8	Leq	NIGHT=	63.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**71.3**
			CNEL=	**71.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**61**	**132**	**285**
	CNEL:	**65**	**139**	**299**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: south of Devonshire Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,064
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	782	55	5	323	23	2	197	14	1
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-2.9	-14.4	-24.5	-6.7	-18.2	-28.3	-8.9	-20.4	-30.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	67.2	64.0	58.4	63.3	60.1	54.6	61.2	58.0	52.4
VEHICULAR NOISE	DAY=	69.3	Leq	EVENING=	65.4	Leq	NIGHT=	63.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**71.0**
			CNEL=	**71.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**58**	**126**	**271**
	CNEL:	**61**	**132**	**284**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,384
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	382	27	3	158	11	1	96	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.5	-8.8	-20.3	-30.3	-10.9	-22.4	-32.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.9	59.2	54.3	57.1	55.3	50.5	54.9	53.2	48.3
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.8	Leq	NIGHT=	57.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.4**
			CNEL=	**65.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**53**	**115**
	CNEL:	**26**	**56**	**121**

Scenario: Existing
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,912
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	414	29	3	171	12	1	104	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.6	-16.1	-26.1	-8.4	-19.9	-30.0	-10.6	-22.1	-32.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.3	59.5	54.7	57.4	55.7	50.8	55.3	53.5	48.7
VEHICULAR NOISE	DAY=	64.0	Leq	EVENING=	60.2	Leq	NIGHT=	58.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.8**
			CNEL=	**66.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**26**	**56**	**121**
	CNEL:	**27**	**59**	**127**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,896
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	472	34	3	195	14	1	119	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.0	-15.5	-25.5	-7.8	-19.3	-29.4	-10.0	-21.5	-31.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.9	60.1	55.2	58.0	56.2	51.4	55.9	54.1	49.3
VEHICULAR NOISE	DAY=	64.6	Leq	EVENING=	60.8	Leq	NIGHT=	58.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**66.3**
			CNEL=	**66.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**29**	**62**	**133**
	CNEL:	**30**	**65**	**139**

Scenario: Existing
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,692
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	460	33	3	190	13	1	116	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.1	-15.6	-25.7	-8.0	-19.4	-29.5	-10.1	-21.6	-31.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.7	60.0	55.1	57.9	56.1	51.3	55.7	54.0	49.1
VEHICULAR NOISE	DAY=	64.5	Leq	EVENING=	60.7	Leq	NIGHT=	58.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**66.2**
			CNEL=	**66.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**60**	**130**
	CNEL:	**29**	**63**	**137**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,656
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	458	32	3	189	13	1	115	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.1	-15.6	-25.7	-8.0	-19.5	-29.5	-10.1	-21.6	-31.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.7	59.9	55.1	57.9	56.1	51.3	55.7	54.0	49.1
VEHICULAR NOISE	DAY=	64.5	Leq	EVENING=	60.6	Leq	NIGHT=	58.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.2** **CNEL= 66.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**60**	**130**
	CNEL:	**29**	**63**	**136**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,196
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	670	48	5	277	20	2	168	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.5	-14.0	-24.0	-6.3	-17.8	-27.9	-8.5	-20.0	-30.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.4	61.6	56.8	59.5	57.8	52.9	57.4	55.6	50.8
VEHICULAR NOISE	DAY=	66.1	Leq	EVENING=	62.3	Leq	NIGHT=	60.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.9** **CNEL= 68.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**78**	**167**
	CNEL:	**38**	**81**	**175**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,616
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	157	11	1	65	5	0	39	3	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-8.1	-19.6	-29.7	-12.0	-23.5	-33.5	-14.1	-25.6	-35.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.3	53.4	49.0	50.5	49.6	45.2	48.3	47.4	43.0
VEHICULAR NOISE	DAY=	57.6	Leq	EVENING=	53.7	Leq	NIGHT=	51.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 59.3**, **CNEL= 59.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**21**	**45**
	CNEL:	**10**	**22**	**47**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,860
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	111	8	1	46	3	0	28	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-9.6	-21.1	-31.2	-13.4	-24.9	-35.0	-15.6	-27.1	-37.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.8	52.0	47.5	49.0	48.1	43.7	46.8	46.0	41.6
VEHICULAR NOISE	DAY=	56.1	Leq	EVENING=	52.2	Leq	NIGHT=	50.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**57.8**
			CNEL=	**58.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**36**
	CNEL:	**8**	**17**	**38**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,984
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	238	17	2	99	7	1	60	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.3	-17.8	-27.8	-10.1	-21.6	-31.7	-12.3	-23.8	-33.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.2	55.3	50.9	52.3	51.4	47.0	50.2	49.3	44.9
VEHICULAR NOISE	DAY=	59.4	Leq	EVENING=	55.6	Leq	NIGHT=	53.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.1**
			CNEL=	**61.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**28**	**60**
	CNEL:	**13**	**29**	**62**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,416
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	264	19	2	109	8	1	66	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.9	-17.3	-27.4	-9.7	-21.2	-31.2	-11.9	-23.3	-33.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.6	55.7	51.3	52.8	51.9	47.5	50.6	49.7	45.3
VEHICULAR NOISE	DAY=	59.8	Leq	EVENING=	56.0	Leq	NIGHT=	53.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.6**
			CNEL=	**61.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**30**	**64**
	CNEL:	**14**	**31**	**67**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,536
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	271	19	2	112	8	1	68	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.7	-17.2	-27.3	-9.6	-21.1	-31.1	-11.7	-23.2	-33.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.7	55.8	51.4	52.9	52.0	47.6	50.7	49.8	45.4
VEHICULAR NOISE	DAY=	60.0	Leq	EVENING=	56.1	Leq	NIGHT=	54.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.7**
			CNEL=	**62.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**30**	**65**
	CNEL:	**15**	**32**	**68**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,022
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	420	30	3	174	12	1	106	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-3.8	-15.3	-25.4	-7.7	-19.2	-29.2	-9.8	-21.3	-31.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.6	57.7	53.3	54.8	53.9	49.5	52.6	51.7	47.3
VEHICULAR NOISE	DAY=	61.9	Leq	EVENING=	58.0	Leq	NIGHT=	55.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**63.6**
			CNEL=	**63.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**19**	**40**	**87**
	CNEL:	**20**	**42**	**91**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,218
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	312	22	2	129	9	1	79	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.1	-16.6	-26.7	-9.0	-20.5	-30.5	-11.1	-22.6	-32.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.3	56.4	52.0	53.5	52.6	48.2	51.3	50.4	46.0
VEHICULAR NOISE	DAY=	60.6	Leq	EVENING=	56.7	Leq	NIGHT=	54.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.3**
			CNEL=	**62.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**33**	**71**
	CNEL:	**16**	**35**	**75**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,720
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	223	16	2	92	7	1	56	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.6	-18.1	-28.1	-10.4	-21.9	-32.0	-12.6	-24.1	-34.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.9	55.0	50.6	52.0	51.1	46.7	49.9	49.0	44.6
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	55.3	Leq	NIGHT=	53.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.8** **CNEL= 61.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**26**	**57**
	CNEL:	**13**	**28**	**60**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,556
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	632	45	4	261	19	2	159	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.7	-14.2	-24.3	-6.6	-18.1	-28.1	-8.7	-20.2	-30.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.1	61.3	56.5	59.3	57.5	52.7	57.1	55.3	50.5
VEHICULAR NOISE	DAY=	65.9	Leq	EVENING=	62.0	Leq	NIGHT=	59.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.6**, **CNEL= 67.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**75**	**161**
	CNEL:	**36**	**78**	**169**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,587
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	693	49	5	287	20	2	174	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.3	-13.8	-23.9	-6.2	-17.7	-27.7	-8.3	-19.8	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.7	56.9	59.7	57.9	53.1	57.5	55.8	50.9
VEHICULAR NOISE	DAY=	66.3	Leq	EVENING=	62.4	Leq	NIGHT=	60.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.0**
			CNEL=	**68.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**79**	**171**
	CNEL:	**39**	**83**	**180**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,434
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	385	27	3	159	11	1	97	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.4	-8.7	-20.2	-30.3	-10.9	-22.4	-32.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.0	59.2	54.4	57.1	55.4	50.5	55.0	53.2	48.4
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.9	Leq	NIGHT=	57.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.5**
			CNEL=	**65.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**54**	**116**
	CNEL:	**26**	**56**	**121**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,860
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	351	25	2	145	10	1	88	6	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.8	-9.1	-20.6	-30.7	-11.3	-22.8	-32.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.6	58.8	54.0	56.7	55.0	50.1	54.6	52.8	48.0
VEHICULAR NOISE	DAY=	63.3	Leq	EVENING=	59.5	Leq	NIGHT=	57.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.1**, **CNEL= 65.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**23**	**50**	**109**
	CNEL:	**25**	**53**	**114**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,424
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	85	6	1	35	2	0	21	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.4	-22.9	-33.0	-15.3	-26.8	-36.8	-17.4	-28.9	-39.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.6	51.8	47.0	49.8	48.0	43.2	47.6	45.8	41.0
VEHICULAR NOISE	DAY=	56.4	Leq	EVENING=	52.5	Leq	NIGHT=	50.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.1**
CNEL= 58.4

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**37**
	CNEL:	**8**	**18**	**39**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,437
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	86	6	1	36	3	0	22	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.4	-22.9	-32.9	-15.2	-26.7	-36.8	-17.4	-28.9	-38.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.6	51.9	47.0	49.8	48.0	43.2	47.7	45.9	41.0
VEHICULAR NOISE	DAY=	56.4	Leq	EVENING=	52.6	Leq	NIGHT=	50.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**58.1**
			CNEL=	**58.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**38**
	CNEL:	**9**	**18**	**39**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	277
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	17	1	0	7	0	0	4	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-18.6	-30.0	-40.1	-22.4	-33.9	-43.9	-24.5	-36.0	-46.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	46.5	44.7	39.9	42.7	40.9	36.1	40.5	38.7	33.9
VEHICULAR NOISE	DAY=	49.2	Leq	EVENING=	45.4	Leq	NIGHT=	43.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**51.0**
			CNEL=	**51.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**13**
	CNEL:	**3**	**6**	**13**

Scenario: Existing
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	326
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	20	1	0	8	1	0	5	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-17.8	-29.3	-39.4	-21.7	-33.2	-43.2	-23.8	-35.3	-45.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	47.2	45.4	40.6	43.4	41.6	36.8	41.2	39.4	34.6
VEHICULAR NOISE	DAY=	50.0	Leq	EVENING=	46.1	Leq	NIGHT=	44.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.7**, **CNEL= 52.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**14**
	CNEL:	**3**	**7**	**15**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	22,250
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1331	94	9	550	39	4	335	24	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.6	-12.1	-22.1	-4.4	-15.9	-26.0	-6.6	-18.1	-28.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.5	66.3	60.7	65.7	62.4	56.9	63.5	60.3	54.8
VEHICULAR NOISE	DAY=	71.6	Leq	EVENING=	67.7	Leq	NIGHT=	65.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**73.3**
			CNEL=	**73.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**83**	**179**	**386**
	CNEL:	**87**	**188**	**405**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	23,404
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1400	99	10	579	41	4	352	25	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.4	-11.9	-21.9	-4.2	-15.7	-25.8	-6.4	-17.9	-27.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.7	66.5	61.0	65.9	62.7	57.1	63.7	60.5	55.0
VEHICULAR NOISE	DAY=	71.8	Leq	EVENING=	68.0	Leq	NIGHT=	65.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**73.5**
			CNEL=	**73.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**86**	**185**	**399**
	CNEL:	**90**	**194**	**419**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	19,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1173	83	8	485	34	3	295	21	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.1	-12.6	-22.7	-5.0	-16.5	-26.5	-7.1	-18.6	-28.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.9	65.7	60.2	65.1	61.9	56.4	63.0	59.7	54.2
VEHICULAR NOISE	DAY=	71.0	Leq	EVENING=	67.2	Leq	NIGHT=	65.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.8**, **CNEL= 73.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**76**	**165**	**355**
	CNEL:	**80**	**173**	**372**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,999
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1077	76	8	445	32	3	271	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.5	-13.0	-23.1	-5.4	-16.8	-26.9	-7.5	-19.0	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.6	65.4	59.8	64.7	61.5	56.0	62.6	59.4	53.8
VEHICULAR NOISE	DAY=	70.6	Leq	EVENING=	66.8	Leq	NIGHT=	64.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.4**
			CNEL=	**72.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**72**	**156**	**335**
	CNEL:	**76**	**163**	**352**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing
Roadway: State St.
Segment: south of Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	16,742
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1002	71	7	414	29	3	252	18	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.8	-13.3	-23.4	-5.7	-17.2	-27.2	-7.8	-19.3	-29.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.3	65.0	59.5	64.4	61.2	55.7	62.3	59.1	53.5
VEHICULAR NOISE	DAY=	70.3	Leq	EVENING=	66.5	Leq	NIGHT=	64.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.1**
			CNEL=	**72.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**69**	**148**	**319**
	CNEL:	**72**	**155**	**335**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,966
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	417	30	3	172	12	1	105	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.5	-16.0	-26.1	-8.4	-19.9	-29.9	-10.5	-22.0	-32.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.3	59.5	54.7	57.5	55.7	50.9	55.3	53.5	48.7
VEHICULAR NOISE	DAY=	64.1	Leq	EVENING=	60.2	Leq	NIGHT=	58.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.8**
			CNEL=	**66.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**26**	**57**	**122**
	CNEL:	**28**	**59**	**128**

Scenario: Existing Phase2
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,789
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	526	37	4	217	15	2	132	9	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.5	-15.0	-25.1	-7.4	-18.9	-28.9	-9.5	-21.0	-31.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.3	60.5	55.7	58.5	56.7	51.9	56.3	54.6	49.7
VEHICULAR NOISE	DAY=	65.1	Leq	EVENING=	61.2	Leq	NIGHT=	59.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.8**, **CNEL= 67.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**31**	**66**	**142**
	CNEL:	**32**	**69**	**149**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	9,931
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	594	42	4	246	17	2	149	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.0	-14.5	-24.6	-6.8	-18.3	-28.4	-9.0	-20.5	-30.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.9	61.1	56.2	59.0	57.2	52.4	56.9	55.1	50.2
VEHICULAR NOISE	DAY=	65.6	Leq	EVENING=	61.8	Leq	NIGHT=	59.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.3** **CNEL= 67.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**33**	**72**	**154**
	CNEL:	**35**	**75**	**162**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2 Project: NORTH HEMET SPECIFIC PI
Roadway: Menlo Av. Analyst FJS
Segment: Gilbert St. to Alessandro St. Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,685
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	639	45	4	264	19	2	161	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.7	-14.2	-24.2	-6.5	-18.0	-28.1	-8.7	-20.2	-30.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.2	61.4	56.6	59.3	57.6	52.7	57.2	55.4	50.6
VEHICULAR NOISE	DAY=	65.9	Leq	EVENING=	62.1	Leq	NIGHT=	59.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.7**
			CNEL=	**68.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**75**	**162**
	CNEL:	**37**	**79**	**170**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,266
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	614	44	4	254	18	2	154	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.9	-14.4	-24.4	-6.7	-18.2	-28.2	-8.9	-20.3	-30.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.0	61.2	56.4	59.2	57.4	52.6	57.0	55.2	50.4
VEHICULAR NOISE	DAY=	65.7	Leq	EVENING=	61.9	Leq	NIGHT=	59.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.5**
			CNEL=	**67.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**73**	**158**
	CNEL:	**36**	**77**	**166**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,966
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	716	51	5	296	21	2	180	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.2	-13.7	-23.7	-6.0	-17.5	-27.6	-8.2	-19.7	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.7	61.9	57.1	59.8	58.1	53.2	57.7	55.9	51.1
VEHICULAR NOISE	DAY=	66.4	Leq	EVENING=	62.6	Leq	NIGHT=	60.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.2**
			CNEL=	**68.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**81**	**175**
	CNEL:	**40**	**85**	**183**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,848
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	170	12	1	70	5	0	43	3	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-7.8	-19.3	-29.3	-11.6	-23.1	-33.1	-13.8	-25.2	-35.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.7	53.8	49.4	50.9	50.0	45.6	48.7	47.8	43.4
VEHICULAR NOISE	DAY=	57.9	Leq	EVENING=	54.1	Leq	NIGHT=	51.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.7**
			CNEL=	**60.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**10**	**22**	**48**
	CNEL:	**11**	**23**	**50**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,874
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	112	8	1	46	3	0	28	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-9.6	-21.1	-31.1	-13.4	-24.9	-35.0	-15.6	-27.1	-37.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.9	52.0	47.6	49.0	48.1	43.7	46.9	46.0	41.6
VEHICULAR NOISE	DAY=	56.1	Leq	EVENING=	52.3	Leq	NIGHT=	50.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.9**, **CNEL= 58.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**36**
	CNEL:	**8**	**18**	**38**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,226
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	253	18	2	105	7	1	64	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.0	-17.5	-27.6	-9.9	-21.4	-31.4	-12.0	-23.5	-33.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.4	55.5	51.1	52.6	51.7	47.3	50.4	49.5	45.1
VEHICULAR NOISE	DAY=	59.6	Leq	EVENING=	55.8	Leq	NIGHT=	53.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.4**
			CNEL=	**61.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**29**	**62**
	CNEL:	**14**	**30**	**65**

Scenario: Existing Phase2 Project: NORTH HEMET SPECIFIC PI
Roadway: Oakland Av. Analyst FJS
Segment: Gilbert St. to Alessandro St. Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,730
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	283	20	2	117	8	1	71	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.6	-17.1	-27.1	-9.4	-20.9	-30.9	-11.6	-23.0	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.9	56.0	51.6	53.1	52.2	47.8	50.9	50.0	45.6
VEHICULAR NOISE	DAY=	60.1	Leq	EVENING=	56.3	Leq	NIGHT=	54.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.9**
			CNEL=	**62.2**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**31**	**67**
	CNEL:	**15**	**33**	**70**

Scenario: Existing Phase2 Project: NORTH HEMET SPECIFIC PI
Roadway: Oakland Av. Analyst FJS
Segment: Alessandro St. to State St. Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,062
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	303	21	2	125	9	1	76	5	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.8	-9.1	-20.6	-30.6	-11.3	-22.8	-32.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.2	56.3	51.9	53.4	52.5	48.1	51.2	50.3	45.9
VEHICULAR NOISE	DAY=	60.4	Leq	EVENING=	56.6	Leq	NIGHT=	54.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.2**
			CNEL=	**62.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**32**	**70**
	CNEL:	**16**	**34**	**73**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,204
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	371	26	3	153	11	1	93	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.4	-15.9	-25.9	-8.2	-19.7	-29.8	-10.4	-21.9	-31.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.1	57.2	52.8	54.2	53.3	48.9	52.1	51.2	46.8
VEHICULAR NOISE	DAY=	61.3	Leq	EVENING=	57.5	Leq	NIGHT=	55.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**63.1**
			CNEL=	**63.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**80**
	CNEL:	**18**	**39**	**84**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,780
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	286	20	2	118	8	1	72	5	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.5	-17.0	-27.1	-9.3	-20.8	-30.9	-11.5	-23.0	-33.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.9	56.1	51.6	53.1	52.2	47.8	50.9	50.1	45.7
VEHICULAR NOISE	DAY=	60.2	Leq	EVENING=	56.3	Leq	NIGHT=	54.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.9**
			CNEL=	**62.2**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**14**	**31**	**67**
	CNEL:	**15**	**33**	**71**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,474
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	208	15	1	86	6	1	52	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.9	-18.4	-28.4	-10.7	-22.2	-32.3	-12.9	-24.4	-34.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.6	54.7	50.3	51.7	50.8	46.4	49.6	48.7	44.3
VEHICULAR NOISE	DAY=	58.8	Leq	EVENING=	55.0	Leq	NIGHT=	52.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.5** **CNEL= 60.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**25**	**54**
	CNEL:	**12**	**26**	**57**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,380
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	501	36	4	207	15	1	126	9	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.7	-15.2	-25.3	-7.6	-19.1	-29.1	-9.7	-21.2	-31.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.1	60.3	55.5	58.3	56.5	51.7	56.1	54.3	49.5
VEHICULAR NOISE	DAY=	64.9	Leq	EVENING=	61.0	Leq	NIGHT=	58.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**66.6**
			CNEL=	**66.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**30**	**64**	**138**
	CNEL:	**31**	**67**	**145**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,710
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	521	37	4	215	15	2	131	9	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.6	-15.1	-25.1	-7.4	-18.9	-29.0	-9.6	-21.1	-31.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.3	60.5	55.7	58.4	56.7	51.8	56.3	54.5	49.7
VEHICULAR NOISE	DAY=	65.0	Leq	EVENING=	61.2	Leq	NIGHT=	59.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.8**, **CNEL= 67.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**30**	**66**	**141**
	CNEL:	**32**	**69**	**148**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,446
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	326	23	2	135	10	1	82	6	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.6	-17.1	-27.2	-9.5	-20.9	-31.0	-11.6	-23.1	-33.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.2	58.5	53.6	56.4	54.6	49.8	54.2	52.5	47.6
VEHICULAR NOISE	DAY=	63.0	Leq	EVENING=	59.2	Leq	NIGHT=	57.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**64.7**
			CNEL=	**65.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**22**	**48**	**103**
	CNEL:	**23**	**50**	**109**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,864
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	291	21	2	120	9	1	73	5	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-6.1	-17.6	-27.7	-9.9	-21.4	-31.5	-12.1	-23.6	-33.6
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	59.8	58.0	53.1	55.9	54.1	49.3	53.8	52.0	47.1
VEHICULAR NOISE	DAY=	62.5	Leq	EVENING=	58.7	Leq	NIGHT=	56.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**64.2**
			CNEL=	**64.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**21**	**45**	**96**
	CNEL:	**22**	**47**	**101**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,120
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	67	5	0	28	2	0	17	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-12.5	-24.0	-34.0	-16.3	-27.8	-37.9	-18.5	-30.0	-40.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	52.6	50.8	46.0	48.7	47.0	42.1	46.6	44.8	40.0
VEHICULAR NOISE	DAY=	55.3	Leq	EVENING=	51.5	Leq	NIGHT=	49.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.1**
CNEL= 57.4

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**7**	**15**	**32**
	CNEL:	**7**	**16**	**33**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,240
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	74	5	1	31	2	0	19	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-12.0	-23.5	-33.6	-15.9	-27.4	-37.4	-18.0	-29.5	-39.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.0	51.2	46.4	49.2	47.4	42.6	47.0	45.2	40.4
VEHICULAR NOISE	DAY=	55.8	Leq	EVENING=	51.9	Leq	NIGHT=	49.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.5**, **CNEL= 57.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**7**	**16**	**34**
	CNEL:	**8**	**17**	**36**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	559
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	33	2	0	14	1	0	8	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-15.5	-27.0	-37.0	-19.3	-30.8	-40.9	-21.5	-33.0	-43.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	49.5	47.8	42.9	45.7	43.9	39.1	43.6	41.8	36.9
VEHICULAR NOISE	DAY=	52.3	Leq	EVENING=	48.5	Leq	NIGHT=	46.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 54.0** **CNEL= 54.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**4**	**9**	**20**
	CNEL:	**5**	**10**	**21**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	767
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	46	3	0	19	1	0	12	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-14.1	-25.6	-35.7	-18.0	-29.5	-39.5	-20.1	-31.6	-41.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	50.9	49.1	44.3	47.1	45.3	40.5	44.9	43.2	38.3
VEHICULAR NOISE	DAY=	53.7	Leq	EVENING=	49.8	Leq	NIGHT=	47.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 55.4**
CNEL= 55.7

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**5**	**11**	**25**
	CNEL:	**6**	**12**	**26**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,850
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1068	76	7	442	31	3	269	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.6	-13.0	-23.1	-5.4	-16.9	-26.9	-7.5	-19.0	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.5	65.3	59.8	64.7	61.5	56.0	62.5	59.3	53.8
VEHICULAR NOISE	DAY=	70.6	Leq	EVENING=	66.8	Leq	NIGHT=	64.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.4**
			CNEL=	**72.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**72**	**155**	**333**
	CNEL:	**75**	**162**	**350**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	18,807
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1125	80	8	465	33	3	283	20	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.3	-12.8	-22.9	-5.2	-16.7	-26.7	-7.3	-18.8	-28.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.8	65.6	60.0	64.9	61.7	56.2	62.8	59.6	54.0
VEHICULAR NOISE	DAY=	70.8	Leq	EVENING=	67.0	Leq	NIGHT=	64.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.6**
			CNEL=	**72.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**74**	**160**	**345**
	CNEL:	**78**	**168**	**362**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,021
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1018	72	7	421	30	3	256	18	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.8	-13.3	-23.3	-5.6	-17.1	-27.1	-7.8	-19.2	-29.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.3	65.1	59.6	64.5	61.3	55.8	62.3	59.1	53.6
VEHICULAR NOISE	DAY=	70.4	Leq	EVENING=	66.6	Leq	NIGHT=	64.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.1**
			CNEL=	**72.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**70**	**150**	**323**
	CNEL:	**73**	**157**	**339**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2 Project: NORTH HEMET SPECIFIC PI
Roadway: State St. Analyst FJS
Segment: Oakland Av. to Devonshire Av. Date: 16-Feb-12

ROADWAY INPUTS	
ADT	14,974
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	896	64	6	370	26	3	225	16	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-2.3	-13.8	-23.9	-6.2	-17.6	-27.7	-8.3	-19.8	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	67.8	64.6	59.0	63.9	60.7	55.2	61.8	58.6	53.0
VEHICULAR NOISE	DAY=	69.8	Leq	EVENING=	66.0	Leq	NIGHT=	63.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 71.6**
CNEL= 71.9

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**64**	**138**	**296**
	CNEL:	**67**	**144**	**311**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: Existing Phase2
Roadway: State St.
Segment: south of Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,536
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	810	57	6	335	24	2	204	14	1
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-2.8	-14.2	-24.3	-6.6	-18.1	-28.1	-8.7	-20.2	-30.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	67.3	64.1	58.6	63.5	60.3	54.8	61.3	58.1	52.6
VEHICULAR NOISE	DAY=	69.4	Leq	EVENING=	65.6	Leq	NIGHT=	63.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**71.2**
			CNEL=	**71.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**60**	**129**	**277**
	CNEL:	**63**	**135**	**291**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	9,217
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	552	39	4	228	16	2	139	10	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.3	-14.8	-24.9	-7.2	-18.7	-28.7	-9.3	-20.8	-30.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.5	60.8	55.9	58.7	56.9	52.1	56.5	54.8	49.9
VEHICULAR NOISE	DAY=	65.3	Leq	EVENING=	61.4	Leq	NIGHT=	59.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.0**
			CNEL=	**67.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**32**	**68**	**147**
	CNEL:	**33**	**72**	**154**

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,302
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	616	44	4	255	18	2	155	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.8	-14.3	-24.4	-6.7	-18.2	-28.2	-8.8	-20.3	-30.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.0	61.2	56.4	59.2	57.4	52.6	57.0	55.2	50.4
VEHICULAR NOISE	DAY=	65.8	Leq	EVENING=	61.9	Leq	NIGHT=	59.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.5** **CNEL= 67.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**73**	**158**
	CNEL:	**36**	**77**	**166**

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,933
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	654	46	5	270	19	2	165	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.6	-14.1	-24.1	-6.4	-17.9	-28.0	-8.6	-20.1	-30.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.3	61.5	56.7	59.4	57.7	52.8	57.3	55.5	50.7
VEHICULAR NOISE	DAY=	66.0	Leq	EVENING=	62.2	Leq	NIGHT=	60.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.8** **CNEL= 68.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**76**	**165**
	CNEL:	**37**	**80**	**173**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,484
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	627	44	4	259	18	2	158	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.8	-14.3	-24.3	-6.6	-18.1	-28.2	-8.8	-20.3	-30.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.1	61.3	56.5	59.3	57.5	52.6	57.1	55.3	50.5
VEHICULAR NOISE	DAY=	65.8	Leq	EVENING=	62.0	Leq	NIGHT=	59.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.6** **CNEL= 67.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**74**	**160**
	CNEL:	**36**	**78**	**168**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,332
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	618	44	4	256	18	2	155	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.8	-14.3	-24.4	-6.7	-18.2	-28.2	-8.8	-20.3	-30.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.0	61.2	56.4	59.2	57.4	52.6	57.0	55.3	50.4
VEHICULAR NOISE	DAY=	65.8	Leq	EVENING=	61.9	Leq	NIGHT=	59.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.5**, **CNEL= 67.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**74**	**159**
	CNEL:	**36**	**77**	**166**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,915
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	833	59	6	344	24	2	209	15	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.5	-13.0	-23.1	-5.4	-16.9	-26.9	-7.5	-19.0	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.3	62.5	57.7	60.5	58.7	53.9	58.3	56.5	51.7
VEHICULAR NOISE	DAY=	67.1	Leq	EVENING=	63.2	Leq	NIGHT=	61.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.8**, **CNEL= 69.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**42**	**90**	**193**
	CNEL:	**44**	**94**	**203**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,274
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	196	14	1	81	6	1	49	3	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-7.2	-18.6	-28.7	-11.0	-22.5	-32.5	-13.2	-24.6	-34.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.3	54.4	50.0	51.5	50.6	46.2	49.3	48.4	44.0
VEHICULAR NOISE	DAY=	58.5	Leq	EVENING=	54.7	Leq	NIGHT=	52.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.3**
CNEL= 60.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**24**	**52**
	CNEL:	**12**	**25**	**55**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,095
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	125	9	1	52	4	0	32	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-9.1	-20.6	-30.6	-12.9	-24.4	-34.5	-15.1	-26.6	-36.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.4	52.5	48.1	49.5	48.6	44.2	47.4	46.5	42.1
VEHICULAR NOISE	DAY=	56.6	Leq	EVENING=	52.8	Leq	NIGHT=	50.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**58.3**
			CNEL=	**58.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**18**	**39**
	CNEL:	**9**	**19**	**41**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,993
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	299	21	2	124	9	1	75	5	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.9	-9.2	-20.7	-30.7	-11.3	-22.8	-32.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.1	56.2	51.8	53.3	52.4	48.0	51.1	50.2	45.8
VEHICULAR NOISE	DAY=	60.4	Leq	EVENING=	56.5	Leq	NIGHT=	54.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 62.1**, **CNEL= 62.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**32**	**69**
	CNEL:	**16**	**34**	**73**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,231
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	313	22	2	129	9	1	79	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.1	-16.6	-26.7	-9.0	-20.4	-30.5	-11.1	-22.6	-32.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.3	56.4	52.0	53.5	52.6	48.2	51.3	50.4	46.0
VEHICULAR NOISE	DAY=	60.6	Leq	EVENING=	56.7	Leq	NIGHT=	54.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 62.3**
CNEL= 62.6

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**33**	**71**
	CNEL:	**16**	**35**	**75**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,464
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	327	23	2	135	10	1	82	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.5	-8.8	-20.3	-30.3	-10.9	-22.4	-32.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.5	56.6	52.2	53.7	52.8	48.4	51.5	50.6	46.2
VEHICULAR NOISE	DAY=	60.8	Leq	EVENING=	56.9	Leq	NIGHT=	54.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.5**
			CNEL=	**62.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**34**	**74**
	CNEL:	**17**	**36**	**77**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,856
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	410	29	3	170	12	1	103	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-3.9	-15.4	-25.5	-7.8	-19.3	-29.3	-9.9	-21.4	-31.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.5	57.6	53.2	54.7	53.8	49.4	52.5	51.6	47.2
VEHICULAR NOISE	DAY=	61.8	Leq	EVENING=	57.9	Leq	NIGHT=	55.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**63.5**
			CNEL=	**63.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**18**	**40**	**86**
	CNEL:	**19**	**42**	**90**

Scenario: 2016 NP
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,142
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	308	22	2	127	9	1	77	5	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.2	-16.7	-26.7	-9.0	-20.5	-30.6	-11.2	-22.7	-32.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.3	56.4	52.0	53.4	52.5	48.1	51.3	50.4	46.0
VEHICULAR NOISE	DAY=	60.5	Leq	EVENING=	56.7	Leq	NIGHT=	54.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.2**
			CNEL=	**62.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**33**	**71**
	CNEL:	**16**	**34**	**74**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,614
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	216	15	2	89	6	1	54	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.7	-18.2	-28.3	-10.6	-22.1	-32.1	-12.7	-24.2	-34.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.7	54.8	50.4	51.9	51.0	46.6	49.7	48.8	44.4
VEHICULAR NOISE	DAY=	59.0	Leq	EVENING=	55.1	Leq	NIGHT=	53.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.7**
			CNEL=	**61.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**26**	**56**
	CNEL:	**13**	**27**	**59**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,480
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	627	44	4	259	18	2	158	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.8	-14.3	-24.3	-6.6	-18.1	-28.2	-8.8	-20.3	-30.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.1	61.3	56.5	59.2	57.5	52.6	57.1	55.3	50.5
VEHICULAR NOISE	DAY=	65.8	Leq	EVENING=	62.0	Leq	NIGHT=	59.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.6** **CNEL= 67.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**34**	**74**	**160**
	CNEL:	**36**	**78**	**168**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,405
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	682	48	5	282	20	2	172	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.4	-13.9	-24.0	-6.2	-17.7	-27.8	-8.4	-19.9	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.7	56.8	59.6	57.8	53.0	57.5	55.7	50.8
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	62.4	Leq	NIGHT=	60.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.9**
			CNEL=	**68.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**79**	**169**
	CNEL:	**38**	**82**	**178**

Scenario: 2016 NP
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,296
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	377	27	3	156	11	1	95	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.0	-16.5	-26.5	-8.8	-20.3	-30.4	-11.0	-22.5	-32.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.9	59.1	54.3	57.0	55.3	50.4	54.9	53.1	48.3
VEHICULAR NOISE	DAY=	63.6	Leq	EVENING=	59.8	Leq	NIGHT=	57.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.4**, **CNEL= 65.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**53**	**114**
	CNEL:	**26**	**55**	**120**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,800
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	347	25	2	143	10	1	87	6	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.9	-9.2	-20.7	-30.7	-11.3	-22.8	-32.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.5	58.7	53.9	56.7	54.9	50.1	54.5	52.7	47.9
VEHICULAR NOISE	DAY=	63.3	Leq	EVENING=	59.4	Leq	NIGHT=	57.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.0** **CNEL= 65.3**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**23**	**50**	**108**
	CNEL:	**24**	**53**	**113**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,348
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	81	6	1	33	2	0	20	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.7	-23.2	-33.2	-15.5	-27.0	-37.1	-17.7	-29.2	-39.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.4	51.6	46.8	49.5	47.8	42.9	47.4	45.6	40.8
VEHICULAR NOISE	DAY=	56.1	Leq	EVENING=	52.3	Leq	NIGHT=	50.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.9** **CNEL= 58.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**36**
	CNEL:	**8**	**18**	**38**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,361
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	81	6	1	34	2	0	20	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.6	-23.1	-33.2	-15.5	-27.0	-37.0	-17.6	-29.1	-39.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.4	51.6	46.8	49.6	47.8	43.0	47.4	45.6	40.8
VEHICULAR NOISE	DAY=	56.2	Leq	EVENING=	52.3	Leq	NIGHT=	50.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 57.9** **CNEL= 58.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**36**
	CNEL:	**8**	**18**	**38**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	261
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	16	1	0	6	0	0	4	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-18.8	-30.3	-40.4	-22.6	-34.1	-44.2	-24.8	-36.3	-46.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	46.2	44.5	39.6	42.4	40.6	35.8	40.2	38.5	33.6
VEHICULAR NOISE	DAY=	49.0	Leq	EVENING=	45.2	Leq	NIGHT=	43.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 50.7**
CNEL= 51.0

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**12**
	CNEL:	**3**	**6**	**13**

Scenario: 2016 NP
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	326
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	20	1	0	8	1	0	5	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-17.8	-29.3	-39.4	-21.7	-33.2	-43.2	-23.8	-35.3	-45.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	47.2	45.4	40.6	43.4	41.6	36.8	41.2	39.4	34.6
VEHICULAR NOISE	DAY=	50.0	Leq	EVENING=	46.1	Leq	NIGHT=	44.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.7** **CNEL= 52.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**14**
	CNEL:	**3**	**7**	**15**

Scenario: 2016 NP
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	22,018
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1317	93	9	545	39	4	331	24	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.6	-12.1	-22.2	-4.5	-16.0	-26.0	-6.6	-18.1	-28.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.5	66.2	60.7	65.6	62.4	56.9	63.5	60.2	54.7
VEHICULAR NOISE	DAY=	71.5	Leq	EVENING=	67.7	Leq	NIGHT=	65.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.3**, **CNEL= 73.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**83**	**178**	**383**
	CNEL:	**87**	**187**	**402**

Scenario: 2016 NP
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	22,845
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1367	97	10	565	40	4	344	24	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.5	-12.0	-22.0	-4.3	-15.8	-25.9	-6.5	-18.0	-28.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.6	66.4	60.9	65.8	62.6	57.0	63.6	60.4	54.9
VEHICULAR NOISE	DAY=	71.7	Leq	EVENING=	67.8	Leq	NIGHT=	65.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.4**, **CNEL= 73.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**85**	**182**	**393**
	CNEL:	**89**	**191**	**412**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	18,794
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1125	80	8	465	33	3	283	20	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.3	-12.8	-22.9	-5.2	-16.7	-26.7	-7.3	-18.8	-28.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.8	65.6	60.0	64.9	61.7	56.2	62.8	59.6	54.0
VEHICULAR NOISE	DAY=	70.8	Leq	EVENING=	67.0	Leq	NIGHT=	64.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.6** **CNEL= 72.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**74**	**160**	**345**
	CNEL:	**78**	**168**	**362**

Scenario: 2016 NP
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,545
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1050	74	7	434	31	3	264	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.6	-13.1	-23.2	-5.5	-17.0	-27.0	-7.6	-19.1	-29.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.5	65.3	59.7	64.6	61.4	55.9	62.5	59.3	53.7
VEHICULAR NOISE	DAY=	70.5	Leq	EVENING=	66.7	Leq	NIGHT=	64.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.3** **CNEL= 72.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**71**	**153**	**329**
	CNEL:	**74**	**160**	**346**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 NP
Roadway: State St.
Segment: south of Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	16,470
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	986	70	7	407	29	3	248	18	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.9	-13.4	-23.4	-5.7	-17.2	-27.3	-7.9	-19.4	-29.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.2	65.0	59.4	64.4	61.1	55.6	62.2	59.0	53.4
VEHICULAR NOISE	DAY=	70.3	Leq	EVENING=	66.4	Leq	NIGHT=	64.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.0** **CNEL= 72.3**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**68**	**147**	**316**
	CNEL:	**71**	**154**	**331**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	9,447
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	565	40	4	234	17	2	142	10	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-3.2	-14.7	-24.8	-7.1	-18.6	-28.6	-9.2	-20.7	-30.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	62.6	60.9	56.0	58.8	57.0	52.2	56.6	54.9	50.0
VEHICULAR NOISE	DAY=	65.4	Leq	EVENING=	61.5	Leq	NIGHT=	59.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.1**
			CNEL=	**67.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**32**	**69**	**149**
	CNEL:	**34**	**73**	**157**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,822
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	648	46	5	268	19	2	163	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.6	-14.1	-24.2	-6.5	-18.0	-28.0	-8.6	-20.1	-30.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.2	61.5	56.6	59.4	57.6	52.8	57.2	55.5	50.6
VEHICULAR NOISE	DAY=	66.0	Leq	EVENING=	62.1	Leq	NIGHT=	60.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.7**, **CNEL= 68.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**76**	**164**
	CNEL:	**37**	**80**	**172**

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,651
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	697	49	5	288	20	2	175	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.3	-13.8	-23.9	-6.1	-17.6	-27.7	-8.3	-19.8	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.8	56.9	59.7	57.9	53.1	57.6	55.8	50.9
VEHICULAR NOISE	DAY=	66.3	Leq	EVENING=	62.5	Leq	NIGHT=	60.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.0**, **CNEL= 68.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**80**	**172**
	CNEL:	**39**	**84**	**180**

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,354
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	679	48	5	281	20	2	171	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.4	-13.9	-24.0	-6.3	-17.8	-27.8	-8.4	-19.9	-30.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.4	61.7	56.8	59.6	57.8	53.0	57.4	55.7	50.8
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	62.3	Leq	NIGHT=	60.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.9** **CNEL= 68.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**78**	**169**
	CNEL:	**38**	**82**	**177**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,470
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	686	49	5	284	20	2	173	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.4	-13.9	-23.9	-6.2	-17.7	-27.8	-8.4	-19.9	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.7	56.9	59.6	57.9	53.0	57.5	55.7	50.9
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	62.4	Leq	NIGHT=	60.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.0** **CNEL= 68.3**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**79**	**170**
	CNEL:	**38**	**83**	**178**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	14,173
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	848	60	6	351	25	2	213	15	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.5	-13.0	-23.0	-5.3	-16.8	-26.8	-7.5	-18.9	-29.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.4	62.6	57.8	60.6	58.8	54.0	58.4	56.6	51.8
VEHICULAR NOISE	DAY=	67.1	Leq	EVENING=	63.3	Leq	NIGHT=	61.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.9** **CNEL= 69.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**42**	**91**	**196**
	CNEL:	**44**	**95**	**205**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,350
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	200	14	1	83	6	1	50	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-7.1	-18.5	-28.6	-10.9	-22.4	-32.4	-13.1	-24.5	-34.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.4	54.5	50.1	51.6	50.7	46.3	49.4	48.5	44.1
VEHICULAR NOISE	DAY=	58.6	Leq	EVENING=	54.8	Leq	NIGHT=	52.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**60.4**
			CNEL=	**60.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**11**	**25**	**53**
	CNEL:	**12**	**26**	**56**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,101
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	126	9	1	52	4	0	32	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-9.1	-20.6	-30.6	-12.9	-24.4	-34.5	-15.1	-26.6	-36.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.4	52.5	48.1	49.5	48.6	44.2	47.4	46.5	42.1
VEHICULAR NOISE	DAY=	56.6	Leq	EVENING=	52.8	Leq	NIGHT=	50.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**58.4**
			CNEL=	**58.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**18**	**39**
	CNEL:	**9**	**19**	**41**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,039
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	302	21	2	125	9	1	76	5	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.8	-9.1	-20.6	-30.7	-11.3	-22.8	-32.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.2	56.3	51.9	53.3	52.4	48.0	51.2	50.3	45.9
VEHICULAR NOISE	DAY=	60.4	Leq	EVENING=	56.6	Leq	NIGHT=	54.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.2**
			CNEL=	**62.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**32**	**70**
	CNEL:	**16**	**34**	**73**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,371
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	321	23	2	133	9	1	81	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.0	-16.5	-26.6	-8.8	-20.3	-30.4	-11.0	-22.5	-32.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.4	56.6	52.2	53.6	52.7	48.3	51.5	50.6	46.2
VEHICULAR NOISE	DAY=	60.7	Leq	EVENING=	56.9	Leq	NIGHT=	54.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.4**
			CNEL=	**62.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**34**	**73**
	CNEL:	**16**	**35**	**76**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,510
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	330	23	2	136	10	1	83	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.4	-8.7	-20.2	-30.3	-10.9	-22.4	-32.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.6	56.7	52.3	53.7	52.8	48.4	51.6	50.7	46.3
VEHICULAR NOISE	DAY=	60.8	Leq	EVENING=	57.0	Leq	NIGHT=	54.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.5**
			CNEL=	**62.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**34**	**74**
	CNEL:	**17**	**36**	**78**

Scenario: 2016 WP
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,022
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	420	30	3	174	12	1	106	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-3.8	-15.3	-25.4	-7.7	-19.2	-29.2	-9.8	-21.3	-31.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.6	57.7	53.3	54.8	53.9	49.5	52.6	51.7	47.3
VEHICULAR NOISE	DAY=	61.9	Leq	EVENING=	58.0	Leq	NIGHT=	55.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.6**
CNEL= 63.9

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**19**	**40**	**87**
	CNEL:	**20**	**42**	**91**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,218
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	312	22	2	129	9	1	79	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-5.1	-16.6	-26.7	-9.0	-20.5	-30.5	-11.1	-22.6	-32.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.3	56.4	52.0	53.5	52.6	48.2	51.3	50.4	46.0
VEHICULAR NOISE	DAY=	60.6	Leq	EVENING=	56.7	Leq	NIGHT=	54.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.3**
			CNEL=	**62.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**15**	**33**	**71**
	CNEL:	**16**	**35**	**75**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,720
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	223	16	2	92	7	1	56	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.6	-18.1	-28.1	-10.4	-21.9	-32.0	-12.6	-24.1	-34.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.9	55.0	50.6	52.0	51.1	46.7	49.9	49.0	44.6
VEHICULAR NOISE	DAY=	59.1	Leq	EVENING=	55.3	Leq	NIGHT=	53.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.8**
CNEL= 61.2

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**26**	**57**
	CNEL:	**13**	**28**	**60**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,556
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	632	45	4	261	19	2	159	11	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.7	-14.2	-24.3	-6.6	-18.1	-28.1	-8.7	-20.2	-30.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.1	61.3	56.5	59.3	57.5	52.7	57.1	55.3	50.5
VEHICULAR NOISE	DAY=	65.9	Leq	EVENING=	62.0	Leq	NIGHT=	59.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 67.6**, **CNEL= 67.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**75**	**161**
	CNEL:	**36**	**78**	**169**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,587
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	693	49	5	287	20	2	174	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.3	-13.8	-23.9	-6.2	-17.7	-27.7	-8.3	-19.8	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.7	56.9	59.7	57.9	53.1	57.5	55.8	50.9
VEHICULAR NOISE	DAY=	66.3	Leq	EVENING=	62.4	Leq	NIGHT=	60.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.0**
CNEL= 68.3

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**37**	**79**	**171**
	CNEL:	**39**	**83**	**180**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,434
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	385	27	3	159	11	1	97	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.9	-16.4	-26.4	-8.7	-20.2	-30.3	-10.9	-22.4	-32.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.0	59.2	54.4	57.1	55.4	50.5	55.0	53.2	48.4
VEHICULAR NOISE	DAY=	63.7	Leq	EVENING=	59.9	Leq	NIGHT=	57.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.5**
			CNEL=	**65.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**54**	**116**
	CNEL:	**26**	**56**	**121**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,860
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	351	25	2	145	10	1	88	6	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-5.3	-16.8	-26.8	-9.1	-20.6	-30.7	-11.3	-22.8	-32.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	60.6	58.8	54.0	56.7	55.0	50.1	54.6	52.8	48.0
VEHICULAR NOISE	DAY=	63.3	Leq	EVENING=	59.5	Leq	NIGHT=	57.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.1** **CNEL= 65.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**23**	**50**	**109**
	CNEL:	**25**	**53**	**114**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,424
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	85	6	1	35	2	0	21	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.4	-22.9	-33.0	-15.3	-26.8	-36.8	-17.4	-28.9	-39.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.6	51.8	47.0	49.8	48.0	43.2	47.6	45.8	41.0
VEHICULAR NOISE	DAY=	56.4	Leq	EVENING=	52.5	Leq	NIGHT=	50.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.1**
CNEL= 58.4

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**37**
	CNEL:	**8**	**18**	**39**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,437
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	86	6	1	36	3	0	22	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.4	-22.9	-32.9	-15.2	-26.7	-36.8	-17.4	-28.9	-38.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.6	51.9	47.0	49.8	48.0	43.2	47.7	45.9	41.0
VEHICULAR NOISE	DAY=	56.4	Leq	EVENING=	52.6	Leq	NIGHT=	50.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.1**
CNEL= 58.5

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**17**	**38**
	CNEL:	**9**	**18**	**39**

Scenario: 2016 WP
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	277
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	17	1	0	7	0	0	4	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-18.6	-30.0	-40.1	-22.4	-33.9	-43.9	-24.5	-36.0	-46.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	46.5	44.7	39.9	42.7	40.9	36.1	40.5	38.7	33.9
VEHICULAR NOISE	DAY=	49.2	Leq	EVENING=	45.4	Leq	NIGHT=	43.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.0**
CNEL= 51.3

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**13**
	CNEL:	**3**	**6**	**13**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	326
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	20	1	0	8	1	0	5	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-17.8	-29.3	-39.4	-21.7	-33.2	-43.2	-23.8	-35.3	-45.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	47.2	45.4	40.6	43.4	41.6	36.8	41.2	39.4	34.6
VEHICULAR NOISE	DAY=	50.0	Leq	EVENING=	46.1	Leq	NIGHT=	44.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.7**, **CNEL= 52.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**6**	**14**
	CNEL:	**3**	**7**	**15**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	22,250
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1331	94	9	550	39	4	335	24	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.6	-12.1	-22.1	-4.4	-15.9	-26.0	-6.6	-18.1	-28.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.5	66.3	60.7	65.7	62.4	56.9	63.5	60.3	54.8
VEHICULAR NOISE	DAY=	71.6	Leq	EVENING=	67.7	Leq	NIGHT=	65.6	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**73.3**
			CNEL=	**73.6**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**83**	**179**	**386**
	CNEL:	**87**	**188**	**405**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	23,404
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1400	99	10	579	41	4	352	25	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.4	-11.9	-21.9	-4.2	-15.7	-25.8	-6.4	-17.9	-27.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.7	66.5	61.0	65.9	62.7	57.1	63.7	60.5	55.0
VEHICULAR NOISE	DAY=	71.8	Leq	EVENING=	68.0	Leq	NIGHT=	65.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**73.5**
			CNEL=	**73.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**86**	**185**	**399**
	CNEL:	**90**	**194**	**419**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	19,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1173	83	8	485	34	3	295	21	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.1	-12.6	-22.7	-5.0	-16.5	-26.5	-7.1	-18.6	-28.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.9	65.7	60.2	65.1	61.9	56.4	63.0	59.7	54.2
VEHICULAR NOISE	DAY=	71.0	Leq	EVENING=	67.2	Leq	NIGHT=	65.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.8** **CNEL= 73.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**76**	**165**	**355**
	CNEL:	**80**	**173**	**372**

Scenario: 2016 WP
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	17,999
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1077	76	8	445	32	3	271	19	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.5	-13.0	-23.1	-5.4	-16.8	-26.9	-7.5	-19.0	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.6	65.4	59.8	64.7	61.5	56.0	62.6	59.4	53.8
VEHICULAR NOISE	DAY=	70.6	Leq	EVENING=	66.8	Leq	NIGHT=	64.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.4** **CNEL= 72.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**72**	**156**	**335**
	CNEL:	**76**	**163**	**352**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2016 WP
Roadway: State St.
Segment: south of Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	16,742
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1002	71	7	414	29	3	252	18	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.8	-13.3	-23.4	-5.7	-17.2	-27.2	-7.8	-19.3	-29.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.3	65.0	59.5	64.4	61.2	55.7	62.3	59.1	53.5
VEHICULAR NOISE	DAY=	70.3	Leq	EVENING=	66.5	Leq	NIGHT=	64.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.1**, **CNEL= 72.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**69**	**148**	**319**
	CNEL:	**72**	**155**	**335**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	10,823
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	648	46	5	268	19	2	163	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.6	-14.1	-24.2	-6.5	-18.0	-28.0	-8.6	-20.1	-30.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.2	61.5	56.6	59.4	57.6	52.8	57.2	55.5	50.6
VEHICULAR NOISE	DAY=	66.0	Leq	EVENING=	62.1	Leq	NIGHT=	60.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.7**
			CNEL=	**68.0**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**35**	**76**	**164**
	CNEL:	**37**	**80**	**172**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,998
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	718	51	5	297	21	2	181	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.2	-13.7	-23.7	-6.0	-17.5	-27.6	-8.2	-19.7	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.7	61.9	57.1	59.8	58.1	53.2	57.7	55.9	51.1
VEHICULAR NOISE	DAY=	66.4	Leq	EVENING=	62.6	Leq	NIGHT=	60.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.2**, **CNEL= 68.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**81**	**175**
	CNEL:	**40**	**85**	**184**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	12,685
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	759	54	5	314	22	2	191	14	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.9	-13.4	-23.5	-5.8	-17.3	-27.3	-7.9	-19.4	-29.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.9	62.1	57.3	60.1	58.3	53.5	57.9	56.1	51.3
VEHICULAR NOISE	DAY=	66.7	Leq	EVENING=	62.8	Leq	NIGHT=	60.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.4**, **CNEL= 68.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**39**	**84**	**182**
	CNEL:	**41**	**89**	**191**

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	12,111
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	725	51	5	300	21	2	182	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.1	-13.6	-23.7	-6.0	-17.5	-27.5	-8.1	-19.6	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.7	61.9	57.1	59.9	58.1	53.3	57.7	55.9	51.1
VEHICULAR NOISE	DAY=	66.5	Leq	EVENING=	62.6	Leq	NIGHT=	60.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.2**
			CNEL=	**68.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**82**	**176**
	CNEL:	**40**	**86**	**185**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,898
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	712	50	5	294	21	2	179	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.2	-13.7	-23.8	-6.1	-17.5	-27.6	-8.2	-19.7	-29.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.6	61.9	57.0	59.8	58.0	53.2	57.6	55.9	51.0
VEHICULAR NOISE	DAY=	66.4	Leq	EVENING=	62.5	Leq	NIGHT=	60.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.1**, **CNEL= 68.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**81**	**174**
	CNEL:	**39**	**85**	**183**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	15,602
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	934	66	7	386	27	3	235	17	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.0	-12.5	-22.6	-4.9	-16.4	-26.4	-7.0	-18.5	-28.6
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.8	63.0	58.2	61.0	59.2	54.4	58.8	57.0	52.2
VEHICULAR NOISE	DAY=	67.6	Leq	EVENING=	63.7	Leq	NIGHT=	61.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 69.3**, **CNEL= 69.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**45**	**97**	**209**
	CNEL:	**47**	**102**	**219**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,681
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	220	16	2	91	6	1	55	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.6	-18.1	-28.2	-10.5	-22.0	-32.0	-12.6	-24.1	-34.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	55.8	54.9	50.5	52.0	51.1	46.7	49.8	48.9	44.5
VEHICULAR NOISE	DAY=	59.0	Leq	EVENING=	55.2	Leq	NIGHT=	53.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 60.8**
CNEL= 61.1

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**12**	**26**	**56**
	CNEL:	**13**	**28**	**59**

Scenario: 2020 NP
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,267
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	136	10	1	56	4	0	34	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-8.8	-20.2	-30.3	-12.6	-24.1	-34.1	-14.7	-26.2	-36.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.7	52.8	48.4	49.9	49.0	44.6	47.7	46.8	42.4
VEHICULAR NOISE	DAY=	56.9	Leq	EVENING=	53.1	Leq	NIGHT=	51.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.7**, **CNEL= 59.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**9**	**19**	**41**
	CNEL:	**9**	**20**	**43**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,614
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	336	24	2	139	10	1	84	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.8	-16.3	-26.4	-8.7	-20.1	-30.2	-10.8	-22.3	-32.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.6	56.8	52.3	53.8	52.9	48.5	51.6	50.8	46.3
VEHICULAR NOISE	DAY=	60.9	Leq	EVENING=	57.0	Leq	NIGHT=	54.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.6**
			CNEL=	**62.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**35**	**75**
	CNEL:	**17**	**36**	**79**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,911
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	354	25	2	146	10	1	89	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.6	-16.1	-26.1	-8.4	-19.9	-30.0	-10.6	-22.1	-32.1
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.9	57.0	52.6	54.0	53.1	48.7	51.9	51.0	46.6
VEHICULAR NOISE	DAY=	61.1	Leq	EVENING=	57.3	Leq	NIGHT=	55.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 62.9** **CNEL= 63.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**36**	**77**
	CNEL:	**18**	**38**	**81**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,063
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	363	26	3	150	11	1	91	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.5	-16.0	-26.0	-8.3	-19.8	-29.9	-10.5	-22.0	-32.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.0	57.1	52.7	54.1	53.2	48.8	52.0	51.1	46.7
VEHICULAR NOISE	DAY=	61.2	Leq	EVENING=	57.4	Leq	NIGHT=	55.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**63.0**
			CNEL=	**63.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**37**	**79**
	CNEL:	**18**	**38**	**83**

Scenario: 2020 NP
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,619
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	456	32	3	188	13	1	115	8	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-3.5	-15.0	-25.0	-7.3	-18.8	-28.9	-9.5	-21.0	-31.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	59.0	58.1	53.7	55.1	54.2	49.8	53.0	52.1	47.7
VEHICULAR NOISE	DAY=	62.2	Leq	EVENING=	58.4	Leq	NIGHT=	56.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 64.0** **CNEL= 64.3**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**20**	**43**	**92**
	CNEL:	**21**	**45**	**96**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,576
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	334	24	2	138	10	1	84	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.8	-16.3	-26.4	-8.7	-20.2	-30.2	-10.8	-22.3	-32.4
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.6	56.7	52.3	53.8	52.9	48.5	51.6	50.7	46.3
VEHICULAR NOISE	DAY=	60.9	Leq	EVENING=	57.0	Leq	NIGHT=	54.9	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.6**
			CNEL=	**62.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**35**	**75**
	CNEL:	**17**	**36**	**78**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,930
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	235	17	2	97	7	1	59	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.4	-17.9	-27.9	-10.2	-21.7	-31.7	-12.4	-23.8	-33.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.1	55.2	50.8	52.3	51.4	47.0	50.1	49.2	44.8
VEHICULAR NOISE	DAY=	59.3	Leq	EVENING=	55.5	Leq	NIGHT=	53.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.1**
			CNEL=	**61.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**27**	**59**
	CNEL:	**13**	**29**	**62**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,889
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	711	50	5	294	21	2	179	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.2	-13.7	-23.8	-6.1	-17.6	-27.6	-8.2	-19.7	-29.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.6	61.9	57.0	59.8	58.0	53.2	57.6	55.9	51.0
VEHICULAR NOISE	DAY=	66.4	Leq	EVENING=	62.5	Leq	NIGHT=	60.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.1**
			CNEL=	**68.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**81**	**174**
	CNEL:	**39**	**85**	**183**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,265
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	794	56	6	328	23	2	200	14	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.7	-13.2	-23.3	-5.6	-17.1	-27.1	-7.7	-19.2	-29.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.1	62.3	57.5	60.3	58.5	53.7	58.1	56.3	51.5
VEHICULAR NOISE	DAY=	66.9	Leq	EVENING=	63.0	Leq	NIGHT=	60.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.6**, **CNEL= 68.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**40**	**87**	**187**
	CNEL:	**42**	**91**	**196**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,077
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	423	30	3	175	12	1	107	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.5	-16.0	-26.0	-8.3	-19.8	-29.9	-10.5	-22.0	-32.0
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.4	59.6	54.8	57.5	55.8	50.9	55.4	53.6	48.8
VEHICULAR NOISE	DAY=	64.1	Leq	EVENING=	60.3	Leq	NIGHT=	58.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.9** **CNEL= 66.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**27**	**57**	**123**
	CNEL:	**28**	**60**	**129**

Scenario: 2020 NP
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,490
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	388	28	3	161	11	1	98	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.9	-16.3	-26.4	-8.7	-20.2	-30.2	-10.8	-22.3	-32.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.0	59.2	54.4	57.2	55.4	50.6	55.0	53.2	48.4
VEHICULAR NOISE	DAY=	63.8	Leq	EVENING=	59.9	Leq	NIGHT=	57.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**65.5**
			CNEL=	**65.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**54**	**116**
	CNEL:	**26**	**57**	**122**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,533
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	92	7	1	38	3	0	23	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.1	-22.6	-32.7	-15.0	-26.4	-36.5	-17.1	-28.6	-38.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.9	52.2	47.3	50.1	48.3	43.5	47.9	46.2	41.3
VEHICULAR NOISE	DAY=	56.7	Leq	EVENING=	52.8	Leq	NIGHT=	50.7	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.4**, **CNEL= 58.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**8**	**18**	**39**
	CNEL:	**9**	**19**	**41**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,569
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	94	7	1	39	3	0	24	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-11.0	-22.5	-32.6	-14.9	-26.3	-36.4	-17.0	-28.5	-38.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.0	52.3	47.4	50.2	48.4	43.6	48.0	46.3	41.4
VEHICULAR NOISE	DAY=	56.8	Leq	EVENING=	52.9	Leq	NIGHT=	50.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.5**, **CNEL= 58.8**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**9**	**19**	**40**
	CNEL:	**9**	**19**	**42**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Alessandro St.
Segment: Meno Av. to Ancla Ln.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	331
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	20	1	0	8	1	0	5	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-17.8	-29.3	-39.3	-21.6	-33.1	-43.2	-23.8	-35.3	-45.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	47.3	45.5	40.7	43.4	41.7	36.8	41.3	39.5	34.7
VEHICULAR NOISE	DAY=	50.0	Leq	EVENING=	46.2	Leq	NIGHT=	44.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 51.8**, **CNEL= 52.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**7**	**14**
	CNEL:	**3**	**7**	**15**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	355
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	21	2	0	9	1	0	5	0	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-17.5	-29.0	-39.0	-21.3	-32.8	-42.9	-23.5	-35.0	-45.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	47.6	45.8	41.0	43.7	42.0	37.1	41.6	39.8	35.0
VEHICULAR NOISE	DAY=	50.3	Leq	EVENING=	46.5	Leq	NIGHT=	44.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 52.1**
CNEL= 52.4

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**3**	**7**	**15**
	CNEL:	**3**	**7**	**16**

Scenario: 2020 NP
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	24,927
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1492	106	10	617	44	4	375	27	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.1	-11.6	-21.6	-3.9	-15.4	-25.5	-6.1	-17.6	-27.6
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.0	66.8	61.2	66.2	62.9	57.4	64.0	60.8	55.2
VEHICULAR NOISE	DAY=	72.1	Leq	EVENING=	68.2	Leq	NIGHT=	66.1	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.8** **CNEL= 74.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**90**	**193**	**416**
	CNEL:	**94**	**203**	**437**

Scenario: 2020 NP
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	25,871
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1548	110	11	640	45	4	389	28	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.1	-11.4	-21.5	-3.8	-15.3	-25.3	-5.9	-17.4	-27.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.2	66.9	61.4	66.3	63.1	57.6	64.2	60.9	55.4
VEHICULAR NOISE	DAY=	72.2	Leq	EVENING=	68.4	Leq	NIGHT=	66.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 74.0** **CNEL= 74.3**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**92**	**198**	**427**
	CNEL:	**96**	**208**	**448**

Scenario: 2020 NP
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	21,295
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1274	90	9	527	37	4	320	23	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.8	-12.3	-22.3	-4.6	-16.1	-26.2	-6.8	-18.3	-28.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.3	66.1	60.6	65.5	62.3	56.7	63.3	60.1	54.6
VEHICULAR NOISE	DAY=	71.4	Leq	EVENING=	67.5	Leq	NIGHT=	65.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.1**, **CNEL= 73.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**81**	**174**	**375**
	CNEL:	**85**	**183**	**393**

Scenario: 2020 NP
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	20,303
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1215	86	9	502	36	4	306	22	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.0	-12.5	-22.5	-4.8	-16.3	-26.4	-7.0	-18.5	-28.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.1	65.9	60.4	65.3	62.0	56.5	63.1	59.9	54.4
VEHICULAR NOISE	DAY=	71.2	Leq	EVENING=	67.3	Leq	NIGHT=	65.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.9** **CNEL= 73.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**78**	**169**	**363**
	CNEL:	**82**	**177**	**381**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 NP
Roadway: State St.
Segment: south of Devonshire Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	18,689
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1118	79	8	462	33	3	281	20	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.4	-12.8	-22.9	-5.2	-16.7	-26.7	-7.3	-18.8	-28.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.7	65.5	60.0	64.9	61.7	56.2	62.7	59.5	54.0
VEHICULAR NOISE	DAY=	70.8	Leq	EVENING=	67.0	Leq	NIGHT=	64.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**72.6**
			CNEL=	**72.9**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**74**	**159**	**344**
	CNEL:	**78**	**167**	**360**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: west of Lyon Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	11,405
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	682	48	5	282	20	2	172	12	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.4	-13.9	-24.0	-6.2	-17.7	-27.8	-8.4	-19.9	-29.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.5	61.7	56.8	59.6	57.8	53.0	57.5	55.7	50.8
VEHICULAR NOISE	DAY=	66.2	Leq	EVENING=	62.4	Leq	NIGHT=	60.2	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**67.9**
			CNEL=	**68.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**36**	**79**	**169**
	CNEL:	**38**	**82**	**178**

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: Lyon Av. to Palm Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,443
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	804	57	6	333	24	2	202	14	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.7	-13.2	-23.2	-5.5	-17.0	-27.1	-7.7	-19.2	-29.2
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.2	62.4	57.6	60.3	58.6	53.7	58.2	56.4	51.6
VEHICULAR NOISE	DAY=	66.9	Leq	EVENING=	63.1	Leq	NIGHT=	60.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 68.7** **CNEL= 69.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**41**	**88**	**189**
	CNEL:	**43**	**92**	**198**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: Palm Av. to Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	14,720
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	881	62	6	364	26	3	222	16	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.3	-12.8	-22.8	-5.1	-16.6	-26.7	-7.3	-18.8	-28.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.6	62.8	58.0	60.7	59.0	54.1	58.6	56.8	52.0
VEHICULAR NOISE	DAY=	67.3	Leq	EVENING=	63.5	Leq	NIGHT=	61.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 69.1**, **CNEL= 69.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**43**	**93**	**201**
	CNEL:	**45**	**98**	**211**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: Gilbert St. to Alessandro St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	15,104
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	904	64	6	374	27	3	227	16	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.2	-12.7	-22.7	-5.0	-16.5	-26.6	-7.2	-18.7	-28.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.7	62.9	58.1	60.8	59.1	54.2	58.7	56.9	52.1
VEHICULAR NOISE	DAY=	67.4	Leq	EVENING=	63.6	Leq	NIGHT=	61.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 69.2** **CNEL= 69.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**44**	**95**	**204**
	CNEL:	**46**	**99**	**214**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	14,507
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	868	62	6	359	25	3	218	15	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.4	-12.9	-22.9	-5.2	-16.7	-26.7	-7.4	-18.8	-28.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.5	62.7	57.9	60.7	58.9	54.1	58.5	56.7	51.9
VEHICULAR NOISE	DAY=	67.2	Leq	EVENING=	63.4	Leq	NIGHT=	61.3	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**69.0**
			CNEL=	**69.3**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**43**	**92**	**199**
	CNEL:	**45**	**97**	**209**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Menlo Av.
Segment: State St. to Buena Vista St.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	16,372
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	980	69	7	405	29	3	246	17	2
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-0.8	-12.3	-22.4	-4.7	-16.2	-26.2	-6.8	-18.3	-28.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	65.0	63.2	58.4	61.2	59.4	54.6	59.0	57.3	52.4
VEHICULAR NOISE	DAY=	67.8	Leq	EVENING=	63.9	Leq	NIGHT=	61.8	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**69.5**
			CNEL=	**69.8**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**46**	**100**	**215**
	CNEL:	**49**	**105**	**226**

Scenario: 2020 WP
Roadway: Fruitvale Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	3,913
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	234	17	2	97	7	1	59	4	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.4	-17.9	-27.9	-10.2	-21.7	-31.8	-12.4	-23.9	-33.9
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.1	55.2	50.8	52.2	51.3	46.9	50.1	49.2	44.8
VEHICULAR NOISE	DAY=	59.3	Leq	EVENING=	55.5	Leq	NIGHT=	53.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 61.1**, **CNEL= 61.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**27**	**59**
	CNEL:	**13**	**29**	**62**

Scenario: 2020 WP
Roadway: Fruitvale Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	2,281
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	136	10	1	56	4	0	34	2	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-8.7	-20.2	-30.3	-12.6	-24.1	-34.1	-14.7	-26.2	-36.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	53.7	52.8	48.4	49.9	49.0	44.6	47.7	46.8	42.4
VEHICULAR NOISE	DAY=	57.0	Leq	EVENING=	53.1	Leq	NIGHT=	51.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.7**, **CNEL= 59.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**9**	**19**	**41**
	CNEL:	**9**	**20**	**43**

Scenario: 2020 WP
Roadway: Oakland Av.
Segment: west of Gilbert St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,856
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	350	25	2	145	10	1	88	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.6	-16.1	-26.2	-8.5	-20.0	-30.0	-10.6	-22.1	-32.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.8	56.9	52.5	54.0	53.1	48.7	51.8	50.9	46.5
VEHICULAR NOISE	DAY=	61.1	Leq	EVENING=	57.2	Leq	NIGHT=	55.1	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**62.8**
			CNEL=	**63.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**17**	**36**	**77**
	CNEL:	**17**	**37**	**81**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Oakland Av.
Segment: Gilbert St. to Alessandro St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,423
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	384	27	3	159	11	1	97	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.2	-15.7	-25.8	-8.1	-19.6	-29.6	-10.2	-21.7	-31.8
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.2	57.3	52.9	54.4	53.5	49.1	52.2	51.3	46.9
VEHICULAR NOISE	DAY=	61.5	Leq	EVENING=	57.6	Leq	NIGHT=	55.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.2** **CNEL= 63.5**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**18**	**38**	**82**
	CNEL:	**19**	**40**	**86**

Scenario: 2020 WP
Roadway: Oakland Av.
Segment: Alessandro St. to State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,587
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	394	28	3	163	12	1	99	7	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.1	-15.6	-25.7	-8.0	-19.4	-29.5	-10.1	-21.6	-31.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	58.3	57.4	53.0	54.5	53.6	49.2	52.3	51.4	47.0
VEHICULAR NOISE	DAY=	61.6	Leq	EVENING=	57.7	Leq	NIGHT=	55.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 63.3**, **CNEL= 63.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**18**	**39**	**83**
	CNEL:	**19**	**41**	**87**

Scenario: 2020 WP
Roadway: Oakland Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	8,147
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	487	35	3	202	14	1	123	9	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-3.2	-14.7	-24.7	-7.0	-18.5	-28.6	-9.2	-20.7	-30.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	59.3	58.4	54.0	55.4	54.5	50.1	53.3	52.4	48.0
VEHICULAR NOISE	DAY=	62.5	Leq	EVENING=	58.7	Leq	NIGHT=	56.5	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 64.2** **CNEL= 64.6**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**21**	**45**	**96**
	CNEL:	**22**	**47**	**101**

Scenario: 2020 WP
Roadway: Devonshire Av.
Segment: west of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	5,808
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	348	25	2	144	10	1	87	6	1
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-4.7	-16.2	-26.2	-8.5	-20.0	-30.0	-10.7	-22.2	-32.2
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	57.8	56.9	52.5	54.0	53.1	48.7	51.8	50.9	46.5
VEHICULAR NOISE	DAY=	61.0	Leq	EVENING=	57.2	Leq	NIGHT=	55.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 62.8**, **CNEL= 63.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**16**	**36**	**77**
	CNEL:	**17**	**37**	**80**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Devonshire Av.
Segment: east of State St.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	4,236
SPEED (mph)	30
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	253	18	2	105	7	1	64	5	0
Speed in MPH	30	30	30	30	30	30	30	30	30
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	62.5	73.1	78.8	62.5	73.1	78.8	62.5	73.1	78.8
ADJUSTMENTS									
Flow	-6.0	-17.5	-27.6	-9.9	-21.4	-31.4	-12.0	-23.5	-33.6
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	56.4	55.5	51.1	52.6	51.7	47.3	50.4	49.5	45.1
VEHICULAR NOISE	DAY=	59.7	Leq	EVENING=	55.8	Leq	NIGHT=	53.7	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**61.4**
			CNEL=	**61.7**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**13**	**29**	**62**
	CNEL:	**14**	**30**	**65**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Lyon Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	12,121
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	725	51	5	300	21	2	182	13	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-2.1	-13.6	-23.7	-6.0	-17.5	-27.5	-8.1	-19.6	-29.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	63.7	61.9	57.1	59.9	58.1	53.3	57.7	55.9	51.1
VEHICULAR NOISE	DAY=	66.5	Leq	EVENING=	62.6	Leq	NIGHT=	60.5	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.2**
			CNEL=	**68.5**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**38**	**82**	**176**
	CNEL:	**40**	**86**	**185**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Lyon Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	13,803
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	826	59	6	341	24	2	208	15	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-1.6	-13.1	-23.1	-5.4	-16.9	-27.0	-7.6	-19.1	-29.1
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	64.3	62.5	57.7	60.4	58.7	53.8	58.3	56.5	51.7
VEHICULAR NOISE	DAY=	67.0	Leq	EVENING=	63.2	Leq	NIGHT=	61.0	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**68.8**
			CNEL=	**69.1**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**41**	**89**	**192**
	CNEL:	**43**	**94**	**202**

Scenario: 2020 WP
Roadway: Palm Av.
Segment: north of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	7,495
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	448	32	3	185	13	1	113	8	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.2	-15.7	-25.8	-8.1	-19.6	-29.6	-10.2	-21.7	-31.8
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.6	59.9	55.0	57.8	56.0	51.2	55.6	53.9	49.0
VEHICULAR NOISE	DAY=	64.4	Leq	EVENING=	60.5	Leq	NIGHT=	58.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 66.1** **CNEL= 66.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**28**	**59**	**128**
	CNEL:	**29**	**62**	**134**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Palm Av.
Segment: south of Menlo Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	6,662
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	399	28	3	165	12	1	100	7	1
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-4.7	-16.2	-26.3	-8.6	-20.1	-30.1	-10.7	-22.2	-32.3
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	61.1	59.3	54.5	57.3	55.5	50.7	55.1	53.3	48.5
VEHICULAR NOISE	DAY=	63.9	Leq	EVENING=	60.0	Leq	NIGHT=	57.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 65.6** **CNEL= 65.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**25**	**55**	**118**
	CNEL:	**27**	**58**	**124**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Gilbert St.
Segment: Meno Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,609
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	96	7	1	40	3	0	24	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-10.9	-22.4	-32.5	-14.7	-26.2	-36.3	-16.9	-28.4	-38.5
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.1	52.4	47.5	50.3	48.5	43.7	48.1	46.4	41.5
VEHICULAR NOISE	DAY=	56.9	Leq	EVENING=	53.1	Leq	NIGHT=	50.9	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 58.6**, **CNEL= 58.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**9**	**19**	**41**
	CNEL:	**9**	**20**	**43**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Gilbert St.
Segment: south of Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	1,801
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	108	8	1	45	3	0	27	2	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-10.4	-21.9	-32.0	-14.3	-25.7	-35.8	-16.4	-27.9	-38.0
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	54.6	52.9	48.0	50.8	49.0	44.2	48.6	46.9	42.0
VEHICULAR NOISE	DAY=	57.4	Leq	EVENING=	53.5	Leq	NIGHT=	51.4	Leq

RESULTS				
NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA):			**Ldn=**	**59.1**
			CNEL=	**59.4**
NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**9**	**20**	**44**
	CNEL:	**10**	**21**	**46**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: Alessandro St.
Segment: Meno Av. To Ancla Ln.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	758
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	45	3	0	19	1	0	11	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-14.2	-25.7	-35.7	-18.0	-29.5	-39.6	-20.2	-31.7	-41.7
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	50.9	49.1	44.3	47.0	45.3	40.4	44.9	43.1	38.3
VEHICULAR NOISE	DAY=	53.6	Leq	EVENING=	49.8	Leq	NIGHT=	47.6	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 55.4** **CNEL= 55.7**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**5**	**11**	**25**
	CNEL:	**6**	**12**	**26**

Scenario: 2020 WP
Roadway: Alessandro St.
Segment: Ancla Ln. to Oakland Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	834
SPEED (mph)	35
ROAD NEAR-FAR LN. DIST.	12
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	50	4	0	21	1	0	13	1	0
Speed in MPH	35	35	35	35	35	35	35	35	35
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	65.1	74.8	80.0	65.1	74.8	80.0	65.1	74.8	80.0
ADJUSTMENTS									
Flow	-13.8	-25.3	-35.3	-17.6	-29.1	-39.1	-19.8	-31.3	-41.3
Distance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	51.3	49.5	44.7	47.5	45.7	40.8	45.3	43.5	38.7
VEHICULAR NOISE	DAY=	54.0	Leq	EVENING=	50.2	Leq	NIGHT=	48.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 55.8**, **CNEL= 56.1**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**6**	**12**	**26**
	CNEL:	**6**	**13**	**27**

Scenario: 2020 WP
Roadway: State St.
Segment: north of Fruitvale Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	25,557
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1529	108	11	632	45	4	385	27	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.0	-11.5	-21.5	-3.8	-15.3	-25.4	-6.0	-17.5	-27.5
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.1	66.9	61.4	66.3	63.0	57.5	64.1	60.9	55.4
VEHICULAR NOISE	DAY=	72.2	Leq	EVENING=	68.3	Leq	NIGHT=	66.2	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.9** **CNEL= 74.2**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**91**	**196**	**423**
	CNEL:	**96**	**206**	**444**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: State St.
Segment: Fruitvale Av. to Menlo Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	26,600
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1592	113	11	658	47	5	400	28	3
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	0.2	-11.3	-21.4	-3.7	-15.1	-25.2	-5.8	-17.3	-27.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	70.3	67.1	61.5	66.4	63.2	57.7	64.3	61.1	55.5
VEHICULAR NOISE	DAY=	72.3	Leq	EVENING=	68.5	Leq	NIGHT=	66.3	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 74.1**, **CNEL= 74.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**94**	**202**	**435**
	CNEL:	**98**	**212**	**456**

FHWA RD-77-108 NOISE PREDICTION MODEL

Scenario: 2020 WP
Roadway: State St.
Segment: Menlo Av. to Oakland Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	23,652
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1415	100	10	585	42	4	356	25	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.3	-11.8	-21.9	-4.2	-15.7	-25.7	-6.3	-17.8	-27.9
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.8	66.5	61.0	65.9	62.7	57.2	63.8	60.6	55.0
VEHICULAR NOISE	DAY=	71.8	Leq	EVENING=	68.0	Leq	NIGHT=	65.8	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.6**, **CNEL= 73.9**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**87**	**187**	**402**
	CNEL:	**91**	**196**	**422**

Scenario: 2020 WP
Roadway: State St.
Segment: Oakland Av. to Devonshire Av.
Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	21,160
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1266	90	9	523	37	4	318	23	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-0.8	-12.3	-22.4	-4.6	-16.1	-26.2	-6.8	-18.3	-28.4
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	69.3	66.1	60.5	65.4	62.2	56.7	63.3	60.1	54.5
VEHICULAR NOISE	DAY=	71.3	Leq	EVENING=	67.5	Leq	NIGHT=	65.4	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 73.1**, **CNEL= 73.4**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**80**	**173**	**373**
	CNEL:	**84**	**182**	**392**

Scenario: 2020 WP
Roadway: State St.
Segment: south of Devonshire Av.

Project: NORTH HEMET SPECIFIC PI
Analyst FJS
Date: 16-Feb-12

ROADWAY INPUTS	
ADT	19,433
SPEED (mph)	45
ROAD NEAR-FAR LN. DIST.	48
DISTANCE ROAD CL (ft)	50
SOFT/HARD CONDITIONS	Soft
GRADE (%)	0%
LEFT VIEW	-90
RIGHT VIEW	90

VEHICLE MIX INPUTS			
DAILY		HOURLY	
% A	92.8%	DAY	77.4%
% MT	6.6%	EVENING	8.0%
% HT	0.7%	NIGHT	14.6%

CALCULATION AREA

	DAYTIME			EVENING			NIGHT		
	AUTOS	MT	HT	AUTOS	MT	HT	AUTOS	MT	HT
Vehicles per hour	1163	82	8	481	34	3	292	21	2
Speed in MPH	45	45	45	45	45	45	45	45	45
Left angle	-90	-90	-90	-90	-90	-90	-90	-90	-90
Right angle	90	90	90	90	90	90	90	90	90
Reference levels (dBA)	69.3	77.6	82.1	69.3	77.6	82.1	69.3	77.6	82.1
ADJUSTMENTS									
Flow	-1.2	-12.7	-22.7	-5.0	-16.5	-26.6	-7.2	-18.7	-28.7
Distance	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Finite Roadway	0	0	0	0	0	0	0	0	0
Barrier	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0
LEQ	68.9	65.7	60.2	65.1	61.9	56.3	62.9	59.7	54.2
VEHICULAR NOISE	DAY=	71.0	Leq	EVENING=	67.1	Leq	NIGHT=	65.0	Leq

RESULTS

NOISE LEVELS AT 50 FEET FROM CENTERLINE (dBA): **Ldn= 72.7** **CNEL= 73.0**

NOISE CONTOUR:		*70 dBA*	*65 dBA*	*60 dBA*
ROAD CENTERLINE DISTANCE TO NOISE CONTOUR (FEET):	**Ldn:**	**76**	**164**	**353**
	CNEL:	**80**	**172**	**370**

VIBRATION DAMAGE ASSESSMENT

Vibration (in/sec)			
	Distance		
Equipment	30	60	100
Pile Driver (impact) Upper Range	1.518	0.408	0.190
Pile Driver (impact) Lower Range	0.644	0.173	0.081
Pile Driver (sonic) Upper Range	0.734	0.197	0.092
Pile Driver (sonic) Lower Range	0.170	0.046	0.021
Vibratory roller	0.210	0.056	0.026
Large bulldozer	0.089	0.024	0.011
Caisson drilling	0.089	0.024	0.011
Loaded trucks	0.076	0.020	0.010
Jackhammer	0.035	0.009	0.004
Small bulldozer	0.003	0.001	0.000

VIBRATION ANNOYANCE ASSESSMENT

Lv(D)=Lv(25ft) - 30log(D/25)

Distance = 25

Vibration (VdB)				
	Distance			
Equipment	30	60	100	350
Pile Driver (impact) Upper Range	112	101	94	78
Pile Driver (impact) Lower Range	104	93	86	70
Pile Driver (sonic) Upper Range	105	94	87	71
Pile Driver (sonic) Lower Range	93	82	75	59
Vibratory roller	94	83	76	60
Large bulldozer	87	76	69	53
Caisson drilling	87	76	69	53
Loaded trucks	79	68	61	45
Jackhammer	58	47	40	24
Small bulldozer	86	75	68	52

Appendix J
Public Services Responses



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North Hemet Specific Plan EIR
Fire Questionnaire

1. Would buildout of the North Hemet Specific Plan require the Hemet Fire Department (HFD) to:

   a. Build any new or expanded fire stations? NO

   b. Add any equipment such as fire apparatus? NO

   c. Expand its staff? NO

2. Would buildout of the North Hemet Specific Plan, in combination with other existing and planned development in the City, have a substantial adverse impact on HFD's fire protection and emergency medical services? If so, do you recommend any mitigation measures to reduce such impacts?

   N/A

3. Please confirm or correct the following information that we obtained from HFD's website, http://www.cityofhemet.org/fire/index.htm, and the Hemet Fire Department Fact Sheet dated March 1, 2007.

   a. The project site is in Target Area 1, within ~~the~~ one response area for Station 1 at 220 North Juanita Street, approximately 0.4 mile southeast of the site.
      i. Station 1 is equipped with ~~two~~ fire engines (~~one HFD engine and one State Office of Emergency Services [OES] engine),~~ one truck, and one squad vehicle.
      ii. Station 1 has a daily staffing of seven personnel. — Six personnel

   b. The second-closest station to the project site is Station No. 2 at 895 West Stetson Avenue, roughly 1.9 miles south of the site.
      i. Station 2 is equipped with two fire engines.
      ii. Station 2 has a daily staffing of three personnel.

   c. The eastern boundary of Target Area 3 is roughly 0.9 mile west of the site. Station 3 is at 4110 West Devonshire Ave., approximately 2.4 miles west of the project site.
      i. Station No. 3 is equipped with one engine company.
      ii. Station 3 has a daily staffing of three personnel.

   d. HFD is staffed by ~~62~~ 49 persons including ~~5 battalion chiefs~~, 15 fire captains, ~~18~~ 15 fire engineers, and ~~24~~ 15 firefighters.

   e. HFD's response time standard for emergency responses, specified in the City of Hemet General Plan, is five minutes throughout the City 80 percent of the time.

   Correct

f. HFD determines where additional fire department resources may be deployed based on information from its latest Fire Station Location study, response data, and information from the City's General Plan.

and Budget. Correct

4. Please add any other comments you may wish to make regarding this project.

Response Prepared by:

MATT SHOBERT — Fire Chief
Name — **Title**

City of Hemet — 8-3-10
Agency — **Date**

Nicole Vermilion

From: Rob Charles Webb [CWebb@cityofhemet.org]
Sent: Monday, August 02, 2010 5:05 PM
To: Michael Milroy
Subject: North Hemet Specific Plan (CORV-01.2L)

Michael:

Here is the information you requested...

1.a. No
1.b. Yes
1.c. Yes. Our current staffing ratio is .9 per 1000 residents. We would need to increase our staff to cover the project area.

2. Yes
2.a. Our department staffing has been decimated by budget cuts. Any population growth at this time would have an adverse impact on our department and lower the service level across the entire community. I would suggest a fully funded CFD or similar funding source to support the increase of service levels.

3.a. 68 sworn and 27 civilian
3.b. Correct

Please call me if you have any further questions.

Rob

Captain Rob Webb
Hemet Police Department
cwebb@cityofhemet.org
450 E. Latham Ave.
Hemet, CA 92543
Phone: 951.765.2411
Fax: 951.765.2474

"Excellence in Service"

North Hemet Specific Plan EIR
Police Questionnaire

1. Would buildout of the North Hemet Specific Plan require the Hemet Police Department (HPD) to:

    a. Build any new or expanded police facilities?

    b. Add any equipment such as police vehicles?

    c. Expand its staff?

2. Would buildout of the North Hemet Specific Plan, in combination with other existing and planned development in the City, have a substantial adverse impact on HPD's police services?

    a. If so, do you recommend any mitigation measures to reduce such impacts?

3. Please confirm or correct the following information that we obtained from HPD's website, http://www.cityofhemet.org/pd/index.htm:

    a. HPD's staff includes 91 sworn officers and 36 civilian employees

    b. In addition to the main HPD station at 450 Latham Avenue, HPD operates two substations:

        i. The East substation at 1985 East Florida Avenue

        ii. The West Substation at 3663 West Florida Avenue.

4. Please add any other comments you may wish to make regarding this project.

Response Prepared by:

Name **Title**

Agency **Date**

HEMET UNIFIED SCHOOL DISTRICT

Dr. Steven A. Lowder
Superintendent

Dr. LaFaye Platter
Deputy Superintendent
Dr. Sally Cawthon
Assistant Superintendent
Vincent Christakos
Assistant Superintendent

Professional Development Service Center
1791 W. Acacia Avenue
Hemet, CA 92545
(951) 765-5100
Fax: (951) 765-5115

Professional Development Academy
2085 W. Acacia Avenue
Hemet, CA 92545
(951) 765-5100
Fax: (951) 765-6421

www.hemetusd.k12.ca.us

Governing Board
Dr. Lisa DeForest
Marilyn Forst
Gisela Gosch
Charlotte Jones
Phyllis Petri
Bill Sanborn
Joe Wojcik

RECEIVED
8/10/10

August 9, 2010

The Planning Center
ATTN: Michael Milroy
1580 Metro Drive
Costa Mesa, CA 92626

RE: Proposed North Hemet Specific Plan
Impact on School Facilities

Dear Mr. Milroy:

The Hemet Unified School District appreciates this opportunity to give our input into the overall planning for this project and its impact on our services.

The District is in receipt of the North Hemet Revitalization Plan, dated February 2009 as well as the working draft dated July 2007. The District requests clarification on whether the Multi Family Apartments are actually part of the new plan. While they are mapped on the working draft, the actual mapping of these type of units are absent from the most recent plan. The most recent report discusses extensively the "strong demand and great need for affordable housing, especially larger family units." However, the Illustrative Site Plan 3.2 does not indicate any Family Apartments.

As the plan progresses, the District would like to stay informed as to the type of housing that will be approved and designed as this will adversely affect our planning strategy for this area.

As you are aware, the student's generation rates for affordable family apartments will be higher than high density assisted living or senior housing. For instance, the report discusses the Hemet Vista Apartments located at Fruitvale and State St. with 143 units, all affordable family housing. In 2009/2010 school year there were 194 students living in these apartments that attended either San Jacinto or Hemet Unified School District. The student generation rates are as follows:

K-6 = .720
7-8 = .252
9-12 = .385
Total = 1.357

This is a verified generation rate and is based on actual student database downloaded on October 3, 2009. Any planned high density affordable family apartment complex can expect to generate similar rates.

As of 2009/2010 the attendance boundaries for this area is Jacob Wiens ES, Rancho Viejo MS, and Tahquitz HS. However, the boundaries are reviewed on a yearly basis and are subject to change based on Board policy and decisions. It is imperative that as the plan progresses that the District stay informed of the type of housing that will be anticipated for construction.

The elementary school, Jacob Wiens is currently impacted. The school is considered a small school site, as it is located on 9.3 acres. The permanent capacity is 550 serving K-5 grades. There are an additional 8 portable classrooms on campus. There is no availability to expand this campus for additional capacity. The student enrollment for 2009/2010 was 690. The projected student enrollment for 2010/2011 is 763.

The Rancho Viejo MS is also impacted, the permanent capacity is 1450 students and currently enrollment for 2009/2010 was 1348. The projected enrollment for 2010/2011 is 1356.

Tahquitz HS has a permanent capacity of 2400. The enrollment for 2009/2010 was 1590 and projected enrollment for 2010/2011 is 1593.

The District currently has 9,573 approved tract maps within the Rancho Viejo MS and Tahquitz HS attendance boundaries. The elementary schools are currently impacted and any future housing, especially affordable housing will have an adverse affect on Hemet Unified District's ability to house the students.

The District has previously recommended that a 12 acre site be allocated for a future elementary school in the northwest corridor of Hemet for these future projects.

The current developer fees as of June 2, 2010 are $3.55 per square foot for family residential and $0.47 square foot for senior age-restricted and commercial development. The fees are reviewed on an annual basis and are subject to change.

The District is available for consultation concerning the impact that this project could have on our ability to serve students.

Respectfully,

Tina Koonce
Director, Facilities & Planning

North Hemet Specific Plan EIR
Schools Questionnaire: HUSD

1. Please confirm or correct the following information we obtained from Hemet Unified School District (HUSD)'s website and from Jesse Bridwell, HUSD facilities planner:

    a. The part of the project site within HUSD is in the attendance area of the three schools in the following table:

Hemet USD Schools Serving Project Site				
School	***Location***	***Grades***	***Capacity[1]***	***Enrollment, 2008–2009[2]***
Jacob Wiens Elementary School	935 East Campus Way, Hemet	K–5	~~990~~	674
Rancho Viejo Middle School	985 North Cawston Avenue, Hemet	6–8	1,450	1,331
Tahquitz High School	4425 West Commonwealth Avenue, Hemet	9–12[3]	2,400	1,202

[1] Includes permanent and portable classrooms. Source: Bridwell 2010.
[2] Source: CDE 2010.
[3] Tahquitz High School opened in Fall 2007 and had students in grades 9 through 11 during the 2008–2009 school year.

    b. HUSD uses the following student generation rates (in students per dwelling unit) for multifamily residential or attached single-family residential development for:
        i. Elementary schools (K–5): 0.282
        ii. Middle Schools (6–8): 0.149
        iii. High Schools (9–12): 0.193

2. Would buildout of the North Hemet Specific Plan, in combination with other existing and planned development within HUSD's boundaries, have a substantial adverse impact on HUSD schools? If so, do you recommend any mitigation measures to reduce such impacts?

3. What are HUSD charges for SB 50 development impact fees:

    a. Per square foot or per unit for residential development?
    b. Per square foot for commercial development?

4. Please add any other comments you may wish to make regarding this project.

Response Prepared by: See attached letter, Aug 9, 2010

Tina Koonce — Director, Facilities Planning
Name — **Title**

Hemet Unified School District — 8-9-10
Agency — **Date**

From:	Jesse Bridwell
To:	Michael Milroy
Cc:	Hans Twardowski
Subject:	Re: Fwd: request for updated enrollment and capacity information for 3 HUSD schools
Date:	Monday, February 06, 2012 8:52:00 AM
Attachments:	20120206 Data for The Planning Center.pdf ATT1049928.png ATT1049929.png ATT1049930.png

Michael,

The same schools still serve this project area. See attached for current enrollment and capacity.

The last document I received regarding this project was the Initial Study distributed by the City of Hemet, October 2011. The land use plan and scope have not changed since then, correct? Also, the area north of Menlo Ave (Planning Areas 1, 2) is served by the San Jacinto Unified School District.

Thank you and let me know if you need anything else.

Jesse Bridwell
Facilities Planner
Hemet Unified School District
1791 W. Acacia Avenue
Hemet, CA 92545
(951) 249-5484 cell
(951) 765-5100 x5465 office
(951) 929-9823 fax

>>> Hans Twardowski 2/3/2012 5:22 PM >>>
Jesse,

Can you answer this?

Thanks
Hans

>>> "Michael Milroy" <mmilroy@planningcenter.com> 2/3/2012 1:33 PM >>>
Dear Mr. Twardowski:

In 2010 Tina Koonce provided us a response to a service questionnaire for the environmental impact report for the North Hemet Specific Plan project. That project was put on hold for an extended time; we are now finishing the draft EIR.

We would appreciate your assistance updating enrollment and capacity data for the schools serving the project site.

Table 5.11-2
Hemet Unified School District and San Jacinto Unified School District Schools Serving Project Site

School	*Location*	*Grades*	*Capacity*[2]	*Enrollment*[3]
Hemet USD				
Jacob Wiens Elementary School	935 East Campus Way, Hemet	K-5	550 permanent plus 8 portable classrooms	690[4] / 763[5]
Rancho Viejo Middle School	985 North Cawston Avenue, Hemet	6-8	1450 permanent	1,348[4] / 1,356[5]
Tahquitz High School	4425 West Commonwealth Avenue, Hemet	9-12[1]	2,400	1,590[4] /1,593[5]

[4] 2009/2010 School Year
[5] Projected 2010/2011 School Year

The project site is the graphic below; if different schools now serve that area due to new schools opening or attendance boundary changes, please provide enrollments and capacities for the appropriate schools.

cid:image001.png@01CCE275.DC99CDE0

Again, I thank you for your help.

For your reference I have included below tables summarizing the project description from the Initial Study for the project, plus an aerial photo of the site.

Schools Serving the North Hemet Specific Plan

School	Grades	Capacity	Enrollment*
Jacob Wiens Elementary School	K-5	550 plus eight portable classrooms	794
Rancho Viejo Middle School	6-8	1,450	1,338
Tahquitz High School	9-12	2,400	1,549

**Enrollment dated October 28, 2011*

July 28, 2010

Scott Shira
Assistant Superintendent, Facilities and Operations
San Jacinto Unified School District
2045 S San Jacinto Ave
San Jacinto, CA 92583-5626

Subject: Inquiry re: Impacts to Schools for Proposed North Hemet Specific Plan Environmental Impact Report (CORV-01.2L)

Dear Mr. Shira:

The Planning Center is assisting the City of Hemet in preparing environmental documentation for the proposed North Hemet Specific Plan.

NORTH HEMET SPECIFIC PLAN

The North Hemet Specific Plan site is 28.6 acres on the west side of State Street, from Oakland Avenue on the south to north of Menlo Avenue. The site is bordered on the west by Alessandro Avenue (see Figure 2, *Local Vicinity*). The North Hemet Specific Plan would permit development of a maximum of 402 high density and 83 medium density residential units; 116,918 square feet of commercial uses; and 16,335 square feet of office uses. The Specific Plan would establish development standards, regulations, infrastructure requirements, design guidelines, and implementation programs for subsequent development activities. It would also include a General Plan Amendment and Zone Change.

INFORMATION REQUEST

The Planning Center would like to assess existing schools near the project site. We request your assistance in the overall planning process and would appreciate input from your agency to evaluate existing services and your help in assessing project impacts to schools.

Enclosed are figures of the proposed site location and a brief questionnaire for you to fill out and return to us. To allow for timely consideration of your comments, we would appreciate it if you could return the completed questionnaire to us by August 20, 2010. Please mail or fax the completed questionnaire to my attention at the address or fax number below. You may also email responses to me at mmilroy@planningcenter.com.

Please feel free to call me at 714.966.9220 with any questions. Thank you for your assistance.

Sincerely,

THE PLANNING CENTER

Michael Milroy
Planner

North Hemet Specific Plan EIR
Schools Questionnaire: SJUSD

1. What student generation rates (in students per dwelling unit) does San Jacinto Unified School District (SJUSD) use for multifamily residential or attached single-family residential development for:

   a. Elementary schools:_____
   b. Middle Schools:_____
   c. High Schools:_____

   Please see attachments

2. Please confirm or correct the following information we obtained from SJUSD's website and from Ana Gonzalez, SJUSD facilities technician:

   The part of the project site within SJUSD is in the attendance area of the three schools in the following table:

San Jacinto USD Schools Serving Project Site				
School	***Location***	***Grades***	***Capacity[1]***	***Enrollment, 2008–2009[2]***
Park Hill Elementary	1157 East Commonwealth Avenue, San Jacinto	K–5	825 ✓	844 ✓
North Mountain Middle School	1202 East 7th Street, San Jacinto	6–8	1,111 ✓	1,044 ✓
San Jacinto High School	500 Idyllwild Drive, San Jacinto	9–12	3,563 ✓	2,378 ✓

[1] Includes permanent and portable classrooms. Source: Gonzalez 2010.
[2] Source: CDE 2010.

3. Would buildout of the North Hemet Specific Plan, in combination with other existing and planned development within SJUSD's boundaries, have a substantial adverse impact on SJUSD schools? If so, do you recommend any mitigation measures to reduce such impacts? We don't expect any adverse impact since the scope of work is outside our district boundaries. However, students tranferring into our District can impact all(3) of the above mentioned sites.
4. What are SJUSD charges for SB 50 development impact fees:

   a. Per square foot or per unit for residential development? $4.11
   b. Per square foot for commercial development? $0.47

5. Please add any other comments you may wish to make regarding this project.

Response Prepared by: Director of Facilities and Operations Michael Collins

[signature] 6-17-10

Name **Title**

San Jacinto USD

Agency **Date**

III. Projected Unhoused Students from Residential Development over the Next Five Years

Section 65995.6(a) requires that the School District determine the need for new school facilities for the Projected Unhoused Students. The calculation of the Projected Unhoused Students shall be based on historical student generation rates ("SGRs") of new residential units constructed in the School District during the previous five (5) years of a type similar to that of the Future Units. The SGRs may also be based on residential units constructed in the last five (5) years in the city or county in which the School District is located. Section III.A. below calculates the Projected Student Enrollment. Section III.B. sets forth the relevant facts as to the identification of any excess seats which might be considered by the School District as available at each school level to house the Projected Student Enrollment. Finally, Section III.C. calculates the Projected Unhoused Students.

A. Projected Student Enrollment

As stated above, Section 65995.6(a) specifies the methodology the School District must use to calculate the Projected Student Enrollment. What follows is a step-by-step description of this calculation.

1. Student Generation Rates

In order to calculate SGRs in accordance with Section 65995.6(a), the School District must identify residential units that (i) were constructed during the previous five (5) years and (ii) are representative of the Future Units. Using residential data obtained from the Office of the Assessor ("Assessor") of the County of Riverside ("County") and the School District, Dolinka Group, LLC compiled a database containing the addresses of the units that meet the criteria listed above. Parcels in the database were then classified by housing type (i.e., single family detached, single family attached, and multifamily). Residential units classified as single family detached ("SFD") are defined as units with no common walls on a single Assessor's parcel. The category of single family attached ("SFA") consists of units with common walls on a single Assessor's parcel (e.g., town homes, condominiums, etc.). The third type of residential unit, multifamily ("MF"), is defined as a unit with common walls on an Assessor's parcel on which other units are located (e.g., duplexes, triplexes, apartments, etc.).

In the School District, a total of 3,398 SFD units were identified as meeting the criteria listed above. Dolinka Group obtained a database of all students within the School District in school year 2009/2010. Upon comparison of the two (2) databases, 2,414 students matched to the 3,398 SFD units, resulting in the following SGRs for SFD units.

Table 1
Student Generation Rates for Single Family Detached Units

School Level	Number of Students Matched	Number of SFD Units	Student Generation Rates
Elementary School (Grades K-5)	1,169	3,398	0.3440
Middle School (Grades 6-8)	565	3,398	0.1663
High School (Grades 9-12)	680	3,398	0.2001
Total	**2,414**	**NA**	**0.7104**

A process identical to the one described above for SFD units was used to determine SGRs for MF units. Dolinka Group examined MF units constructed over the previous five (5) years and determined that a total of 201 units meet the criteria stated above. A comparison of these units to the student database revealed a total match of 83 students. Table 2 shows a summary of the calculation of the SGRS for MF units.

Table 2
Student Generation Rates for Multifamily Units

School Level	Number of Students Matched	Number of MF Units	Student Generation Rate
Elementary School	40	201	0.1990
Middle School	18	201	0.0896
High School	25	201	0.1244
Total	**83**	**NA**	**0.4130**

SGRs for SFA units could not be calculated by Dolinka Group due to the absence of units of these types constructed in the School District over the last five (5) years. However, construction of SFA units is expected in the next five (5) years in the School District. Employing Section 65995.6(a), which allows the School District to use the SGRs of a School District located in the same city or county, the School District has determined that it will use the SGRs calculated for Moreno Valley Unified School District ("MVUSD") for SFA units constructed in the last five (5) years as set forth in MVUSD's Analysis dated May 14, 2010. Table 3 shows the SGRs for SFA units.

Table 3
Student Generation Rates for
Single Family Attached Units

School Level	SFA Student Generation Rates
Elementary School	0.1614
Middle School	0.0669
High School	0.0629
Total	**0.2912**

Source: MVUSD School Facilities Needs Analysis dated May 14, 2010.

2. **Future Units**

Based on information provided from the planning departments of the Cities of Beaumont, Hemet, Moreno Valley and San Jacinto (collectively, "Cities") and the County, all Future Units are projected to be constructed in the City of San Jacinto and the City of Hemet (please refer to the map on the following page for a geographic profile of the School District). Dolinka Group contacted the Planning Departments of the Cities in June 2010 with estimates of the number and type of Future Units to be constructed over the next five (5) years based on information provided by the Cities previously and these numbers were adjusted accordingly by the Cities (see Exhibit I for correspondence between Dolinka Group and the Cities). The City of San Jacinto provided information regarding the total number of units projected over the next five (5) years, however, did not specify the number of units by unit type. Therefore, based on information provided by the City of San Jacinto last year, Dolinka Group applied the same proportion of units by unit type to this year's total projected units. Table 4 lists the Future Units by unit type.

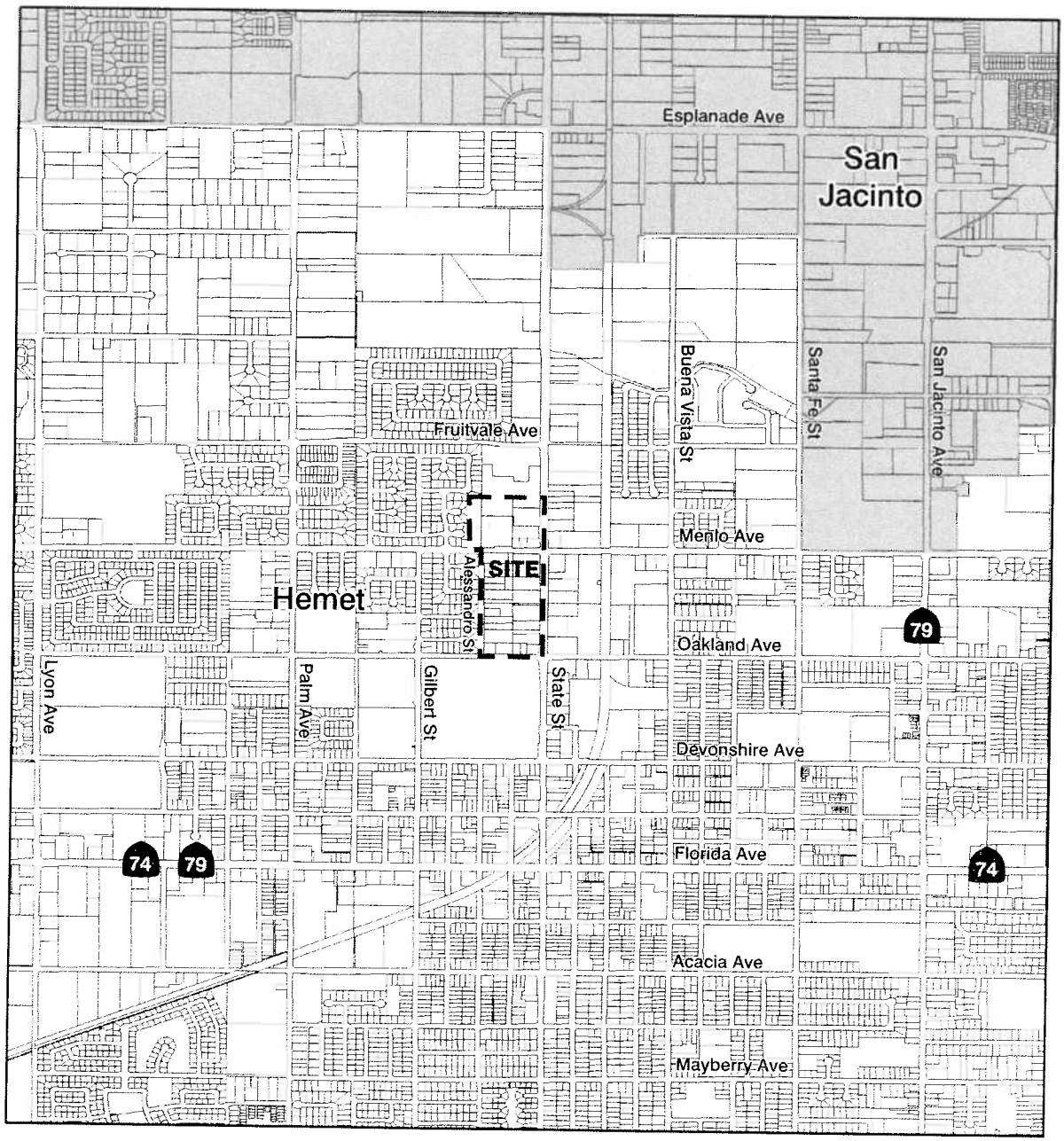
Table 4
Future Units by Unit Type

Unit Type	Number of Future Units
Single Family Detached	5,221
Single Family Attached	734
Multifamily	545
Total	**6,500**

The projected number of Future Units identified in Table 4 includes units which may result from residential units that are voluntarily demolished in order to be replaced by new residential development ("Reconstruction"). For additional information regarding the facilities cost impacts of Reconstruction please refer to Exhibit J.

It should be noted these projections are based on the best available information at this time as provided by the Cities served by the School District and are independent of the projected residential development reported to the State in SAB Form 50-01.

Local Vicinity



— — Specific Plan Boundary

Feet
0
2,000

From: Gonzalez, Anazele
To: Michael Milroy
Cc: Collins, Michael P.
Subject: RE: updates- enrollments, capacities- 3 SJUSD schools
Date: Monday, February 06, 2012 8:45:03 AM
Attachments: image001.jpg

Good Morning Michael~

The ES boundaries have changed since 2010 (see attached). However, the location below was not affected. The students in this vicinity would attend Park Hill, N. Mountain and SJHS.

Here is the info requested

Park Hill – Capacity = 825 (based on State Standards) Enrollment = 839
North Mountain - Capacity = 1119 (based on State Standards, fluctuates based on SDC) Enrollment = 981
San Jacinto HS- Capacity = 3518 (based on State Standards) Enrollment = 2256

Let me know if you need anything else.

Thank You.

Ana

From: Collins, Michael P.
Sent: Friday, February 03, 2012 1:43 PM
To: Gonzalez, Anazele
Subject: FW: updates- enrollments, capacities- 3 SJUSD schools

Ana,
Please verify and respond to Mr. Milroy.
Thank you,

Michael P. Collins
Director, Facilities and Operations

San Jacinto Unified School District
Facilities and Operations Department
905 Industrial Way
San Jacinto CA 92582
951-654-7769 Phone
951-487-7771
mpcollins@sanjacinto.k12.ca.us

From: Michael Milroy [mailto:mmilroy@planningcenter.com]
Sent: Friday, February 03, 2012 1:15 PM
To: Collins, Michael P.
Subject: updates- enrollments, capacities- 3 SJUSD schools

Hi Michael

Here is the info I'm looking for updates to: enrollment and capacity

The project site is the graphic below; if any new schools have opened serving that area, or if attendance boundaries have changed since 2010 such that different schools now serve that area, please provide enrollments and capacities for the appropriate schools.

I thank you again for your help

Table 5.11-2
Hemet Unified School District and San Jacinto Unified School District Schools Serving Project Site

School	*Location*	*Grades*	*Capacity*[2]	*Enrollment*[3]
San Jacinto USD				
Park Hill Elementary	**1157 East Commonwealth Avenue, San Jacinto**	**K-5**	**825**	**844**[6]
North Mountain Middle School	**1202 East 7th Street, San Jacinto**	**6-8**	**1,111**	**1,044**[6]
San Jacinto High School	**500 Idyllwild Drive, San Jacinto**	**9-12**	**3,563**	**2,378**[6]





Our corporate office has moved. Please update your records to reflect the address change.

Michael Milroy
Associate Planner

THE PLANNING CENTER | DC&E
3 MacArthur Place, Suite 1100 | Santa Ana, CA 92707
714.966.9220 | 714.966.9221 (f)
mmilroy@planningcenter.com
www.planningcenter.com | **www.dceplanning.com**

Think environment before printing.

North Hemet Specific Plan EIR
Library Questionnaire

1. Please confirm or correct the following information that we obtained from Hemet Public Library (HPL)'s website, http://www.cityofhemet.org/library/:

   a. Hemet Public Library operates from one facility at 300 E. Latham Avenue in Hemet.

   b. The facility is approximately 50,000 square feet.

   c. HPL's collection contains approximately 104,000 items, of which about 6,000 are media materials such as DVDs and CDs.

2. Would buildout of the North Hemet Specific Plan, in combination with other existing and planned development in the City, have a substantial adverse impact on HPL services?

   a. If so, do you recommend any mitigation measures to reduce such impacts?

Yes, as the library community grows our ability to handle the growth requires additional funding for staffing and materials.

3. Does HPL have standards for serving an expanding population in its service area? If so, what standards?

   a. Facility size (square feet) NONE

   b. Collection size

   c. Electronic resources and media (e.g., computers for patron use)

   d. Other?

4. Please add any other comments you may wish to make regarding this project.

The library has had to cut service hours to 38 open hours per week. Additionally, we have only 8 staff members (down almost 50% from 2 years ago) Consequently any growth in the service community does concern me.

Response Prepared by:

Wayne Disher — Library Director
Name — Title

Hemet Public — 8/12/10
Agency — Date

Michael Milroy

To: Michael Milroy
Subject: FW: Fwd: request for updated enrollment and capacity information for 3 HUSD schools
Attachments: 20120206 Data for The Planning Center.pdf

From: Jesse Bridwell [mailto:Jbridwell@hemetusd.k12.ca.us]
Sent: Monday, February 06, 2012 8:50 AM
To: Michael Milroy
Cc: Hans Twardowski
Subject: Re: Fwd: request for updated enrollment and capacity information for 3 HUSD schools

Michael,

The same schools still serve this project area. See attached for current enrollment and capacity.

The last document I received regarding this project was the Initial Study distributed by the City of Hemet, October 2011. The land use plan and scope have not changed since then, correct? Also, the area north of Menlo Ave (Planning Areas 1, 2) is served by the San Jacinto Unified School District.

Thank you and let me know if you need anything else.

Jesse Bridwell
Facilities Planner
Hemet Unified School District
1791 W. Acacia Avenue
Hemet, CA 92545
(951) 249-5484 cell
(951) 765-5100 x5465 office
(951) 929-9823 fax

Schools Serving the North Hemet Specific Plan

School	Grades	Capacity	Enrollment*
Jacob Wiens Elementary School	K-5	550 plus eight portable classrooms	794
Rancho Viejo Middle School	6-8	1,450	1,338
Tahquitz High School	9-12	2,400	1,549

**Enrollment dated October 28, 2011*

Michael Milroy

To: Michael Milroy
Subject: FW: updates- enrollments, capacities- 3 SJUSD schools

From: Gonzalez, Anazele [mailto:a.gonzalez@SanJacinto.k12.ca.us]
Sent: Monday, February 06, 2012 8:43 AM
To: Michael Milroy
Cc: Collins, Michael P.
Subject: RE: updates- enrollments, capacities- 3 SJUSD schools

Good Morning Michael~

The ES boundaries have changed since 2010 (see attached). However, the location below was not affected. The students in this vicinity would attend Park Hill, N. Mountain and SJHS.

Here is the info requested

Park Hill – Capacity = 825 (based on State Standards) Enrollment = 839
North Mountain - Capacity = 1119 (based on State Standards, fluctuates based on SDC) Enrollment = 981
San Jacinto HS- Capacity = 3518 (based on State Standards) Enrollment = 2256

Let me know if you need anything else.

Thank You.

Ana

Appendix K
Traffic Impact Analysis

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NORTH HEMET REVITALIZATION PLAN
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF HEMET, CALIFORNIA

July 23, 2012 (Revised)
May 25, 2011

JN:05456-04 REPORT
AE:CH:HQ:DL:rd

TABLE OF CONTENTS

SECTION PAGE

1.0 EXECUTIVE SUMMARY 1
- 1.1 Project Traffic Estimates
- 1.2 Project Impacts and Mitigation Measures
- 1.3 Site Access and On-Site Roadway Improvements
- 1.4 Cumulative Impacts and Mitigation Measures

2.0 INTRODUCTION 17
- 2.1 Study Purpose
- 2.2 Analysis Overview
- 2.3 Report Organization
- 2.4 Analysis Methods
- 2.5 Level of Service Criteria
- 2.6 Thresholds of Significance

3.0 EXISTING CONDITIONS 27
- 3.1 Existing Roadway Network
- 3.2 Transit Service
- 3.3 Bicycle and Pedestrian Facilities
- 3.4 Existing Intersection Traffic Volumes
- 3.5 Existing Conditions Analysis
- 3.6 Summary

4.0 PROJECTED FUTURE TRAFFIC 41
- 4.1 Project Description
- 4.2 Background Traffic
- 4.3 Cumulative Development Traffic
- 4.4 Trip Distribution and Assignment

5.0 EXISTING PLUS PROJECT CONDITIONS 73
- 5.1 Existing Plus Project (P1) Traffic Volume Forecasts
- 5.2 Existing Plus Project (P1) Conditions Analysis
- 5.3 Existing Plus Project (Buildout) Traffic Volume Forecasts
- 5.4 Existing Plus Project (Buildout) Conditions Analysis

6.0 INTERIM YEAR 2016 CONDITIONS 85
- 6.1 Interim Year 2016 Without Project Traffic Volume Forecasts
- 6.2 Interim Year 2016 With Project Traffic Volume Forecasts
- 6.3 Interim Year 2016 Conditions Analysis
- 6.4 Interim Year 2016 Project Impacts, Proposed Mitigation and Improvement Strategies
- 6.5 Interim Year 2016 Cumulative Impacts, Proposed Mitigation and Improvement Strategies

SECTION PAGE

7.0 PROJECT BUILDOUT YEAR 2020 CONDITIONS..... 103
- 7.1 Year 2020 Without Project Traffic Volume Forecasts
- 7.2 Year 2020 With Project Traffic Volume Forecasts
- 7.3 Year 2020 Conditions Analysis
- 7.4 Year 2020 Project Impacts, Proposed Mitigation and Improvement Strategies
- 7.5 Year 2020 Cumulative Impacts, Proposed Mitigation and Improvement Strategies
- 7.6 Development Impact Fees
- 7.7 Project Fair Improvements

8.0 ROADWAY SYSTEM, ON-SITE CIRCULATION & SITE ACCESS..... 123
- 8.1 Roadway System
- 8.2 Non-Motorized Travel
- 8.3 Site Access and On-Site Roadway Improvements

APPENDICES

EXISTING 2010 TRAFFIC COUNT WORKSHEETS 3.1

EXISTING 2010 CONDITIONS INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS 3.2

EXISTING 2010 TRAFFIC SIGNAL WARRANTS 3.3

PROJECT INTERNAL CAPTURE WORKSHEETS 4.1

EXISTING PLUS PROJECT AVERAGE DAILY TRAFFIC (ADT) 5.1

EXISTING PLUS PROJECT (P1) CONDITIONS INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS 5.2

EXISTING PLUS PROJECT (P1) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 5.3

EXISTING PLUS PROJECT (BUILDOUT) CONDITIONS INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS 5.4

EXISTING PLUS PROJECT (BUILDOUT) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 5.5

INTERIM YEAR 2016 AVERAGE DAILY TRAFFIC (ADT) 6.1

INTERIM YEAR 2016 WITHOUT PROJECT CONDITIONS INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS 6.2

INTERIM YEAR 2016 WITH PROJECT CONDITIONS INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS 6.3

INTERIM YEAR 2016 WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 6.4

INTERIM YEAR 2016 WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 6.5

INTERIM YEAR 2016 WITH PROJECT CONDITIONS WITH MITIGATION MEASURES TO ACHIEVE PRE-PROJECT CONDITIONS 6.6

INTERIM YEAR 2016 WITH PROJECT CONDITIONS WITH MITIGATION MEASURES TO ACHIEVE REQUISITE LOS 6.7

YEAR 2020 AVERAGE DAILY TRAFFIC (ADT) 7.1

APPENDICES (CONTINUED)

YEAR 2020 WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS..... 7.2

YEAR 2020 WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS..... 7.3

YEAR 2020 WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 7.4

YEAR 2020 WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS 7.5

YEAR 2020 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE PRE-PROJECT CONDITIONS..... 7.6

YEAR 2020 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE REQUISITE LOS 7.7

LIST OF EXHIBITS

EXHIBIT		PAGE
1-1	Land Use Plan	2
1-2	Off-Site Project Mitigation Measures For Opening Year 2016 Conditions	4
1-3	Off-Site Project Mitigation Measures For Year 2020 Conditions	6
1-4	Off-Site Cumulative Mitigation Measures For Opening Year 2016 Conditions	12
1-5	Off-Site Cumulative Mitigation Measures For Year 2020 Conditions	14
2-1	Regional Location Map	18
2-2	Study Area Location Map	20
3-1	Existing Number Of Through Lanes and Intersection Controls	28
3-2	Hemet General Plan Update Circulation Element	29
3-3	City of Hemet General Plan Roadway Cross-Sections	30
3-4	Hemet General Plan Update Transit Service Features	33
3-5	Hemet General Plan Bikeway Network	34
3-6	Existing (2010) Average Daily Traffic (ADT)	35
3-7	Existing AM Peak Hour Intersection Volumes	36
3-8	Existing PM Peak Hour Intersection Volumes	37
4-1	Project Traffic Analysis Zones (TAZs)	48
4-2	Project TAZ 1 Trip Distribution	49
4-3	Project TAZ 2 Trip Distribution	51
4-4	Project TAZ 3 Trip Distribution	52
4-5	Project TAZ 4 Trip Distribution	53
4-6	Project (2016) Average Daily Traffic (ADT)	54
4-7	Project (2016) AM Peak Hour Intersection Volumes	55
4-8	Project (2016) PM Peak Hour Intersection Volumes	56

LIST OF EXHIBITS (CONTINUED)

EXHIBIT		PAGE
4-9	Project (2020) Average Daily Traffic (ADT)	57
4-10	Project (2020) AM Peak Hour Intersection Volumes	58
4-11	Project (2020) PM Peak Hour Intersection Volumes	59
4-12	Cumulative Development Location Map	65
4-13	Cumulative Development (2016) Average Daily Traffic (ADT)	67
4-14	Cumulative Development (2016) AM Peak Hour Intersection Volumes	68
4-15	Cumulative Development (2016) PM Peak Hour Intersection Volumes	69
4-16	Cumulative Development (2020) Average Daily Traffic (ADT)	70
4-17	Cumulative Development (2020) AM Peak Hour Intersection Volumes	71
4-18	Cumulative Development (2020) PM Peak Hour Intersection Volumes	72
5-1	Existing Plus Project (P1) AM Peak Hour Intersection Volumes	74
5-2	Existing Plus Project (P1) PM Peak Hour Intersection Volumes	75
5-3	Existing Plus Project (Buildout) AM Peak Hour Intersection Volumes	80
5-4	Existing Plus Project (Buildout) PM Peak Hour Intersection Volumes	81
6-1	2016 Without Project AM Peak Hour Intersection Volumes	86
6-2	2016 Without Project PM Peak Hour Intersection Volumes	87
6-3	2016 With Project AM Peak Hour Intersection Volumes	88
6-4	2016 With Project PM Peak Hour Intersection Volumes	89
6-5	Recommended Improvements at State Street and Menlo Avenue	97
7-1	2020 Without Project AM Peak Hour Intersection Volumes	104

LIST OF EXHIBITS (CONTINUED)

EXHIBIT		PAGE
7-2	2020 Without Project PM Peak Hour Intersection Volumes	105
7-3	2020 With Project AM Peak Hour Intersection Volumes	106
7-4	2020 With Project PM Peak Hour Intersection Volumes	107
8-1	North Hemet Revitalization Plan Phase 1 (2016) Design Features	124
8-2	North Hemet Revitalization Plan Roadway Cross-Sections	125
8-3	North Hemet Revitalization Plan Phase 2 (2020) Design Features	126
8-4	North Hemet Project Area Sample Speed Reduction Measures	128
8-5	Pedestrian Accommodations	129
8-6A	In-Pavement Raised Markers	131
8-6B	In-Pavement Raised Markers	132
8-7	Menlo Avenue / State Street Roadway Plan View	133

LIST OF TABLES

TABLE		PAGE
2-1	Signalized Intersection Level of Service Thresholds	23
2.2	Unsignalized Intersection Level of Service Thresholds	24
3-1	Intersection Analysis For Existing (2010) Conditions	39
4-1	Project Trip Generation Rates	43
4-2	North Hemet Revitalization Plan Trip Generation Summary by Planning Area	44
4-3	Existing Trip Generation Rates	46
4-4	Trip Generation Summary by Planning Area for Existing Uses	47
4-5	Cumulative Development Trip Generation Rates	61
4-6	Cumulative Development Land Use and Trip Generation Summary	62
5-1	Intersection Analysis for Existing Plus Project (P1) Conditions	76
5-2	Peak Hour Segment Analysis for Existing Plus Project (P1) Conditions	78
5-3	Intersection Analysis for Existing Plus Project (Buildout) Conditions	79
5-4	Peak Hour Segment Analysis for Existing Plus Project (Buildout) Conditions	83
6-1	Intersection Analysis for 2016 Without Project Conditions	90
6-2	Intersection Analysis for 2016 With Project Conditions	91
6-3	Peak Hour Segment Analysis for 2016 With Project Conditions	94
6-4	Intersection Analysis for 2016 With Project Conditions With Mitigation Measures to Mitigate Project Impacts	96
6-5	Intersection Analysis for 2016 With Project Conditions With Mitigation Measures to Mitigate Cumulative Impacts	99
7-1	Intersection Analysis for 2020 Without Project Conditions	108
7-2	Intersection Analysis for 2020 With Project Conditions	109
7-3	Peak Hour Segment Analysis for 2020 With Project Conditions	112
7-4	Intersection Analysis for 2020 With Project Conditions With Mitigation Measures to Mitigate Project Impacts	114
7-5	Intersection Analysis for 2020 With Project Conditions With Mitigation Measures to Mitigate Cumulative Impacts	116

LIST OF TABLES (CONTINUED)

TABLE		PAGE
7-6	Project Contribution to Total New Traffic	120
7-7	Future Intersection Improvements and Local Mitigation	121

NORTH HEMET REVITALIZATION PLAN
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF HEMET, CALIFORNIA

1.0 EXECUTIVE SUMMARY

This report presents the results of the traffic impact analysis (TIA) for the proposed North Hemet Revitalization Plan (referred to as "project") generally located on either side of Menlo Avenue between Alessandro Street and State Street in the City of Hemet. The project site is comprised of several parcels with a combined area of approximately 28.6 acres, consisting of 96 senior residential dwelling units, 252 apartments, 81 condominium/townhomes, a 137 bed assisted living facility, 16,335 square feet of office use, and 118,919 square feet of commercial retail use. For the purposes of this traffic impact analysis, it has been assumed that the project would be fully built and occupied by Year 2020 and will be developed in two phases (as discussed in Section 2.0 of this report). Exhibit 1-1 illustrates the preliminary land use plan for the project.

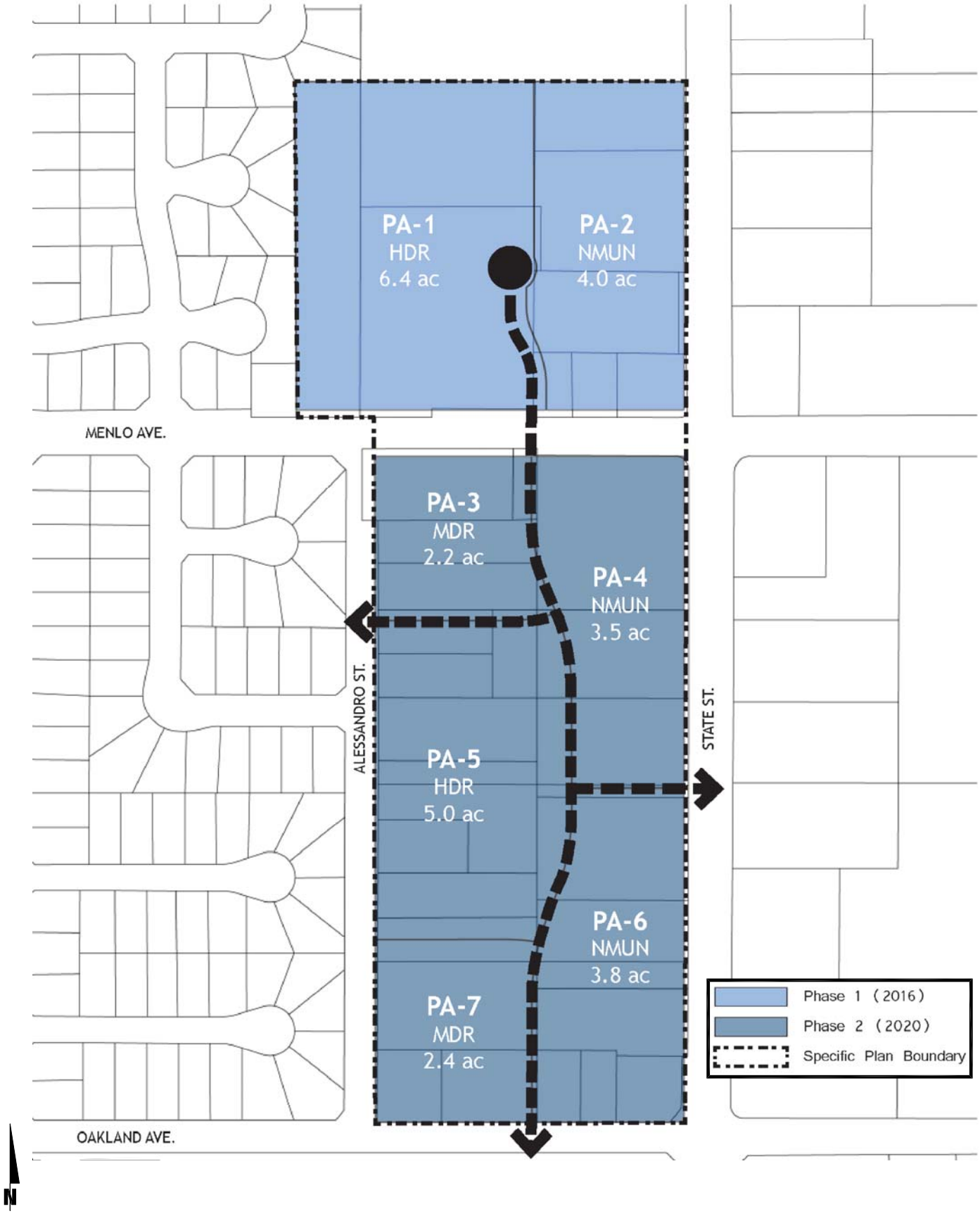
The purpose of this traffic impact analysis is to evaluate the potential traffic and circulation impacts associated with the proposed development on the surrounding roadway system, and recommend improvements to mitigate impacts considered significant in comparison to thresholds determined by the City of Hemet.

1.1 Project Traffic Estimates

Trips generated by the project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 8th Edition, 2008. The project is estimated to generate a net total of approximately 6,130 net trip-ends per day with approximately 271 net AM peak hour trips and 646 net PM peak hour trips. The internal capture and pass-by reductions are discussed in further detail in Chapter 4.

EXHIBIT 1-1

LAND USE PLAN



1.2 Project Impacts and Mitigation Measures

The recommended mitigation measures necessary to reduce project-related impacts to "less-than-significant" are discussed below. The following measures should be implemented prior to the issuance of occupancy permits for Phase 1 (Interim Year 2016):

Impact 1.1 – State Street / Menlo Avenue (#15) – The addition of project traffic would result in an unacceptable level of service during the PM peak hour as compared to Interim Year 2016 without project conditions. The impact is considered ***"significant"***.

Mitigation Measure 1.1 – The following improvements (shown in **bold**) are necessary to reduce the project's impact to ***"less-than-significant"***:
Northbound: One left turn lane, one through lane and one shared through-right turn lane.
Southbound: One left turn lane, one through lane and one shared through-right turn lane.
Eastbound: **One left turn lane**, one through lane and one right turn lane.
Westbound: One shared left-through lane and one right turn lane.

The recommended mitigation measure to reduce the project's Phase 1 impact to ***"less-than-significant"*** is illustrated on Exhibit 1-2. The recommended improvements are shown in bold and are recommended in addition to the existing lanes shown subsequently on Exhibit 3-1.

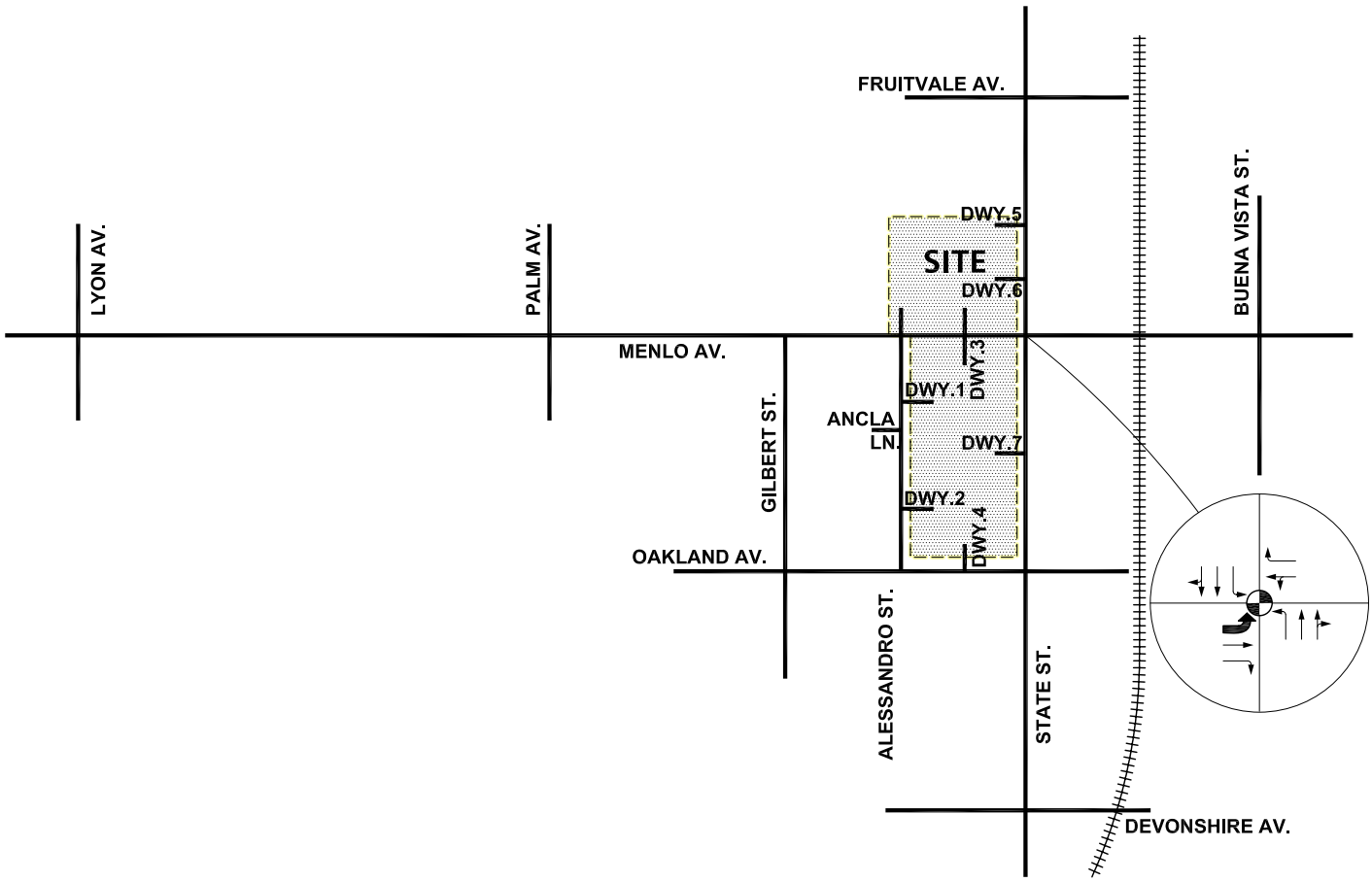
The following additional measures should be implemented prior to the issuance of occupancy permits for Phase 2 (Year 2020):

Impact 2.1 – Palm Avenue / Menlo Avenue (#2) – The addition of project traffic would result in an unacceptable level of service during both peak hours as compared to Year 2020 without project conditions. The impact is considered ***"significant"***.

Mitigation Measure 2.1 – The following improvement (shown in **bold**) is necessary to reduce the project's impact to "***less-than-significant***":
Install a Traffic Signal; no additional mitigation required.

EXHIBIT 1-2

OFF-SITE PROJECT MITIGATION MEASURES FOR OPENING YEAR 2016 CONDITIONS



LEGEND:

= TRAFFIC SIGNAL
= STOP SIGN
= EXISTING LANE
= CURRENT PHASE IMPROVEMENTS

N

The recommended mitigation measures to reduce the Phase 2 project's impact to ***"less-than-significant"*** are illustrated on Exhibit 1-3. The recommended improvements are shown in bold and are recommended in addition to the improvements shown on Exhibit 1-2 for Opening Year 2016 conditions.

1.3 Site Access and On-Site Roadway Improvements

Phase 1 of the project is proposed to have access to Menlo Avenue via an extension of Alessandro Street and Driveway 3 and to State Street via Driveway 5 and 6. All project driveways are proposed to have full access with the exception of Driveways 5 and 6 which are proposed to be right-in/right-out access only.

Phase 2 of the project is proposed to have access to Alessandro Street via Driveways 1 and 2, Menlo Avenue via Driveway 3 and Alessandro Street, Oakland Avenue via Driveway 4 and Alessandro Street and to State Street via Driveway 7. All driveways for Phase 2 are proposed to have full access.

Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below. These improvements should be in place prior to occupancy.

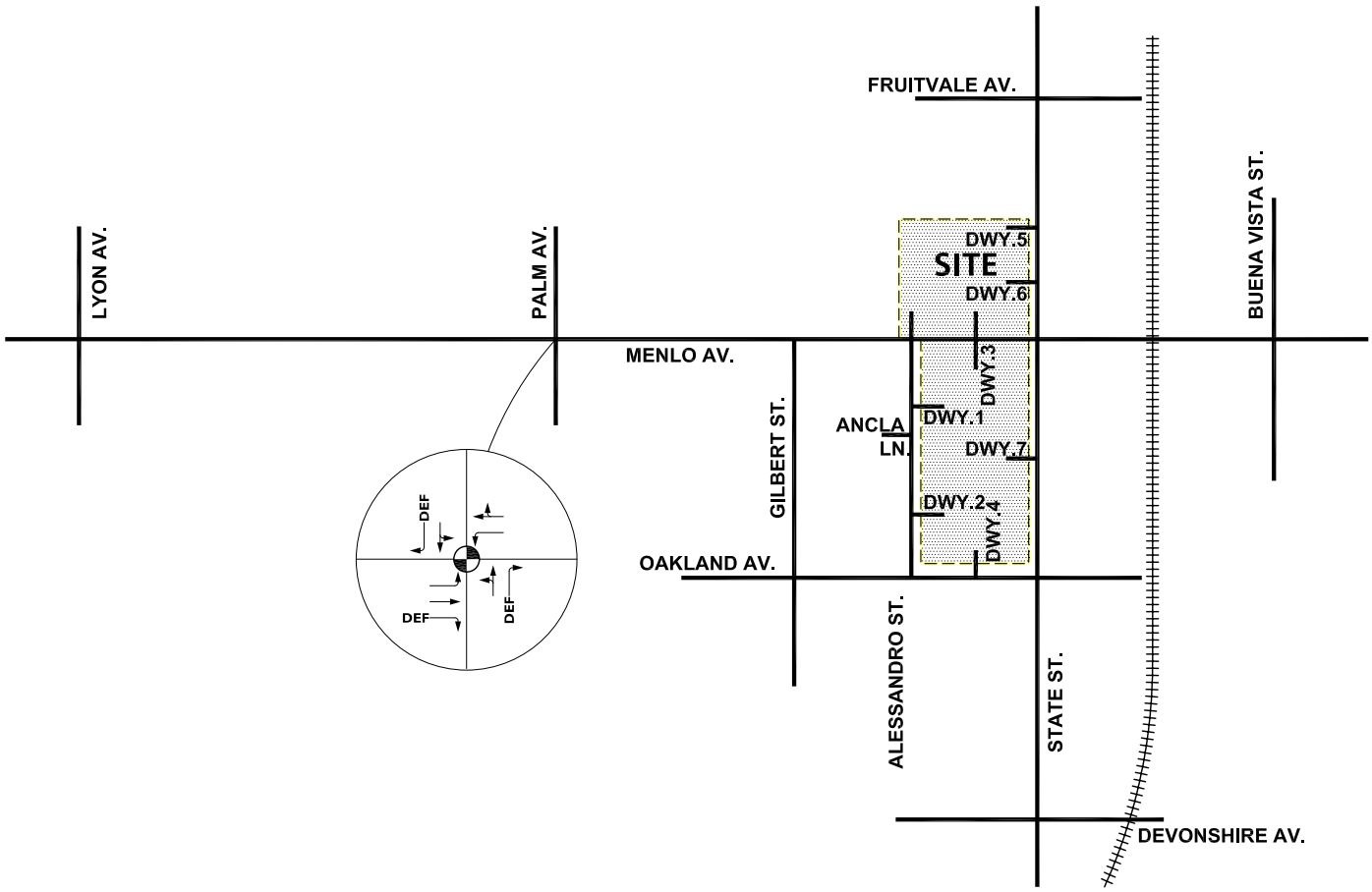
1.3.1 Site Access Improvements for Phase 1 (Interim Year 2016)

The recommended site access driveway improvements for the Project are described below. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes.

Driveway 3 and Menlo Avenue – Install a stop control on the north leg and construct the intersection with the following geometrics: one southbound shared left-right turn lane, one eastbound left turn lane, two eastbound through lanes, one westbound through lane and one westbound shared through-right.

EXHIBIT 1-3

OFF-SITE PROJECT MITIGATION MEASURES FOR YEAR 2020 CONDITIONS



LEGEND:

= TRAFFIC SIGNAL
= STOP SIGN
= EXISTING LANE
= CURRENT PHASE IMPROVEMENTS

N

State Street and Driveway 5 – Install a stop control on the eastbound approach and construct the intersection with the following geometrics: two northbound through lanes, one southbound through turn lane, one southbound shared through-right turn lane, and one eastbound right turn lane.

State Street and Driveway 6 – Install a stop control on the eastbound approach and construct the intersection with the following geometrics: two northbound through lanes, one southbound through turn lane, one southbound shared through-right turn lane, and one eastbound right turn lane.

1.3.2 Site Access Improvements for Phase 2 (Year 2020)

Alessandro Street and Driveway 1 – Install a stop control on the westbound approach and construct the intersection with the following geometrics: one northbound shared through-right turn lane, one southbound shared through-left turn lane, one westbound shared left-right turn lane.

Alessandro Street and Driveway 2 – Install a stop control on the westbound approach and construct the intersection with the following geometrics: one northbound shared through-right turn lane, one southbound shared through-left turn lane, one westbound shared left-right turn lane.

Driveway 3 and Menlo Avenue – Install a stop control on the south leg and construct the intersection with the following geometrics: one northbound shared left-through-right turn lane, one southbound shared left-through-right turn lane, one eastbound left turn lane, one eastbound through lane, one eastbound shared through-right, one westbound left turn lane, one westbound through lane and one westbound shared through-right.

Driveway 4 and Oakland – Install a stop control on the southbound approach and construct the intersection with the following geometrics: one southbound shared left-right turn lane, one eastbound shared left-through turn lane, and one westbound shared through-right turn lane.

State Street and Driveway 7 – Install a traffic signal and construct the intersection with the following geometrics: one northbound left turn lane, two northbound through lanes, one southbound through lane, one southbound shared through-right turn lane, and one eastbound shared left-right turn lane.

1.3.3 On-Site Roadway Improvements for Phase 1 (Interim Year 2016)

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 8-1 illustrates the site-adjacent roadway improvement recommendations.

State Street – Construct at its ultimate half-section width as a Divided Secondary (94-foot right-of-way) between the northern project boundary and Menlo Avenue, consistent with the roadway cross-sections shown on Exhibit 8-2.

Menlo Avenue – Construct at its ultimate half-section width as a Secondary (94-foot right-of-way) between the western project boundary and State Street along the north side of the street, consistent with the roadway cross-sections shown on Exhibit 8-2.

Internal Project Roadways – Construct at its ultimate full-section width as a local roadway (60-foot right-of-way), consistent with the roadway cross-sections shown on Exhibit 8-2.

1.3.4 On-Site Roadway Improvements for Phase 2 (Year 2020)

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 8-3 illustrates the site-adjacent roadway improvement recommendations.

State Street – Construct at its ultimate half-section width as a Divided Secondary (94-foot right-of-way) between the Menlo Avenue and Oakland Avenue, consistent with the roadway cross-section shown on Exhibit 8-2.

Menlo Avenue – Construct at its ultimate half-section width as a Secondary (94-foot right-of-way) between the western project boundary and State Street along the south side of the

street, which would complete the ultimate section of the roadway, consistent with the roadway cross-sections shown on Exhibit 8-2.

Alessandro Street – Construct at its ultimate half-section width as a local roadway (60-foot right-of-way) between Menlo Avenue and Oakland Avenue, consistent with the roadway cross-section shown on Exhibit 8-2.

Oakland Avenue – Construct at its ultimate half-section width as a collector roadway (74-foot right-of-way) between Alessandro Street and State Street, consistent with the roadway cross-section shown on Exhibit 8-2.

Internal Project Roadways – Construct at its ultimate full-section width as a local roadway (60-foot right-of-way), consistent with the roadway cross-section shown on Exhibit 8-2.

1.4 Cumulative Impacts and Mitigation Measures

A summary of the cumulatively impacted study area intersections and recommended mitigation measures to address cumulatively significant impacts are described in detail within Chapters 5.0 and 6.0.

1.4.1 Cumulative Impact and Mitigation Measures for Phase 1 (Interim Year 2016)

The recommended mitigation measures necessary to achieve the City of Hemet requisite level of service threshold of LOS "D" or better at all study area intersections for Year 2016 with project conditions are listed below:

Impact 1.2 – State Avenue / Menlo Avenue (#15) – The intersection is anticipated to operate at an unacceptable level of service during the PM peak hour as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 1.2 – The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***, in addition to those previously described under Mitigation Measure 1.1:

Northbound: One left turn lane, one through lane and one shared through-right turn lane.
Southbound: One left turn lane, one through lane and one shared through-right turn lane.
Eastbound: *One left turn lane*, one through lane and one right turn lane.
Westbound: **One left turn lane**, one through lane and one right turn lane.

Impact 2.2 – Palm Avenue / Menlo Avenue (#2) – The intersection is anticipated to operate at an unacceptable level of service during the PM peak hour as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 2.2 – The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***:
Install a Traffic Signal.
Northbound: **One left turn lane** and one shared through-right turn lane.
Southbound: **One left turn lane** and one shared through-right turn lane.
Eastbound: One left turn lane, one through lane and one defacto right turn lane.
Westbound: One left turn lane and one shared through-right turn lane.

Impact 3.1 – N. Lyon Avenue / Menlo Avenue (#1) – The intersection is anticipated to operate at an unacceptable level of service during the AM and PM peak hours as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 3.1 – The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***:
Northbound: Re-stripe to provide **one left turn lane** and one shared through-right turn lane.
Southbound: Re-stripe to provide **one left turn lane** and one shared through-right turn lane.
Eastbound: Re-stripe to provide **one left turn lane** and one shared through-right turn lane.
Westbound: Re-stripe to provide **one left turn lane** and one shared through-right turn lane.

Impact 4.1 – Buena Vista Street / Menlo Avenue (#19) – The intersection is anticipated to operate at an unacceptable level of service during the PM peak hour as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 4.1 – The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***, in addition to those previously described under Mitigation Measure 4.1:

Install a Traffic Signal.

Northbound: **One left turn lane** and one shared through-right turn lane.

Southbound: **One left turn lane** and one shared through-right turn lane.

Eastbound: **One left turn lane** and one shared through-right turn lane.

Westbound: **One left turn lane** and one shared through-right turn lane.

The recommended mitigation measures to reduce the Phase 1 cumulative impacts to ***"less-than-significant"*** are illustrated on Exhibit 1-4.

1.4.2 Cumulative Impact and Mitigation Measures for Phase 2 (Year 2020)

The recommended mitigation measures necessary to achieve the requisite level of service threshold of LOS "D" or better at all study area intersections for Year 2020 with project conditions are listed below:

Impact 1.3 – State Avenue / Menlo Avenue (#15) – The intersection is anticipated to operate at an unacceptable level of service during the PM peak hour as compared to existing conditions. The impact is considered ***"significant"***.

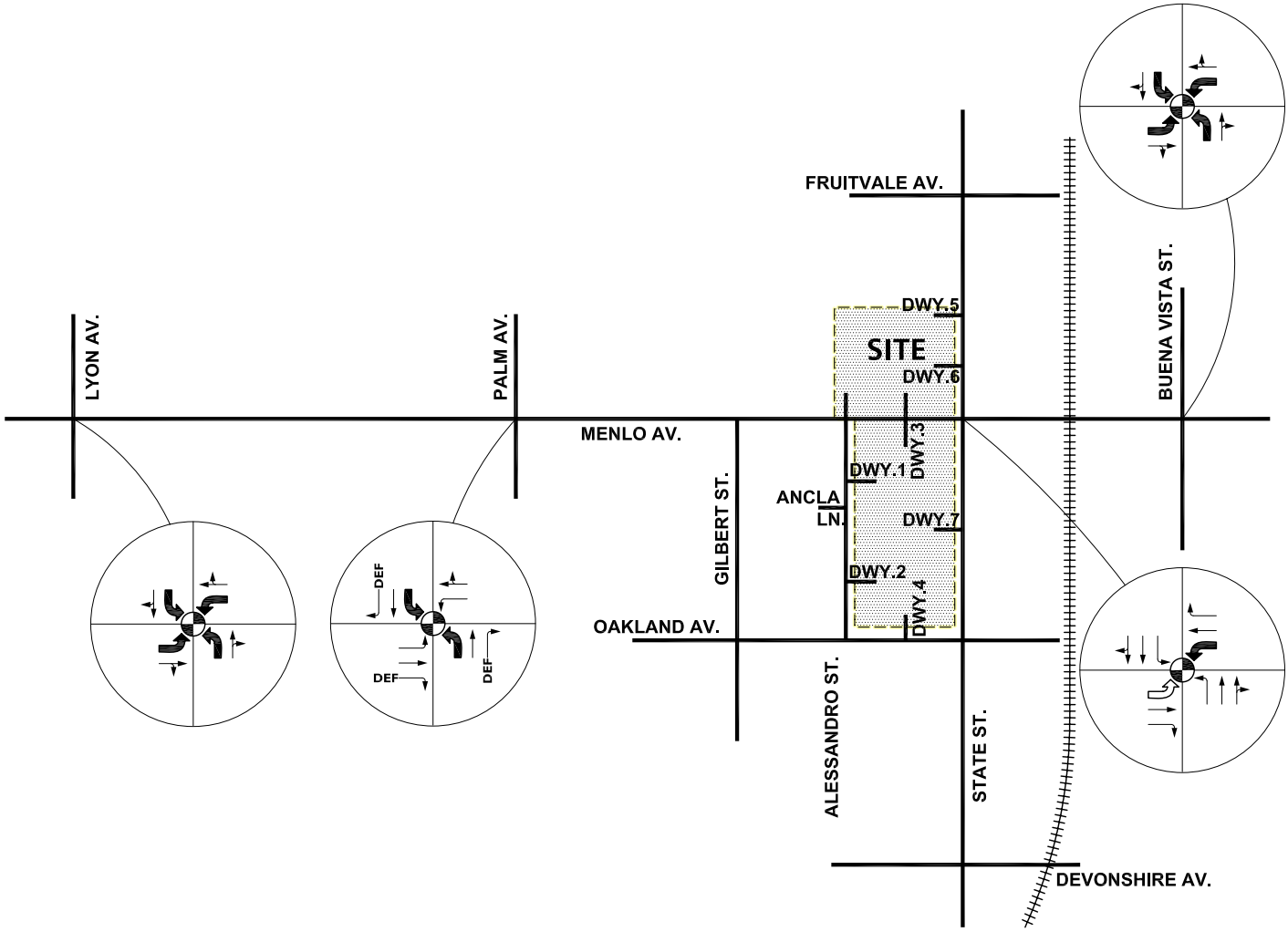
Mitigation Measure 1.3 – The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***, in addition to those previously described under Mitigation Measures 1.1 and 1.2:

Northbound: One left turn lane, one through lane and one shared through-right turn lane.

Southbound: One left turn lane, one through lane and one shared through-right turn lane.

EXHIBIT 1-4

OFF-SITE CUMULATIVE MITIGATION MEASURES FOR OPENING YEAR 2016 CONDITIONS



LEGEND:

= TRAFFIC SIGNAL
= STOP SIGN
= EXISTING LANE
= CURRENT PHASE IMPROVEMENTS
= PREVIOUS PROJECT IMPROVEMENTS

N

Eastbound: *One left turn lane*, one through lane and **one shared through-right turn lane**.
Westbound: *One left turn lane*, one through lane and one right turn lane.

Impact 2.3 – Palm Avenue / Menlo Avenue (#2) – The intersection is anticipated to operate at an unacceptable level of service during the AM and PM peak hours as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 2.3 – Mitigation Measure 2.2 shall apply; no additional mitigation required.

Impact 3.2 – N. Lyon Avenue / Menlo Avenue (#1) – The intersection is anticipated to operate at an unacceptable level of service during the AM and PM peak hours as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 3.2 – Mitigation Measure 3.1 shall apply; no additional mitigation required.

Impact 4.2 – Buena Vista Street / Menlo Avenue (#19) – The intersection is anticipated to operate at an unacceptable level of service during the PM peak hour as compared to existing conditions. The impact is considered ***"significant"***.

Mitigation Measure 4.2 – Mitigation Measure 4.1 shall apply; no additional mitigation required.

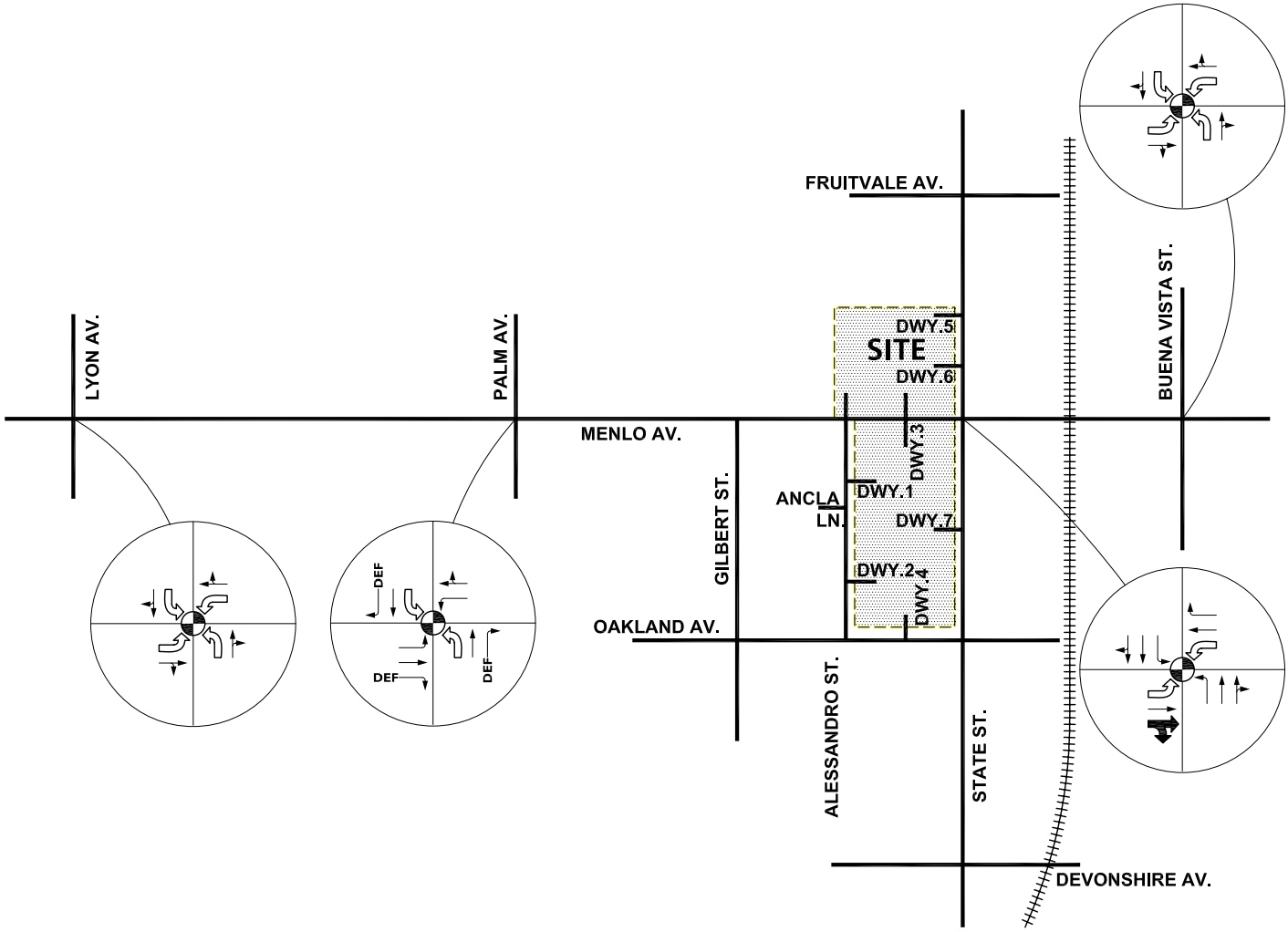
The recommended mitigation measures to reduce the Phase 2 cumulative impact to ***"less-than-significant"*** are illustrated on Exhibit 1-5.

1.4.3 Project Fair Share

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. The proposed project is subject to two

EXHIBIT 1-5

OFF-SITE CUMULATIVE MITIGATION MEASURES FOR YEAR 2020 CONDITIONS



LEGEND:

= TRAFFIC SIGNAL
= STOP SIGN
= EXISTING LANE
= CURRENT PHASE IMPROVEMENTS
= PREVIOUS PHASE IMPROVEMENTS

N

off-site roadway improvement fee programs: the regional Transportation Uniform Mitigation Fee (TUMF) and the City of Hemet's Development Impact Fee (DIF). Each program focuses on a specific network of future infrastructure needs that may overlap or complement direct project mitigation.

This TIA has identified recommended intersection improvements at five locations. The intersection State Street / Menlo Avenue is adjacent to the project and has a 24.6% share. The relatively minor magnitude of the improvements could be addressed through a financial contribution or assignment of specific improvements with some form of cost sharing with the city. The other four intersection improvement locations identified on Table 7-7 have a minor share of future traffic and include new traffic signals which may be covered by the DIF. A nominal financial contribution or payment of DIF may be adequate to cover the project's impacts. A rough order of magnitude cost should be prepared by the City to determine the appropriate contribution value based upon the project's fair share of traffic as part of the project approval process. The cost basis should be determined by the city based upon physical and community constraints, current bidding experiences and engineering preferences.

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2.0 INTRODUCTION

This report presents the results of the Traffic Impact Analysis (TIA) for the North Hemet Revitalization project located within the North Hemet Subarea of the Mid-County Redevelopment Project Area (MCRPA). More specifically, the project site is bounded on the north and northwest by existing residential land uses, on the west by Alessandro Street, on the south by Oakland Avenue, and on the west by State Street in the City of Hemet. This chapter provides an overview of the analysis, the study area locations, report organization, analysis methods, and significance thresholds used to identify impacts.

2.1 Study Purpose

The purpose of this traffic study is to evaluate the potential impacts to traffic and circulation associated with the development of the proposed project in the City of Hemet. The project is generally located on either side of Menlo Avenue between Alessandro Street and State Street in the City of Hemet as shown on Exhibit 2-1. The project site is comprised of several parcels with a combined area of approximately 28.6 acres, consisting of 96 senior residential dwelling units, 252 apartments, 81 condominium/townhomes, a 137 bed assisted living facility, 16,335 square feet of office use, and 118,919 square feet of commercial retail use.

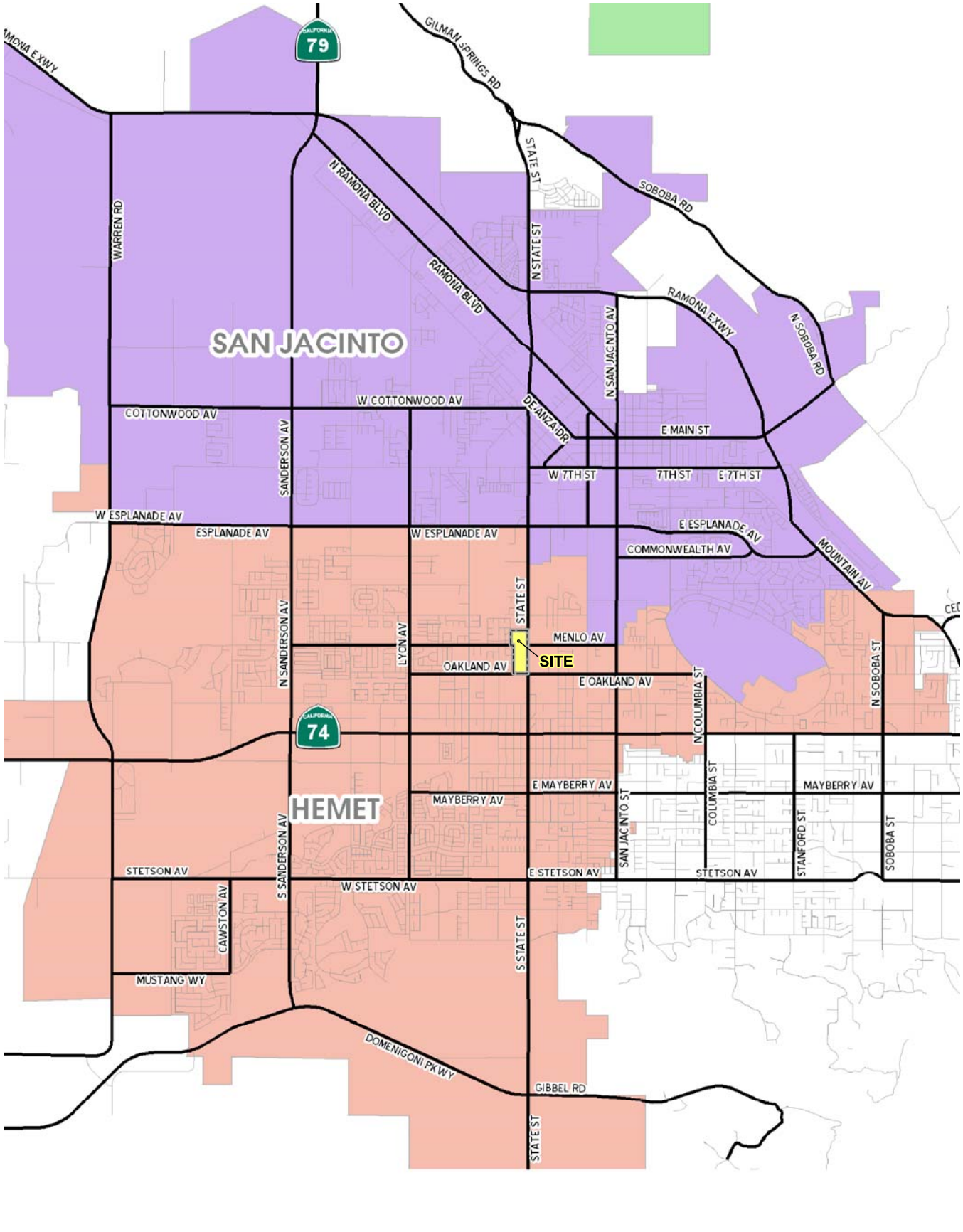
2.2 Analysis Overview

Consistent with the *Riverside County Traffic Impact Analysis Preparation Guide* (April 2008), the study area includes any intersection of Collector or higher classification street with another Collector or higher classification street, at which the proposed project is anticipated to add 50 or more peak hour trips. Based on this methodology, the following intersections have the potential to be impacted by the proposed project:

1. Lyon Avenue/Menlo Avenue
2. Palm Avenue/Menlo Avenue
3. Gilbert Street/Menlo Avenue
4. Gilbert Street/Oakland Avenue
5. Alessandro Street/Menlo Avenue
6. Alessandro Street/Ancla Lane

EXHIBIT 2-1

REGIONAL LOCATION MAP



7. Alessandro Street/Oakland Avenue
8. State Street/Fruitvale Avenue
9. State Street/Menlo Avenue
10. State Street/Oakland Avenue
11. State Street/Devonshire Avenue

Planned future changes to the nearby arterial system anticipated to influence travel patterns have been taken into account when determining the project trip distribution patterns (discussed in Chapter 4) and the specific analysis locations by time horizon. Analysis locations for existing (2010), interim-year 2016, and buildout year 2020 traffic conditions are illustrated on Exhibit 2-2.

Operation of these facilities has been analyzed for both weekday morning (7:00 to 9:00 AM) and weekday evening (4:00 to 6:00 PM) peak hour conditions for the following scenarios:

Scenario 1: Existing – Existing volumes obtained from recent (2010) traffic counts and existing lane configurations.

Scenario 2: Existing Plus Project (P1) – Existing volumes plus the new traffic generated by the proposed project's first phase of development.

Scenario 3: Existing Plus Project (Buildout) – Existing volumes plus the new traffic generated by all phases of the proposed project's development.

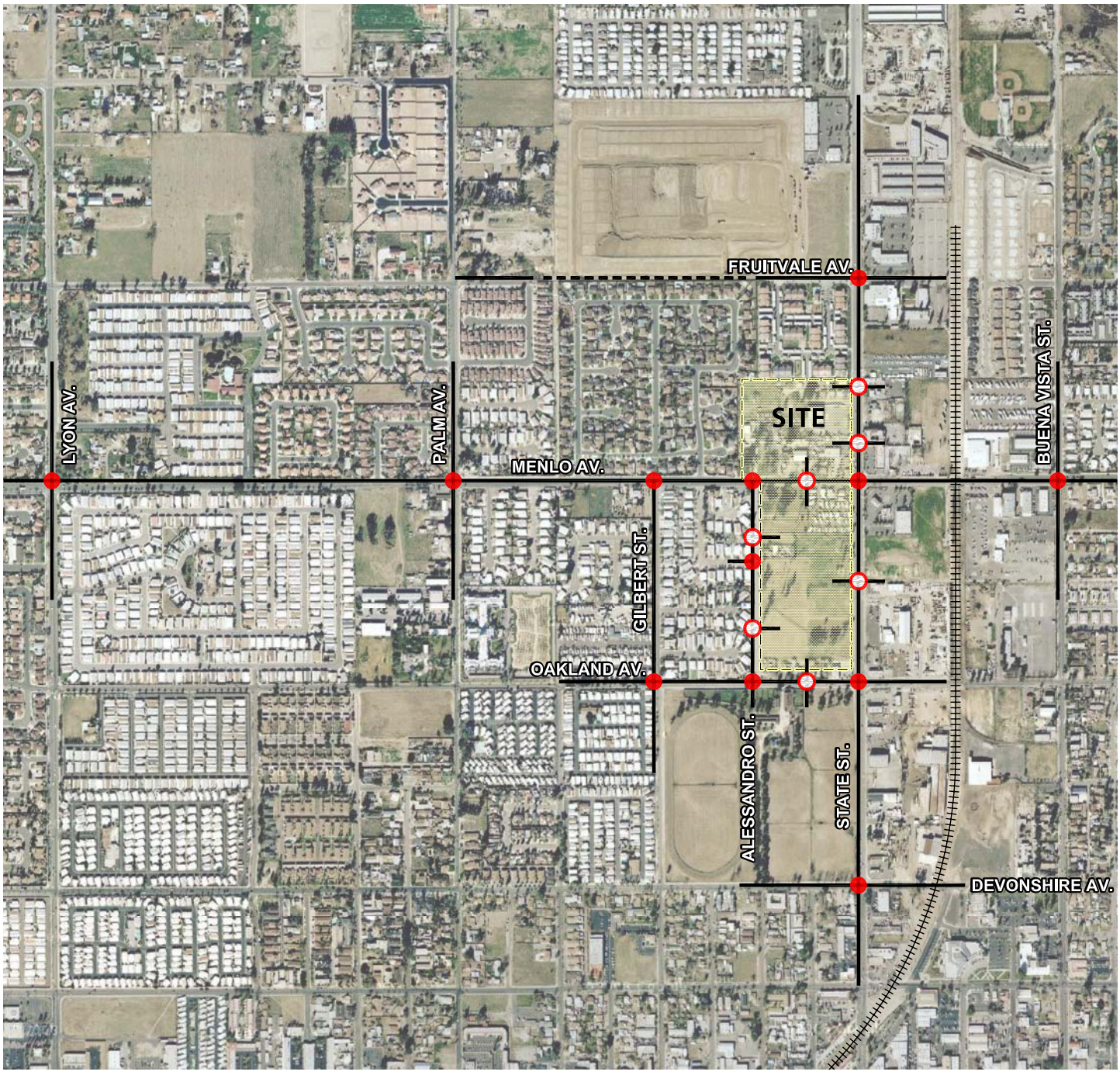
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Scenario 4: Interim-Year 2016 Without Project – Existing volumes plus six years of ambient growth plus traffic from pending and approved but not yet constructed developments in the area.

Scenario 5: Interim-Year 2016 With Project – Volumes and transportation system from Scenario 2 plus the new traffic generated by the proposed project's first phase of development.

EXHIBIT 2-2

STUDY AREA LOCATION MAP



LEGEND:

- = EXISTING INTERSECTION ANALYSIS LOCATION
- = FUTURE INTERSECTION ANALYSIS LOCATION
- = ROADWAY SEGMENT TO BE ANALYZED

N

Scenario 6: Buildout Year 2020 Without Project – Existing volumes plus ten years of ambient growth plus traffic from pending and approved but not yet constructed developments in the area.

Scenario 7: Buildout Year 2020 With Project – Volumes and transportation system from Scenario 4 plus the new traffic generated by all phases of the proposed project's development.

2.3 Report Organization

The traffic impact analysis is divided into the following nine (9) chapters:

Chapter 1: Executive Summary – identifies the impacts and mitigation measures recommended for each analysis scenario.

Chapter 2: Introduction – includes the purpose of the traffic impact analysis and report organization, and discusses the various methodologies applied in the analysis of the study area intersection.

Chapter 3: Existing Conditions – describes the existing transportation facilities and existing traffic operations in the area of the project, including the bicycle, pedestrian and transit facilities that currently exist in the project vicinity.

Chapter 4: Projected Future Traffic – presents the trip generation for the project by phase, the distribution of project traffic and resulting assignment of project trips for each of the two (2) phases of development. Trip generation for cumulative development projects, the distribution of cumulative project traffic and resulting assignment of cumulative project trips for each of the two (2) project phases is also presented.

Chapter 5: Existing Plus Project Conditions – presents the Existing Plus Project peak hour volumes for phase 1 and project Buildout, identifies potential impacts to study area intersections, and recommends mitigation measures to address significant impacts.

Chapter 6: Year 2020 Conditions – presents the project Interim-Year 2016 Without Project and With Project peak hour volumes, identifies potential impacts at study area intersections, and recommends mitigation measures to address significant impacts.

Chapter 7: Year 2020 Conditions – presents the project Buildout Year 2020 Without Project and With Project peak hour volumes, identifies potential impacts at study area intersections, and recommends mitigation measures to address significant impacts.

Chapter 8: Site-Access and On-Site Circulation – discusses site access and on-site circulation recommendations.

2.4 Analysis Methods

Traffic operations of roadway facilities are described with the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS "A", representing completely free-flow conditions, to LOS "F", representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, an unstable level, where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.4.1 Signalized Intersections

The City of Hemet and the County of Riverside each require signalized intersection operations analysis based on the methodology as described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) by the Transportation Research Board. Intersection level of service operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

All study area intersections have been analyzed using the software package Traffix (Version 8.0 R1, 2008). For signalized intersections the intersection level of service is directly related to the average control delay per vehicle and is correlated to a level of service letter grade designation as described in Table 2-1.

Table 2-1

Signalized Intersection

Level of Service (LOS) Thresholds

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Source: HCM 2000, Chapter 16

2.4.2 Unsignalized Intersections

The City of Hemet and County of Riverside each require the operations of unsignalized intersections be evaluated using the methodology described in Chapter 17 of the HCM. The level of service rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, level of service is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, level of service is computed for the intersection as a whole. Analyses of all unsignalized study area intersections have utilized the Traffix software (Version 8.0 R1, 2008).

Table 2-2

Unsignalized Intersection

Level of Service (LOS) Thresholds

Level of Service	Description	Average Control Per Vehicle (Seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00
Source: HCM 2000, Chapter 17		

2.5 Level of Service Criteria

The definition of an intersection deficiency has been obtained from the City of Hemet General Plan. The City of Hemet General Plan states that peak hour intersection operations of Level of Service (LOS) "D" or better are generally acceptable. Therefore, any intersection operating at LOS "E" or "F" will be considered deficient.

In addition, the City of Hemet initiative, Measure "A" (adopted July 7, 1988), establishes that LOS "C" should be maintained on all roadway segments within the City.

2.6 Thresholds of Significance

The City of Hemet has determined that roadway segments and intersections that operate below LOS thresholds (LOS "C" for roadway segments and LOS "D" for intersections) should be identified and improved to an acceptable LOS; although specific criteria to identify project-related impacts is not specified in the City of Hemet General Plan. As such, this traffic study adheres to County of Riverside guidance for the purpose of determining project and cumulative traffic impacts.

Based on Riverside County traffic study guidelines, a "significant" traffic impact would occur when an intersection which currently operates at an acceptable level of service (i.e., LOS "D" or better) in the pre-project condition falls to an unacceptable level of service (i.e., LOS "E" or "F") with the addition of project traffic. Therefore, existing plus project traffic conditions are compared to existing conditions and future year with project conditions are compared to future year without project conditions to identify significant impacts according to the following criteria:

- If an intersection is projected to operate at an acceptable level of service (i.e., LOS "D" or better) without the project and the addition of project traffic as measured by 50 or more peak hour trips is expected to cause the intersection to operate at an unacceptable level of service (i.e., LOS "E" or "F"), the impact is considered significant.

- If an intersection is projected to operate at an unacceptable level of service (i.e., LOS "E" or "F") without the project, and the project contributes 50 or more peak hour trips, the impact is considered significant.

A significant cumulative impact is identified when a facility is projected to operate below the level of service standards due to cumulative future traffic AND a project-related traffic increase of 50 or more peak hour trips. Cumulative traffic impacts are created as a result of a combination of the proposed project together with other future developments contributing to the overall traffic impacts requiring additional improvements to maintain acceptable level of service operations with or without the project. A project's contribution can be reduced to less-than-significant if the project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur.

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3.0 EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway, bicycle, pedestrian and transit facilities, and discusses existing intersection, freeway mainline and freeway ramp operations.

3.1 Existing Roadway Network

Site access is provided by Alessandro Street south of Menlo Avenue, Alessandro Street south of Ancla Lane, Menlo Avenue, Oakland Avenue, State Street south of Fruitvale Avenue, and State Street south of Menlo Avenue. This section describes the existing roadway network, which was illustrated previously on Exhibit 2-2. Exhibit 3-1 identifies the existing roadway conditions for study area roadways and intersections, the number of through traffic lanes for existing roadways and the existing intersection controls have been identified.

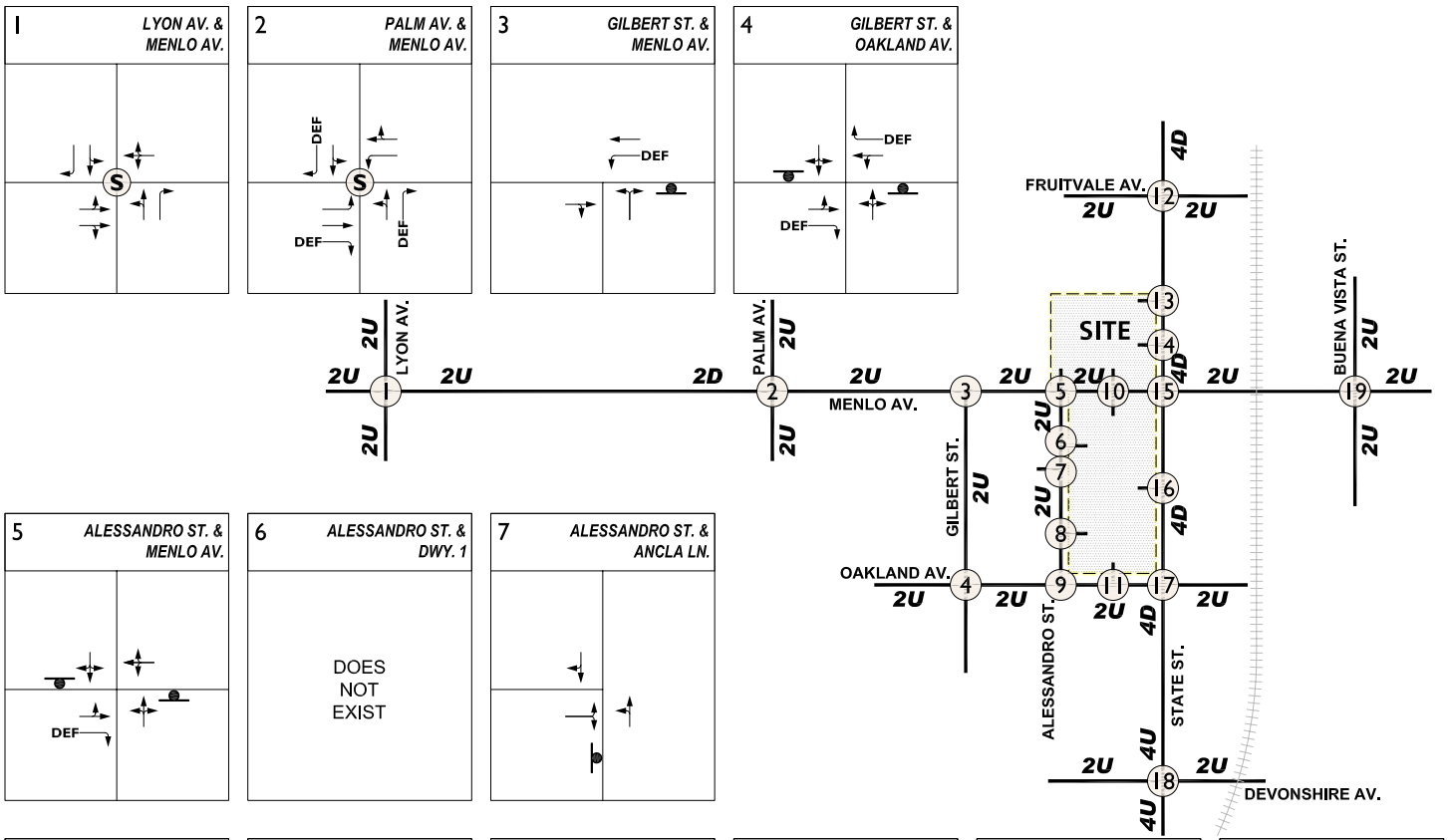
Exhibit 3-2 shows the Hemet General Plan Circulation Element, and Exhibit 3-3 illustrates the Hemet General Plan roadway cross-sections. The existing conditions and the proposed future improvements (as identified on the County of Hemet General Plan Circulation Element) of the General Plan roadways within the study area are described below:

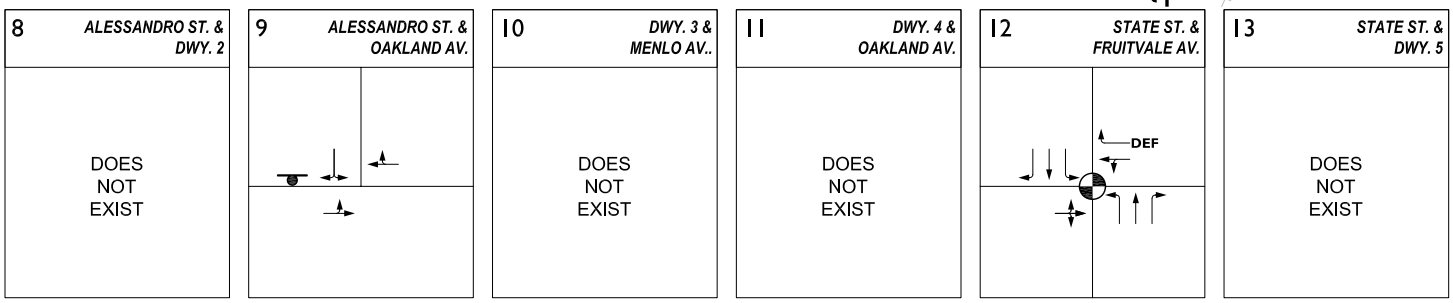
Lyon Avenue is currently a two-lane undivided roadway north and south of Menlo Avenue. There are curb and gutter improvements and sidewalks on both sides of Lyon south of Menlo and only on the west side of Lyon Avenue north of Menlo Avenue. The intersection of Lyon Avenue and Menlo Avenue provides crosswalks on the north leg of Lyon Avenue and East leg of Menlo. Lyon Avenue is designated as a secondary roadway (94-foot right-of-way), north and south of Menlo Avenue.

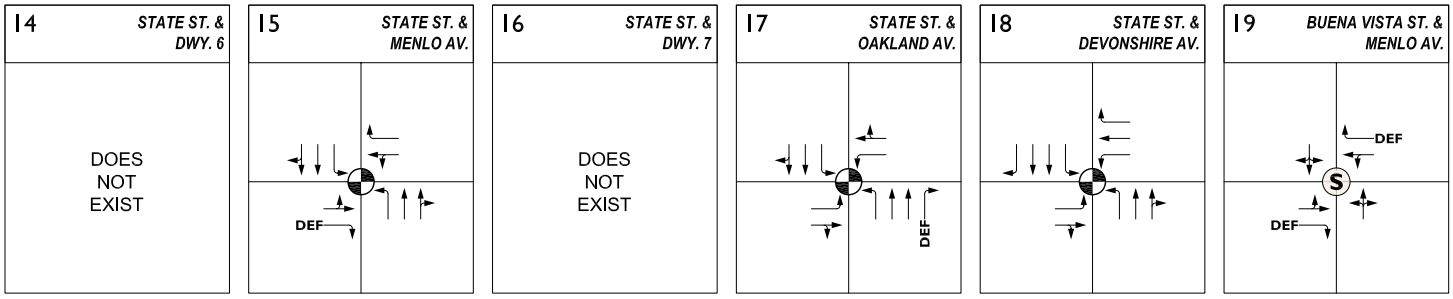
Palm Avenue is currently a two-lane undivided roadway north and south of Menlo Avenue. There are curb and gutter improvements and sidewalks on both sides of Palm Avenue north of Menlo Avenue and only on the east side of Palm Avenue south of Menlo Avenue. There are no crosswalks near the intersection of Palm Avenue and Menlo Avenue. Palm Road is designated as a secondary roadway (94-foot right-of-way), north of Menlo Avenue and is designated as a collector roadway (64 to 74-foot right-of-way) south of Menlo Avenue.

EXHIBIT 3-1

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS







LEGEND:

= TRAFFIC SIGNAL	*4* = NUMBER OF LANES
S = ALL WAY STOP	*D* = DIVIDED
= STOP SIGN	*U* = UNDIVIDED
	DEF = DEFACTO TURN LANE

N

EXHIBIT 3-2

HEMET GENERAL PLAN UPDATE
CIRCULATION ELEMENT

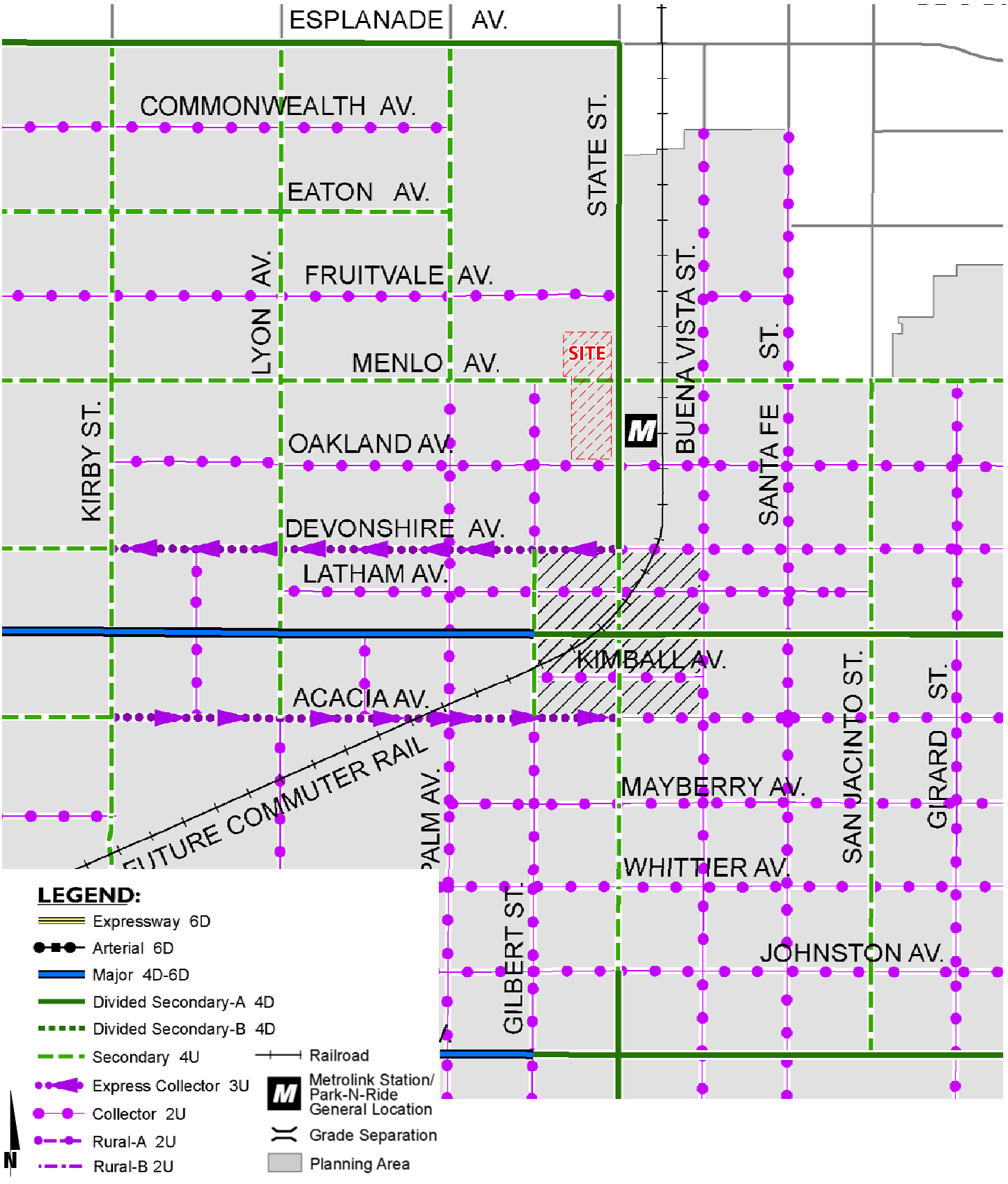
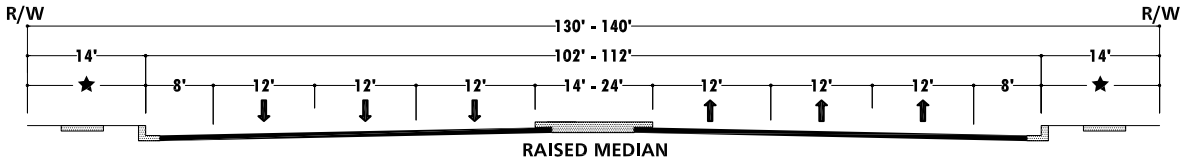
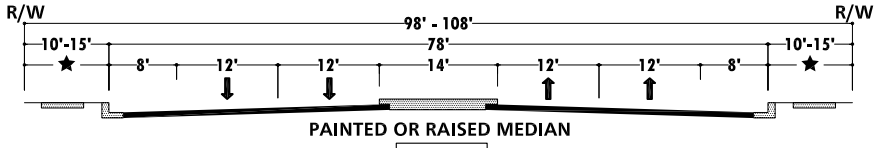


EXHIBIT 3-3

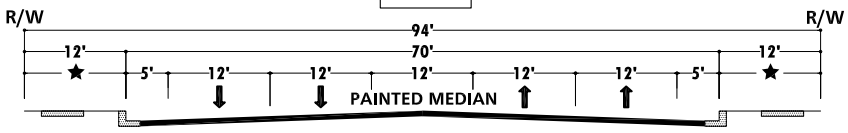
CITY OF HEMET
GENERAL PLAN ROADWAY CROSS-SECTIONS



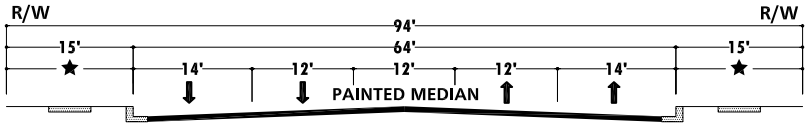
ARTERIAL



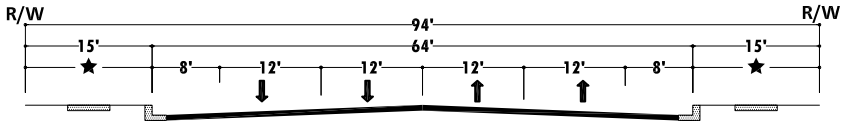
MAJOR



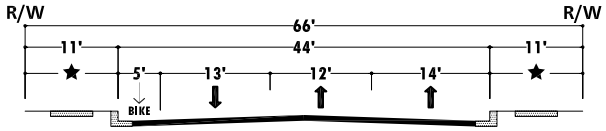
DIVIDED SECONDARY - A (W/ BIKE LANES)



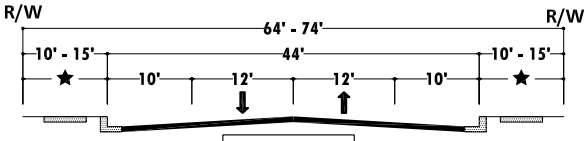
DIVIDED SECONDARY - B



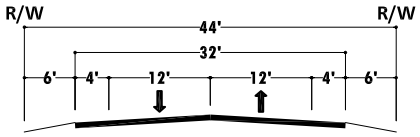
SECONDARY



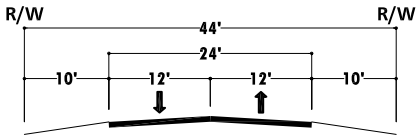
EXPRESS COLLECTOR



COLLECTOR



RURAL - A (W/ BIKE LANES)



RURAL - B

★ *ALL SIDEWALK LOCATIONS PER COMMUNITY DESIGN ELEMENT USING PARKWAYS EXCEPT IN COMMERCIAL OR MULTI-FAMILY AREAS WITH ON-STREET PARKING. CROSS-SECTIONS EMPHASIZE TYPICAL CURB-TO-CURB LAYOUTS. RIGHT-OF-WAY, PARKWAY AND ADDITIONAL LANDSCAPE LOT DESIGNS ARE DISCUSSED IN THE COMMUNITY DESIGN ELEMENT.*

THESE STANDARD SECTIONS ARE FOR TYPICAL ROADWAY SEGMENTS. INTERSECTION LANE REQUIREMENTS MAY INCREASE THE CROSS-SECTION WIDTHS.

NOT TO SCALE

Gilbert Street is currently a two-lane undivided roadway south of Menlo Avenue. There are no sidewalks or curb and gutter improvements along Gilbert Street. There are no crosswalks near the intersection of Palm Avenue and Menlo Avenue. Gilbert Street is designated as a collector roadway (64 to 74-foot right-of-way) south of Menlo Avenue and north of Devonshire Avenue.

Alessandro Street is currently a two-lane undivided roadway south of Menlo Avenue. There are sidewalks and curb and gutter improvements only along the west side of Alessandro. There are no crosswalks near the intersection of Alessandro Street and Menlo Avenue. Alessandro Street is designated as a local roadway south of Menlo Avenue.

State Street is currently a four-lane divided roadway south of Fruitvale Avenue and is a four-lane undivided roadway south of Devonshire Avenue. Currently there are sidewalks and curb and gutter improvements on the west and east sides of State Street between Fruitvale Avenue and Oakland Avenue, and on the east side of State Street between Oakland Avenue and Devonshire Avenue. The intersections of State Street and Fruitvale, State Street and Menlo Avenue, and State Street and Oakland Avenue provide crosswalks on all legs of the intersection. The intersection of State Street and Devonshire Avenue provides a crosswalk on only the southern leg of the intersection. State Street is designated as a divided secondary – a (w/bike lanes) (94-foot right-of-way) between Fruitvale Avenue and Devonshire Avenue.

Buena Vista Street is currently a two-lane undivided roadway. There are limited curb and gutter improvements and sidewalks on Buena Vista Street. There are no crosswalks near the intersection of Buena Vista Street and Menlo Avenue. Buena Vista Street is designated as a collector roadway (64 to 74-foot right-of-way).

Menlo Avenue is currently a two-lane undivided roadway. There are limited curb and gutter improvements and sidewalks on Menlo Avenue. Menlo Avenue is designated as a secondary roadway (94-foot right-of-way).

Oakland Avenue is currently a two-lane undivided roadway. There are limited curb and gutter improvements and sidewalks on Oakland Avenue. Oakland Avenue is designated as a collector roadway (64 to 74-foot right-of-way).

Devonshire Avenue is currently a two-lane undivided roadway. There are limited curb and gutter improvements and sidewalks on Devonshire Avenue. Devonshire Avenue is designated as an express collector (66-foot right-of-way) between Lyon Avenue and State Street and as a collector (64 to 74-foot right-of-way) east of State Street.

3.2 Transit Service

The project area is currently served by Riverside Transit Agency (RTA), a public transit agency serving Riverside County with bus service along Lyon Avenue, Menlo Avenue, Fruitvale Avenue, Oakland Avenue, and State Street through various routes (Routes 31, 33 and 74). The existing bus routes provided in the area by are shown on Exhibit 3-4.

3.3 Bicycle and Pedestrian Facilities

The City of Hemet's proposed General Plan Update identifies a bikeway network planning area as illustrated on Exhibit 3-5. There is a proposed bikeway network located along Lyon Avenue, Palm Avenue, Gilbert Avenue, Devonshire Avenue, Oakland Avenue, and Menlo Avenue.

3.4 Existing Intersection Traffic Volumes

Weekday AM (7:00 to 9:00 AM) and PM (4:00 to 6:00 PM) peak period intersection turning movement counts were conducted at the study area intersections in June 2010. Traffic count worksheets are included in Appendix "3.1". Existing (2010) average daily traffic (ADT) volumes on roadways throughout the study area are shown on Exhibit 3-6. Existing (2010) ADT volumes are based upon factored intersection peak hour counts conducted for Urban Crossroads, Inc. using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume

Existing (2010) intersection level of service calculations are based upon manual AM and PM peak hour turning movement counts illustrated on Exhibits 3-7 and 3-8.

EXHIBIT 3-4

HEMET GENERAL PLAN UPDATE
TRANSIT SERVICE FEATURES

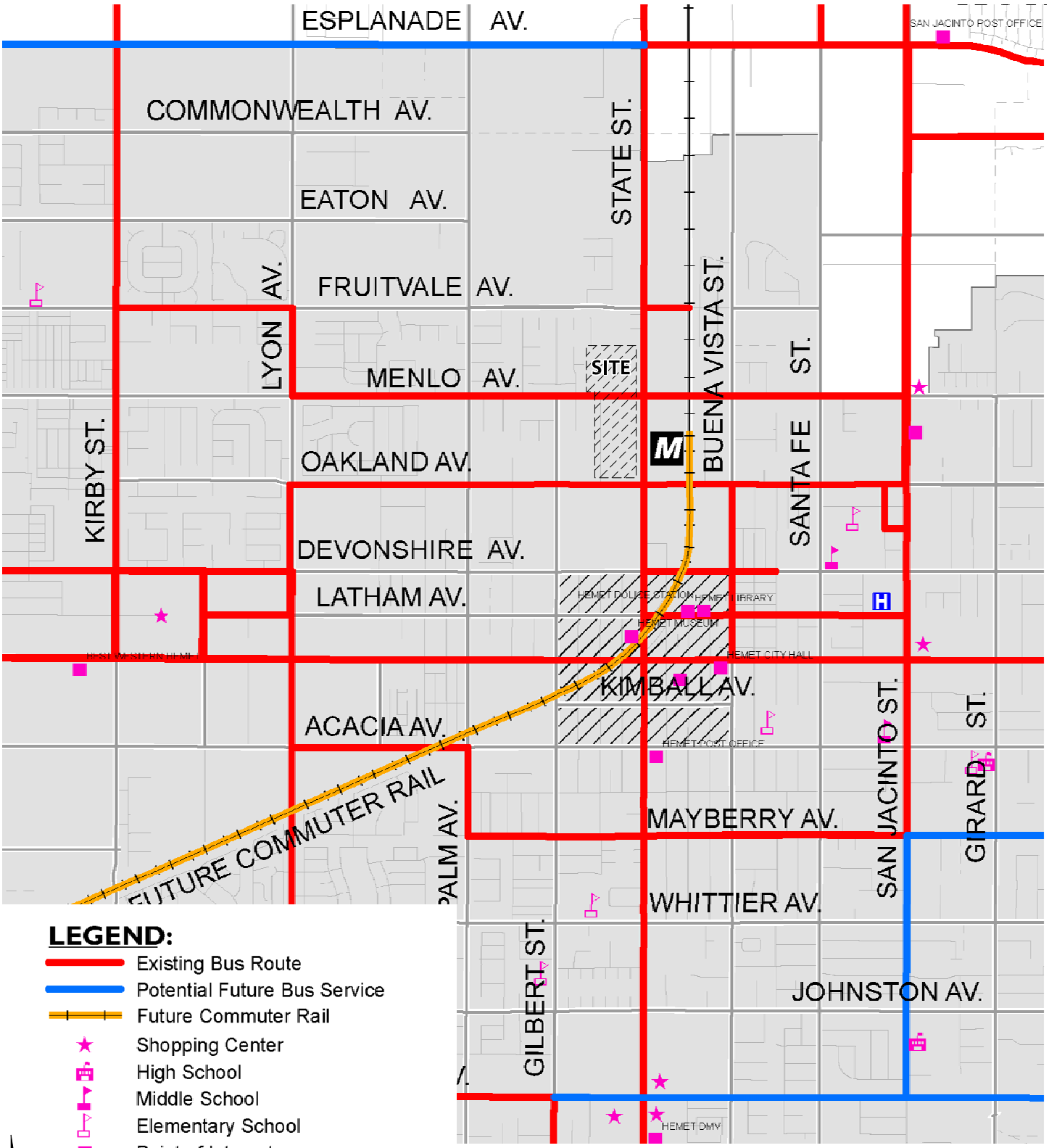


EXHIBIT 3-5

HEMET GENERAL PLAN UPDATE
BIKEWAY NETWORK

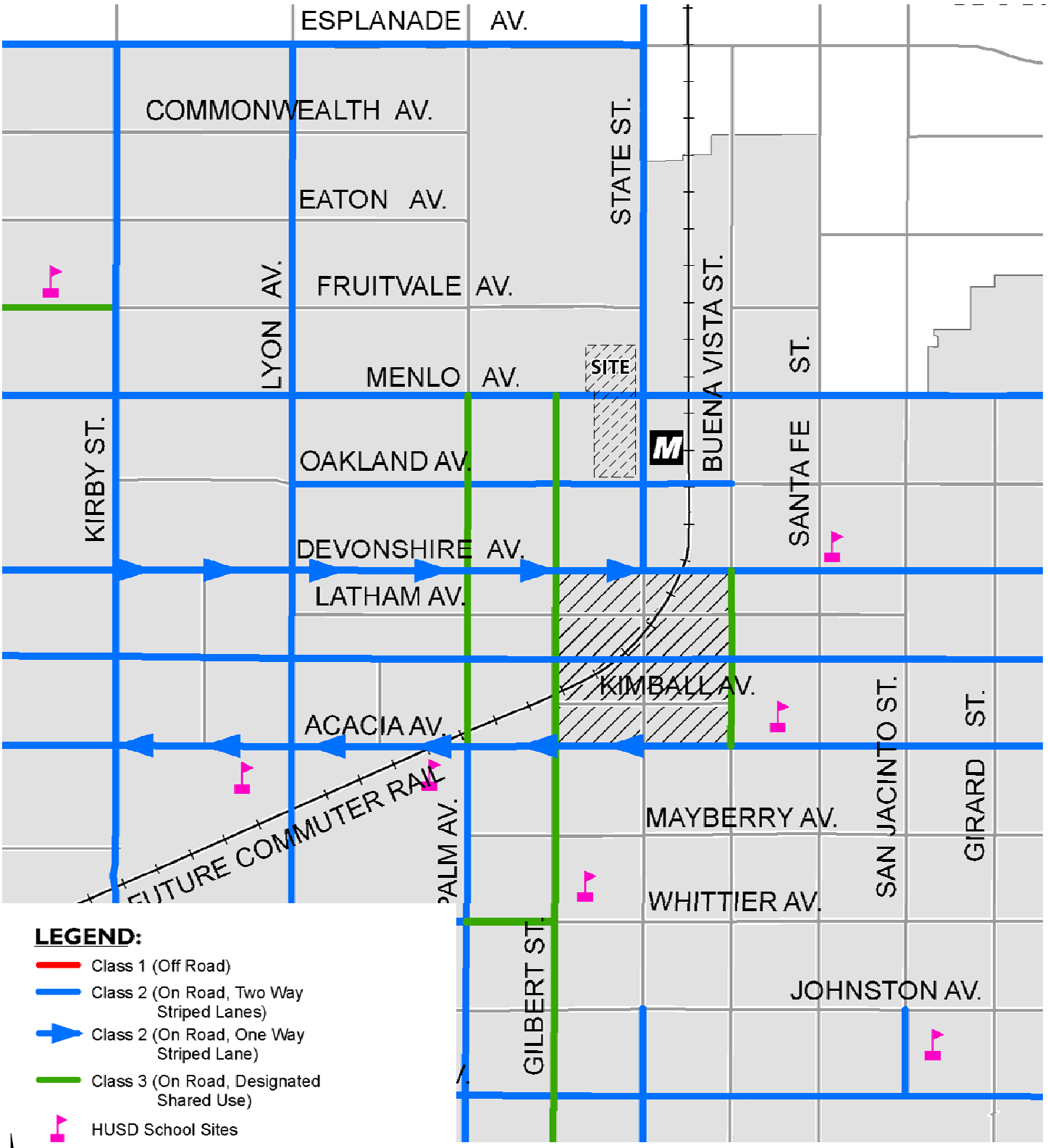


EXHIBIT 3-6

EXISTING (2010) AVERAGE DAILY TRAFFIC (ADT)

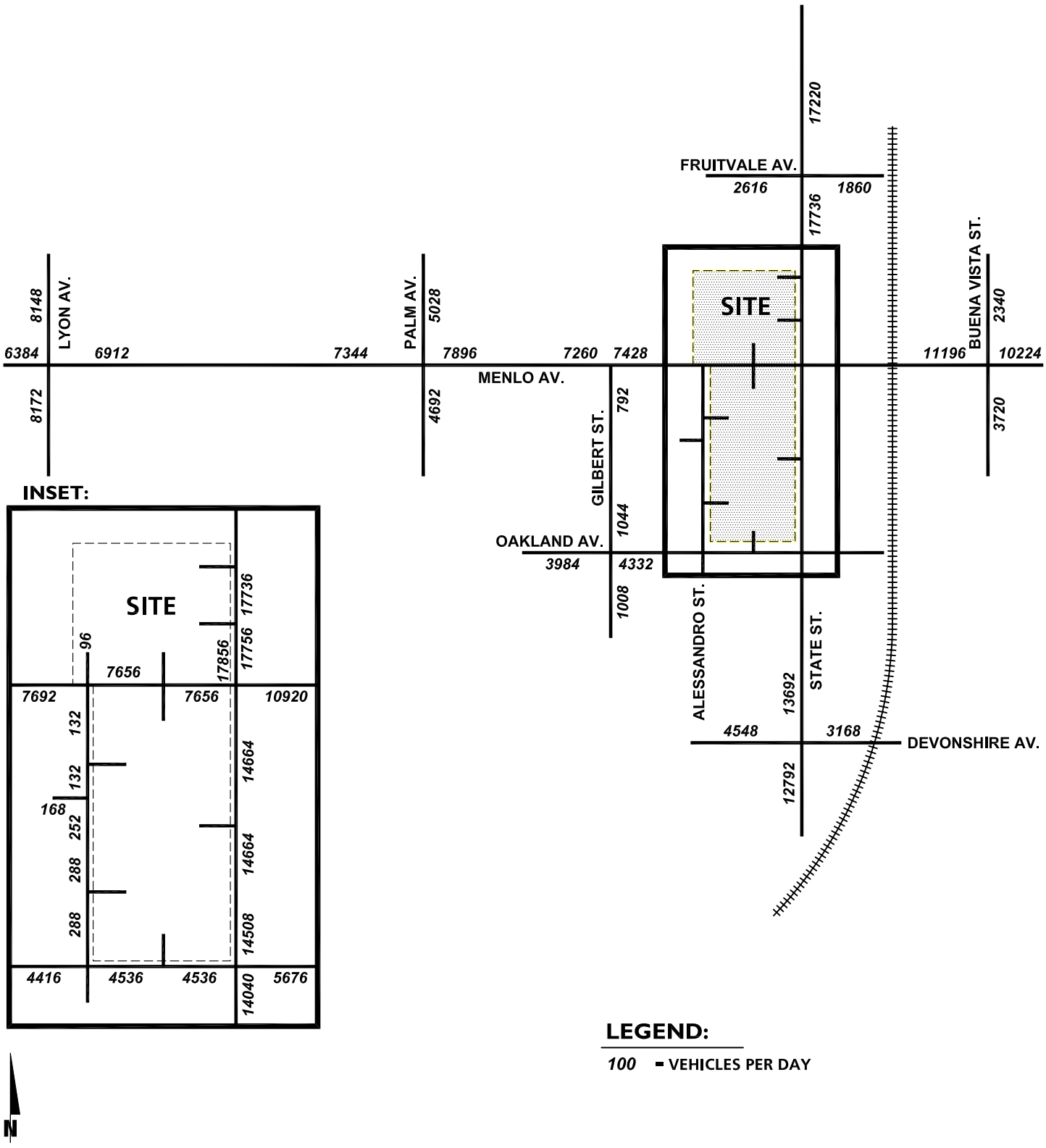


EXHIBIT 3-7

EXISTING AM PEAK HOUR INTERSECTION VOLUMES

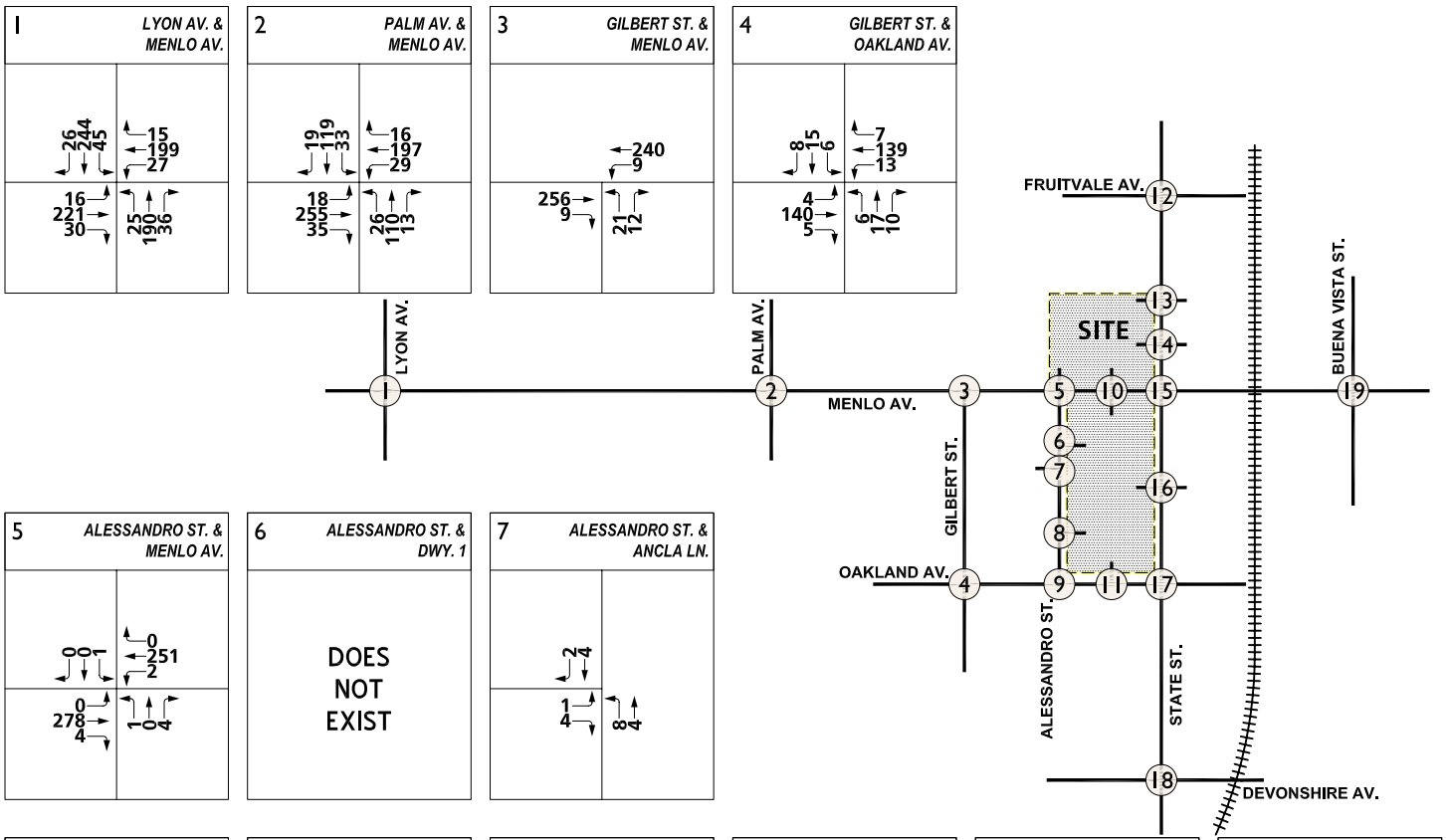
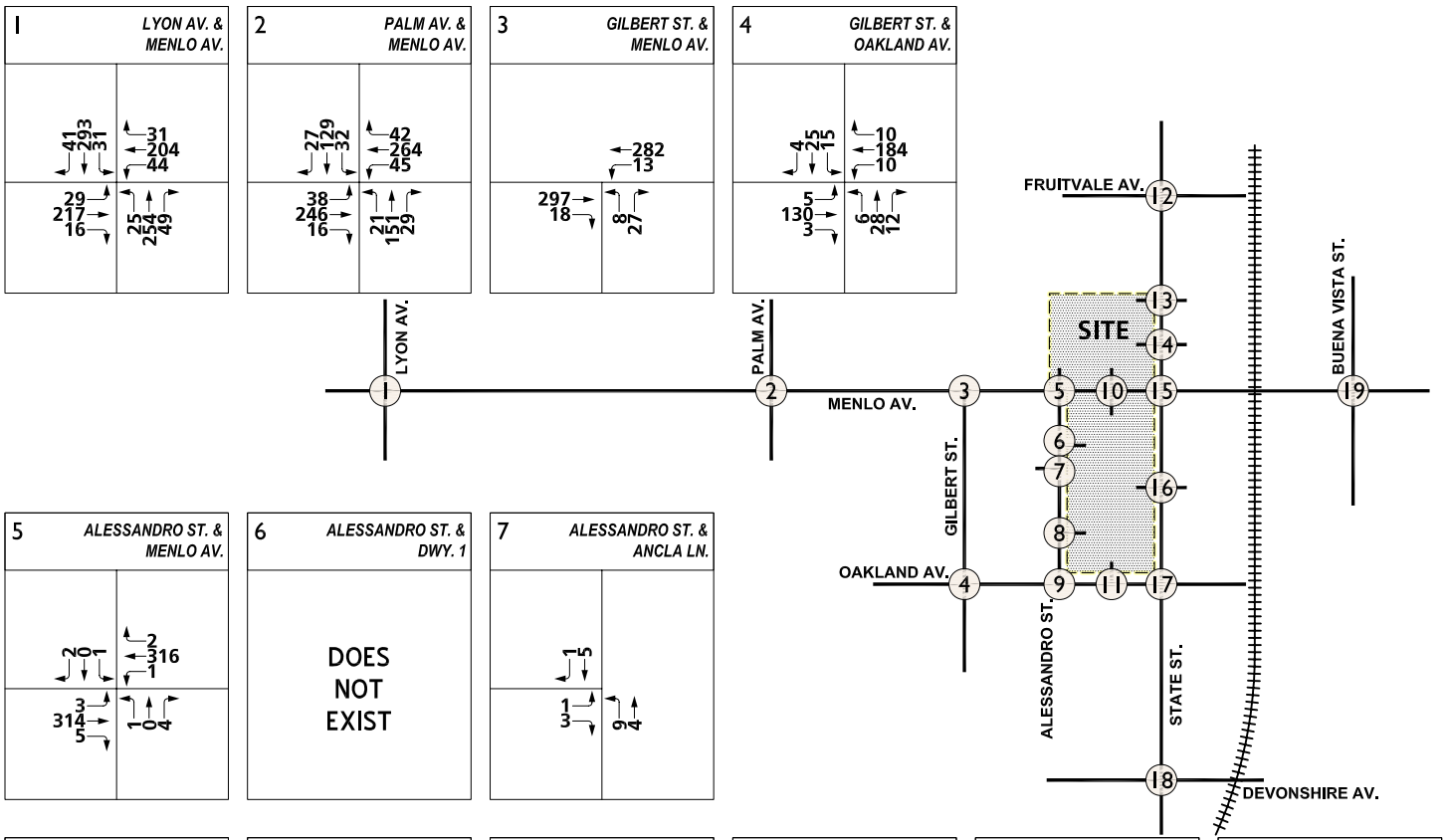


EXHIBIT 3-8

EXISTING PM PEAK HOUR INTERSECTION VOLUMES



3.5 Existing Conditions Analysis

3.5.1 Intersection Operations

LOS calculations were conducted for the study area intersections to evaluate their operations under existing (2010) conditions. Table 3-1 presents the LOS results for the study area intersections under existing (2010) conditions during the weekday AM and PM peak hours.

For existing (2010) traffic conditions, all study area intersections were found to operate at an acceptable LOS during the peak hours.

3.6 Summary

As noted in the analysis above, the local circulation system in the vicinity of the project operates at an acceptable LOS.

Table 3-1

Intersection Analysis for Existing (2010) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	22.7	20.3	C	C
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	13.9	15.5	B	C
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	11.8	11.3	B	B
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	11.2	11.9	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	13.7	11.8	B	B
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.5	8.4	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.3	10.5	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	17.9	18.5	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	32.2	38.1	C	D
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	17.8	18.5	B	B
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.1	24.7	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	15.6	21.6	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

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4.0 PROJECTED FUTURE TRAFFIC

This chapter describes the procedures used to develop project and cumulative traffic forecasts. The results are used to evaluate potential impacts the project would have on the surrounding roadway system.

The amount of traffic added to the roadway system by the project and the known cumulative developments are both estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of traffic which is attracted and produced by a project. The second step estimates directional orientation of traffic to and from the project. The last step includes the assignment of traffic from the site to the adjoining roadway system. This step is based upon the site's trip generation, trip distribution pattern, and proposed arterial highway and local street systems assumed to be in place by the time of initial occupancy of the site.

4.1 Project Description

The project is generally located on either side of Menlo Avenue between Alessandro Street and State Street in the City of Hemet. As previously noted, the project site is comprised of several parcels with a combined area of approximately 28.6 acres, consisting of 96 senior residential dwelling units, 252 apartments, 81 condominium/townhomes, a 137 bed assisted living facility, 16,335 square feet of office use, and 118,919 square feet of commercial retail use. The project is assumed to be built and fully operational by Year 2020.

For purposes of this traffic analysis, the project is assumed to be built in two (2) development phases. Phase 1 (2016) includes Planning Areas (PA) 1 and PA 2, and is assumed to consist of 96 senior residential dwelling units, a 137 bed assisted living facility, 16,335 square feet of office use, and 38,115 square feet of commercial retail use. Phase 2 (2020) includes PAs 3 through 7, and is assumed to consist of 252 apartments, 81 condominium/townhomes, and 81,003 square feet of commercial retail use.

Site access is provided by Alessandro Street south of Menlo Avenue, Alessandro Street south of Ancla Lane, Menlo Avenue, Oakland Avenue, State Street south of Fruitvale Avenue, and State Street south of Menlo Avenue.

4.1.1 Trip Generation

The traffic generation is based upon the specific land uses planned for the project. Trip generation rates for this project are shown in Table 4-1 and a summary of project trip generation is shown in Table 4-2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 8th Edition, 2008.

There are instances when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. These include reductions for pass-by trips, reductions for internal capture of trips, and reductions to account for traffic generated by uses currently occupied and generating traffic within the project boundary.

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street that offers direct access to the generator. These types of trips are many times associated with retail-oriented developments such as shopping centers, discount stores, banks, restaurants, service stations, and convenience markets, which are often located adjacent to busy streets in order to attract motorists already on the street. These uses attract a portion of their trips from traffic passing the site on the way from an origin to an ultimate destination. As the proposed project has a portion of PAs 2, 4, and 6 that are proposed to contain commercial retail, a conservative 25 percent pass-by reduction (ITE data supports up to a 34% pass-by reduction for shopping center uses) has been applied to the anticipated retail components of PAs 2, 4 and 6 only. The use of a 25 percent pass-by reduction is consistent with other studies performed by Urban Crossroads, Inc. in the City of Hemet.

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. In other words, trips may be made between individual land uses on-site and can be made either by walking or using internal roadways without using external streets. A common example of this internal trip-making occurs at a multi-use development containing retail and office uses. Some of the trips made by office workers to shops, restaurants, and banks may occur on site. These types of trips are defined as internal to (i.e., captured within) the multi-use site.

Table 4-1

Project Trip Generation Rates[1]

Land Use	ITE Code	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Apartments	220	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.72
Condo/Townhouse	230	DU	0.07	0.37	0.44	0.35	0.17	0.52	5.86
Senior Housing	251	DU	0.08	0.14	0.22	0.16	0.11	0.27	3.71
Assisted Living	254	DU	0.12	0.046	0.17	0.15	0.139	0.29	2.74
Office[3]	710	TSF	2.37	0.32	2.69	1.01	4.93	5.94	20.24
Commercial/Retail (118.92 TSF)[4]	820	TSF	0.88	0.56	1.44	2.94	3.06	6.00	63.91

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 8th Edition, 2008.

[2] TSF = Thousand Square Feet; DU = Dwelling Units

[3] Trip generation rates are based on square footage and derived from the ITE regression equation for "Office".

[4] Trip generation rates are based on square footage and derived from the ITE regression equation for "Shopping Center".

Table 4-2

North Hemet Revitalization Plan Trip Generation Summary by Planning Area

TAZ	PA	Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
PHASE 1 (2016)											
1	PA-1	Senior Housing	96	DU	8	13	21	15	11	26	356
	PA-1	Assisted Living	137	BEDS	17	6	23	21	19	40	375
		Internal Capture			*0*	*0*	*0*	*-1*	*0*	*-1*	*-3*
		Existing Land Uses			*-11*	*-7*	*-18*	*-11*	*-10*	*-21*	*-133*
		Subtotal TAZ 1			*13*	*13*	*26*	*24*	*19*	*43*	*596*
2	PA-2	Office	16.34	TSF	39	5	44	16	81	97	331
	PA-2	Commercial	38.12	TSF	34	21	55	112	117	229	2,436
		Internal Capture			*-3*	*-2*	*-5*	*-12*	*-15*	*-27*	*-292*
		Pass-by (25%)			*0*	*0*	*0*	*-25*	*-25*	*-50*	*-536*
		Existing Land Uses			*-10*	*-10*	*-20*	*-17*	*-16*	*-33*	*-411*
		Subtotal TAZ 2			*59*	*15*	*74*	*75*	*140*	*215*	*1,528*
		Phase 1 Subtotal			***73***	***27***	***100***	***99***	***160***	***259***	***2,123***
PHASE 2 (2020)											
3	PA-3	Apartments	20	DU	2	8	10	8	4	12	134
	PA-3	Condo/Townhouse	20	DU	1	7	9	7	3	10	117
	PA-4	Condo/Townhouse	40	DU	3	15	18	14	7	21	234
	PA-5	Apartments	150	DU	15	62	77	60	33	93	1,008
	PA-6	Apartments	60	DU	6	25	31	24	13	37	403
	PA-7	Apartments	22	DU	2	12	17	14	8	22	211
	PA-7	Condo/Townhouse	21	DU	1	8	9	7	4	11	123
		Internal Capture			*0*	*0*	*0*	*-2*	*0*	*-2*	*-3*
		Existing Land Uses			*-44*	*-45*	*-89*	*-50*	*-47*	*-97*	*-1,329*
		Subtotal TAZ 3			*-13*	*91*	*81*	*82*	*25*	*108*	*899*
4	PA-4	Commercial	53.36	TSF	47	30	77	157	163	320	3,410
	PA-6	Commercial	27.44	TSF	24	15	40	81	84	165	1,754
		Internal Capture			*-6*	*-7*	*-13*	*-39*	*-49*	*-88*	*-821*
		Pass-by (25%)			*0*	*0*	*0*	*-50*	*-50*	*-99*	*-1,086*
		Existing Land Uses			*-3*	*-11*	*-13*	*-11*	*-7*	*-18*	*-150*
		Subtotal TAZ 4			*62*	*28*	*90*	*138*	*142*	*280*	*3,108*
		Phase 2 Subtotal			***50***	***119***	***171***	***220***	***167***	***387***	***4,006***
EXTERNAL TOTAL					**123**	**147**	**271**	**319**	**327**	**646**	**6,130**

[1] DU = Dwelling Units; TSF = Thousand Square Feet

Specific procedures for estimating the number of trips that could reasonably be expected to stay within the site based on the specific mix of uses proposed by the projected are defined within the ITE Trip Generation Handbook, 2nd Edition, and June 2004. Internal rates of capture for each applicable land use have been identified per the procedures outlined by ITE. Internal trip capture worksheets are presented in Appendix 4.1.

The proposed project site currently contains existing land uses such as single family residential units, a mobile home park, specialty retail, a convenience market, automobile care centers, and a restaurant. Trip generation rates for existing uses are shown in Table 4-3 and a summary of existing trip generation is shown in Table 4-4. These existing trips have been calculated and have been subtracted from the proposed project trips to obtain the number of net new trips the project would contribute to the surrounding circulation system. The project's net contribution of new vehicle trips is as shown on Table 4-2.

With adjustments made for pass-by, internal capture and existing land uses currently generating traffic, the project is anticipated to generate a net total of approximately 271 weekday AM peak hour trips and 646 weekday PM peak hour trips.

4.1.2 Trip Distribution and Assignment

The directional orientation of traffic has been determined by evaluating existing and proposed land uses, highways and freeways within the vicinity of the project along with existing traffic patterns understood from current traffic counts. The project traffic is distributed to the network via primary project driveways to ensure the necessary lane geometrics for the site access points are understood, and to identify potential project impacts to near-by intersections.

For the purposes of this analysis, the project has been divided into four (4) traffic analysis zones (TAZs). Exhibit 4-1 illustrates the four (4) TAZs.

Project TAZ 1 trip distribution for the senior housing and assisted living, PA 1, in Phase 1 (2016) is graphically depicted on Exhibit 4-2.

Table 4-3

Existing Trip Generation Rates[1]

Land Use	ITE Code	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	240	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Mobile Home Park	240	DU	0.09	0.35	0.44	0.37	0.22	0.59	4.99
Specialty Retail[3]	814	TSF	0.72	0.48	1.2	1.19	1.52	2.71	44.32
Convenience Mkt. (15-16 Hrs.)[4]	852	TSF	15.51	15.51	31.02	16.94	17.63	34.57	500
High Turnover (Sit-Down) Restaurant	932	TSF	5.99	5.53	11.52	6.58	4.57	11.15	127.15
Automobile Care Center[4]	942	TSF	1.91	1.03	2.94	1.69	1.69	3.38	20

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 8th Edition, 2008.

[2] TSF = Thousand Square Feet; DU = Dwelling Units

[3] ITE does not provide AM peak hour rates of the adjacent street traffic, as such the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002) has been utilized.

[4] ITE does not provide daily rates, as such the SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002) has been utilized.

Table 4-4

Trip Generation Summary by Planning Area for Existing Uses

TAZ	PA	Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
1	PA-1	Single Family Detached Residential	2	DU	0	1	2	1	1	2	19
	PA-1	Automobile Care Center	5.69	TSF	11	6	17	10	10	19	114
		TAZ 1 Subtotal			*11*	*7*	*18*	*11*	*10*	*21*	*133*
2	PA-2	Single Family Detached Residential	9	DU	2	5	7	6	3	9	86
	PA-2	Automobile Care Center	1.82	TSF	3	2	5	3	3	6	36
	PA-2	Specialty Retail	6.5	TSF	5	3	8	8	10	18	288
		TAZ 2 Subtotal			*10*	*10*	*20*	*17*	*16*	*33*	*411*
3	PA-5	Single Family Detached Residential	1	DU	0	1	1	1	0	1	10
	PA-6	Single Family Detached Residential	2	DU	0	1	2	1	1	2	19
	PA-6	High Turnover (Sit-Down) Restaurant	1.45	TSF	9	8	17	10	7	16	184
	PA-6	Convenience Mkt. (15-16 Hrs.)	2.90	TSF	45	45	90	49	51	100	1,450
		Pass-by (25%)			*-11*	*-11*	*-22*	*-12*	*-13*	*-25*	*-363*
		Subtotal			*34*	*34*	*67*	*37*	*38*	*75*	*1,088*
	PA-7	Single Family Detached Residential	3	DU	1	2	2	2	1	3	29
		TAZ 3 Subtotal			*44*	*45*	*89*	*50*	*47*	*97*	*1,329*
4	PA-4	Mobile Home Park	30	DU	3	11	13	11	7	18	150
TOTAL					**67**	**73**	**140**	**89**	**80**	**169**	**2,023**

[1] DU = Dwelling Units; TSF = Thousand Square Feet

EXHIBIT 4-1

PROJECT TRAFFIC ANALYSIS ZONES (TAZ'S)

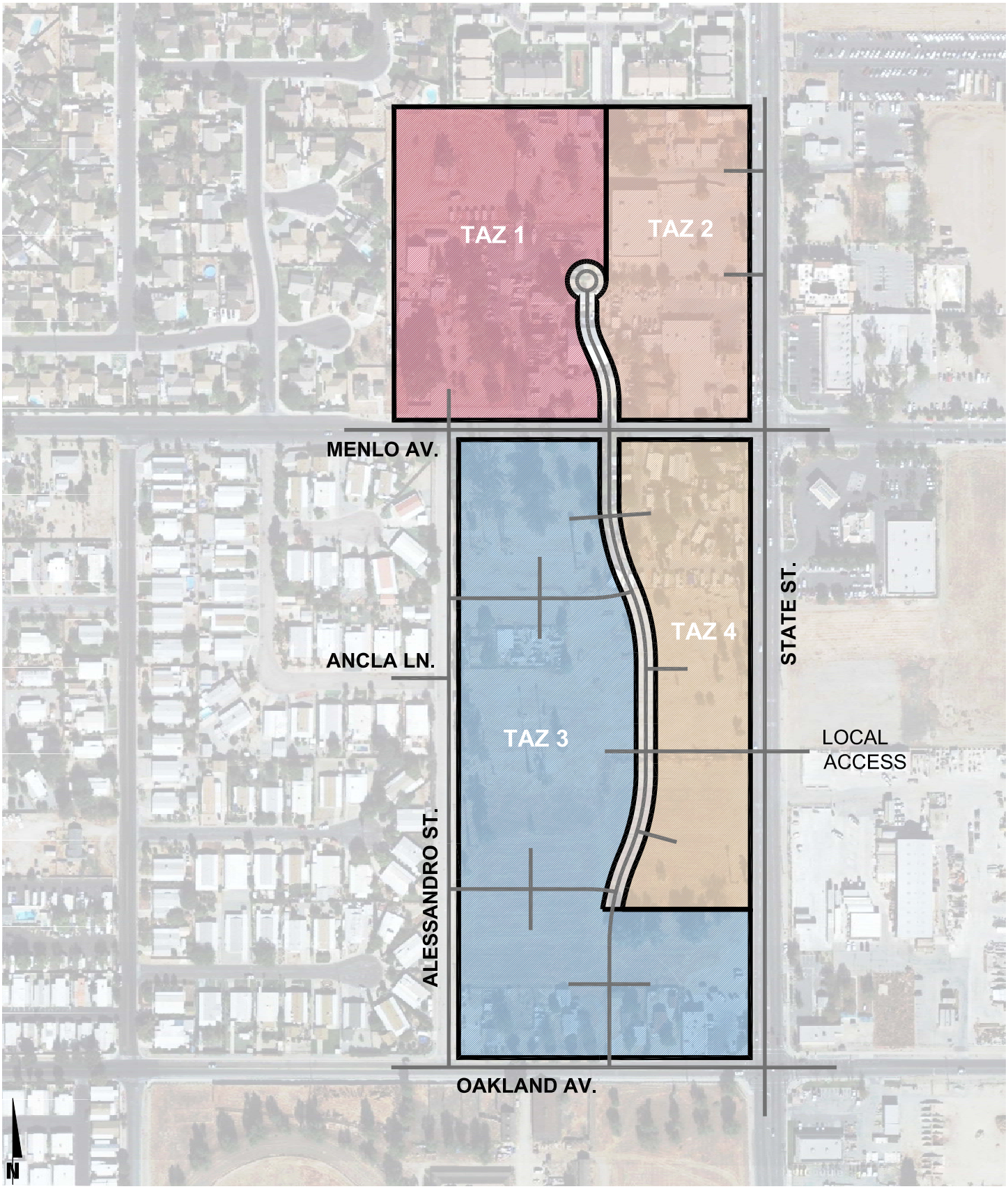
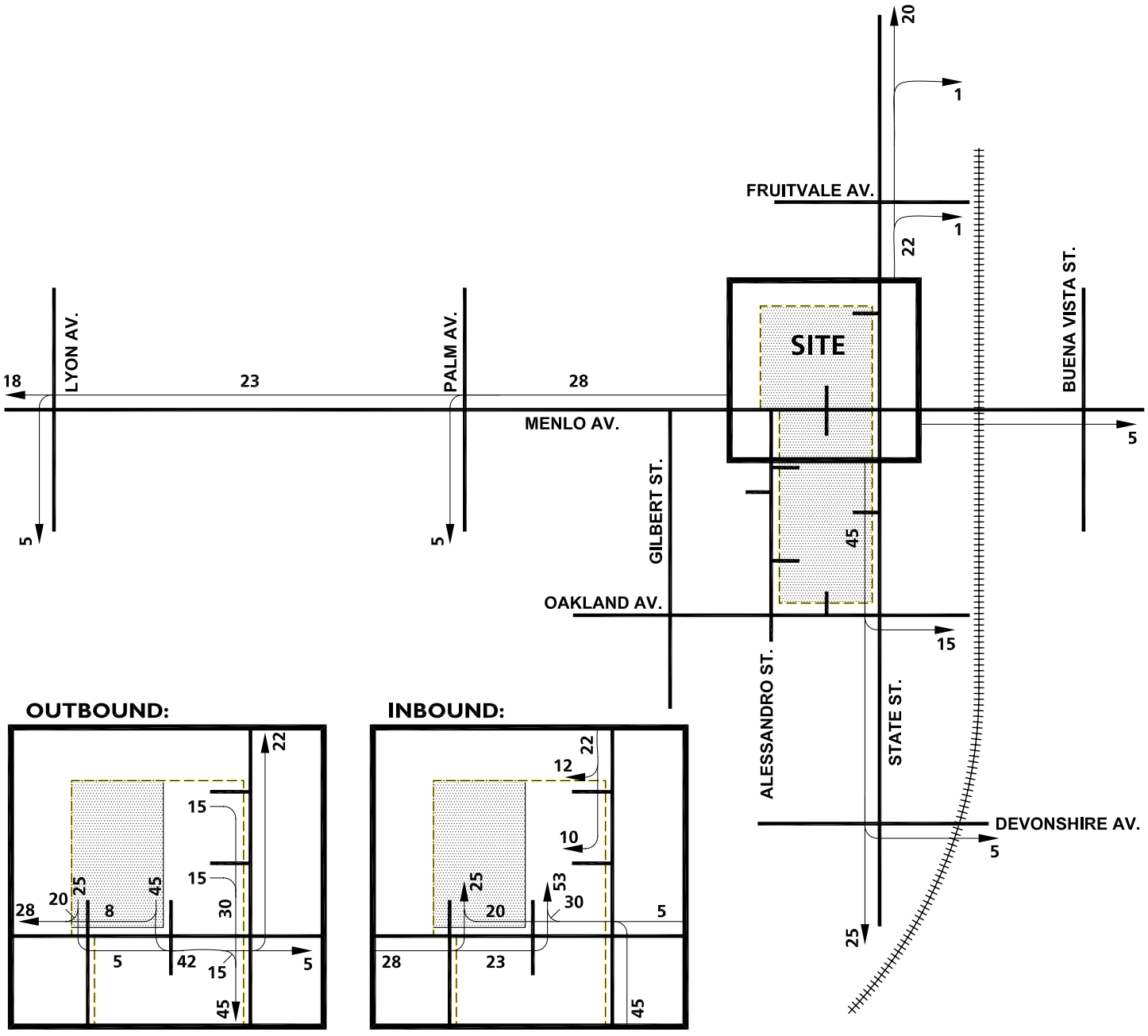


EXHIBIT 4-2

PROJECT TAZ 1 TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

N

Project TAZ 2 trip distribution, which includes the office and commercial retail uses, PA 2, in Phase 1 (2016) is illustrated on Exhibit 4-3.

Project TAZ 3 distribution, which includes the apartments and condominium/townhomes, PA's 3 through 7, in Phase 2 (2020) is illustrated on Exhibit 4-4.

Project TAZ 4 trip distribution for the commercial retail uses, PA 4 and PA 5, in Phase 2 (2020) is illustrated on Exhibit 4-5.

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distribution patterns, and proposed arterial highway and local street systems, which would be in place by the time of initial occupancy of the site.

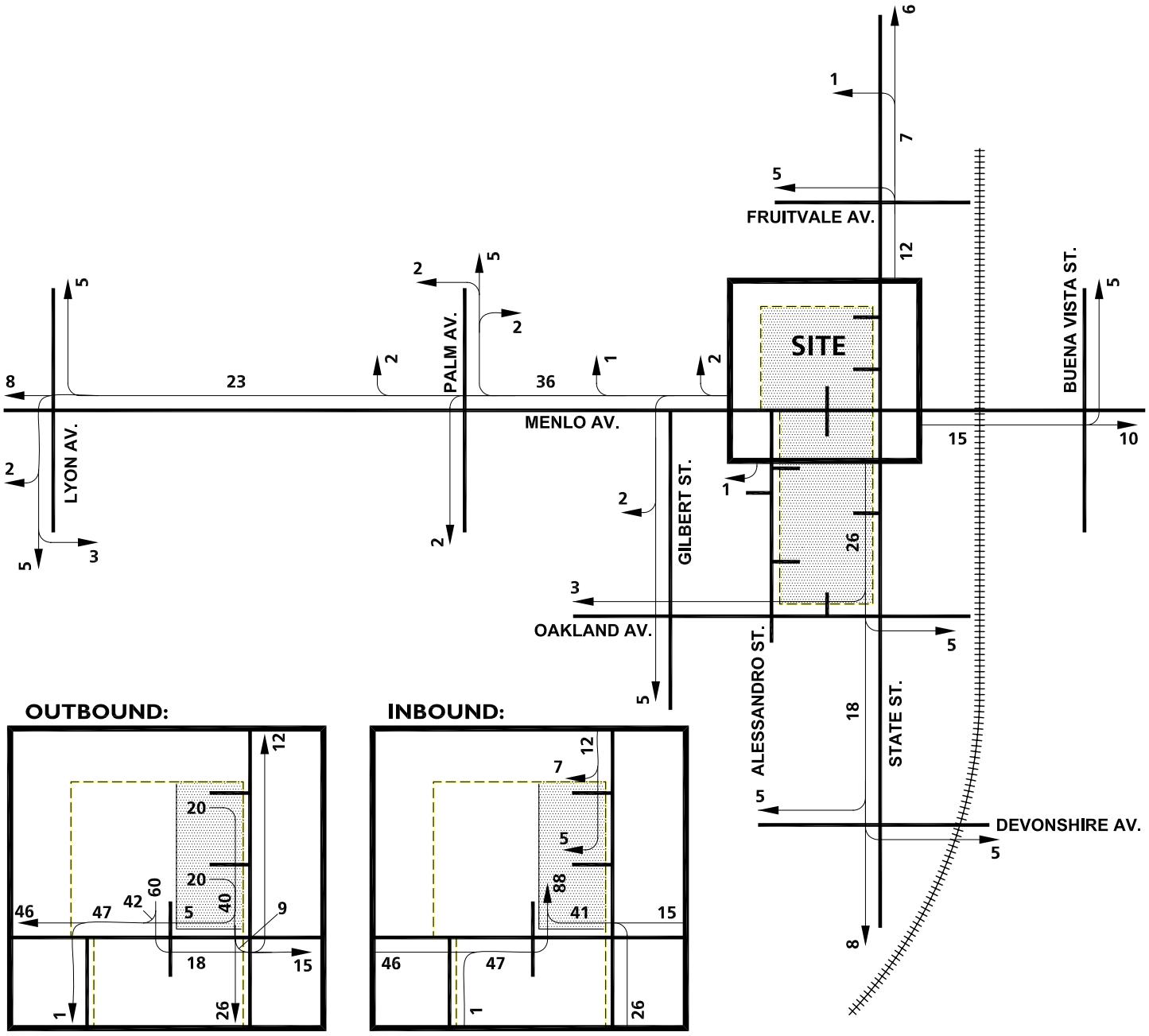
Based on the identified project traffic generation and trip distribution, project average daily traffic (ADT) volumes are shown on Exhibit 4-6 for Phase 1 (2016) conditions and project AM and PM peak hour volumes are shown on Exhibit 4-7 and 4-8. Phase 2 (2020) project ADT volumes are shown on Exhibit 4-9 and project AM and PM peak hour volumes are shown on Exhibits 4-10 and 4-11.

4.2 Background Traffic

To assess future year conditions, project traffic is combined with existing traffic and area-wide growth. Future year traffic forecasts have been based upon six (6) and ten (10) years of background (ambient) growth at 2% per year for 2016 and 2020 conditions, respectively. The total ambient growth rate is 12.62% for 2016 conditions and 21.90% for 2020 conditions. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by known cumulative development. The remaining growth is anticipated to be accounted for by development of future projects in the study area that have been approved and/or are being processed concurrently.

EXHIBIT 4-3

PROJECT TAZ 2
TRIP DISTRIBUTION



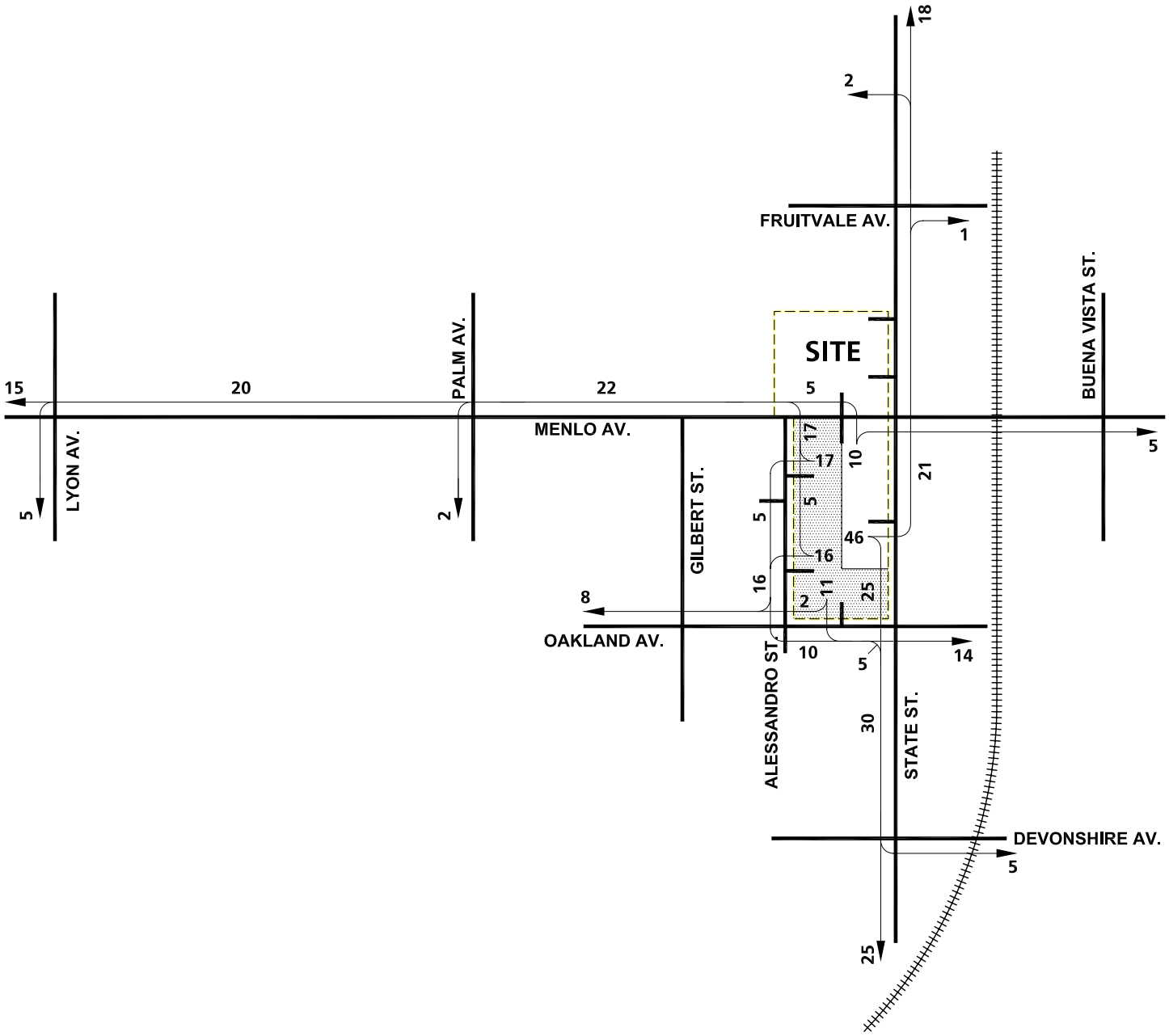
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-4

PROJECT TAZ 3 TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 4-5

PROJECT TAZ 4
TRIP DISTRIBUTION

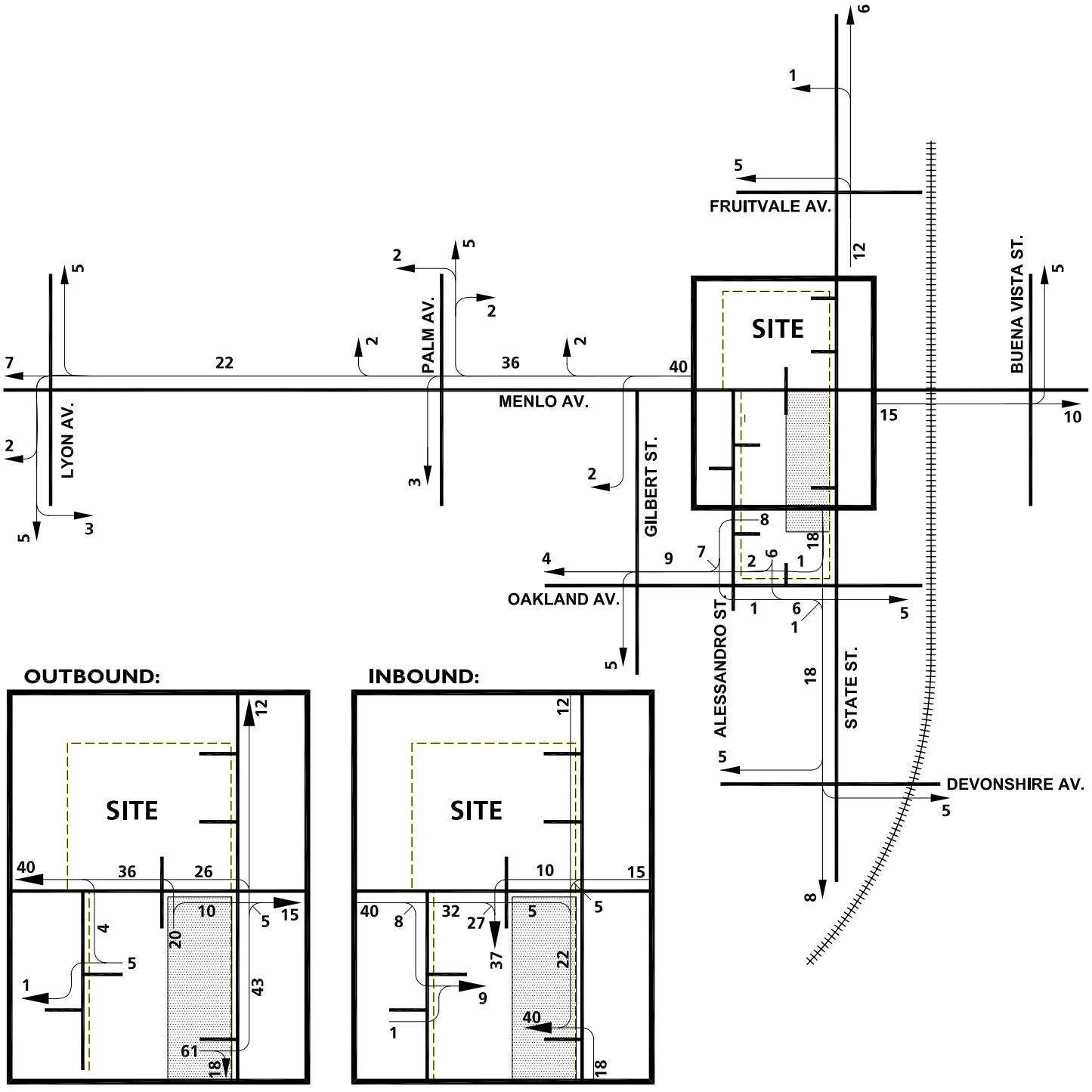


EXHIBIT 4-6

PROJECT (2016) AVERAGE DAILY TRAFFIC (ADT)

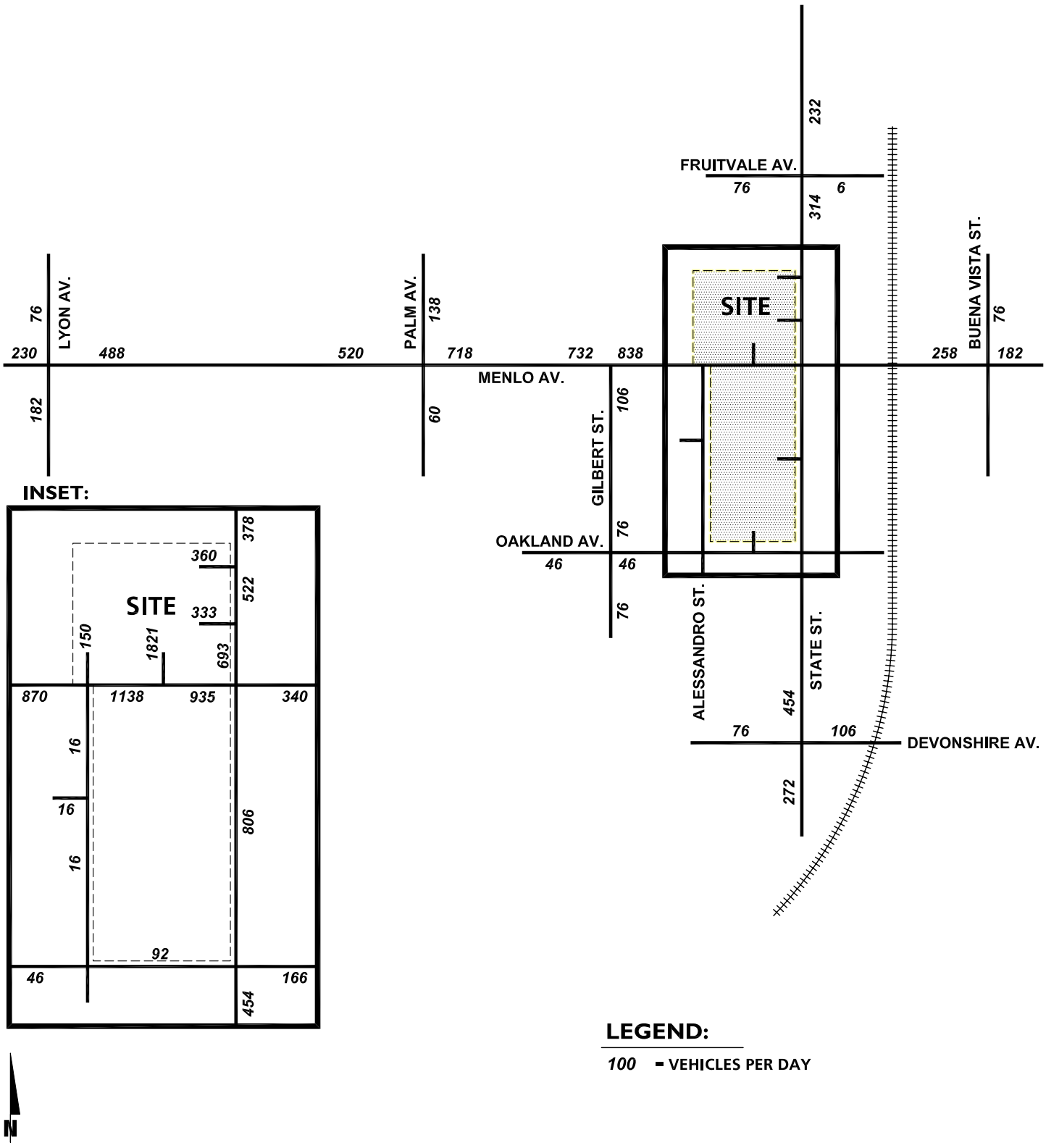


EXHIBIT 4-7

PROJECT (2016)
AM PEAK HOUR INTERSECTION VOLUMES

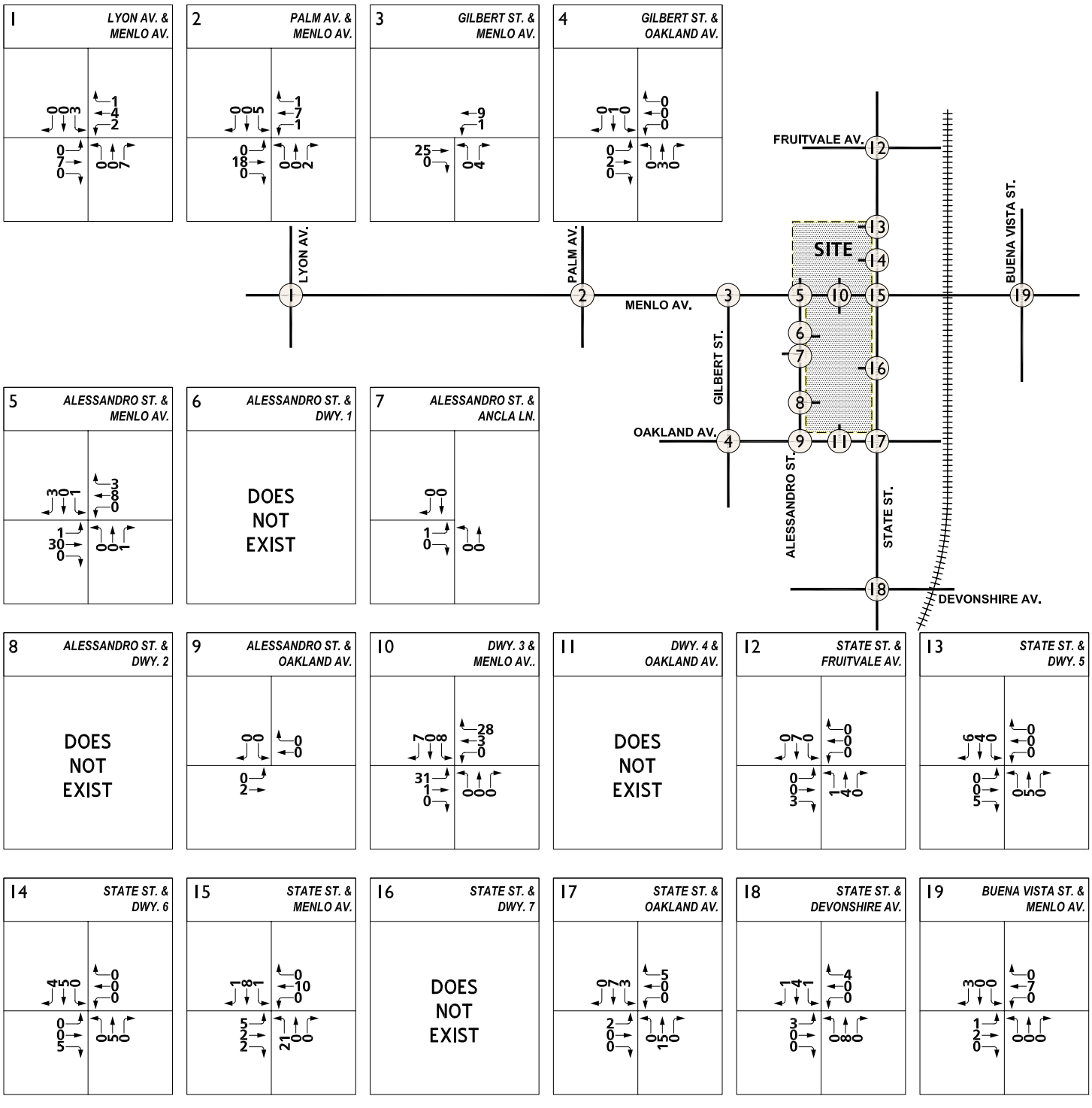


EXHIBIT 4-8

PROJECT (2016)
PM PEAK HOUR INTERSECTION VOLUMES

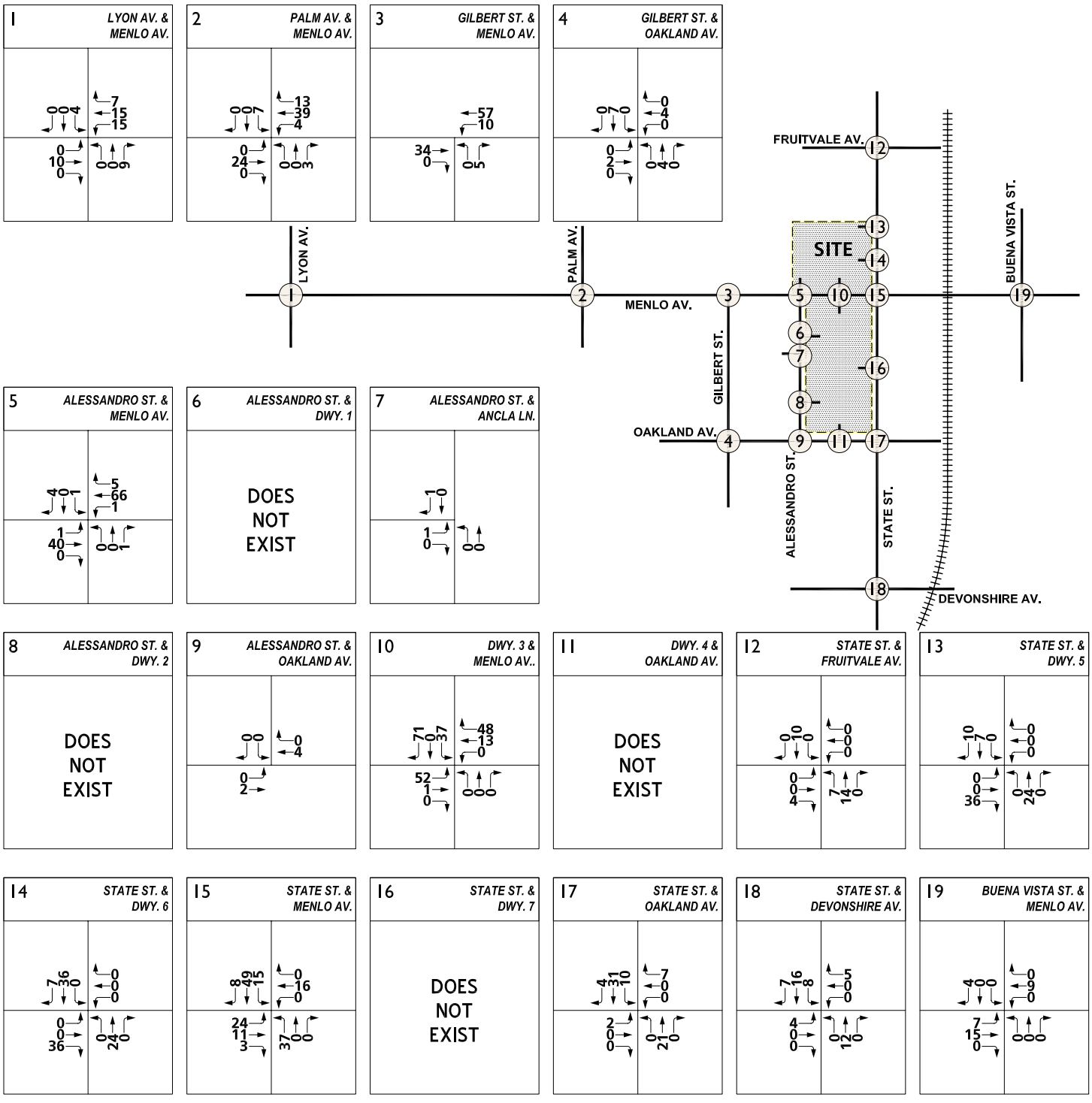


EXHIBIT 4-9

PROJECT (2020) AVERAGE DAILY TRAFFIC (ADT)

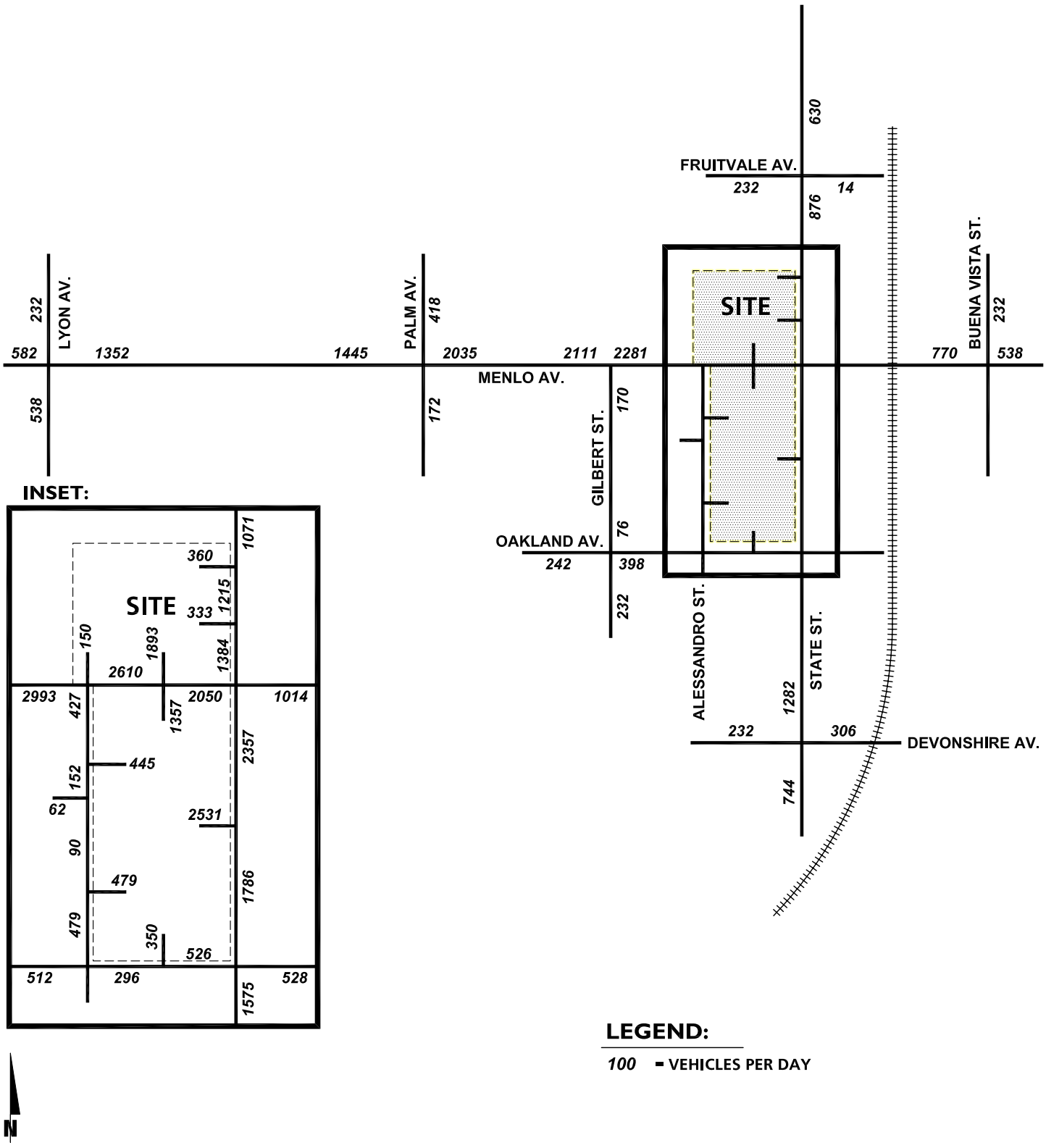


EXHIBIT 4-10

PROJECT (2020) AM PEAK HOUR INTERSECTION VOLUMES

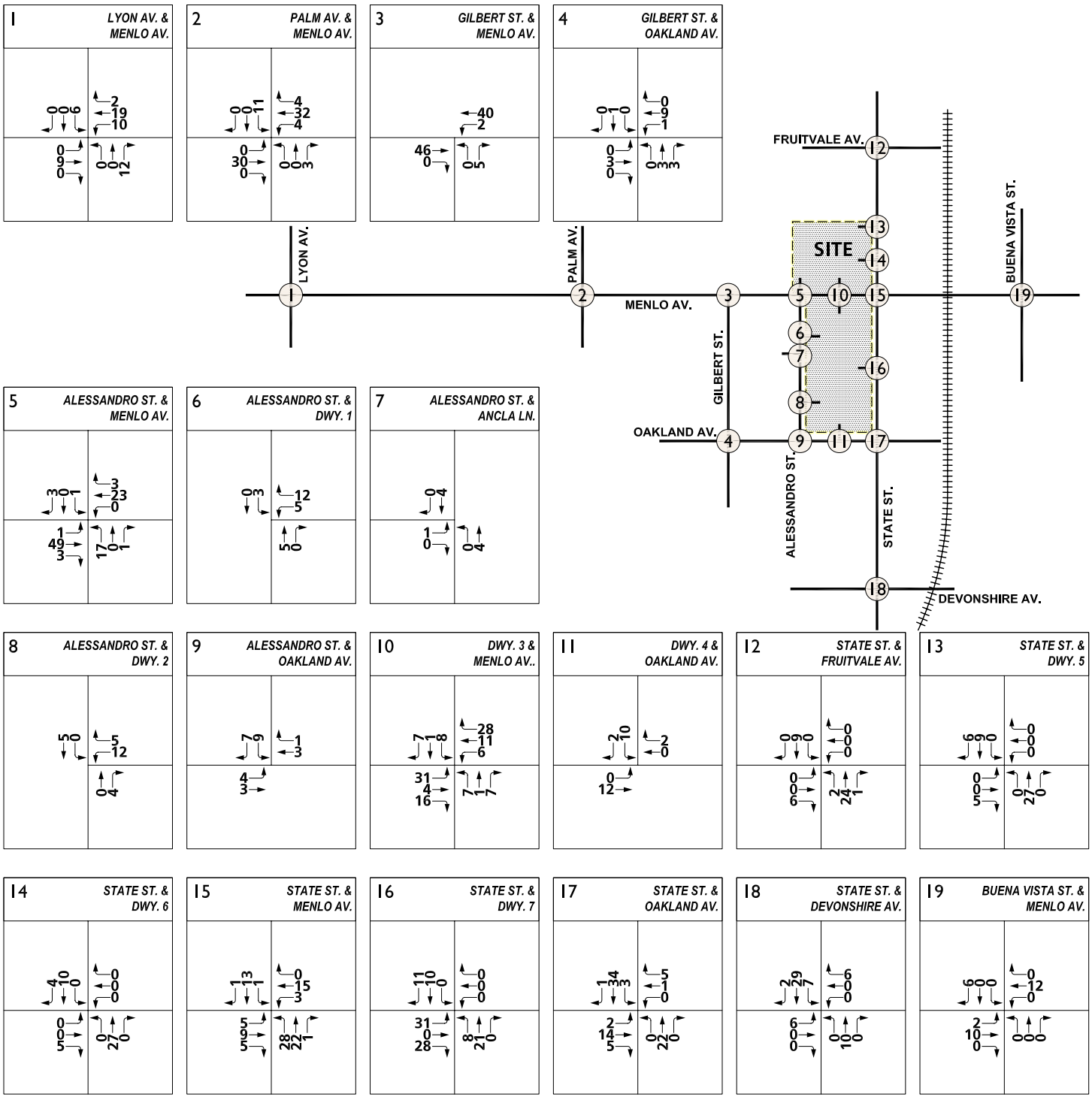
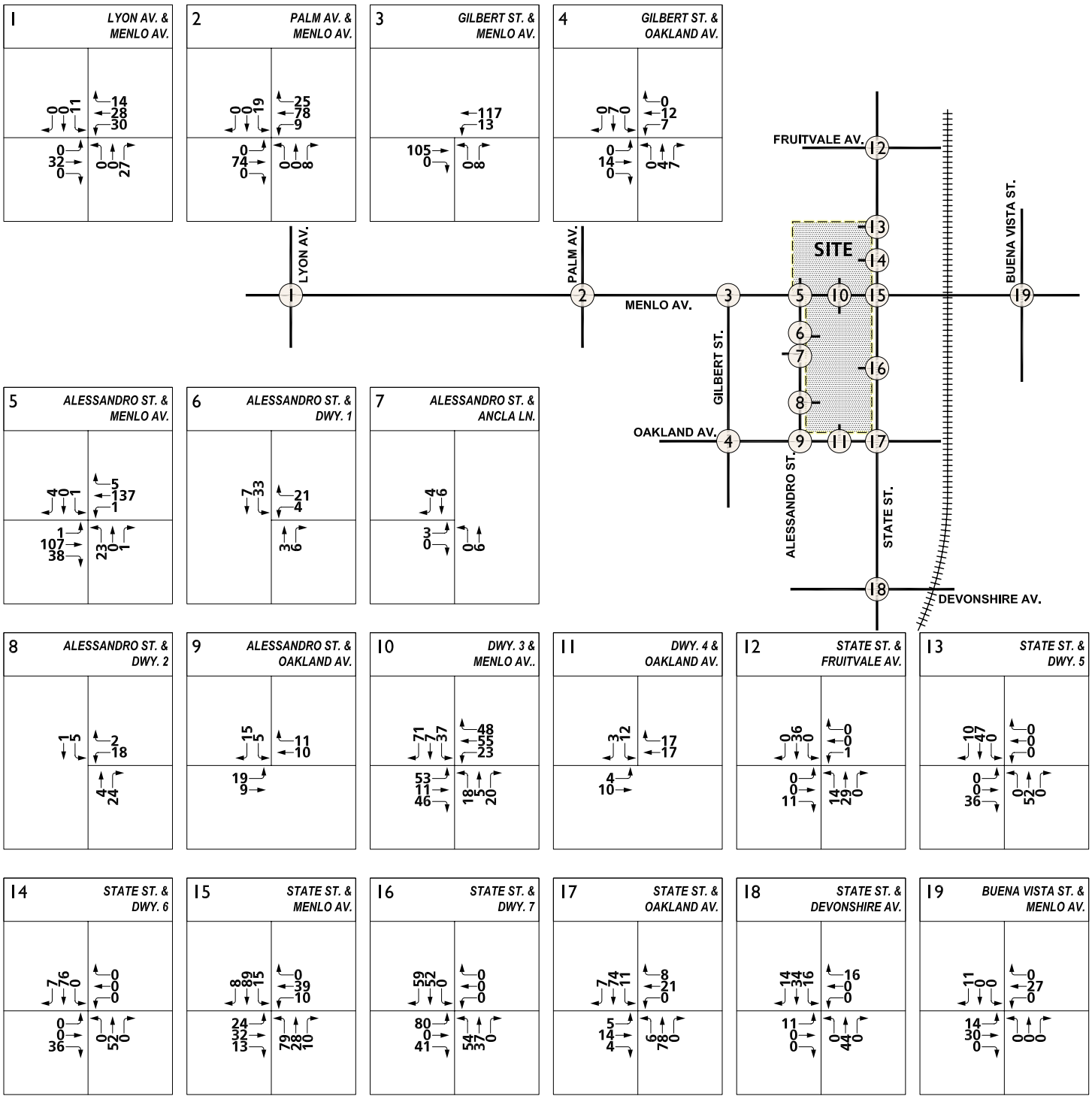


EXHIBIT 4-11

PROJECT (2020)
PM PEAK HOUR INTERSECTION VOLUMES



4.3 Cumulative Development Traffic

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario.

4.3.1 Trip Generation

The cumulative development projects included in this analysis were compiled through consultation and coordination with both the City of Hemet and the City of San Jacinto. Cumulative development projects included in this analysis are assumed to contribute traffic to at least one or more of the study area intersections.

Table 4-5 presents the cumulative development trip generation rates. Table 4-6 lists the proposed land uses and their associated trip generation. Exhibit 4-12 illustrates the cumulative development location map. Cumulative development projects that are reasonably foreseeable in the study area at the time of this analysis, includes over 50 projects within 24 traffic analysis zones (TAZs) as shown on Exhibit 4-12.

In an effort to more accurately represent current and anticipated future economic conditions, the forecasted growth in traffic volumes related to cumulative development has been based on a different absorption percentage for each the interim year and project buildout. The absorption percentages were reviewed and approved by the lead agency as part of the traffic impact study scoping process. Specifically, the future traffic scenarios assume 40 percent of the projected cumulative development traffic for 2016 conditions and 60 percent of the projected cumulative development traffic for 2020 conditions. Annual traffic growth between 2% and 50% per year for some intersections and roadway segments is anticipated based on the conservative absorptions percentages.

According to information published by the Riverside County Center for Demographic Research (RCCDR) and used as the basis for completing the Western Riverside Council of Governments (WRCOG) TUMF Nexus Update Study -2009 Program Update, the population of Western Riverside County is projected to increase by 62% in the period

Table 4-5

Cumulative Development Trip Generation Rates[1]

Land Use	ITE Code	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
General Light Industrial	110	Varies	AC	6.23	1.28	7.51	1.60	5.66	7.26	51.80
General Light Industrial	110	Varies	TSF	0.81	0.11	0.92	0.12	0.86	0.98	6.97
Single Family Residential	210	Varies	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Apartments	220	Varies	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.72
Condos / Townhomes	230	Varies	DU	0.07	0.37	0.44	0.35	0.17	0.52	5.86
Senior Adult Housing	251	Varies	DU	0.08	0.12	0.20	0.16	0.10	0.26	3.71
Assisted Living	254	Varies	BEDS	0.12	0.05	0.17	0.15	0.14	0.29	2.74
Hotel	310	Varies	ROOMS	0.34	0.22	0.56	0.31	0.28	0.59	8.17
Church	560	Varies	TSF	0.35	0.21	0.56	0.26	0.29	0.55	9.11
Hospital	610	Varies	BEDS	0.81	0.33	1.14	0.47	0.84	1.31	11.81
Medical-Dental Office	720	Varies	TSF	1.82	0.48	2.30	0.93	2.53	3.46	36.13
Commercial Uses:										
- PM 33196	820	14.70	TSF	2.06	1.31	3.37	5.77	6.25	12.01	132.85
- Florida Promenade[3]	820	100.00	TSF	0.72	0.46	1.18	2.37	2.56	4.93	53.13
- CUP 04-17	820	28.75	TSF	1.57	1.00	2.58	4.59	4.97	9.56	105.05
- Cawston Plaza (CUP 07-26)	820	21.00	TSF	1.78	1.14	2.92	5.11	5.53	10.64	117.26
- Hemet Covenant Group	820	6.70	TSF	2.81	1.80	4.61	7.53	8.16	15.69	174.91
- CUP 06-4	820	74.00	TSF	1.08	0.69	1.77	3.33	3.61	6.94	75.46
- Stetson Crossing (SP 07-4)[4]	820	189.00	TSF	0.74	0.47	1.21	2.42	2.62	5.04	54.35
- Brethern Square	820	9.80	TSF	2.42	1.55	3.96	6.62	7.17	13.79	153.11
- PM 33340	820	58.20	TSF	1.19	0.76	1.94	3.61	3.91	7.53	82.08
- PM 34834	820	8.90	TSF	2.51	1.61	4.12	6.84	7.41	14.25	158.36
- Scripps West	820	5.30	TSF	3.09	1.98	5.07	8.16	8.84	17.00	189.86

[1] Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 7th Edition, 2003.

[2] DU = Dwelling Units
TSF = Thousand Square Feet
STU = Students

[3] Source: Florida Promenade Commercial Traffic Impact Analysis, Urban Crossroads, Inc. - January 31, 2007.

[4] Source: Stetson Crossing Development Traffic Impact Analysis, Urban Crossroads, Inc. - January 22, 2008.

Table 4-6 (Page 1 of 3)

Cumulative Development Land Use and Trip Generation Summary

Project					AM Peak Hour			PM Peak Hour			
No.	Name	Land Use[3]	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
1	TR 30597	SFDR	100	DU	19	56	75	64	37	101	957
	TR 32352	SFDR	94	DU	18	53	71	60	35	95	900
	TR 30814	SFDR	155	DU	29	87	116	99	57	157	1,483
	TR 31555	SFDR	99	DU	19	55	74	63	37	100	947
	TR 36071 (SP1-09)	SFDR	358	DU	68	200	269	229	132	362	3,426
	TR 33420A1	SFDR	161	DU	31	90	121	103	60	163	1,541
	Subtotal TAZ 1				**184**	**541**	**726**	**618**	**358**	**978**	**9,254**
2	PM 33196	Commercial	14.7	TSF	30	19	50	85	92	177	1,953
		Less Pass-By[2]	-25%		-	-	-	-21	-23	-44	-488
	Subtotal PM 33196				**30**	**19**	**50**	**64**	**69**	**133**	**1,465**
3	TTM 29581 (Covenant)	SFDR	71	DU	13	40	53	45	26	72	679
	TTM 31064 (Kolby)	SFDR	150	DU	29	84	113	96	56	152	1,436
	TR 31929	SFDR	78	DU	15	44	59	50	29	79	746
	TR 32250	SFDR	53	DU	10	30	40	34	20	54	507
	TR 32247	SFDR	150	DU	29	84	113	96	56	152	1,436
	Subtotal TAZ 4				**96**	**282**	**378**	**321**	**187**	**509**	**4,804**
4	TTM 33707 (Devonshire Partners)	SFDR	37	DU	7	21	28	24	14	37	354
	CUP 05-02 (Terra West)	Senior Housing	240	DU	18	30	48	38	24	62	890
	Subtotal TAZ 5				**25**	**51**	**76**	**62**	**38**	**99**	**1,244**
5	TTM 33858 (BC Eaton LLC)	SFDR	73	DU	14	41	55	47	27	74	699
	TTM 31064 (Kolby)	Senior Housing	240	DU	18	30	48	38	24	62	890
	Tres Cerritos East (SPA 06-1)	SFDR	775	DU	147	434	581	496	287	783	7,417
	Subtotal TAZ 6				**179**	**505**	**684**	**581**	**338**	**919**	**9,006**
6	Florida Promenade (SP 06-4)	Commercial	100	TSF	72	46	118	237	256	493	5,313
		Less Pass-By[2,4]	-15%		-	-	-	-36	-38	-74	-797
	Marriott Towneplace Suites (SDR 09-03)	Hotel	105	ROOMS	36	23	59	33	29	62	858
	CUP 04-17	Commercial	28.75	TSF	45	29	74	132	143	275	3,020
		Less Pass-By[2]	-25%		-	-	-	-33	-36	-69	-755
	Cawston Plaza (CUP 07-26)	Commercial	21.0	TSF	37	24	61	107	116	223	2,463
		Less Pass-By[2]	-25%		-	-	-	-27	-29	-56	-616
	Hemet Covenant Group (CUP 07-18)	Commercial	6.7	TSF	19	12	31	50	55	105	1,172
		Less Pass-By[2]	-25%		-	-	-	-13	-14	-26	-293
	Subtotal TAZ 7				**209**	**134**	**343**	**450**	**482**	**933**	**10,365**

Table 4-6 (Page 2 of 3)

Cumulative Development Land Use and Trip Generation Summary

Project					AM Peak Hour			PM Peak Hour			
No.	Name	Land Use[3]	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
7	Hemet Medcity Complex (CUP 09-03)	Medical Office	233.30	TSF	425	112	537	217	590	807	8,429
		Hospital	49	BEDS	40	16	56	23	41	64	579
	CUP 06-4	Commercial	74	TSF	80	51	131	246	267	513	5,584
		Less Pass-By[2]	-25%		-	-	-	-62	-67	-128	-1,396
	Subtotal TAZ 8				**545**	**179**	**724**	**424**	**831**	**1,256**	**13,196**
8	Amberwood Villas (CUP 07-16)	Apartments	18	DU	2	7	9	7	4	11	121
	Acacia Gardens Expansion (CUP 06-5)	Apartments	50	DU	5	21	26	20	11	31	336
	Subtotal TAZ 9				**7**	**28**	**35**	**27**	**15**	**42**	**457**
9	Stetson Crossing (SP 07-4)	Commercial[5]	189	TSF	401	345	746	600	591	1,191	12,609
	Brethern Square (CUP 06-2)	Commercial	9.8	TSF	24	15	39	65	70	135	1,500
		Less Pass-By[2]	-25%		-	-	-	-16	-18	-34	-375
	Hemet Medical (CUP 07-24) (TPM 35701)	Medical Office	76	TSF	138	36	175	71	192	263	2,746
	Subtotal TAZ 10				**563**	**396**	**960**	**720**	**835**	**1,555**	**16,480**
10	Los Olivos TTM 34712 (SDR 0617)	Apartments	40	DU	4	16	20	16	9	25	269
	Seven Hills Expansion (SDR 07-6)(SP 06-3)	Senior Housing	40	DU	3	5	8	6	4	10	148
	Subtotal TAZ 11				**7**	**21**	**28**	**22**	**13**	**35**	**417**
11	TR 31097	SFDR	134	DU	25	75	101	86	50	135	1,282
	TR 31154	SFDR	58	DU	11	32	44	37	21	59	555
	TR 31293	SFDR	100	DU	19	56	75	64	37	101	957
	TR 31282	SFDR	274	DU	52	153	206	175	101	277	2,622
	TR 31900	SFDR	112	DU	21	63	84	72	41	113	1,072
	TR 33072	SFDR	140	DU	27	78	105	90	52	141	1,340
	TR 32574	SFDR	131	DU	25	73	98	84	48	132	1,254
	Subtotal TAZ 12				**180**	**530**	**713**	**608**	**350**	**958**	**9,082**
12	TR 22665	SFDR	90	DU	17	50	68	58	33	91	861
	TR 32809	Condo/ Townhome	272	DU	19	101	120	95	46	141	1,594
	Subtotal TAZ 13				**36**	**151**	**188**	**153**	**79**	**232**	**2,455**
13	Noel TTM 34125 (Map 05-24)	SFDR	5	DU	1	3	4	3	2	5	48
	Subtotal Noel TTM 34125 (MAP 05-24)				**1**	**3**	**4**	**3**	**2**	**5**	**48**
14	Salvation Army Church (CUP 07-27)	Church	16	TSF	6	3	9	4	5	9	146
	Subtotal Salvation Army Church (CUP 07-27)				**6**	**3**	**9**	**4**	**5**	**9**	**146**

Table 4-6 (Page 3 of 3)

Cumulative Development Land Use and Trip Generation Summary

Project					AM Peak Hour			PM Peak Hour			
No.	Name	Land Use[3]	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
15	PM 33340	Commercial	58.2	TSF	69	44	113	210	228	438	4,777
		Less Pass-By[2]	-25%		-	-	-	-53	-57	-110	-1,194
	Subtotal PM 33340				**69**	**44**	**113**	**157**	**171**	**328**	**3,583**
16	PM 30570	Industrial	84.6	KSF	69	9	78	10	73	83	590
	Subtotal PM 30570				**69**	**9**	**78**	**10**	**73**	**83**	**590**
17	Nelson (SDR 06-28)	Industrial	16.2	TSF	13	2	15	2	14	16	113
	Subtotal Nelson (SDR 06-28)				**13**	**2**	**15**	**2**	**14**	**16**	**113**
18	TTM 31796 (Centex)	SFDR	122	DU	23	68	92	78	45	123	1,168
	Subtotal TTM 31796 (Centex)				**23**	**68**	**92**	**78**	**45**	**123**	**1,168**
19	TR 33889	Industrial	13.95	TSF	87	18	105	22	79	101	723
	Subtotal TR 33889				**87**	**18**	**105**	**22**	**79**	**101**	**723**
20	Meadowbrook Expansion (CUP 08-8)	Assisted Living	60	BEDS	7	3	10	9	8	17	164
	Subtotal Meadowbrook Expansion (CUP 08-8)				**7**	**3**	**10**	**9**	**8**	**17**	**164**
21	Santa Fe Point (CUP 06-06)	Apartments	237	DU	24	97	121	95	52	147	1,593
	Subtotal Santa Fe Point (CUP 06-06)				**24**	**97**	**121**	**95**	**52**	**147**	**1,593**
22	PM 34834	Commercial	8.9	TSF	22	14	37	61	66	127	1,409
		Less Pass-By[2]	-25%		-	-	-	-15	-17	-32	-352
	Subtotal PM 34834				**22**	**14**	**37**	**46**	**49**	**95**	**1,057**
23	TR 32053	SFDR	154	DU	29	86	116	99	57	156	1,474
	TR 30379	SFDR	126	DU	24	71	95	81	47	127	1,206
	TR 32582	SFDR	192	DU	36	108	144	123	71	194	1,837
	TR 33862A1	SFDR	98	DU	19	55	74	63	36	99	938
	TR 34271	SFDR	147	DU	28	82	110	94	54	148	1,407
	Subtotal TAZ 23				**136**	**402**	**539**	**460**	**265**	**724**	**6,862**
24	TR 28224	Senior Housing	183	DU	14	23	37	29	18	48	679
	TR 33644	Condo/ Townhomes	62	DU	4	23	27	22	11	32	363
	Subtotal TAZ 24				**18**	**46**	**64**	**51**	**29**	**80**	**1,042**
25	Scripps West (CUP 08-14)	Commercial	5.3	TSF	16	10	27	43	47	90	1,006
		Less Pass-By[2]	-25%		-	-	-	-11	-12	-23	-252
	Subtotal Scripps West (CUP 08-14)				**16**	**10**	**27**	**32**	**35**	**67**	**754**
26	VTTM 31165	Senior Housing	213	DU	40	119	160	136	79	215	2,038
	Subtotal VVTM 31165				**40**	**119**	**160**	**136**	**79**	**215**	**2,038**
TOTAL					**2,592**	**3,675**	**6,279**	**5,155**	**4,501**	**9,659**	**98,106**

[1] DU = Dwelling Units; TSF = Thousand Square Feet; BEDS = Occupied Be

[2] "Pass-By" reduction rates have been used to account for traffic that will access the site as an intermediate stop on the way to a pr destination. Per County of Riverside staff, pass-by trips are not included during the AM peak hours. Internal capture is the reducti the overall traffic due to compatibility of land uses within the project site.

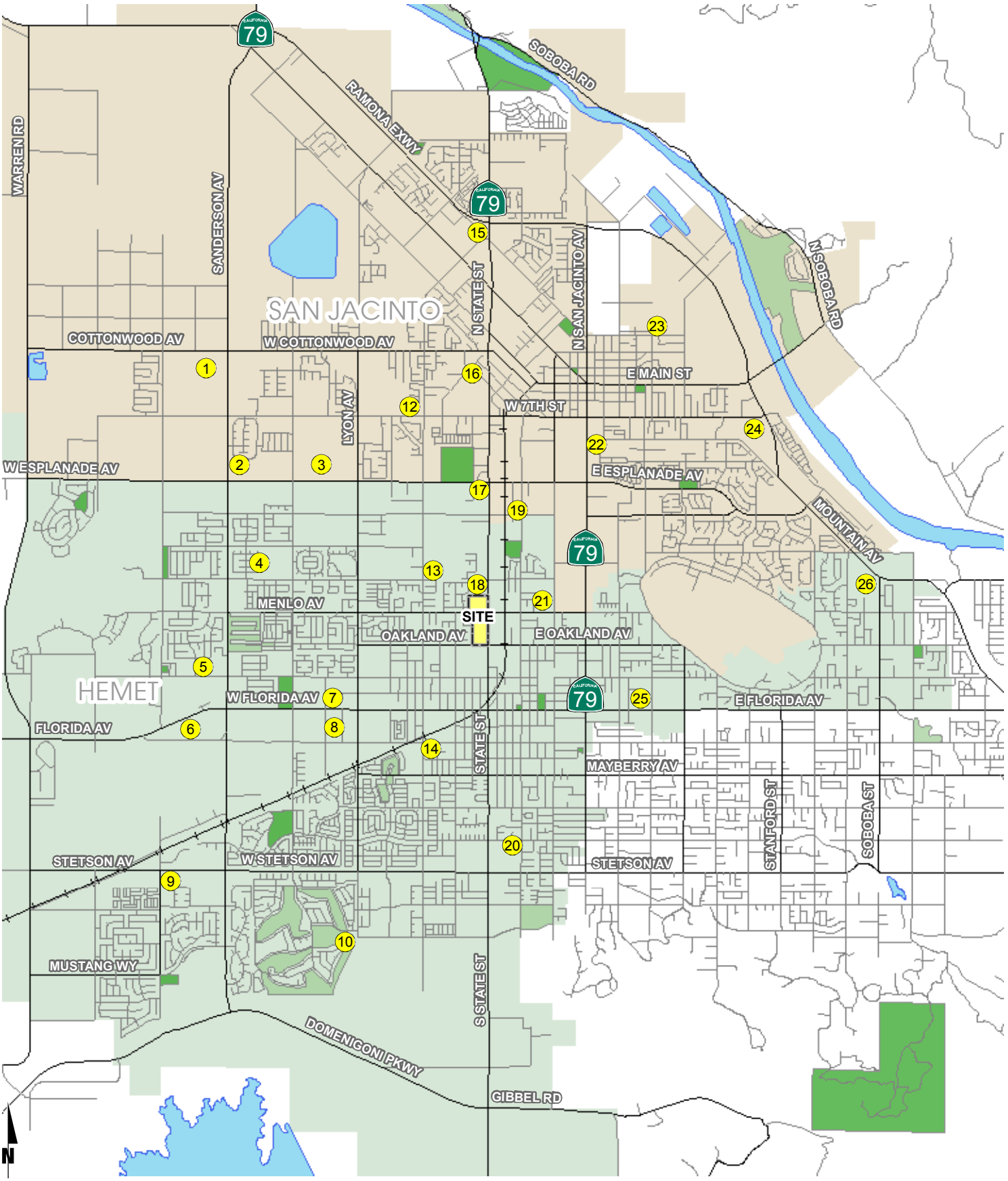
[3] SFDR = Single-Family Detached Residential

[4] Source: Florida Promenade Commercial Traffic Impact Analysis, Urban Crossroads, Inc. - January 31

[5] Source: Stetson Crossing Development Traffic Impact Analysis, Urban Crossroads, Inc. - January 22

EXHIBIT 4-12

CUMULATIVE DEVELOPMENT LOCATION MAP



between 2007 and 2035 for a compounded rate of approximately 1.73% annually. During the same period, employment in Western Riverside County is expected to increase by 111% or 2.71% annually. Therefore, the annual growth in traffic of 2% - 50% utilized in this traffic report would appear to be conservative and tend to overstate as oppose to understate traffic growth and potential impacts to circulation.

4.4 Trip Distribution and Assignment

Based on the identified trip distributions for the cumulative development projects on arterial highways throughout the study area for future conditions, cumulative development ADT volumes for interim year (2016) conditions are shown on Exhibit 4-13. Cumulative development 2016 AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-14 and 4-15. Cumulative development ADT volumes for 2020 conditions are shown on Exhibit 4-16. Cumulative development 2020 AM and PM peak hour intersection turning movement volumes are shown on Exhibits 4-17 and 4-18.

EXHIBIT 4-13

CUMULATIVE DEVELOPMENT (2016) AVERAGE DAILY TRAFFIC (ADT)

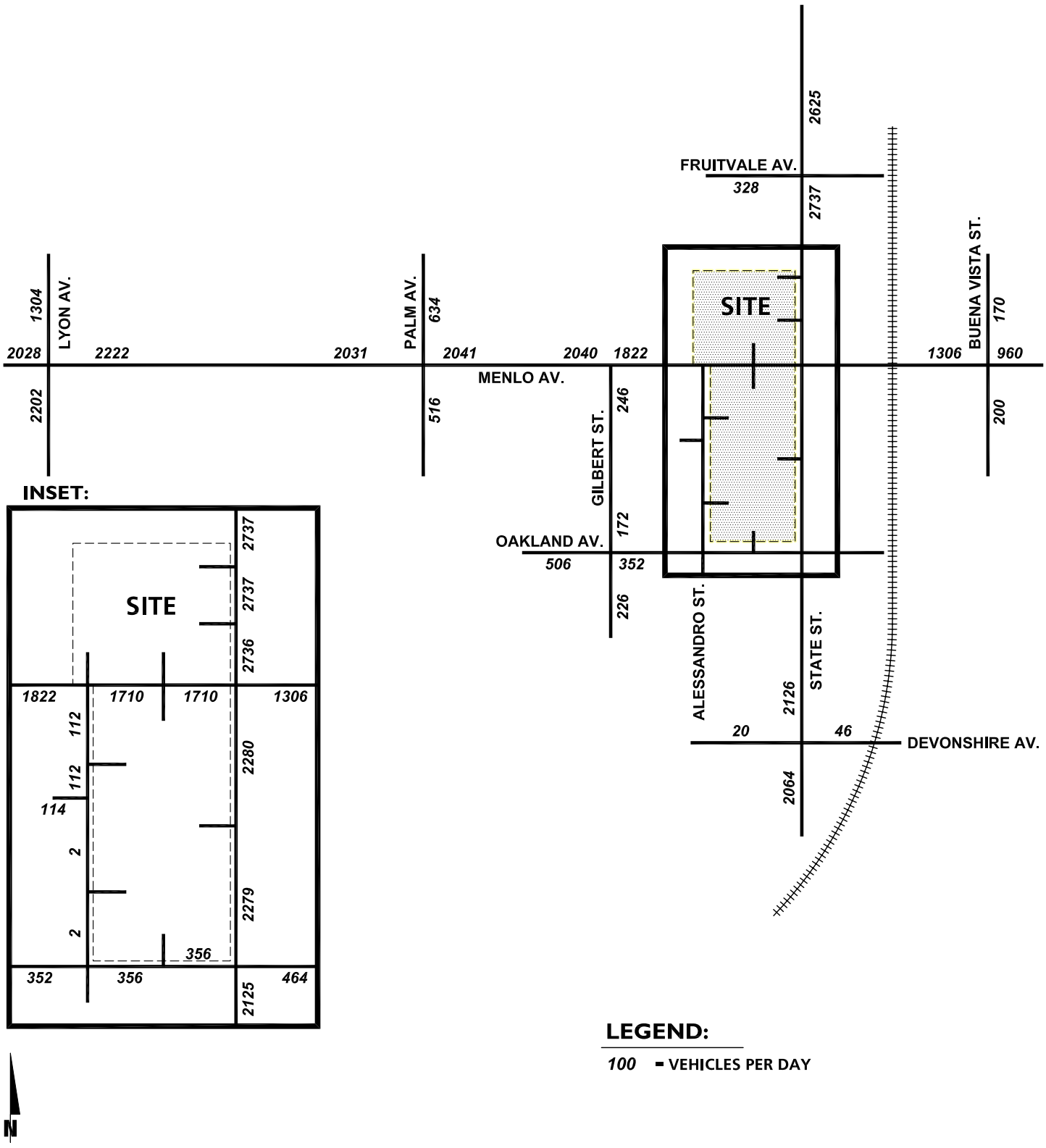


EXHIBIT 4-14

CUMULATIVE DEVELOPMENT (2016) AM PEAK HOUR INTERSECTION VOLUMES

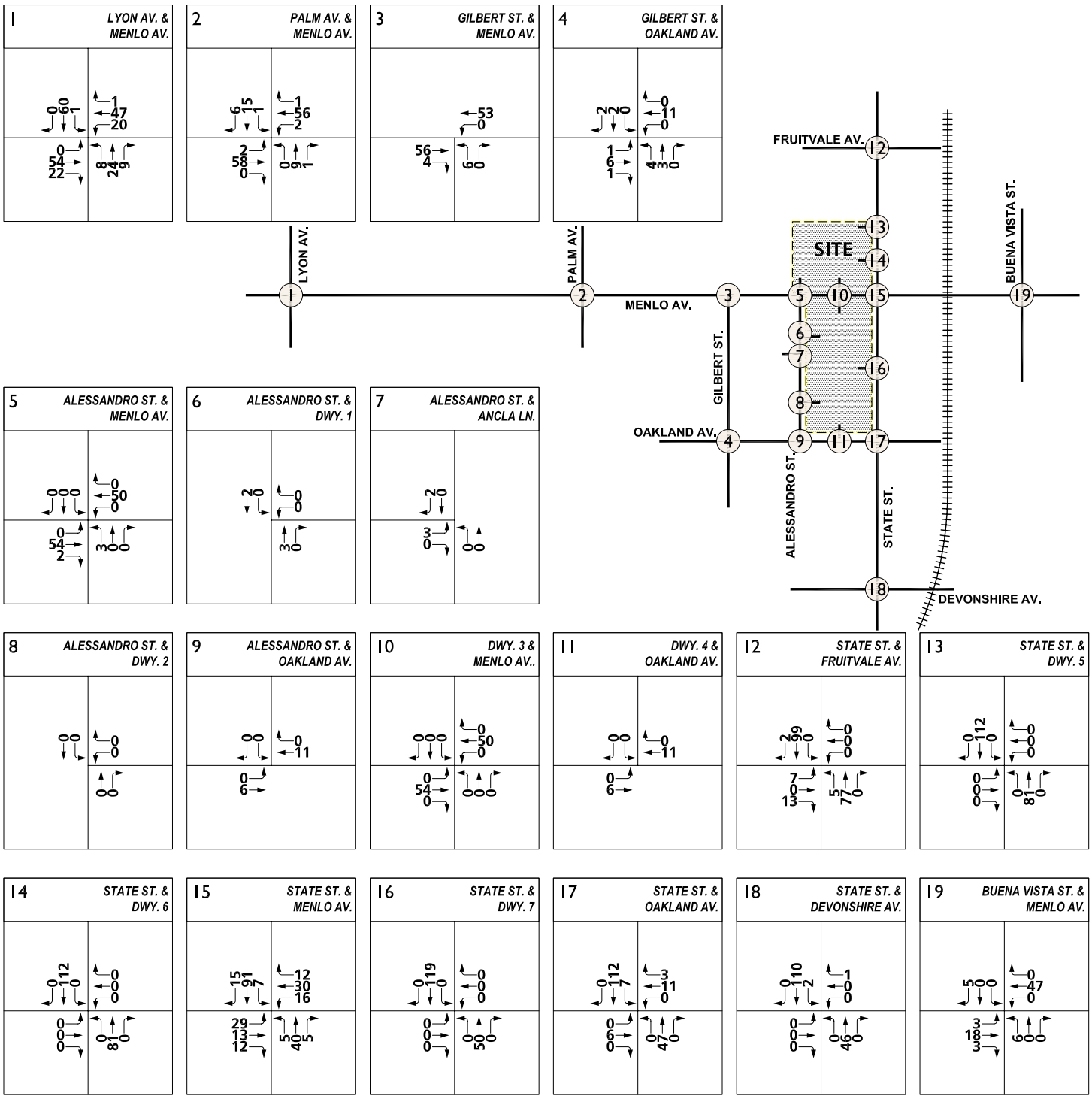


EXHIBIT 4-15

CUMULATIVE DEVELOPMENT (2016) PM PEAK HOUR INTERSECTION VOLUMES

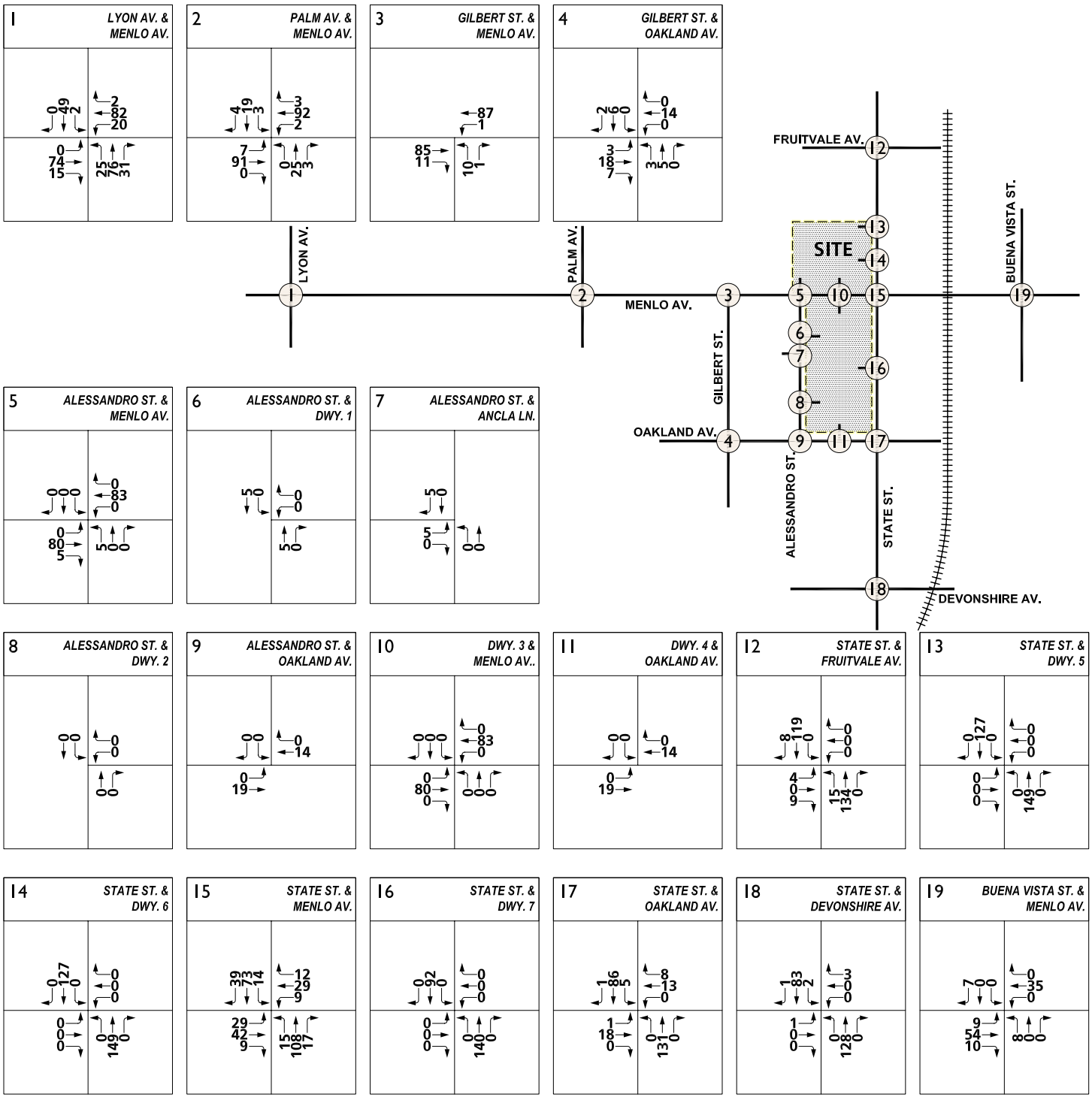


EXHIBIT 4-16

CUMULATIVE DEVELOPMENT (2020) AVERAGE DAILY TRAFFIC (ADT)

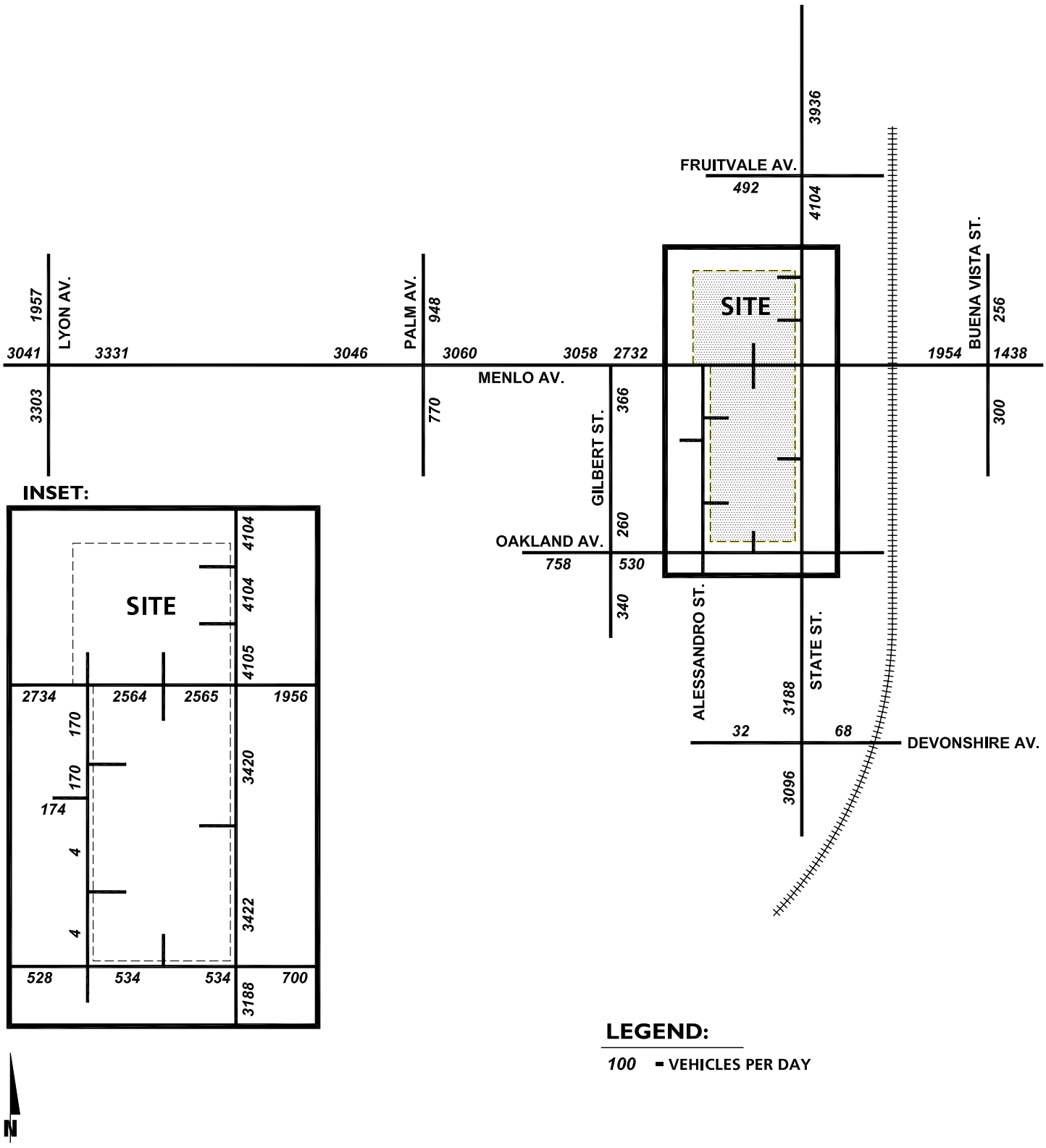


EXHIBIT 4-17

CUMULATIVE DEVELOPMENT (2020) AM PEAK HOUR INTERSECTION VOLUMES

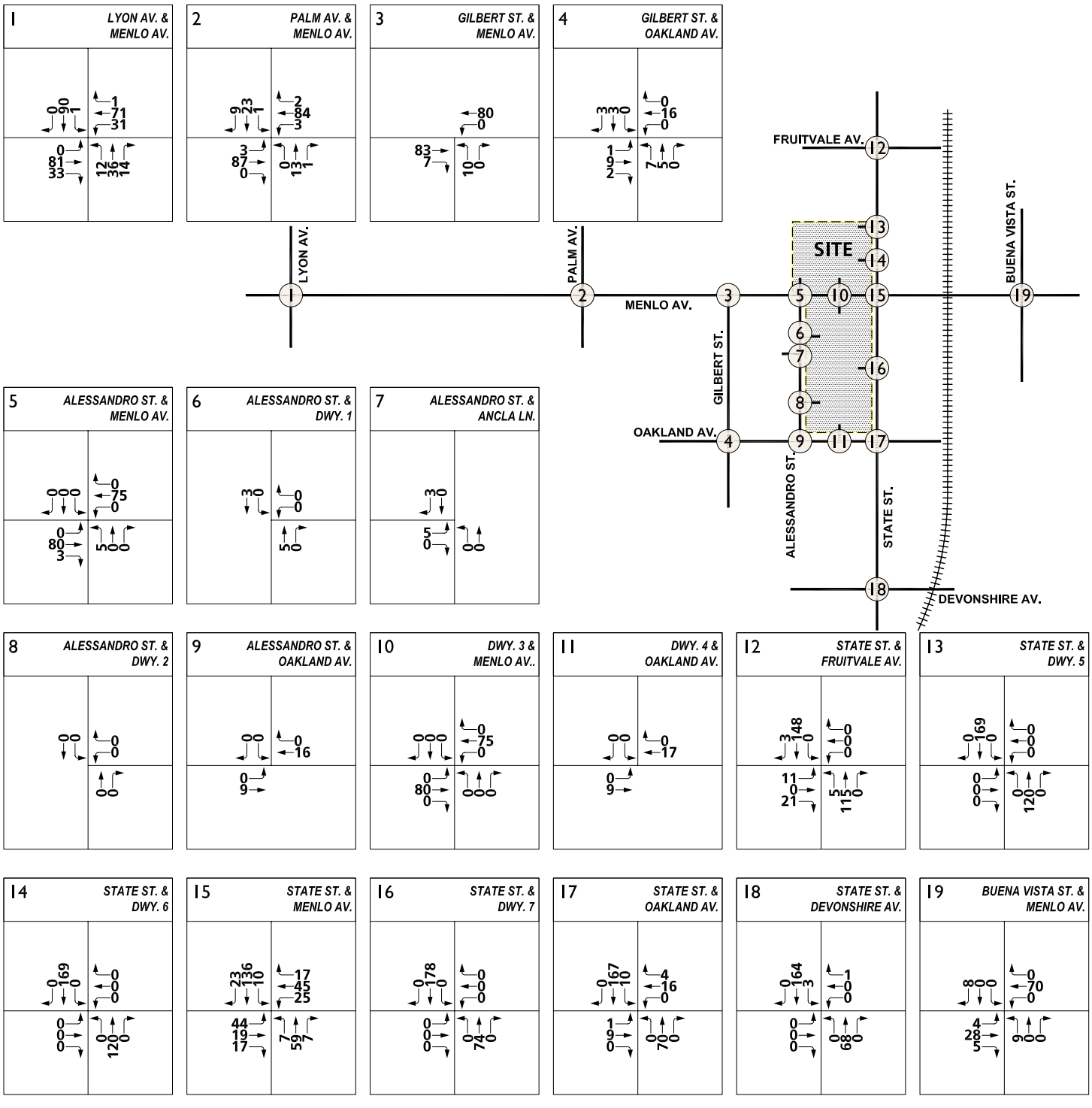
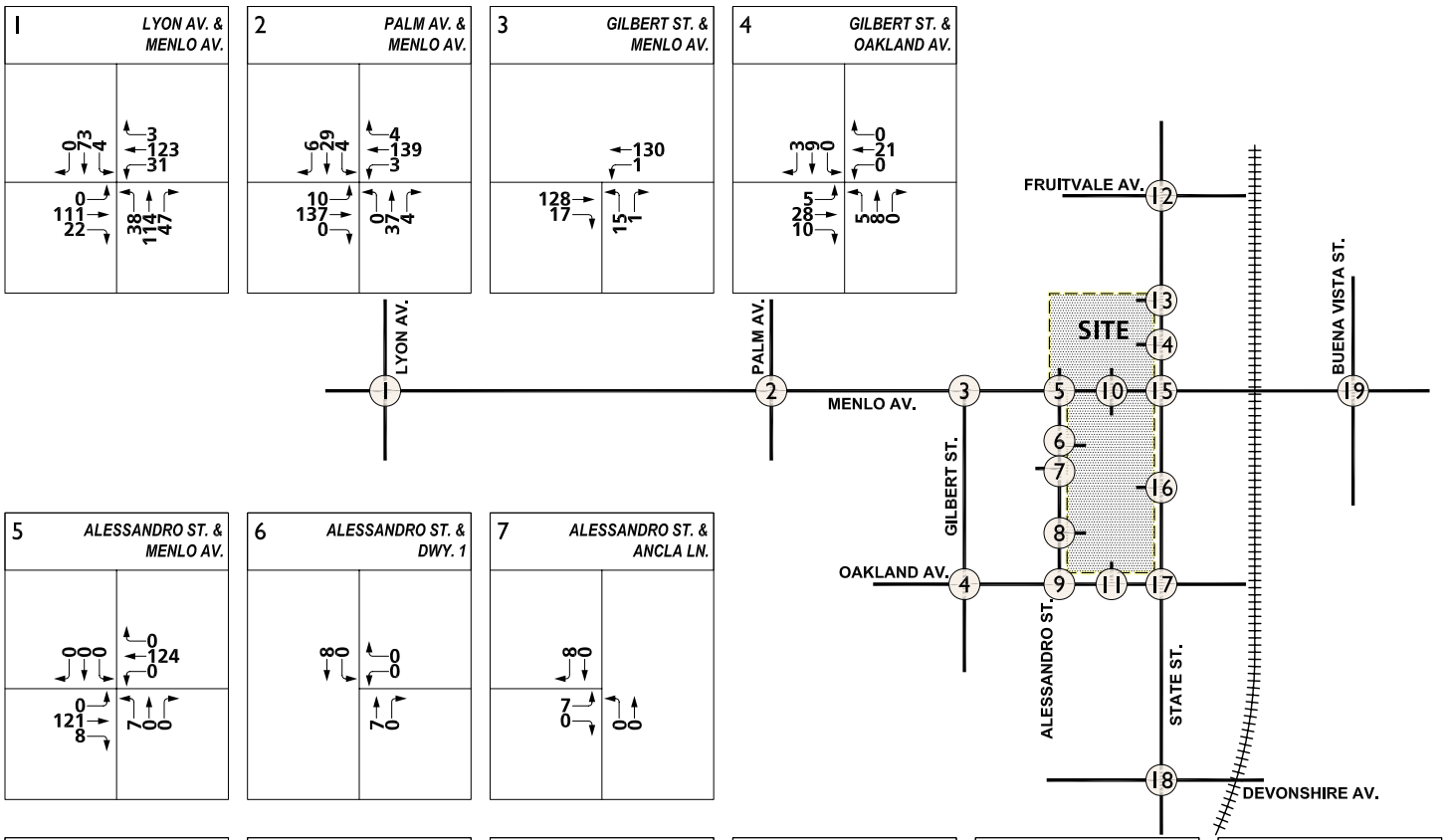


EXHIBIT 4-18

CUMULATIVE DEVELOPMENT (2020) PM PEAK HOUR INTERSECTION VOLUMES



5.0 EXISTING PLUS PROJECT CONDITIONS

This chapter discusses the methods used to develop traffic forecasts for existing plus project (E+P) (P1) and E+P (Buildout) conditions and the resulting intersection operations.

5.1 Existing Plus Project (P1) Traffic Volume Forecasts

This scenario includes existing (2010) traffic volumes plus the new traffic generated by the proposed project's first phase of development. The weekday ADT volumes which can be expected for E+P (P1) traffic conditions have been provided in Appendix "5.1" on Exhibit 5.1-1. Exhibits 5-1 and 5-2 illustrate the weekday AM and PM peak hour intersection turning movement volumes for E+P (P1) traffic conditions.

5.2 Existing Plus Project (P1) Conditions Analysis

5.2.1 Intersection Operations

Level of service calculations were conducted for the study intersections to evaluate their operations under E+P (P1) conditions. The results of the intersection level of service analysis are presented in Table 5-1 for E+P (P1) conditions. As shown in Table 5-1, there are no intersections anticipated to operate below the City's LOS threshold of LOS "D" or better.

Worksheets for E+P (P1) conditions HCM calculations are provided in Appendix "5.2" and E+P (P1) traffic signal warrants are provided in Appendix "5.3".

5.2.2 Roadway Segment Analysis

Pursuant to City of Hemet initiative Measure A (July 7, 1988), Level of Service "C" should be maintained on all City roadway segments. As such, this traffic report contains an analysis of peak hour roadway segment performance for E+P (P1) conditions. The segment analysis is based on the peak hour link volume; therefore, segments should operate at Level of Service "C" with a capacity of 1,520 vehicles per hour per lane. This

EXHIBIT 5-1

EXISTING PLUS PROJECT (P1) AM PEAK HOUR INTERSECTION VOLUMES

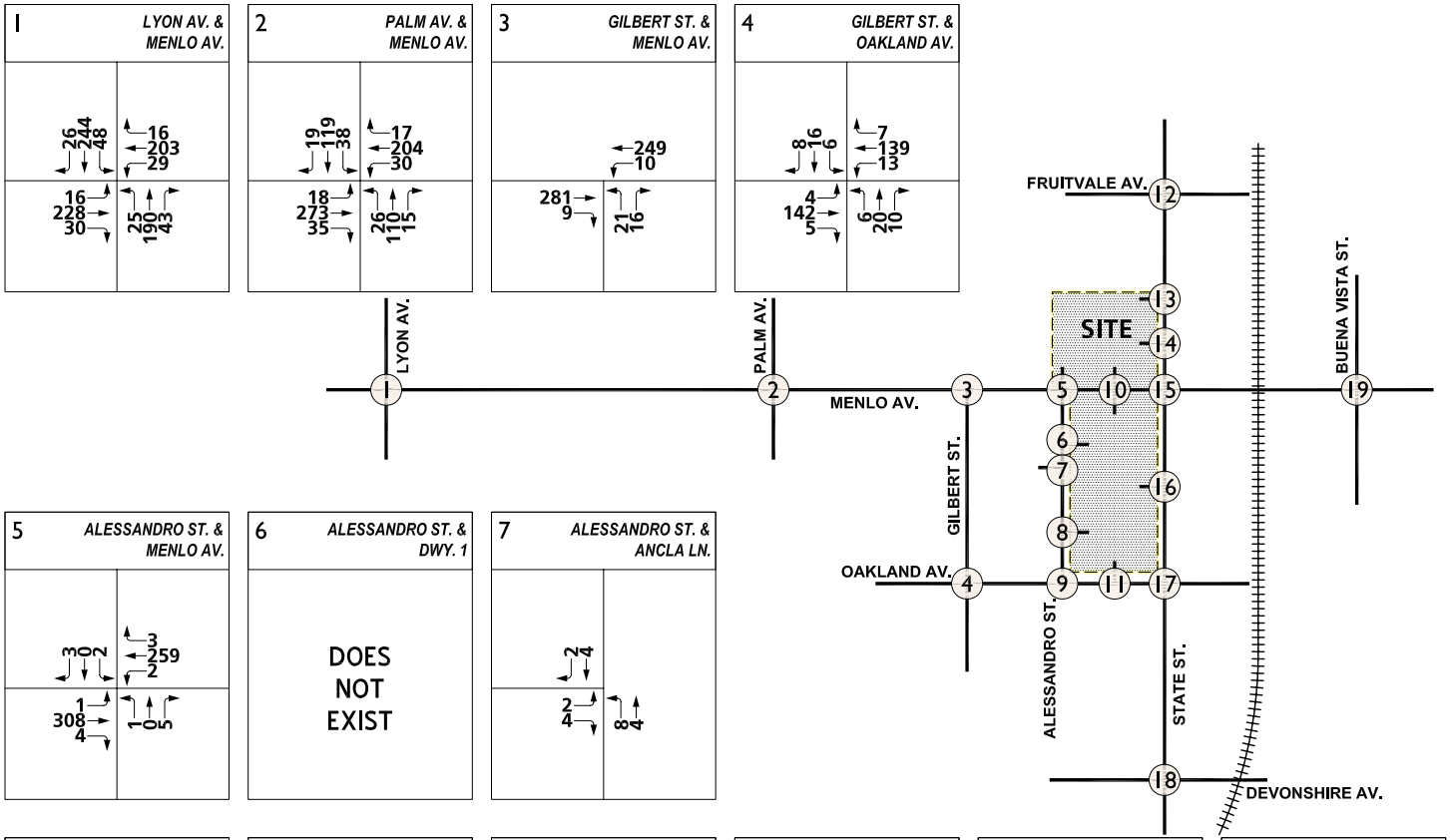


EXHIBIT 5-2

EXISTING PLUS PROJECT (P1)
PM PEAK HOUR INTERSECTION VOLUMES

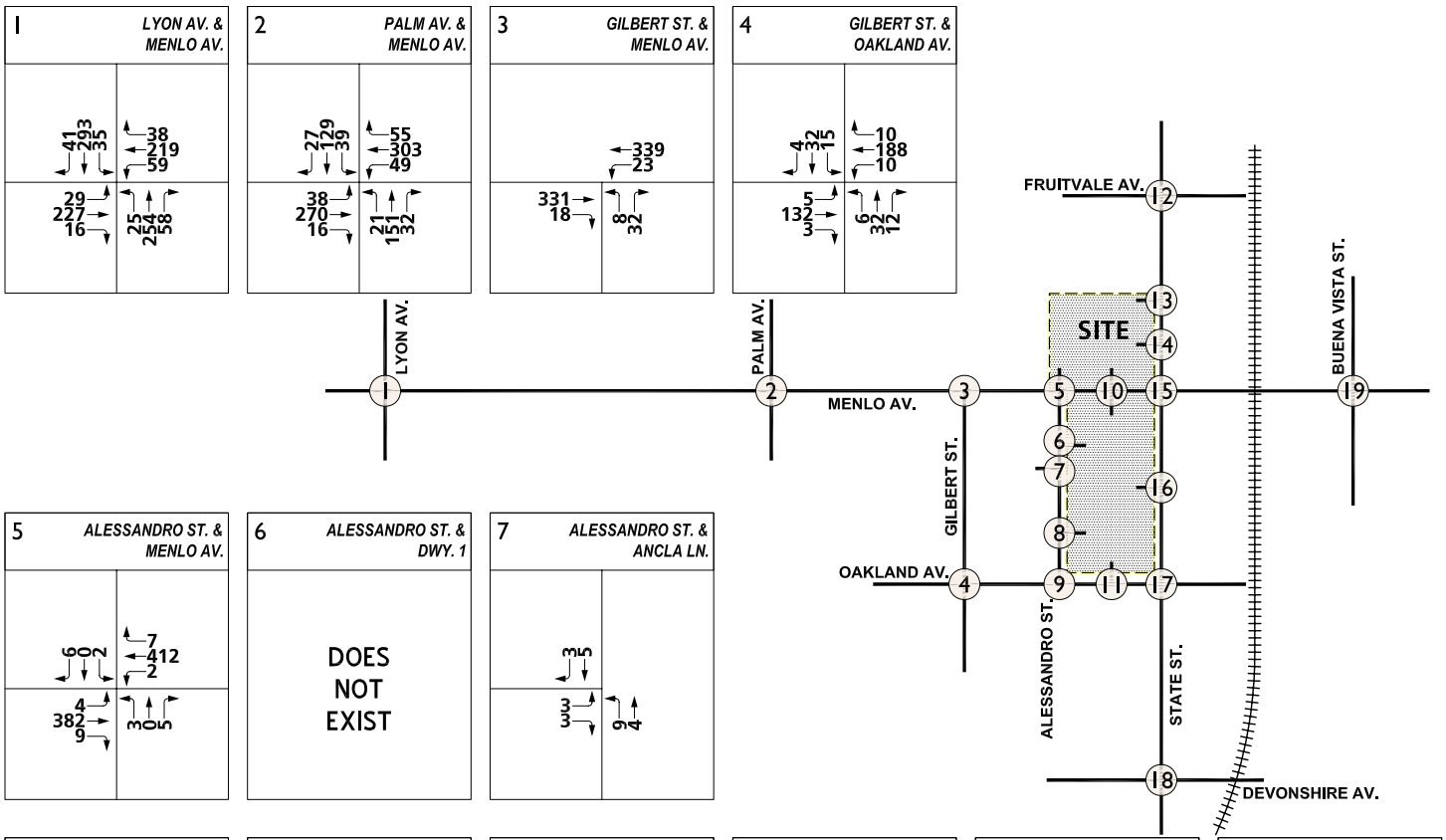


Table 5-1

Intersection Analysis for Existing Plus Project (P1) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	24.0	23.3	C	C
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	14.8	18.7	B	C
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	12.0	11.8	B	B
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	11.3	12.1	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	11.7	13.8	B	B
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.5	8.6	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.3	10.6	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.0	18.6	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	32.5	42.0	C	D
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	18.0	18.8	B	B
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.1	25.3	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	16.1	24.3	C	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

peak hour per lane capacity is calculated from a base capacity of 1,900 vehicles per hour per lane, representing LOS "E" conditions. Eighty percent of this base capacity should equate to a LOS "C" operation (1,900 x 0.80 = 1,520 vehicles per hour per lane).

Any roadway segment in which the project is projected to contribute 1,000 or more daily project trips is evaluated; the following roadway segment location has been analyzed for E+P (P1) conditions:

Menlo Avenue:

- Between Alessandro Street and Driveway 3

Table 5-2 outlines the results of a segment analysis for E+P (P1) conditions. As shown on Table 5-2, Menlo Avenue between Alessandro Street and Driveway 3 is projected to operate at an acceptable LOS (i.e., LOS C or better) during peak hour traffic flows.

5.3 Existing Plus Project (Buildout)Traffic Volume Forecasts

This scenario includes existing (2010) traffic volumes plus the new traffic generated at buildout of the proposed project. The weekday ADT volumes which can be expected for E+P (Buildout) traffic conditions have been provided in Appendix "5.1" on Exhibit 5.1-2. Exhibits 5-3 and 5-4 illustrate the weekday AM and PM peak hour intersection turning movement volumes for E+P (Buildout) traffic conditions.

5.4 Existing Plus Project (Buildout)Conditions Analysis

5.4.1 Intersection Operations

Level of service calculations were conducted for the study intersections to evaluate their operations under E+P (Buildout) conditions. The results of the intersection level of service analysis are presented in Table 5-3 for E+P (Buildout) conditions. There are no intersections anticipated to operate below the City's LOS threshold.

Table 5-2

Peak Hour Segment Analysis for Existing Plus Project (P1) Conditions[1]

Segment[2]	Existing Number of Lanes	Capacity	AM Peak Hour Link Volume	V/C Ratio	Acceptable?	PM Peak Hour Link Volume	V/C Ratio	Acceptable?
Menlo Av b/w Alessandro & Driveway 3								
Eastbound:	1	1,520	315	0.21	YES	390	0.26	YES
Westbound:	1	1,520	264	0.17	YES	421	0.28	YES

[1] Segment analysis based on the PM peak hour link volume. Capacity is based on Level of Service "C" per City of Hemet standards (i.e., 1,900 x 80 percent = 1,520 vehicles per hour per lane). Segment analysis based on criterion of 1,000 or more daily project trips on the segment. Recommended improvements based on number of lanes required to achieve minimum level of service on each segment (only shown for segments with existing V/C > 1.00).

[2] N/O = North Of; S/O = South Of; W/O = West Of; E/O = East Of; b/w = Between

Table 5-3

Intersection Analysis for Existing Plus Project (Buildout) Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	26.8	28.8	D	D
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	16.2	27.0	C	D
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	12.4	12.9	B	B
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	11.4	12.6	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	14.4	19.3	B	C
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.6	8.6	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.4	10.6	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.0	18.7	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	32.9	43.8	C	D
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	18.2	19.2	B	B
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.5	25.9	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	16.7	28.8	C	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

EXHIBIT 5-3

EXISTING PLUS PROJECT (BUILDOUT) AM PEAK HOUR INTERSECTION VOLUMES

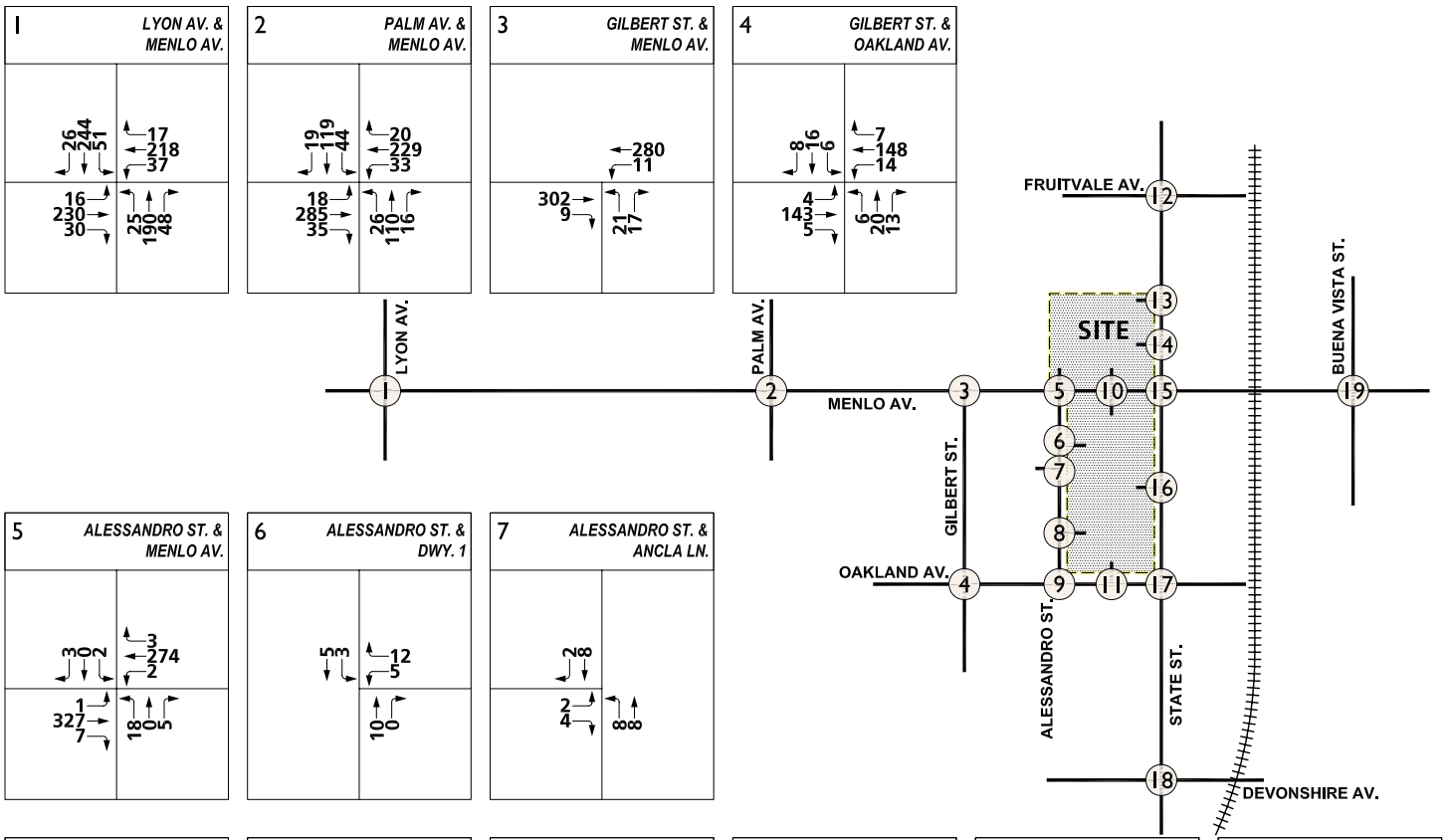
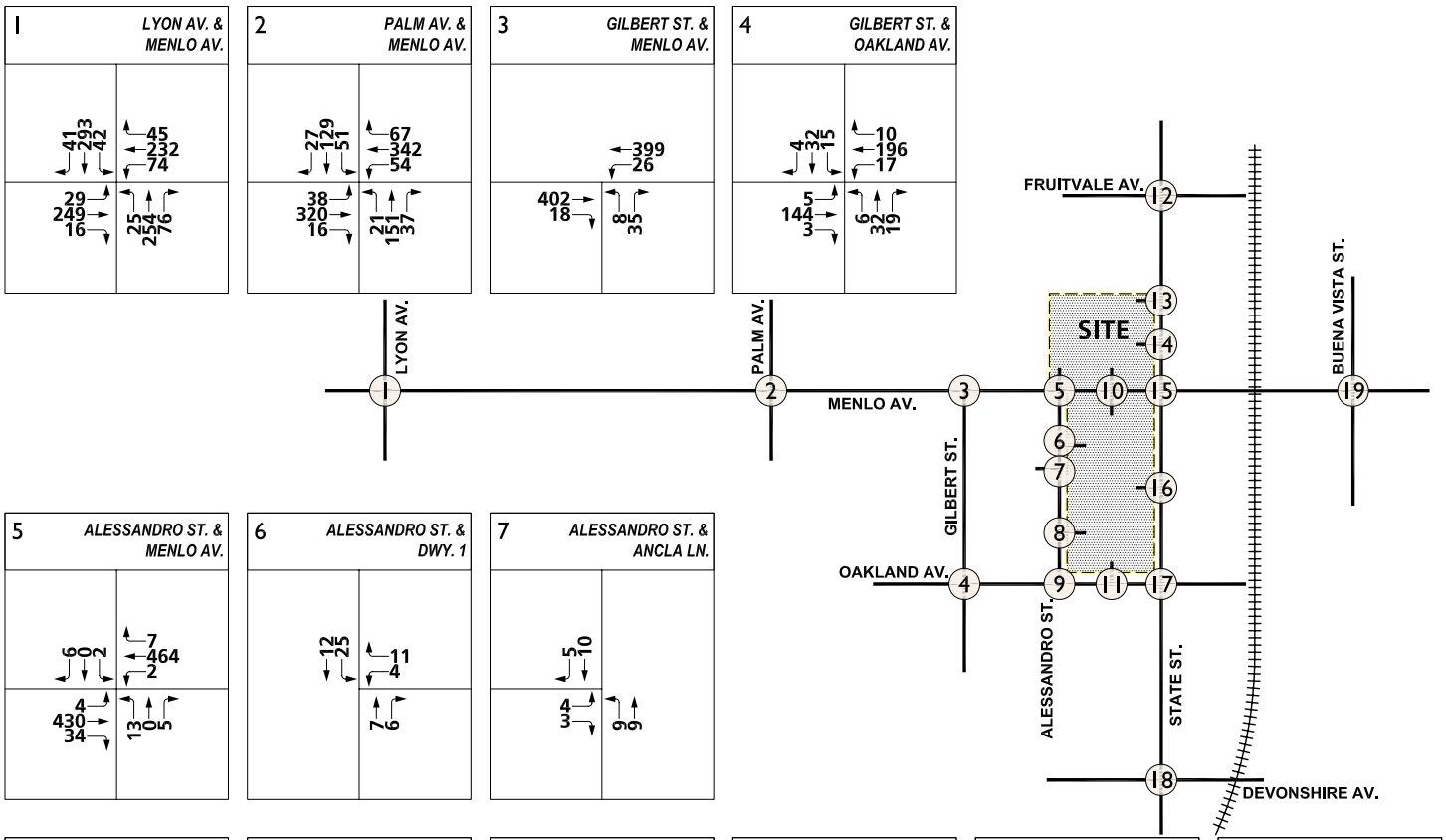


EXHIBIT 5-4

EXISTING PLUS PROJECT (BUILDOUT) PM PEAK HOUR INTERSECTION VOLUMES



Worksheets for E+P (Buildout) conditions HCM calculations are provided in Appendix "5.4" and E+P (Buildout) traffic signal warrants are provided in Appendix "5.5".

5.4.2 Roadway Segment Analysis

Consistent with City policy, any roadway segment in which the project is projected to contribute 1,000 or more daily project trips has been evaluated; the following roadway segment locations have been analyzed for E+P (Buildout) conditions:

Menlo Avenue:

- East of Lyon Avenue
- West of Palm Avenue
- Between Palm Avenue and Gilbert Street
- Between Gilbert Street and Alessandro Street
- Between Alessandro Street and Driveway 3
- Between Driveway 3 and State Street

State Street:

- Between Fruitvale Avenue and Driveway 5
- Between Driveway 5 and Driveway 6
- Between Driveway 6 and Menlo Avenue
- Between Menlo Avenue and Driveway 7
- Between Driveway 7 and Oakland Avenue
- Between Oakland Avenue and Devonshire Avenue

Table 5-4 outlines the results of a segment analysis for E+P (Buildout) conditions. As shown on Table 5-4, the roadway segments are operating at under-capacity conditions based on existing roadway conditions, thus project impacts are less than significant.

Table 5-4

Peak Hour Segment Analysis for Existing Plus Project (Buildout) Conditions[1]

Segment[2]	Existing Number of Lanes	Capacity	AM Peak Hour Link Volume	V/C Ratio	Acceptable?	PM Peak Hour Link Volume	V/C Ratio	Acceptable?
Menlo Av E/O Lyon Av								
Eastbound:	1	1,520	329	0.22	YES	367	0.24	YES
Westbound:	1	1,520	272	0.18	YES	351	0.23	YES
Menlo Av W/O Palm Av								
Eastbound:	1	1,520	338	0.22	YES	374	0.25	YES
Westbound:	1	1,520	274	0.18	YES	390	0.26	YES
Menlo Av b/w Palm Av & Gilbert St								
Eastbound:	1	1,520	345	0.23	YES	408	0.27	YES
Westbound:	1	1,520	282	0.19	YES	463	0.30	YES
Menlo Av b/w Gilbert St & Alessandro St								
Eastbound:	1	1,520	335	0.22	YES	468	0.31	YES
Westbound:	1	1,520	295	0.19	YES	483	0.32	YES
Menlo Av b/w Alessandro & Driveway 3								
Eastbound:	1	1,520	334	0.22	YES	441	0.29	YES
Westbound:	1	1,520	279	0.18	YES	473	0.31	YES
Menlo Av b/w Driveway 3 & State St								
Eastbound:	1	1,520	302	0.20	YES	388	0.26	YES
Westbound:	1	1,520	298	0.20	YES	453	0.30	YES
State St b/w Fruitvale Av & Driveway 5								
Northbound:	2	3,040	582	0.19	YES	752	0.25	YES
Southbound:	2	3,040	564	0.19	YES	835	0.27	YES
State St b/w Driveway 5 & Driveway 6								
Northbound:	2	3,040	582	0.19	YES	752	0.25	YES
Southbound:	2	3,040	563	0.19	YES	861	0.28	YES
State St b/w Driveway 6 & Menlo Av								
Northbound:	2	3,040	603	0.20	YES	752	0.25	YES
Southbound:	2	3,040	558	0.18	YES	917	0.30	YES
State St b/w Menlo Av & Driveway 7								
Northbound:	2	3,040	494	0.16	YES	699	0.23	YES
Southbound:	2	3,040	497	0.16	YES	760	0.25	YES
State St b/w Driveway 7 & Oakland Av								
Northbound:	2	3,040	489	0.16	YES	668	0.22	YES
Southbound:	2	3,040	522	0.17	YES	741	0.24	YES
State St b/w Oakland Av & Devonshire Av								
Northbound:	2	3,040	454	0.15	YES	651	0.21	YES
Southbound:	2	3,040	501	0.16	YES	653	0.21	YES

[1] Segment analysis based on the PM peak hour link volume. Capacity is based on Level of Service "C" per City of Hemet standards (i.e., 1,900 x 80 percent = 1,520 vehicles per hour per lane). Segment analysis based on criterion of 1,000 or more daily project trips on the segment. Recommended improvements based on number of lanes required to achieve minimum level of service on each segment (only shown for segments with existing V/C > 1.00).

[2] N/O = North Of; S/O = South Of; W/O = West Of; E/O = East Of; b/w = Between

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6.0 INTERIM YEAR 2016 CONDITIONS

This chapter discusses the methods used to develop Interim Year 2016 traffic forecasts for without and with project conditions and the resulting intersection operations.

6.1 Interim Year 2016 Without Project Traffic Volume Forecasts

This scenario includes existing (2010) traffic volumes plus an ambient growth factor of 12.62% and the addition to cumulative development traffic. The weekday ADT volumes which can be expected for Interim Year 2016 without project traffic conditions have been provided in Appendix "6.1" on Exhibit 6.1-1. Exhibits 6-1 and 6-2 show the weekday AM and PM peak hour intersection turning movement volumes for Interim Year 2016 without project traffic conditions.

6.2 Interim Year 2016 With Project Traffic Volume Forecasts

The weekday ADT volumes which can be expected for Interim Year 2016 with project traffic conditions have been provided in Appendix "6.1" on Exhibit 6.1-2. Exhibits 6-3 and 6-4 illustrate the weekday AM and PM peak hour intersection turning movement volumes for Interim Year 2016 with project traffic conditions.

6.3 Interim Year 2016 Conditions Analysis

6.3.1 Intersection Operations

Level of service calculations were conducted for the study intersections to evaluate their operations under Interim Year 2016 conditions. The results of the intersection level of service analysis are presented in Table 6-1 for Interim Year 2016 without project conditions and Table 6-2 for Interim Year 2016 with project conditions. Intersections that are anticipated to operate below the City's LOS threshold are indicated in bold text.

Worksheets for Interim Year 2016 without and with project conditions HCM calculations are provided in Appendix "6.2" and "6.3" and Interim Year 2016 without and with project traffic signal warrants are provided in Appendix "6.4" and "6.5".

EXHIBIT 6-1

2016 WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

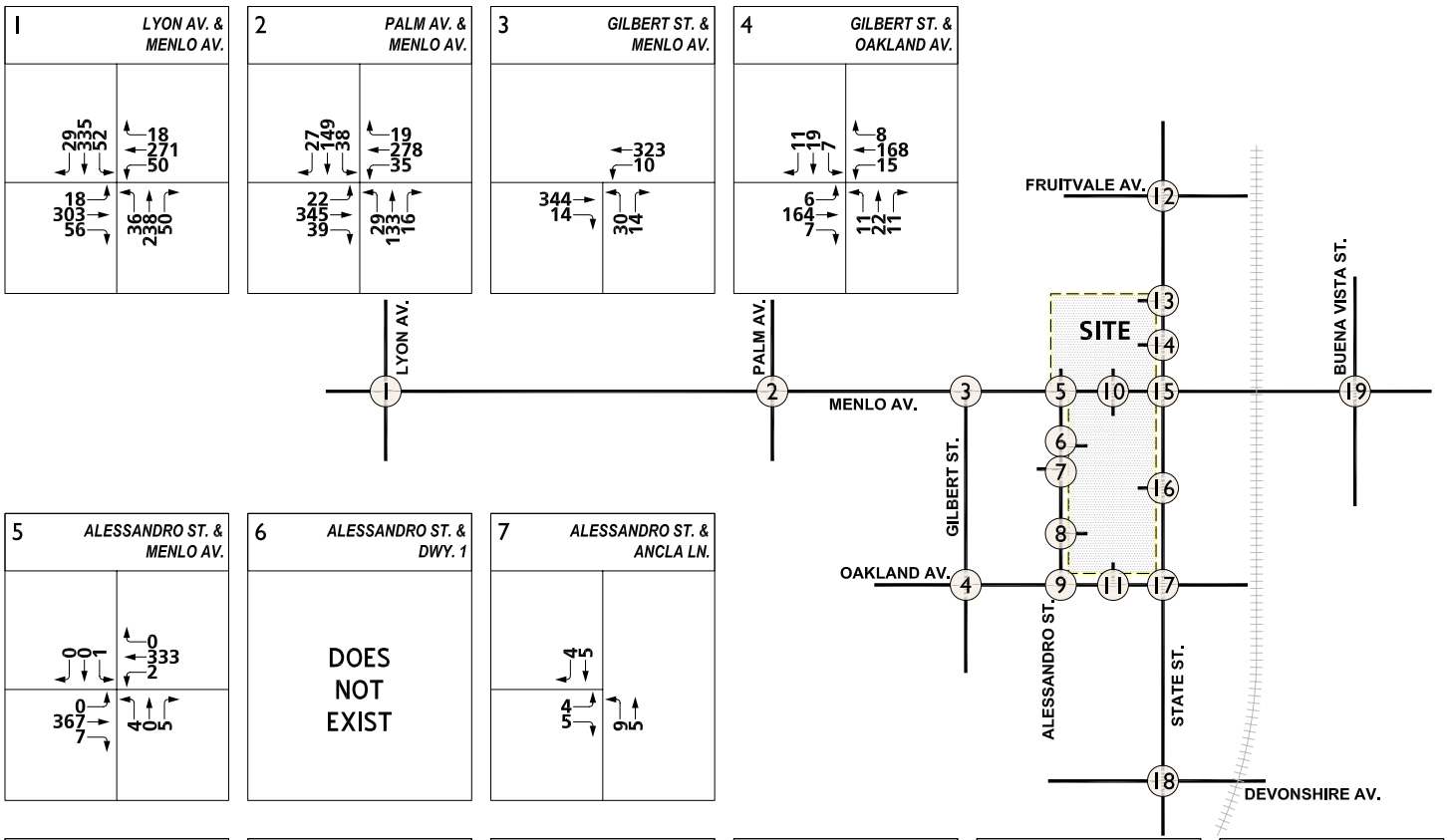


EXHIBIT 6-2

2016 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES

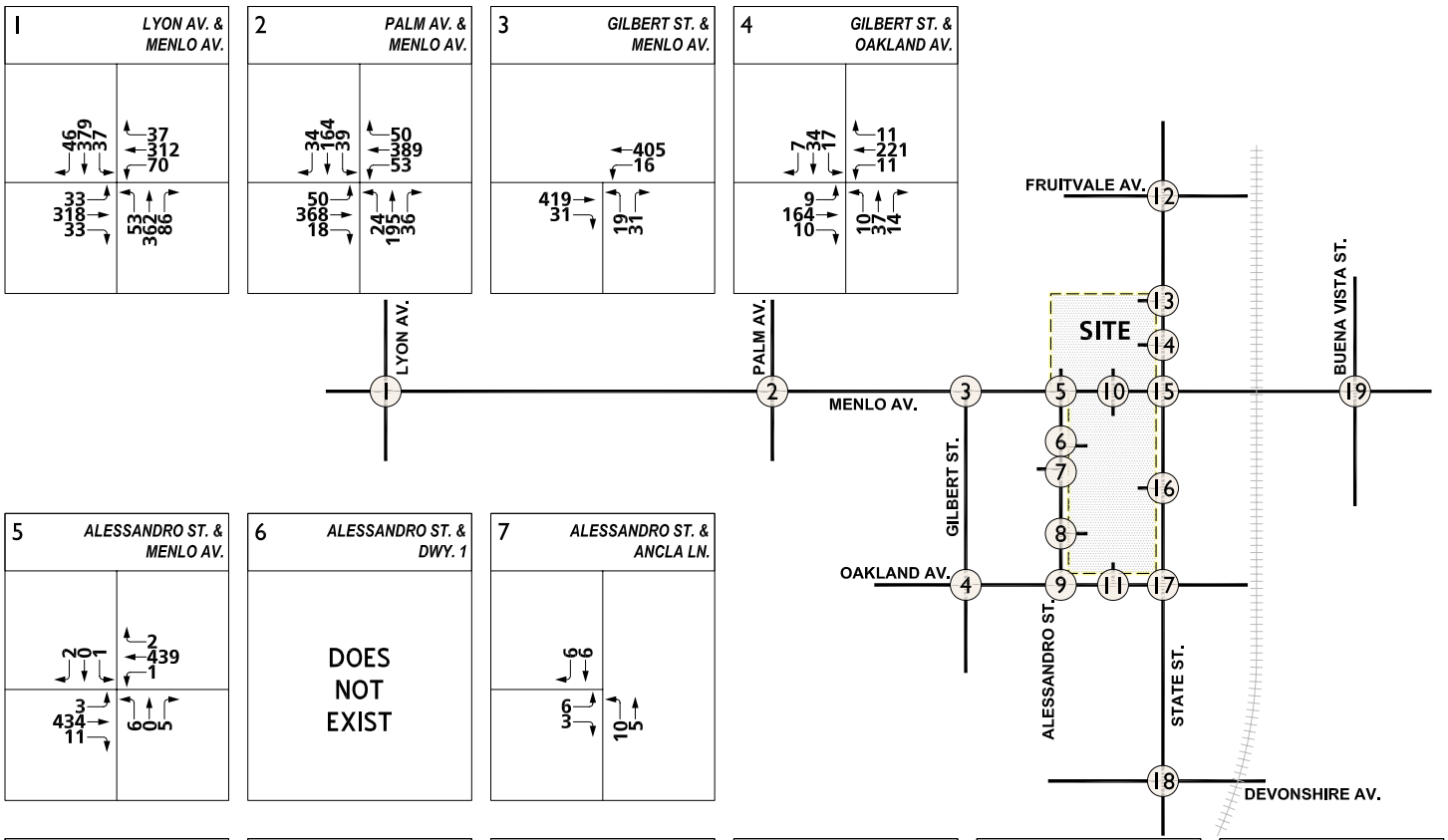


EXHIBIT 6-3

2016 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

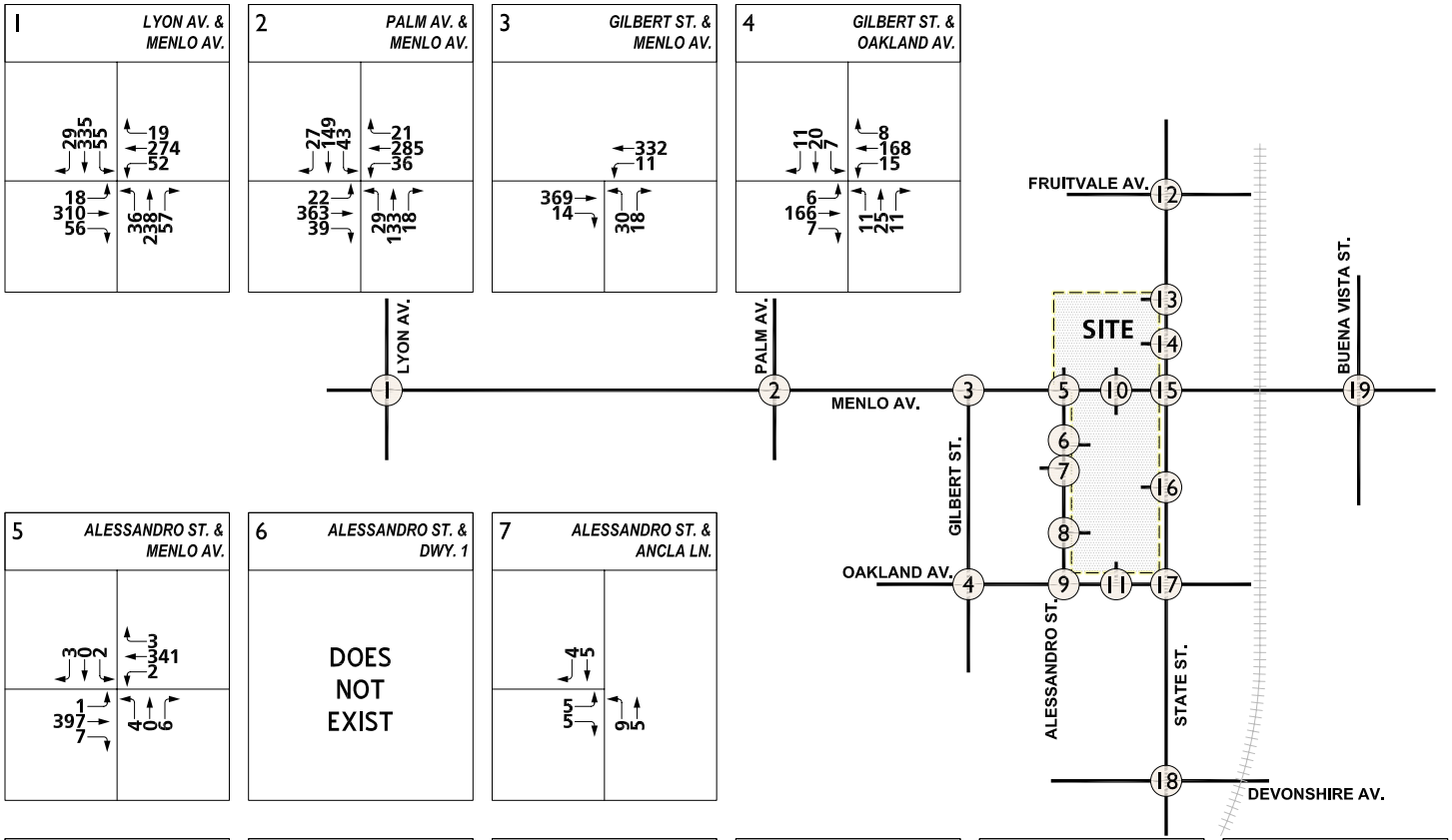
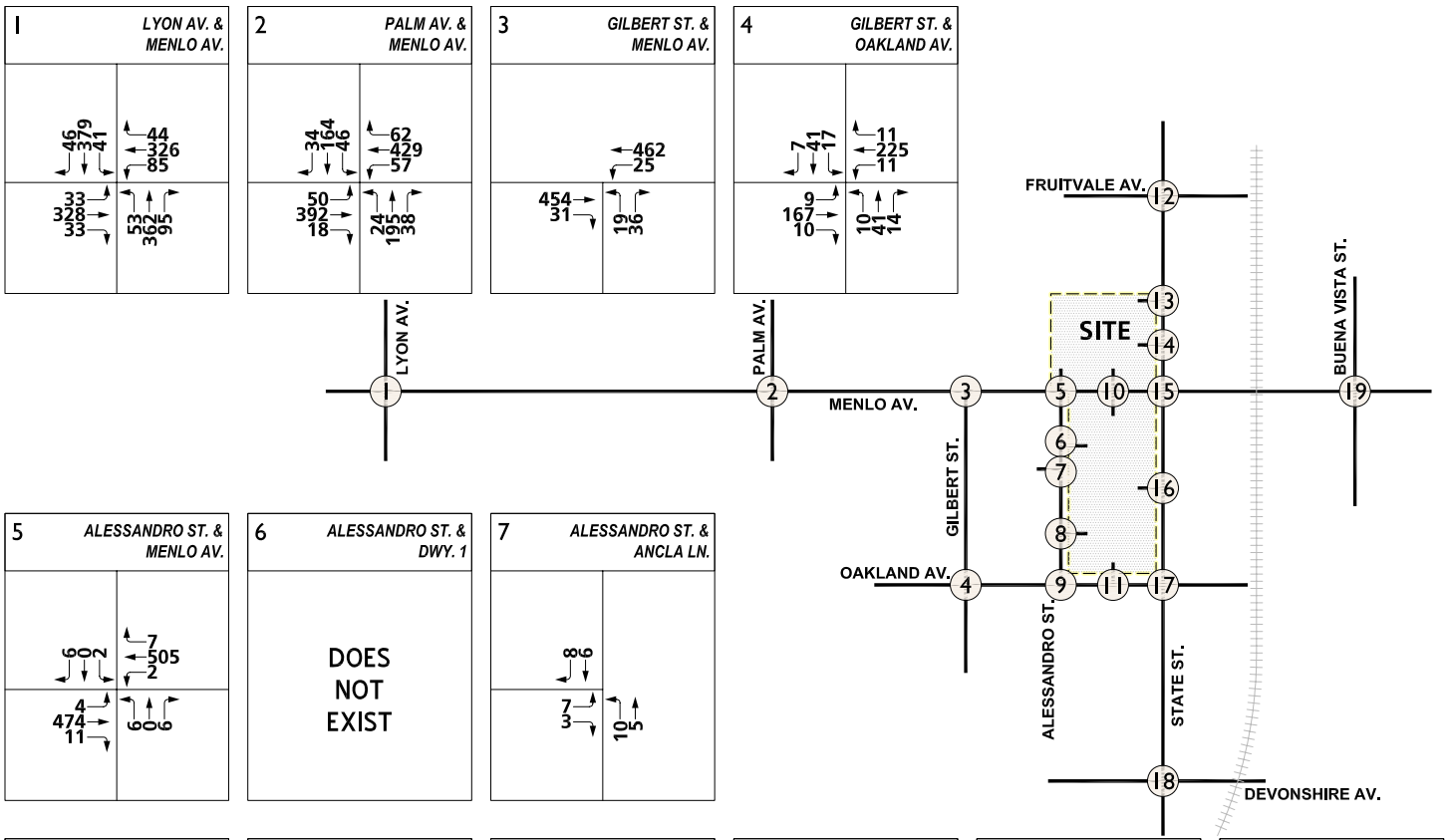


EXHIBIT 6-4

2016 WITH PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



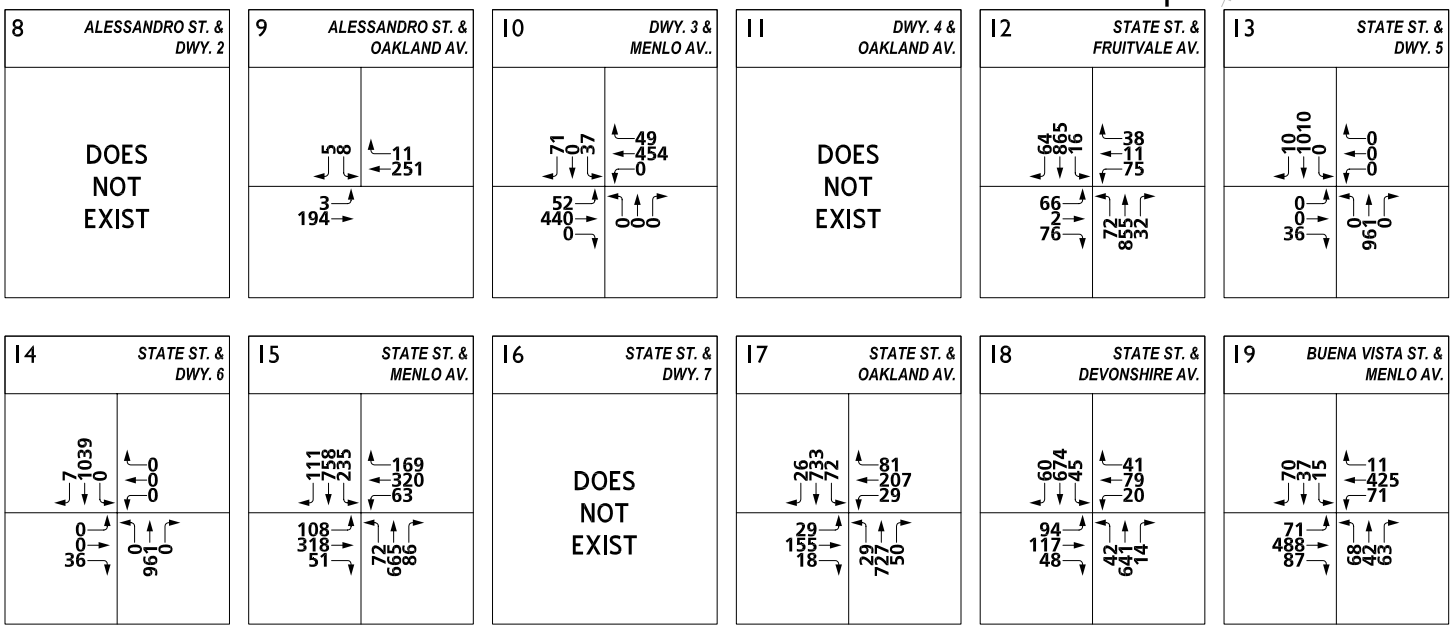




Table 6-1

Intersection Analysis for 2016 Without Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	**40.6**	**97.9**	**E**	**F[4]**
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	17.7	**36.0**	C	**E**
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	13.9	14.3	B	B
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	11.6	13.1	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	16.0	16.3	C	C
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.5	8.6	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.7	11.0	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.8	18.7	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	35.6	54.0	D	D
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	18.5	20.2	B	C
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.5	26.1	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	18.9	**46.3**	C	**F[4]**

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Volume to Capacity ratio is greater than 1.00 = Level of Service "F".

Table 6-2

Intersection Analysis for 2016 With Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	**44.0**	**111.2**	**E**	**F[4]**
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	19.3	**52.7**	C	**F**
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	14.2	15.4	B	C
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	11.7	13.4	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	13.4	17.8	B	C
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.5	8.6	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.7	11.0	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.9	18.8	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	36.0	**61.5**	D	**E**
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	18.6	20.4	B	C
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.6	26.4	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	19.5	**53.5**	C	**F[4]**

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Volume to Capacity ratio is greater than 1.00 = Level of Service "F".

For Interim Year 2016 without project traffic conditions, the following study area intersections are projected to operate at an unacceptable level of service during the peak hours:

- N. Lyon Avenue / Menlo Avenue (LOS "E" – AM peak hour; LOS "F" – PM peak hour)
- Palm Avenue / Menlo Avenue (LOS "E" – PM peak hour)
- Buena Vista Street / Menlo Avenue (LOS "F" – PM peak hour)

As shown in Table 6-1 the addition of cumulative traffic is projected to cause these intersections, which operate at an acceptable level of service under existing conditions, to fall to an unacceptable level of service during the peak hours. As shown in Table 6-2, the addition of project traffic contributes to the peak hour delay at these already deficient intersections. As such, the project's incremental effect, though individually limited, is cumulatively considerable.

In addition, the contribution of project traffic at the following intersection is projected to cause this location, which operates at an acceptable level of service (i.e., LOS "D" or better) under pre-project 2016 traffic conditions, to fall to an unacceptable level of service (i.e., LOS "E" or "F"), potentially resulting in a significant impact:

State Street / Menlo Avenue – The addition of project traffic is anticipated to worsen the LOS operations during the PM peak hour from LOS "D" to LOS "E". As such, the impact is considered **significant (Impact 1.1)**.

6.3.2 Roadway Segment Analysis

Pursuant to City of Hemet initiative Measure A (July 7, 1988), Level of Service "C" should be maintained on all City roadway segments. As such, this traffic report contains an analysis of peak hour roadway segment performance for Interim Year 2016 with project conditions. The segment analysis is based on the peak hour link volume; therefore, segments should operate at Level of Service "C" with a capacity of 1,520 vehicles per hour per lane. This peak hour per lane capacity is calculated from a base

capacity of 1,900 vehicles per hour per lane, representing LOS "E" conditions. Eighty percent of this base capacity should equate to a LOS "C" operation (1,900 x 0.80 = 1,520 vehicles per hour per lane).

Any roadway segment in which the project is projected to contribute 1,000 or more daily project trips is evaluated; the following roadway segment location has been analyzed for Interim Year 2016 with project conditions:

Menlo Avenue:

- Between Alessandro Street and Driveway 3

Table 6-3 outlines the results of a segment analysis for Interim Year 2016 with project conditions. As shown on Table 6-3, Menlo Avenue between Alessandro Street and Driveway 3 is projected to operate at an acceptable LOS (i.e., LOS C or better) during peak hour traffic flows.

6.4 Interim Year 2016 Project Impacts, Proposed Mitigation and Improvement Strategies

The study area intersection found to be significantly impacted by the project was previously discussed in Section 6.3.1.

6.4.1 Summary of Interim Year 2016 Project Impacts

Intersections found to have significant project impacts have been identified based on the level of service thresholds and significance criteria previously discussed in Chapter 2.0. Mitigation strategies have been recommended to address LOS and delay at each affected intersection consistent with City of Hemet General Plan goals and policies.

The intersection of State Street / Menlo Avenue is projected to be significantly impacted by the (addition of) project traffic for Interim Year 2016 conditions.

Table 6-3

Peak Hour Segment Analysis for 2016 With Project Conditions[1]

Segment[2]	Existing Number of Lanes	Capacity	AM Peak Hour Link Volume	V/C Ratio	Acceptable?	PM Peak Hour Link Volume	V/C Ratio	Acceptable?
Menlo Av b/w Alessandro & Driveway 3								
Eastbound:	1	1,520	405	0.27	YES	492	0.32	YES
Westbound:	1	1,520	346	0.23	YES	525	0.35	YES

[1] Segment analysis based on the PM peak hour link volume. Capacity is based on Level of Service "C" per City of Hemet standards (i.e., 1,900 x 80 percent = 1,520 vehicles per hour per lane). Segment analysis based on criterion of 1,000 or more daily project trips on the segment. Recommended improvements based on number of lanes required to achieve minimum level of service on each segment (only shown for segments with existing V/C > 1.00).

[2] N/O = North Of; S/O = South Of; W/O = West Of; E/O = East Of; b/w = Between

6.4.2 Proposed Mitigation and Improvement Strategies to Address Interim Year 2016 Project Impacts at Intersection

Mitigation strategies have been recommended to address intersections significantly impacted by the project. Mitigation measures have been recommended that are necessary to reduce each locations peak hour delay and associate LOS grade back to pre-project conditions, thus reducing the project's impact to "less-than-significant".

Table 6-4 shows the recommended intersection improvements necessary to return LOS operations to pre-project conditions. The improvement measures are as follows:

Mitigation Measure 1.1 – State Street / Menlo Avenue

This intersection is anticipated to operate deficiently under Interim Year 2016 conditions due to the existing lane configuration and the anticipated future traffic volumes. This location can be mitigated by providing an exclusive left turn lane on the eastbound leg of the intersection. The eastbound right turn lane should also be striped along Menlo Avenue and should extend the full length of the segment. The westbound direction should be improved to provide two travel lanes west of the intersection, along the project's frontage. The improvements on the west leg of the intersection have taken into account the site-adjacent roadway improvements that will be implemented by the project. No other geometric improvements are needed to bring the intersection delay and LOS back to pre-project conditions and thus reducing the project's impact to ***"less-than-significant"***.

Exhibit 6-5 demonstrates the feasibility of the recommended project improvement at this location. Roadway widening is necessary to provide two westbound travel lanes and an eastbound left turn lane, through lane and dedicated right turn lane, on the west leg of the intersection. However, it is important to note that the roadway widening would be part of the project's site-adjacent roadway improvements.

Worksheets for Interim Year 2016 with project conditions, with mitigation to achieve pre-project conditions, HCM calculations are provided in Appendix "6.6".

Table 6-4

Intersection Analysis for 2016 With Project Conditions With Mitigation Measures to Mitigate Project Impacts

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Driveway 3 / Menlo Av.																	
- Pre-Project Condition[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	0	0	0	**1**	0	**1**	**2**	0	0	**2**	0	11.9	14.6	B	B
State St. / Driveway 5																	
- Pre-Project Condition[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	2	0	0	2	0	0	0	**1**	0	0	0	10.9	12.9	B	B
State St. / Driveway 6																	
- Pre-Project Condition[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	2	0	0	2	0	0	0	**1**	0	0	0	10.7	12.7	B	B
State St. / Menlo Av.																	
- Pre-Project Condition[4]	TS	1	2	0	1	2	0	0	1	1	0	1	1	35.6	54.0	D	D
- With Mitigation	TS	1	2	0	1	2	0	**1**	1	1	0	1	1	18.2	24.1	B	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

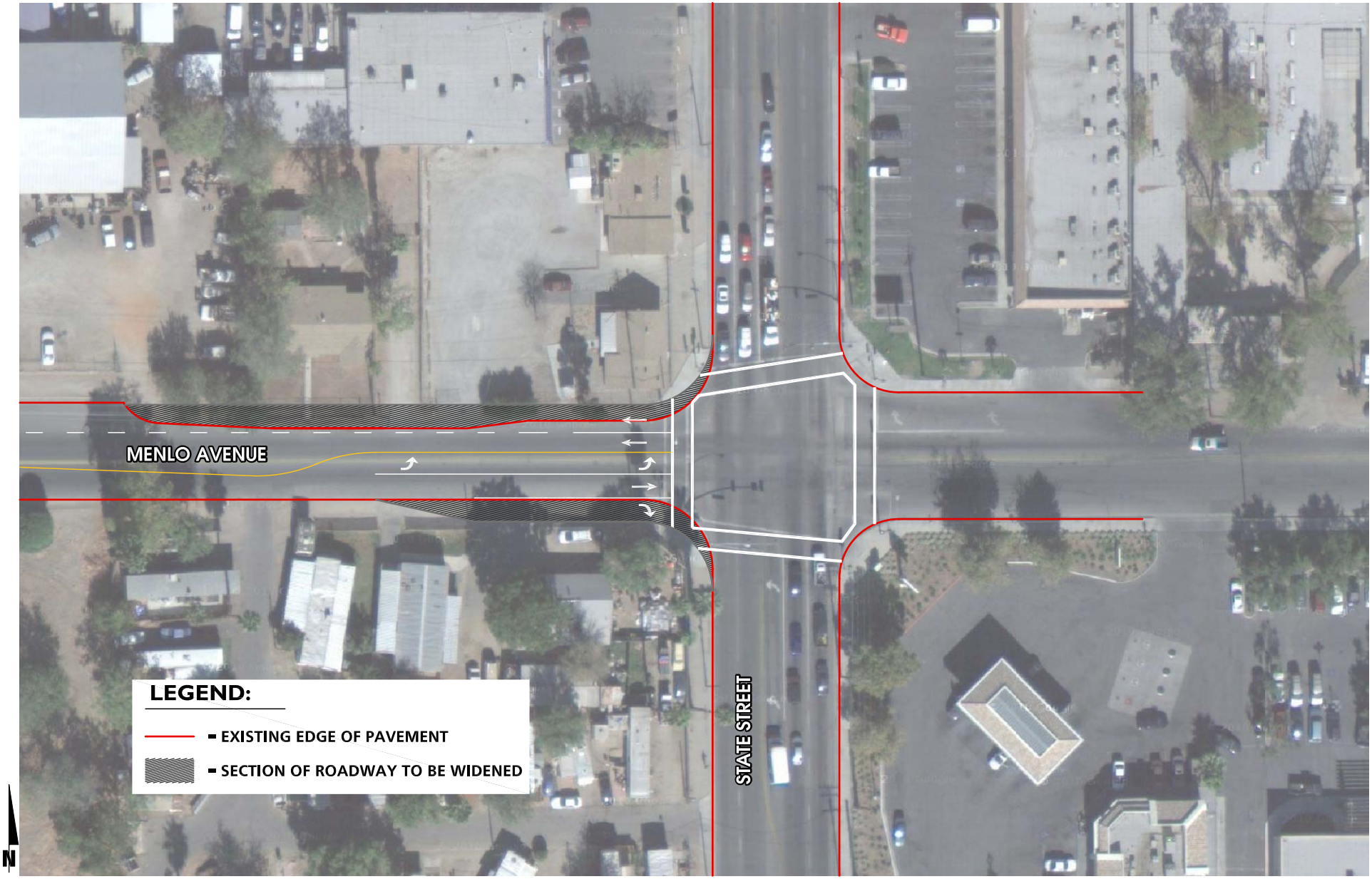
[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Pre-project condition (without mitigation), consistent with Table 6-1.

EXHIBIT 6-5

RECOMMENDED IMPROVEMENTS AT STATE STREET AND MENLO AVENUE



6.5 Interim Year 2016 Cumulative Impacts, Proposed Mitigation and Improvement Strategies

Intersections found to exceed the applicable City of Hemet level of service threshold (LOS "D" or better) for Interim Year 2016 traffic conditions, were previously identified on Tables 6-1 and 6-2.

6.5.1 Summary of Interim Year 2016 Cumulative Impacts

The study area intersections anticipated to exceed LOS thresholds and thus have a significant cumulative impact due to traffic volumes generated by other reasonably foreseeable development in conjunction with project traffic are listed below:

- N. Lyon Avenue / Menlo Avenue – AM and PM peak hours
- Palm Avenue / Menlo Avenue – PM peak hour only
- State Street / Menlo Avenue – PM peak hour only
- Buena Vista Street / Menlo Avenue – PM peak hour only

6.5.2 Proposed Mitigation and Improvement Strategies to Address Interim Year 2016 Cumulative Impacts at Intersections

Mitigation strategies have been recommended at intersections that have been identified as cumulatively impacted to improve each affected intersection's peak hour operations to LOS "D" or better, consistent with City of Hemet General Plan goals and policies. The effectiveness of the recommended mitigation strategies discussed below to address Interim Year 2016 cumulative traffic impacts are presented in Table 6-5. The following mitigation measures are recommended to reduce Interim Year 2016 cumulative impacts to "less-than-significant":

Mitigation Measure 1.2 – State Street / Menlo Avenue (#15)

This intersection is anticipated to operate deficiently under Interim Year 2016 conditions due to the existing lane configuration and the anticipated future traffic volumes. This location can be mitigated by providing exclusive left turn lanes on the eastbound and westbound legs of the intersection. No other geometric improvements are needed to

Table 6-5

Intersection Analysis for 2016 With Project Conditions With Mitigation Measures to Mitigate Cumulative Impacts

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.																	
- Without Mitigation	AWS	0	1	1	0	1	1	0	1	1	0	1	0	44.0	111.2	E	F[4]
- With Mitigation	**TS**	**1**	1	**0**	**1**	1	**0**	**1**	1	**0**	**1**	1	0	31.6	37.1	C	D
Palm Av. / Menlo Av.																	
- Without Mitigation	AWS	0	1	1	0	1	1	1	1	1	1	1	0	19.3	52.7	C	F
- With Mitigation	**TS**	**1**	1	**0**	**1**	1	**0**	1	1	1	1	1	0	27.1	30.6	C	C
State St. / Menlo Av.																	
- Without Mitigation	TS	1	2	0	1	2	0	0	1	1	0	1	1	36.0	61.5	D	E
- With Mitigation	TS	1	2	0	1	2	0	**1**	1	1	**1**	1	1	29.3	33.5	C	C
Buena Vista St. / Menlo Av.																	
- Without Mitigation	AWS	0	1	0	0	1	0	0	1	1	0	1	1	19.5	53.5	C	F
- With Mitigation	**TS**	**1**	1	0	**1**	1	0	**1**	1	**0**	**1**	1	**0**	19.7	20.9	B	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Volume to Capacity ratio is greater than 1.00 = Level of Service "F".

bring the intersection delay and LOS back to LOS "D" or better and thus reducing the cumulative impact to ***"less-than-significant"***.

Mitigation Measure 2.2 – Palm Avenue / Menlo Avenue (#2)

This intersection is anticipated to operate deficiently under Interim Year 2016 conditions due to the existing all way stop intersection control and treatment of left turns at the intersection on the northbound and southbound approaches. This location can be mitigated by implementing a traffic signal and providing exclusive left turn lanes on the northbound and southbound approaches. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Mitigation Measure 3.1 – N. Lyon Avenue / Menlo Avenue (#1)

This intersection is anticipated to operate deficiently under Interim Year 2016 conditions due to the existing all way stop intersection control and treatment of left turns at the intersection on all approaches. This location can be mitigated by implementing a traffic signal and providing exclusive left turn lanes on all approaches. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Mitigation Measure 4.1 – Buena Vista Street and Menlo Avenue (#19)

This intersection is anticipated to operate deficiently under Interim Year 2016 conditions due to the existing all way stop intersection control and treatment of left turns at the intersection on all approaches. This location can be mitigated by implementing a traffic signal and providing exclusive left turn lanes on all approaches. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Worksheets for Interim Year 2016 with project conditions, with mitigation to achieve the City of Hemet's acceptable LOS threshold (LOS "D"), HCM calculations are provided in Appendix "6.7".

The project shall participate in the funding and construction of off-site improvements, including traffic signals that are needed to mitigate cumulative traffic impacts through the payment of City of Hemet Development Impact Fees (DIF) or through a fair share contribution as directed by the City. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population and traffic increases.

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7.0 PROJECT BUILDOUT 2020 CONDITIONS

This chapter discusses the methods used to develop Project Buildout 2020 traffic forecasts for without and with project conditions and the resulting intersection operations.

7.1 Year 2020 Without Project Traffic Volume Forecasts

This scenario includes existing (2010) traffic volumes plus an ambient growth factor of 21.90% and the addition to cumulative development traffic. The weekday ADT volumes which can be expected for Year 2020 without project traffic conditions have been provided in Appendix "7.1" on Exhibit 7.1-1. Exhibits 7-1 and 7-2 show the weekday AM and PM peak hour intersection turning movement volumes for Project Buildout 2020 without project traffic conditions.

7.2 Year 2020 With Project Traffic Volume Forecasts

The weekday ADT volumes which can be expected for Year 2020 with project traffic conditions have been provided in Appendix "7.1" on Exhibit 7.1-2. Exhibits 7-3 and 7-4 illustrate the weekday AM and PM peak hour intersection turning movement volumes for Year 2020 with project traffic conditions.

7.3 Year 2020 Conditions Analysis

7.3.1 Intersection Operations

Level of service calculations were conducted for the study intersections to evaluate their operations under project buildout Year 2020 conditions. The results of the intersection level of service analysis are presented in Table 7-1 for Year 2020 without project conditions and Table 7-2 for Year 2020 with project conditions. Intersections that are anticipated to operate below the City's LOS threshold are indicated in bold text.

Worksheets for Year 2020 without and with project conditions HCM calculations are provided in Appendix "7.2" and "7.3" and Year 2020 without and with project traffic signal warrants are provided in Appendix "7.4" and "7.5".

EXHIBIT 7-1

2020 WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

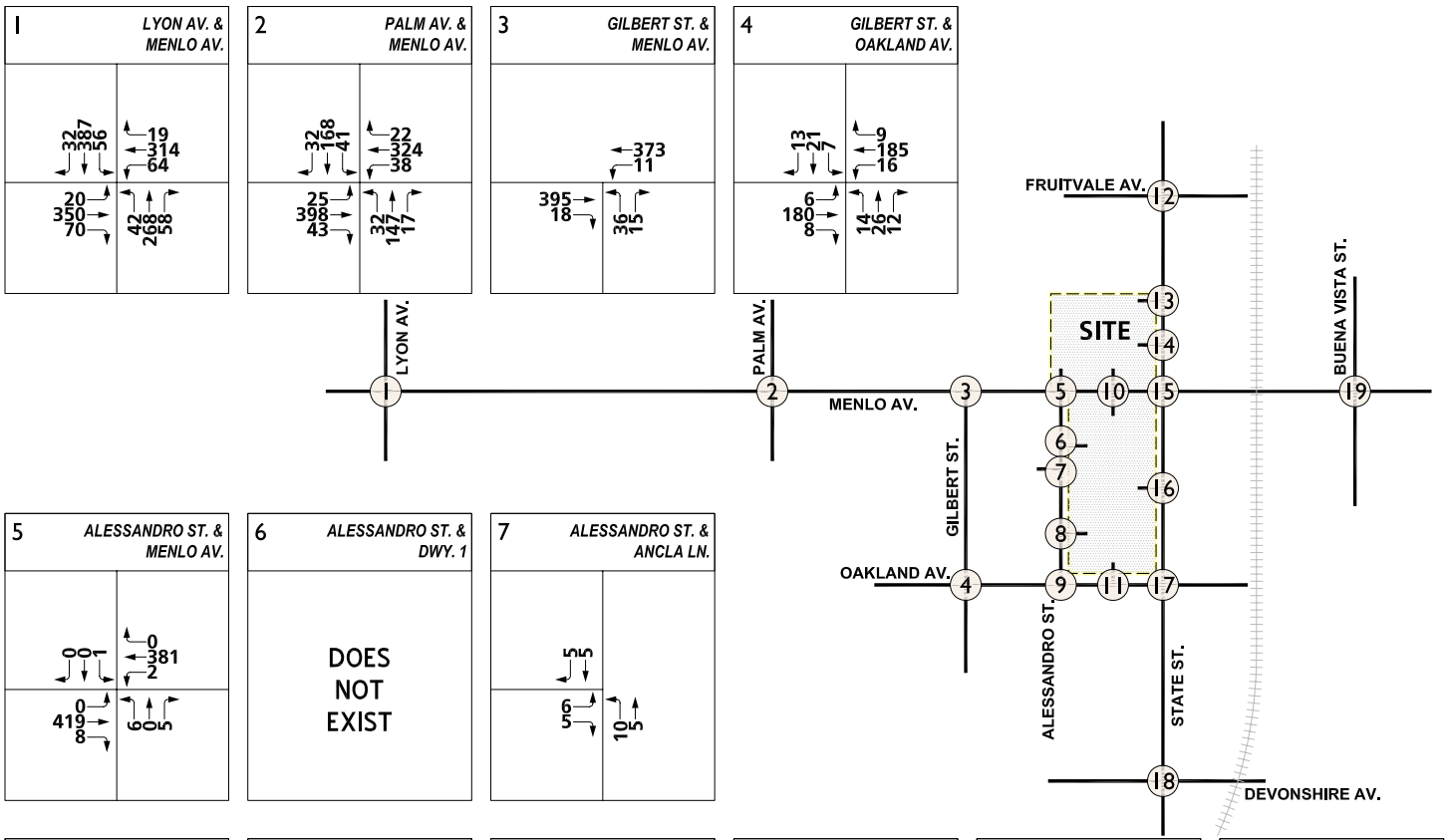


EXHIBIT 7-2

2020 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES

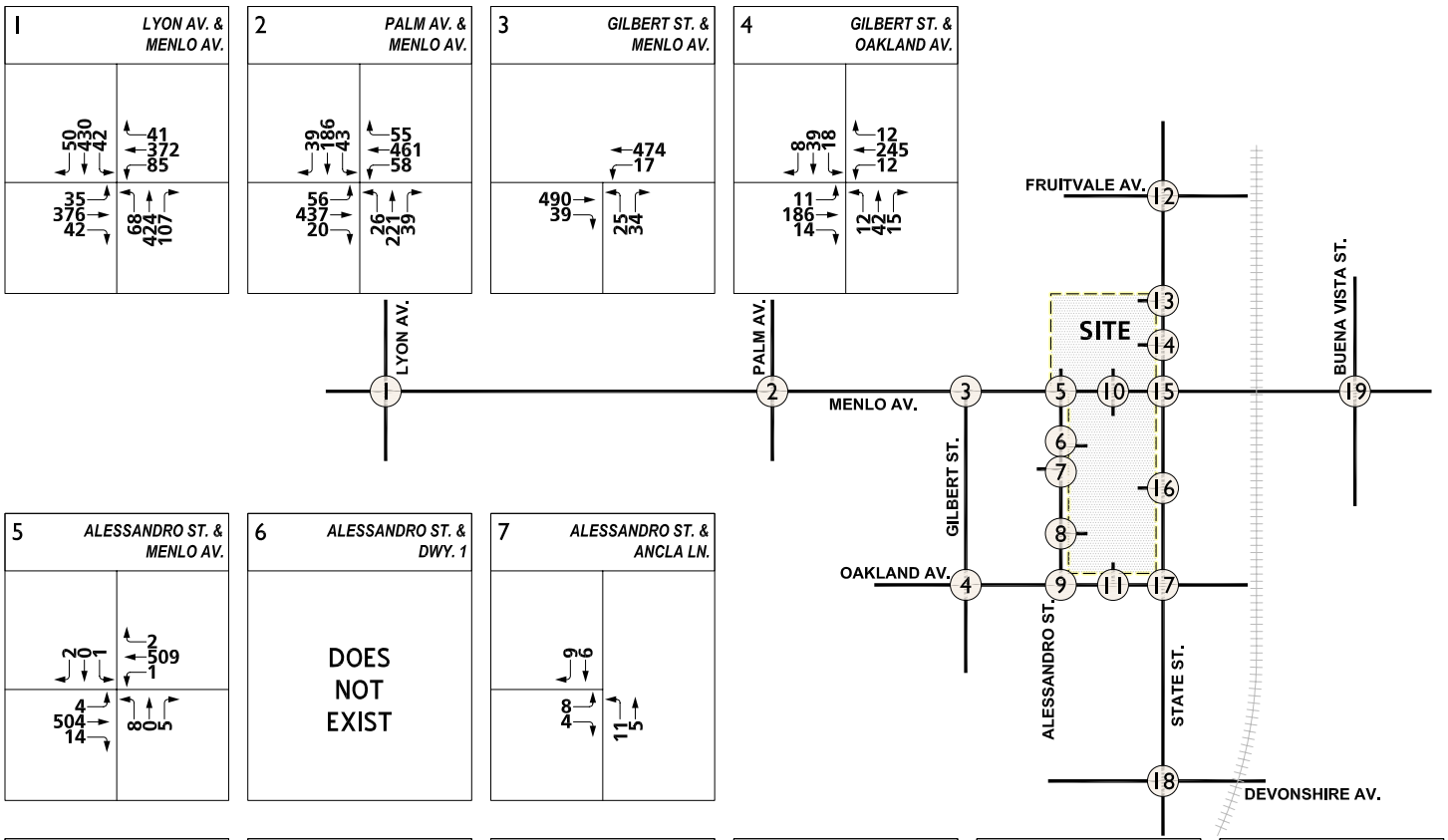
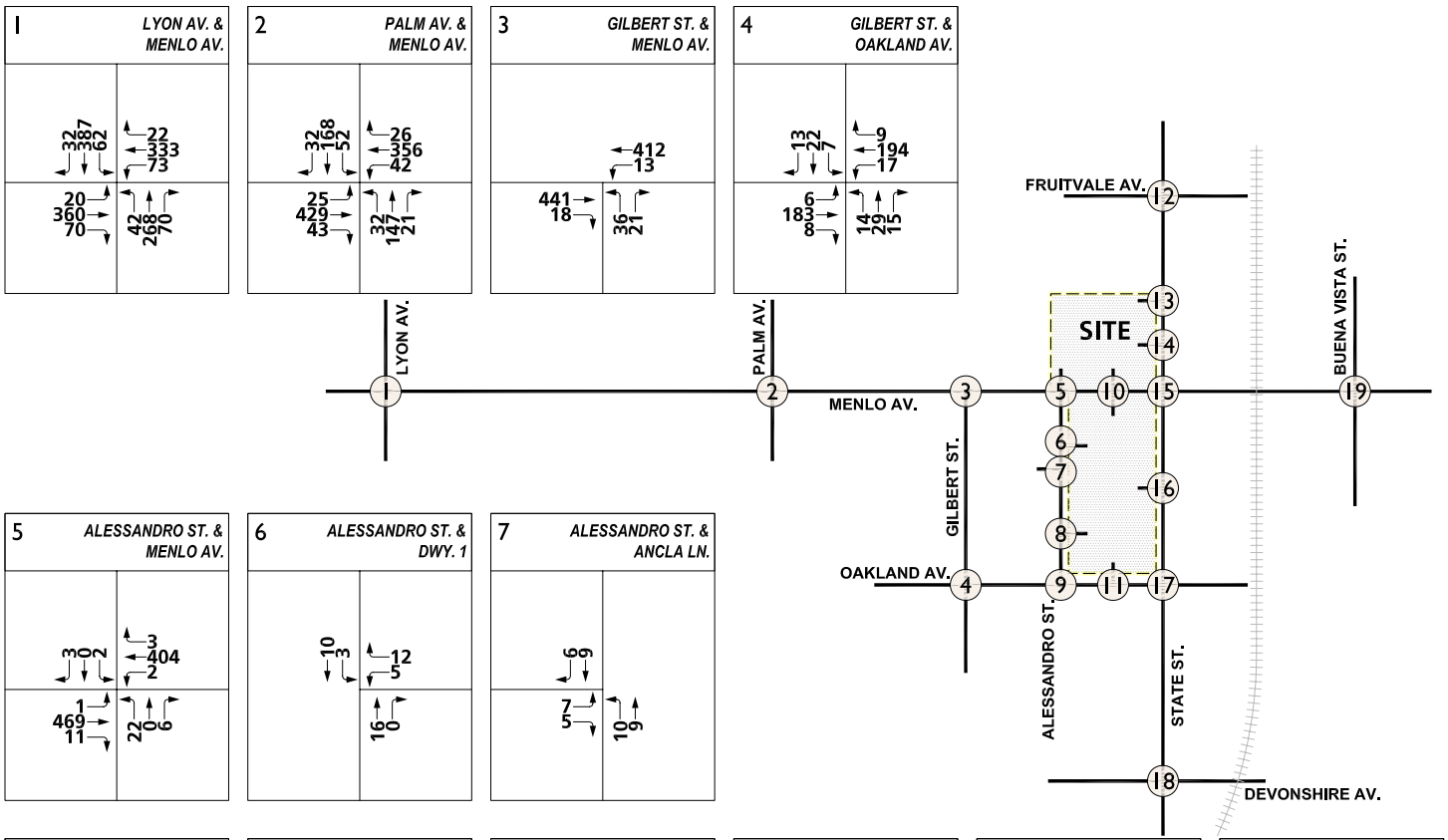


EXHIBIT 7-3

2020 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



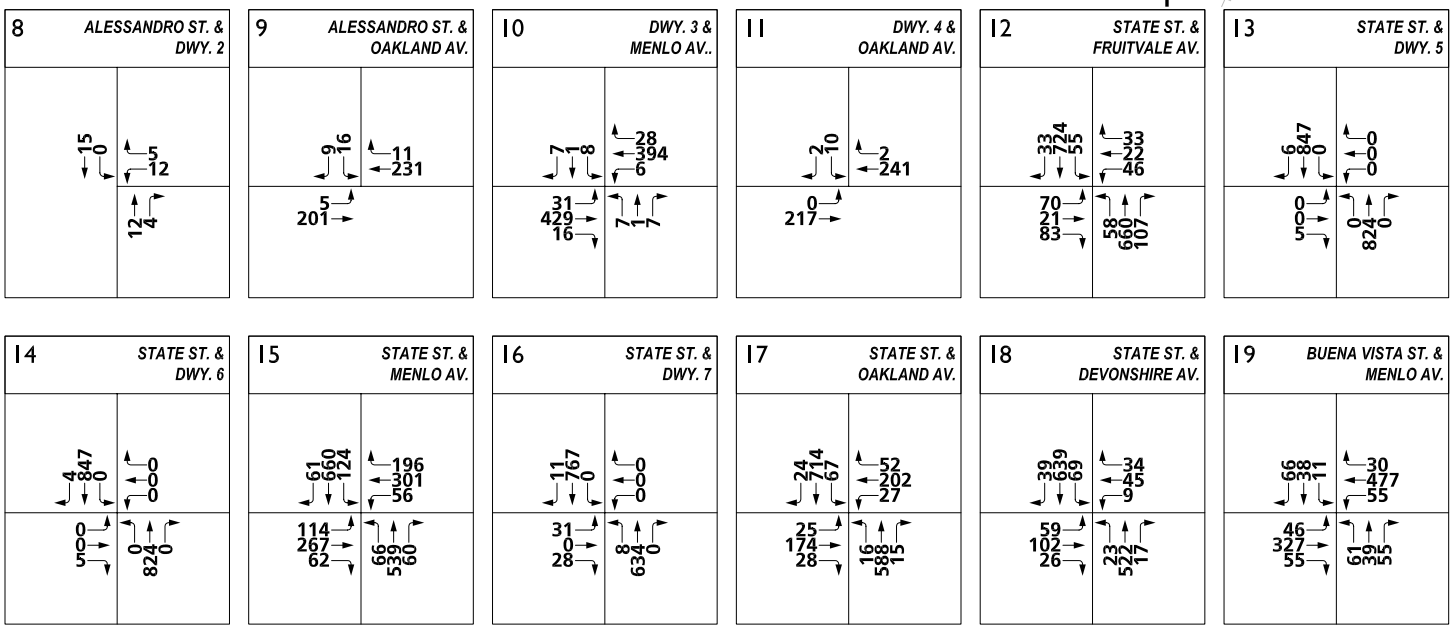




EXHIBIT 7-4

2020 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES

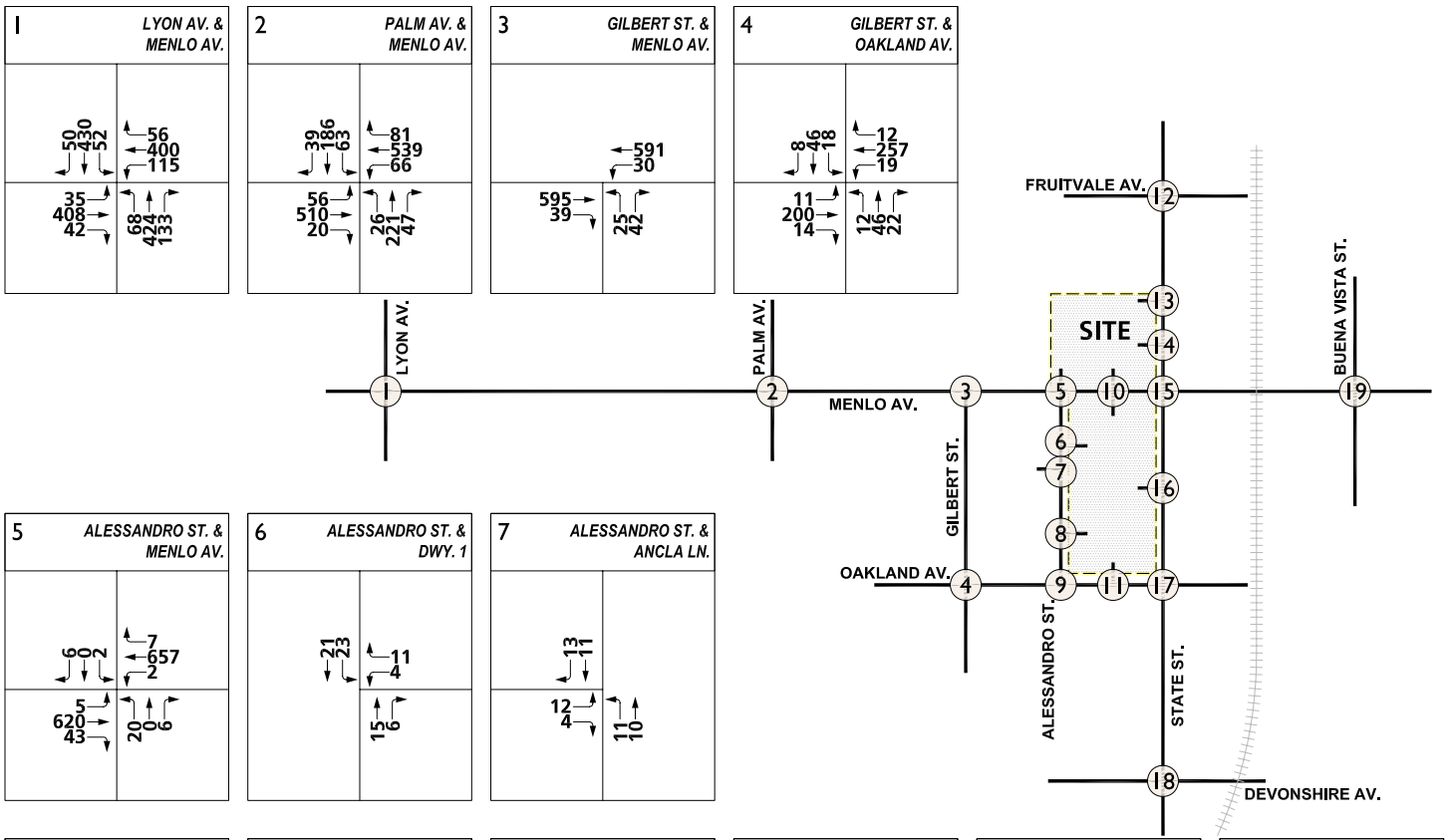


Table 7-1

Intersection Analysis for 2020 Without Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	**84.3**	**162.5**	**F[4]**	**F[4]**
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	26.0	**76.0**	D	**F**
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	15.7	17.1	C	C
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	12.2	14.1	B	B
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	18.0	19.7	C	C
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.6	8.6	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	11.0	11.4	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	19.1	19.1	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	41.6	**74.8**	D	**F[4]**
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	19.3	21.1	B	C
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	24.7	26.6	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	27.8	**81.7**	D	**F**

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Volume to Capacity ratio is greater than 1.00 = Level of Service "F".

Table 7-2

Intersection Analysis for 2020 With Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.	AWS	0	1	1	0	1	1	0	1	1	0	1	0	**95.9**	**193.2**	**F[4]**	**F[4]**
Palm Av. / Menlo Av.	AWS	0	1	1	0	1	1	1	1	1	1	1	0	**35.6**	**135.2**	**E**	**F**
Gilbert St. / Menlo Av.	CSS	0	1	0	0	0	0	0	1	0	1	1	0	16.9	21.9	C	C
Gilbert St. / Oakland Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	1	12.4	15.1	B	C
Alessandro St. / Menlo Av.	CSS	0	1	0	0	1	0	0	1	1	0	1	0	19.3	34.9	C	D
Alessandro St. / Ancla Ln.	CSS	0	1	0	0	1	0	0	1	0	0	0	0	8.6	8.7	A	A
Alessandro St. / Oakland Av.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	11.1	11.4	B	B
State St. / Fruitvale Av.	TS	1	2	0	1	2	0	0	1	0	0	1	1	19.2	19.5	B	B
State St. / Menlo Av.	TS	1	2	0	1	2	0	0	1	1	0	1	1	42.9	**101.6**	D	**F**
State St. / Oakland Av.	TS	1	2	1	1	2	0	1	1	0	1	1	0	19.5	21.9	B	C
State St. / Devonshire Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	25.3	27.0	C	C
Buena Vista St. / Menlo Av.	AWS	0	1	0	0	1	0	0	1	1	0	1	1	30.9	**105.1**	D	**F**

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

[4] Volume to Capacity ratio is greater than 1.00 = Level of Service "F".

For Year 2020 without project traffic conditions, the following study area intersections are projected to operate at an unacceptable level of service during the peak hours:

- N. Lyon Avenue / Menlo Avenue (LOS "F" – AM and PM peak hours)
- Palm Avenue / Menlo Avenue (LOS "F" – PM peak hour)
- State Street / Menlo Avenue (LOS "F" – PM peak hour)
- Buena Vista Street / Menlo Avenue (LOS "F" – PM peak hour)

As shown in Table 6-1 the addition of cumulative traffic is projected to cause these intersections, which operate at an acceptable level of service under existing conditions, to fall to an unacceptable level of service during the peak hours. As shown in Table 7-2, the addition of project traffic contributes to the peak hour delay at these already deficient intersections. As such, the project's incremental effect, though individually limited, is cumulatively considerable.

The addition of project traffic at the following intersection is projected to cause this location, which operates at an acceptable level of service (i.e., LOS "D" or better) under pre-project 2020 traffic conditions, to fall to an unacceptable level of service (i.e., LOS "E" or "F"), potentially resulting in a significant impact:

Palm Avenue / Menlo Avenue – The addition of project traffic is anticipated to worsen the LOS operations during the AM peak hour from LOS "D" to LOS "E". As such, the impact is considered **significant (Impact 2.1)**.

7.3.2 Roadway Segment Analysis

Pursuant to City of Hemet initiative Measure A (July 7, 1988), any roadway segment in which the project is projected to contribute 1,000 or more daily project trips is evaluated; the following roadway segment locations have been analyzed for project buildout Year 2020 with project conditions:

Menlo Avenue:

- East of Lyon Avenue
- West of Palm Avenue
- Between Palm Avenue and Gilbert Street
- Between Gilbert Street and Alessandro Street
- Between Alessandro Street and Driveway 3
- Between Driveway 3 and State Street

State Street:

- Between Fruitvale Avenue and Driveway 5
- Between Driveway 5 and Driveway 6
- Between Driveway 6 and Menlo Avenue
- Between Menlo Avenue and Driveway 7
- Between Driveway 7 and Oakland Avenue
- Between Oakland Avenue and Devonshire Avenue

Table 7-3 outlines the results of a segment analysis for Year 2020 with project conditions. As shown on Table 7-3, the roadway segments are operating at under-capacity conditions based on existing roadway conditions, thus project impacts are less than significant.

7.4 Year 2020 Project Impacts, Proposed Mitigation and Improvement Strategies

The study area intersections found to be significantly impacted by the project were previously discussed in Section 7.3.1.

7.4.1 Summary of Year 2020 Project Impacts

Intersections found to have significant project-related impacts have been identified based on the level of service thresholds and significance criteria previously discussed in Chapter 2.0. Mitigation strategies have been recommended to address LOS and delay at each affected intersection consistent with City of Hemet General Plan goals and policies.

Table 7-3

Peak Hour Segment Analysis for 2020 With Project Conditions[1]

Segment[2]	Existing Number of Lanes	Capacity	AM Peak Hour Link Volume	V/C Ratio	Acceptable?	PM Peak Hour Link Volume	V/C Ratio	Acceptable?
Menlo Av E/O Lyon Av								
Eastbound:	1	1,520	492	0.32	YES	592	0.39	YES
Westbound:	1	1,520	428	0.28	YES	570	0.38	YES
Menlo Av W/O Palm Av								
Eastbound:	1	1,520	496	0.33	YES	586	0.39	YES
Westbound:	1	1,520	420	0.28	YES	603	0.40	YES
Menlo Av b/w Palm Av & Gilbert St								
Eastbound:	1	1,520	502	0.33	YES	620	0.41	YES
Westbound:	1	1,520	424	0.28	YES	686	0.45	YES
Menlo Av b/w Gilbert St & Alessandro St								
Eastbound:	1	1,520	481	0.32	YES	668	0.44	YES
Westbound:	1	1,520	429	0.28	YES	683	0.45	YES
Menlo Av b/w Alessandro & Driveway 3								
Eastbound:	1	1,520	476	0.31	YES	628	0.41	YES
Westbound:	1	1,520	408	0.27	YES	667	0.44	YES
Menlo Av b/w Driveway 3 & State St								
Eastbound:	1	1,520	443	0.29	YES	578	0.38	YES
Westbound:	1	1,520	428	0.28	YES	646	0.43	YES
State St b/w Fruitvale Av & Driveway 5								
Northbound:	2	3,040	825	0.27	YES	1,128	0.37	YES
Southbound:	2	3,040	853	0.28	YES	1,195	0.39	YES
State St b/w Driveway 5 & Driveway 6								
Northbound:	2	3,040	824	0.27	YES	1,128	0.37	YES
Southbound:	2	3,040	852	0.28	YES	1,221	0.40	YES
State St b/w Driveway 6 & Menlo Av								
Northbound:	2	3,040	849	0.28	YES	1,108	0.36	YES
Southbound:	2	3,040	845	0.28	YES	1,282	0.42	YES
State St b/w Menlo Av & Driveway 7								
Northbound:	2	3,040	665	0.22	YES	1,034	0.34	YES
Southbound:	2	3,040	778	0.26	YES	1,040	0.34	YES
State St b/w Driveway 7 & Oakland Av								
Northbound:	2	3,040	665	0.22	YES	1,001	0.33	YES
Southbound:	2	3,040	805	0.26	YES	1,021	0.34	YES
State St b/w Oakland Av & Devonshire Av								
Northbound:	2	3,040	619	0.20	YES	988	0.33	YES
Southbound:	2	3,040	769	0.25	YES	924	0.30	YES

[1] Segment analysis based on the PM peak hour link volume. Capacity is based on Level of Service "C" per City of Hemet standards (i.e., 1,900 x 80 percent = 1,520 vehicles per hour per lane). Segment analysis based on criterion of 1,000 or more daily project trips on the segment. Recommended improvements based on number of lanes required to achieve minimum level of service on each segment (only shown for segments with existing V/C > 1.00).

[2] N/O = North Of; S/O = South Of; W/O = West Of; E/O = East Of; b/w = Between

The intersection of Palm Avenue / Menlo Avenue is projected to operate at level of service "E" during the AM peak hour and LOS "F" during the PM peak hour and is significantly impacted by the project.

7.4.2 Proposed Mitigation and Improvement Strategies to Address Year 2020 Project Impacts at Intersections

Mitigation has been recommended to address the intersection location significantly impacted by the project. Mitigation measures have been recommended that are necessary to reduce each locations peak hour delay and associate LOS grade back to pre-project conditions, thus reducing the project's impact to "less-than-significant".

Table 7-4 shows the recommended intersection improvements necessary to return LOS operations to pre-project conditions. The improvement measures are as follows:

Mitigation Measure 2.1 – Palm Avenue / Menlo Avenue

The following improvement (shown in **bold**) is necessary to reduce the project's impact to "***less-than-significant***":

Install a Traffic Signal; no other geometric improvements are necessary.

Worksheets for Year 2020 with project conditions, with mitigation to achieve pre-project conditions, HCM calculations are provided in Appendix "7.6".

7.5 Year 2020 Cumulative Impacts, Proposed Mitigation and Improvement Strategies

Intersections found to exceed the applicable City of Hemet level of service threshold (LOS "D" or better) for Year 2020 traffic conditions, were previously identified on Table 7-2.

7.5.1 Summary of Year 2020 Cumulative Impacts

The study area intersections anticipated to exceed LOS thresholds and thus have a significant cumulative impact due to traffic volumes generated by other reasonably

Table 7-4

Intersection Analysis for 2020 With Project Conditions With Mitigation Measures to Mitigate Project Impacts

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Palm Av. / Menlo Av.																	
- Pre-Project Conditions[4]	AWS	0	1	1	0	1	1	1	1	1	1	1	0	26.0	76.0	D	F
- With Mitigation	**TS**	0	1	1	0	1	1	1	1	1	1	1	0	10.9	12.5	B	B
Alessandro St. / Driveway 1																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	1	0	0	1	0	0	0	0	0	**1**	0	8.5	8.6	A	A
Alessandro St. / Driveway 2																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	1	0	0	1	0	0	0	0	0	**1**	0	9.3	9.3	A	A
Driveway 3 / Menlo Av.																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	**1**	0	0	**1**	0	**1**	**2**	0	**1**	**2**	0	14.2	25.8	B	D
Driveway 4 / Oakland Av.																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	0	0	0	**1**	0	0	1	0	0	1	0	11.4	12.3	B	B
State St. / Driveway 5																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	2	0	0	2	0	0	0	**1**	0	0	0	11.5	14.2	B	B
State St. / Driveway 6																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**CSS**	0	2	0	0	2	0	0	0	**1**	0	0	0	11.2	13.9	B	B
State St. / Driveway 7																	
- Pre-Project Conditions[4]		Intersection Does Not Exist															
- With Mitigation	**TS**	**1**	2	0	0	2	0	0	**1**	0	0	0	0	9.3	11.8	A	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a signle lane) are shown.

[3] CSS = Cross Street Stop; AWS = All Way Stop; TS = Traffic Signal

[4] Pre-project condition (without mitigation), consistent with Table 7-1.

foreseeable development projects in the area in conjunction with project traffic are listed below:

- N. Lyon Avenue / Menlo Avenue – AM and PM peak hours
- Palm Avenue / Menlo Avenue – AM and PM peak hours
- State Street / Menlo Avenue – PM peak hour only
- Buena Vista Street / Menlo Avenue – PM peak hour only

7.5.2 Proposed Mitigation and Improvement Strategies to Address Year 2020 Cumulative Impacts at Intersections

Mitigation strategies have been recommended at intersections that have been identified as cumulatively impacted to improve each affected intersection's peak hour operations to LOS "D" or better, consistent with City of Hemet General Plan goals and policies. The effectiveness of the recommended mitigation strategies discussed below to address Year 2020 cumulative traffic impacts are presented in Table 7-5. The following mitigation measures are recommended to reduce Year 2030 cumulative impacts to "less-than-significant":

Mitigation Measure 1.3 – State Street / Menlo Avenue (#15)

The following improvements (shown in **bold**) are necessary to reduce the cumulative impact to ***"less-than-significant"***, in addition to those previously described under Mitigation Measures 1.1 and 1.2:

Northbound: One left turn lane, one through lane and one shared through-right turn lane.

Southbound: One left turn lane, one through lane and one shared through-right turn lane.

Eastbound: *One left turn lane*, one through lane and **one shared through-right turn lane**.

Westbound: *One left turn lane*, one through lane and one right turn lane.

Table 7-5

Intersection Analysis for 2020 With Project Conditions With Mitigation Measures to Mitigate Cumulative Impacts

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (sec.)		Level of Service	
		Northbound			Southbound			Eastbound			Westbound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
N. Lyon Av. / Menlo Av.																	
- Without Mitigation	AWS	0	1	1	0	1	1	0	1	1	0	1	0	95.9	193.2	F	F
- With Mitigation	**TS**	**1**	1	**0**	**1**	1	**0**	**1**	1	**0**	**1**	1	0	36.0	45.3	D	D
Palm Av. / Menlo Av.																	
- Without Mitigation	AWS	0	1	1	0	1	1	1	1	1	1	1	0	35.6	135.2	E	F
- With Mitigation	**TS**	**1**	1	**0**	**1**	1	**0**	1	1	1	1	1	0	28.8	34.4	C	C
State St. / Menlo Av.																	
- Without Mitigation	TS	1	2	0	1	2	0	0	1	1	0	1	1	42.9	101.6	D	F
- With Mitigation	TS	1	2	0	1	2	0	**1**	**2**	**0**	**1**	1	1	28.8	39.4	C	D
Buena Vista St. / Menlo Av.																	
- Without Mitigation	AWS	0	1	0	0	1	0	0	1	1	0	1	1	30.9	105.1	D	F
- With Mitigation	**TS**	**1**	1	0	**1**	1	0	**1**	1	**0**	**1**	1	**0**	20.0	22.0	B	C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; **1** = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 8.0 R1 (2008). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross Street Stop
AWS = All Way Stop
TS = Traffic Signal

Mitigation Measure 2.3 – Palm Avenue / Menlo Avenue (#2)

Mitigation Measure 2.2 shall apply. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Mitigation Measure 3.2 – N. Lyon Avenue / Menlo Avenue (#1)

Mitigation Measure 3.1 shall apply. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Mitigation Measure 4.2 – Buena Vista Street and Menlo Avenue (#19)

Mitigation Measure 4.1 shall apply. No other geometric improvements are needed to bring the intersection delay and associated LOS grade back to LOS "D" or better, thus reducing the cumulative impact to ***"less-than-significant"***.

Worksheets for Year 2020 with project conditions, with mitigation to achieve the City of Hemet's acceptable LOS threshold (LOS "D"), HCM calculations are provided in Appendix "7.7".

The project shall participate in the funding and construction of off-site improvements, including traffic signals that are needed to serve cumulative traffic conditions through the payment of City of Hemet Development Impact Fees (DIF) or through a fair share contribution as directed by the City. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population and traffic increases.

7.6 Development Impact Fees

The proposed project is subject to two off-site roadway improvement fee programs: the regional Transportation Uniform Mitigation Fee (TUMF) and the City of Hemet's Development Impact Fee (DIF). Each program focuses on a specific network of future infrastructure needs that may overlap or complement direct project mitigation.

The TUMF Program: The TUMF program is administered by Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in 2003. The program Nexus Study was updated in October 2009 to reflect current cost factors and network changes. TUMF identifies a network of backbone and local roadways that are needed to accommodate regional growth through 2035. This program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service. TUMF is a regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County except the City of Beaumont.

TUMF is imposed on new residential, commercial, office, and industrial development through application of the TUMF fee ordinance and fees are due prior to issuance of an occupancy permit. In addition, an annual inflation adjustment is considered each year. In this way, TUMF fees are adjusted on a regular basis to ensure that the development impact fees collected keep pace with construction and labor costs, etc.

The City of Hemet DIF Program: The project area is located within city limits and therefore will be subject to City of Hemet Development Impact Fees (DIF). The DIF program is intended to address the impacts of local development and consists of a variety of public use categories including one transportation component: “Bridges, Signals & Thoroughfares”.

7.6.1 TUMF and DIF Administrative Issues and Opportunities

TUMF is an ambitious regional program created to address cumulative impacts of growth throughout western Riverside County. Program guidelines and implementation strategies are being handled on an iterative basis. Exemptions, credits, and reimbursement decisions are deferred to local jurisdictions subject to audit. Fees submitted to the City are passed on to WRCOG as the ultimate program administrator. Fees collected by WRCOG are distributed on a formula basis to the regional, local, and transit components of the program.

The project is located in the Hemet / San Jacinto Zone with member agencies including the County of Riverside and the Cities of Hemet and San Jacinto. The Hemet / San Jacinto Zone five-year Transportation Improvement Plan (TIP) which prioritizes TUMF

improvements in the Zone was adopted in March 2011. No Zone improvements are currently programmed in the immediate project vicinity

The cost of signalizing DIF network intersections is assumed to be covered under the Bridges, Signals & Thoroughfares component of the DIF program. Most impact fee programs generally define DIF eligible intersections as those consisting of two intersecting general plan roadways.

7.7 Fair Share Improvements

The improvements listed previously in Table 7-5 are comprised of lane additions, installation of signals and signal modifications. Depending on the width of the existing pavement and right-of-way, these improvements may involve only striping modifications or they may involve construction of additional pavement width.

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Impact fee programs typically have a specific network improvement list that serve as the basis for the fee. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. The project fair share percentages are shown on Table 7-6. The mitigation measures identified on Table 7-7 are not part of the TUMF or explicitly identified in the DIF. The City's DIF program does not identify specific signal improvement locations but may provide funding at certain locations. Eligibility of potential signal installations would be negotiated as part of the development approval process.

This TIA has identified recommended intersection improvements at five locations. The intersection State Street / Menlo Avenue is adjacent to the project and has a 24.6% share. The relatively minor magnitude of the improvements could be addressed through a financial

Table 7-6

Project Contribution to Total New Traffic

Intersection		Peak Hour	2010 Traffic	Project Traffic	2020 WP Traffic	New Traffic	Project Contribution
No.	Name						
1	N. Lyon Avenue / Menlo Avenue	AM	1,074	58	3,476	2,402	2.4%
		PM	1,234	142	4,422	3,188	4.5%
2	Palm Avenue / Menlo Avenue	AM	870	84	2,745	1,875	4.5%
		PM	1,040	213	3,708	2,668	8.0%
15	State Street / Menlo Avenue	AM	1,636	103	2,506	870	11.8%
		PM	2,129	347	3,542	1,413	24.6%
19	Buena Vista Street and Menlo Avenue	AM	908	30	2,522	1,614	1.9%
		PM	1,145	82	3,326	2,181	3.8%

Table 7-7

Future Intersection Improvements and Local Mitigation

Intersections	Total Improvements Required by 2016	Total Improvements Required by 2020	TUMF Improvements	DIF Improvements	Local Mitigation (Improvements not covered by TUMF/DIF)	Project % for Local Mitigation
Lyon Avenue (NS) & Menlo Avenue (EW)	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	None	Signal TBD	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	4.5%
Palm Avenue (NS) & Menlo Avenue (EW)	Install Signal, 1.NBL, 1.SBL	Install Signal, 1.NBL, 1.SBL	None	Signal TBD	Install Signal, 1.NBL, 1.SBL	8.0%
State Street (NS) & Menlo Avenue (EW)	1.EBL, 1.WBL	1.EBL, restripe EBR as shared EBT/R, 1.WBL	None	None	1.EBL, restripe EBR as shared EBT/R, 1.WBL	24.6%
Buena Vista Street (NS) & Menlo Avenue (EW)	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	None	Signal TBD	Install Signal, 1.NBL, 1.SBL, 1.EBL, 1.WBL	3.8%

contribution or assignment of specific improvements with some form of cost sharing with the city. The other four intersection improvement locations identified on Table 7-7 have a minor share of future traffic and include new traffic signals which may be covered by the DIF. A nominal financial contribution or payment of DIF may be adequate to cover the project's impacts. A rough order of magnitude cost should be prepared by the City to determine the appropriate contribution value based upon the project's fair share of traffic as part of the project approval process. The cost basis should be determined by the city based upon physical and community constraints, current bidding experiences and engineering preferences.

8.0 ROADWAY SYSTEM, ON-SITE CIRCULATION & SITE ACCESS

Chapter 8 summarizes project roadway system, on-site circulation recommendations and site access.

8.1 Roadway System

The North Hemet Revitalization Plan roadway system has been developed with the principles of sustainability in mind. Design features are intended to provide travel features for users of all modes. An effective transportation system will recognize the great variety of users in a community and their various needs.

8.1.1 Project Roadway Design Features

This section presents details on the project roadway network. The project roadway network (see Exhibits 8-1 and 8-3) provides connectivity to the arterial roadways State Street and Menlo Avenue, which will provide the primary north/south and east/west access to the site.

The roadway network is categorized in the following manner:

1. Divided Secondary – (94' ROW) 4 lanes divided with a 12-foot raised median.
2. Secondary – (94' ROW) 4 lanes undivided.
3. Collector – (74' ROW) 2 lanes undivided with on-street parking on both sides.
4. Local Streets – (60' ROW) 2 lanes undivided.

Prepared project specific roadway cross-sections for each classification are depicted on Exhibit 8-2.

EXHIBIT 8-1

NORTH HEMET REVITALIZATION PLAN
PHASE 1 (2016) DESIGN FEATURES

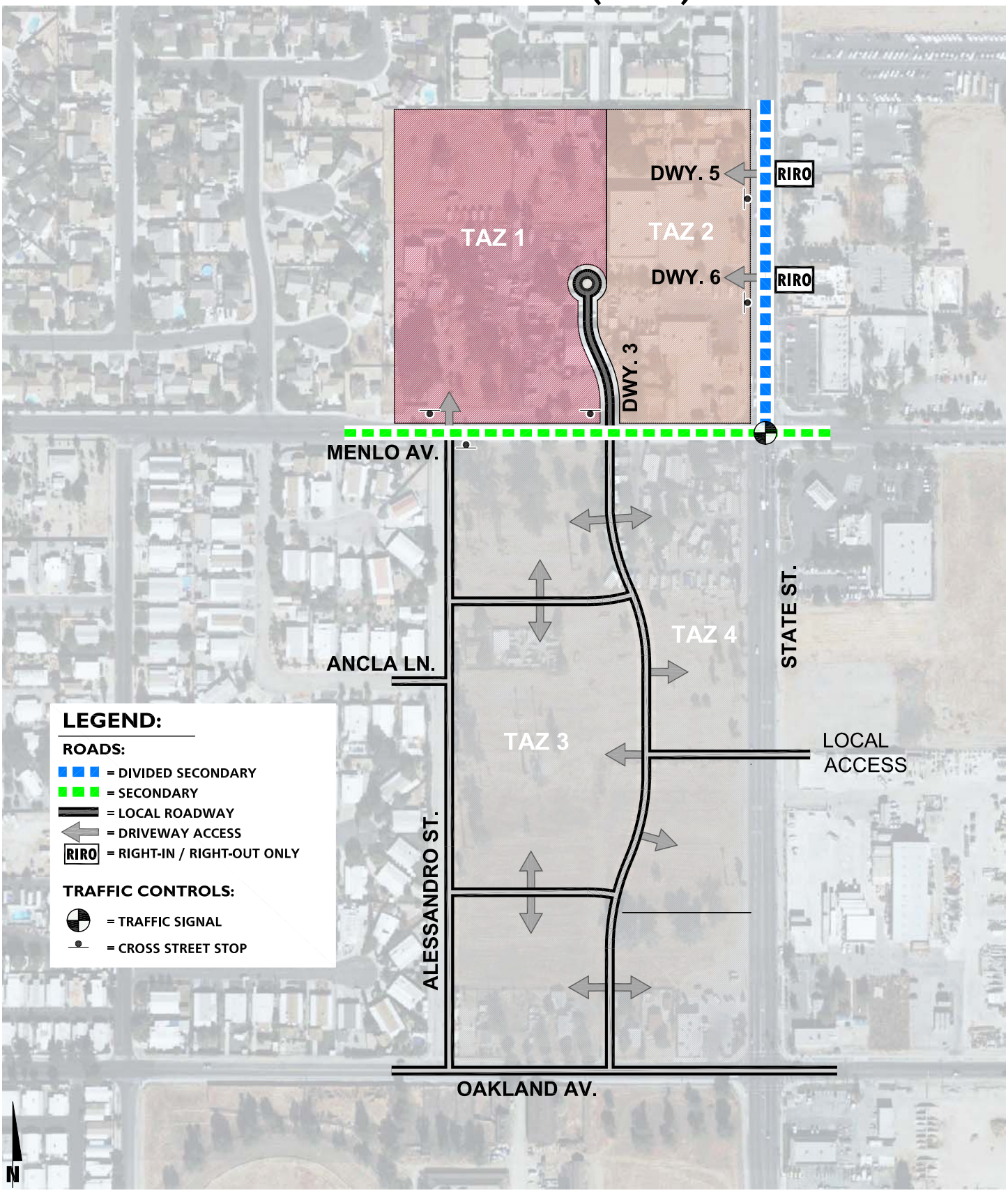
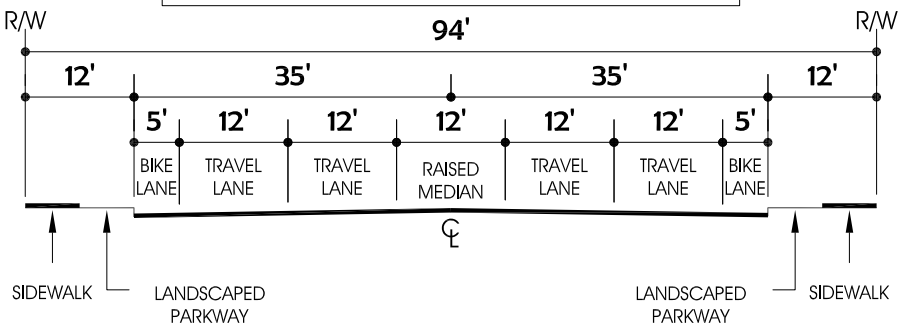


EXHIBIT 8-2

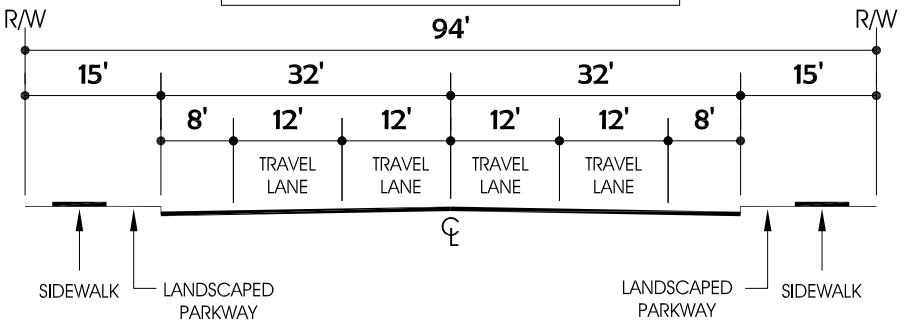
NORTH HEMET REVITALIZATION PLAN
ROADWAY CROSS-SECTIONS

PROJECT FRONTAGE

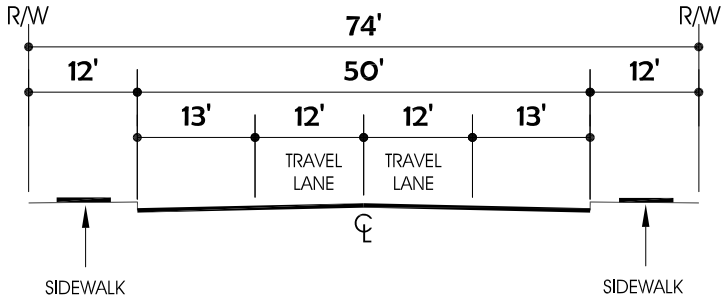
STATE STREET
Divided Secondary, 94' Right-Of-Way



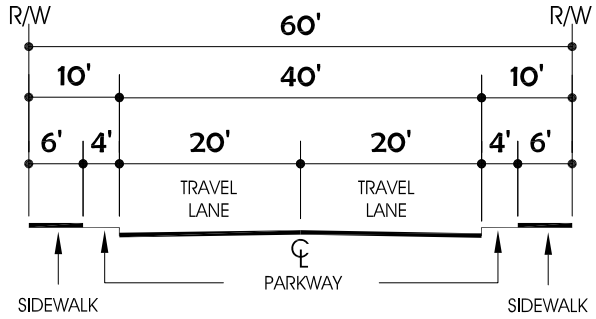
MENLO AVENUE
Secondary, 94' Right-Of-Way



Collector, 74' Right-Of-Way



Local Street, 60' Right-Of-Way

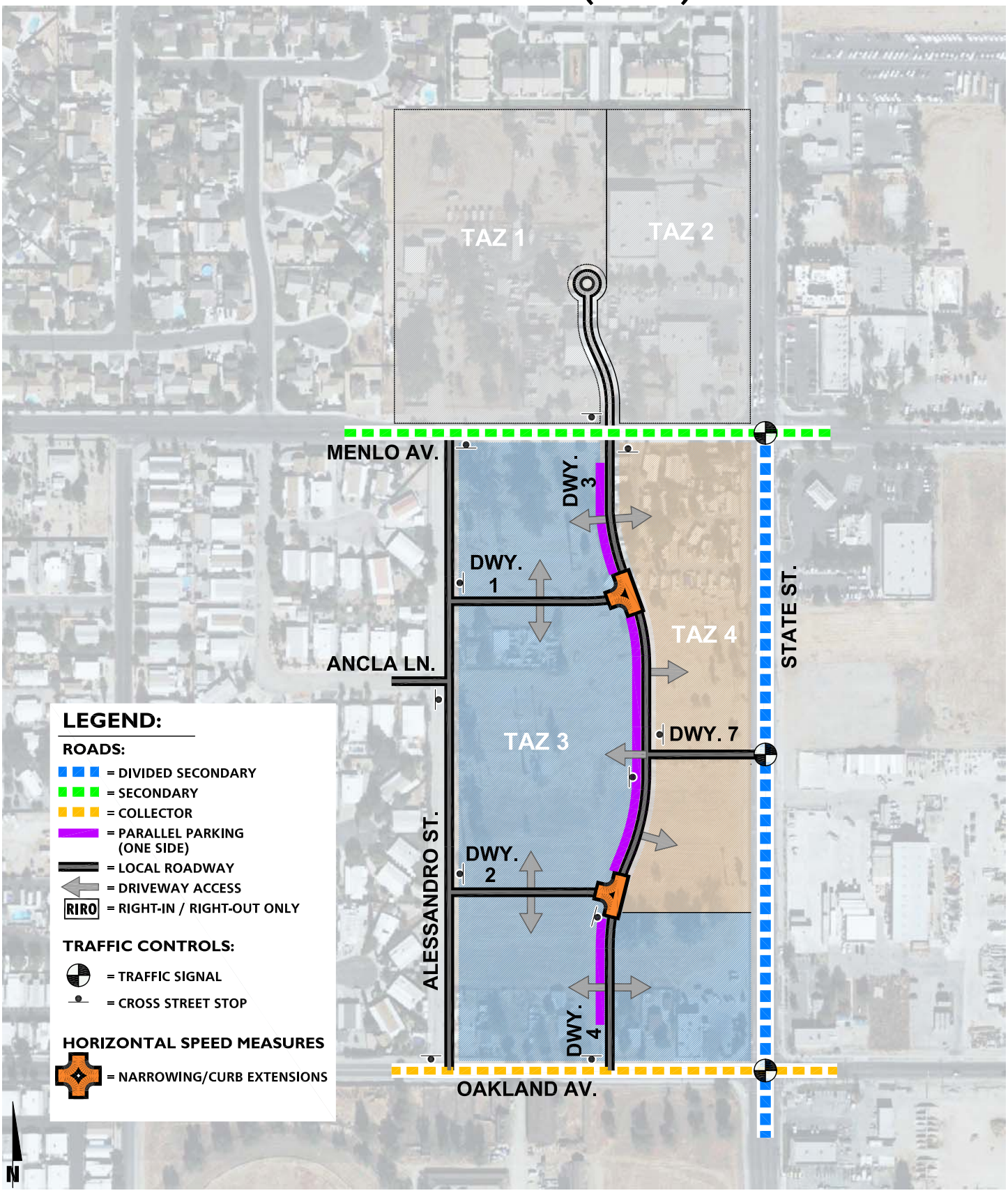


ALL SIDEWALK LOCATIONS PER COMMUNITY DESIGN ELEMENT USING PARKWAYS EXCEPT IN COMMERCIAL OR MULTI-FAMILY AREAS WITH ON-STREET PARKING. CROSS-SECTIONS EMPHASIZE TYPICAL CURB-TO-CURB LAYOUTS. RIGHT-OF-WAY, PARKWAY AND ADDITIONAL LANDSCAPE LOT DESIGNS ARE DISCUSSED IN THE COMMUNITY DESIGN ELEMENT.

THESE STANDARD SECTIONS ARE FOR TYPICAL ROADWAY SEGMENTS. INTERSECTION LANE REQUIREMENTS MAY INCREASE THE CROSS-SECTION WIDTHS.

EXHIBIT 8-3

NORTH HEMET REVITALIZATION PLAN
PHASE 2 (2020) DESIGN FEATURES



8.1.2 Traffic Control

On-site traffic will be controlled by a traffic signal at the intersection of Driveway #7 and State Street and cross-street stops at all other intersections. Exhibit 8-1 illustrates the intersection traffic controls anticipated on the project roadway network.

Traffic calming features such as on-street parking are proposed for both the arterial roadways of Menlo Avenue and State Street, and the primary north-south roadway internal to the project site providing a buffer between the commercial and residential components of the project site. Additional traffic calming features in the form of curb extensions, raised crosswalks and speed lumps may also be implemented on the internal local roads. Exhibit 8-4 illustrates a few examples of speed reduction measures proposed for the North Hemet project area.

8.2 Non-Motorized Travel

8.2.1 Pedestrian Network

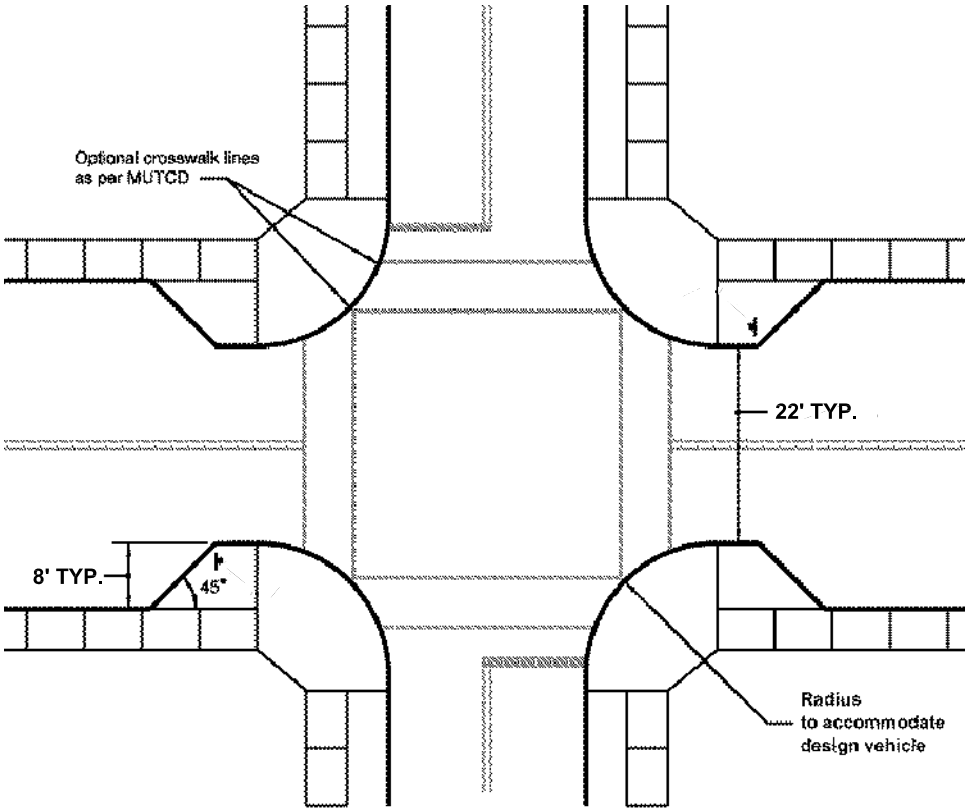
The plan of walkways and pedestrian paths for North Hemet Revitalization Plan (Exhibit 8-5) promotes pedestrian safety and access to help ensure that the community will be a safe, convenient and attractive place to walk. It establishes a pedestrian network emphasizing core area paths, and connections to a planned future transit hub located adjacent to the project on the east side of State Street. The routes include streets, paths and walkways that connect neighborhoods and commercial districts throughout the plan.

Raised crosswalks are an effective tool that contribute to pedestrian safety by catching the attention of drivers, slowing automobile traffic, and they provide a comfortable walking environment. According to the Federal Highway Administration (FHWA), raised crosswalks increase pedestrian visibility and eliminate the need for curb ramps, which improves access for people with mobility impairments and increases the sidewalk area available to pedestrians waiting to cross the street. As shown on Exhibit 8-5, a raised crosswalk is planned for the pedestrian crossing at the intersection of Alessandro Street and Ancla Lane. A sample raised crosswalk design is provided in Exhibit 8-4.

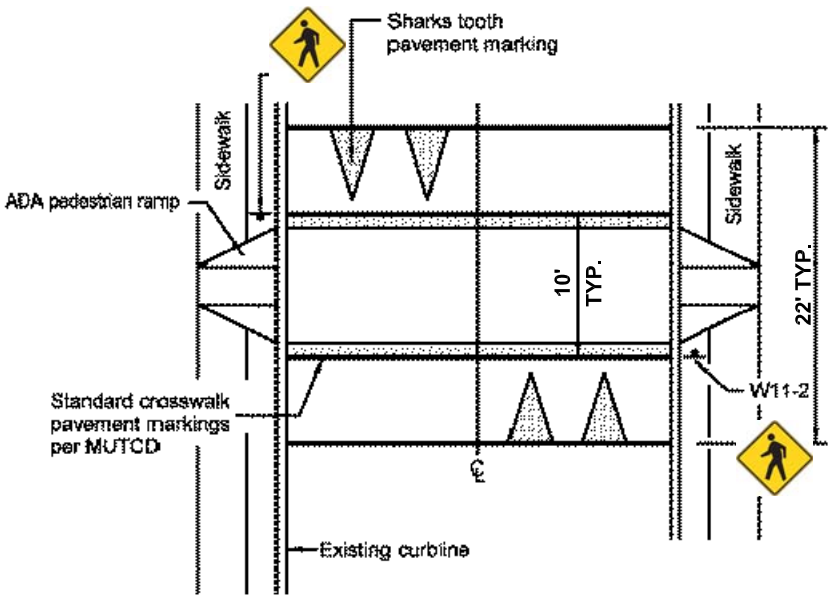
EXHIBIT 8-4

NORTH HEMET PROJECT AREA
SAMPLE SPEED REDUCTION MEASURES

NARROWING / CURB EXTENSIONS



RAISED CROSSWALK



SPEED LUMP

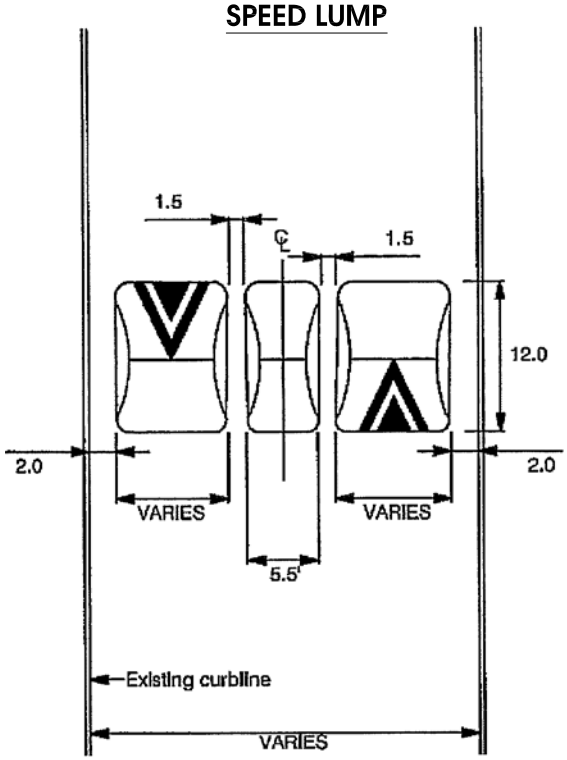
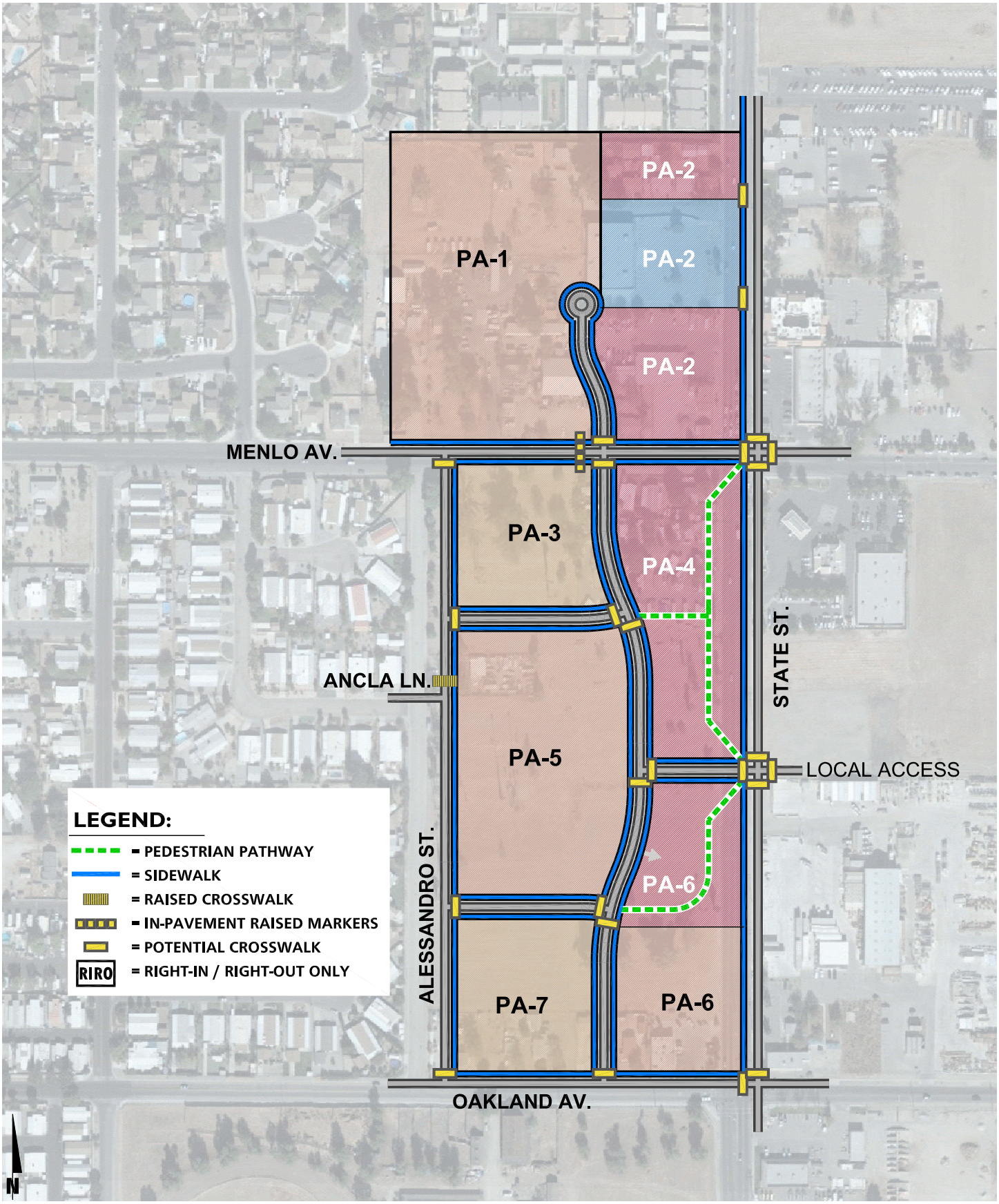


EXHIBIT 8-5

PEDESTRIAN ACCOMMODATIONS



For larger multi-lane roadways with traffic volumes in excess of 10,000 vehicles per day, pedestrian crossings should include more active warning devices to alert drivers that they are approaching an occupied crosswalk. In-pavement raised markers contribute to pedestrian safety by increasing drive' attentiveness when approaching marked crosswalks occupied by pedestrians at uncontrolled locations. As shown in Exhibit 8-5, in-pavement raised markers are planned for the major pedestrian crossing along Menlo Avenue west of Driveway 3. Exhibits 8-6A and 8-6B provide an example of a similar pedestrian crossing concept constructed and in operation at the intersection of Pacific Coast Highway (PCH) and Pearl Street in the City of Laguna Beach. As shown in Exhibit 8-6A, both sides of the crosswalk crossing PCH are lined with durable encased raised pavement markers. The treatment uses amber LED strobe lighting in the raised pavement markers to alert drivers that they are approaching an occupied crosswalk. There is also additional signage. As shown in Exhibit 8-6B, the LEDs in the raised pavement markers are activated by push buttons.

8.2.2 Bicycle Network

The project's proposed roadway cross-sections for Menlo Avenue and State Street each ensure that the City's planned Class 2 bike lanes were accommodated. Accommodating modes of travel other than the automobile was of critical importance when determining the site's design. Exhibit 8-7 illustrates a roadway plan view of the proposed Secondary cross-sections adjacent to the project site at full buildout.

8.3 Site Access and On-Site Roadway Improvements

Phase 1 of the project is proposed to have access to Menlo Avenue via an extension of Alessandro Street and Driveway 3, and to State Street via Driveway 5 and 6. All project driveways are proposed to have full access with the exception of Driveways 5 and 6 which are proposed to be restricted to right-in/right-out access only.

Phase 2 of the project is proposed to have access to Alessandro Street via Driveways 1 and 2, Menlo Avenue via Driveway 3 and Alessandro Street, Oakland Avenue via Driveway 4 and

EXHIBIT 8-6A

IN-PAVEMENT RAISED MARKERS





EXHIBIT 8-6B

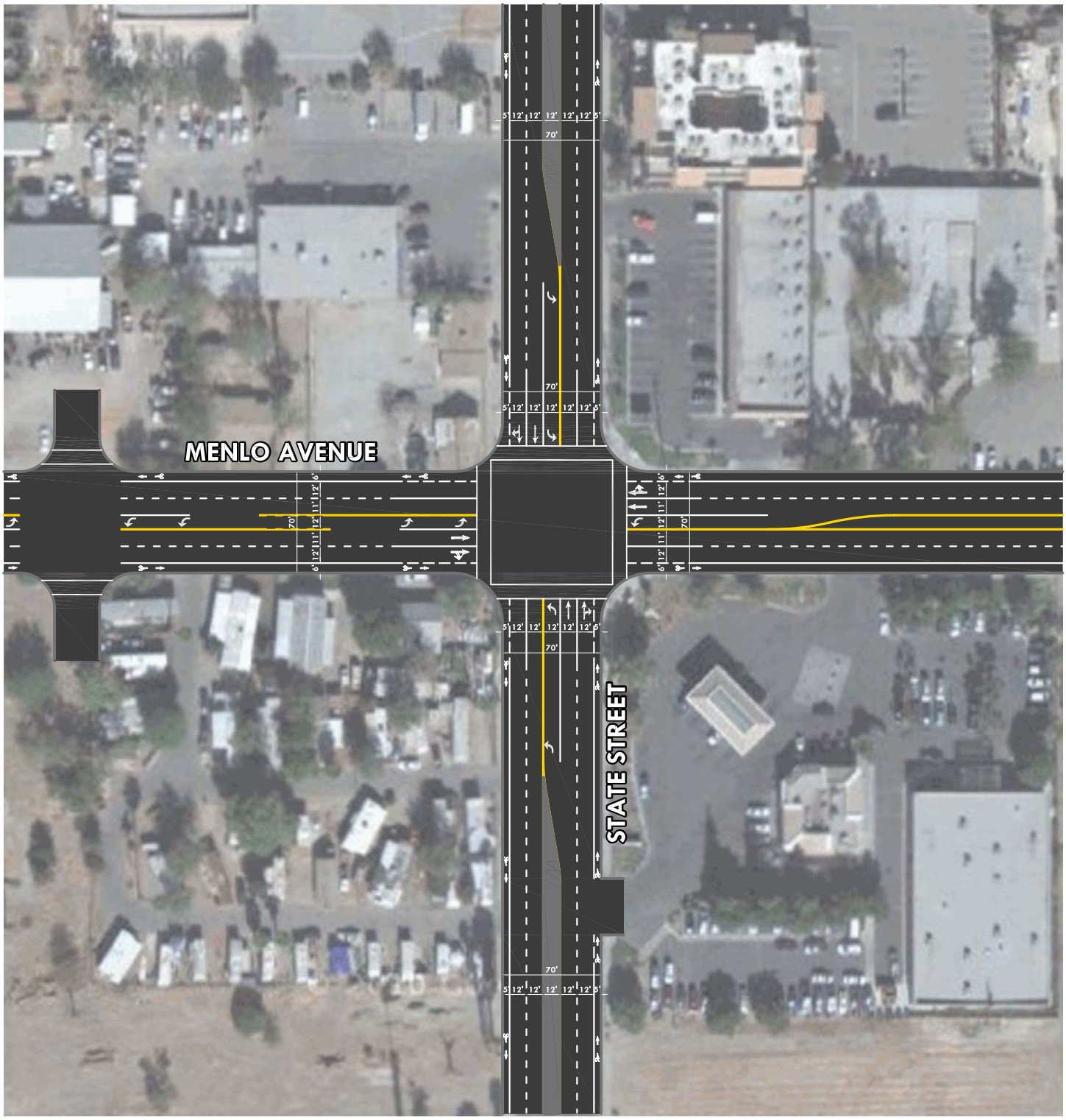
IN-PAVEMENT RAISED MARKERS





EXHIBIT 8-7

MENLO AVENUE / STATE STREET ROADWAY PLAN VIEW



N

Alessandro Street, and to State Street via Driveway 7. All driveways for Phase 2 are proposed to have full access.

Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below. These improvements should be in place prior to occupancy.

8.3.1 Site Access Improvements for Phase 1 (Interim Year 2016)

The recommended site access driveway improvements for the Project are described below. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes.

Driveway 3 and Menlo Avenue – Install a stop control on the north leg and construct the intersection with the following geometrics: one southbound shared left-right turn lane, one eastbound left turn lane, two eastbound through lanes, one westbound through lane and one westbound shared through-right.

State Street and Driveway 5 – Install a stop control on the eastbound approach and construct the intersection with the following geometrics: two northbound through lanes, one southbound through turn lane, one southbound shared through-right turn lane, and one eastbound right turn lane.

State Street and Driveway 6 – Install a stop control on the eastbound approach and construct the intersection with the following geometrics: two northbound through lanes, one southbound through turn lane, one southbound shared through-right turn lane, and one eastbound right turn lane.

8.3.2 Site Access Improvements for Phase 2 (Year 2020)

Alessandro Street and Driveway 1 – Install a stop control on the westbound approach and construct the intersection with the following geometrics: one northbound shared

through-right turn lane, one southbound shared through-left turn lane, one westbound shared left-right turn lane.

Alessandro Street and Driveway 2 – Install a stop control on the westbound approach and construct the intersection with the following geometrics: one northbound shared through-right turn lane, one southbound shared through-left turn lane, one westbound shared left-right turn lane.

Driveway 3 and Menlo Avenue – Install a stop control on the south leg and construct the intersection with the following geometrics: one northbound shared left-through-right turn lane, one southbound shared left-through-right turn lane, one eastbound left turn lane, one eastbound through lane, one eastbound shared through-right, one westbound left turn lane, one westbound through lane and one westbound shared through-right.

Driveway 4 and Oakland – Install a stop control on the southbound approach and construct the intersection with the following geometrics: one southbound shared left-right turn lane, one eastbound shared left-through turn lane, and one westbound shared through-right turn lane.

State Street and Driveway 7 – Install a traffic signal and construct the intersection with the following geometrics: one northbound left turn lane, two northbound through lanes, one southbound through lane, one southbound shared through-right turn lane, and one eastbound shared left-right turn lane.

8.3.3 On-Site Roadway Improvements for Phase 1 (Interim Year 2016)

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 8-1 illustrates the site-adjacent roadway improvement recommendations.

State Street – Construct at its ultimate half-section width as a Divided Secondary (94-foot right-of-way) between the northern project boundary and Menlo Avenue, consistent with the roadway cross-sections shown on Exhibit 8-2.

Menlo Avenue – Construct at its ultimate half-section width as a Secondary (94-foot right-of-way) between the western project boundary and State Street along the north side of the street, consistent with the roadway cross-sections shown on Exhibit 8-2.

Internal Project Roadways – Construct at its ultimate full-section width as a local roadway (60-foot right-of-way), consistent with the roadway cross-sections shown on Exhibit 8-2.

8.3.4 On-Site Roadway Improvements for Phase 2 (Year 2020)

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 8-3 illustrates the site-adjacent roadway improvement recommendations.

State Street – Construct at its ultimate half-section width as a Divided Secondary (94-foot right-of-way) between the Menlo Avenue and Oakland Avenue, consistent with the roadway cross-sections shown on Exhibit 8-2.

Menlo Avenue – Construct at its ultimate half-section width as a Secondary (94-foot right-of-way) between the western project boundary and State Street along the south side of the street, which would complete the ultimate section of the roadway, consistent with the roadway cross-sections shown on Exhibit 8-2.

Alessandro Street – Construct at its ultimate half-section width as a local roadway (60-foot right-of-way) between Menlo Avenue and Oakland Avenue, consistent with the roadway cross-sections shown on Exhibit 8-2.

Oakland Avenue – Construct at its ultimate half-section width as a collector roadway (74-foot right-of-way) between Alessandro Street and State Street, consistent with the roadway cross-sections shown on Exhibit 8-2.

Internal Project Roadways – Construct at its ultimate full-section width as a local roadway (60-foot right-of-way), consistent with the roadway cross-sections shown on Exhibit 8-2.

APPENDIX 3.1

EXISTING 2010 TRAFFIC COUNT WORKSHEETS

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Lyon Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMLYMEAM
Site Code : 10135137
Start Date : 6/10/2010

Groups Printed- Total Volume

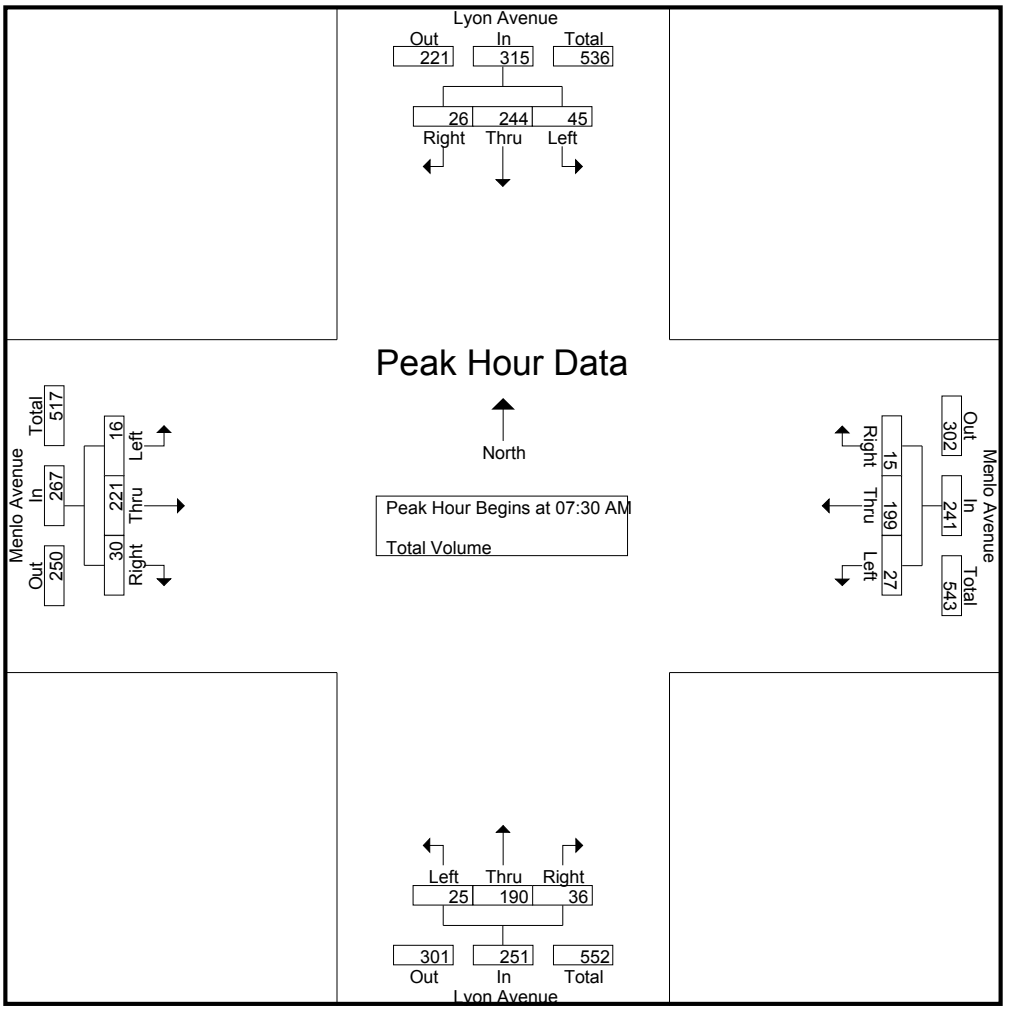
	Lyon Avenue Southbound				Menlo Avenue Westbound				Lyon Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	38	1	45	7	40	6	53	7	38	3	48	2	25	3	30	176
07:15 AM	4	52	7	63	4	50	3	57	8	43	10	61	8	39	5	52	233
07:30 AM	10	54	5	69	6	65	4	75	11	47	6	64	5	39	11	55	263
07:45 AM	15	84	6	105	5	61	5	71	5	55	9	69	3	76	9	88	333
Total	35	228	19	282	22	216	18	256	31	183	28	242	18	179	28	225	1005
08:00 AM	14	56	6	76	8	34	4	46	3	45	8	56	4	53	5	62	240
08:15 AM	6	50	9	65	8	39	2	49	6	43	13	62	4	53	5	62	238
08:30 AM	2	46	3	51	12	49	0	61	11	46	5	62	2	43	7	52	226
08:45 AM	8	69	3	80	5	53	3	61	5	32	4	41	8	67	9	84	266
Total	30	221	21	272	33	175	9	217	25	166	30	221	18	216	26	260	970
Grand Total	65	449	40	554	55	391	27	473	56	349	58	463	36	395	54	485	1975
Apprch %	11.7	81	7.2		11.6	82.7	5.7		12.1	75.4	12.5		7.4	81.4	11.1		
Total %	3.3	22.7	2	28.1	2.8	19.8	1.4	23.9	2.8	17.7	2.9	23.4	1.8	20	2.7	24.6	

	Lyon Avenue Southbound				Menlo Avenue Westbound				Lyon Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	10	54	5	69	6	**65**	4	**75**	**11**	47	6	64	**5**	39	**11**	55	263
07:45 AM	**15**	**84**	6	**105**	5	61	**5**	71	5	**55**	9	**69**	3	**76**	9	**88**	**333**
08:00 AM	14	56	6	76	**8**	34	4	46	3	45	8	56	4	53	5	62	240
08:15 AM	6	50	**9**	65	8	39	2	49	6	43	**13**	62	4	53	5	62	238
Total Volume	45	244	26	315	27	199	15	241	25	190	36	251	16	221	30	267	1074
% App. Total	14.3	77.5	8.3		11.2	82.6	6.2		10	75.7	14.3		6	82.8	11.2		
PHF	.750	.726	.722	.750	.844	.765	.750	.803	.568	.864	.692	.909	.800	.727	.682	.759	.806

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City of Hemet
N/S: Lyon Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMLYMEAM
Site Code : 10135137
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:30 AM				07:30 AM			
+0 mins.	10	54	5	69	**7**	40	**6**	53	**11**	47	6	64	**5**	39	**11**	55
+15 mins.	**15**	**84**	6	**105**	4	50	3	57	5	**55**	9	**69**	3	**76**	9	**88**
+30 mins.	14	56	6	76	6	**65**	4	**75**	3	45	8	56	4	53	5	62
+45 mins.	6	50	**9**	65	5	61	5	71	6	43	**13**	62	4	53	5	62
Total Volume	45	244	26	315	22	216	18	256	25	190	36	251	16	221	30	267
% App. Total	14.3	77.5	8.3		8.6	84.4	7		10	75.7	14.3		6	82.8	11.2	
PHF	.750	.726	.722	.750	.786	.831	.750	.853	.568	.864	.692	.909	.800	.727	.682	.759

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City of Hemet
N/S: Lyon Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMLYMEPM
Site Code : 10135137
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

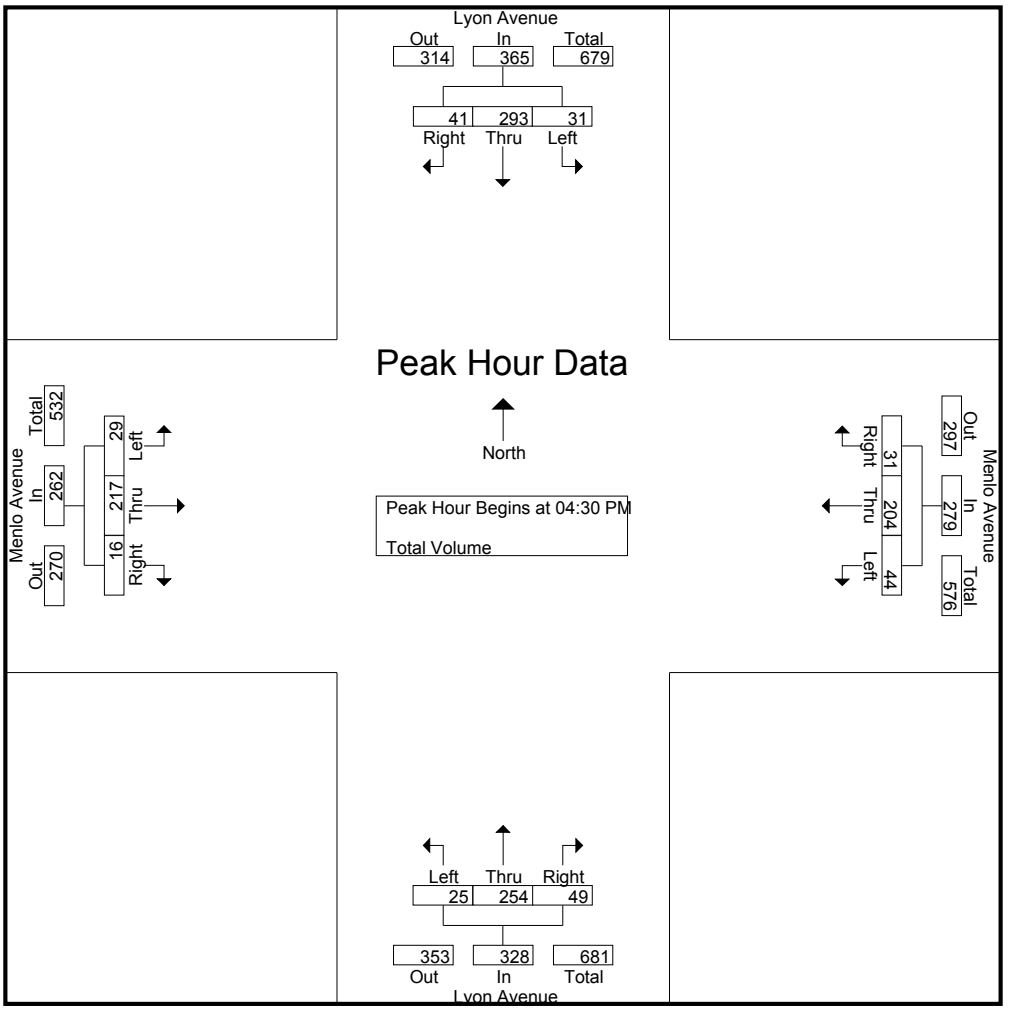
	Lyon Avenue Southbound				Menlo Avenue Westbound				Lyon Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	58	12	76	10	45	8	63	4	53	16	73	4	65	3	72	284
04:15 PM	2	55	10	67	8	43	10	61	4	67	17	88	1	42	5	48	264
04:30 PM	9	63	9	81	12	51	11	74	7	64	14	85	8	45	1	54	294
04:45 PM	7	85	10	102	13	47	4	64	5	60	8	73	6	42	8	56	295
Total	24	261	41	326	43	186	33	262	20	244	55	319	19	194	17	230	1137
05:00 PM	7	69	6	82	12	62	7	81	3	67	11	81	9	66	3	78	322
05:15 PM	8	76	16	100	7	44	9	60	10	63	16	89	6	64	4	74	323
05:30 PM	5	76	11	92	13	56	2	71	3	63	11	77	7	42	4	53	293
05:45 PM	7	74	10	91	7	58	3	68	4	68	11	83	6	41	3	50	292
Total	27	295	43	365	39	220	21	280	20	261	49	330	28	213	14	255	1230
Grand Total	51	556	84	691	82	406	54	542	40	505	104	649	47	407	31	485	2367
Apprch %	7.4	80.5	12.2		15.1	74.9	10		6.2	77.8	16		9.7	83.9	6.4		
Total %	2.2	23.5	3.5	29.2	3.5	17.2	2.3	22.9	1.7	21.3	4.4	27.4	2	17.2	1.3	20.5	

	Lyon Avenue Southbound				Menlo Avenue Westbound				Lyon Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**9**	63	9	81	12	51	**11**	74	7	64	14	85	8	45	1	54	294
04:45 PM	7	**85**	10	**102**	**13**	47	4	64	5	60	8	73	6	42	**8**	56	295
05:00 PM	7	69	6	82	12	**62**	7	**81**	3	**67**	11	81	**9**	**66**	3	**78**	322
05:15 PM	8	76	**16**	100	7	44	9	60	**10**	63	**16**	**89**	6	64	4	74	**323**
Total Volume	31	293	41	365	44	204	31	279	25	254	49	328	29	217	16	262	1234
% App. Total	8.5	80.3	11.2		15.8	73.1	11.1		7.6	77.4	14.9		11.1	82.8	6.1		
PHF	.861	.862	.641	.895	.846	.823	.705	.861	.625	.948	.766	.921	.806	.822	.500	.840	.955

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City of Hemet
N/S: Lyon Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMLYMEPM
Site Code : 10135137
Start Date : 6/10/2010



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	7	**85**	10	**102**	8	43	10	61	3	67	11	81	8	45	1	54
+15 mins.	7	69	6	82	12	51	**11**	74	**10**	63	**16**	**89**	6	42	**8**	56
+30 mins.	**8**	76	**16**	100	**13**	47	4	64	3	63	11	77	**9**	**66**	3	**78**
+45 mins.	5	76	11	92	12	**62**	7	**81**	4	**68**	11	83	6	64	4	74
Total Volume	27	306	43	376	45	203	32	280	20	261	49	330	29	217	16	262
% App. Total	7.2	81.4	11.4		16.1	72.5	11.4		6.1	79.1	14.8		11.1	82.8	6.1	
PHF	.844	.900	.672	.922	.865	.819	.727	.864	.500	.960	.766	.927	.806	.822	.500	.840

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City of Hemet
N/S: Palm Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMPAMEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

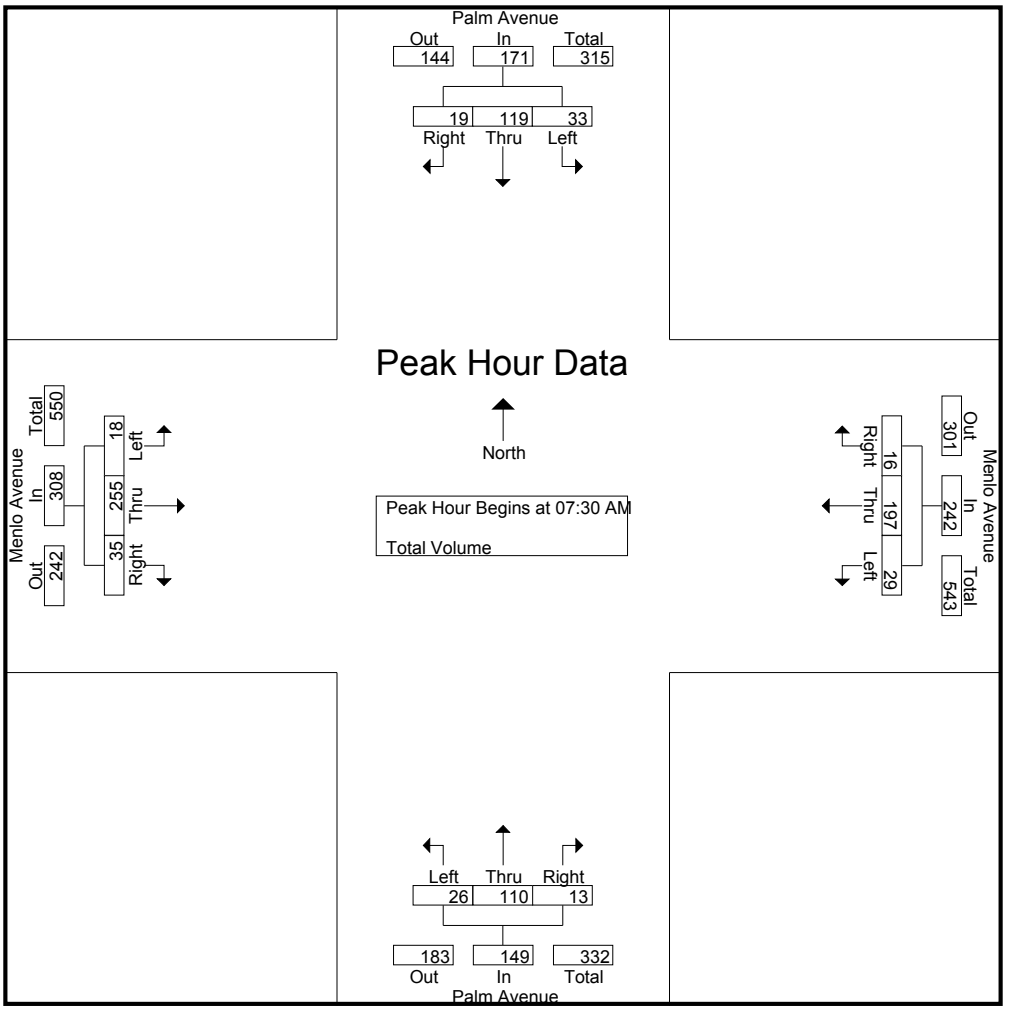
	Palm Avenue Southbound				Menlo Avenue Westbound				Palm Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	15	6	27	3	33	10	46	3	13	2	18	2	26	0	28	119
07:15 AM	13	27	5	45	6	45	7	58	2	16	4	22	3	39	8	50	175
07:30 AM	11	27	5	43	9	55	5	69	9	37	4	50	2	44	5	51	213
07:45 AM	7	35	3	45	4	61	7	72	7	32	2	41	2	85	16	103	261
Total	37	104	19	160	22	194	29	245	21	98	12	131	9	194	29	232	768
08:00 AM	10	32	5	47	6	40	1	47	5	21	3	29	6	68	8	82	205
08:15 AM	5	25	6	36	10	41	3	54	5	20	4	29	8	58	6	72	191
08:30 AM	3	32	5	40	5	58	10	73	5	22	4	31	7	47	5	59	203
08:45 AM	9	28	4	41	8	54	4	66	8	23	3	34	6	71	11	88	229
Total	27	117	20	164	29	193	18	240	23	86	14	123	27	244	30	301	828
Grand Total	64	221	39	324	51	387	47	485	44	184	26	254	36	438	59	533	1596
Apprch %	19.8	68.2	12		10.5	79.8	9.7		17.3	72.4	10.2		6.8	82.2	11.1		
Total %	4	13.8	2.4	20.3	3.2	24.2	2.9	30.4	2.8	11.5	1.6	15.9	2.3	27.4	3.7	33.4	

	Palm Avenue Southbound				Menlo Avenue Westbound				Palm Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**11**	27	5	43	9	55	5	69	**9**	**37**	**4**	**50**	2	44	5	51	213
07:45 AM	7	**35**	3	45	4	**61**	**7**	**72**	7	32	2	41	2	**85**	**16**	**103**	**261**
08:00 AM	10	32	5	**47**	6	40	1	47	5	21	3	29	6	68	8	82	205
08:15 AM	5	25	**6**	36	**10**	41	3	54	5	20	4	29	**8**	58	6	72	191
Total Volume	33	119	19	171	29	197	16	242	26	110	13	149	18	255	35	308	870
% App. Total	19.3	69.6	11.1		12	81.4	6.6		17.4	73.8	8.7		5.8	82.8	11.4		
PHF	.750	.850	.792	.910	.725	.807	.571	.840	.722	.743	.813	.745	.563	.750	.547	.748	.833

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City of Hemet
N/S: Palm Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMPAMEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	**13**	27	**5**	45	6	45	**7**	58	**9**	**37**	**4**	**50**	2	**85**	**16**	**103**
+15 mins.	11	27	5	43	**9**	55	5	69	7	32	2	41	6	68	8	82
+30 mins.	7	**35**	3	45	4	**61**	7	**72**	5	21	3	29	**8**	58	6	72
+45 mins.	10	32	5	**47**	6	40	1	47	5	20	4	29	7	47	5	59
Total Volume	41	121	18	180	25	201	20	246	26	110	13	149	23	258	35	316
% App. Total	22.8	67.2	10		10.2	81.7	8.1		17.4	73.8	8.7		7.3	81.6	11.1	
PHF	.788	.864	.900	.957	.694	.824	.714	.854	.722	.743	.813	.745	.719	.759	.547	.767

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City of Hemet
N/S: Palm Avenue
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File Name : HEMPAMEPM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

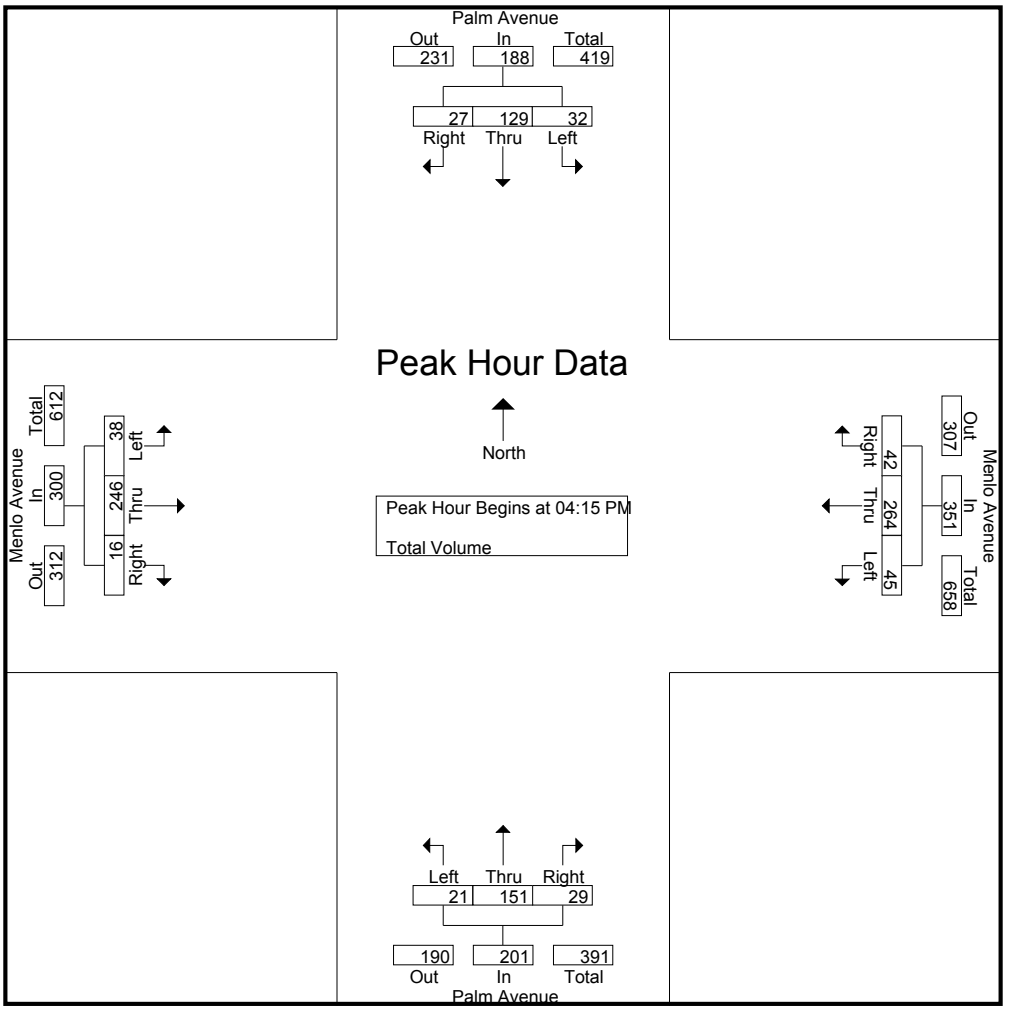
	Palm Avenue Southbound				Menlo Avenue Westbound				Palm Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	11	36	5	52	6	55	11	72	3	39	9	51	3	76	4	83	258
04:15 PM	11	28	4	43	9	66	10	85	2	32	9	43	7	64	3	74	245
04:30 PM	4	36	8	48	10	68	7	85	8	34	7	49	9	57	5	71	253
04:45 PM	7	42	10	59	11	55	8	74	5	39	9	53	8	57	2	67	253
Total	33	142	27	202	36	244	36	316	18	144	34	196	27	254	14	295	1009
05:00 PM	10	23	5	38	15	75	17	107	6	46	4	56	14	68	6	88	289
05:15 PM	13	26	3	42	7	53	11	71	1	25	10	36	6	74	0	80	229
05:30 PM	13	29	3	45	9	65	12	86	8	27	8	43	7	54	4	65	239
05:45 PM	10	18	4	32	3	58	8	69	3	26	5	34	10	51	4	65	200
Total	46	96	15	157	34	251	48	333	18	124	27	169	37	247	14	298	957
Grand Total	79	238	42	359	70	495	84	649	36	268	61	365	64	501	28	593	1966
Apprch %	22	66.3	11.7		10.8	76.3	12.9		9.9	73.4	16.7		10.8	84.5	4.7		
Total %	4	12.1	2.1	18.3	3.6	25.2	4.3	33	1.8	13.6	3.1	18.6	3.3	25.5	1.4	30.2	

	Palm Avenue Southbound				Menlo Avenue Westbound				Palm Avenue Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**11**	28	4	43	9	66	10	85	2	32	**9**	43	7	64	3	74	245
04:30 PM	4	36	8	48	10	68	7	85	**8**	34	7	49	9	57	5	71	253
04:45 PM	7	**42**	**10**	**59**	11	55	8	74	5	39	9	53	8	57	2	67	253
05:00 PM	10	23	5	38	**15**	**75**	**17**	**107**	6	**46**	4	**56**	**14**	**68**	**6**	**88**	**289**
Total Volume	32	129	27	188	45	264	42	351	21	151	29	201	38	246	16	300	1040
% App. Total	17	68.6	14.4		12.8	75.2	12		10.4	75.1	14.4		12.7	82	5.3		
PHF	.727	.768	.675	.797	.750	.880	.618	.820	.656	.821	.806	.897	.679	.904	.667	.852	.900

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City of Hemet
N/S: Palm Avenue
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMPAMEPM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:15 PM				04:30 PM			
+0 mins.	**11**	36	5	52	9	66	10	85	2	32	**9**	43	9	57	5	71
+15 mins.	11	28	4	43	10	68	7	85	**8**	34	7	49	8	57	2	67
+30 mins.	4	36	8	48	11	55	8	74	5	39	9	53	**14**	68	**6**	**88**
+45 mins.	7	**42**	**10**	**59**	**15**	**75**	**17**	**107**	6	**46**	4	**56**	6	**74**	0	80
Total Volume	33	142	27	202	45	264	42	351	21	151	29	201	37	256	13	306
% App. Total	16.3	70.3	13.4		12.8	75.2	12		10.4	75.1	14.4		12.1	83.7	4.2	
PHF	.750	.845	.675	.856	.750	.880	.618	.820	.656	.821	.806	.897	.661	.865	.542	.869

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City of Hemet
N/S: Gilbert Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMGIMEAM
Site Code : 10135051
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

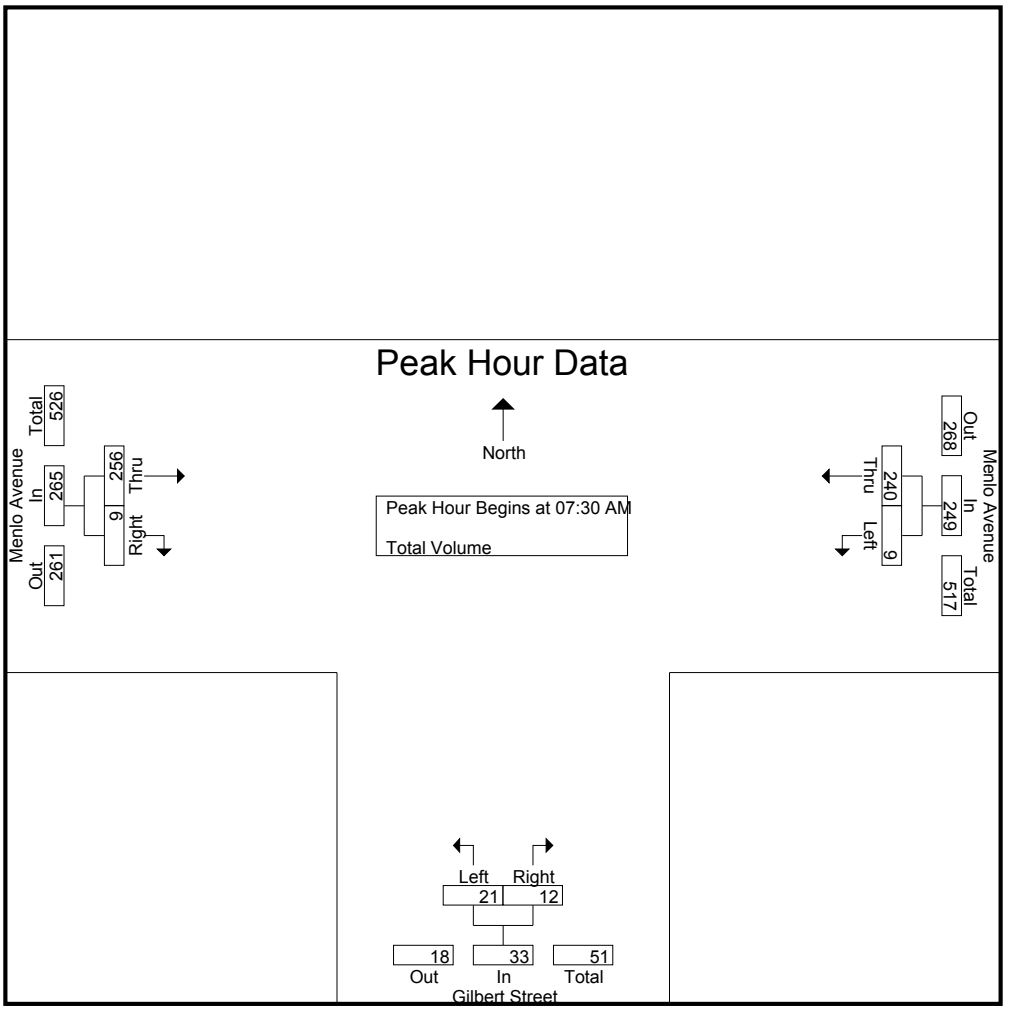
	Menlo Avenue Westbound			Gilbert Street Northbound			Menlo Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	5	42	47	1	6	7	45	2	47	101
07:15 AM	4	45	49	4	4	8	52	0	52	109
07:30 AM	0	73	73	6	3	9	64	1	65	147
07:45 AM	2	62	64	7	0	7	68	2	70	141
Total	11	222	233	18	13	31	229	5	234	498
08:00 AM	3	57	60	2	7	9	59	3	62	131
08:15 AM	4	48	52	6	2	8	65	3	68	128
08:30 AM	3	57	60	4	1	5	47	4	51	116
08:45 AM	4	58	62	4	4	8	66	6	72	142
Total	14	220	234	16	14	30	237	16	253	517
Grand Total	25	442	467	34	27	61	466	21	487	1015
Apprch %	5.4	94.6		55.7	44.3		95.7	4.3		
Total %	2.5	43.5	46	3.3	2.7	6	45.9	2.1	48	

	Menlo Avenue Westbound			Gilbert Street Northbound			Menlo Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	**73**	**73**	6	3	**9**	64	1	65	**147**
07:45 AM	2	62	64	**7**	0	7	**68**	2	**70**	141
08:00 AM	3	57	60	2	**7**	9	59	**3**	62	131
08:15 AM	**4**	48	52	6	2	8	65	3	68	128
Total Volume	9	240	249	21	12	33	256	9	265	547
% App. Total	3.6	96.4		63.6	36.4		96.6	3.4		
PHF	.563	.822	.853	.750	.429	.917	.941	.750	.946	.930

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City of Hemet
N/S: Gilbert Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMGIMEAM
Site Code : 10135051
Start Date : 6/10/2010



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			07:30 AM		
+0 mins.	0	**73**	**73**	4	4	8	64	1	65
+15 mins.	2	62	64	6	3	**9**	**68**	2	**70**
+30 mins.	3	57	60	**7**	0	7	59	**3**	62
+45 mins.	**4**	48	52	2	**7**	9	65	3	68
Total Volume	9	240	249	19	14	33	256	9	265
% App. Total	3.6	96.4		57.6	42.4		96.6	3.4	
PHF	.563	.822	.853	.679	.500	.917	.941	.750	.946

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City of Hemet
N/S: Gilbert Street
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File Name : HEMGIMEPM
Site Code : 10135051
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

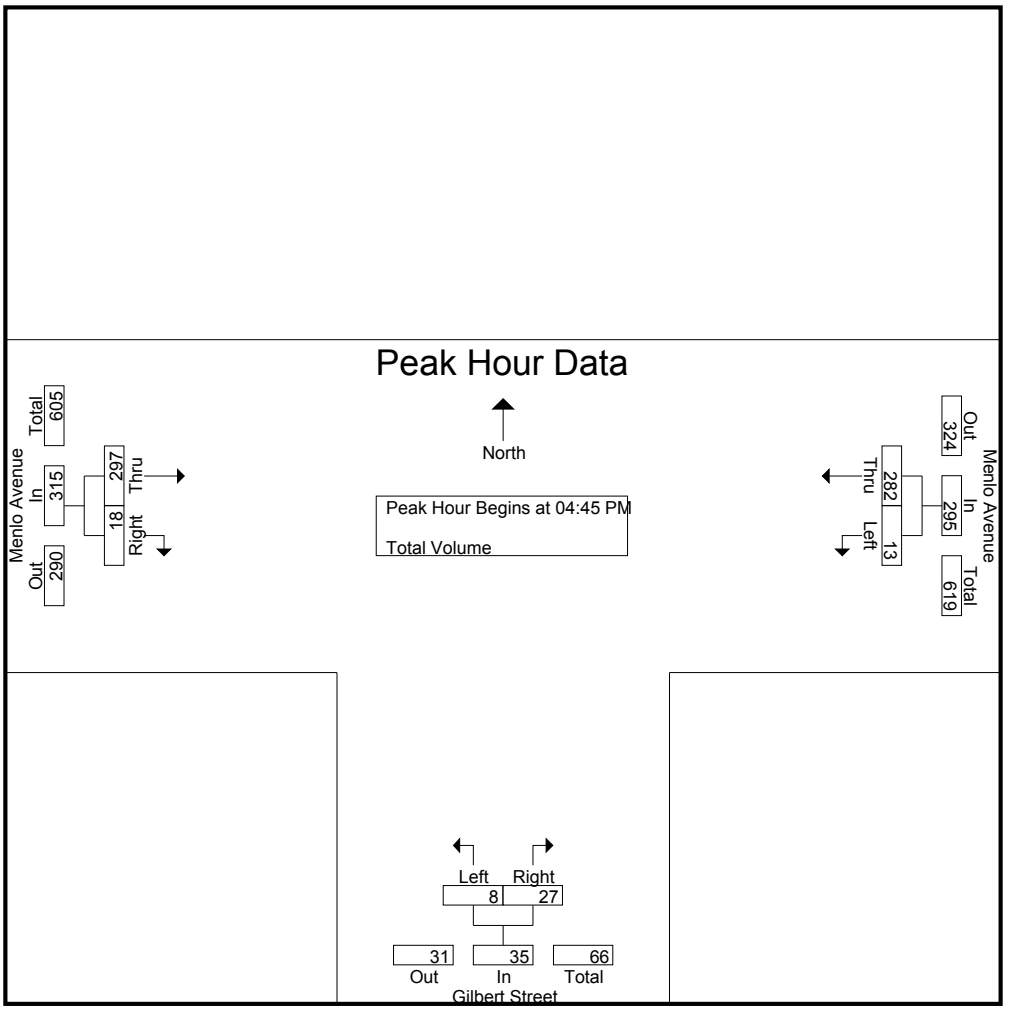
	Menlo Avenue Westbound			Gilbert Street Northbound			Menlo Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	3	65	68	4	4	8	78	4	82	158
04:15 PM	0	80	80	3	2	5	75	0	75	160
04:30 PM	5	65	70	1	5	6	65	6	71	147
04:45 PM	2	67	69	1	4	5	68	4	72	146
Total	10	277	287	9	15	24	286	14	300	611
05:00 PM	3	74	77	2	5	7	82	7	89	173
05:15 PM	5	80	85	5	10	15	74	3	77	177
05:30 PM	3	61	64	0	8	8	73	4	77	149
05:45 PM	2	69	71	5	3	8	62	0	62	141
Total	13	284	297	12	26	38	291	14	305	640
Grand Total	23	561	584	21	41	62	577	28	605	1251
Apprch %	3.9	96.1		33.9	66.1		95.4	4.6		
Total %	1.8	44.8	46.7	1.7	3.3	5	46.1	2.2	48.4	

	Menlo Avenue Westbound			Gilbert Street Northbound			Menlo Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	2	67	69	1	4	5	68	4	72	146
05:00 PM	3	74	77	2	5	7	**82**	**7**	**89**	173
05:15 PM	**5**	**80**	**85**	**5**	**10**	**15**	74	3	77	**177**
05:30 PM	3	61	64	0	8	8	73	4	77	149
Total Volume	13	282	295	8	27	35	297	18	315	645
% App. Total	4.4	95.6		22.9	77.1		94.3	5.7		
PHF	.650	.881	.868	.400	.675	.583	.905	.643	.885	.911

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City of Hemet
N/S: Gilbert Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMGIMEPM
Site Code : 10135051
Start Date : 6/10/2010



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM			05:00 PM			04:45 PM		
+0 mins.	**5**	65	70	2	5	7	68	4	72
+15 mins.	2	67	69	**5**	**10**	**15**	**82**	**7**	**89**
+30 mins.	3	74	77	0	8	8	74	3	77
+45 mins.	5	**80**	**85**	5	3	8	73	4	77
Total Volume	15	286	301	12	26	38	297	18	315
% App. Total	5	95		31.6	68.4		94.3	5.7	
PHF	.750	.894	.885	.600	.650	.633	.905	.643	.885

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Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: Gilbert Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMGIOAAM
Site Code : 10135135
Start Date : 6/10/2010

Groups Printed- Total Volume

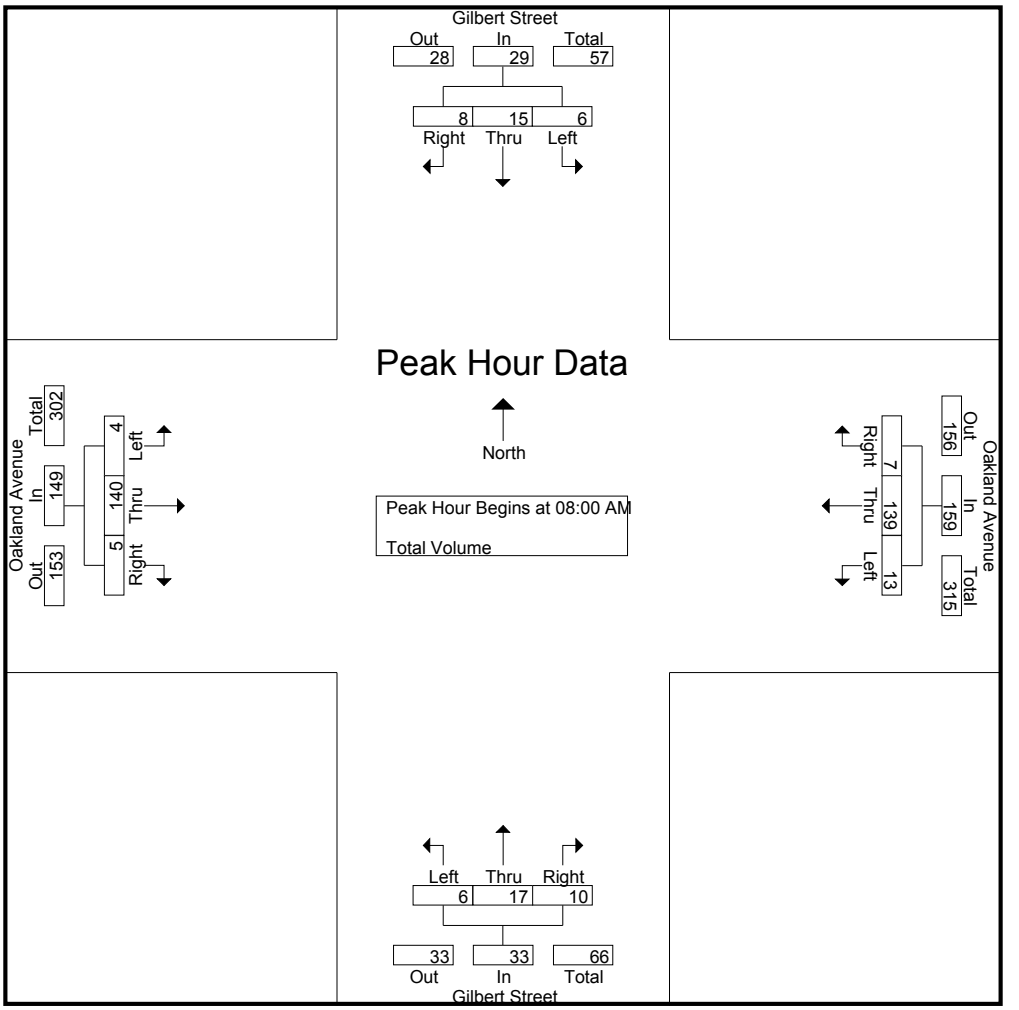
	Gilbert Street Southbound				Oakland Avenue Westbound				Gilbert Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	9	9	0	18	5	15	4	24	0	5	2	7	2	12	0	14	63
07:15 AM	5	6	1	12	2	25	4	31	2	2	0	4	0	26	1	27	74
07:30 AM	5	1	0	6	1	37	5	43	1	5	3	9	0	24	0	24	82
07:45 AM	4	4	1	9	5	44	4	53	1	3	1	5	2	29	0	31	98
Total	23	20	2	45	13	121	17	151	4	15	6	25	4	91	1	96	317
08:00 AM	2	1	3	6	3	30	0	33	1	8	5	14	0	34	2	36	89
08:15 AM	3	4	4	11	5	38	1	44	0	4	2	6	1	28	1	30	91
08:30 AM	1	5	0	6	1	31	3	35	2	1	1	4	0	36	1	37	82
08:45 AM	0	5	1	6	4	40	3	47	3	4	2	9	3	42	1	46	108
Total	6	15	8	29	13	139	7	159	6	17	10	33	4	140	5	149	370
Grand Total	29	35	10	74	26	260	24	310	10	32	16	58	8	231	6	245	687
Apprch %	39.2	47.3	13.5		8.4	83.9	7.7		17.2	55.2	27.6		3.3	94.3	2.4		
Total %	4.2	5.1	1.5	10.8	3.8	37.8	3.5	45.1	1.5	4.7	2.3	8.4	1.2	33.6	0.9	35.7	

	Gilbert Street Southbound				Oakland Avenue Westbound				Gilbert Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	2	1	3	6	3	30	0	33	1	**8**	**5**	**14**	0	34	**2**	36	89
08:15 AM	**3**	4	**4**	**11**	**5**	38	1	44	0	4	2	6	1	28	1	30	91
08:30 AM	1	**5**	0	6	1	31	**3**	35	2	1	1	4	0	36	1	37	82
08:45 AM	0	5	1	6	4	**40**	3	**47**	**3**	4	2	9	**3**	**42**	1	**46**	**108**
Total Volume	6	15	8	29	13	139	7	159	6	17	10	33	4	140	5	149	370
% App. Total	20.7	51.7	27.6		8.2	87.4	4.4		18.2	51.5	30.3		2.7	94	3.4		
PHF	.500	.750	.500	.659	.650	.869	.583	.846	.500	.531	.500	.589	.333	.833	.625	.810	.856

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City of Hemet
N/S: Gilbert Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMGIOAAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:30 AM				08:00 AM			
+0 mins.	**9**	**9**	0	**18**	1	37	**5**	43	**1**	5	3	9	0	34	**2**	36
+15 mins.	5	6	**1**	12	**5**	**44**	4	**53**	1	3	1	5	1	28	1	30
+30 mins.	5	1	0	6	3	30	0	33	1	**8**	**5**	**14**	0	36	1	37
+45 mins.	4	4	1	9	5	38	1	44	0	4	2	6	**3**	**42**	1	**46**
Total Volume	23	20	2	45	14	149	10	173	3	20	11	34	4	140	5	149
% App. Total	51.1	44.4	4.4		8.1	86.1	5.8		8.8	58.8	32.4		2.7	94	3.4	
PHF	.639	.556	.500	.625	.700	.847	.500	.816	.750	.625	.550	.607	.333	.833	.625	.810

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City of Hemet
N/S: Gilbert Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMGIOAPM
Site Code : 10135135
Start Date : 6/10/2010

Groups Printed- Total Volume

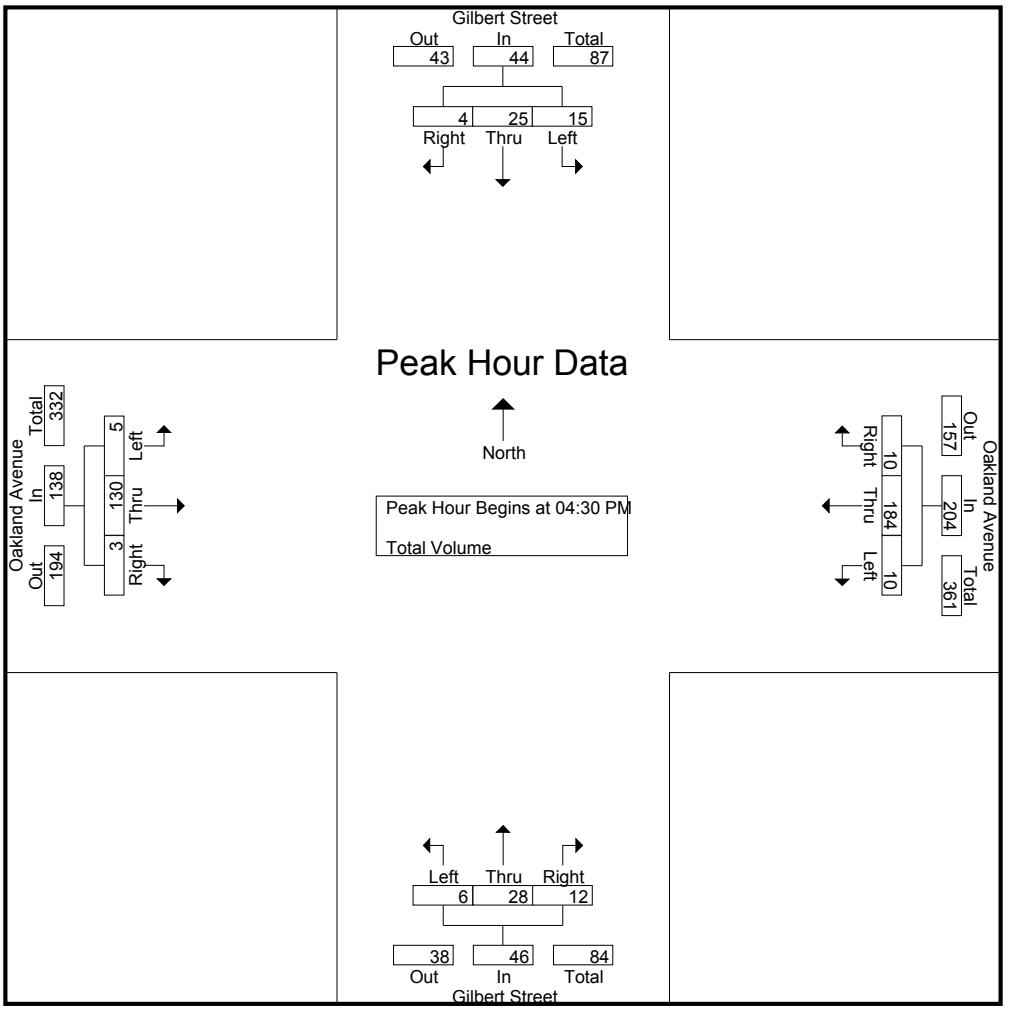
	Gilbert Street Southbound				Oakland Avenue Westbound				Gilbert Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	6	6	13	2	51	4	57	5	7	1	13	1	23	0	24	107
04:15 PM	1	5	1	7	3	39	4	46	1	3	1	5	4	30	1	35	93
04:30 PM	2	6	0	8	2	47	3	52	3	6	4	13	1	36	2	39	112
04:45 PM	5	8	1	14	2	39	2	43	1	6	4	11	1	32	0	33	101
Total	9	25	8	42	9	176	13	198	10	22	10	42	7	121	3	131	413
05:00 PM	2	7	1	10	4	57	3	64	0	8	1	9	2	30	0	32	115
05:15 PM	6	4	2	12	2	41	2	45	2	8	3	13	1	32	1	34	104
05:30 PM	2	1	2	5	0	40	3	43	1	3	7	11	2	34	0	36	95
05:45 PM	0	3	0	3	1	34	3	38	0	8	2	10	0	22	0	22	73
Total	10	15	5	30	7	172	11	190	3	27	13	43	5	118	1	124	387
Grand Total	19	40	13	72	16	348	24	388	13	49	23	85	12	239	4	255	800
Apprch %	26.4	55.6	18.1		4.1	89.7	6.2		15.3	57.6	27.1		4.7	93.7	1.6		
Total %	2.4	5	1.6	9	2	43.5	3	48.5	1.6	6.1	2.9	10.6	1.5	29.9	0.5	31.9	

	Gilbert Street Southbound				Oakland Avenue Westbound				Gilbert Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	6	0	8	2	47	**3**	52	**3**	6	**4**	**13**	1	**36**	**2**	**39**	112
04:45 PM	5	**8**	1	**14**	2	39	2	43	1	6	4	11	1	32	0	33	101
05:00 PM	2	7	1	10	**4**	**57**	3	**64**	0	**8**	1	9	**2**	30	0	32	**115**
05:15 PM	**6**	4	**2**	12	2	41	2	45	2	8	3	13	1	32	1	34	104
Total Volume	15	25	4	44	10	184	10	204	6	28	12	46	5	130	3	138	432
% App. Total	34.1	56.8	9.1		4.9	90.2	4.9		13	60.9	26.1		3.6	94.2	2.2		
PHF	.625	.781	.500	.786	.625	.807	.833	.797	.500	.875	.750	.885	.625	.903	.375	.885	.939

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City of Hemet
N/S: Gilbert Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMGIOAPM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:30 PM				04:15 PM			
+0 mins.	2	6	0	8	3	39	**4**	46	**3**	6	**4**	**13**	**4**	30	1	35
+15 mins.	5	**8**	1	**14**	2	47	3	52	1	6	4	11	1	**36**	**2**	**39**
+30 mins.	2	7	1	10	2	39	2	43	0	**8**	1	9	1	32	0	33
+45 mins.	**6**	4	**2**	12	**4**	**57**	3	**64**	2	8	3	13	2	30	0	32
Total Volume	15	25	4	44	11	182	12	205	6	28	12	46	8	128	3	139
% App. Total	34.1	56.8	9.1		5.4	88.8	5.9		13	60.9	26.1		5.8	92.1	2.2	
PHF	.625	.781	.500	.786	.688	.798	.750	.801	.500	.875	.750	.885	.500	.889	.375	.891

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City of Hemet
N/S: Alessandro Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMALMEAM
Site Code : 10135066
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

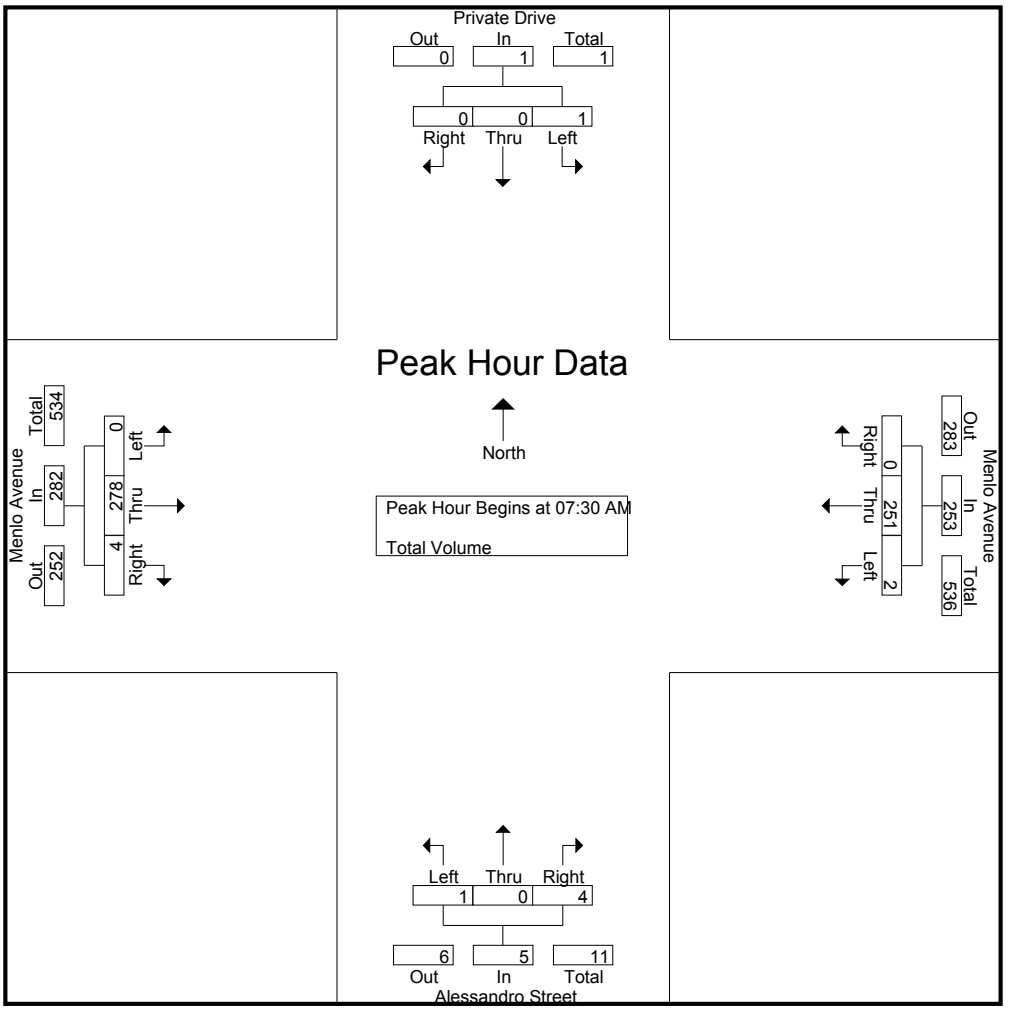
	Private Drive Southbound				Menlo Avenue Westbound				Alessandro Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	1	0	2	0	43	0	43	0	0	0	0	0	48	2	50	95
07:15 AM	0	0	0	0	0	46	0	46	0	0	0	0	0	64	0	64	110
07:30 AM	0	0	0	0	1	72	0	73	1	0	3	4	0	71	2	73	150
07:45 AM	1	0	0	1	0	69	0	69	0	0	0	0	0	73	0	73	143
Total	2	1	0	3	1	230	0	231	1	0	3	4	0	256	4	260	498
08:00 AM	0	0	0	0	1	57	0	58	0	0	1	1	0	71	0	71	130
08:15 AM	0	0	0	0	0	53	0	53	0	0	0	0	0	63	2	65	118
08:30 AM	0	0	0	0	1	64	0	65	2	0	0	2	0	53	0	53	120
08:45 AM	0	0	0	0	1	63	0	64	0	0	2	2	0	73	1	74	140
Total	0	0	0	0	3	237	0	240	2	0	3	5	0	260	3	263	508
Grand Total	2	1	0	3	4	467	0	471	3	0	6	9	0	516	7	523	1006
Apprch %	66.7	33.3	0		0.8	99.2	0		33.3	0	66.7		0	98.7	1.3		
Total %	0.2	0.1	0	0.3	0.4	46.4	0	46.8	0.3	0	0.6	0.9	0	51.3	0.7	52	

	Private Drive Southbound				Menlo Avenue Westbound				Alessandro Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**1**	**72**	0	**73**	**1**	0	**3**	**4**	0	71	**2**	**73**	**150**
07:45 AM	**1**	0	0	**1**	0	69	0	69	0	0	0	0	0	**73**	0	73	143
08:00 AM	0	0	0	0	1	57	0	58	0	0	1	1	0	71	0	71	130
08:15 AM	0	0	0	0	0	53	0	53	0	0	0	0	0	63	2	65	118
Total Volume	1	0	0	1	2	251	0	253	1	0	4	5	0	278	4	282	541
% App. Total	100	0	0		0.8	99.2	0		20	0	80		0	98.6	1.4		
PHF	.250	.000	.000	.250	.500	.872	.000	.866	.250	.000	.333	.313	.000	.952	.500	.966	.902

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City of Hemet
N/S: Alessandro Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMALMEAM
Site Code : 10135066
Start Date : 6/10/2010



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	**1**	**1**	0	**2**	**1**	**72**	0	**73**	0	0	0	0	0	71	**2**	**73**
+15 mins.	0	0	0	0	0	69	0	69	**1**	0	**3**	**4**	0	**73**	0	73
+30 mins.	0	0	0	0	1	57	0	58	0	0	0	0	0	71	0	71
+45 mins.	1	0	0	1	0	53	0	53	0	0	1	1	0	63	2	65
Total Volume	2	1	0	3	2	251	0	253	1	0	4	5	0	278	4	282
% App. Total	66.7	33.3	0		0.8	99.2	0		20	0	80		0	98.6	1.4	
PHF	.500	.250	.000	.375	.500	.872	.000	.866	.250	.000	.333	.313	.000	.952	.500	.966

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City of Hemet
N/S: Alessandro Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMALMEPM
Site Code : 10135066
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

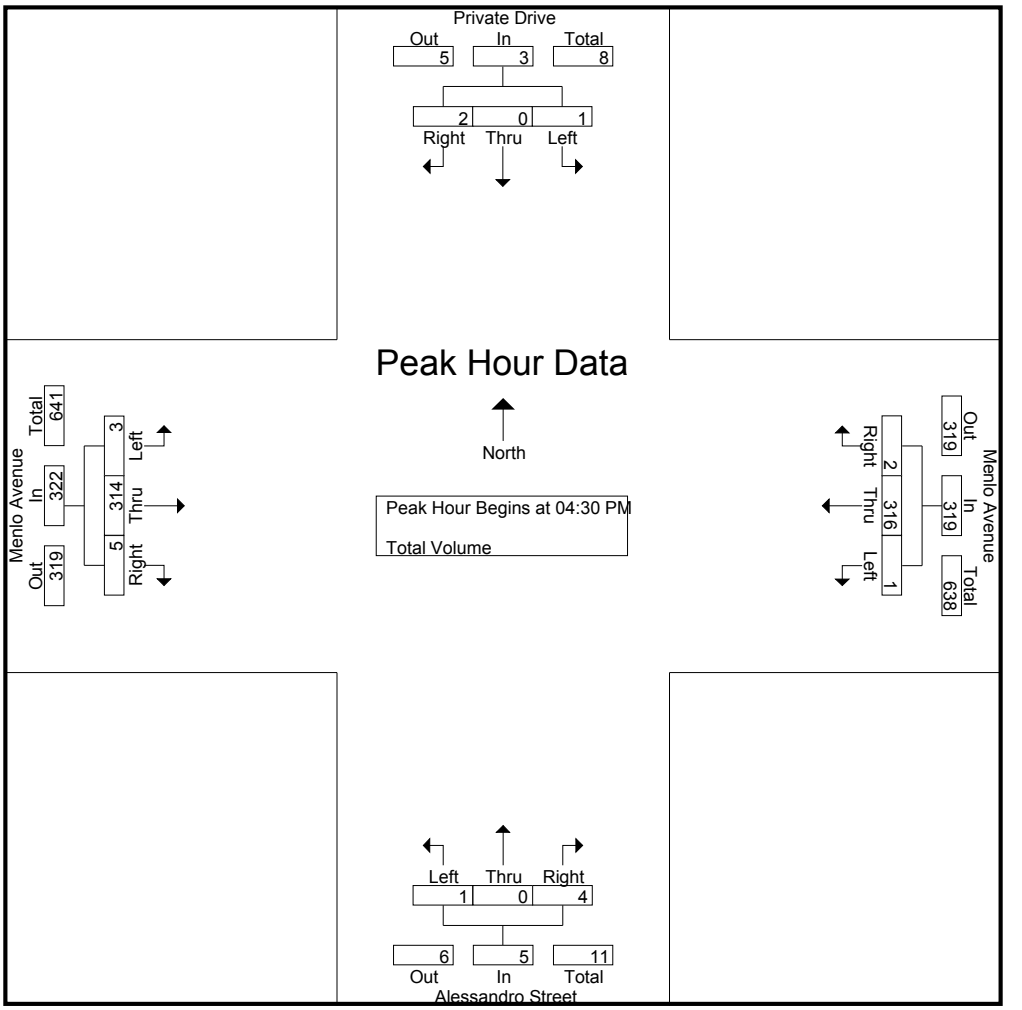
	Private Drive Southbound				Menlo Avenue Westbound				Alessandro Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	75	0	75	0	0	0	0	0	88	0	88	163
04:15 PM	0	0	0	0	0	86	0	86	1	0	0	1	0	78	1	79	166
04:30 PM	0	0	0	0	1	78	0	79	0	0	3	3	0	77	1	78	160
04:45 PM	1	0	0	1	0	74	1	75	0	0	0	0	0	67	3	70	146
Total	1	0	0	1	1	313	1	315	1	0	3	4	0	310	5	315	635
05:00 PM	0	0	1	1	0	76	0	76	1	0	0	1	1	87	1	89	167
05:15 PM	0	0	1	1	0	88	1	89	0	0	1	1	2	83	0	85	176
05:30 PM	0	0	1	1	0	66	0	66	0	0	3	3	0	80	0	80	150
05:45 PM	0	0	0	0	0	71	0	71	0	0	2	2	0	66	1	67	140
Total	0	0	3	3	0	301	1	302	1	0	6	7	3	316	2	321	633
Grand Total	1	0	3	4	1	614	2	617	2	0	9	11	3	626	7	636	1268
Apprch %	25	0	75		0.2	99.5	0.3		18.2	0	81.8		0.5	98.4	1.1		
Total %	0.1	0	0.2	0.3	0.1	48.4	0.2	48.7	0.2	0	0.7	0.9	0.2	49.4	0.6	50.2	

	Private Drive Southbound				Menlo Avenue Westbound				Alessandro Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	**1**	78	0	79	0	0	**3**	**3**	0	77	1	78	160
04:45 PM	**1**	0	0	**1**	0	74	**1**	75	0	0	0	0	0	67	**3**	70	146
05:00 PM	0	0	**1**	1	0	76	0	76	**1**	0	0	1	1	**87**	1	**89**	167
05:15 PM	0	0	1	1	0	**88**	1	**89**	0	0	1	1	**2**	83	0	85	**176**
Total Volume	1	0	2	3	1	316	2	319	1	0	4	5	3	314	5	322	649
% App. Total	33.3	0	66.7		0.3	99.1	0.6		20	0	80		0.9	97.5	1.6		
PHF	.250	.000	.500	.750	.250	.898	.500	.896	.250	.000	.333	.417	.375	.902	.417	.904	.922

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City of Hemet
N/S: Alessandro Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMALMEPM
Site Code : 10135066
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				05:00 PM				04:45 PM			
+0 mins.	**1**	0	0	**1**	**1**	78	0	79	**1**	0	0	1	0	67	**3**	70
+15 mins.	0	0	**1**	1	0	74	**1**	75	0	0	1	1	1	**87**	1	**89**
+30 mins.	0	0	1	1	0	76	0	76	0	0	**3**	**3**	**2**	83	0	85
+45 mins.	0	0	1	1	0	**88**	1	**89**	0	0	2	2	0	80	0	80
Total Volume	1	0	3	4	1	316	2	319	1	0	6	7	3	317	4	324
% App. Total	25	0	75		0.3	99.1	0.6		14.3	0	85.7		0.9	97.8	1.2	
PHF	.250	.000	.750	1.000	.250	.898	.500	.896	.250	.000	.500	.583	.375	.911	.333	.910

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City of Hemet
N/S: Alessandro Street
E/W: Ancla Lane
Weather: Sunny

File Name : HEMALANAM
Site Code : 10135035
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

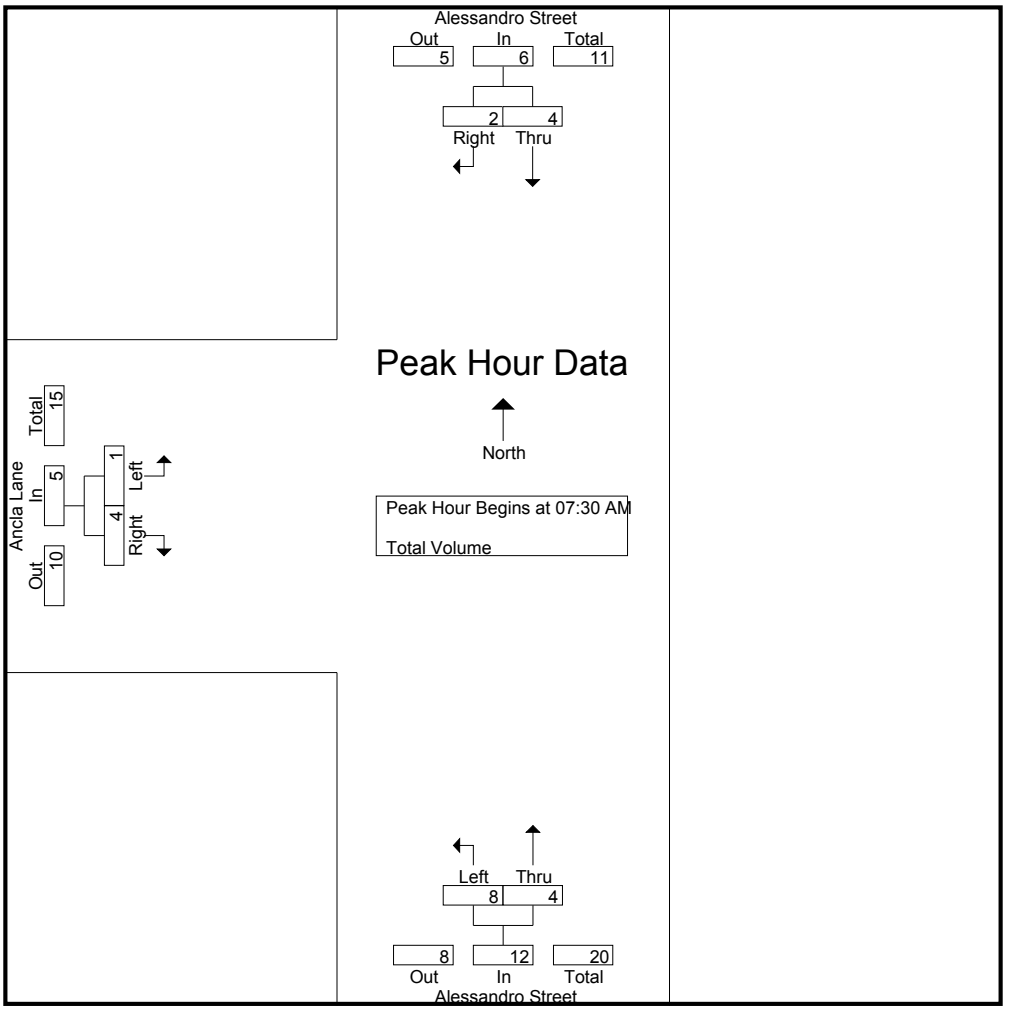
	Alessandro Street Southbound			Alessandro Street Northbound			Ancla Lane Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	3	0	3	0	0	0	0	1	1	4
07:15 AM	0	0	0	0	0	0	0	1	1	1
07:30 AM	2	0	2	3	3	6	0	3	3	11
07:45 AM	0	0	0	2	1	3	0	0	0	3
Total	5	0	5	5	4	9	0	5	5	19
08:00 AM	0	2	2	1	0	1	1	1	2	5
08:15 AM	2	0	2	2	0	2	0	0	0	4
08:30 AM	0	0	0	1	1	2	1	1	2	4
08:45 AM	2	0	2	0	1	1	0	0	0	3
Total	4	2	6	4	2	6	2	2	4	16
Grand Total	9	2	11	9	6	15	2	7	9	35
Apprch %	81.8	18.2		60	40		22.2	77.8		
Total %	25.7	5.7	31.4	25.7	17.1	42.9	5.7	20	25.7	

	Alessandro Street Southbound			Alessandro Street Northbound			Ancla Lane Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**2**	0	**2**	**3**	**3**	**6**	0	**3**	**3**	**11**
07:45 AM	0	0	0	2	1	3	0	0	0	3
08:00 AM	0	**2**	2	1	0	1	**1**	1	2	5
08:15 AM	2	0	2	2	0	2	0	0	0	4
Total Volume	4	2	6	8	4	12	1	4	5	23
% App. Total	66.7	33.3		66.7	33.3		20	80		
PHF	.500	.250	.750	.667	.333	.500	.250	.333	.417	.523

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City of Hemet
N/S: Alessandro Street
E/W: Ancla Lane
Weather: Sunny

File Name : HEMALANAM
Site Code : 10135035
Start Date : 6/10/2010



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:15 AM		
+0 mins.	**2**	0	**2**	**3**	**3**	**6**	0	1	1
+15 mins.	0	0	0	2	1	3	0	**3**	**3**
+30 mins.	0	**2**	2	1	0	1	0	0	0
+45 mins.	2	0	2	2	0	2	**1**	1	2
Total Volume	4	2	6	8	4	12	1	5	6
% App. Total	66.7	33.3		66.7	33.3		16.7	83.3	
PHF	.500	.250	.750	.667	.333	.500	.250	.417	.500

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City of Hemet
N/S: Alessandro Street
E/W: Ancla Lane
Weather: Sunny

File Name : HEMALANPM
Site Code : 10135035
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

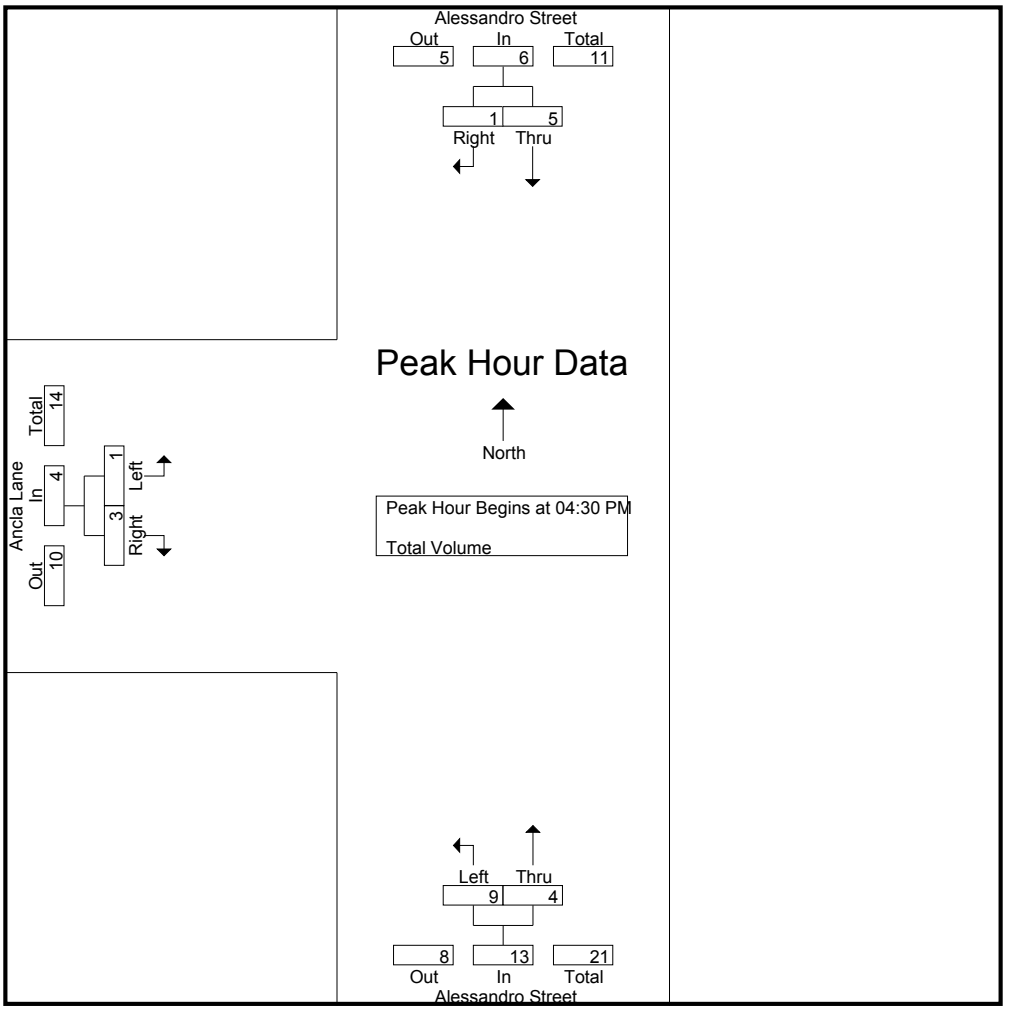
	Alessandro Street Southbound			Alessandro Street Northbound			Ancla Lane Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	1	0	1	1	1	2	0	1	1	4
04:30 PM	1	1	2	3	2	5	1	0	1	8
04:45 PM	3	0	3	1	0	1	0	1	1	5
Total	5	1	6	6	3	9	1	2	3	18
05:00 PM	1	0	1	1	1	2	0	1	1	4
05:15 PM	0	0	0	4	1	5	0	1	1	6
05:30 PM	0	0	0	2	2	4	1	0	1	5
05:45 PM	1	0	1	0	2	2	0	0	0	3
Total	2	0	2	7	6	13	1	2	3	18
Grand Total	7	1	8	13	9	22	2	4	6	36
Apprch %	87.5	12.5		59.1	40.9		33.3	66.7		
Total %	19.4	2.8	22.2	36.1	25	61.1	5.6	11.1	16.7	

	Alessandro Street Southbound			Alessandro Street Northbound			Ancla Lane Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	1	**1**	2	3	**2**	**5**	**1**	0	**1**	**8**
04:45 PM	**3**	0	**3**	1	0	1	0	**1**	1	5
05:00 PM	1	0	1	1	1	2	0	1	1	4
05:15 PM	0	0	0	**4**	1	5	0	1	1	6
Total Volume	5	1	6	9	4	13	1	3	4	23
% App. Total	83.3	16.7		69.2	30.8		25	75		
PHF	.417	.250	.500	.563	.500	.650	.250	.750	1.000	.719

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City of Hemet
N/S: Alessandro Street
E/W: Ancla Lane
Weather: Sunny

File Name : HEMALANPM
Site Code : 10135035
Start Date : 6/10/2010



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM			04:30 PM			04:15 PM		
+0 mins.	1	0	1	3	**2**	**5**	0	**1**	**1**
+15 mins.	1	**1**	2	1	0	1	**1**	0	1
+30 mins.	**3**	0	**3**	1	1	2	0	1	1
+45 mins.	1	0	1	**4**	1	5	0	1	1
Total Volume	6	1	7	9	4	13	1	3	4
% App. Total	85.7	14.3		69.2	30.8		25	75	
PHF	.500	.250	.583	.563	.500	.650	.250	.750	1.000

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City of Hemet
N/S: Alessandro Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMALOAAM
Site Code : 10135137
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

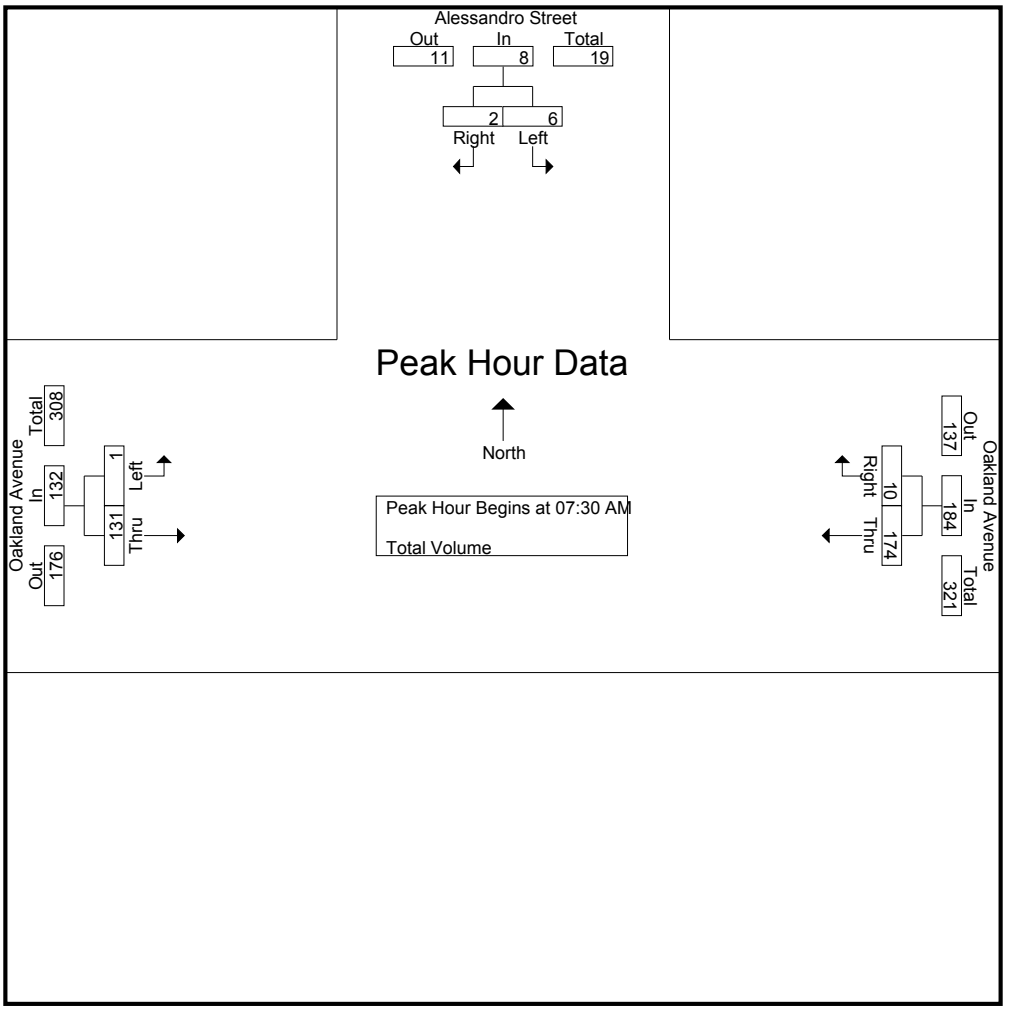
	Alessandro Street Southbound			Oakland Avenue Westbound			Oakland Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	2	1	3	22	0	22	0	20	20	45
07:15 AM	2	0	2	27	0	27	0	30	30	59
07:30 AM	4	0	4	44	5	49	0	27	27	80
07:45 AM	0	0	0	53	2	55	0	32	32	87
Total	8	1	9	146	7	153	0	109	109	271
08:00 AM	0	1	1	31	1	32	0	40	40	73
08:15 AM	2	1	3	46	2	48	1	32	33	84
08:30 AM	1	0	1	33	1	34	0	40	40	75
08:45 AM	1	1	2	47	1	48	0	40	40	90
Total	4	3	7	157	5	162	1	152	153	322
Grand Total	12	4	16	303	12	315	1	261	262	593
Apprch %	75	25		96.2	3.8		0.4	99.6		
Total %	2	0.7	2.7	51.1	2	53.1	0.2	44	44.2	

	Alessandro Street Southbound			Oakland Avenue Westbound			Oakland Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**4**	0	**4**	44	**5**	49	0	27	27	80
07:45 AM	0	0	0	**53**	2	**55**	0	32	32	**87**
08:00 AM	0	**1**	1	31	1	32	0	**40**	**40**	73
08:15 AM	2	1	3	46	2	48	**1**	32	33	84
Total Volume	6	2	8	174	10	184	1	131	132	324
% App. Total	75	25		94.6	5.4		0.8	99.2		
PHF	.375	.500	.500	.821	.500	.836	.250	.819	.825	.931

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City of Hemet
N/S: Alessandro Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMALOAAM
Site Code : 10135137
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:30 AM			08:00 AM		
+0 mins.	2	**1**	3	44	**5**	49	0	**40**	**40**
+15 mins.	2	0	2	**53**	2	**55**	**1**	32	33
+30 mins.	**4**	0	**4**	31	1	32	0	40	40
+45 mins.	0	0	0	46	2	48	0	40	40
Total Volume	8	1	9	174	10	184	1	152	153
% App. Total	88.9	11.1		94.6	5.4		0.7	99.3	
PHF	.500	.250	.563	.821	.500	.836	.250	.950	.956

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City of Hemet
N/S: Alessandro Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMALOAPM
Site Code : 10135137
Start Date : 6/10/2010

Groups Printed- Total Volume

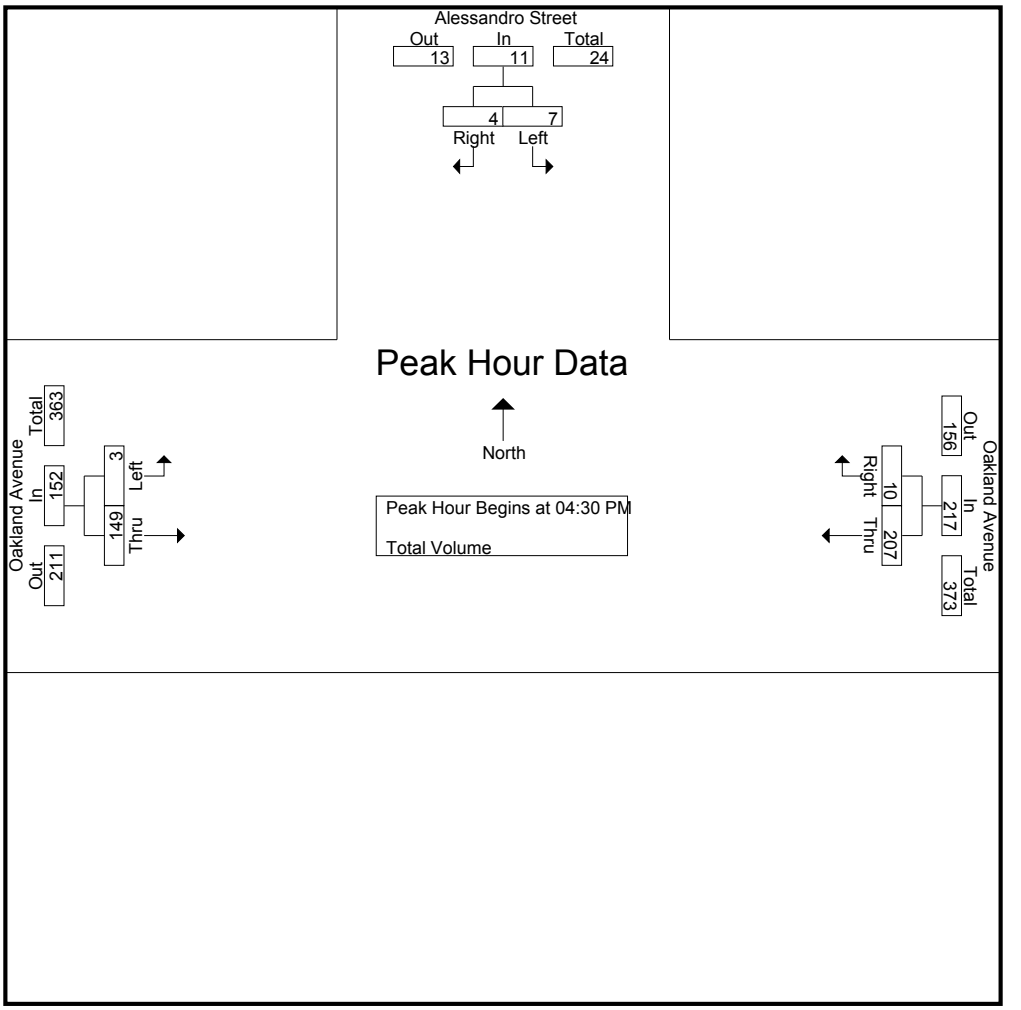
	Alessandro Street Southbound			Oakland Avenue Westbound			Oakland Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	51	2	53	0	22	22	75
04:15 PM	1	1	2	44	2	46	0	33	33	81
04:30 PM	0	2	2	52	4	56	1	38	39	97
04:45 PM	3	0	3	44	1	45	0	35	35	83
Total	4	3	7	191	9	200	1	128	129	336
05:00 PM	3	2	5	63	3	66	0	34	34	105
05:15 PM	1	0	1	48	2	50	2	42	44	95
05:30 PM	1	0	1	42	2	44	0	37	37	82
05:45 PM	1	0	1	38	2	40	0	22	22	63
Total	6	2	8	191	9	200	2	135	137	345
Grand Total	10	5	15	382	18	400	3	263	266	681
Apprch %	66.7	33.3		95.5	4.5		1.1	98.9		
Total %	1.5	0.7	2.2	56.1	2.6	58.7	0.4	38.6	39.1	

	Alessandro Street Southbound			Oakland Avenue Westbound			Oakland Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	**2**	2	52	**4**	56	1	38	39	97
04:45 PM	**3**	0	3	44	1	45	0	35	35	83
05:00 PM	3	2	**5**	**63**	3	**66**	0	34	34	**105**
05:15 PM	1	0	1	48	2	50	**2**	**42**	**44**	95
Total Volume	7	4	11	207	10	217	3	149	152	380
% App. Total	63.6	36.4		95.4	4.6		2	98		
PHF	.583	.500	.550	.821	.625	.822	.375	.887	.864	.905

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City of Hemet
N/S: Alessandro Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMALOAPM
Site Code : 10135137
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM			04:30 PM			04:30 PM		
+0 mins.	1	1	2	52	**4**	56	1	38	39
+15 mins.	0	**2**	2	44	1	45	0	35	35
+30 mins.	**3**	0	3	**63**	3	**66**	0	34	34
+45 mins.	3	2	**5**	48	2	50	**2**	**42**	**44**
Total Volume	7	5	12	207	10	217	3	149	152
% App. Total	58.3	41.7		95.4	4.6		2	98	
PHF	.583	.625	.600	.821	.625	.822	.375	.887	.864

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City of Hemet
N/S: State Street
E/W: Fruitvale Avenue
Weather: Sunny

File Name : HEMSTFRAM
Site Code : 10135044
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

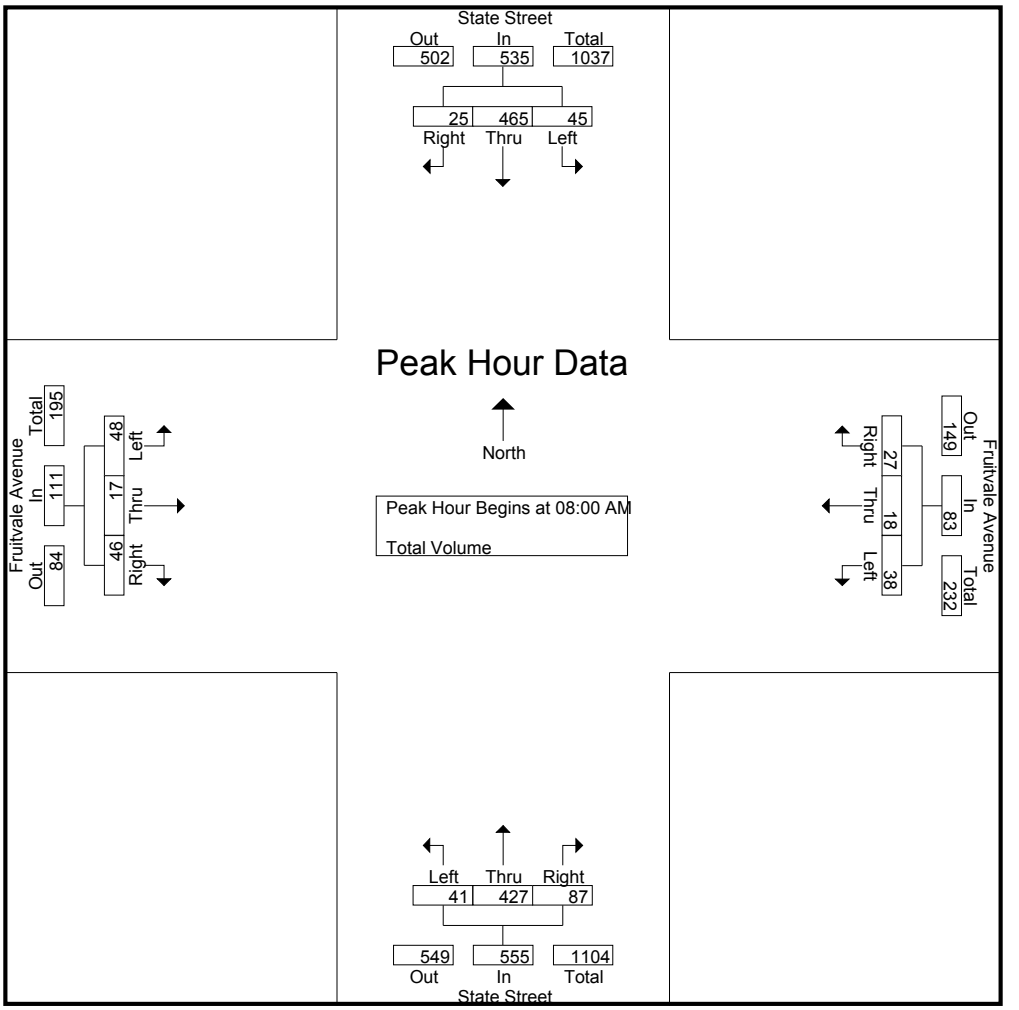
	State Street Southbound				Fruitvale Avenue Westbound				State Street Northbound				Fruitvale Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	62	5	70	1	0	0	1	6	86	8	100	5	0	13	18	189
07:15 AM	9	109	6	124	1	0	1	2	8	64	7	79	4	0	14	18	223
07:30 AM	7	112	7	126	7	1	3	11	8	101	24	133	8	6	17	31	301
07:45 AM	11	126	5	142	4	1	6	11	18	118	17	153	9	6	18	33	339
Total	30	409	23	462	13	2	10	25	40	369	56	465	26	12	62	100	1052
08:00 AM	14	99	5	118	9	0	3	12	11	107	27	145	13	4	12	29	304
08:15 AM	10	121	6	137	5	5	7	17	6	91	24	121	12	2	9	23	298
08:30 AM	9	106	8	123	9	2	6	17	12	119	21	152	12	2	12	26	318
08:45 AM	12	139	6	157	15	11	11	37	12	110	15	137	11	9	13	33	364
Total	45	465	25	535	38	18	27	83	41	427	87	555	48	17	46	111	1284
Grand Total	75	874	48	997	51	20	37	108	81	796	143	1020	74	29	108	211	2336
Apprch %	7.5	87.7	4.8		47.2	18.5	34.3		7.9	78	14		35.1	13.7	51.2		
Total %	3.2	37.4	2.1	42.7	2.2	0.9	1.6	4.6	3.5	34.1	6.1	43.7	3.2	1.2	4.6	9	

	State Street Southbound				Fruitvale Avenue Westbound				State Street Northbound				Fruitvale Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**14**	99	5	118	9	0	3	12	11	107	**27**	145	**13**	4	12	29	304
08:15 AM	10	121	6	137	5	5	7	17	6	91	24	121	12	2	9	23	298
08:30 AM	9	106	**8**	123	9	2	6	17	**12**	**119**	21	**152**	12	2	12	26	318
08:45 AM	12	**139**	6	**157**	**15**	**11**	**11**	**37**	12	110	15	137	11	**9**	**13**	**33**	**364**
Total Volume	45	465	25	535	38	18	27	83	41	427	87	555	48	17	46	111	1284
% App. Total	8.4	86.9	4.7		45.8	21.7	32.5		7.4	76.9	15.7		43.2	15.3	41.4		
PHF	.804	.836	.781	.852	.633	.409	.614	.561	.854	.897	.806	.913	.923	.472	.885	.841	.882

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City of Hemet
N/S: State Street
E/W: Fruitvale Avenue
Weather: Sunny

File Name : HEMSTFRAM
Site Code : 10135044
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:45 AM				07:30 AM			
+0 mins.	**14**	99	5	118	9	0	3	12	**18**	118	17	**153**	8	**6**	17	31
+15 mins.	10	121	6	137	5	5	7	17	11	107	**27**	145	9	6	**18**	**33**
+30 mins.	9	106	**8**	123	9	2	6	17	6	91	24	121	**13**	4	12	29
+45 mins.	12	**139**	6	**157**	**15**	**11**	**11**	**37**	12	**119**	21	152	12	2	9	23
Total Volume	45	465	25	535	38	18	27	83	47	435	89	571	42	18	56	116
% App. Total	8.4	86.9	4.7		45.8	21.7	32.5		8.2	76.2	15.6		36.2	15.5	48.3	
PHF	.804	.836	.781	.852	.633	.409	.614	.561	.653	.914	.824	.933	.808	.750	.778	.879

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City of Hemet
N/S: State Street
E/W: Fruitvale Avenue
Weather: Sunny

File Name : HEMSTFRPM
Site Code : 10135043
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

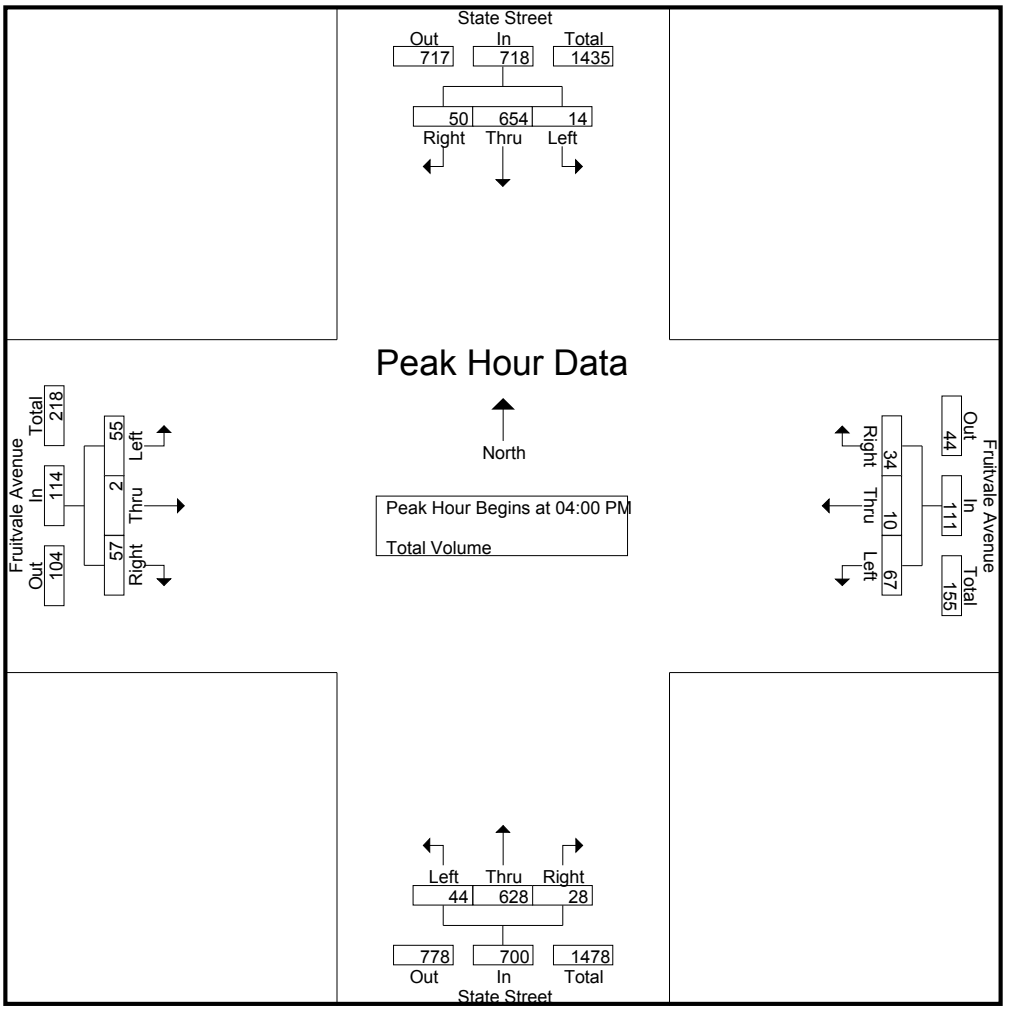
	State Street Southbound				Fruitvale Avenue Westbound				State Street Northbound				Fruitvale Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	156	12	171	17	6	10	33	10	138	9	157	19	1	15	35	396
04:15 PM	2	174	12	188	22	0	9	31	13	178	11	202	11	0	15	26	447
04:30 PM	6	156	12	174	11	1	12	24	13	172	5	190	16	0	12	28	416
04:45 PM	3	168	14	185	17	3	3	23	8	140	3	151	9	1	15	25	384
Total	14	654	50	718	67	10	34	111	44	628	28	700	55	2	57	114	1643
05:00 PM	3	154	8	165	15	7	7	29	19	145	3	167	2	0	22	24	385
05:15 PM	0	128	13	141	3	2	4	9	16	134	2	152	11	0	11	22	324
05:30 PM	1	148	9	158	7	5	3	15	13	138	2	153	8	0	14	22	348
05:45 PM	3	114	4	121	4	0	1	5	12	106	4	122	15	0	10	25	273
Total	7	544	34	585	29	14	15	58	60	523	11	594	36	0	57	93	1330
Grand Total	21	1198	84	1303	96	24	49	169	104	1151	39	1294	91	2	114	207	2973
Apprch %	1.6	91.9	6.4		56.8	14.2	29		8	88.9	3		44	1	55.1		
Total %	0.7	40.3	2.8	43.8	3.2	0.8	1.6	5.7	3.5	38.7	1.3	43.5	3.1	0.1	3.8	7	

	State Street Southbound				Fruitvale Avenue Westbound				State Street Northbound				Fruitvale Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	156	12	171	17	**6**	10	**33**	10	138	9	157	**19**	**1**	**15**	**35**	396
04:15 PM	2	**174**	12	**188**	**22**	0	9	31	**13**	**178**	**11**	**202**	11	0	15	26	**447**
04:30 PM	**6**	156	12	174	11	1	**12**	24	13	172	5	190	16	0	12	28	416
04:45 PM	3	168	**14**	185	17	3	3	23	8	140	3	151	9	1	15	25	384
Total Volume	14	654	50	718	67	10	34	111	44	628	28	700	55	2	57	114	1643
% App. Total	1.9	91.1	7		60.4	9	30.6		6.3	89.7	4		48.2	1.8	50		
PHF	.583	.940	.893	.955	.761	.417	.708	.841	.846	.882	.636	.866	.724	.500	.950	.814	.919

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: State Street
E/W: Fruitvale Avenue
Weather: Sunny

File Name : HEMSTFRPM
Site Code : 10135043
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:15 PM				04:00 PM			
+0 mins.	3	156	12	171	17	**6**	10	**33**	13	**178**	**11**	**202**	**19**	**1**	**15**	**35**
+15 mins.	2	**174**	12	**188**	**22**	0	9	31	13	172	5	190	11	0	15	26
+30 mins.	**6**	156	12	174	11	1	**12**	24	8	140	3	151	16	0	12	28
+45 mins.	3	168	**14**	185	17	3	3	23	**19**	145	3	167	9	1	15	25
Total Volume	14	654	50	718	67	10	34	111	53	635	22	710	55	2	57	114
% App. Total	1.9	91.1	7		60.4	9	30.6		7.5	89.4	3.1		48.2	1.8	50	
PHF	.583	.940	.893	.955	.761	.417	.708	.841	.697	.892	.500	.879	.724	.500	.950	.814

Counts Unlimited Inc.
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Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: State Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMSTMEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

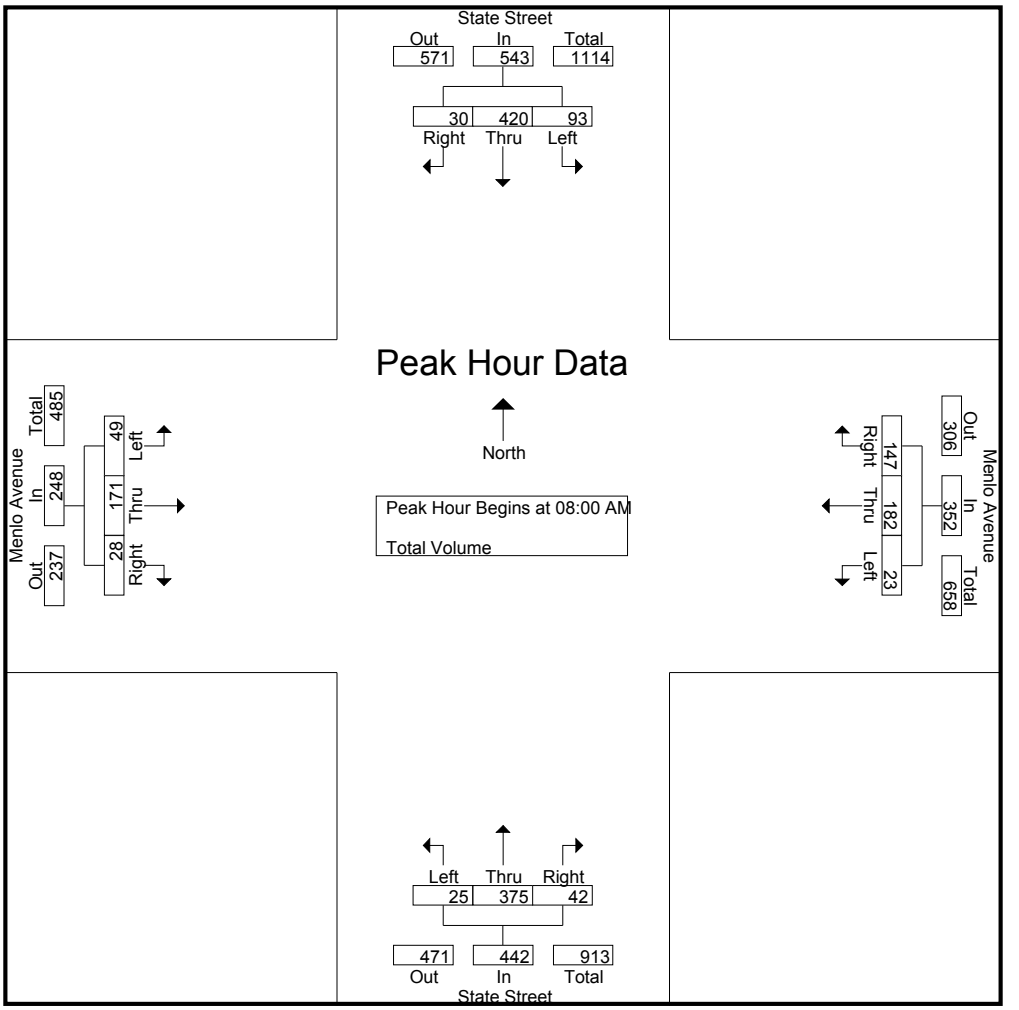
	State Street Southbound				Menlo Avenue Westbound				State Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	64	7	84	2	34	20	56	3	74	5	82	9	33	2	44	266
07:15 AM	20	79	9	108	6	39	30	75	3	52	8	63	9	47	8	64	310
07:30 AM	29	78	6	113	7	56	27	90	9	90	2	101	14	45	10	69	373
07:45 AM	25	101	6	132	5	65	45	115	5	90	9	104	12	54	5	71	422
Total	87	322	28	437	20	194	122	336	20	306	24	350	44	179	25	248	1371
08:00 AM	26	103	7	136	4	34	37	75	8	107	12	127	12	50	7	69	407
08:15 AM	27	90	8	125	5	42	29	76	6	65	1	72	16	40	7	63	336
08:30 AM	20	91	10	121	8	49	43	100	6	103	14	123	10	29	4	43	387
08:45 AM	20	136	5	161	6	57	38	101	5	100	15	120	11	52	10	73	455
Total	93	420	30	543	23	182	147	352	25	375	42	442	49	171	28	248	1585
Grand Total	180	742	58	980	43	376	269	688	45	681	66	792	93	350	53	496	2956
Apprch %	18.4	75.7	5.9		6.2	54.7	39.1		5.7	86	8.3		18.8	70.6	10.7		
Total %	6.1	25.1	2	33.2	1.5	12.7	9.1	23.3	1.5	23	2.2	26.8	3.1	11.8	1.8	16.8	

	State Street Southbound				Menlo Avenue Westbound				State Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	26	103	7	136	4	34	37	75	**8**	**107**	12	**127**	12	50	7	69	407
08:15 AM	**27**	90	8	125	5	42	29	76	6	65	1	72	**16**	40	7	63	336
08:30 AM	20	91	**10**	121	**8**	49	**43**	100	6	103	14	123	10	29	4	43	387
08:45 AM	20	**136**	5	**161**	6	**57**	38	**101**	5	100	**15**	120	11	**52**	**10**	**73**	**455**
Total Volume	93	420	30	543	23	182	147	352	25	375	42	442	49	171	28	248	1585
% App. Total	17.1	77.3	5.5		6.5	51.7	41.8		5.7	84.8	9.5		19.8	69	11.3		
PHF	.861	.772	.750	.843	.719	.798	.855	.871	.781	.876	.700	.870	.766	.822	.700	.849	.871

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: State Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMSTMEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				07:15 AM			
+0 mins.	26	103	7	136	5	**65**	**45**	**115**	**8**	**107**	12	**127**	9	47	8	64
+15 mins.	**27**	90	8	125	4	34	37	75	6	65	1	72	**14**	45	**10**	69
+30 mins.	20	91	**10**	121	5	42	29	76	6	103	14	123	12	**54**	5	**71**
+45 mins.	20	**136**	5	**161**	**8**	49	43	100	5	100	**15**	120	12	50	7	69
Total Volume	93	420	30	543	22	190	154	366	25	375	42	442	47	196	30	273
% App. Total	17.1	77.3	5.5		6	51.9	42.1		5.7	84.8	9.5		17.2	71.8	11	
PHF	.861	.772	.750	.843	.688	.731	.856	.796	.781	.876	.700	.870	.839	.907	.750	.961

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(951) 268-6268

City of Hemet
N/S: State Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMSTMEPM
Site Code : 10135135
Start Date : 6/10/2010

Groups Printed- Total Volume

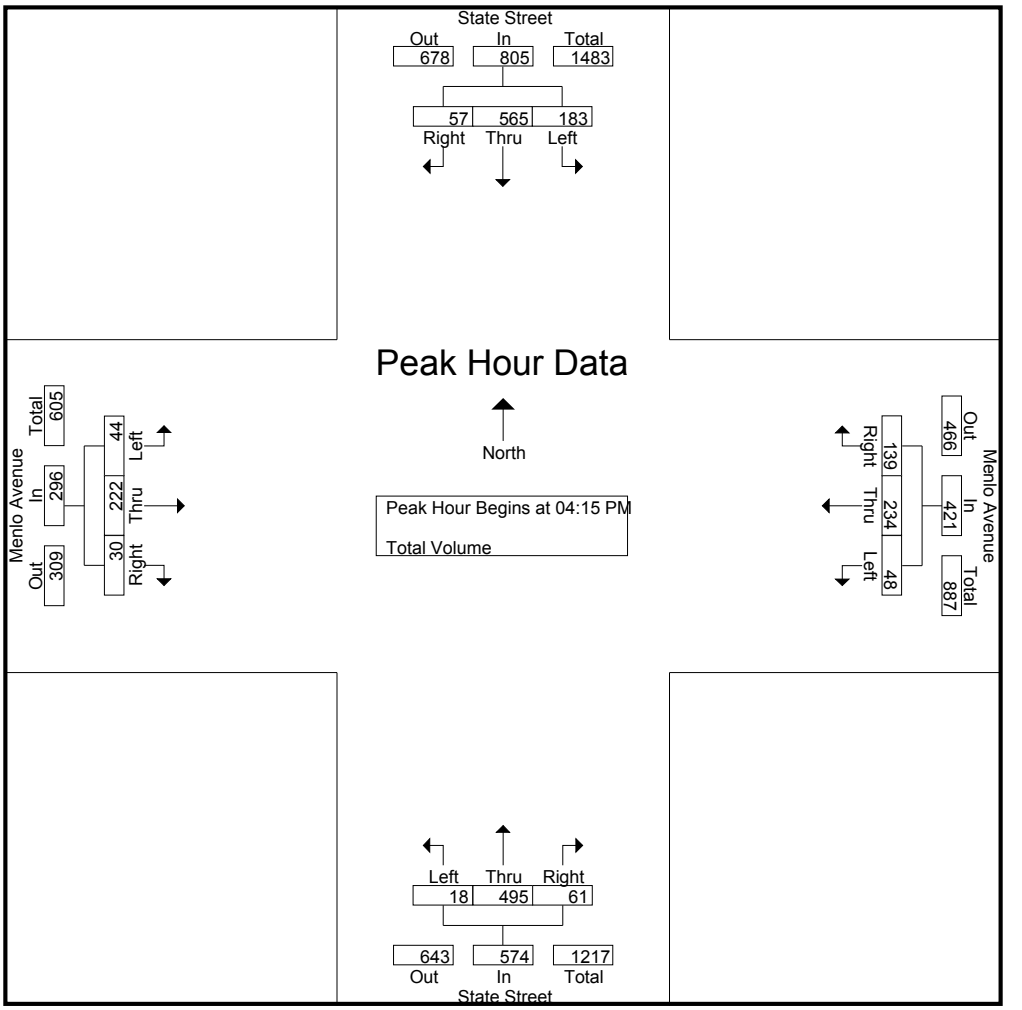
	State Street Southbound				Menlo Avenue Westbound				State Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	124	20	184	6	50	26	82	5	107	13	125	14	64	3	81	472
04:15 PM	42	138	14	194	7	67	43	117	6	117	13	136	12	54	10	76	523
04:30 PM	45	151	23	219	14	52	40	106	1	144	14	159	11	61	7	79	563
04:45 PM	47	122	12	181	9	49	30	88	7	101	20	128	10	49	6	65	462
Total	174	535	69	778	36	218	139	393	19	469	60	548	47	228	26	301	2020
05:00 PM	49	154	8	211	18	66	26	110	4	133	14	151	11	58	7	76	548
05:15 PM	25	107	19	151	11	62	27	100	8	105	16	129	11	69	6	86	466
05:30 PM	43	115	9	167	9	52	28	89	7	100	17	124	6	56	9	71	451
05:45 PM	30	103	9	142	3	55	21	79	6	88	22	116	7	44	6	57	394
Total	147	479	45	671	41	235	102	378	25	426	69	520	35	227	28	290	1859
Grand Total	321	1014	114	1449	77	453	241	771	44	895	129	1068	82	455	54	591	3879
Apprch %	22.2	70	7.9		10	58.8	31.3		4.1	83.8	12.1		13.9	77	9.1		
Total %	8.3	26.1	2.9	37.4	2	11.7	6.2	19.9	1.1	23.1	3.3	27.5	2.1	11.7	1.4	15.2	

	State Street Southbound				Menlo Avenue Westbound				State Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	42	138	14	194	7	**67**	**43**	**117**	6	117	13	136	**12**	54	**10**	76	523
04:30 PM	45	151	**23**	**219**	14	52	40	106	1	**144**	14	**159**	11	**61**	7	**79**	**563**
04:45 PM	47	122	12	181	9	49	30	88	**7**	101	**20**	128	10	49	6	65	462
05:00 PM	**49**	**154**	8	211	**18**	66	26	110	4	133	14	151	11	58	7	76	548
Total Volume	183	565	57	805	48	234	139	421	18	495	61	574	44	222	30	296	2096
% App. Total	22.7	70.2	7.1		11.4	55.6	33		3.1	86.2	10.6		14.9	75	10.1		
PHF	.934	.917	.620	.919	.667	.873	.808	.900	.643	.859	.763	.903	.917	.910	.750	.937	.931

Counts Unlimited Inc.
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City of Hemet
N/S: State Street
E/W: Menlo Avenue
Weather: Sunny

File Name : HEMSTMEPM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:30 PM			
+0 mins.	42	138	14	194	7	**67**	**43**	**117**	6	117	13	136	**11**	61	**7**	79
+15 mins.	45	151	**23**	**219**	14	52	40	106	1	**144**	14	**159**	10	49	6	65
+30 mins.	47	122	12	181	9	49	30	88	**7**	101	**20**	128	11	58	7	76
+45 mins.	**49**	**154**	8	211	**18**	66	26	110	4	133	14	151	11	**69**	6	**86**
Total Volume	183	565	57	805	48	234	139	421	18	495	61	574	43	237	26	306
% App. Total	22.7	70.2	7.1		11.4	55.6	33		3.1	86.2	10.6		14.1	77.5	8.5	
PHF	.934	.917	.620	.919	.667	.873	.808	.900	.643	.859	.763	.903	.977	.859	.929	.890

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City of Hemet
N/S: State Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMSTOAAM
Site Code : 10135022
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

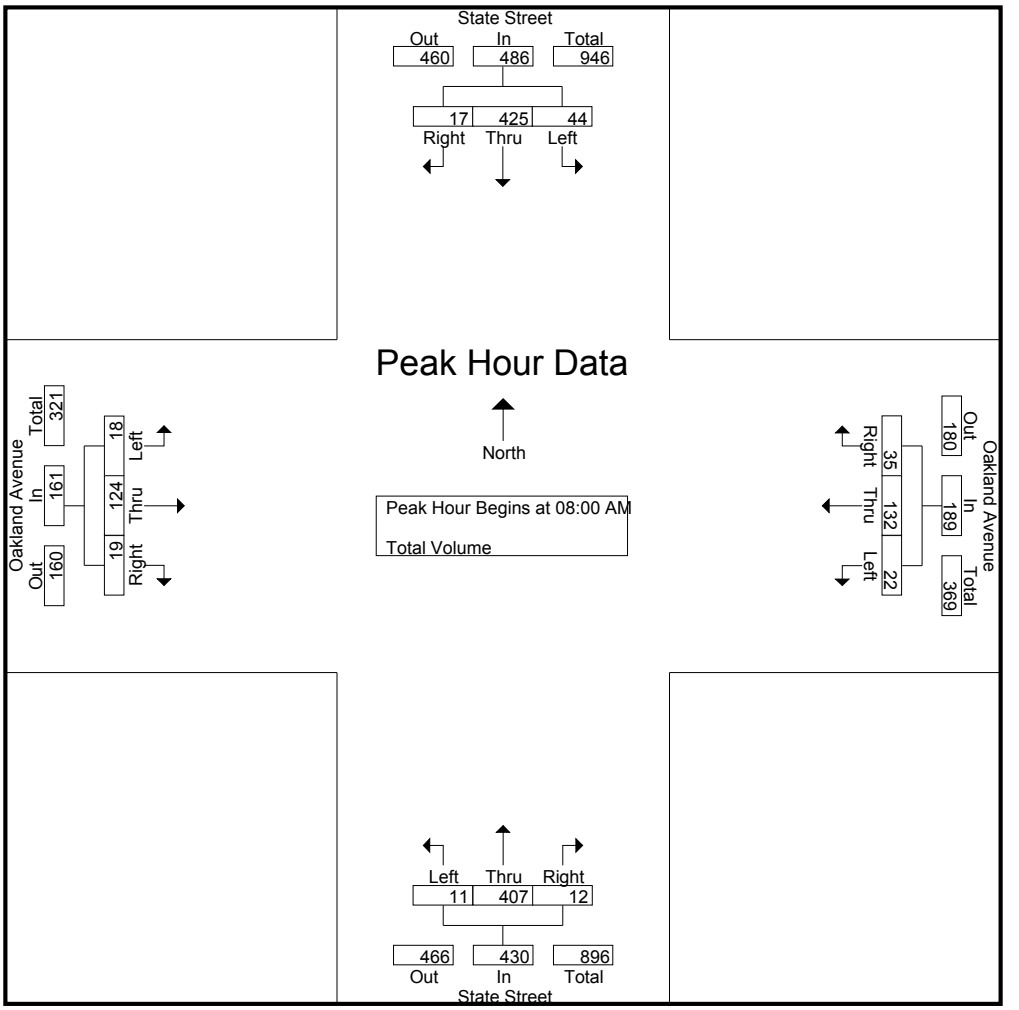
	State Street Southbound				Oakland Avenue Westbound				State Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	58	3	74	0	22	13	35	1	71	7	79	3	23	1	27	215
07:15 AM	10	86	2	98	3	33	9	45	0	61	10	71	2	31	3	36	250
07:30 AM	9	92	5	106	5	45	12	62	4	96	8	108	4	29	3	36	312
07:45 AM	22	92	4	118	8	51	13	72	0	105	9	114	0	33	4	37	341
Total	54	328	14	396	16	151	47	214	5	333	34	372	9	116	11	136	1118
08:00 AM	14	93	5	112	7	25	9	41	2	117	3	122	4	35	2	41	316
08:15 AM	9	90	5	104	8	34	6	48	4	71	4	79	2	27	4	33	264
08:30 AM	11	94	1	106	4	34	8	46	2	116	1	119	4	29	7	40	311
08:45 AM	10	148	6	164	3	39	12	54	3	103	4	110	8	33	6	47	375
Total	44	425	17	486	22	132	35	189	11	407	12	430	18	124	19	161	1266
Grand Total	98	753	31	882	38	283	82	403	16	740	46	802	27	240	30	297	2384
Apprch %	11.1	85.4	3.5		9.4	70.2	20.3		2	92.3	5.7		9.1	80.8	10.1		
Total %	4.1	31.6	1.3	37	1.6	11.9	3.4	16.9	0.7	31	1.9	33.6	1.1	10.1	1.3	12.5	

	State Street Southbound				Oakland Avenue Westbound				State Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**14**	93	5	112	7	25	9	41	2	**117**	3	**122**	4	**35**	2	41	316
08:15 AM	9	90	5	104	**8**	34	6	48	**4**	71	**4**	79	2	27	4	33	264
08:30 AM	11	94	1	106	4	34	8	46	2	116	1	119	4	29	**7**	40	311
08:45 AM	10	**148**	**6**	**164**	3	**39**	**12**	**54**	3	103	4	110	**8**	33	6	**47**	**375**
Total Volume	44	425	17	486	22	132	35	189	11	407	12	430	18	124	19	161	1266
% App. Total	9.1	87.4	3.5		11.6	69.8	18.5		2.6	94.7	2.8		11.2	77	11.8		
PHF	.786	.718	.708	.741	.688	.846	.729	.875	.688	.870	.750	.881	.563	.886	.679	.856	.844

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City of Hemet
N/S: State Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMSTOAAM
Site Code : 10135022
Start Date : 6/10/2010



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:45 AM				08:00 AM			
+0 mins.	**14**	93	5	112	5	45	12	62	0	105	**9**	114	4	**35**	2	41
+15 mins.	9	90	5	104	**8**	**51**	**13**	**72**	2	**117**	3	**122**	2	27	4	33
+30 mins.	11	94	1	106	7	25	9	41	**4**	71	4	79	4	29	**7**	40
+45 mins.	10	**148**	**6**	**164**	8	34	6	48	2	116	1	119	**8**	33	6	**47**
Total Volume	44	425	17	486	28	155	40	223	8	409	17	434	18	124	19	161
% App. Total	9.1	87.4	3.5		12.6	69.5	17.9		1.8	94.2	3.9		11.2	77	11.8	
PHF	.786	.718	.708	.741	.875	.760	.769	.774	.500	.874	.472	.889	.563	.886	.679	.856

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City of Hemet
N/S: State Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMSTOAPM
Site Code : 10135022
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

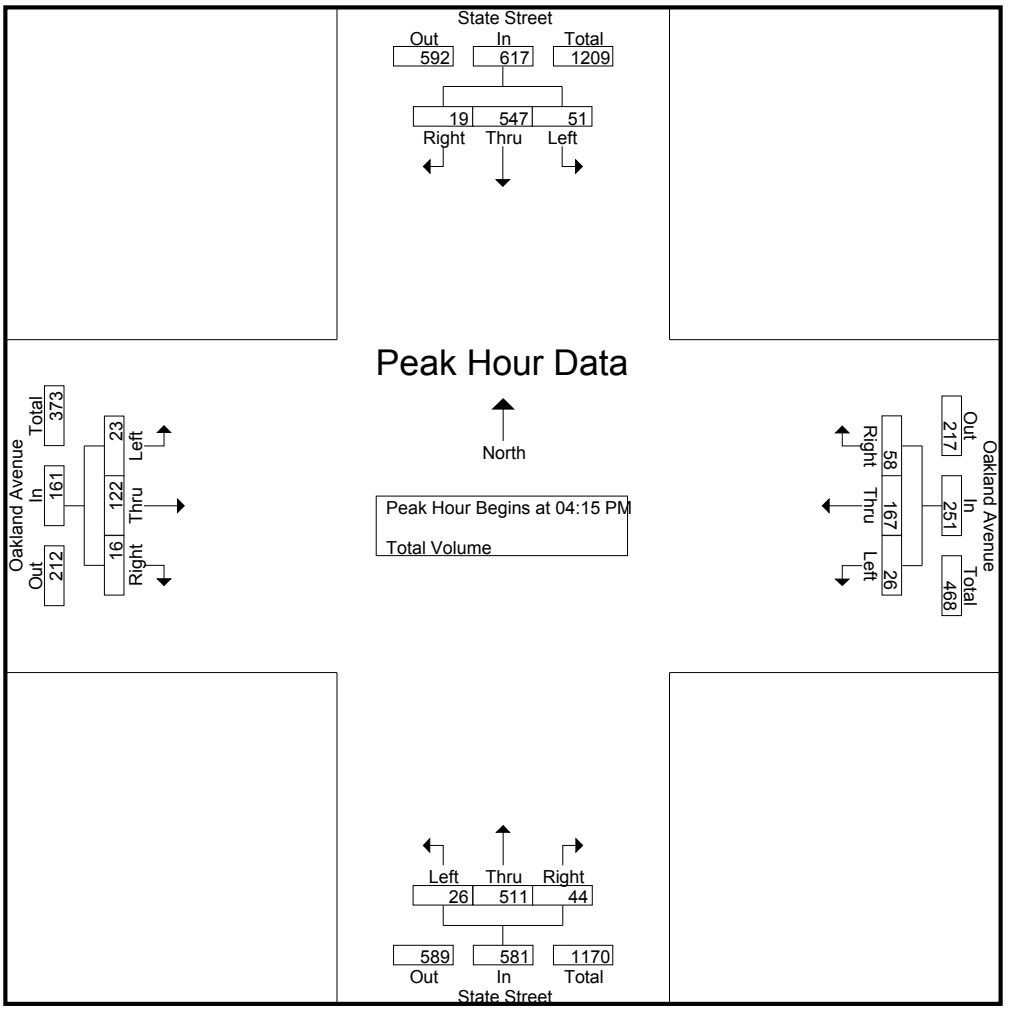
	State Street Southbound				Oakland Avenue Westbound				State Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	125	7	144	12	39	9	60	4	129	11	144	5	19	4	28	376
04:15 PM	16	144	5	165	6	39	17	62	7	130	14	151	4	29	7	40	418
04:30 PM	14	153	4	171	7	35	13	55	7	131	5	143	6	31	3	40	409
04:45 PM	9	131	3	143	5	46	12	63	5	117	15	137	7	34	1	42	385
Total	51	553	19	623	30	159	51	240	23	507	45	575	22	113	15	150	1588
05:00 PM	12	119	7	138	8	47	16	71	7	133	10	150	6	28	5	39	398
05:15 PM	5	127	6	138	7	34	10	51	2	128	8	138	7	26	2	35	362
05:30 PM	14	109	3	126	11	35	7	53	4	110	7	121	2	31	0	33	333
05:45 PM	8	104	5	117	3	27	11	41	4	91	8	103	8	13	5	26	287
Total	39	459	21	519	29	143	44	216	17	462	33	512	23	98	12	133	1380
Grand Total	90	1012	40	1142	59	302	95	456	40	969	78	1087	45	211	27	283	2968
Apprch %	7.9	88.6	3.5		12.9	66.2	20.8		3.7	89.1	7.2		15.9	74.6	9.5		
Total %	3	34.1	1.3	38.5	2	10.2	3.2	15.4	1.3	32.6	2.6	36.6	1.5	7.1	0.9	9.5	

	State Street Southbound				Oakland Avenue Westbound				State Street Northbound				Oakland Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**16**	144	5	165	6	39	**17**	62	**7**	130	14	**151**	4	29	**7**	40	**418**
04:30 PM	14	**153**	4	**171**	7	35	13	55	7	131	5	143	6	31	3	40	409
04:45 PM	9	131	3	143	5	46	12	63	5	117	**15**	137	**7**	**34**	1	**42**	385
05:00 PM	12	119	**7**	138	**8**	**47**	16	**71**	7	**133**	10	150	6	28	5	39	398
Total Volume	51	547	19	617	26	167	58	251	26	511	44	581	23	122	16	161	1610
% App. Total	8.3	88.7	3.1		10.4	66.5	23.1		4.5	88	7.6		14.3	75.8	9.9		
PHF	.797	.894	.679	.902	.813	.888	.853	.884	.929	.961	.733	.962	.821	.897	.571	.958	.963

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Hemet
N/S: State Street
E/W: Oakland Avenue
Weather: Sunny

File Name : HEMSTOAPM
Site Code : 10135022
Start Date : 6/10/2010



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	12	125	**7**	144	6	39	**17**	62	**7**	130	14	**151**	4	29	**7**	40
+15 mins.	**16**	144	5	165	7	35	13	55	7	131	5	143	6	31	3	40
+30 mins.	14	**153**	4	**171**	5	46	12	63	5	117	**15**	137	**7**	**34**	1	**42**
+45 mins.	9	131	3	143	**8**	**47**	16	**71**	7	**133**	10	150	6	28	5	39
Total Volume	51	553	19	623	26	167	58	251	26	511	44	581	23	122	16	161
% App. Total	8.2	88.8	3		10.4	66.5	23.1		4.5	88	7.6		14.3	75.8	9.9	
PHF	.797	.904	.679	.911	.813	.888	.853	.884	.929	.961	.733	.962	.821	.897	.571	.958

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City of Hemet
N/S: State Street
E/W: Devonshire Avenue
Weather: Sunny

File Name : HEMSTDEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

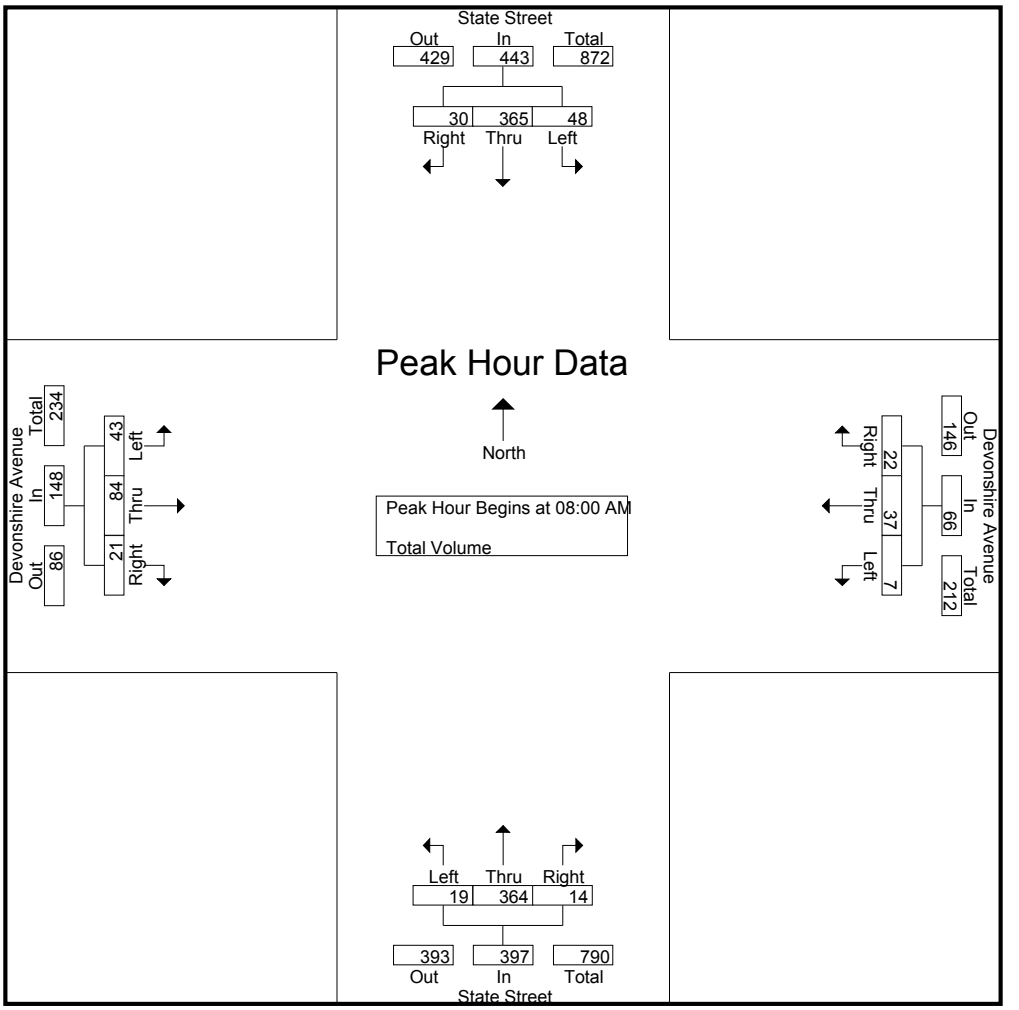
	State Street Southbound				Devonshire Avenue Westbound				State Street Northbound				Devonshire Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	50	4	56	1	18	1	20	1	68	2	71	9	25	4	38	185
07:15 AM	4	80	5	89	1	10	2	13	2	60	1	63	9	25	5	39	204
07:30 AM	4	75	5	84	1	20	4	25	4	89	1	94	13	24	7	44	247
07:45 AM	14	96	8	118	2	13	1	16	4	100	4	108	14	36	10	60	302
Total	24	301	22	347	5	61	8	74	11	317	8	336	45	110	26	181	938
08:00 AM	7	76	8	91	1	6	6	13	4	102	1	107	11	18	4	33	244
08:15 AM	14	80	7	101	1	15	5	21	6	63	3	72	10	19	8	37	231
08:30 AM	12	85	9	106	4	12	4	20	0	97	5	102	13	21	5	39	267
08:45 AM	15	124	6	145	1	4	7	12	9	102	5	116	9	26	4	39	312
Total	48	365	30	443	7	37	22	66	19	364	14	397	43	84	21	148	1054
Grand Total	72	666	52	790	12	98	30	140	30	681	22	733	88	194	47	329	1992
Apprch %	9.1	84.3	6.6		8.6	70	21.4		4.1	92.9	3		26.7	59	14.3		
Total %	3.6	33.4	2.6	39.7	0.6	4.9	1.5	7	1.5	34.2	1.1	36.8	4.4	9.7	2.4	16.5	

	State Street Southbound				Devonshire Avenue Westbound				State Street Northbound				Devonshire Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	76	8	91	1	6	6	13	4	**102**	1	107	11	18	4	33	244
08:15 AM	14	80	7	101	1	**15**	5	**21**	6	63	3	72	10	19	**8**	37	231
08:30 AM	12	85	**9**	106	**4**	12	4	20	0	97	**5**	102	**13**	21	5	**39**	267
08:45 AM	**15**	**124**	6	**145**	1	4	**7**	12	**9**	102	5	**116**	9	**26**	4	39	**312**
Total Volume	48	365	30	443	7	37	22	66	19	364	14	397	43	84	21	148	1054
% App. Total	10.8	82.4	6.8		10.6	56.1	33.3		4.8	91.7	3.5		29.1	56.8	14.2		
PHF	.800	.736	.833	.764	.438	.617	.786	.786	.528	.892	.700	.856	.827	.808	.656	.949	.845

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City of Hemet
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Weather: Sunny

File Name : HEMSTDEAM
Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				08:00 AM				07:00 AM			
+0 mins.	7	76	8	91	1	**20**	4	**25**	4	**102**	1	107	9	25	4	38
+15 mins.	14	80	7	101	**2**	13	1	16	6	63	3	72	9	25	5	39
+30 mins.	12	85	**9**	106	1	6	**6**	13	0	97	**5**	102	13	24	7	44
+45 mins.	**15**	**124**	6	**145**	1	15	5	21	**9**	102	5	**116**	**14**	**36**	**10**	**60**
Total Volume	48	365	30	443	5	54	16	75	19	364	14	397	45	110	26	181
% App. Total	10.8	82.4	6.8		6.7	72	21.3		4.8	91.7	3.5		24.9	60.8	14.4	
PHF	.800	.736	.833	.764	.625	.675	.667	.750	.528	.892	.700	.856	.804	.764	.650	.754

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Page No : 1

Groups Printed- Total Volume

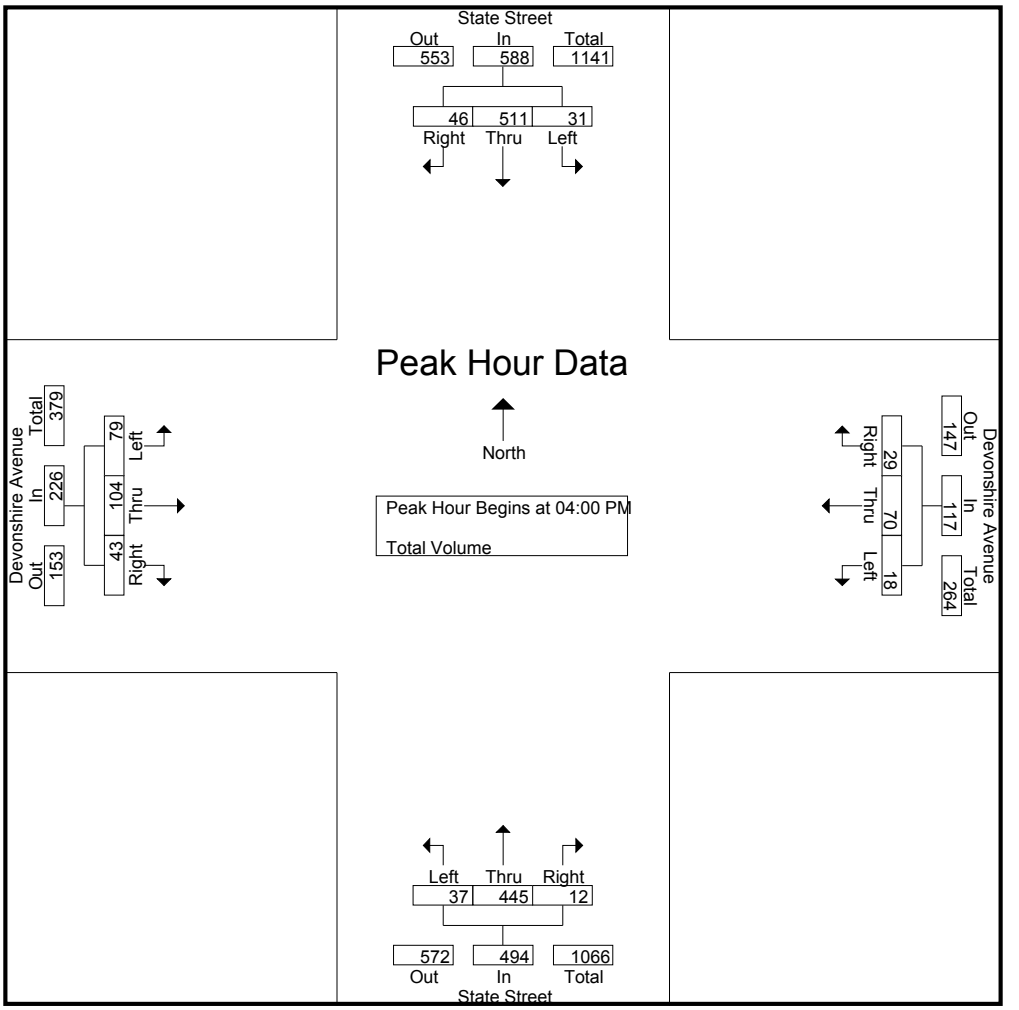
	State Street Southbound				Devonshire Avenue Westbound				State Street Northbound				Devonshire Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	143	11	162	10	22	10	42	8	114	8	130	8	24	12	44	378
04:15 PM	7	115	13	135	3	17	8	28	7	106	1	114	18	22	12	52	329
04:30 PM	8	131	8	147	3	12	8	23	10	122	3	135	29	28	7	64	369
04:45 PM	8	122	14	144	2	19	3	24	12	103	0	115	24	30	12	66	349
Total	31	511	46	588	18	70	29	117	37	445	12	494	79	104	43	226	1425
05:00 PM	11	118	12	141	2	24	7	33	2	101	2	105	26	32	11	69	348
05:15 PM	2	106	9	117	1	10	6	17	4	107	1	112	17	29	8	54	300
05:30 PM	8	115	9	132	2	12	5	19	5	101	1	107	19	26	9	54	312
05:45 PM	4	86	9	99	2	7	2	11	10	92	2	104	20	23	6	49	263
Total	25	425	39	489	7	53	20	80	21	401	6	428	82	110	34	226	1223
Grand Total	56	936	85	1077	25	123	49	197	58	846	18	922	161	214	77	452	2648
Apprch %	5.2	86.9	7.9		12.7	62.4	24.9		6.3	91.8	2		35.6	47.3	17		
Total %	2.1	35.3	3.2	40.7	0.9	4.6	1.9	7.4	2.2	31.9	0.7	34.8	6.1	8.1	2.9	17.1	

	State Street Southbound				Devonshire Avenue Westbound				State Street Northbound				Devonshire Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**8**	**143**	11	**162**	**10**	**22**	**10**	**42**	8	114	**8**	130	8	24	**12**	44	**378**
04:15 PM	7	115	13	135	3	17	8	28	7	106	1	114	18	22	12	52	329
04:30 PM	8	131	8	147	3	12	8	23	10	**122**	3	**135**	**29**	28	7	64	369
04:45 PM	8	122	**14**	144	2	19	3	24	**12**	103	0	115	24	**30**	12	**66**	349
Total Volume	31	511	46	588	18	70	29	117	37	445	12	494	79	104	43	226	1425
% App. Total	5.3	86.9	7.8		15.4	59.8	24.8		7.5	90.1	2.4		35	46	19		
PHF	.969	.893	.821	.907	.450	.795	.725	.696	.771	.912	.375	.915	.681	.867	.896	.856	.942

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Site Code : 10135135
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:30 PM			
+0 mins.	**8**	**143**	11	**162**	**10**	**22**	**10**	**42**	8	114	**8**	130	**29**	28	7	64
+15 mins.	7	115	13	135	3	17	8	28	7	106	1	114	24	30	**12**	66
+30 mins.	8	131	8	147	3	12	8	23	10	**122**	3	**135**	26	**32**	11	**69**
+45 mins.	8	122	**14**	144	2	19	3	24	**12**	103	0	115	17	29	8	54
Total Volume	31	511	46	588	18	70	29	117	37	445	12	494	96	119	38	253
% App. Total	5.3	86.9	7.8		15.4	59.8	24.8		7.5	90.1	2.4		37.9	47	15	
PHF	.969	.893	.821	.907	.450	.795	.725	.696	.771	.912	.375	.915	.828	.930	.792	.917

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City of Hemet
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E/W: Menlo Avenue
Weather: Sunny

File Name : HEMBVMEAM
Site Code : 10135044
Start Date : 6/10/2010
Page No : 1

Groups Printed- Total Volume

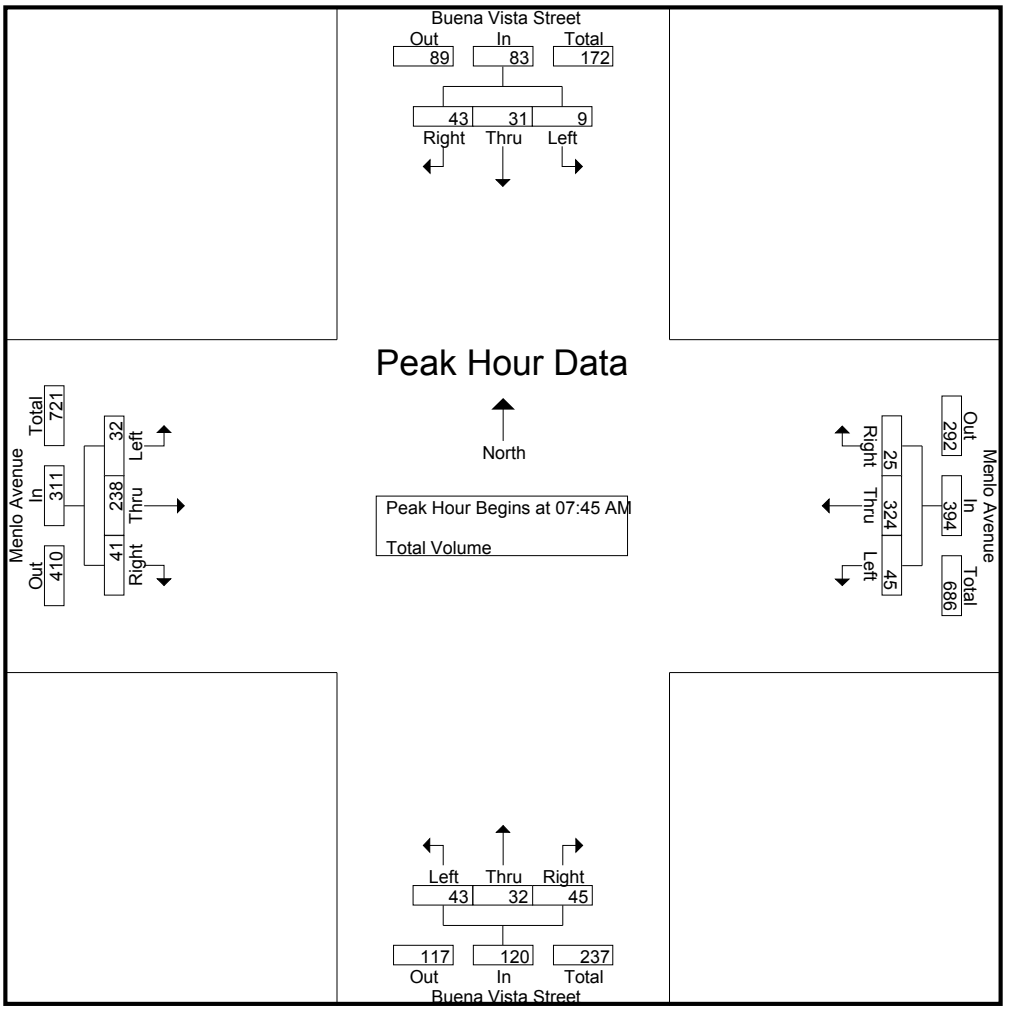
	Buena Vista Street Southbound				Menlo Avenue Westbound				Buena Vista Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	4	11	17	3	42	0	45	6	7	4	17	4	44	6	54	133
07:15 AM	1	2	10	13	5	62	1	68	10	1	6	17	3	51	7	61	159
07:30 AM	3	6	14	23	8	79	1	88	9	5	12	26	2	58	14	74	211
07:45 AM	6	6	11	23	14	96	6	116	17	4	16	37	10	70	14	94	270
Total	12	18	46	76	30	279	8	317	42	17	38	97	19	223	41	283	773
08:00 AM	2	6	11	19	13	78	3	94	12	7	11	30	5	65	11	81	224
08:15 AM	0	8	10	18	12	67	9	88	8	12	8	28	10	44	8	62	196
08:30 AM	1	11	11	23	6	83	7	96	6	9	10	25	7	59	8	74	218
08:45 AM	4	3	7	14	9	85	2	96	15	2	7	24	5	69	15	89	223
Total	7	28	39	74	40	313	21	374	41	30	36	107	27	237	42	306	861
Grand Total	19	46	85	150	70	592	29	691	83	47	74	204	46	460	83	589	1634
Apprch %	12.7	30.7	56.7		10.1	85.7	4.2		40.7	23	36.3		7.8	78.1	14.1		
Total %	1.2	2.8	5.2	9.2	4.3	36.2	1.8	42.3	5.1	2.9	4.5	12.5	2.8	28.2	5.1	36	

	Buena Vista Street Southbound				Menlo Avenue Westbound				Buena Vista Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**6**	6	**11**	**23**	**14**	**96**	6	**116**	**17**	4	**16**	**37**	**10**	**70**	**14**	**94**	**270**
08:00 AM	2	6	11	19	13	78	3	94	12	7	11	30	5	65	11	81	224
08:15 AM	0	8	10	18	12	67	**9**	88	8	**12**	8	28	10	44	8	62	196
08:30 AM	1	**11**	11	23	6	83	7	96	6	9	10	25	7	59	8	74	218
Total Volume	9	31	43	83	45	324	25	394	43	32	45	120	32	238	41	311	908
% App. Total	10.8	37.3	51.8		11.4	82.2	6.3		35.8	26.7	37.5		10.3	76.5	13.2		
PHF	.375	.705	.977	.902	.804	.844	.694	.849	.632	.667	.703	.811	.800	.850	.732	.827	.841

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E/W: Menlo Avenue
Weather: Sunny

File Name : HEMBVMEAM
Site Code : 10135044
Start Date : 6/10/2010



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:30 AM				07:30 AM			
+0 mins.	3	6	**14**	**23**	**14**	**96**	6	**116**	9	5	12	26	2	58	**14**	74
+15 mins.	**6**	6	11	23	13	78	3	94	**17**	4	**16**	**37**	**10**	**70**	14	**94**
+30 mins.	2	6	11	19	12	67	**9**	88	12	7	11	30	5	65	11	81
+45 mins.	0	**8**	10	18	6	83	7	96	8	**12**	8	28	10	44	8	62
Total Volume	11	26	46	83	45	324	25	394	46	28	47	121	27	237	47	311
% App. Total	13.3	31.3	55.4		11.4	82.2	6.3		38	23.1	38.8		8.7	76.2	15.1	
PHF	.458	.813	.821	.902	.804	.844	.694	.849	.676	.583	.734	.818	.675	.846	.839	.827

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File Name : HEMBVMEPM
Site Code : 10135044
Start Date : 6/10/2010

Groups Printed- Total Volume

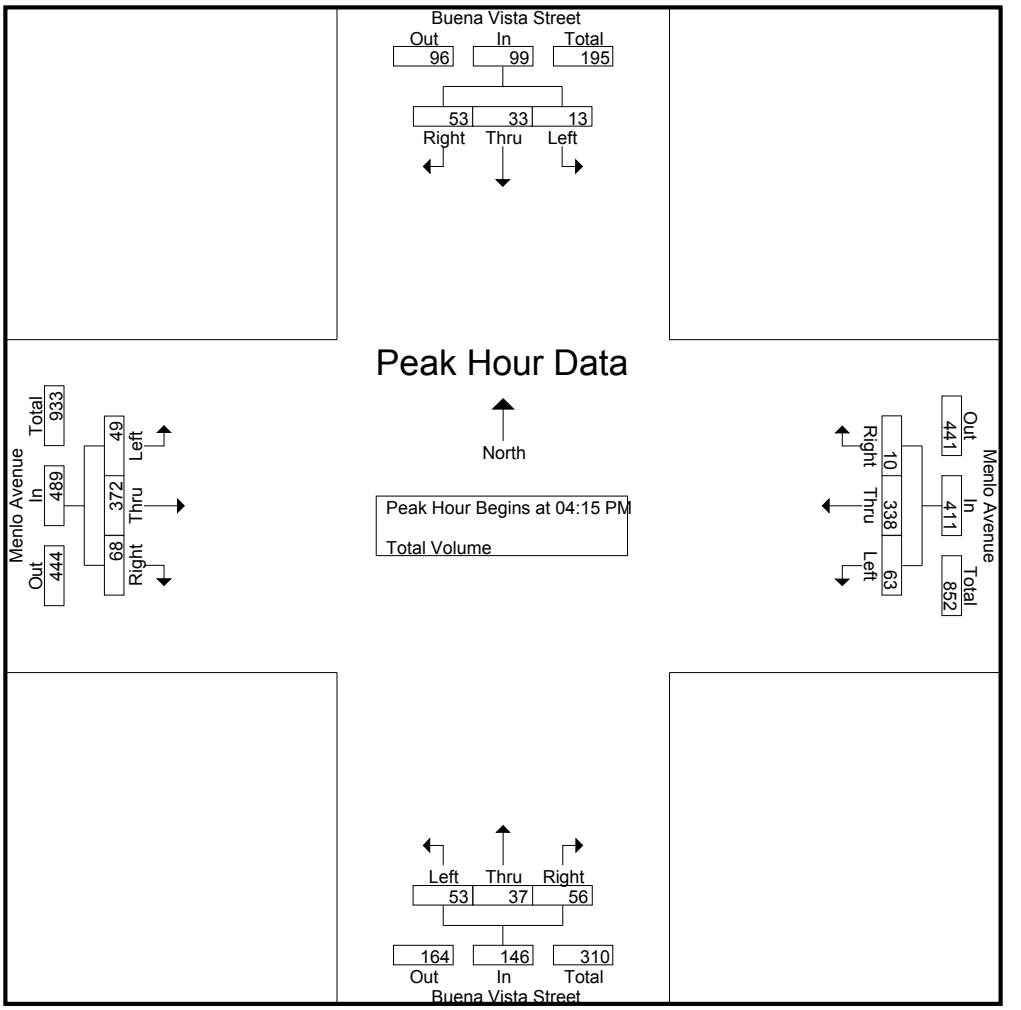
	Buena Vista Street Southbound				Menlo Avenue Westbound				Buena Vista Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	13	9	25	13	56	2	71	14	6	14	34	6	82	16	104	234
04:15 PM	3	6	10	19	10	89	2	101	16	10	11	37	10	104	15	129	286
04:30 PM	1	5	12	18	15	93	0	108	19	7	16	42	10	95	18	123	291
04:45 PM	2	10	9	21	13	70	3	86	8	8	8	24	14	86	22	122	253
Total	9	34	40	83	51	308	7	366	57	31	49	137	40	367	71	478	1064
05:00 PM	7	12	22	41	25	86	5	116	10	12	21	43	15	87	13	115	315
05:15 PM	2	5	13	20	9	67	4	80	9	12	16	37	14	102	19	135	272
05:30 PM	3	3	18	24	14	71	4	89	15	12	9	36	14	90	9	113	262
05:45 PM	3	4	7	14	17	66	4	87	14	8	15	37	11	91	5	107	245
Total	15	24	60	99	65	290	17	372	48	44	61	153	54	370	46	470	1094
Grand Total	24	58	100	182	116	598	24	738	105	75	110	290	94	737	117	948	2158
Apprch %	13.2	31.9	54.9		15.7	81	3.3		36.2	25.9	37.9		9.9	77.7	12.3		
Total %	1.1	2.7	4.6	8.4	5.4	27.7	1.1	34.2	4.9	3.5	5.1	13.4	4.4	34.2	5.4	43.9	

	Buena Vista Street Southbound				Menlo Avenue Westbound				Buena Vista Street Northbound				Menlo Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	3	6	10	19	10	89	2	101	16	10	11	37	10	**104**	15	**129**	286
04:30 PM	1	5	12	18	15	**93**	0	108	**19**	7	16	42	10	95	18	123	291
04:45 PM	2	10	9	21	13	70	3	86	8	8	8	24	14	86	**22**	122	253
05:00 PM	**7**	**12**	**22**	**41**	**25**	86	**5**	**116**	10	**12**	**21**	**43**	**15**	87	13	115	**315**
Total Volume	13	33	53	99	63	338	10	411	53	37	56	146	49	372	68	489	1145
% App. Total	13.1	33.3	53.5		15.3	82.2	2.4		36.3	25.3	38.4		10	76.1	13.9		
PHF	.464	.688	.602	.604	.630	.909	.500	.886	.697	.771	.667	.849	.817	.894	.773	.948	.909

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File Name : HEMBVMEPM
Site Code : 10135044
Start Date : 6/10/2010
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	2	10	9	21	10	89	2	101	10	**12**	**21**	**43**	10	95	18	123
+15 mins.	**7**	**12**	**22**	**41**	15	**93**	0	108	9	12	16	37	14	86	**22**	122
+30 mins.	2	5	13	20	13	70	3	86	**15**	12	9	36	**15**	87	13	115
+45 mins.	3	3	18	24	**25**	86	**5**	**116**	14	8	15	37	14	**102**	19	**135**
Total Volume	14	30	62	106	63	338	10	411	48	44	61	153	53	370	72	495
% App. Total	13.2	28.3	58.5		15.3	82.2	2.4		31.4	28.8	39.9		10.7	74.7	14.5	
PHF	.500	.625	.705	.646	.630	.909	.500	.886	.800	.917	.726	.890	.883	.907	.818	.917

APPENDIX 3.2

EXISTING 2010 CONDITIONS INTERSECTION ANALYSIS
HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	0	Average Delay (sec/veh):	22.7
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	190	36	45	244	26	16	221	30	27	199	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	31	236	45	56	303	32	20	274	37	33	247	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	236	45	56	303	32	20	274	37	33	247	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	236	45	56	303	32	20	274	37	33	247	19
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.88	1.00	0.16	0.84	1.00	0.07	0.93	1.00	0.11	0.83	0.06
Final Sat.:	52	394	490	73	395	518	31	422	495	50	368	28
Capacity Analysis Module:												
Vol/Sat:	0.60	0.60	0.09	0.77	0.77	0.06	0.65	0.65	0.08	0.67	0.67	0.67
Crit Moves:		****		****				****			****	
Delay/Veh:	19.9	19.9	10.2	28.8	28.8	9.8	21.9	21.9	10.1	23.4	23.4	23.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.9	19.9	10.2	28.8	28.8	9.8	21.9	21.9	10.1	23.4	23.4	23.4
LOS by Move:	C	C	B	D	D	A	C	C	B	C	C	C
ApproachDel:		18.5			27.2			20.6			23.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.5			27.2			20.6			23.4	
LOS by Appr:		C			D			C			C	
AllWayAvgQ:	1.2	1.2	0.1	2.4	2.4	0.1	1.5	1.5	0.1	1.6	1.6	1.6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	0	Average Delay (sec/veh):	13.9
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	110	13	33	119	19	18	255	35	29	197	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
PHF Volume:	31	132	16	40	143	23	22	306	42	35	236	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	132	16	40	143	23	22	306	42	35	236	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	132	16	40	143	23	22	306	42	35	236	19
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.19	0.81	1.00	0.22	0.78	1.00	1.00	1.00	1.00	1.00	0.92	0.08
Final Sat.:	94	397	546	108	389	553	489	530	584	503	510	41
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.03	0.37	0.37	0.04	0.04	0.58	0.07	0.07	0.46	0.46
Crit Moves:	****				****			****				****
Delay/Veh:	12.6	12.6	8.9	13.1	13.1	8.9	10.1	17.3	9.0	10.0	13.8	13.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.6	12.6	8.9	13.1	13.1	8.9	10.1	17.3	9.0	10.0	13.8	13.8
LOS by Move:	B	B	A	B	B	A	B	C	A	A	B	B
ApproachDel:	12.3			12.6			15.9			13.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.3			12.6			15.9			13.4		
LOS by Appr:	B			B			C			B		
AllWayAvgQ:	0.4	0.4	0.0	0.5	0.5	0.0	0.0	1.2	0.1	0.1	0.7	0.7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	0	12	0	0	0	0	256	9	9	240	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	23	0	13	0	0	0	0	275	10	10	258	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	0	13	0	0	0	0	275	10	10	258	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	558	558	280	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	285	xxxx	xxxxx
Potent Cap.:	495	441	764	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1289	xxxx	xxxxx
Move Cap.:	492	438	764	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1289	xxxx	xxxxx
Volume/Cap:	0.05	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	565	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[11.2]

Approach:	North Bound			South Bound			East Bound					West Bound				
Movement:	L	- T	- R	L	- T	- R	L	- T	- R			L	- T	- R		
Control:	Stop Sign			Stop Sign			Uncontrolled					Uncontrolled				
Rights:	Include			Include			Include					Include				
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0	1 0	0	0	1	0	1 0	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	6	17	10	6	15	8	4	140	5			13	139	7		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	6	17	10	6	15	8	4	140	5			13	139	7		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86			0.86	0.86	0.86		
PHF Volume:	7	20	12	7	18	9	5	164	6			15	162	8		
Reduct Vol:	0	0	0	0	0	0	0	0	0			0	0	0		
FinalVolume:	7	20	12	7	18	9	5	164	6			15	162	8		
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	383	374	164	384	371	162	171	xxxx	xxxxx			169	xxxx	xxxxx		
Potent Cap.:	579	560	886	578	562	888	1419	xxxx	xxxxx			1420	xxxx	xxxxx		
Move Cap.:	553	552	886	548	554	888	1419	xxxx	xxxxx			1420	xxxx	xxxxx		
Volume/Cap:	0.01	0.04	0.01	0.01	0.03	0.01	0.00	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx			7.6	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	A	*	*			A	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	624	xxxxx	xxxx	617	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		
Shrd ConDel:	xxxxx	11.2	xxxxx	xxxxx	11.2	xxxxx	7.5	xxxx	xxxxx			7.6	xxxx	xxxxx		
Shared LOS:	*	B	*	*	B	*	A	*	*			A	*	*		
ApproachDel:		11.2			11.2			xxxxxx					xxxxxx			
ApproachLOS:		B			B			*					*			

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0	0	0	0 1	0	1	0	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	0	0	278	4	2	251	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	4	1	0	0	0	278	4	2	251	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	1	0	4	1	0	0	0	308	4	2	278	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	0	4	1	0	0	0	308	4	2	278	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	591	591	308	595	xxxx	xxxxx	xxxx	xxxx	xxxxx	313	xxxx	xxxxx
Potent Cap.:	422	422	736	419	xxxx	xxxxx	xxxx	xxxx	xxxxx	1259	xxxx	xxxxx
Move Cap.:	421	422	736	416	xxxx	xxxxx	xxxx	xxxx	xxxxx	1259	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	13.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	641	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	10.7	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	7.9	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	A	*	*
ApproachDel:		10.7			13.7			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[8.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module: >> Count Date: 10 Jun 2010 <<																								
Base Vol:	8		4		0		0		4		2		1		0		4		0		0		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	8		4		0		0		4		2		1		0		4		0		0		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.52		0.52		0.52		0.52		0.52		0.52		0.52		0.52		0.52		0.52		0.52		0.52	
PHF Volume:	15		8		0		0		8		4		2		0		8		0		0		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	15		8		0		0		8		4		2		0		8		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4		6.5		6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																								
Cnflict Vol:	11	xxxx	xxxxx	xxxx	xxxx	xxxxx							48		48		10	xxxx	xxxx	xxxxx				
Potent Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx							967		848		1078	xxxx	xxxx	xxxxx				
Move Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx							960		840		1078	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx							0.00		0.00		0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx				
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx				
LOS by Move:	A	*		*		*							*		*			*	*					
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	1052	xxxxx			xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	0.0	xxxxx			xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	8.5	xxxxx			xxxxx	xxxx	xxxxx				
Shared LOS:	A	*		*		*							*	A		*			*					
ApproachDel:	xxxxxx			xxxxxx									8.5			xxxxxx								
ApproachLOS:	*			*									A			*								

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	2	1	155	0	0	174	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	6	0	2	1	166	0	0	187	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	6	0	2	1	166	0	0	187	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	361	361	192	198	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	642	569	854	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	642	569	854	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	684	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.337
Loss Time (sec):	12	Average Delay (sec/veh):	17.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	427	87	45	465	25	48	17	46	38	18	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	46	484	99	51	527	28	54	19	52	43	20	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	484	99	51	527	28	54	19	52	43	20	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	484	99	51	527	28	54	19	52	43	20	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.82	0.82	0.82	0.79	0.79	0.85
Lanes:	1.00	1.66	0.34	1.00	1.90	0.10	0.44	0.15	0.41	0.68	0.32	1.00
Final Sat.:	1805	2924	596	1805	3398	183	670	237	642	1024	485	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.17	0.03	0.16	0.16	0.08	0.08	0.08	0.04	0.04	0.02
Crit Moves:		****		****				****				
Green/Cycle:	0.20	0.35	0.35	0.15	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.13	0.47	0.47	0.18	0.51	0.51	0.26	0.26	0.26	0.14	0.14	0.06
Delay/Veh:	21.3	16.5	16.5	24.3	19.0	19.0	17.3	17.3	17.3	16.4	16.4	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.3	16.5	16.5	24.3	19.0	19.0	17.3	17.3	17.3	16.4	16.4	15.9
LOS by Move:	C	B	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	1	5	5	1	5	5	2	2	2	1	1	0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	16	Average Delay (sec/veh):	32.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	375	42	93	420	30	54	196	33	23	198	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	29	431	48	107	482	34	62	225	38	26	227	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	431	48	107	482	34	62	225	38	26	227	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	431	48	107	482	34	62	225	38	26	227	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.99	0.99	0.85	1.00	1.00	0.85
Lanes:	1.00	1.80	0.20	1.00	1.87	0.13	0.22	0.78	1.00	0.10	0.90	1.00
Final Sat.:	1805	3198	358	1805	3336	238	406	1473	1615	197	1694	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.13	0.06	0.14	0.14	0.15	0.15	0.02	0.13	0.13	0.10
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.23	0.23	0.11	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.14	0.59	0.59	0.52	0.64	0.64	0.64	0.64	0.10	0.56	0.56	0.44
Delay/Veh:	35.4	31.5	31.5	39.1	32.4	32.4	33.2	33.2	26.2	31.1	31.1	29.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	31.5	31.5	39.1	32.4	32.4	33.2	33.2	26.2	31.1	31.1	29.3
LOS by Move:	D	C	C	D	C	C	C	C	C	C	C	C
HCM2kAvgQ:	1	7	7	3	8	8	8	8	1	7	7	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	12	Average Delay (sec/veh):	17.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	407	12	44	421	19	18	124	19	22	152	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	15	482	14	52	499	23	21	147	23	26	180	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	482	14	52	499	23	21	147	23	26	180	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	482	14	52	499	23	21	147	23	26	180	41
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.94	0.94	0.57	0.98	0.98	0.64	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.91	0.09	1.00	0.87	0.13	1.00	0.81	0.19
Final Sat.:	1805	3610	1615	1805	3433	155	1093	1615	247	1224	1501	346
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.01	0.03	0.15	0.15	0.02	0.09	0.09	0.02	0.12	0.12
Crit Moves:	****				****						****	
Green/Cycle:	0.17	0.26	0.26	0.17	0.27	0.27	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.05	0.51	0.03	0.17	0.54	0.54	0.05	0.25	0.25	0.06	0.33	0.33
Delay/Veh:	21.1	19.5	16.6	21.4	19.5	19.5	12.3	13.4	13.4	12.3	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.1	19.5	16.6	21.4	19.5	19.5	12.3	13.4	13.4	12.3	14.0	14.0
LOS by Move:	C	B	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	5	0	1	5	5	0	2	2	0	3	3

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 24.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	19	364	14		48	365	30		43	84	21		7	37	22	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	
PHF Volume:	22	431	17		57	432	36		51	99	25		8	44	26	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	22	431	17		57	432	36		51	99	25		8	44	26	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	22	431	17		57	432	36		51	99	25		8	44	26	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.95	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.93	0.07		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3455	133		1805	3610	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.12	0.12		0.03	0.12	0.02		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:		****				****					****			****		
Green/Cycle:	0.56	0.42	0.42		0.45	0.34	0.34		0.36	0.23	0.23		0.36	0.23	0.23	
Volume/Cap:	0.04	0.30	0.30		0.11	0.35	0.06		0.10	0.29	0.29		0.02	0.10	0.07	
Delay/Veh:	10.7	20.4	20.4		16.6	25.9	23.2		22.1	33.9	33.9		21.7	32.1	31.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	10.7	20.4	20.4		16.6	25.9	23.2		22.1	33.9	33.9		21.7	32.1	31.8	
LOS by Move:	B	C	C		B	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	0	5	5		1	5	1		1	3	3		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	0	Average Delay (sec/veh):	15.6
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	32	45	9	31	43	32	238	41	45	324	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	51	38	54	11	37	51	38	283	49	54	385	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	38	54	11	37	51	38	283	49	54	385	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	38	54	11	37	51	38	283	49	54	385	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.27	0.37	0.11	0.37	0.52	0.12	0.88	1.00	0.12	0.88	1.00
Final Sat.:	192	143	201	57	196	272	71	530	682	76	544	706
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.19	0.19	0.19	0.53	0.53	0.07	0.71	0.71	0.04
Crit Moves:	****				****			****			****	
Delay/Veh:	10.9	10.9	10.9	10.2	10.2	10.2	14.7	14.7	8.1	20.5	20.5	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.9	10.9	10.9	10.2	10.2	10.2	14.7	14.7	8.1	20.5	20.5	7.9
LOS by Move:	B	B	B	B	B	B	B	B	A	C	C	A
ApproachDel:	10.9			10.2			13.8			19.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.9			10.2			13.8			19.7		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	1.0	1.0	0.1	2.1	2.1	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.707
Loss Time (sec):	0	Average Delay (sec/veh):	20.3
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	254	49	31	293	41	29	217	16	44	204	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	26	266	51	32	307	43	30	227	17	46	214	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	266	51	32	307	43	30	227	17	46	214	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	266	51	32	307	43	30	227	17	46	214	32
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.91	1.00	0.10	0.90	1.00	0.12	0.88	1.00	0.16	0.73	0.11
Final Sat.:	42	427	517	46	434	529	53	397	495	72	334	51
Capacity Analysis Module:												
Vol/Sat:	0.62	0.62	0.10	0.71	0.71	0.08	0.57	0.57	0.03	0.64	0.64	0.64
Crit Moves:		****			****			****				
Delay/Veh:	20.2	20.2	10.0	24.1	24.1	9.7	18.7	18.7	9.7	21.4	21.4	21.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.2	20.2	10.0	24.1	24.1	9.7	18.7	18.7	9.7	21.4	21.4	21.4
LOS by Move:	C	C	A	C	C	A	C	C	A	C	C	C
ApproachDel:		18.7			22.5			18.2			21.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.7			22.5			18.2			21.4	
LOS by Appr:		C			C			C			C	
AllWayAvgQ:	1.3	1.3	0.1	1.9	1.9	0.1	1.1	1.1	0.0	1.4	1.4	1.4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	0	Average Delay (sec/veh):	15.5
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	151	29	32	129	27	38	246	16	45	264	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	23	168	32	36	143	30	42	273	18	50	293	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	168	32	36	143	30	42	273	18	50	293	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	168	32	36	143	30	42	273	18	50	293	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.88	1.00	0.20	0.80	1.00	1.00	1.00	1.00	1.00	0.86	0.14
Final Sat.:	58	419	526	94	378	523	458	494	540	494	471	75
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.06	0.38	0.38	0.06	0.09	0.55	0.03	0.10	0.62	0.62
Crit Moves:	****			****				****				****
Delay/Veh:	14.0	14.0	9.4	13.7	13.7	9.4	11.0	17.5	9.2	10.4	18.3	18.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.0	14.0	9.4	13.7	13.7	9.4	11.0	17.5	9.2	10.4	18.3	18.3
LOS by Move:	B	B	A	B	B	A	B	C	A	B	C	C
ApproachDel:	13.3			13.1			16.2			17.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.3			13.1			16.2			17.3		
LOS by Appr:	B			B			C			C		
AllWayAvgQ:	0.6	0.6	0.1	0.5	0.5	0.1	0.1	1.1	0.0	0.1	1.4	1.4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[11.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 0	0 0		0 0 0	1 0		1 0 1	0 0	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	27	0	0	0	0	297	18	13	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	9	0	30	0	0	0	0	326	20	14	310	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	0	30	0	0	0	0	326	20	14	310	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	674	674	336	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	346	xxxx	xxxxx
Potent Cap.:	423	379	711	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1224	xxxx	xxxxx
Move Cap.:	419	374	711	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1224	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	613	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		11.3			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		B			*			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	6	28	12	15	25	4	5	130	3	10	184	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	28	12	15	25	4	5	130	3	10	184	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	6	30	13	16	27	4	5	138	3	11	196	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	30	13	16	27	4	5	138	3	11	196	11
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	387	377	138	389	370	196	207	xxxx	xxxxx	142	xxxx	xxxxx
Potent Cap.:	575	558	915	573	563	850	1377	xxxx	xxxxx	1454	xxxx	xxxxx
Move Cap.:	547	551	915	537	557	850	1377	xxxx	xxxxx	1454	xxxx	xxxxx
Volume/Cap:	0.01	0.05	0.01	0.03	0.05	0.01	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	614	xxxxx	xxxx	568	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.3	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.4	xxxxx	xxxxx	11.9	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		11.4			11.9			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 1			0 0 1! 0 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	2	3	314	5	1	316	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	4	1	0	2	3	314	5	1	316	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	1	0	4	1	0	2	3	341	5	1	343	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	0	4	1	0	2	3	341	5	1	343	2
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	694	694	341	698	698	344	345	xxxx	xxxxx	346	xxxx	xxxxx
Potent Cap.:	360	369	706	358	367	704	1225	xxxx	xxxxx	1224	xxxx	xxxxx
Move Cap.:	358	367	706	355	365	704	1225	xxxx	xxxxx	1224	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.01	0.00	0.00	0.00	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	591	xxxxx	xxxx	530	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.0	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.1	xxxxx	xxxxx	11.8	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	*	*	*
ApproachDel:		11.1			11.8			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: A[8.4]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module: >> Count Date: 10 Jun 2010 <<																								
Base Vol:	9		4		0		0		5		1		1		0		3		0		0		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	9		4		0		0		5		1		1		0		3		0		0		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.72		0.72		0.72		0.72		0.72		0.72		0.72		0.72		0.72		0.72		0.72		0.72	
PHF Volume:	13		6		0		0		7		1		1		0		4		0		0		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	13		6		0		0		7		1		1		0		4		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4		6.5		6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																								
Cnflict Vol:	8	xxxx	xxxxx	xxxx	xxxx	xxxxx							38		38		8	xxxx	xxxx	xxxxx				
Potent Cap.:	1625	xxxx	xxxxx	xxxx	xxxx	xxxxx							979		858		1080	xxxx	xxxx	xxxxx				
Move Cap.:	1625	xxxx	xxxxx	xxxx	xxxx	xxxxx							973		851		1080	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx							0.00		0.00		0.00	xxxx	xxxx	xxxx				
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	A	*		*		*		*		*			*		*				*		*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	1051	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	0.0	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	8.4	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	A	*		*		*		*		*			A		*				*		*			
ApproachDel:	xxxxxx			xxxxxx									8.4						xxxxxx					
ApproachLOS:	*			*									A						*					

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[10.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	7	0	4	3	154	0	0	207	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	0	0	8	0	4	3	170	0	0	229	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	4	3	170	0	0	229	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	411	411	234	240	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	601	534	810	1339	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	600	532	810	1339	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	662	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.5			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.376
Loss Time (sec):	12	Average Delay (sec/veh):	18.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	628	28	14	654	50	55	2	57	67	10	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	48	683	30	15	712	54	60	2	62	73	11	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	683	30	15	712	54	60	2	62	73	11	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	683	30	15	712	54	60	2	62	73	11	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.77	0.77	0.77	0.69	0.69	0.85
Lanes:	1.00	1.91	0.09	1.00	1.86	0.14	0.48	0.02	0.50	0.87	0.13	1.00
Final Sat.:	1805	3435	153	1805	3317	254	706	26	731	1141	170	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.01	0.21	0.21	0.08	0.08	0.08	0.06	0.06	0.02
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.41	0.41	0.23	0.53	0.53	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	0.24	0.48	0.48	0.04	0.40	0.40	0.38	0.38	0.38	0.29	0.29	0.10
Delay/Veh:	37.1	19.6	19.6	26.9	12.6	12.6	30.5	30.5	30.5	29.6	29.6	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.1	19.6	19.6	26.9	12.6	12.6	30.5	30.5	30.5	29.6	29.6	28.0
LOS by Move:	D	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	8	8	0	7	7	3	3	3	2	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	16	Average Delay (sec/veh):	38.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	495	61	183	565	57	49	235	35	48	244	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	19	532	66	197	607	61	53	252	38	52	262	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	532	66	197	607	61	53	252	38	52	262	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	532	66	197	607	61	53	252	38	52	262	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.78	0.22	1.00	1.82	0.18	0.17	0.83	1.00	0.16	0.84	1.00
Final Sat.:	1805	3163	390	1805	3233	326	325	1558	1615	310	1575	1615
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.11	0.19	0.19	0.16	0.16	0.02	0.17	0.17	0.09
Crit Moves:		****		****			****			****		
Green/Cycle:	0.13	0.23	0.23	0.15	0.25	0.25	0.22	0.22	0.22	0.23	0.23	0.23
Volume/Cap:	0.08	0.73	0.73	0.73	0.74	0.74	0.73	0.73	0.10	0.73	0.73	0.40
Delay/Veh:	36.8	37.1	37.1	48.1	35.9	35.9	40.6	40.6	29.5	40.1	40.1	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.8	37.1	37.1	48.1	35.9	35.9	40.6	40.6	29.5	40.1	40.1	31.9
LOS by Move:	D	D	D	D	D	D	D	D	C	D	D	C
HCM2kAvgQ:	1	10	10	7	11	11	10	10	1	10	10	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.377
Loss Time (sec):	12	Average Delay (sec/veh):	18.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 2	0	1	1 0 1	1	0	1 0 0	1	0	1 0 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	511	44	51	547	19	23	122	16	26	172	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	27	531	46	53	568	20	24	127	17	27	179	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	531	46	53	568	20	24	127	17	27	179	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	531	46	53	568	20	24	127	17	27	179	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.53	0.98	0.98	0.66	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.88	0.12	1.00	0.75	0.25
Final Sat.:	1805	3610	1615	1805	3471	121	1011	1651	217	1254	1367	461
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.03	0.03	0.16	0.16	0.02	0.08	0.08	0.02	0.13	0.13
Crit Moves:		****		****							****	
Green/Cycle:	0.19	0.32	0.32	0.15	0.29	0.29	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.08	0.45	0.09	0.19	0.57	0.57	0.07	0.23	0.23	0.06	0.39	0.39
Delay/Veh:	21.7	17.7	15.4	24.3	20.6	20.6	14.7	15.6	15.6	14.6	16.8	16.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.7	17.7	15.4	24.3	20.6	20.6	14.7	15.6	15.6	14.6	16.8	16.8
LOS by Move:	C	B	B	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	0	5	1	1	6	6	0	2	2	0	4	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.966
Loss Time (sec):	16	Average Delay (sec/veh):	24.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	24	24	10	24	24
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	37	445	12	31	511	46	79	104	43	18	70	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	445	12	31	511	46	79	104	43	18	70	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	39	472	13	33	542	49	84	110	46	19	74	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	472	13	33	542	49	84	110	46	19	74	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	472	13	33	542	49	84	110	46	19	74	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.96	0.96	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	1.00	0.71	0.29	1.00	1.00	1.00
Final Sat.:	1805	3501	94	1805	3610	1615	1805	1285	531	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.13	0.02	0.15	0.03	0.05	0.09	0.09	0.01	0.04	0.02
Crit Moves:	****				****			****			****	
Green/Cycle:	0.43	0.34	0.34	0.55	0.42	0.42	0.37	0.24	0.24	0.33	0.24	0.24
Volume/Cap:	0.09	0.40	0.40	0.06	0.36	0.07	0.17	0.36	0.36	0.04	0.17	0.08
Delay/Veh:	17.4	27.0	27.0	11.5	21.1	18.4	21.9	33.8	33.8	23.8	32.1	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.4	27.0	27.0	11.5	21.1	18.4	21.9	33.8	33.8	23.8	32.1	31.3
LOS by Move:	B	C	C	B	C	B	C	C	C	C	C	C
HCM2kAvgQ:	1	6	6	1	6	1	2	4	4	0	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
Existing 2010 Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	0	Average Delay (sec/veh):	21.6
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	37	56	13	33	53	49	372	68	63	338	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	58	41	62	14	36	58	54	409	75	69	372	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	41	62	14	36	58	54	409	75	69	372	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	41	62	14	36	58	54	409	75	69	372	11
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.25	0.39	0.13	0.33	0.54	0.12	0.88	1.00	0.16	0.84	1.00
Final Sat.:	180	125	190	63	161	258	69	520	664	91	486	650
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.32	0.23	0.23	0.23	0.79	0.79	0.11	0.76	0.76	0.02
Crit Moves:			****		****		****				****	
Delay/Veh:	12.2	12.2	12.2	11.2	11.2	11.2	26.4	26.4	8.6	25.1	25.1	8.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	12.2	12.2	11.2	11.2	11.2	26.4	26.4	8.6	25.1	25.1	8.1
LOS by Move:	B	B	B	B	B	B	D	D	A	D	D	A
ApproachDel:		12.2			11.2			24.0			24.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.2			11.2			24.0			24.7	
LOS by Appr:		B			B			C			C	
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	2.9	2.9	0.1	2.6	2.6	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 3.3

EXISTING 2010 TRAFFIC SIGNAL WARRANTS

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

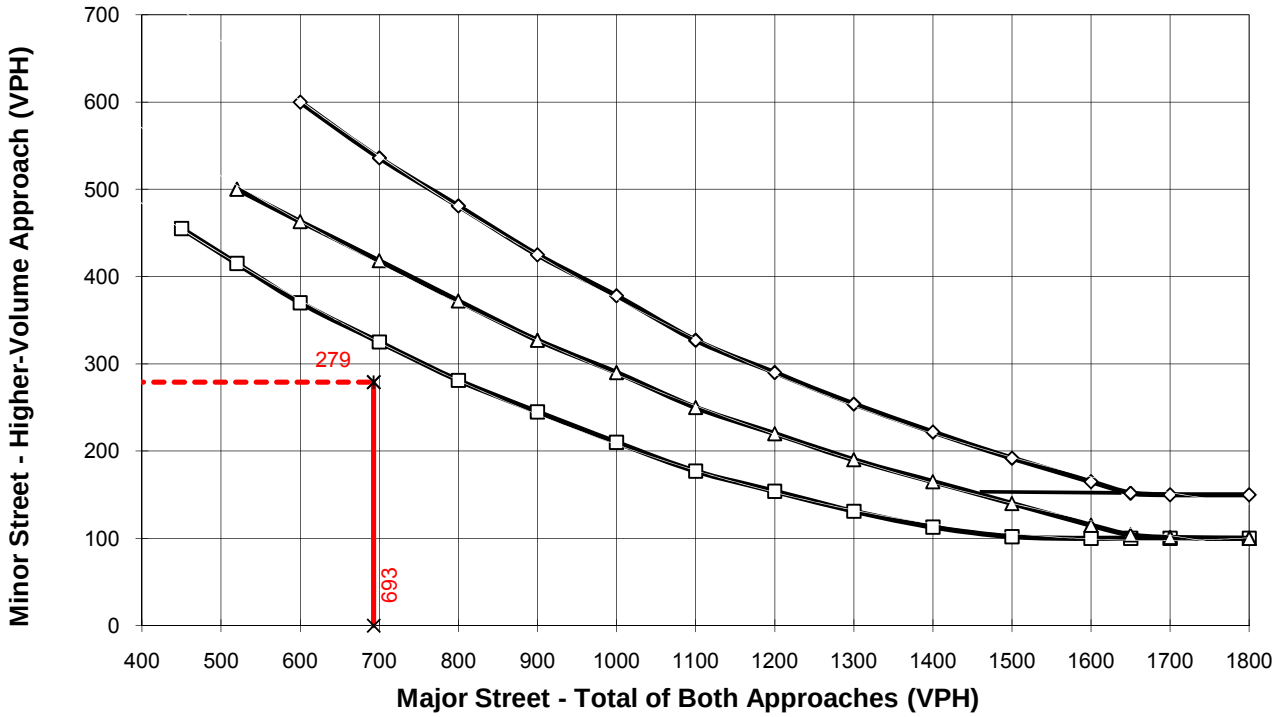
Major Street Name = **Lyon**

Total of Both Approaches (VPH) = **693**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Menlo**

High Volume Approach (VPH) = **279**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

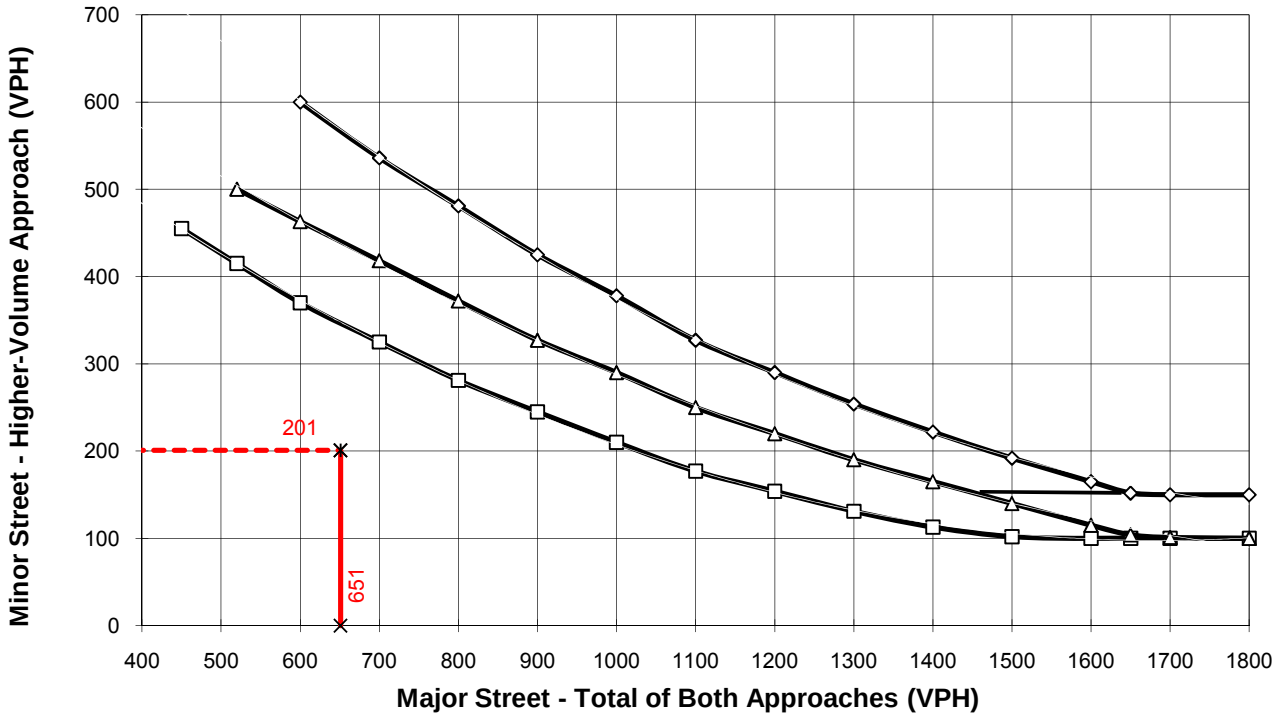
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **651**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Palm**

High Volume Approach (VPH) = **201**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

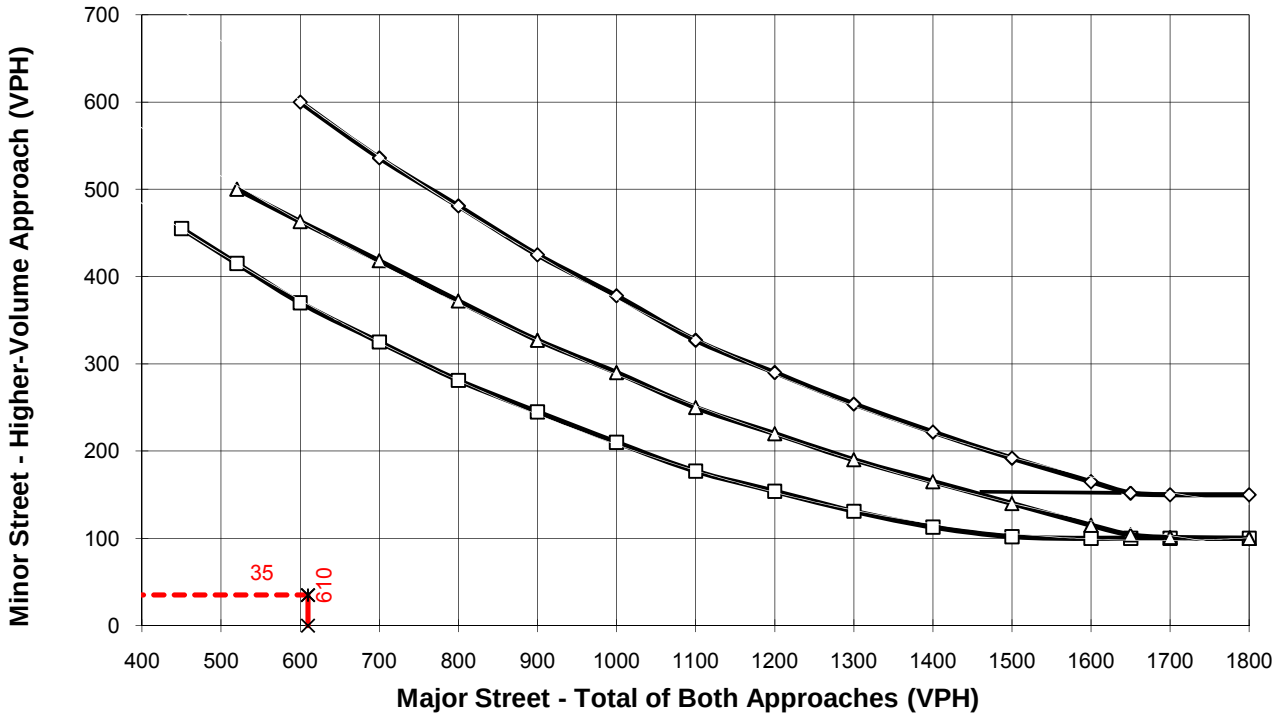
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **610**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Gilbert**

High Volume Approach (VPH) = **35**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

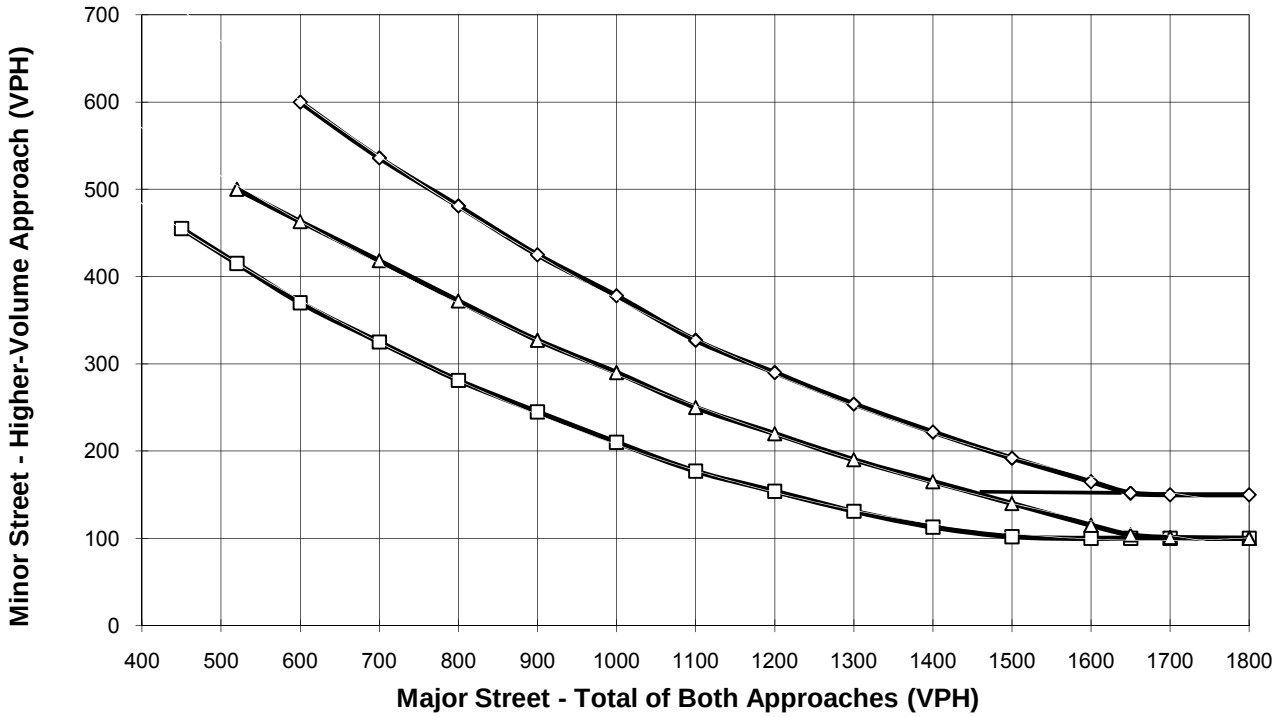
Major Street Name = **Oakland**

Total of Both Approaches (VPH) = **342**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Gilbert**

High Volume Approach (VPH) = **46**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

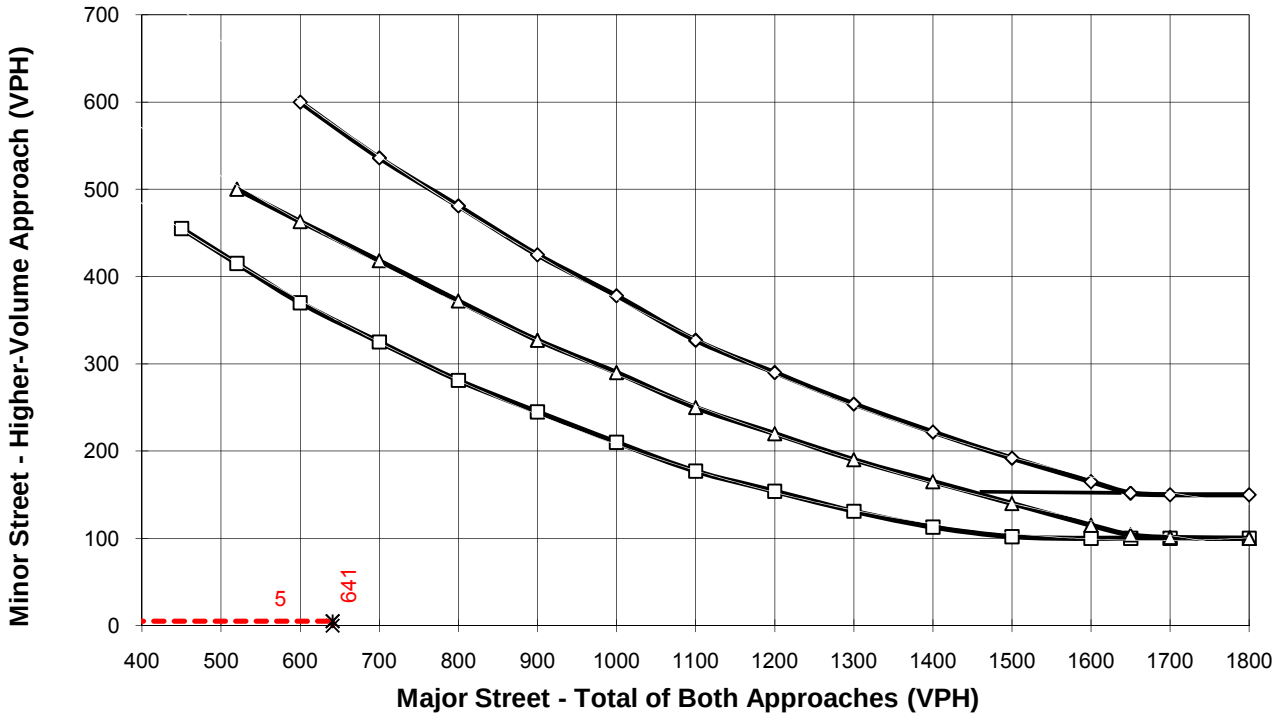
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **641**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro**

High Volume Approach (VPH) = **5**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

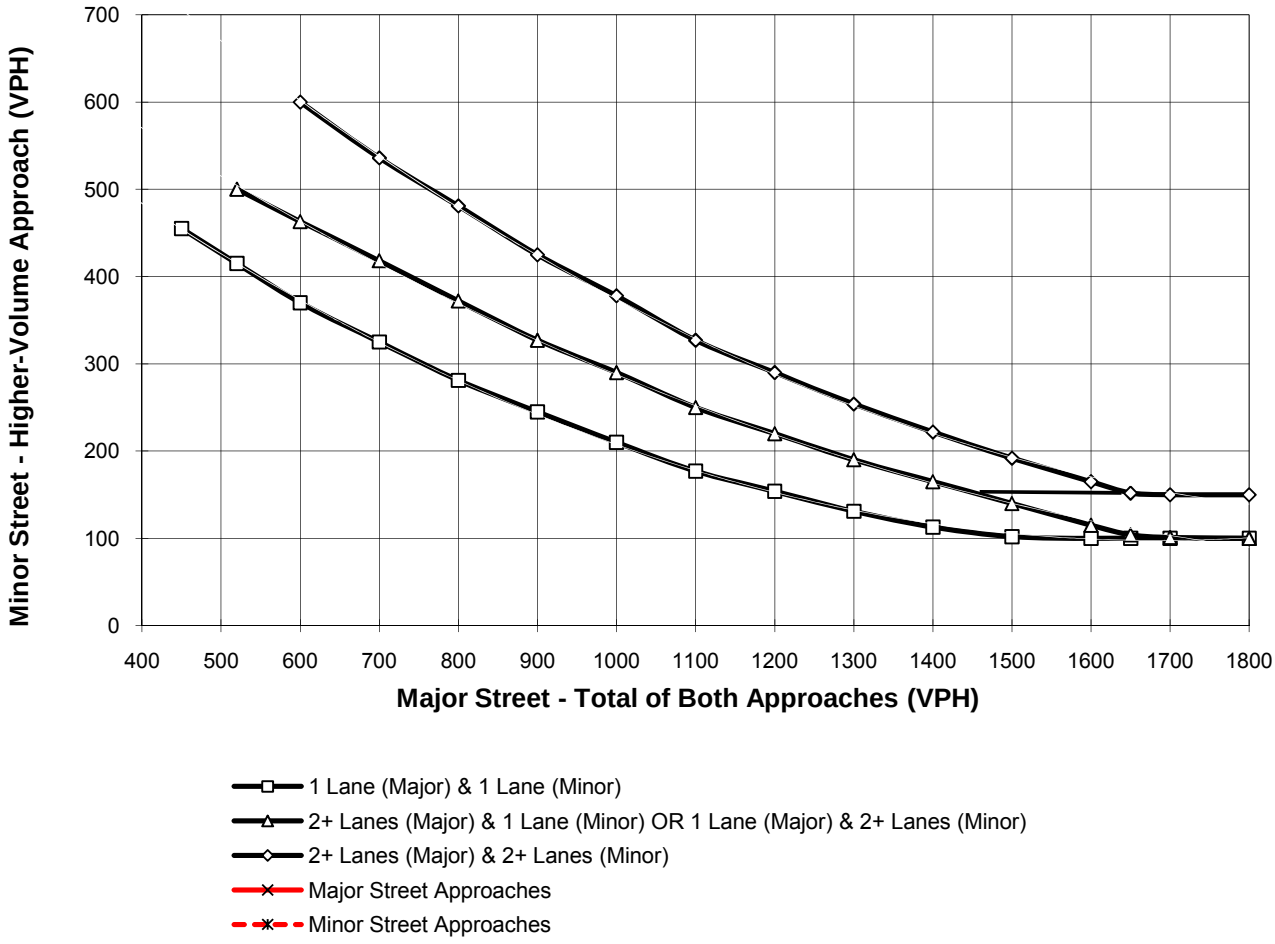
Major Street Name = **Alessandro**

Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Ancla**

High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

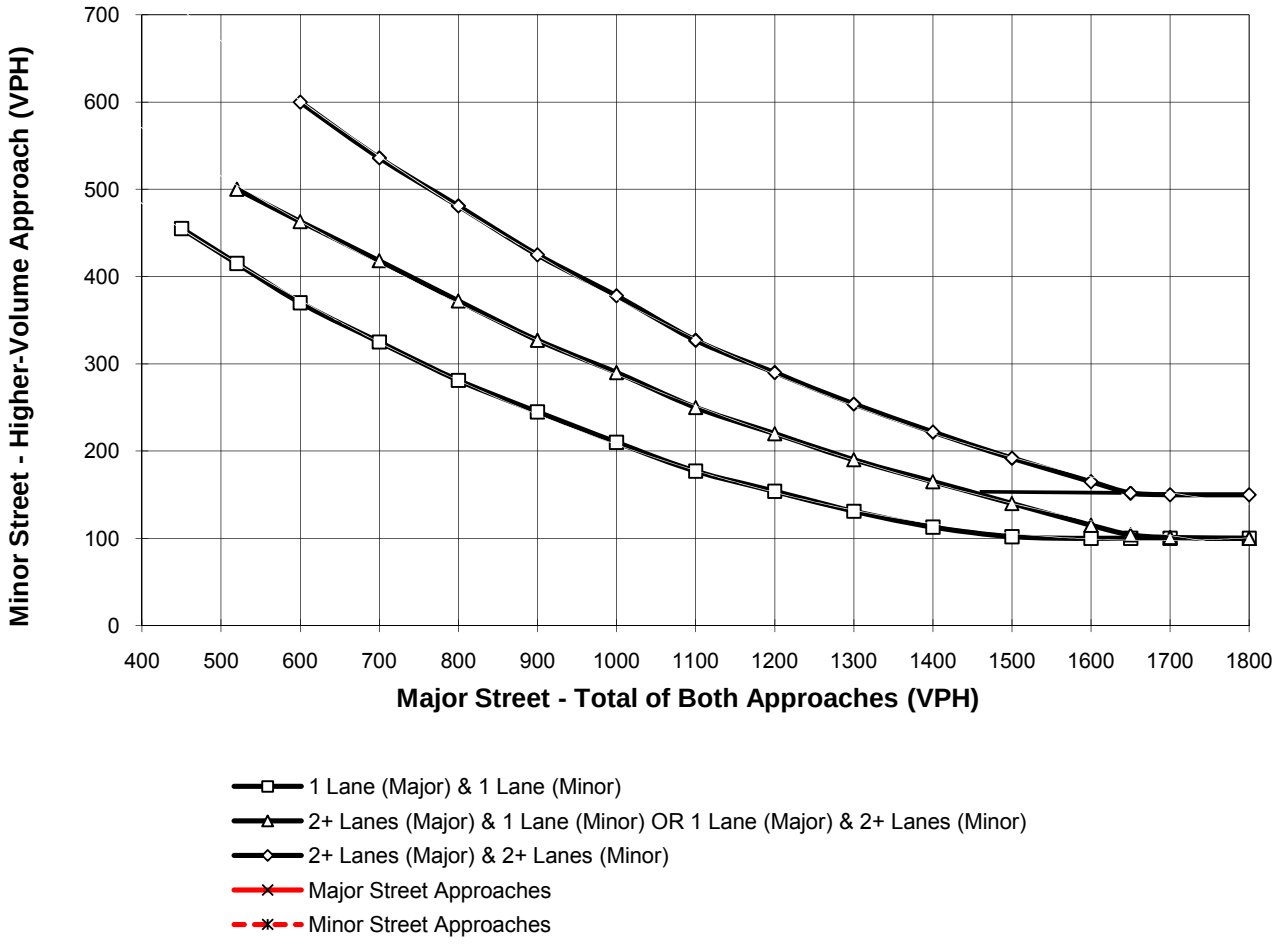
Major Street Name = **Oakland**

Total of Both Approaches (VPH) = **374**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Alessandro**

High Volume Approach (VPH) = **11**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2010) Conditions**

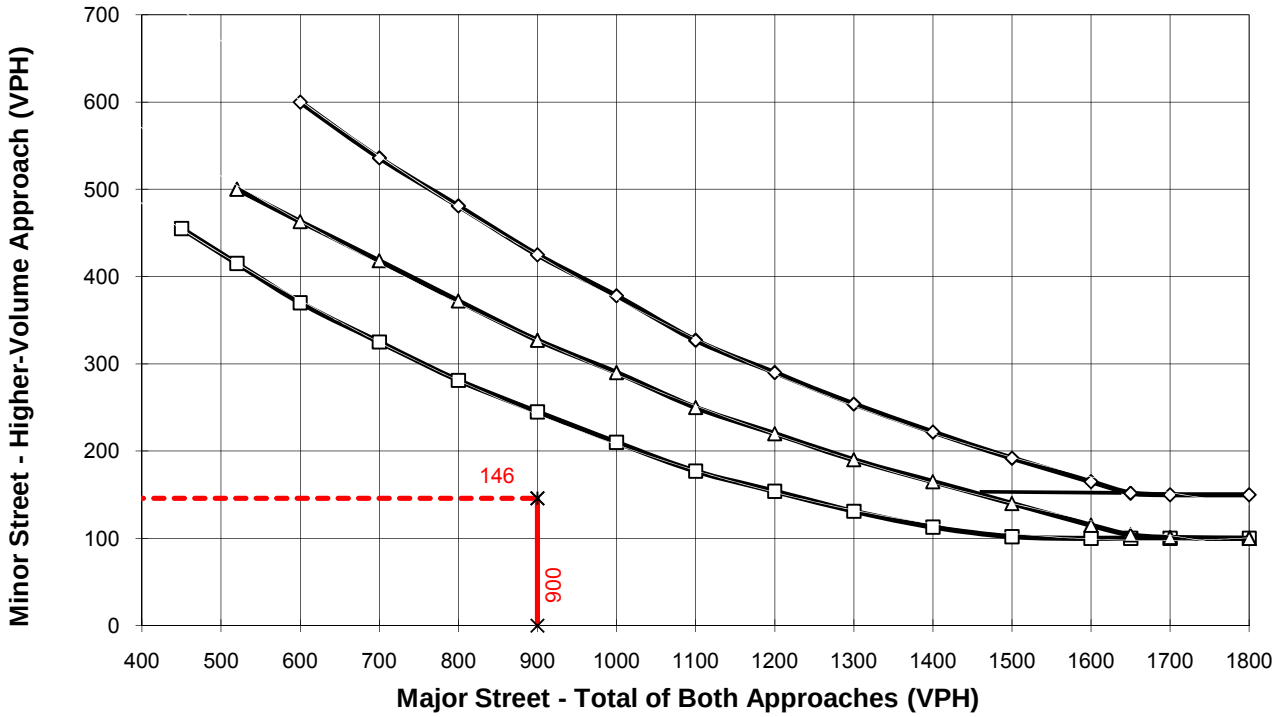
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **900**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Buena Vista**

High Volume Approach (VPH) = **146**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



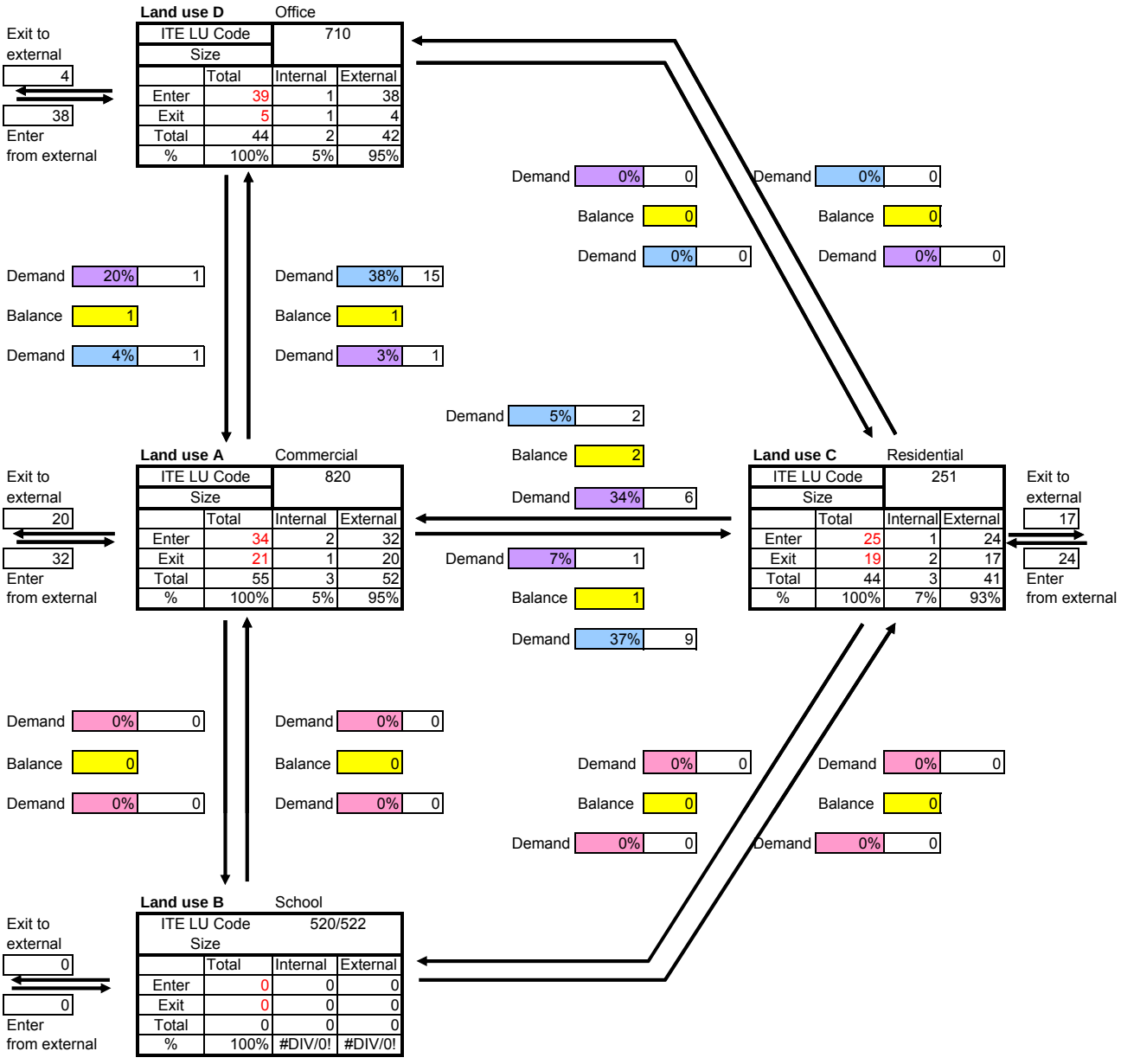
*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

APPENDIX 4.1

PROJECT INTERNAL CAPTURE WORKSHEETS

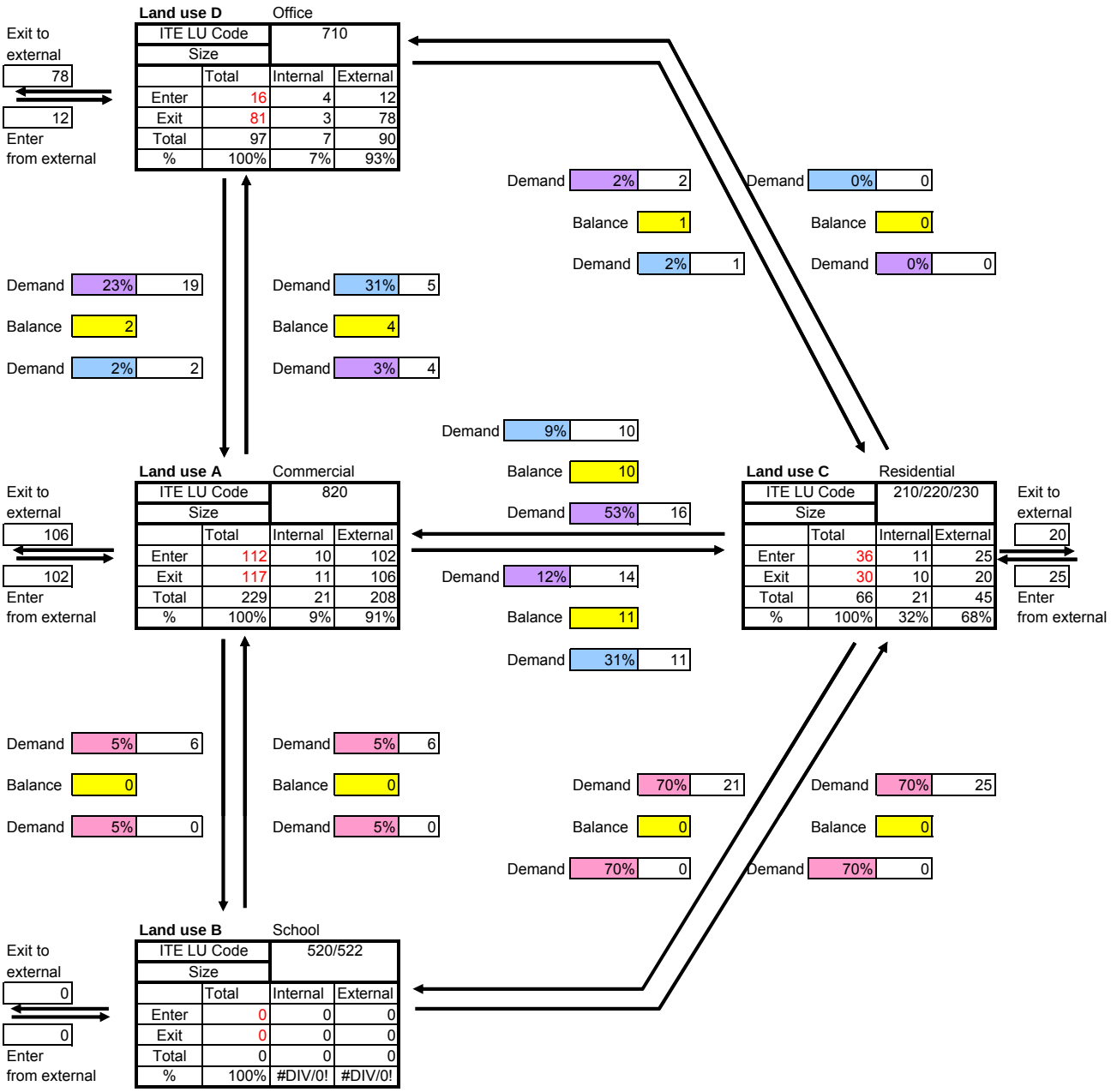
PROJECT PHASE 1 (2016) INTERNAL CAPTURE CALCULATIONS CH

AM Peak Hour 2/26/07



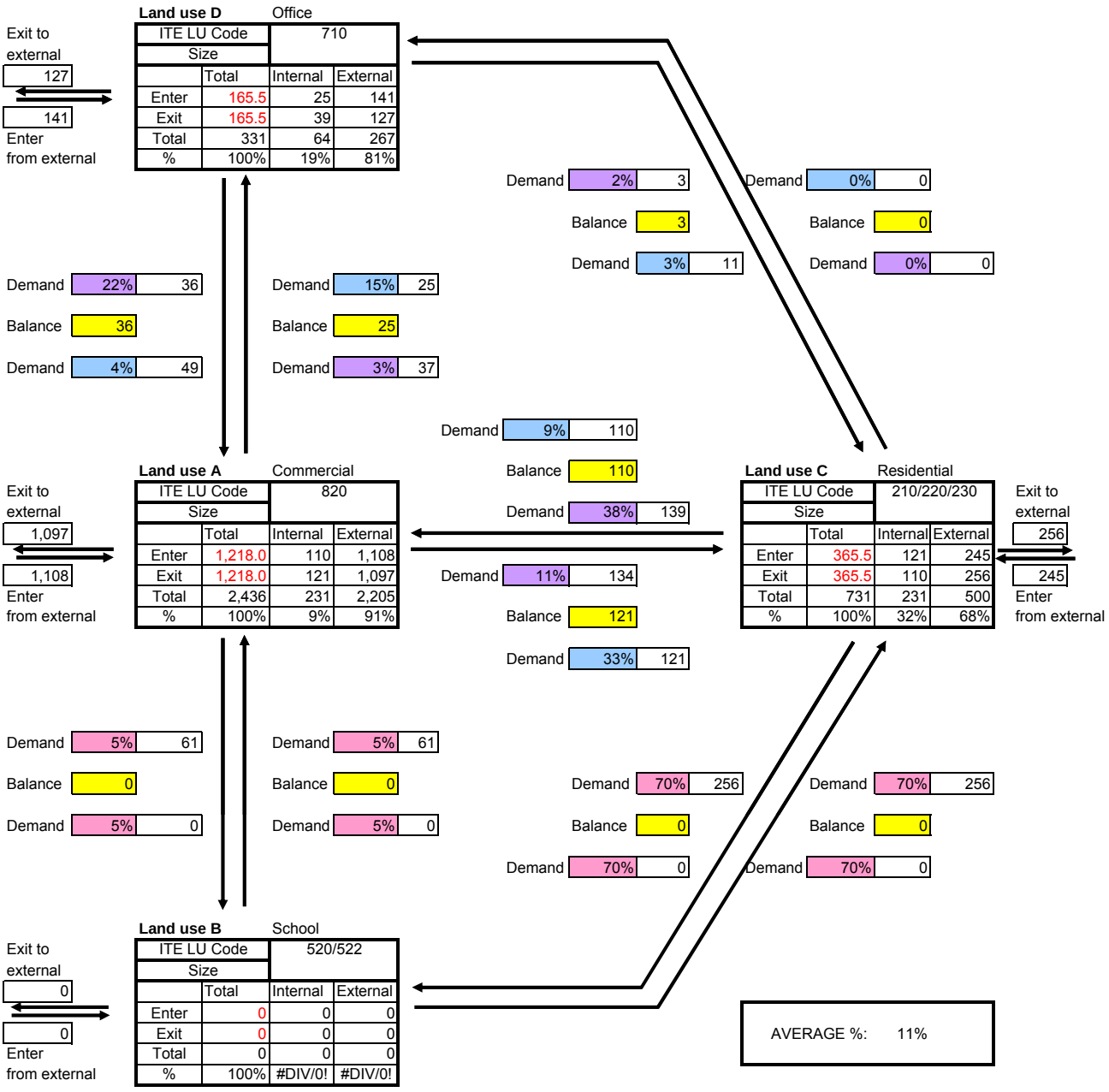
Net External Trips from Multi-Use Development						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL	
Enter	32	0	24	38	94	
Exit	20	0	17	4	41	INTERNAL
Total	52	0	41	42	135	CAPTURE
Single-Use Trip Gen. Est.	55	0	44	44	143	6%

PM Peak Hour



Net External Trips from Multi-Use Development						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL	
Enter	102	0	25	12	139	
Exit	106	0	20	78	204	INTERNAL
Total	208	0	45	90	343	CAPTURE
Single-Use Trip Gen. Est.	229	0	66	97	392	13%

DAILY



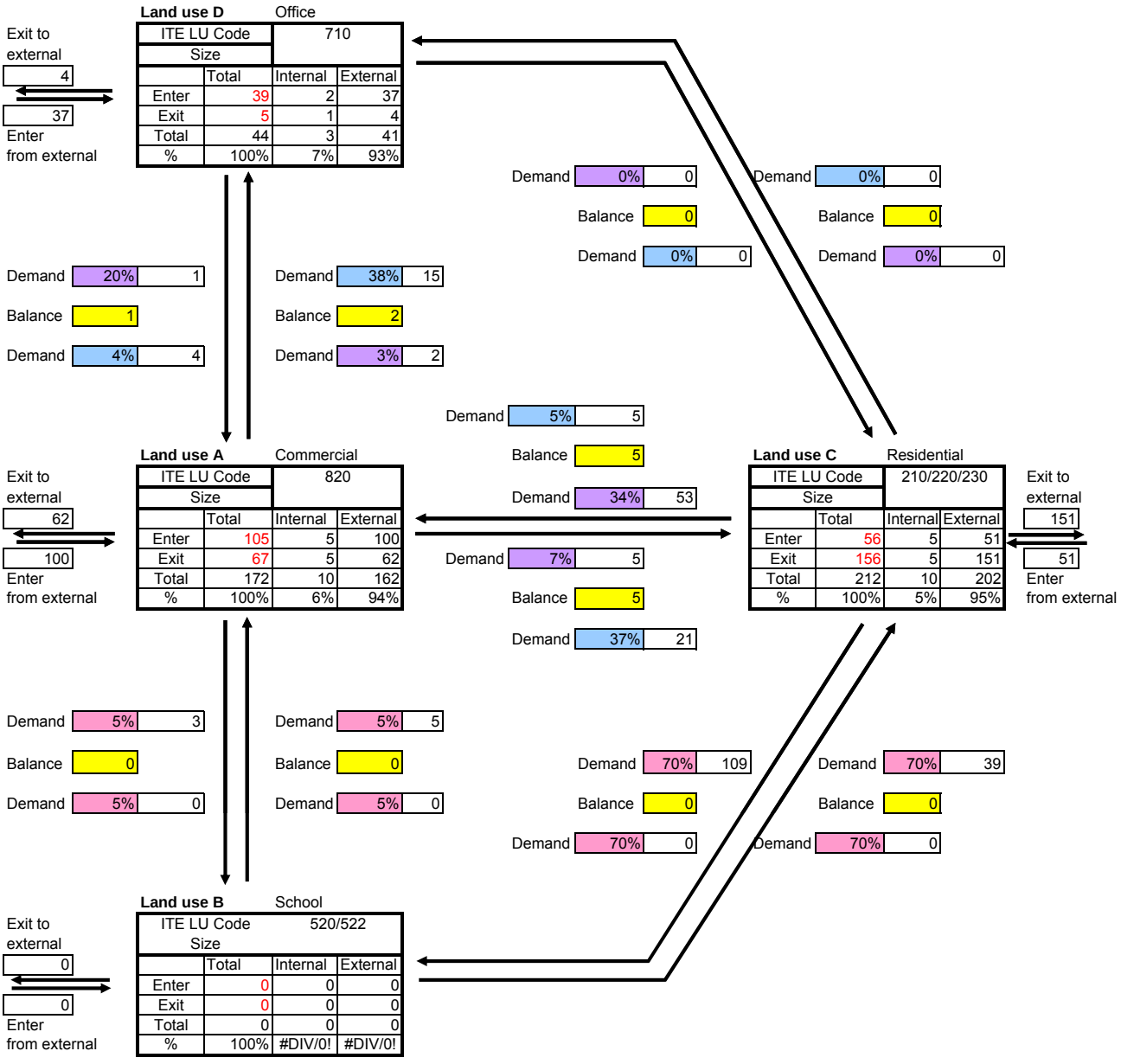
Net External Trips from Multi-Use Development					
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL
Enter	1108	0	244.5	140.5	1493
Exit	1097	0	255.5	126.5	1479
Total	2205	0	500	267	2972
Single-Use Trip Gen. Est.	2436	0	731	331	3498

INTERNAL CAPTURE
15%

Rate change from Table 7.1
Rate change from Table 7.2
Data input
Assumed %

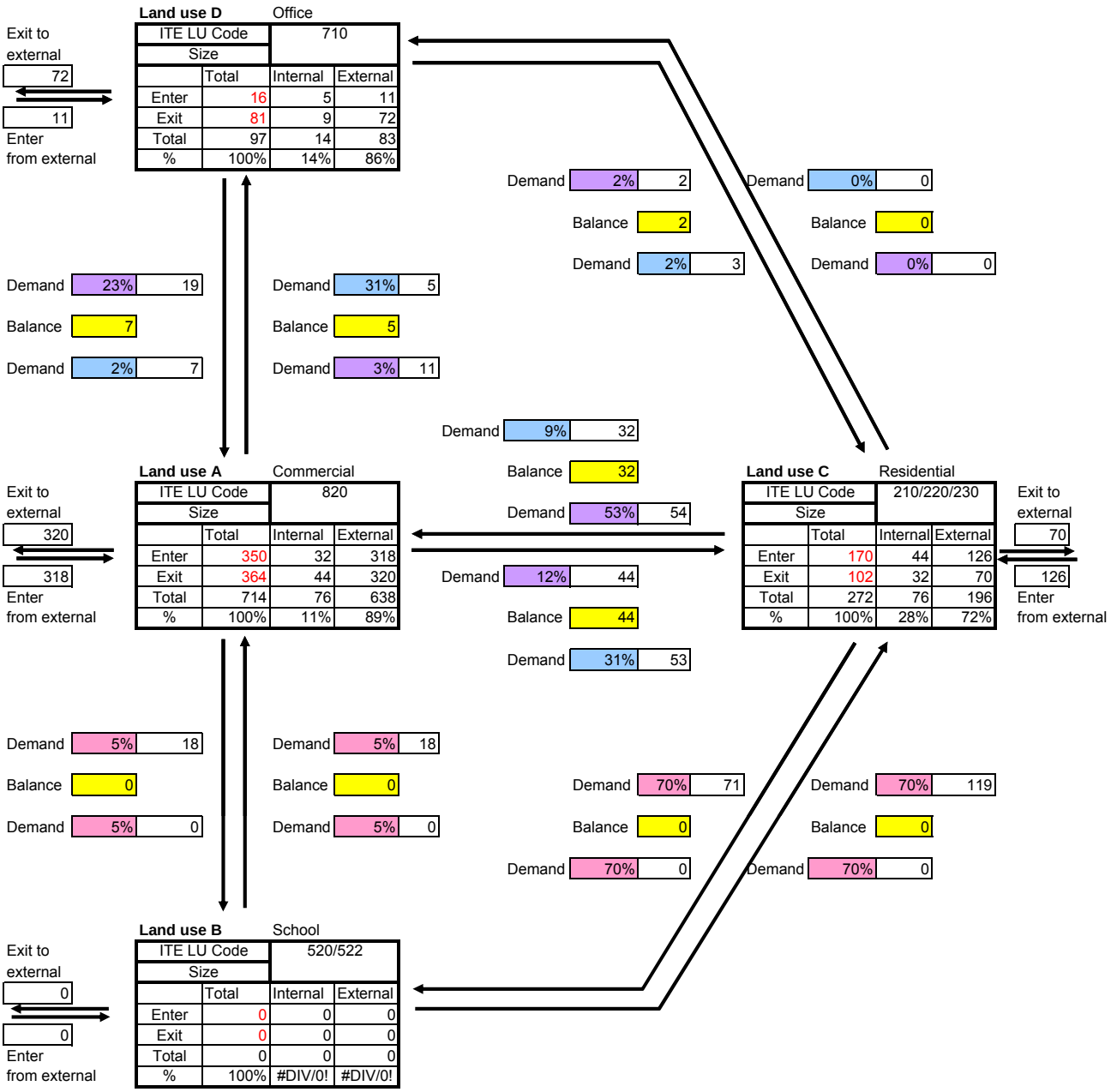
INTERNAL CAPTURE CALCULATIONS CH

AM Peak Hour 11/1/07



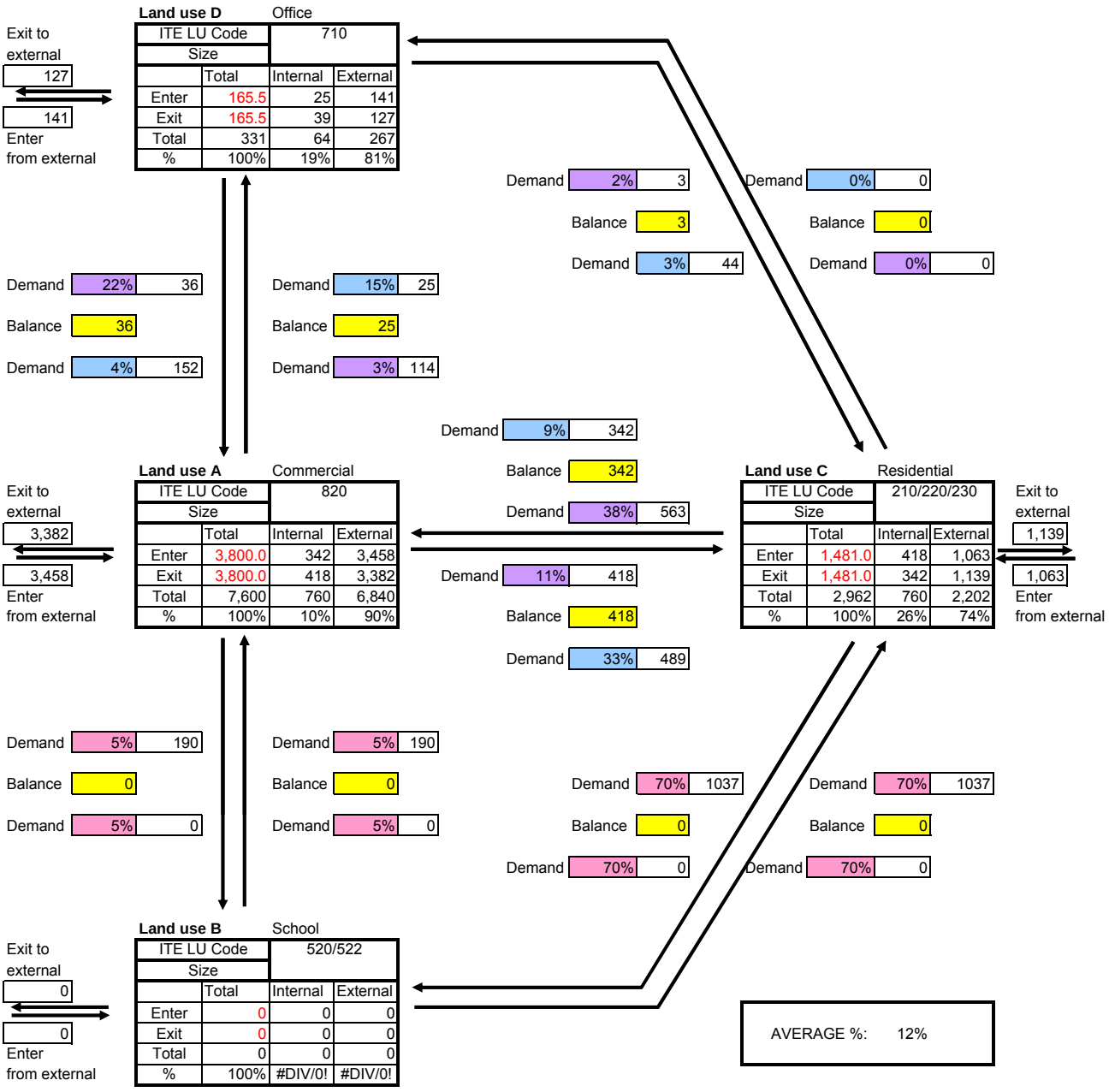
Net External Trips from Multi-Use Development						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL	
Enter	100	0	51	37	188	
Exit	62	0	151	4	217	INTERNAL
Total	162	0	202	41	405	CAPTURE
Single-Use Trip Gen. Est.	172	0	212	44	428	5%

PM Peak Hour



Net External Trips from Multi-Use Development						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL	
Enter	318	0	126	11	455	
Exit	320	0	70	72	462	INTERNAL
Total	638	0	196	83	917	CAPTURE
Single-Use Trip Gen. Est.	714	0	272	97	1083	15%

DAILY



Net External Trips from Multi-Use Development						
	LAND USE A	LAND USE B	LAND USE C	LAND USE D	TOTAL	
Enter	3458	0	1063	140.5	4661.5	
Exit	3382	0	1139	126.5	4647.5	INTERNAL
Total	6840	0	2202	267	9309	CAPTURE
Single-Use Trip Gen. Est.	7600	0	2962	331	10893	15%

Rate change from Table 7.1
Rate change from Table 7.2
Data input
Assumed %

APPENDIX 5.1

EXISTING PLUS PROJECT AVERAGE DAILY TRAFFIC (ADT)

EXHIBIT 5.1-1

EXISTING PLUS PROJECT (P1) AVERAGE DAILY TRAFFIC (ADT)

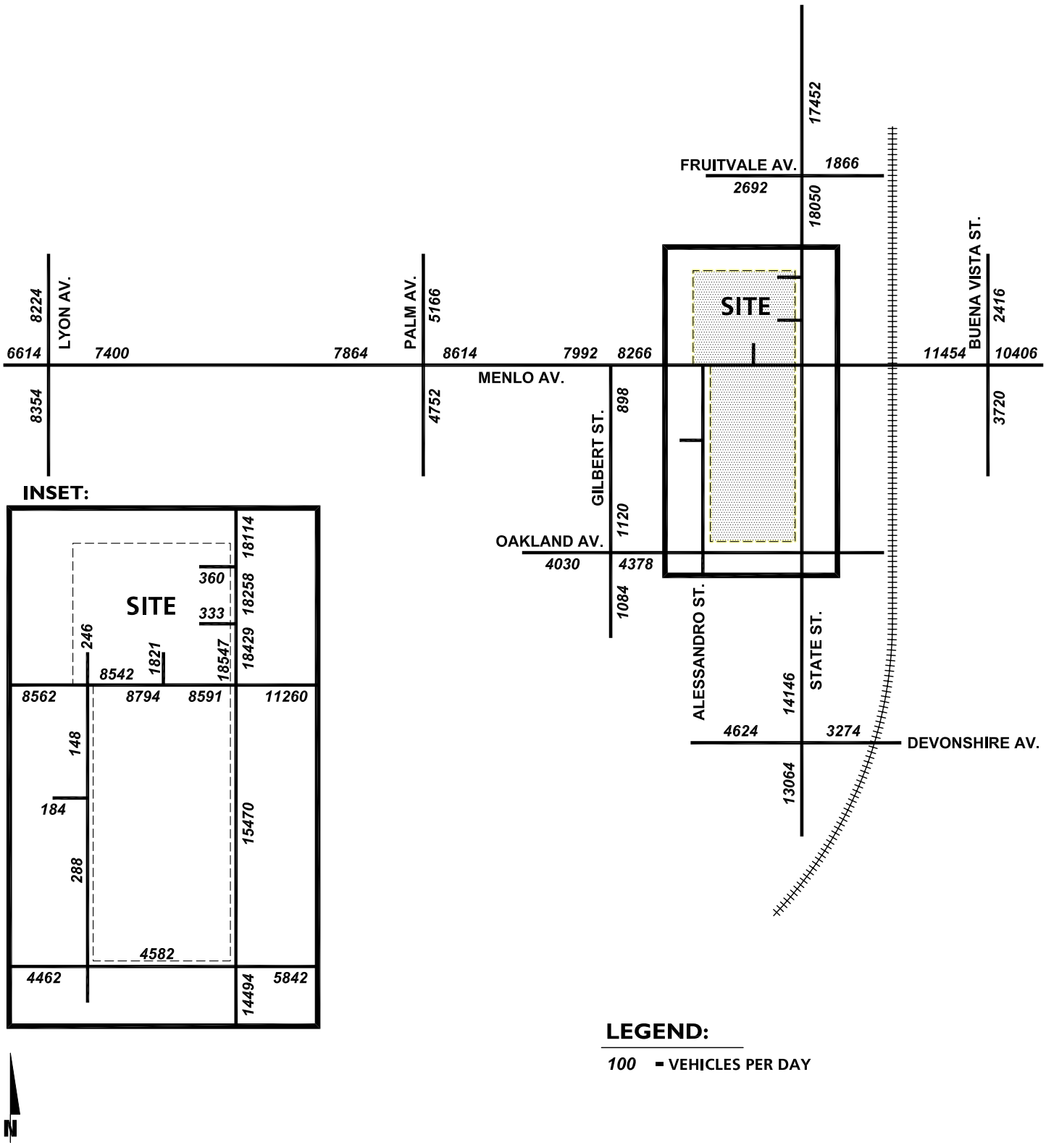
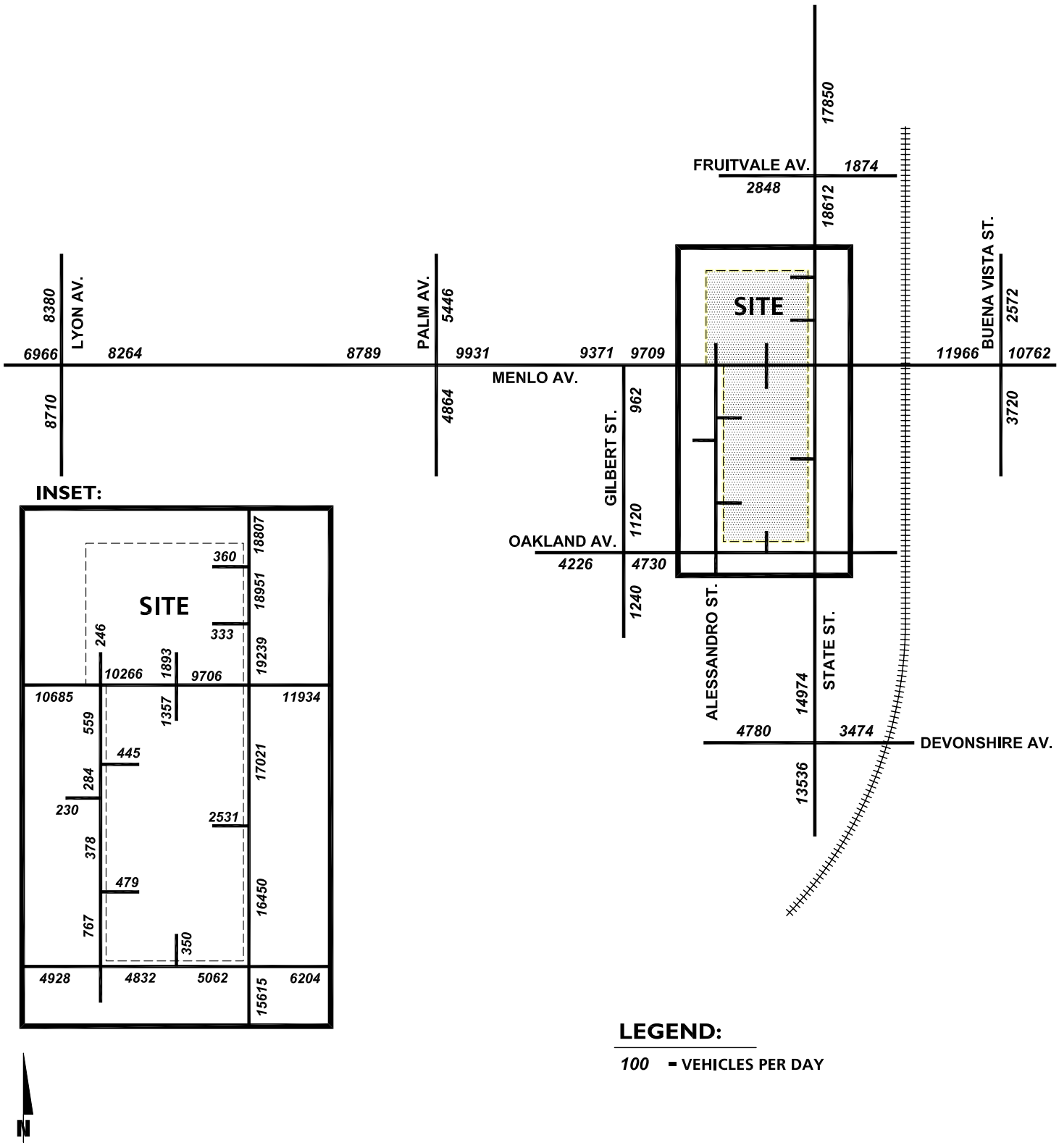


EXHIBIT 5.1-2

EXISTING PLUS PROJECT (BUILDOUT) AVERAGE DAILY TRAFFIC (ADT)



APPENDIX 5.2

EXISTING PLUS PROJECT (P1) CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.785
Loss Time (sec):	0	Average Delay (sec/veh):	24.0
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	190	36	45	244	26	16	221	30	27	199	15
Added Vol:	0	0	7	3	0	0	0	7	0	2	4	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	190	43	48	244	26	16	228	30	29	203	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	31	236	53	60	303	32	20	283	37	36	252	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	236	53	60	303	32	20	283	37	36	252	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	236	53	60	303	32	20	283	37	36	252	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.88	1.00	0.16	0.84	1.00	0.07	0.93	1.00	0.12	0.82	0.06
Final Sat.:	51	388	482	76	386	510	29	418	490	52	361	28
Capacity Analysis Module:												
Vol/Sat:	0.61	0.61	0.11	0.79	0.79	0.06	0.68	0.68	0.08	0.70	0.70	0.70
Crit Moves:	****			****				****			****	
Delay/Veh:	20.5	20.5	10.5	30.8	30.8	9.9	23.4	23.4	10.2	25.1	25.1	25.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.5	20.5	10.5	30.8	30.8	9.9	23.4	23.4	10.2	25.1	25.1	25.1
LOS by Move:	C	C	B	D	D	A	C	C	B	D	D	D
ApproachDel:	18.8			29.1			22.0			25.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	18.8			29.1			22.0			25.1		
LOS by Appr:	C			D			C			D		
AllWayAvgQ:	1.2	1.2	0.1	2.6	2.6	0.1	1.6	1.6	0.1	1.8	1.8	1.8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	0	Average Delay (sec/veh):	14.8
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 1	0	0	1	0 1	0	0	1	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	26	110	13		33	119	19		18	255	35		29	197	16	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	26	110	13		33	119	19		18	255	35		29	197	16	
Added Vol:	0	0	2		5	0	0		0	18	0		1	7	1	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	26	110	15		38	119	19		18	273	35		30	204	17	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.83	0.83	0.83		0.83	0.83	0.83		0.83	0.83	0.83		0.83	0.83	0.83	
PHF Volume:	31	132	18		46	143	23		22	328	42		36	245	20	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	132	18		46	143	23		22	328	42		36	245	20	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	31	132	18		46	143	23		22	328	42		36	245	20	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.19	0.81	1.00		0.24	0.76	1.00		1.00	1.00	1.00		1.00	0.92	0.08	
Final Sat.:	92	389	533		118	369	542		483	525	576		496	501	42	
Capacity Analysis Module:																
Vol/Sat:	0.34	0.34	0.03		0.39	0.39	0.04		0.04	0.62	0.07		0.07	0.49	0.49	
Crit Moves:		****				****				****					****	
Delay/Veh:	12.9	12.9	9.1		13.6	13.6	9.1		10.2	19.1	9.1		10.1	14.5	14.5	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	12.9	12.9	9.1		13.6	13.6	9.1		10.2	19.1	9.1		10.1	14.5	14.5	
LOS by Move:	B	B	A		B	B	A		B	C	A		B	B	B	
ApproachDel:	12.5				13.1				17.5				14.0			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	12.5				13.1				17.5				14.0			
LOS by Appr:	B				B				C				B			
AllWayAvgQ:	0.4	0.4	0.0		0.5	0.5	0.0		0.0	1.4	0.1		0.1	0.8	0.8	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[12.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0 1	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	0	12	0	0	0	0	256	9	9	240	0
Added Vol:	0	0	4	0	0	0	0	25	0	1	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	0	16	0	0	0	0	281	9	10	249	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	23	0	17	0	0	0	0	302	10	11	268	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	0	17	0	0	0	0	302	10	11	268	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	596	596	307	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	312	xxxx	xxxxx
Potent Cap.:	470	419	738	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1260	xxxx	xxxxx
Move Cap.:	467	416	738	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1260	xxxx	xxxxx
Volume/Cap:	0.05	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	555	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	12.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[11.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	6	17	10	6	15	8	4	140	5	13	139	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	17	10	6	15	8	4	140	5	13	139	7
Added Vol:	0	3	0	0	1	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	20	10	6	16	8	4	142	5	13	139	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	7	23	12	7	19	9	5	166	6	15	162	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	23	12	7	19	9	5	166	6	15	162	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	386	376	166	388	374	162	171	xxxx	xxxxx	172	xxxx	xxxxx
Potent Cap.:	576	558	884	574	560	888	1419	xxxx	xxxxx	1418	xxxx	xxxxx
Move Cap.:	549	550	884	542	552	888	1419	xxxx	xxxxx	1418	xxxx	xxxxx
Volume/Cap:	0.01	0.04	0.01	0.01	0.03	0.01	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	615	xxxxx	xxxx	612	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.3	xxxxx	xxxxx	11.2	xxxxx	7.5	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:	11.3			11.2			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1! 0	0	0	0	1! 0	0	0	1	0	0 1	0	0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	1	0	4		1	0	0		0	278	4		2	251	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	1	0	4		1	0	0		0	278	4		2	251	0	
Added Vol:	0	0	1		1	0	3		1	30	0		0	8	3	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	1	0	5		2	0	3		1	308	4		2	259	3	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	1	0	6		2	0	3		1	341	4		2	287	3	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	1	0	6		2	0	3		1	341	4		2	287	3	
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2		7.1	6.5	6.2		4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3		3.5	4.0	3.3		2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	639	639	341		642	641	289		290	xxxx	xxxxx		346	xxxx	xxxxx	
Potent Cap.:	392	397	706		390	395	755		1283	xxxx	xxxxx		1224	xxxx	xxxxx	
Move Cap.:	389	396	706		386	394	755		1283	xxxx	xxxxx		1224	xxxx	xxxxx	
Volume/Cap:	0.00	0.00	0.01		0.01	0.00	0.00		0.00	xxxx	xxxx		0.00	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		0.0	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		7.8	xxxx	xxxxx		7.9	xxxx	xxxxx	
LOS by Move:	*	*	*		*	*	*		A	*	*		A	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	621	xxxxx		xxxx	546	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.0	xxxxx		xxxxx	0.0	xxxxx		0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	10.9	xxxxx		xxxxx	11.7	xxxxx		7.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*		*	B	*		A	*	*		*	*	*	
ApproachDel:	10.9				11.7				xxxxxx				xxxxxx			
ApproachLOS:	B				B				*				*			

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: A[8.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0	0	0 0 0	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	4	0	0	4	2	1	0	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	4	0	0	4	2	1	0	4	0	0	0
Added Vol:	0	0	0	0	0	0	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	4	0	0	4	2	2	0	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
PHF Volume:	15	8	0	0	8	4	4	0	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	8	0	0	8	4	4	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	11	xxxx	xxxxx	xxxx	xxxx	xxxxx	48	48	10	xxxx	xxxx	xxxxx
Potent Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx	967	848	1078	xxxx	xxxx	xxxxx
Move Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx	960	840	1078	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1035	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	2	1	155	0	0	174	10
Added Vol:	0	0	0	0	0	0	0	2	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	6	0	2	1	157	0	0	174	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	6	0	2	1	169	0	0	187	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	6	0	2	1	169	0	0	187	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	363	363	192	198	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	640	568	854	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	640	567	854	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	682	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.341
Loss Time (sec):	12	Average Delay (sec/veh):	18.0
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	15	15		10	15	15		20	20	20		20	20	20	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	0 1!	0	0	0	1 0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	41	427	87		45	465	25		48	17	46		38	18	27	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	41	427	87		45	465	25		48	17	46		38	18	27	
Added Vol:	1	4	0		0	7	0		0	0	3		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	42	431	87		45	472	25		48	17	49		38	18	27	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88		0.88	0.88	0.88	
PHF Volume:	48	489	99		51	535	28		54	19	56		43	20	31	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	48	489	99		51	535	28		54	19	56		43	20	31	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	48	489	99		51	535	28		54	19	56		43	20	31	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.93	0.93		0.95	0.94	0.94		0.82	0.82	0.82		0.79	0.79	0.85	
Lanes:	1.00	1.66	0.34		1.00	1.90	0.10		0.42	0.15	0.43		0.68	0.32	1.00	
Final Sat.:	1805	2929	591		1805	3404	180		653	231	667		1022	484	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.17	0.17		0.03	0.16	0.16		0.08	0.08	0.08		0.04	0.04	0.02	
Crit Moves:		****				****				****						
Green/Cycle:	0.20	0.35	0.35		0.15	0.30	0.30		0.31	0.31	0.31		0.31	0.31	0.31	
Volume/Cap:	0.13	0.47	0.47		0.18	0.52	0.52		0.27	0.27	0.27		0.14	0.14	0.06	
Delay/Veh:	21.4	16.6	16.6		24.3	19.1	19.1		17.3	17.3	17.3		16.4	16.4	15.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	21.4	16.6	16.6		24.3	19.1	19.1		17.3	17.3	17.3		16.4	16.4	15.9	
LOS by Move:	C	B	B		C	B	B		B	B	B		B	B	B	
HCM2kAvgQ:	1	5	5		1	5	5		2	2	2		1	1	0	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.601
Loss Time (sec):	16	Average Delay (sec/veh):	32.5
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	10	20	20		10	20	20		21	21	21		21	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 0	0	1	0	1 0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	25	375	42		93	420	30		54	196	33		23	198	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	25	375	42		93	420	30		54	196	33		23	198	147	
Added Vol:	21	0	0		1	8	1		5	2	2		0	10	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	46	375	42		94	428	31		59	198	35		23	208	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87	
PHF Volume:	53	431	48		108	491	36		68	227	40		26	239	169	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	53	431	48		108	491	36		68	227	40		26	239	169	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	53	431	48		108	491	36		68	227	40		26	239	169	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.94	0.94		0.99	0.99	0.85		1.00	1.00	0.85	
Lanes:	1.00	1.80	0.20		1.00	1.86	0.14		0.23	0.77	1.00		0.10	0.90	1.00	
Final Sat.:	1805	3198	358		1805	3333	241		431	1448	1615		188	1702	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.13	0.13		0.06	0.15	0.15		0.16	0.16	0.02		0.14	0.14	0.10	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.11	0.23	0.23		0.11	0.23	0.23		0.24	0.24	0.24		0.24	0.24	0.24	
Volume/Cap:	0.26	0.59	0.59		0.53	0.65	0.65		0.66	0.66	0.10		0.59	0.59	0.44	
Delay/Veh:	36.3	31.5	31.5		39.3	32.7	32.7		33.8	33.8	26.3		31.7	31.7	29.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	36.3	31.5	31.5		39.3	32.7	32.7		33.8	33.8	26.3		31.7	31.7	29.3	
LOS by Move:	D	C	C		D	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	2	7	7		4	8	8		8	8	1		7	7	4	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	12	Average Delay (sec/veh):	18.0
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	15	15		10	15	15		22	22	22		22	22	22	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 2	0	1	1	0 1	1	0	1	0 0	1	0	1	0 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	13	407	12		44	421	19		18	124	19		22	152	35	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	13	407	12		44	421	19		18	124	19		22	152	35	
Added Vol:	0	15	0		3	7	0		2	0	0		0	0	5	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	13	422	12		47	428	19		20	124	19		22	152	40	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.84	0.84	0.84		0.84	0.84	0.84		0.84	0.84	0.84		0.84	0.84	0.84	
PHF Volume:	15	500	14		56	507	23		24	147	23		26	180	47	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	15	500	14		56	507	23		24	147	23		26	180	47	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	15	500	14		56	507	23		24	147	23		26	180	47	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.85		0.95	0.94	0.94		0.57	0.98	0.98		0.64	0.97	0.97	
Lanes:	1.00	2.00	1.00		1.00	1.91	0.09		1.00	0.87	0.13		1.00	0.79	0.21	
Final Sat.:	1805	3610	1615		1805	3436	153		1081	1615	247		1224	1458	384	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.14	0.01		0.03	0.15	0.15		0.02	0.09	0.09		0.02	0.12	0.12	
Crit Moves:		****				****								****		
Green/Cycle:	0.17	0.27	0.27		0.17	0.26	0.26		0.37	0.37	0.37		0.37	0.37	0.37	
Volume/Cap:	0.05	0.52	0.03		0.19	0.57	0.57		0.06	0.25	0.25		0.06	0.34	0.34	
Delay/Veh:	20.7	19.2	16.3		21.8	20.1	20.1		12.4	13.4	13.4		12.3	14.0	14.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	20.7	19.2	16.3		21.8	20.1	20.1		12.4	13.4	13.4		12.3	14.0	14.0	
LOS by Move:	C	B	B		C	C	C		B	B	B		B	B	B	
HCM2kAvgQ:	0	5	0		1	5	5		0	2	2		0	3	3	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 24.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	19	364	14		48	365	30		43	84	21		7	37	22	
Added Vol:	0	8	0		1	4	1		3	0	0		0	0	4	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	19	372	14		49	369	31		46	84	21		7	37	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	
PHF Volume:	22	440	17		58	437	37		54	99	25		8	44	31	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	22	440	17		58	437	37		54	99	25		8	44	31	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	22	440	17		58	437	37		54	99	25		8	44	31	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.93	0.07		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3462	130		1805	3610	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.13	0.13		0.03	0.12	0.02		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.56	0.42	0.42		0.45	0.34	0.34		0.36	0.23	0.23		0.36	0.23	0.23	
Volume/Cap:	0.04	0.30	0.30		0.11	0.35	0.07		0.11	0.29	0.29		0.02	0.10	0.08	
Delay/Veh:	10.7	20.5	20.5		16.6	25.9	23.2		22.2	33.9	33.9		21.7	32.1	31.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	10.7	20.5	20.5		16.6	25.9	23.2		22.2	33.9	33.9		21.7	32.1	31.9	
LOS by Move:	B	C	C		B	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	0	5	5		1	6	1		1	3	3		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	0	Average Delay (sec/veh):	16.1
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0	0 0	1!	0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	32	45	9	31	43	32	238	41	45	324	25
Added Vol:	0	0	0	0	0	3	1	2	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	32	45	9	31	46	33	240	41	45	331	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	51	38	54	11	37	55	39	285	49	54	394	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	38	54	11	37	55	39	285	49	54	394	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	38	54	11	37	55	39	285	49	54	394	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.27	0.37	0.10	0.36	0.54	0.12	0.88	1.00	0.12	0.88	1.00
Final Sat.:	190	142	199	55	188	279	72	525	678	74	543	703
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.20	0.20	0.20	0.54	0.54	0.07	0.72	0.72	0.04
Crit Moves:	****				****		****				****	
Delay/Veh:	11.0	11.0	11.0	10.3	10.3	10.3	14.9	14.9	8.2	21.4	21.4	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.0	11.0	11.0	10.3	10.3	10.3	14.9	14.9	8.2	21.4	21.4	7.9
LOS by Move:	B	B	B	B	B	B	B	B	A	C	C	A
ApproachDel:	11.0			10.3			14.0			20.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.0			10.3			14.0			20.6		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	1.1	1.1	0.1	2.2	2.2	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0	Average Delay (sec/veh):	23.3
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	254	49	31	293	41	29	217	16	44	204	31
Added Vol:	0	0	9	4	0	0	0	10	0	15	15	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	254	58	35	293	41	29	227	16	59	219	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	26	266	61	37	307	43	30	238	17	62	229	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	266	61	37	307	43	30	238	17	62	229	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	266	61	37	307	43	30	238	17	62	229	40
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.91	1.00	0.11	0.89	1.00	0.11	0.89	1.00	0.19	0.69	0.12
Final Sat.:	40	410	495	49	412	509	50	388	479	84	313	54
Capacity Analysis Module:												
Vol/Sat:	0.65	0.65	0.12	0.74	0.74	0.08	0.61	0.61	0.03	0.73	0.73	0.73
Crit Moves:		****			****			****			****	
Delay/Veh:	22.0	22.0	10.5	27.3	27.3	10.1	20.7	20.7	10.0	27.0	27.0	27.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.0	22.0	10.5	27.3	27.3	10.1	20.7	20.7	10.0	27.0	27.0	27.0
LOS by Move:	C	C	B	D	D	B	C	C	A	D	D	D
ApproachDel:	20.0			25.4			20.1			27.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.0			25.4			20.1			27.0		
LOS by Appr:	C			D			C			D		
AllWayAvgQ:	1.5	1.5	0.1	2.2	2.2	0.1	1.2	1.2	0.0	2.0	2.0	2.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	0	Average Delay (sec/veh):	18.7
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 1	0	0	1	0 1	0	0	1	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	21	151	29		32	129	27		38	246	16		45	264	42	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	151	29		32	129	27		38	246	16		45	264	42	
Added Vol:	0	0	3		7	0	0		0	24	0		4	39	13	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	21	151	32		39	129	27		38	270	16		49	303	55	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	23	168	36		43	143	30		42	300	18		54	337	61	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	168	36		43	143	30		42	300	18		54	337	61	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	168	36		43	143	30		42	300	18		54	337	61	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.12	0.88	1.00		0.23	0.77	1.00		1.00	1.00	1.00		1.00	0.85	0.15	
Final Sat.:	56	399	498		104	345	496		443	477	518		485	454	82	
Capacity Analysis Module:																
Vol/Sat:	0.42	0.42	0.07		0.42	0.42	0.06		0.10	0.63	0.03		0.11	0.74	0.74	
Crit Moves:		****				****				****				****		
Delay/Veh:	14.9	14.9	9.8		14.9	14.9	9.8		11.3	20.8	9.5		10.7	24.7	24.7	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	14.9	14.9	9.8		14.9	14.9	9.8		11.3	20.8	9.5		10.7	24.7	24.7	
LOS by Move:	B	B	A		B	B	A		B	C	A		B	C	C	
ApproachDel:	14.1				14.2				19.1				23.0			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	14.1				14.2				19.1				23.0			
LOS by Appr:	B				B				C				C			
AllWayAvgQ:	0.6	0.6	0.1		0.6	0.6	0.1		0.1	1.4	0.0		0.1	2.3	2.3	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	27	0	0	0	0	297	18	13	282	0
Added Vol:	0	0	5	0	0	0	0	34	0	10	57	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	0	32	0	0	0	0	331	18	23	339	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	9	0	35	0	0	0	0	363	20	25	372	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	0	35	0	0	0	0	363	20	25	372	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	796	796	373	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	383	xxxx	xxxxx
Potent Cap.:	359	322	677	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1186	xxxx	xxxxx
Move Cap.:	353	315	677	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1186	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	572	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[12.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 1!	0 0		0 1 0	0 1		0 1 0	0 1	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	6	28	12	15	25	4	5	130	3	10	184	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	28	12	15	25	4	5	130	3	10	184	10
Added Vol:	0	4	0	0	7	0	0	2	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	32	12	15	32	4	5	132	3	10	188	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	6	34	13	16	34	4	5	141	3	11	200	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	34	13	16	34	4	5	141	3	11	200	11
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	397	383	141	398	376	200	211	xxxx	xxxxx	144	xxxx	xxxxx
Potent Cap.:	566	553	913	566	558	846	1372	xxxx	xxxxx	1451	xxxx	xxxxx
Move Cap.:	532	547	913	527	552	846	1372	xxxx	xxxxx	1451	xxxx	xxxxx
Volume/Cap:	0.01	0.06	0.01	0.03	0.06	0.01	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	603	xxxxx	xxxx	560	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.3	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.5	xxxxx	xxxxx	12.1	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:	11.5			12.1			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 1			0 0 1! 0 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	2	3	314	5	1	316	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	4	1	0	2	3	314	5	1	316	2
Added Vol:	0	0	1	1	0	4	1	40	0	1	66	5
PasserByVol:	2	0	0	0	0	0	0	28	4	0	30	0
Initial Fut:	3	0	5	2	0	6	4	382	9	2	412	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	3	0	5	2	0	7	4	414	10	2	447	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	3	0	5	2	0	7	4	414	10	2	447	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	881	882	414	886	888	451	454	xxxx	xxxxx	424	xxxx	xxxxx
Potent Cap.:	269	287	642	268	285	613	1117	xxxx	xxxxx	1146	xxxx	xxxxx
Move Cap.:	265	286	642	264	283	613	1117	xxxx	xxxxx	1146	xxxx	xxxxx
Volume/Cap:	0.01	0.00	0.01	0.01	0.00	0.01	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	419	xxxxx	xxxx	461	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.8	xxxxx	xxxxx	13.0	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	*	*	*
ApproachDel:		13.8			13.0		xxxxxx			xxxxxx		
ApproachLOS:		B			B		*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0 1!	0 0		0 0 0	0 0	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	4	0	0	5	1	1	0	3	0	0	0
Added Vol:	0	0	0	0	0	1	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	1	1	0	0	0	0	0
Initial Fut:	9	4	0	0	5	3	3	0	3	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
PHF Volume:	13	6	0	0	7	4	4	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	6	0	0	7	4	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	11	xxxx	xxxxx	xxxx	xxxx	xxxxx	40	40	9	xxxx	xxxx	xxxxx
Potent Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx	977	856	1079	xxxx	xxxx	xxxxx
Move Cap.:	1621	xxxx	xxxxx	xxxx	xxxx	xxxxx	971	850	1079	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1022	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[10.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1 0	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	7	0	4	3	154	0	0	207	10
Added Vol:	0	0	0	0	0	0	0	2	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	4	3	156	0	0	211	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	0	0	8	0	4	3	172	0	0	233	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	4	3	172	0	0	233	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	418	418	239	244	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	596	529	805	1334	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	594	528	805	1334	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	657	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.388
Loss Time (sec):	12	Average Delay (sec/veh):	18.6
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	628	28	14	654	50	55	2	57	67	10	34
Added Vol:	7	14	0	0	10	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	642	28	14	664	50	55	2	61	67	10	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	55	699	30	15	723	54	60	2	66	73	11	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	699	30	15	723	54	60	2	66	73	11	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	699	30	15	723	54	60	2	66	73	11	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.77	0.77	0.77	0.68	0.68	0.85
Lanes:	1.00	1.92	0.08	1.00	1.86	0.14	0.46	0.02	0.52	0.87	0.13	1.00
Final Sat.:	1805	3438	150	1805	3324	250	682	25	756	1131	169	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.01	0.22	0.22	0.09	0.09	0.09	0.06	0.06	0.02
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.42	0.42	0.23	0.53	0.53	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	0.28	0.49	0.49	0.04	0.41	0.41	0.39	0.39	0.39	0.29	0.29	0.10
Delay/Veh:	37.4	19.5	19.5	27.1	12.7	12.7	30.6	30.6	30.6	29.7	29.7	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	19.5	19.5	27.1	12.7	12.7	30.6	30.6	30.6	29.7	29.7	28.0
LOS by Move:	D	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	8	8	0	7	7	3	3	3	2	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	16	Average Delay (sec/veh):	42.0
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	495	61	183	565	57	49	235	35	48	244	139
Added Vol:	30	0	0	13	42	7	21	9	3	0	12	0
PasserByVol:	20	6	3	2	13	1	3	7	3	3	9	0
Initial Fut:	68	501	64	198	620	65	73	251	41	51	265	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	73	538	69	213	666	70	78	270	44	55	285	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	538	69	213	666	70	78	270	44	55	285	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	538	69	213	666	70	78	270	44	55	285	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.77	0.23	1.00	1.81	0.19	0.23	0.77	1.00	0.16	0.84	1.00
Final Sat.:	1805	3147	402	1805	3222	338	423	1456	1615	304	1581	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.12	0.21	0.21	0.19	0.19	0.03	0.18	0.18	0.09
Crit Moves:		****		****			****			****		
Green/Cycle:	0.12	0.22	0.22	0.15	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.23
Volume/Cap:	0.33	0.79	0.79	0.79	0.84	0.84	0.79	0.79	0.12	0.79	0.79	0.40
Delay/Veh:	39.0	40.5	40.5	53.1	41.7	41.7	43.1	43.1	28.7	43.7	43.7	31.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.0	40.5	40.5	53.1	41.7	41.7	43.1	43.1	28.7	43.7	43.7	31.8
LOS by Move:	D	D	D	D	D	D	D	D	C	D	D	C
HCM2kAvgQ:	2	11	11	8	14	14	12	12	1	11	11	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	12	Average Delay (sec/veh):	18.8
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	511	44	51	547	19	23	122	16	26	172	58
Added Vol:	0	21	0	10	31	4	2	0	0	0	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	532	44	61	578	23	25	122	16	26	172	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	27	552	46	63	600	24	26	127	17	27	179	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	552	46	63	600	24	26	127	17	27	179	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	552	46	63	600	24	26	127	17	27	179	67
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.94	0.94	0.52	0.98	0.98	0.66	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.92	0.08	1.00	0.88	0.12	1.00	0.73	0.27
Final Sat.:	1805	3610	1615	1805	3451	137	994	1651	217	1254	1322	500
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.03	0.04	0.17	0.17	0.03	0.08	0.08	0.02	0.14	0.14
Crit Moves:		****		****							****	
Green/Cycle:	0.19	0.32	0.32	0.15	0.29	0.29	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.08	0.47	0.09	0.23	0.61	0.61	0.08	0.23	0.23	0.06	0.40	0.40
Delay/Veh:	21.7	17.9	15.4	24.5	21.1	21.1	14.7	15.6	15.6	14.6	16.9	16.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.7	17.9	15.4	24.5	21.1	21.1	14.7	15.6	15.6	14.6	16.9	16.9
LOS by Move:	C	B	B	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	0	5	1	1	7	7	0	2	2	0	4	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.915
Loss Time (sec): 16 Average Delay (sec/veh): 25.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	24	24	10	24	24
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	37	445	12	31	511	46	79	104	43	18	70	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	445	12	31	511	46	79	104	43	18	70	29
Added Vol:	0	12	0	8	16	7	4	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	457	12	39	527	53	83	104	43	18	70	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	39	485	13	41	559	56	88	110	46	19	74	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	485	13	41	559	56	88	110	46	19	74	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	485	13	41	559	56	88	110	46	19	74	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.96	0.96	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	1.00	0.71	0.29	1.00	1.00	1.00
Final Sat.:	1805	3504	92	1805	3610	1615	1805	1285	531	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.14	0.02	0.15	0.03	0.05	0.09	0.09	0.01	0.04	0.02
Crit Moves:	****				****			****			****	
Green/Cycle:	0.43	0.34	0.34	0.56	0.43	0.43	0.37	0.24	0.24	0.32	0.23	0.23
Volume/Cap:	0.09	0.40	0.40	0.07	0.36	0.08	0.18	0.36	0.36	0.05	0.17	0.10
Delay/Veh:	18.1	27.8	27.8	11.7	21.1	18.4	23.4	35.3	35.3	25.5	33.8	33.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.1	27.8	27.8	11.7	21.1	18.4	23.4	35.3	35.3	25.5	33.8	33.2
LOS by Move:	B	C	C	B	C	B	C	D	D	C	C	C
HCM2kAvgQ:	1	7	7	1	7	1	2	5	5	0	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (P1) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	0	Average Delay (sec/veh):	24.3
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0	0 0	1!	0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	37	56	13	33	53	49	372	68	63	338	10
Added Vol:	0	0	0	0	0	4	7	15	0	0	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	37	56	13	33	57	56	387	68	63	347	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	58	41	62	14	36	63	62	426	75	69	382	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	41	62	14	36	63	62	426	75	69	382	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	41	62	14	36	63	62	426	75	69	382	11
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.25	0.39	0.13	0.32	0.55	0.13	0.87	1.00	0.15	0.85	1.00
Final Sat.:	179	125	189	61	155	267	74	511	658	88	483	641
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.23	0.23	0.23	0.83	0.83	0.11	0.79	0.79	0.02
Crit Moves:	****			****			****			****		
Delay/Veh:	12.4	12.4	12.4	11.4	11.4	11.4	31.1	31.1	8.7	27.3	27.3	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	12.4	12.4	11.4	11.4	11.4	31.1	31.1	8.7	27.3	27.3	8.2
LOS by Move:	B	B	B	B	B	B	D	D	A	D	D	A
ApproachDel:	12.4			11.4			28.1			26.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.4			11.4			28.1			26.9		
LOS by Appr:	B			B			D			D		
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	3.6	3.6	0.1	2.9	2.9	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 5.3

EXISTING PLUS PROJECT (P1) CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Lyon Av.**

Minor Street: **Menlo Av.**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 40 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,289** vpd

Minor Street Future ADT = **3,700** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **RURAL (R)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied **XX** Not Satisfied

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **8,289**	*1* **3,700**
2 +	*1*
2 +	*2* +
1	*2* +

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000 *	5,600	2,400 *	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **8,289**	*1* **3,700**
2 +	*1*
2 +	*2* +
1	*2* +

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200 *	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more .....

A	B
100%	**69%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo Av.**

Minor Street: **Palm Av.**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 35 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **8,239** vpd

Minor Street Future ADT = **2,583** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT	
XX	Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
CONDITION A - Minimum Vehicular Volume		
Satisfied **XX** / Not Satisfied		
Number of lanes for moving traffic on each approach		
Major Street / Minor Street	Urban / Rural	Urban / Rural
1 **8,239** / *1* **2,583**	8,000 * / 5,600	2,400 * / 1,680
2 + / *1*	9,600 / 6,720	2,400 / 1,680
2 + / *2* +	9,600 / 6,720	3,200 / 2,240
1 / *2* +	8,000 / 5,600	3,200 / 2,240
CONDITION B - Interruption of Continuous Traffic		
Satisfied / Not Satisfied **XX**	Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
Number of lanes for moving traffic on each approach		
Major Street / Minor Street	Urban / Rural	Urban / Rural
1 **8,239** / *1* **2,583**	12,000 / 8,400	1,200 * / 850
2 + / *1*	14,400 / 10,080	1,200 / 850
2 + / *2* +	14,400 / 10,080	1,600 / 1,120
1 / *2* +	12,000 / 8,400	1,600 / 1,120
Combination of CONDITIONS A + B		
Satisfied / Not Satisfied **XX**	2 CONDITIONS 80%	2 CONDITIONS 80%
No one condition satisfied, but following conditions fulfilled 80% of more ..... A **100%** / B **69%**		

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo Av.**

Minor Street: **Gilbert St.**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,129** vpd

Minor Street Future ADT = **449** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **8,129** / *1* **449**	8,000 *	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **8,129** / *1* **449**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied **XX**	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A **19%** B **37%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Oakland**

Minor Street: **Gilbert St.**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 30 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,204** vpd

Minor Street Future ADT = **560** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,204**	*1* **560**
2 +	*1*
2 +	*2* +
1	*2* +

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,204**	*1* **560**
2 +	*1*
2 +	*2* +
1	*2* +

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... A **23%** B **35%**

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo Av.**

Minor Street: **Alessandro St.**

TRAFFIC CONDITIONS

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

E+P (P1)

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **8,552** vpd

Minor Street Future ADT = **123** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX	8,000 *	5,600	2,400	1,680
Number of lanes for moving traffic on each approach	9,600	6,720	2,400	1,680
Major Street: 1 **8,552**; 2 +; 2 +; 1	9,600	6,720	3,200	2,240
Minor Street: 1 **123**; 1; 2 +; 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach	12,000	8,400	1,200	850
Major Street: 1 **8,552**; 2 +; 2 +; 1	14,400	10,080	1,200	850
Minor Street: 1 **123**; 1; 2 +; 2 +	14,400	10,080	1,600	1,120
	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B	2 CONDITIONS 80%		2 CONDITIONS 80%	
Satisfied / Not Satisfied: XX				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **5%** B: **10%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Alessandro St.**

Minor Street: **Ancla**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 25 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **218** vpd

Minor Street Future ADT = **92** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **218**	*1* **92**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2 +*	9,600	6,720	3,200	2,240
1	*2 +*	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **218**	*1* **92**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2 +*	14,400	10,080	1,600	1,120
1	*2 +*	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... A **3%** B **2%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Oakland**

Minor Street: **Alessandro**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 30 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,522** vpd

Minor Street Future ADT = **144** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **URBAN (U)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,522**	*1* **144**
2 +	*1*
2 +	*2 +*
1	*2 +*

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,522**	*1* **144**
2 +	*1*
2 +	*2 +*
1	*2 +*

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... A **6%** B **12%**

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo Av.**

Minor Street: **Dwy 3**

TRAFFIC CONDITIONS

CALC IC

CHK IC

E+P (P1)

DATE 05/18/10

DATE 05/18/10

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **8,693** vpd

Minor Street Future ADT = **911** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **RURAL (R)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **8,693** / *1* **911**	8,000 *	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **8,693** / *1* **911**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **38%** B: **72%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **State**

Minor Street: **Devonshire**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 35 mph

Critical Approach Speed (Minor) 30 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **13,605** vpd

Minor Street Future ADT = **2,312** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **13,605** / Minor Street: 1 **2,312**	9,600 *	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **13,605** / Minor Street: 1 **2,312**	14,400	10,080	1,200 *	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied: XX / Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **96%** B: **94%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo**

Minor Street: **Buena Vista**

TRAFFIC CONDITIONS — **E+P (P1)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 35 mph

Critical Approach Speed (Minor) 30 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **10,930** vpd

Minor Street Future ADT = **1,860** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **URBAN (U)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **10,930** / 1 **1,860**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **10,930** / 1 **1,860**	12,000	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **78%** B: **91%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 5.4

EXISTING PLUS PROJECT (BUILDOUT) CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	0	Average Delay (sec/veh):	26.8
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	190	36	45	244	26	16	221	30	27	199	15
Added Vol:	0	0	12	6	0	0	0	9	0	10	19	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	190	48	51	244	26	16	230	30	37	218	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	31	236	60	63	303	32	20	285	37	46	270	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	236	60	63	303	32	20	285	37	46	270	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	236	60	63	303	32	20	285	37	46	270	21
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	0.88	1.00	0.17	0.83	1.00	0.07	0.93	1.00	0.14	0.80	0.06
Final Sat.:	50	377	468	78	372	496	28	408	478	60	351	27
Capacity Analysis Module:												
Vol/Sat:	0.62	0.62	0.13	0.81	0.81	0.07	0.70	0.70	0.08	0.77	0.77	0.77
Crit Moves:	****			****			****			****		
Delay/Veh:	21.6	21.6	10.9	34.1	34.1	10.2	25.1	25.1	10.4	30.7	30.7	30.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.6	21.6	10.9	34.1	34.1	10.2	25.1	25.1	10.4	30.7	30.7	30.7
LOS by Move:	C	C	B	D	D	B	D	D	B	D	D	D
ApproachDel:	19.7			32.2			23.5			30.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.7			32.2			23.5			30.7		
LOS by Appr:	C			D			C			D		
AllWayAvgQ:	1.3	1.3	0.1	3.0	3.0	0.1	1.8	1.8	0.1	2.4	2.4	2.4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	0	Average Delay (sec/veh):	16.2
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 1	0	0	1	0 1	0	0	1	1	0	1	0 1	1	0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	26	110	13		33	119	19		18	255	35		29	197	16	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	26	110	13		33	119	19		18	255	35		29	197	16	
Added Vol:	0	0	3		11	0	0		0	30	0		4	32	4	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	26	110	16		44	119	19		18	285	35		33	229	20	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.83	0.83	0.83		0.83	0.83	0.83		0.83	0.83	0.83		0.83	0.83	0.83	
PHF Volume:	31	132	19		53	143	23		22	342	42		40	275	24	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	31	132	19		53	143	23		22	342	42		40	275	24	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	31	132	19		53	143	23		22	342	42		40	275	24	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.19	0.81	1.00		0.27	0.73	1.00		1.00	1.00	1.00		1.00	0.92	0.08	
Final Sat.:	89	377	515		128	345	526		472	513	561		490	493	43	
Capacity Analysis Module:																
Vol/Sat:	0.35	0.35	0.04		0.41	0.41	0.04		0.05	0.67	0.07		0.08	0.56	0.56	
Crit Moves:	****				****					****				****		
Delay/Veh:	13.3	13.3	9.3		14.3	14.3	9.3		10.4	21.4	9.3		10.3	16.4	16.4	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	13.3	13.3	9.3		14.3	14.3	9.3		10.4	21.4	9.3		10.3	16.4	16.4	
LOS by Move:	B	B	A		B	B	A		B	C	A		B	C	C	
ApproachDel:	12.9				13.8				19.5				15.7			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	12.9				13.8				19.5				15.7			
LOS by Appr:	B				B				C				C			
AllWayAvgQ:	0.4	0.4	0.0		0.6	0.6	0.0		0.0	1.7	0.1		0.1	1.1	1.1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[12.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	0	12	0	0	0	0	256	9	9	240	0
Added Vol:	0	0	5	0	0	0	0	46	0	2	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	0	17	0	0	0	0	302	9	11	280	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	23	0	18	0	0	0	0	325	10	12	301	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	0	18	0	0	0	0	325	10	12	301	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	654	654	330	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	xxxx	xxxxx
Potent Cap.:	434	389	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1236	xxxx	xxxxx
Move Cap.:	431	385	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1236	xxxx	xxxxx
Volume/Cap:	0.05	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	525	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	12.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[11.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	6	17	10	6	15	8	4	140	5	13	139	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	17	10	6	15	8	4	140	5	13	139	7
Added Vol:	0	3	3	0	1	0	0	3	0	1	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	20	13	6	16	8	4	143	5	14	148	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	7	23	15	7	19	9	5	167	6	16	173	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	23	15	7	19	9	5	167	6	16	173	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	400	390	167	404	388	173	181	xxxx	xxxxx	173	xxxx	xxxxx
Potent Cap.:	564	548	882	560	550	876	1406	xxxx	xxxxx	1416	xxxx	xxxxx
Move Cap.:	537	540	882	527	542	876	1406	xxxx	xxxxx	1416	xxxx	xxxxx
Volume/Cap:	0.01	0.04	0.02	0.01	0.03	0.01	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	7.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	620	xxxxx	xxxx	599	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.3	xxxxx	xxxxx	11.4	xxxxx	7.6	xxxx	xxxxx	7.6	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		11.3			11.4			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[14.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	0	0	278	4	2	251	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	4	1	0	0	0	278	4	2	251	0
Added Vol:	17	0	1	1	0	3	1	49	3	0	23	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	0	5	2	0	3	1	327	7	2	274	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	20	0	6	2	0	3	1	363	8	2	304	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	0	6	2	0	3	1	363	8	2	304	3
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	676	676	363	681	682	305	307	xxxx	xxxxx	370	xxxx	xxxxx
Potent Cap.:	370	378	687	367	374	739	1265	xxxx	xxxxx	1199	xxxx	xxxxx
Move Cap.:	367	376	687	363	373	739	1265	xxxx	xxxxx	1199	xxxx	xxxxx
Volume/Cap:	0.05	0.00	0.01	0.01	0.00	0.00	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	409	xxxxx	xxxx	523	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.4	xxxxx	xxxxx	12.0	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	*	*	*
ApproachDel:	14.4			12.0			xxxxxx			xxxxxx		
ApproachLOS:	B			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		0 0 1!	0 0		0 0 0	0 0	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	4	0	0	4	2	1	0	4	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	4	0	0	4	2	1	0	4	0	0	0
Added Vol:	0	4	0	0	4	0	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	8	0	0	8	2	2	0	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
PHF Volume:	15	15	0	0	15	4	4	0	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	15	0	0	15	4	4	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	19	xxxx	xxxxx	xxxx	xxxx	xxxxx	63	63	17	xxxx	xxxx	xxxxx
Potent Cap.:	1610	xxxx	xxxxx	xxxx	xxxx	xxxxx	948	832	1067	xxxx	xxxx	xxxxx
Move Cap.:	1610	xxxx	xxxxx	xxxx	xxxx	xxxxx	941	824	1067	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1022	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[10.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	2	1	155	0	0	174	10
Added Vol:	0	0	0	9	0	7	4	3	0	0	3	-1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	15	0	9	5	158	0	0	177	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	16	0	10	5	170	0	0	190	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	16	0	10	5	170	0	0	190	10
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	376	376	195	200	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	630	559	851	1384	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	628	556	851	1384	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	696	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.352
Loss Time (sec):	12	Average Delay (sec/veh):	18.0
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	427	87	45	465	25	48	17	46	38	18	27
Added Vol:	2	24	1	0	9	0	0	0	6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	451	88	45	474	25	48	17	52	38	18	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	49	511	100	51	537	28	54	19	59	43	20	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	511	100	51	537	28	54	19	59	43	20	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	511	100	51	537	28	54	19	59	43	20	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.82	0.82	0.82	0.79	0.79	0.85
Lanes:	1.00	1.67	0.33	1.00	1.90	0.10	0.41	0.15	0.44	0.68	0.32	1.00
Final Sat.:	1805	2948	575	1805	3405	180	637	226	691	1020	483	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.17	0.03	0.16	0.16	0.09	0.09	0.09	0.04	0.04	0.02
Crit Moves:		****		****				****				
Green/Cycle:	0.20	0.35	0.35	0.15	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.13	0.49	0.49	0.18	0.52	0.52	0.28	0.28	0.28	0.14	0.14	0.06
Delay/Veh:	21.4	16.7	16.7	24.3	19.1	19.1	17.3	17.3	17.3	16.4	16.4	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.4	16.7	16.7	24.3	19.1	19.1	17.3	17.3	17.3	16.4	16.4	15.9
LOS by Move:	C	B	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	1	5	5	1	5	5	2	2	2	1	1	0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	16	Average Delay (sec/veh):	32.9
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	10	20	20		10	20	20		21	21	21		21	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	1 0	0	1	0	1 0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	25	375	42		93	420	30		54	196	33		23	198	147	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	25	375	42		93	420	30		54	196	33		23	198	147	
Added Vol:	28	22	1		1	13	1		5	9	5		3	15	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	53	397	43		94	433	31		59	205	38		26	213	147	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87		0.87	0.87	0.87	
PHF Volume:	61	456	49		108	497	36		68	235	44		30	245	169	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	61	456	49		108	497	36		68	235	44		30	245	169	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	61	456	49		108	497	36		68	235	44		30	245	169	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.94	0.94		0.99	0.99	0.85		1.00	1.00	0.85	
Lanes:	1.00	1.80	0.20		1.00	1.87	0.13		0.22	0.78	1.00		0.11	0.89	1.00	
Final Sat.:	1805	3208	348		1805	3335	239		420	1459	1615		206	1685	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.14	0.14		0.06	0.15	0.15		0.16	0.16	0.03		0.15	0.15	0.10	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.11	0.23	0.23		0.11	0.23	0.23		0.24	0.24	0.24		0.24	0.24	0.24	
Volume/Cap:	0.30	0.63	0.63		0.53	0.66	0.66		0.68	0.68	0.11		0.61	0.61	0.44	
Delay/Veh:	36.6	32.2	32.2		39.3	32.8	32.8		34.5	34.5	26.3		32.2	32.2	29.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	36.6	32.2	32.2		39.3	32.8	32.8		34.5	34.5	26.3		32.2	32.2	29.3	
LOS by Move:	D	C	C		D	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	2	7	7		4	8	8		9	9	1		7	7	4	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.362
Loss Time (sec):	12	Average Delay (sec/veh):	18.2
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	407	12	44	421	19	18	124	19	22	152	35
Added Vol:	0	22	0	3	34	1	2	14	5	0	1	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	429	12	47	455	20	20	138	24	22	153	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	15	508	14	56	539	24	24	164	28	26	181	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	508	14	56	539	24	24	164	28	26	181	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	508	14	56	539	24	24	164	28	26	181	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.94	0.94	0.57	0.98	0.98	0.61	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.92	0.08	1.00	0.85	0.15	1.00	0.79	0.21
Final Sat.:	1805	3610	1615	1805	3437	151	1075	1583	275	1167	1460	382
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.01	0.03	0.16	0.16	0.02	0.10	0.10	0.02	0.12	0.12
Crit Moves:	****			****						****		
Green/Cycle:	0.17	0.26	0.26	0.17	0.27	0.27	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.05	0.54	0.03	0.18	0.59	0.59	0.06	0.28	0.28	0.06	0.34	0.34
Delay/Veh:	21.1	19.8	16.6	21.4	20.1	20.1	12.4	13.6	13.6	12.4	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.1	19.8	16.6	21.4	20.1	20.1	12.4	13.6	13.6	12.4	14.0	14.0
LOS by Move:	C	B	B	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	0	5	0	1	6	6	0	3	3	0	3	3

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 24.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	19	364	14		48	365	30		43	84	21		7	37	22	
Added Vol:	0	10	0		7	29	2		6	0	0		0	0	6	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	19	374	14		55	394	32		49	84	21		7	37	28	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85		0.85	0.85	0.85	
PHF Volume:	22	443	17		65	466	38		58	99	25		8	44	33	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	22	443	17		65	466	38		58	99	25		8	44	33	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	22	443	17		65	466	38		58	99	25		8	44	33	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.93	0.07		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3462	130		1805	3610	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.13	0.13		0.04	0.13	0.02		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.56	0.41	0.41		0.46	0.34	0.34		0.36	0.23	0.23		0.36	0.23	0.23	
Volume/Cap:	0.04	0.31	0.31		0.12	0.38	0.07		0.11	0.29	0.29		0.02	0.10	0.09	
Delay/Veh:	10.8	21.2	21.2		16.1	26.2	23.2		22.2	33.9	33.9		21.7	32.1	32.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	10.8	21.2	21.2		16.1	26.2	23.2		22.2	33.9	33.9		21.7	32.1	32.0	
LOS by Move:	B	C	C		B	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	0	5	5		1	6	1		1	3	3		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	0	Average Delay (sec/veh):	16.7
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0	0 0	1!	0	0 0	1	0	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	32	45	9	31	43	32	238	41	45	324	25
Added Vol:	0	0	0	0	0	6	2	10	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	32	45	9	31	49	34	248	41	45	336	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	51	38	54	11	37	58	40	295	49	54	400	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	38	54	11	37	58	40	295	49	54	400	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	38	54	11	37	58	40	295	49	54	400	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.27	0.37	0.10	0.35	0.55	0.12	0.88	1.00	0.12	0.88	1.00
Final Sat.:	188	140	197	52	181	285	72	523	674	73	542	698
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.20	0.20	0.20	0.56	0.56	0.07	0.74	0.74	0.04
Crit Moves:	****			****				****			****	
Delay/Veh:	11.1	11.1	11.1	10.4	10.4	10.4	15.5	15.5	8.2	22.3	22.3	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.1	11.1	11.1	10.4	10.4	10.4	15.5	15.5	8.2	22.3	22.3	7.9
LOS by Move:	B	B	B	B	B	B	C	C	A	C	C	A
ApproachDel:	11.1			10.4			14.6			21.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.1			10.4			14.6			21.4		
LOS by Appr:	B			B			B			C		
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	1.1	1.1	0.1	2.4	2.4	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.836
Loss Time (sec):	0	Average Delay (sec/veh):	28.8
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	254	49	31	293	41	29	217	16	44	204	31
Added Vol:	0	0	27	11	0	0	0	32	0	30	28	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	254	76	42	293	41	29	249	16	74	232	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	26	266	80	44	307	43	30	261	17	77	243	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	266	80	44	307	43	30	261	17	77	243	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	266	80	44	307	43	30	261	17	77	243	47
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	0.91	1.00	0.13	0.87	1.00	0.10	0.90	1.00	0.21	0.66	0.13
Final Sat.:	38	390	469	55	385	483	44	379	462	93	291	56
Capacity Analysis Module:												
Vol/Sat:	0.68	0.68	0.17	0.80	0.80	0.09	0.69	0.69	0.04	0.84	0.84	0.84
Crit Moves:		****		****				****		****		
Delay/Veh:	24.6	24.6	11.4	33.0	33.0	10.6	25.0	25.0	10.3	37.7	37.7	37.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	24.6	11.4	33.0	33.0	10.6	25.0	25.0	10.3	37.7	37.7	37.7
LOS by Move:	C	C	B	D	D	B	D	D	B	E	E	E
ApproachDel:	21.8			30.6			24.2			37.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	21.8			30.6			24.2			37.7		
LOS by Appr:	C			D			C			E		
AllWayAvgQ:	1.7	1.7	0.2	2.7	2.7	0.1	1.7	1.7	0.0	3.3	3.3	3.3

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	0	Average Delay (sec/veh):	27.0
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 1	0	0	1	0 1	0	0	1	1 0	1	0	1	1 0	0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	21	151	29		32	129	27		38	246	16		45	264	42	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	21	151	29		32	129	27		38	246	16		45	264	42	
Added Vol:	0	0	8		19	0	0		0	74	0		9	78	25	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	21	151	37		51	129	27		38	320	16		54	342	67	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	23	168	41		57	143	30		42	356	18		60	380	74	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	168	41		57	143	30		42	356	18		60	380	74	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	168	41		57	143	30		42	356	18		60	380	74	
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.12	0.88	1.00		0.28	0.72	1.00		1.00	1.00	1.00		1.00	0.84	0.16	
Final Sat.:	52	376	468		121	305	469		426	459	495		467	433	85	
Capacity Analysis Module:																
Vol/Sat:	0.45	0.45	0.09		0.47	0.47	0.06		0.10	0.77	0.04		0.13	0.88	0.88	
Crit Moves:	****				****					****				****		
Delay/Veh:	16.2	16.2	10.5		16.9	16.9	10.3		11.8	30.8	9.9		11.3	39.6	39.6	
Delay Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	16.2	16.2	10.5		16.9	16.9	10.3		11.8	30.8	9.9		11.3	39.6	39.6	
LOS by Move:	C	C	B		C	C	B		B	D	A		B	E	E	
ApproachDel:	15.2				16.1				28.0				36.3			
Delay Adj:	1.00				1.00				1.00				1.00			
ApprAdjDel:	15.2				16.1				28.0				36.3			
LOS by Appr:	C				C				D				E			
AllWayAvgQ:	0.7	0.7	0.1		0.7	0.7	0.1		0.1	2.6	0.0		0.1	4.3	4.3	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[12.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	27	0	0	0	0	297	18	13	282	0
Added Vol:	0	0	8	0	0	0	0	105	0	13	117	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	0	35	0	0	0	0	402	18	26	399	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	9	0	38	0	0	0	0	441	20	29	438	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	0	38	0	0	0	0	441	20	29	438	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	946	946	451	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	461	xxxx	xxxxx
Potent Cap.:	293	263	612	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1111	xxxx	xxxxx
Move Cap.:	287	257	612	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1111	xxxx	xxxxx
Volume/Cap:	0.03	0.00	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	506	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	12.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[12.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	6	28	12	15	25	4	5	130	3	10	184	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	28	12	15	25	4	5	130	3	10	184	10
Added Vol:	0	4	7	0	7	0	0	14	0	7	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	32	19	15	32	4	5	144	3	17	196	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	6	34	20	16	34	4	5	153	3	18	209	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	6	34	20	16	34	4	5	153	3	18	209	11
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	433	420	153	438	412	209	219	xxxx	xxxxx	157	xxxx	xxxxx
Potent Cap.:	536	528	898	533	533	837	1362	xxxx	xxxxx	1436	xxxx	xxxxx
Move Cap.:	501	519	898	488	524	837	1362	xxxx	xxxxx	1436	xxxx	xxxxx
Volume/Cap:	0.01	0.07	0.02	0.03	0.07	0.01	0.00	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	601	xxxxx	xxxx	528	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.3	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	11.7	xxxxx	xxxxx	12.6	xxxxx	7.7	xxxx	xxxxx	7.5	xxxx	xxxxx
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*
ApproachDel:		11.7			12.6		xxxxxx			xxxxxx		
ApproachLOS:		B			B		*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[19.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	2	3	314	5	1	316	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	0	4	1	0	2	3	314	5	1	316	2
Added Vol:	10	0	1	1	0	4	1	88	25	1	118	5
PasserByVol:	2	0	0	0	0	0	0	28	4	0	30	0
Initial Fut:	13	0	5	2	0	6	4	430	34	2	464	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	14	0	5	2	0	7	4	466	37	2	503	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	0	5	2	0	7	4	466	37	2	503	8
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	990	990	466	1008	1023	507	511	xxxx	xxxxx	503	xxxx	xxxxx
Potent Cap.:	227	248	600	221	237	570	1065	xxxx	xxxxx	1072	xxxx	xxxxx
Move Cap.:	224	247	600	218	236	570	1065	xxxx	xxxxx	1072	xxxx	xxxxx
Volume/Cap:	0.06	0.00	0.01	0.01	0.00	0.01	0.00	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	8.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	271	xxxxx	xxxx	406	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	19.3	xxxxx	xxxxx	14.1	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	B	*	A	*	*	*	*	*
ApproachDel:		19.3			14.1		xxxxxx			xxxxxx		
ApproachLOS:		C			B		*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: A[8.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 1	0	0	0	0	0	0	1	0	0	0	1! 0	0	0	0	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0				
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	9	4	0	0	5	1	1	0	3	0	0	0				
Added Vol:	0	5	0	0	5	3	2	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	1	1	0	0	0	0	0				
Initial Fut:	9	9	0	0	10	5	4	0	3	0	0	0				
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.72 0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72				
PHF Volume:	13	13	0	0	14	7	6	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	13	13	0	0	14	7	6	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																
Cnflict Vol:	21 xxxx	xxxxx	xxxx	xxxx	xxxxx	55	55	17	xxxx	xxxx	xxxxx					
Potent Cap.:	1608 xxxx	xxxxx	xxxx	xxxx	xxxxx	958	840	1067	xxxx	xxxx	xxxxx					
Move Cap.:	1608 xxxx	xxxxx	xxxx	xxxx	xxxxx	952	834	1067	xxxx	xxxx	xxxxx					
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx					
Level Of Service Module:																
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Control Del:	7.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*					
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT					
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	998	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	7.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx						
ApproachLOS:	*			*			A			*						

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	7	0	4	3	154	0	0	207	10
Added Vol:	0	0	0	4	0	11	15	7	0	0	8	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	11	0	15	18	161	0	0	215	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	0	0	0	12	0	17	20	178	0	0	238	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	12	0	17	20	178	0	0	238	22
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	466	466	249	260	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	558	497	795	1317	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	552	489	795	1317	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.02	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	670	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.407
Loss Time (sec):	12	Average Delay (sec/veh):	18.7
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	15	15		10	15	15		20	20	20		20	20	20	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	0	0 1!	0	0	0	1 0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	44	628	28		14	654	50		55	2	57		67	10	34	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	44	628	28		14	654	50		55	2	57		67	10	34	
Added Vol:	14	29	0		0	36	0		0	0	11		1	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	58	657	28		14	690	50		55	2	68		68	10	34	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92		0.92	0.92	0.92	
PHF Volume:	63	715	30		15	751	54		60	2	74		74	11	37	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	63	715	30		15	751	54		60	2	74		74	11	37	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	63	715	30		15	751	54		60	2	74		74	11	37	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.94	0.94		0.77	0.77	0.77		0.67	0.67	0.85	
Lanes:	1.00	1.92	0.08		1.00	1.86	0.14		0.44	0.02	0.54		0.87	0.13	1.00	
Final Sat.:	1805	3442	147		1805	3332	241		648	24	801		1108	163	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.21	0.21		0.01	0.23	0.23		0.09	0.09	0.09		0.07	0.07	0.02	
Crit Moves:	****					****				****						
Green/Cycle:	0.11	0.42	0.42		0.22	0.53	0.53		0.22	0.22	0.22		0.22	0.22	0.22	
Volume/Cap:	0.31	0.49	0.49		0.04	0.42	0.42		0.42	0.42	0.42		0.30	0.30	0.10	
Delay/Veh:	37.7	19.4	19.4		27.3	12.8	12.8		30.9	30.9	30.9		29.8	29.8	28.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	37.7	19.4	19.4		27.3	12.8	12.8		30.9	30.9	30.9		29.8	29.8	28.0	
LOS by Move:	D	B	B		C	B	B		C	C	C		C	C	C	
HCM2kAvgQ:	2	8	8		0	7	7		4	4	4		2	2	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	16	Average Delay (sec/veh):	43.8
Optimal Cycle:	88	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	495	61	183	565	57	49	235	35	48	244	139
Added Vol:	67	22	7	13	76	7	21	25	10	7	30	0
PasserByVol:	20	6	3	2	13	1	3	7	3	3	9	0
Initial Fut:	105	523	71	198	654	65	73	267	48	58	283	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	113	562	76	213	702	70	78	287	52	62	304	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	562	76	213	702	70	78	287	52	62	304	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	562	76	213	702	70	78	287	52	62	304	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.76	0.24	1.00	1.82	0.18	0.21	0.79	1.00	0.17	0.83	1.00
Final Sat.:	1805	3121	424	1805	3241	322	403	1476	1615	321	1564	1615
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.18	0.12	0.22	0.22	0.19	0.19	0.03	0.19	0.19	0.09
Crit Moves:	****			****			****			****		
Green/Cycle:	0.11	0.23	0.23	0.13	0.26	0.26	0.23	0.23	0.23	0.23	0.23	0.23
Volume/Cap:	0.59	0.77	0.77	0.90	0.83	0.83	0.83	0.83	0.14	0.83	0.83	0.40
Delay/Veh:	45.5	38.4	38.4	73.6	39.8	39.8	47.6	47.6	29.0	47.5	47.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.5	38.4	38.4	73.6	39.8	39.8	47.6	47.6	29.0	47.5	47.5	31.5
LOS by Move:	D	D	D	E	D	D	D	D	C	D	D	C
HCM2kAvgQ:	4	11	11	9	14	14	13	13	1	13	13	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.424
Loss Time (sec):	12	Average Delay (sec/veh):	19.2
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	511	44	51	547	19	23	122	16	26	172	58
Added Vol:	5	65	0	10	61	6	4	11	3	0	18	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	576	44	61	608	25	27	133	19	26	190	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	32	598	46	63	631	26	28	138	20	27	197	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	598	46	63	631	26	28	138	20	27	197	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	598	46	63	631	26	28	138	20	27	197	67
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.94	0.94	0.50	0.98	0.98	0.65	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.92	0.08	1.00	0.87	0.13	1.00	0.75	0.25
Final Sat.:	1805	3610	1615	1805	3447	142	946	1631	233	1227	1362	466
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.03	0.04	0.18	0.18	0.03	0.08	0.08	0.02	0.14	0.14
Crit Moves:		****		****							****	
Green/Cycle:	0.19	0.32	0.32	0.15	0.29	0.29	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.09	0.51	0.09	0.23	0.64	0.64	0.09	0.25	0.25	0.06	0.43	0.43
Delay/Veh:	21.8	18.2	15.4	24.5	21.6	21.6	14.8	15.7	15.7	14.6	17.1	17.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.8	18.2	15.4	24.5	21.6	21.6	14.8	15.7	15.7	14.6	17.1	17.1
LOS by Move:	C	B	B	C	C	C	B	B	B	B	B	B
HCM2kAvgQ:	1	6	1	1	7	7	0	2	2	0	4	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.869
Loss Time (sec):	16	Average Delay (sec/veh):	25.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	24	24	10	24	24
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	2	0 1	1 0	0	1 0	1 0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	37	445	12	31	511	46	79	104	43	18	70	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	445	12	31	511	46	79	104	43	18	70	29
Added Vol:	0	44	0	16	34	14	11	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	489	12	47	545	60	90	104	43	18	70	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	39	519	13	50	579	64	96	110	46	19	74	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	519	13	50	579	64	96	110	46	19	74	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	519	13	50	579	64	96	110	46	19	74	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.96	0.96	0.95	1.00	0.85
Lanes:	1.00	1.95	0.05	1.00	2.00	1.00	1.00	0.71	0.29	1.00	1.00	1.00
Final Sat.:	1805	3509	86	1805	3610	1615	1805	1285	531	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.15	0.03	0.16	0.04	0.05	0.09	0.09	0.01	0.04	0.03
Crit Moves:	****				****			****			****	
Green/Cycle:	0.44	0.35	0.35	0.57	0.45	0.45	0.36	0.24	0.24	0.32	0.23	0.23
Volume/Cap:	0.09	0.42	0.42	0.09	0.36	0.09	0.20	0.36	0.36	0.05	0.17	0.13
Delay/Veh:	18.7	28.7	28.7	11.9	21.1	18.3	25.0	36.9	36.9	27.2	35.6	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.7	28.7	28.7	11.9	21.1	18.3	25.0	36.9	36.9	27.2	35.6	35.2
LOS by Move:	B	C	C	B	C	B	C	D	D	C	D	D
HCM2kAvgQ:	1	8	8	1	7	1	2	5	5	0	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
E+P (Buildout) Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	0	Average Delay (sec/veh):	28.8
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	37	56	13	33	53	49	372	68	63	338	10
Added Vol:	0	0	0	0	0	11	14	30	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	37	56	13	33	64	63	402	68	63	365	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	58	41	62	14	36	70	69	442	75	69	402	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	41	62	14	36	70	69	442	75	69	402	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	41	62	14	36	70	69	442	75	69	402	11
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.25	0.39	0.12	0.30	0.58	0.14	0.86	1.00	0.15	0.85	1.00
Final Sat.:	178	124	188	57	145	282	78	499	648	83	480	630
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.25	0.25	0.25	0.89	0.89	0.12	0.84	0.84	0.02
Crit Moves:		****		****				****		****		
Delay/Veh:	12.8	12.8	12.8	11.8	11.8	11.8	38.3	38.3	8.8	32.1	32.1	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.8	12.8	12.8	11.8	11.8	11.8	38.3	38.3	8.8	32.1	32.1	8.3
LOS by Move:	B	B	B	B	B	B	E	E	A	D	D	A
ApproachDel:	12.8			11.8			34.5			31.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.8			11.8			34.5			31.6		
LOS by Appr:	B			B			D			D		
AllWayAvgQ:	0.4	0.4	0.4	0.3	0.3	0.3	4.7	4.7	0.1	3.6	3.6	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 5.5

EXISTING PLUS PROJECT (BUILDOUT) CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

Jurisdiction: **City of Hemet**
Major Street: **Menlo Av.**
Minor Street: **Gilbert St.**

TRAFFIC CONDITIONS — **E+P (Buildout)**
CALC IC — DATE 05/18/10
CHK IC — DATE 05/18/10
Critical Approach Speed (Major) 40 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **9,540** vpd
Minor Street Future ADT = **481** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....
or **RURAL (R)**
In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX — RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied: — Not Satisfied: **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **9,540**	1 **481**
2 +	1
2 +	2 +
1	2 +

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000 *	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied: — Not Satisfied: **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **9,540**	1 **481**
2 +	1
2 +	2 +
1	2 +

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied: — Not Satisfied: **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... A **20%** B **40%**

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC — DATE 05/18/10

CHK IC — DATE 05/18/10

Jurisdiction: **City of Hemet**

Major Street: **Oakland**

Minor Street: **Gilbert St.**

Critical Approach Speed (Major) 30 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,478** vpd

Minor Street Future ADT = **620** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **4,478** / *1* **620**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **4,478** / *1* **620**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied **XX**	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A **26%** B **37%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC — DATE 05/18/10

CHK IC — DATE 05/18/10

Jurisdiction: **City of Hemet**

Major Street: **Menlo Av.**

Minor Street: **Alessandro St.**

Critical Approach Speed (Major) 40 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **10,476** vpd

Minor Street Future ADT = **280** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **RURAL (R)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX — RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied: **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **10,476**	1 **280**
2 +	1
2 +	2 +
1	2 +

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000 *	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied: **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **10,476**	1 **280**
2 +	1
2 +	2 +
1	2 +

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied: **XX**

No one condition satisfied, but following conditions fulfilled 80% of more .....

A	B
12%	**23%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

___ DIST	___ CO	___ RTE	___ PM	TRAFFIC CONDITIONS	E+P (Buildout)
				CALC IC	DATE 05/18/10
Jurisdiction: **City of Hemet**				CHK IC	DATE 05/18/10
Major Street: **Alessandro St.**				Critical Approach Speed (Major)	25 mph
Minor Street: **Dwy 1**				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **422** vpd Minor Street Future ADT = **223** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **422** / *1* **223**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied **XX**	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **422** / *1* **223**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B Satisfied / Not Satisfied **XX**	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A **5%** B **4%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Alessandro St.**

Minor Street: **Ancla**

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC _____ DATE 05/18/10

CHK IC _____ DATE 05/18/10

Critical Approach Speed (Major) 25 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **331** vpd

Minor Street Future ADT = **115** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **331** / *1* **115**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **331** / *1* **115**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **4%** B: **3%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

___ DIST ___ CO ___ RTE ___ PM

TRAFFIC CONDITIONS **E+P (Buildout)**

Jurisdiction: **City of Hemet** CALC IC DATE 05/18/10

Major Street: **Alessandro St.** CHK IC DATE 05/18/10

Minor Street: **Dwy 2** Critical Approach Speed (Major) 25 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **573** vpd Minor Street Future ADT = **240** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied: XX / Not Satisfied:				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **573** / *1* **240**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **573** / *1* **240**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **7%** B: **5%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Oakland**

Minor Street: **Alessandro**

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 30 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,880** vpd

Minor Street Future ADT = **384** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **URBAN (U)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **4,880**	*1* **384**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **4,880**	*1* **384**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** **16%** **B** **32%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

TRAFFIC CONDITIONS — **E+P (Buildout)**

Jurisdiction: **City of Hemet** — CALC IC — DATE 05/18/10

Major Street: **Menlo Av.** — CHK IC — DATE 05/18/10

Minor Street: **Dwy 3** — Critical Approach Speed (Major) 40 mph — Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane — Minor Street Approach Lanes **1** lane

Major Street Future ADT = **9,986** vpd — Minor Street Future ADT = **947** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... ☐

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... ☐

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: *1* **9,986** / Minor Street: *1* **947**	8,000 *	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2 +*	9,600	6,720	3,200	2,240
1 / *2 +*	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street: *1* **9,986** / Minor Street: *1* **947**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2 +*	14,400	10,080	1,600	1,120
1 / *2 +*	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS		2 CONDITIONS	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: **39%** B: **79%**	80%		80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Jurisdiction: **City of Hemet**

Major Street: **Oakland**

Minor Street: **Dwy 4**

Critical Approach Speed (Major) 30 mph

Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **4,947** vpd

Minor Street Future ADT = **175** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or **URBAN (U)**

In built up area of isolated community of < 10,000 population .....

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,947**	*1* **175**
2 +	*1*
2 +	*2 +*
1	*2 +*

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1 **4,947**	*1* **175**
2 +	*1*
2 +	*2 +*
1	*2 +*

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400	10,080	1,200	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more .....

A	B
7%	**15%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM

Jurisdiction: **City of Hemet**
Major Street: **State**
Minor Street: **Dwy 7**

TRAFFIC CONDITIONS — **E+P (Buildout)**
CALC IC — DATE 05/18/10
CHK IC — DATE 05/18/10
Critical Approach Speed (Major) 35 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane
Major Street Future ADT = **16,736** vpd
Minor Street Future ADT = **1,266** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....
or
In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX — RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied: **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 + **16,736**	1 **1,266**
2 +	2 +
1	2 +

Minimum Requirements EADT

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
8,000	5,600	2,400	1,680
9,600 *	6,720	2,400	1,680
9,600	6,720	3,200	2,240
8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied: **XX** — Not Satisfied

Number of lanes for moving traffic on each approach

Major Street	Minor Street
1	1
2 + **16,736**	1 **1,266**
2 +	2 +
1	2 +

Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Urban	Rural	Urban	Rural
12,000	8,400	1,200	850
14,400 *	10,080	1,200 *	850
14,400	10,080	1,600	1,120
12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied: **XX**

No one condition satisfied, but following conditions fulfilled 80% of more .....

A	B
53%	**100%**

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST ___ CO ___ RTE ___ PM ___

Jurisdiction: **City of Hemet**

Major Street: **Menlo**

Minor Street: **Buena Vista**

TRAFFIC CONDITIONS — **E+P (Buildout)**

CALC IC DATE 05/18/10

CHK IC DATE 05/18/10

Critical Approach Speed (Major) 35 mph

Critical Approach Speed (Minor) 30 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes **1** lane

Major Street Future ADT = **11,364** vpd

Minor Street Future ADT = **1,860** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....

or

In built up area of isolated community of < 10,000 population .....

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **11,364** / *1* **1,860**	8,000 *	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: **XX**				
Number of lanes for moving traffic on each approach: Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **11,364** / *1* **1,860**	12,000	8,400	1,200 *	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: **XX**	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** **78%** **B** **95%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

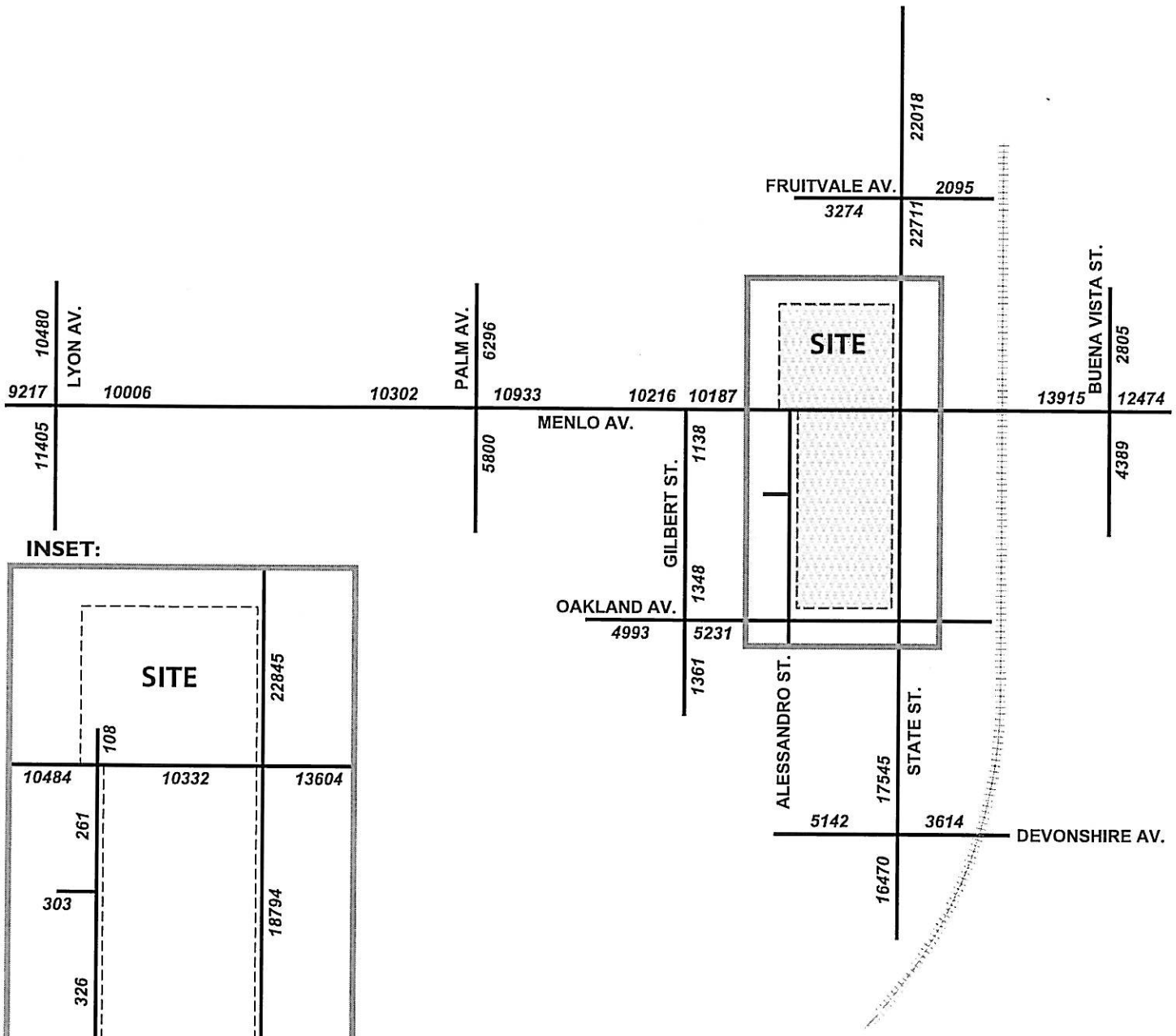
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APPENDIX 6.1

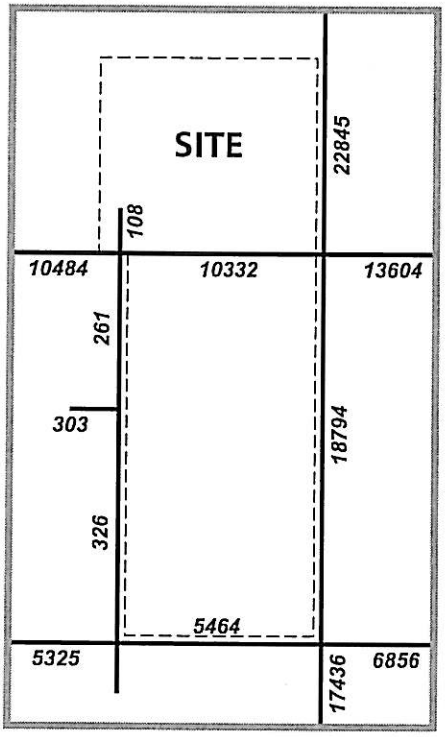
INTERIM YEAR 2016 AVERAGE DAILY TRAFFIC (ADT)

EXHIBIT 6.1-1

2016 WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



INSET:



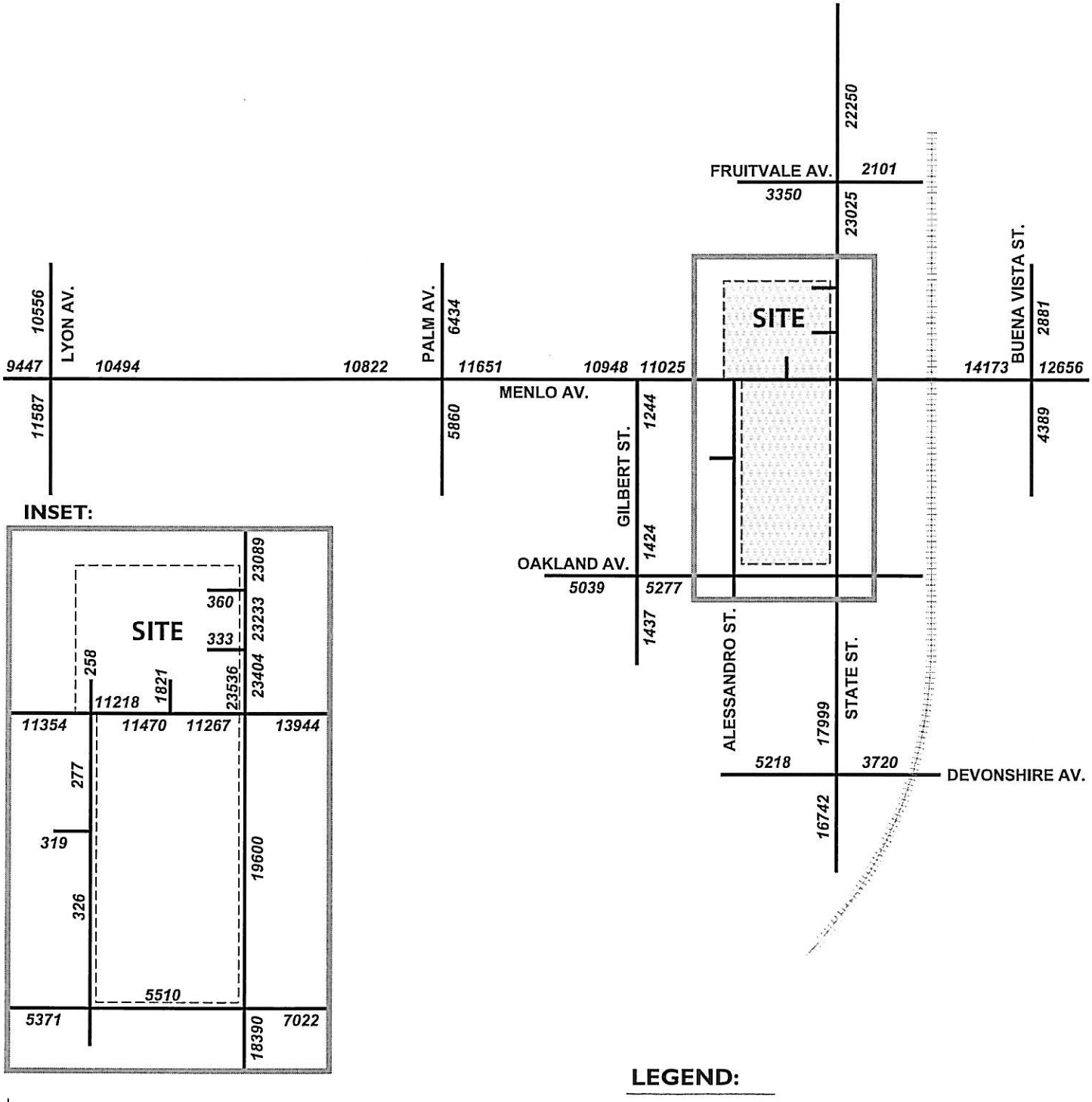
LEGEND:

100 = VEHICLES PER DAY

N

EXHIBIT 6.1-2

2016 WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



APPENDIX 6.2

INTERIM YEAR 2016 WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.947
Loss Time (sec):	0	Average Delay (sec/veh):	40.6
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	0 1	0 0	1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	214	41	51	275	29	18	249	34	30	224	17
Added Vol:	8	24	9	1	60	0	0	54	22	20	47	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	238	50	52	335	29	18	303	56	50	271	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	38	250	52	54	352	31	19	319	59	53	285	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	250	52	54	352	31	19	319	59	53	285	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	250	52	54	352	31	19	319	59	53	285	19
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.87	1.00	0.13	0.87	1.00	0.06	0.94	1.00	0.15	0.80	0.05
Final Sat.:	53	347	436	57	372	470	23	390	449	61	326	21
Capacity Analysis Module:												
Vol/Sat:	0.72	0.72	0.12	0.95	0.95	0.07	0.82	0.82	0.13	0.88	0.88	0.88
Crit Moves:		****			****			****			****	
Delay/Veh:	28.7	28.7	11.6	58.3	58.3	10.8	36.8	36.8	11.6	45.4	45.4	45.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.7	28.7	11.6	58.3	58.3	10.8	36.8	36.8	11.6	45.4	45.4	45.4
LOS by Move:	D	D	B	F	F	B	E	E	B	E	E	E
ApproachDel:		26.1			55.0			33.0			45.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		26.1			55.0			33.0			45.4	
LOS by Appr:		D			F			D			E	
AllWayAvgQ:	1.9	1.9	0.1	5.6	5.6	0.1	2.9	2.9	0.1	3.8	3.8	3.8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	0	Average Delay (sec/veh):	17.7
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	29	124	15	37	134	21	20	287	39	33	222	18
Added Vol:	0	9	1	1	15	6	2	58	0	2	56	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	133	16	38	149	27	22	345	39	35	278	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	140	16	40	157	29	23	363	41	36	292	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	140	16	40	157	29	23	363	41	36	292	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	140	16	40	157	29	23	363	41	36	292	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.82	1.00	0.20	0.80	1.00	1.00	1.00	1.00	1.00	0.94	0.06
Final Sat.:	82	374	503	95	370	513	466	507	553	482	494	34
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.03	0.42	0.42	0.06	0.05	0.72	0.07	0.08	0.59	0.59
Crit Moves:		****			****			****				****
Delay/Veh:	13.9	13.9	9.5	14.7	14.7	9.5	10.5	24.3	9.4	10.4	17.7	17.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.9	13.9	9.5	14.7	14.7	9.5	10.5	24.3	9.4	10.4	17.7	17.7
LOS by Move:	B	B	A	B	B	A	B	C	A	B	C	C
ApproachDel:		13.5			14.0			22.1			16.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		13.5			14.0			22.1			16.9	
LOS by Appr:		B			B			C			C	
AllWayAvgQ:	0.5	0.5	0.0	0.6	0.6	0.1	0.0	2.1	0.1	0.1	1.2	1.2

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[13.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			1 0 1 0 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	24	0	14	0	0	0	0	288	10	10	270	0
Added Vol:	6	0	0	0	0	0	0	56	4	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	14	0	0	0	0	344	14	10	323	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	0	14	0	0	0	0	362	15	11	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	31	0	14	0	0	0	0	362	15	11	340	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	731	731	370	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	377	xxxx	xxxxx
Potent Cap.:	392	351	680	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1192	xxxx	xxxxx
Move Cap.:	389	348	680	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1192	xxxx	xxxxx
Volume/Cap:	0.08	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	449	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		13.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: B[11.6]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6		17		10	6		15		8	4		140		5	13		139		7
Growth Adj:	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13
Initial Bse:	7		19		11	7		17		9	5		158		6	15		157		8
Added Vol:	4		3		0	0		2		2	1		6		1	0		11		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	11		22		11	7		19		11	6		164		7	15		168		8
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	11		23		12	7		20		12	6		172		7	15		176		8
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	11		23		12	7		20		12	6		172		7	15		176		8
Critical Gap Module:																				
Critical Gp:	7.1		6.5		6.2	7.1		6.5		6.2	4.1		xxxx		xxxxx	4.1		xxxx		xxxxx
FollowUpTim:	3.5		4.0		3.3	3.5		4.0		3.3	2.2		xxxx		xxxxx	2.2		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	411		399		172	412		398		176	185		xxxx		xxxxx	179		xxxx		xxxxx
Potent Cap.:	555		542		877	554		543		872	1402		xxxx		xxxxx	1409		xxxx		xxxxx
Move Cap.:	526		534		877	522		535		872	1402		xxxx		xxxxx	1409		xxxx		xxxxx
Volume/Cap:	0.02		0.04		0.01	0.01		0.04		0.01	0.00		xxxx		xxxx	0.01		xxxx		xxxx
Level Of Service Module:																				
2Way95thQ:	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Control Del:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	7.6		xxxx		xxxxx	7.6		xxxx		xxxxx
LOS by Move:	*		*		*	*		*		*	A		*		*	A		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		590	xxxxx		xxxx		602	xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx		0.3	xxxxx		xxxxx		0.2	xxxxx		0.0	xxxx		xxxxx		0.0	xxxx		xxxxx	
Shrd ConDel:	xxxxx		11.6	xxxxx		xxxxx		11.4	xxxxx		7.6	xxxx		xxxxx		7.6	xxxx		xxxxx	
Shared LOS:	*		B	*		*		B	*		A	*		*		A	*		*	
ApproachDel:	11.6					11.4					xxxxxx					xxxxxx				
ApproachLOS:	B					B					*					*				

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[16.0]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1! 0	0	1	0	0	0	0	0	1			0	1	0	0	0	
Volume Module: >> Count Date: 10 Jun 2010 <<																		
Base Vol:	1	0	4	1	0	0	0	278	4				2	251	0			
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13				1.13	1.13	1.13			
Initial Bse:	1	0	5	1	0	0	0	313	5				2	283	0			
Added Vol:	3	0	0	0	0	0	0	54	2				0	50	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	4	0	5	1	0	0	0	367	7				2	333	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	4	0	5	1	0	0	0	386	7				2	350	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	4	0	5	1	0	0	0	386	7				2	350	0			
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	741	741	386	747	xxxx	xxxxx	xxxx	xxxx	xxxxx				393	xxxx	xxxxx			
Potent Cap.:	335	346	666	332	xxxx	xxxxx	xxxx	xxxx	xxxxx				1176	xxxx	xxxxx			
Move Cap.:	334	346	666	329	xxxx	xxxxx	xxxx	xxxx	xxxxx				1176	xxxx	xxxxx			
Volume/Cap:	0.01	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx				0.0	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	16.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx				8.1	xxxx	xxxxx			
LOS by Move:	*	*	*	C	*	*	*	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	451	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd ConDel:	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx				8.1	xxxx	xxxxx			
Shared LOS:	*	B	*	*	*	*	A	*	*				A	*	*			
ApproachDel:	13.1			16.0			xxxxxx						xxxxxx					
ApproachLOS:	B			C			*						*					

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: A[8.5]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	8	4	0	0	4	2	1	0	4	0	0	0				
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13				
Initial Bse:	9	5	0	0	5	2	1	0	5	0	0	0				
Added Vol:	0	0	0	0	0	2	3	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	9	5	0	0	5	4	4	0	5	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
PHF Volume:	9	5	0	0	5	4	4	0	5	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	9	5	0	0	5	4	4	0	5	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	9	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	31	7	xxxx	xxxx	xxxxx				
Potent Cap.:	1624	xxxx	xxxxx	xxxx	xxxx	xxxxx	989	866	1081	xxxx	xxxx	xxxxx				
Move Cap.:	1624	xxxx	xxxxx	xxxx	xxxx	xxxxx	984	861	1081	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1033	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx						
ApproachLOS:	*			*			A			*						

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	7	0	2	1	175	0	0	196	11
Added Vol:	0	0	0	0	0	0	0	6	0	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	2	1	181	0	0	207	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	7	0	2	1	190	0	0	218	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	7	0	2	1	190	0	0	218	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	416	416	224	230	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	597	530	821	1350	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	596	530	821	1350	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	640	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	70	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	12	Average Delay (sec/veh):	18.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	46	481	98	51	524	28	54	19	52	43	20	30
Added Vol:	5	77	0	0	99	2	7	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	558	98	51	623	30	61	19	65	43	20	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	54	587	103	53	655	32	64	20	68	45	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	587	103	53	655	32	64	20	68	45	21	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	587	103	53	655	32	64	20	68	45	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.81	0.81	0.81	0.78	0.78	0.85
Lanes:	1.00	1.70	0.30	1.00	1.91	0.09	0.42	0.13	0.45	0.68	0.32	1.00
Final Sat.:	1805	3003	527	1805	3419	166	644	202	684	999	473	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.03	0.19	0.19	0.10	0.10	0.10	0.05	0.05	0.02
Crit Moves:		****		****				****				
Green/Cycle:	0.22	0.40	0.40	0.14	0.33	0.33	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.14	0.49	0.49	0.21	0.59	0.59	0.35	0.35	0.35	0.16	0.16	0.07
Delay/Veh:	22.3	15.9	15.9	26.9	20.5	20.5	20.3	20.3	20.3	18.9	18.9	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.3	15.9	15.9	26.9	20.5	20.5	20.3	20.3	20.3	18.9	18.9	18.3
LOS by Move:	C	B	B	C	C	C	C	C	C	B	B	B
HCM2kAvgQ:	1	6	6	1	7	7	3	3	3	1	1	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	16	Average Delay (sec/veh):	35.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	422	47	105	473	34	61	221	37	26	223	166
Added Vol:	5	40	5	7	91	15	29	13	12	16	30	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	462	52	112	564	49	90	234	49	42	253	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	35	487	55	118	594	51	95	246	52	44	266	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	487	55	118	594	51	95	246	52	44	266	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	487	55	118	594	51	95	246	52	44	266	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.80	0.20	1.00	1.84	0.16	0.28	0.72	1.00	0.14	0.86	1.00
Final Sat.:	1805	3194	361	1805	3283	284	520	1353	1615	268	1619	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.15	0.07	0.18	0.18	0.18	0.18	0.03	0.16	0.16	0.12
Crit Moves:		****		****				****			****	
Green/Cycle:	0.11	0.23	0.23	0.11	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.17	0.67	0.67	0.57	0.80	0.80	0.76	0.76	0.13	0.69	0.69	0.48
Delay/Veh:	35.6	33.2	33.2	40.9	37.6	37.6	38.7	38.7	26.5	35.0	35.0	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.6	33.2	33.2	40.9	37.6	37.6	38.7	38.7	26.5	35.0	35.0	29.8
LOS by Move:	D	C	C	D	D	D	D	D	C	D	D	C
HCM2kAvgQ:	1	8	8	4	11	11	10	10	1	9	9	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.386
Loss Time (sec):	12	Average Delay (sec/veh):	18.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	15	458	14	50	474	21	20	140	21	25	171	39
Added Vol:	0	47	0	7	112	0	0	6	0	0	11	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	505	14	57	586	21	20	146	21	25	182	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	15	532	14	60	617	23	21	153	23	26	192	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	532	14	60	617	23	21	153	23	26	192	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	532	14	60	617	23	21	153	23	26	192	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.54	0.98	0.98	0.62	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.87	0.13	1.00	0.81	0.19
Final Sat.:	1805	3610	1615	1805	3465	127	1018	1625	239	1178	1498	349
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.01	0.03	0.18	0.18	0.02	0.09	0.09	0.02	0.13	0.13
Crit Moves:	****				****						****	
Green/Cycle:	0.15	0.29	0.29	0.19	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.06	0.51	0.03	0.17	0.55	0.55	0.06	0.28	0.28	0.07	0.38	0.38
Delay/Veh:	23.6	19.9	16.7	22.2	18.7	18.7	14.6	15.9	15.9	14.6	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	19.9	16.7	22.2	18.7	18.7	14.6	15.9	15.9	14.6	16.7	16.7
LOS by Move:	C	B	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	5	0	1	6	6	0	3	3	0	4	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 24.5
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0	0	1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	21	410	16		54	411	34		48	95	24		8	42	25	
Added Vol:	0	46	0		2	110	0		0	0	0		0	0	1	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	21	456	16		56	521	34		48	95	24		8	42	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	23	480	17		59	548	36		51	100	25		8	44	27	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	23	480	17		59	548	36		51	100	25		8	44	27	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	23	480	17		59	548	36		51	100	25		8	44	27	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.93	0.07		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3472	120		1805	3610	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.14	0.14		0.03	0.15	0.02		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.56	0.42	0.42		0.44	0.34	0.34		0.36	0.23	0.23		0.36	0.23	0.23	
Volume/Cap:	0.04	0.33	0.33		0.12	0.44	0.06		0.10	0.30	0.30		0.02	0.10	0.07	
Delay/Veh:	11.1	20.4	20.4		16.9	27.0	23.2		22.1	33.9	33.9		21.7	32.1	31.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	11.1	20.4	20.4		16.9	27.0	23.2		22.1	33.9	33.9		21.7	32.1	31.9	
LOS by Move:	B	C	C		B	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	0	6	6		1	7	1		1	3	3		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0	Average Delay (sec/veh):	18.9
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	48	36	51	10	35	48	36	268	46	51	365	28
Added Vol:	6	0	0	0	0	5	3	18	3	0	47	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	36	51	10	35	53	39	286	49	51	412	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	38	53	11	37	56	41	301	52	53	434	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	38	53	11	37	56	41	301	52	53	434	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	38	53	11	37	56	41	301	52	53	434	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.39	0.25	0.36	0.10	0.35	0.55	0.12	0.88	1.00	0.11	0.89	1.00
Final Sat.:	200	132	186	53	181	277	71	517	664	67	544	692
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.20	0.20	0.20	0.58	0.58	0.08	0.80	0.80	0.04
Crit Moves:	****			****				****		****		
Delay/Veh:	11.5	11.5	11.5	10.6	10.6	10.6	16.2	16.2	8.3	26.6	26.6	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	11.5	11.5	10.6	10.6	10.6	16.2	16.2	8.3	26.6	26.6	8.0
LOS by Move:	B	B	B	B	B	B	C	C	A	D	D	A
ApproachDel:	11.5			10.6			15.2			25.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.5			10.6			15.2			25.6		
LOS by Appr:	B			B			C			D		
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	1.2	1.2	0.1	3.1	3.1	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.168
Loss Time (sec):	0	Average Delay (sec/veh):	97.9
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	286	55	35	330	46	33	244	18	50	230	35
Added Vol:	25	76	31	2	49	0	0	74	15	20	82	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	362	86	37	379	46	33	318	33	70	312	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	56	379	90	39	397	48	34	333	35	73	326	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	379	90	39	397	48	34	333	35	73	326	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	379	90	39	397	48	34	333	35	73	326	39
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.87	1.00	0.09	0.91	1.00	0.09	0.91	1.00	0.17	0.74	0.09
Final Sat.:	50	339	423	35	355	423	36	350	420	62	279	33
Capacity Analysis Module:												
Vol/Sat:	1.12	1.12	0.21	1.12	1.12	0.11	0.95	0.95	0.08	1.17	1.17	1.17
Crit Moves:		****			****			****			****	
Delay/Veh:	112.0	112	13.5	111.9	112	12.3	65.3	65.3	12.0	130.9	131	130.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.0	112	13.5	111.9	112	12.3	65.3	65.3	12.0	130.9	131	130.9
LOS by Move:	F	F	B	F	F	B	F	F	B	F	F	F
ApproachDel:		95.1			102.0			60.7			130.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		95.1			102.0			60.7			130.9	
LOS by Appr:		F			F			F			F	
AllWayAvgQ:	10.8	10.8	0.3	10.8	10.8	0.1	5.7	5.7	0.1	12.3	12.3	12.3

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	0	Average Delay (sec/veh):	36.0
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	24	170	33	36	145	30	43	277	18	51	297	47
Added Vol:	0	25	3	3	19	4	7	91	0	2	92	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	195	36	39	164	34	50	368	18	53	389	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	205	38	41	173	36	52	387	19	55	410	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	205	38	41	173	36	52	387	19	55	410	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	205	38	41	173	36	52	387	19	55	410	53
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.89	1.00	0.19	0.81	1.00	1.00	1.00	1.00	1.00	0.89	0.11
Final Sat.:	45	374	457	79	334	453	410	441	474	442	431	56
Capacity Analysis Module:												
Vol/Sat:	0.55	0.55	0.08	0.52	0.52	0.08	0.13	0.88	0.04	0.13	0.95	0.95
Crit Moves:		****			****			****			****	
Delay/Veh:	19.9	19.9	10.9	19.1	19.1	10.9	12.5	45.0	10.4	11.7	54.9	54.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.9	19.9	10.9	19.1	19.1	10.9	12.5	45.0	10.4	11.7	54.9	54.9
LOS by Move:	C	C	B	C	C	B	B	E	B	B	F	F
ApproachDel:		18.6			17.9			39.9			50.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		18.6			17.9			39.9			50.3	
LOS by Appr:		C			C			E			F	
AllWayAvgQ:	1.0	1.0	0.1	0.9	0.9	0.1	0.1	4.2	0.0	0.1	6.1	6.1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[14.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0 1	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	9	0	30	0	0	0	0	334	20	15	318	0
Added Vol:	10	0	1	0	0	0	0	85	11	1	87	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	0	31	0	0	0	0	419	31	16	405	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	20	0	33	0	0	0	0	442	33	16	426	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	0	33	0	0	0	0	442	33	16	426	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	917	917	458	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	474	xxxx	xxxxx
Potent Cap.:	305	274	607	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1098	xxxx	xxxxx
Move Cap.:	301	270	607	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1098	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	439	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		14.3		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 3.0 Worst Case Level Of Service: B[13.1]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6	28	12	15	25	4	5	130	3	10	184	10								
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13								
Initial Bse:	7	32	14	17	28	5	6	146	3	11	207	11								
Added Vol:	3	5	0	0	6	2	3	18	7	0	14	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	10	37	14	17	34	7	9	164	10	11	221	11								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	10	38	14	18	36	7	9	173	11	12	233	12								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	10	38	14	18	36	7	9	173	11	12	233	12								
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	475	460	173	480	459	233	245	xxxx	xxxxx	184	xxxx	xxxxx								
Potent Cap.:	503	501	876	500	502	811	1333	xxxx	xxxxx	1403	xxxx	xxxxx								
Move Cap.:	466	494	876	457	494	811	1333	xxxx	xxxxx	1403	xxxx	xxxxx								
Volume/Cap:	0.02	0.08	0.02	0.04	0.07	0.01	0.01	xxxx	xxxx	0.01	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	7.6	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	542	xxxxx	xxxx	504	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.4	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx								
Shrd ConDel:	xxxxx	12.5	xxxxx	xxxxx	13.1	xxxxx	7.7	xxxx	xxxxx	7.6	xxxx	xxxxx								
Shared LOS:	*	B	*	*	B	*	A	*	*	A	*	*								
ApproachDel:	12.5			13.1			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[16.3]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	1	0	4	1	0	2	3	314	5		1	316	2							
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13		1.13	1.13	1.13							
Initial Bse:	1	0	5	1	0	2	3	354	6		1	356	2							
Added Vol:	5	0	0	0	0	0	0	80	5		0	83	0							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	6	0	5	1	0	2	3	434	11		1	439	2							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	6	0	5	1	0	2	4	456	11		1	462	2							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	6	0	5	1	0	2	4	456	11		1	462	2							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	930	930	456	937	940	463	464	xxxx	xxxxx		468	xxxx	xxxxx							
Potent Cap.:	250	269	608	247	266	603	1108	xxxx	xxxxx		1105	xxxx	xxxxx							
Move Cap.:	248	268	608	244	264	603	1108	xxxx	xxxxx		1105	xxxx	xxxxx							
Volume/Cap:	0.03	0.00	0.01	0.00	0.00	0.00	0.00	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx		8.3	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	331	xxxxx	xxxx	405	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx	16.3	xxxxx	xxxxx	14.0	xxxxx	8.3	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	C	*	*	B	*	A	*	*		*	*	*							
ApproachDel:	16.3			14.0			xxxxxx				xxxxxx									
ApproachLOS:	C			B			*				*									

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0	0	0 0 0	1	0	0 0	1! 0	0	0 0 0	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	10	5	0	0	6	1	1	0	3	0	0	0
Added Vol:	0	0	0	0	0	5	5	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	5	0	0	6	6	6	0	3	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	11	5	0	0	6	6	6	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	5	0	0	6	6	6	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	12	xxxx	xxxxx	xxxx	xxxx	xxxxx	35	35	9	xxxx	xxxx	xxxxx
Potent Cap.:	1620	xxxx	xxxxx	xxxx	xxxx	xxxxx	983	861	1078	xxxx	xxxx	xxxxx
Move Cap.:	1620	xxxx	xxxxx	xxxx	xxxx	xxxxx	978	855	1078	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1011	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.0]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10								
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13								
Initial Bse:	0	0	0	8	0	5	3	173	0	0	233	11								
Added Vol:	0	0	0	0	0	0	0	19	0	0	14	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	8	0	5	3	192	0	0	247	11								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	0	0	0	8	0	5	4	203	0	0	260	12								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	0	8	0	5	4	203	0	0	260	12								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	476	476	266	272	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	551	491	777	1303	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	550	490	777	1303	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	616	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx			11.0			xxxxxx			xxxxxx										
ApproachLOS:	*			B			*			*										

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	12	Average Delay (sec/veh):	18.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	50	707	32	16	736	56	62	2	64	75	11	38
Added Vol:	15	134	0	0	119	8	4	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	841	32	16	855	64	66	2	73	75	11	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	68	885	33	17	900	68	69	2	77	79	12	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	885	33	17	900	68	69	2	77	79	12	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	68	885	33	17	900	68	69	2	77	79	12	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.76	0.76	0.76	0.63	0.63	0.85
Lanes:	1.00	1.93	0.07	1.00	1.86	0.14	0.47	0.01	0.52	0.87	0.13	1.00
Final Sat.:	1805	3462	130	1805	3324	250	672	23	746	1047	156	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.26	0.01	0.27	0.27	0.10	0.10	0.10	0.08	0.08	0.02
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.47	0.47	0.19	0.56	0.56	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.36	0.55	0.55	0.05	0.49	0.49	0.49	0.49	0.49	0.36	0.36	0.12
Delay/Veh:	40.7	18.4	18.4	31.3	13.0	13.0	34.1	34.1	34.1	32.8	32.8	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.7	18.4	18.4	31.3	13.0	13.0	34.1	34.1	34.1	32.8	32.8	30.4
LOS by Move:	D	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	10	10	0	9	9	4	4	4	3	3	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.914
Loss Time (sec): 16 Average Delay (sec/veh): 54.0
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	20	557	69	206	636	64	55	265	39	54	275	157
Added Vol:	15	108	17	14	73	39	29	42	9	9	29	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	665	86	220	709	103	84	307	48	63	304	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	700	90	232	747	109	89	323	51	66	320	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	700	90	232	747	109	89	323	51	66	320	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	700	90	232	747	109	89	323	51	66	320	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.77	0.23	1.00	1.75	0.25	0.22	0.78	1.00	0.17	0.83	1.00
Final Sat.:	1805	3144	405	1805	3092	450	405	1474	1615	324	1559	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.22	0.13	0.24	0.24	0.22	0.22	0.03	0.21	0.21	0.11
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.24	0.24	0.14	0.28	0.28	0.24	0.24	0.24	0.22	0.22	0.22
Volume/Cap:	0.19	0.91	0.91	0.91	0.88	0.88	0.91	0.91	0.13	0.91	0.91	0.49
Delay/Veh:	43.1	52.7	52.7	79.1	45.4	45.4	62.0	62.0	31.5	63.9	63.9	36.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.1	52.7	52.7	79.1	45.4	45.4	62.0	62.0	31.5	63.9	63.9	36.5
LOS by Move:	D	D	D	E	D	D	E	E	C	E	E	D
HCM2kAvgQ:	1	17	17	11	17	17	17	17	1	16	16	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec): 70 Critical Vol./Cap.(X): 0.481
Loss Time (sec): 12 Average Delay (sec/veh): 20.2
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	29	575	50	57	616	21	26	137	18	29	194	65
Added Vol:	0	131	0	5	86	1	1	18	0	0	13	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	706	50	62	702	22	27	155	18	29	207	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	30	734	51	65	729	23	28	161	19	30	215	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	734	51	65	729	23	28	161	19	30	215	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	734	51	65	729	23	28	161	19	30	215	76
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.44	0.98	0.98	0.60	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.94	0.06	1.00	0.90	0.10	1.00	0.74	0.26
Final Sat.:	1805	3610	1615	1805	3481	111	832	1675	194	1136	1348	478
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.03	0.04	0.21	0.21	0.03	0.10	0.10	0.03	0.16	0.16
Crit Moves:		****		****							****	
Green/Cycle:	0.21	0.37	0.37	0.14	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.08	0.55	0.09	0.25	0.68	0.68	0.11	0.31	0.31	0.09	0.51	0.51
Delay/Veh:	22.6	17.8	14.3	27.2	22.9	22.9	17.2	18.5	18.5	17.0	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.6	17.8	14.3	27.2	22.9	22.9	17.2	18.5	18.5	17.0	20.3	20.3
LOS by Move:	C	B	B	C	C	C	B	B	B	B	C	C
HCM2kAvgQ:	1	7	1	1	9	9	1	3	3	1	6	6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.900
Loss Time (sec): 16 Average Delay (sec/veh): 26.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	37	445	12		31	511	46		79	104	43		18	70	29	
Growth Adj:	1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	42	501	14		35	575	52		89	117	48		20	79	33	
Added Vol:	0	128	0		2	83	1		1	0	0		0	0	3	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	42	629	14		37	658	53		90	117	48		20	79	36	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	44	662	14		39	693	56		95	123	51		21	83	38	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	44	662	14		39	693	56		95	123	51		21	83	38	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	44	662	14		39	693	56		95	123	51		21	83	38	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.96	0.96		0.95	1.00	0.85	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		1.00	0.71	0.29		1.00	1.00	1.00	
Final Sat.:	1805	3523	76		1805	3610	1615		1805	1285	531		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.19	0.19		0.02	0.19	0.03		0.05	0.10	0.10		0.01	0.04	0.02	
Crit Moves:	****					****				****			****			
Green/Cycle:	0.46	0.37	0.37		0.58	0.46	0.46		0.35	0.23	0.23		0.31	0.22	0.22	
Volume/Cap:	0.11	0.50	0.50		0.08	0.42	0.08		0.21	0.42	0.42		0.06	0.20	0.10	
Delay/Veh:	17.3	28.2	28.2		11.9	21.1	17.5		25.9	38.5	38.5		27.9	36.5	35.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.3	28.2	28.2		11.9	21.1	17.5		25.9	38.5	38.5		27.9	36.5	35.7	
LOS by Move:	B	C	C		B	C	B		C	D	D		C	D	D	
HCM2kAvgQ:	1	10	10		1	9	1		2	5	5		1	2	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.015
Loss Time (sec):	0	Average Delay (sec/veh):	46.3
Optimal Cycle:	0	Level Of Service:	~~E~~ F V/C >1.0

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	60	42	63	15	37	60	55	419	77	71	381	11
Added Vol:	8	0	0	0	0	7	9	54	10	0	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	42	63	15	37	67	64	473	87	71	416	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	71	44	66	15	39	70	68	498	91	75	437	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	44	66	15	39	70	68	498	91	75	437	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	44	66	15	39	70	68	498	91	75	437	12
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.39	0.24	0.37	0.12	0.31	0.57	0.12	0.88	1.00	0.15	0.85	1.00
Final Sat.:	191	118	178	59	149	268	67	490	623	79	464	613
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.26	0.26	0.26	1.02	1.02	0.15	0.94	0.94	0.02
Crit Moves:		****			****			****			****	
Delay/Veh:	14.2	14.2	14.2	12.7	12.7	12.7	67.0	67.0	9.4	50.5	50.5	8.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	14.2	12.7	12.7	12.7	67.0	67.0	9.4	50.5	50.5	8.7
LOS by Move:	B	B	B	B	B	B	F	F	A	F	F	A
ApproachDel:		14.2			12.7			59.0			49.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.2			12.7			59.0			49.6	
LOS by Appr:		B			B			F			E	
AllWayAvgQ:	0.5	0.5	0.5	0.3	0.3	0.3	8.9	8.9	0.2	6.2	6.2	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 6.3

INTERIM YEAR 2016 WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	0	Average Delay (sec/veh):	44.0
Optimal Cycle:	0	Level Of Service:	E

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	214	41	51	275	29	18	249	34	30	224	17
Added Vol:	8	24	16	4	60	0	0	61	22	22	50	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	238	57	55	335	29	18	310	56	52	274	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	38	250	60	58	352	31	19	326	59	55	289	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	250	60	58	352	31	19	326	59	55	289	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	250	60	58	352	31	19	326	59	55	289	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.87	1.00	0.14	0.86	1.00	0.05	0.95	1.00	0.15	0.80	0.05
Final Sat.:	52	344	432	60	365	465	23	388	447	61	321	22
Capacity Analysis Module:												
Vol/Sat:	0.73	0.73	0.14	0.97	0.97	0.07	0.84	0.84	0.13	0.90	0.90	0.90
Crit Moves:		****			****			****			****	
Delay/Veh:	29.8	29.8	11.9	63.3	63.3	10.9	40.3	40.3	11.7	50.1	50.1	50.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	29.8	11.9	63.3	63.3	10.9	40.3	40.3	11.7	50.1	50.1	50.1
LOS by Move:	D	D	B	F	F	B	E	E	B	F	F	F
ApproachDel:		26.8			59.6			36.1			50.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		26.8			59.6			36.1			50.1	
LOS by Appr:		D			F			E			F	
AllWayAvgQ:	2.0	2.0	0.1	6.2	6.2	0.1	3.3	3.3	0.1	4.3	4.3	4.3

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	0	Average Delay (sec/veh):	19.3
Optimal Cycle:	0	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 0	1	0 1	0 0	1	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	29	124	15	37	134	21	20	287	39	33	222	18
Added Vol:	0	9	3	6	15	6	2	76	0	3	63	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	133	18	43	149	27	22	363	39	36	285	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	140	19	45	157	29	23	382	41	38	300	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	140	19	45	157	29	23	382	41	38	300	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	140	19	45	157	29	23	382	41	38	300	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.82	1.00	0.22	0.78	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	81	367	492	103	355	504	462	503	547	476	484	36
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.04	0.44	0.44	0.06	0.05	0.76	0.08	0.08	0.62	0.62
Crit Moves:	****				****			****			****	
Delay/Veh:	14.2	14.2	9.6	15.3	15.3	9.7	10.6	27.7	9.5	10.5	18.8	18.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.2	14.2	9.6	15.3	15.3	9.7	10.6	27.7	9.5	10.5	18.8	18.8
LOS by Move:	B	B	A	C	C	A	B	D	A	B	C	C
ApproachDel:	13.8			14.6			25.1			17.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.8			14.6			25.1			17.9		
LOS by Appr:	B			B			D			C		
AllWayAvgQ:	0.5	0.5	0.0	0.7	0.7	0.1	0.0	2.5	0.1	0.1	1.4	1.4

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[14.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	24	0	14	0	0	0	0	288	10	10	270	0
Added Vol:	6	0	4	0	0	0	0	81	4	1	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	18	0	0	0	0	369	14	11	332	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	0	18	0	0	0	0	389	15	12	350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	31	0	18	0	0	0	0	389	15	12	350	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	769	769	396	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	404	xxxx	xxxxx
Potent Cap.:	372	334	658	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1166	xxxx	xxxxx
Move Cap.:	369	330	658	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1166	xxxx	xxxxx
Volume/Cap:	0.08	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	441	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	14.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		14.2		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: B[11.7]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0	1! 0	0		0	0	1! 0	0		0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6	17	10	6	15	8	4	140	5		13	139	7							
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13		1.13	1.13	1.13							
Initial Bse:	7	19	11	7	17	9	5	158	6		15	157	8							
Added Vol:	4	6	0	0	3	2	1	8	1		0	11	0							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	11	25	11	7	20	11	6	166	7		15	168	8							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	11	26	12	7	21	12	6	174	7		15	176	8							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	11	26	12	7	21	12	6	174	7		15	176	8							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	414	401	174	416	400	176	185	xxxx	xxxxx		181	xxxx	xxxxx							
Potent Cap.:	553	540	874	551	541	872	1402	xxxx	xxxxx		1406	xxxx	xxxxx							
Move Cap.:	523	532	874	517	533	872	1402	xxxx	xxxxx		1406	xxxx	xxxxx							
Volume/Cap:	0.02	0.05	0.01	0.01	0.04	0.01	0.00	xxxx	xxxx		0.01	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx		7.6	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	584	xxxxx	xxxx	598	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Shrd ConDel:	xxxxx	11.7	xxxxx	xxxxx	11.5	xxxxx	7.6	xxxx	xxxxx		7.6	xxxx	xxxxx							
Shared LOS:	*	B	*	*	B	*	A	*	*		A	*	*							
ApproachDel:	11.7			11.5			xxxxxx				xxxxxx									
ApproachLOS:	B			B			*				*									

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.4]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	1	0	4	1	0	0	0	278	4		2	251	0							
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13		1.13	1.13	1.13							
Initial Bse:	1	0	5	1	0	0	0	313	5		2	283	0							
Added Vol:	3	0	1	1	0	3	1	84	2		0	58	3							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	4	0	6	2	0	3	1	397	7		2	341	3							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	4	0	6	2	0	3	1	418	7		2	359	3							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	4	0	6	2	0	3	1	418	7		2	359	3							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	787	787	418	791	792	360	362	xxxx	xxxxx		425	xxxx	xxxxx							
Potent Cap.:	312	326	639	310	324	689	1208	xxxx	xxxxx		1145	xxxx	xxxxx							
Move Cap.:	310	325	639	306	323	689	1208	xxxx	xxxxx		1145	xxxx	xxxxx							
Volume/Cap:	0.01	0.00	0.01	0.01	0.00	0.00	0.00	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx		8.1	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		439	xxxxx		xxxx		454	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx		0.1	xxxxx		xxxxx		0.0	xxxxx		0.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx		13.4	xxxxx		xxxxx		13.0	xxxxx		8.0	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		B	*		*		B	*		A	*	*			*	*	*		
ApproachDel:		13.4					13.0					xxxxxx					xxxxxx			
ApproachLOS:		B					B					*					*			

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Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

****

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: A[8.5]

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	8	4	0	0	4	2	1	0	4	0	0	0				
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13				
Initial Bse:	9	5	0	0	5	2	1	0	5	0	0	0				
Added Vol:	0	0	0	0	0	2	4	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	9	5	0	0	5	4	5	0	5	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
PHF Volume:	9	5	0	0	5	4	5	0	5	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	9	5	0	0	5	4	5	0	5	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	9	xxxx	xxxxx	xxxx	xxxx	xxxxx	31	31	7	xxxx	xxxx	xxxxx				
Potent Cap.:	1624	xxxx	xxxxx	xxxx	xxxx	xxxxx	989	866	1081	xxxx	xxxx	xxxxx				
Move Cap.:	1624	xxxx	xxxxx	xxxx	xxxx	xxxxx	984	861	1081	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1027	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			8.5			xxxxxx						
ApproachLOS:	*			*			A			*						

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	7	0	2	1	175	0	0	196	11
Added Vol:	0	0	0	0	0	0	0	8	0	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	2	1	183	0	0	207	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	7	0	2	1	192	0	0	218	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	7	0	2	1	192	0	0	218	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	418	418	224	230	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	595	529	821	1350	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	595	528	821	1350	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	639	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec): 70 Critical Vol./Cap.(X): 0.396
Loss Time (sec): 12 Average Delay (sec/veh): 18.9
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	46	481	98	51	524	28	54	19	52	43	20	30
Added Vol:	5	80	0	0	106	2	7	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	561	98	51	630	30	61	19	68	43	20	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	54	590	103	53	663	32	64	20	71	45	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	590	103	53	663	32	64	20	71	45	21	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	590	103	53	663	32	64	20	71	45	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.81	0.81	0.81	0.77	0.77	0.85
Lanes:	1.00	1.70	0.30	1.00	1.91	0.09	0.41	0.13	0.46	0.68	0.32	1.00
Final Sat.:	1805	3006	525	1805	3421	164	632	198	701	998	473	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.03	0.19	0.19	0.10	0.10	0.10	0.05	0.05	0.02
Crit Moves:		****		****				****				
Green/Cycle:	0.22	0.40	0.40	0.14	0.33	0.33	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.14	0.49	0.49	0.21	0.59	0.59	0.36	0.36	0.36	0.16	0.16	0.07
Delay/Veh:	22.3	16.0	16.0	26.9	20.6	20.6	20.4	20.4	20.4	18.9	18.9	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.3	16.0	16.0	26.9	20.6	20.6	20.4	20.4	20.4	18.9	18.9	18.3
LOS by Move:	C	B	B	C	C	C	C	C	C	B	B	B
HCM2kAvgQ:	1	6	6	1	7	7	3	3	3	1	1	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	16	Average Delay (sec/veh):	36.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	422	47	105	473	34	61	221	37	26	223	166
Added Vol:	26	40	5	8	98	16	34	14	14	16	39	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	462	52	113	571	50	95	235	51	42	262	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	487	55	119	601	52	100	247	54	44	276	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	487	55	119	601	52	100	247	54	44	276	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	487	55	119	601	52	100	247	54	44	276	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.80	0.20	1.00	1.84	0.16	0.29	0.71	1.00	0.14	0.86	1.00
Final Sat.:	1805	3194	361	1805	3281	286	539	1334	1615	260	1627	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.07	0.18	0.18	0.19	0.19	0.03	0.17	0.17	0.12
Crit Moves:		****			****			****			****	
Green/Cycle:	0.11	0.23	0.23	0.11	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24
Volume/Cap:	0.28	0.67	0.67	0.58	0.81	0.81	0.78	0.78	0.14	0.71	0.71	0.48
Delay/Veh:	36.4	33.2	33.2	41.1	38.1	38.1	39.6	39.6	26.6	35.9	35.9	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.4	33.2	33.2	41.1	38.1	38.1	39.6	39.6	26.6	35.9	35.9	29.8
LOS by Move:	D	C	C	D	D	D	D	D	C	D	D	C
HCM2kAvgQ:	2	8	8	4	11	11	11	11	1	9	9	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	12	Average Delay (sec/veh):	18.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	15	458	14	50	474	21	20	140	21	25	171	39
Added Vol:	0	62	0	9	118	1	2	6	0	0	11	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	520	14	59	592	22	22	146	21	25	182	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	15	548	14	62	623	24	23	153	23	26	192	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	548	14	62	623	24	23	153	23	26	192	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	548	14	62	623	24	23	153	23	26	192	50
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.53	0.98	0.98	0.62	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.87	0.13	1.00	0.79	0.21
Final Sat.:	1805	3610	1615	1805	3461	131	1003	1625	239	1178	1461	380
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.01	0.03	0.18	0.18	0.02	0.09	0.09	0.02	0.13	0.13
Crit Moves:	****				****						****	
Green/Cycle:	0.15	0.29	0.29	0.19	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.06	0.53	0.03	0.18	0.56	0.56	0.07	0.28	0.28	0.07	0.39	0.39
Delay/Veh:	23.6	20.0	16.7	22.3	18.8	18.8	14.6	15.9	15.9	14.6	16.8	16.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	20.0	16.7	22.3	18.8	18.8	14.6	15.9	15.9	14.6	16.8	16.8
LOS by Move:	C	C	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	5	0	1	6	6	0	3	3	0	4	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 24.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T		R	L	T		R	L	T		R	L	T		R
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19		19	10	19		19	10	24		24	10	24		24
Y+R:	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364		14	48	365		30	43	84		21	7	37		22
Growth Adj:	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13
Initial Bse:	21	410		16	54	411		34	48	95		24	8	42		25
Added Vol:	0	54		0	3	114		1	3	0		0	0	0		5
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	21	464		16	57	525		35	51	95		24	8	42		30
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95
PHF Volume:	23	488		17	60	553		37	54	100		25	8	44		31
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	23	488		17	60	553		37	54	100		25	8	44		31
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	23	488		17	60	553		37	54	100		25	8	44		31
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900		1900
Adjustment:	0.95	0.95		0.95	0.95	0.95		0.85	0.95	0.97		0.97	0.95	1.00		0.85
Lanes:	1.00	1.93		0.07	1.00	2.00		1.00	1.00	0.80		0.20	1.00	1.00		1.00
Final Sat.:	1805	3474		118	1805	3610		1615	1805	1474		369	1805	1900		1615
Capacity Analysis Module:																
Vol/Sat:	0.01	0.14		0.14	0.03	0.15		0.02	0.03	0.07		0.07	0.00	0.02		0.02
Crit Moves:		****				****					****			****		
Green/Cycle:	0.56	0.42		0.42	0.44	0.34		0.34	0.36	0.23		0.23	0.36	0.23		0.23
Volume/Cap:	0.04	0.33		0.33	0.12	0.45		0.07	0.10	0.30		0.30	0.02	0.10		0.08
Delay/Veh:	11.1	20.4		20.4	16.9	27.0		23.2	22.1	33.9		33.9	21.7	32.1		32.0
User DelAdj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	11.1	20.4		20.4	16.9	27.0		23.2	22.1	33.9		33.9	21.7	32.1		32.0
LOS by Move:	B	C		C	B	C		C	C	C		C	C	C		C
HCM2kAvgQ:	0	6		6	1	7		1	1	3		3	0	1		1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.809
Loss Time (sec):	0	Average Delay (sec/veh):	19.5
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	48	36	51	10	35	48	36	268	46	51	365	28
Added Vol:	6	0	0	0	0	8	4	20	3	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	36	51	10	35	56	40	288	49	51	418	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	38	53	11	37	59	42	303	52	53	440	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	38	53	11	37	59	42	303	52	53	440	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	38	53	11	37	59	42	303	52	53	440	30
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.39	0.25	0.36	0.10	0.34	0.56	0.12	0.88	1.00	0.11	0.89	1.00
Final Sat.:	199	132	185	51	176	284	71	513	660	66	543	689
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.21	0.21	0.21	0.59	0.59	0.08	0.81	0.81	0.04
Crit Moves:			****			****	****				****	
Delay/Veh:	11.5	11.5	11.5	10.7	10.7	10.7	16.5	16.5	8.4	27.8	27.8	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	11.5	11.5	10.7	10.7	10.7	16.5	16.5	8.4	27.8	27.8	8.0
LOS by Move:	B	B	B	B	B	B	C	C	A	D	D	A
ApproachDel:	11.5			10.7			15.4			26.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.5			10.7			15.4			26.7		
LOS by Appr:	B			B			C			D		
AllWayAvgQ:	0.3	0.3	0.3	0.2	0.2	0.2	1.3	1.3	0.1	3.3	3.3	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.276
Loss Time (sec):	0	Average Delay (sec/veh):	111.2
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	286	55	35	330	46	33	244	18	50	230	35
Added Vol:	25	76	40	6	49	0	0	84	15	35	96	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	362	95	41	379	46	33	328	33	85	326	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	56	379	100	43	397	48	34	344	35	89	341	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	379	100	43	397	48	34	344	35	89	341	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	379	100	43	397	48	34	344	35	89	341	46
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	0.87	1.00	0.10	0.90	1.00	0.09	0.91	1.00	0.18	0.72	0.10
Final Sat.:	50	337	421	38	349	420	35	351	420	69	267	36
Capacity Analysis Module:												
Vol/Sat:	1.12	1.12	0.24	1.14	1.14	0.12	0.98	0.98	0.08	1.28	1.28	1.28
Crit Moves:		****			****			****			****	
Delay/Veh:	114.1	114	13.9	117.9	118	12.4	71.5	71.5	12.0	171.7	172	171.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	114.1	114	13.9	117.9	118	12.4	71.5	71.5	12.0	171.7	172	171.7
LOS by Move:	F	F	B	F	F	B	F	F	B	F	F	F
ApproachDel:		95.4			107.4			66.5			171.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		95.4			107.4			66.5			171.7	
LOS by Appr:		F			F			F			F	
AllWayAvgQ:	11.0	11.0	0.3	11.4	11.4	0.1	6.4	6.4	0.1	16.5	16.5	16.5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.080
Loss Time (sec):	0	Average Delay (sec/veh):	52.7
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	24	170	33	36	145	30	43	277	18	51	297	47
Added Vol:	0	25	5	10	19	4	7	115	0	6	132	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	195	38	46	164	34	50	392	18	57	429	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	205	40	48	173	36	52	413	19	60	452	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	205	40	48	173	36	52	413	19	60	452	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	205	40	48	173	36	52	413	19	60	452	66
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.89	1.00	0.22	0.78	1.00	1.00	1.00	1.00	1.00	0.87	0.13
Final Sat.:	45	371	455	90	322	453	407	435	471	437	418	61
Capacity Analysis Module:												
Vol/Sat:	0.55	0.55	0.09	0.54	0.54	0.08	0.13	0.95	0.04	0.14	1.08	1.08
Crit Moves:	****				****			****			****	
Delay/Veh:	20.8	20.8	11.2	20.5	20.5	11.1	12.7	59.6	10.6	12.1	91.4	91.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	20.8	11.2	20.5	20.5	11.1	12.7	59.6	10.6	12.1	91.4	91.4
LOS by Move:	C	C	B	C	C	B	B	F	B	B	F	F
ApproachDel:	19.4			19.2			52.6			83.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	19.4			19.2			52.6			83.2		
LOS by Appr:	C			C			F			F		
AllWayAvgQ:	1.1	1.1	0.1	1.1	1.1	0.1	0.1	5.9	0.0	0.2	10.8	10.8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[15.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0 1	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	9	0	30	0	0	0	0	334	20	15	318	0
Added Vol:	10	0	6	0	0	0	0	120	11	10	144	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	0	36	0	0	0	0	454	31	25	462	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	20	0	38	0	0	0	0	478	33	26	486	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	0	38	0	0	0	0	478	33	26	486	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1033	1033	495	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	511	xxxx	xxxxx
Potent Cap.:	260	234	579	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1064	xxxx	xxxxx
Move Cap.:	255	229	579	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1064	xxxx	xxxxx
Volume/Cap:	0.08	0.00	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	403	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		15.4		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[13.4]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6		28		12	15		25		4	5		130		3	10		184		10
Growth Adj:	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13	1.13		1.13		1.13
Initial Bse:	7		32		14	17		28		5	6		146		3	11		207		11
Added Vol:	3		9		0	0		13		2	3		21		7	0		18		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	10		41		14	17		41		7	9		167		10	11		225		11
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	10		43		14	18		43		7	9		176		11	12		237		12
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	10		43		14	18		43		7	9		176		11	12		237		12
Critical Gap Module:																				
Critical Gp:	7.1		6.5		6.2	7.1		6.5		6.2	4.1		xxxx		xxxxx	4.1		xxxx		xxxxx
FollowUpTim:	3.5		4.0		3.3	3.5		4.0		3.3	2.2		xxxx		xxxxx	2.2		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	486		467		176	489		466		237	249		xxxx		xxxxx	187		xxxx		xxxxx
Potent Cap.:	495		496		872	493		497		807	1329		xxxx		xxxxx	1399		xxxx		xxxxx
Move Cap.:	452		489		872	447		489		807	1329		xxxx		xxxxx	1399		xxxx		xxxxx
Volume/Cap:	0.02		0.09		0.02	0.04		0.09		0.01	0.01		xxxx		xxxx	0.01		xxxx		xxxx
Level Of Service Module:																				
2Way95thQ:	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Control Del:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	7.7		xxxx		xxxxx	7.6		xxxx		xxxxx
LOS by Move:	*		*		*	*		*		*	A		*		*	A		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		532		xxxxx	xxxx		497		xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx		0.4		xxxxx	xxxxx		0.5		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Shrd ConDel:	xxxxx		12.7		xxxxx	xxxxx		13.4		xxxxx	7.7		xxxx		xxxxx	7.6		xxxx		xxxxx
Shared LOS:	*		B		*	*		B		*	A		*		*	A		*		*
ApproachDel:			12.7					13.4			xxxxxx					xxxxxx				
ApproachLOS:			B					B			*					*				

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.8]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	1	0	4	1	0	2	3	314	5		1	316	2							
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13		1.13	1.13	1.13							
Initial Bse:	1	0	5	1	0	2	3	354	6		1	356	2							
Added Vol:	5	0	1	1	0	4	1	120	5		1	149	5							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	6	0	6	2	0	6	4	474	11		2	505	7							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	6	0	6	2	0	7	5	499	11		2	531	8							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	6	0	6	2	0	7	5	499	11		2	531	8							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	1051	1051	499	1056	1059	535	539	xxxx	xxxxx		510	xxxx	xxxxx							
Potent Cap.:	207	229	576	205	226	549	1040	xxxx	xxxxx		1066	xxxx	xxxxx							
Move Cap.:	203	227	576	202	225	549	1040	xxxx	xxxxx		1066	xxxx	xxxxx							
Volume/Cap:	0.03	0.00	0.01	0.01	0.00	0.01	0.00	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx		8.4	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	293	xxxxx	xxxx	382	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx	17.8	xxxxx	xxxxx	14.6	xxxxx	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	C	*	*	B	*	A	*	*		*	*	*							
ApproachDel:	17.8			14.6			xxxxxx				xxxxxx									
ApproachLOS:	C			B			*				*									

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: A[8.6]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	1	0	0 0	0	0	0	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0				
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13				
Initial Bse:	10	5	0	0	6	1	1	0	3	0	0	0				
Added Vol:	0	0	0	0	0	7	6	0	0	0	0	0				
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0				
Initial Fut:	10	5	0	0	6	8	7	0	3	0	0	0				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
PHF Volume:	11	5	0	0	6	9	8	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	11	5	0	0	6	9	8	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	14	xxxx	xxxxx	xxxx	xxxx	xxxxx	36	36	10	xxxx	xxxx	xxxxx				
Potent Cap.:	1617	xxxx	xxxxx	xxxx	xxxx	xxxxx	981	860	1077	xxxx	xxxx	xxxxx				
Move Cap.:	1617	xxxx	xxxxx	xxxx	xxxx	xxxxx	976	854	1077	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1007	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				8.6			xxxxxx					
ApproachLOS:	*			*				A			*					

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1 0	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	8	0	5	3	173	0	0	233	11
Added Vol:	0	0	0	0	0	0	0	21	0	0	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	8	0	5	3	194	0	0	251	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	8	0	5	4	205	0	0	264	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	5	4	205	0	0	264	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	482	482	270	276	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	547	487	773	1298	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	546	486	773	1298	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	611	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.485
Loss Time (sec): 12 Average Delay (sec/veh): 18.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	50	707	32	16	736	56	62	2	64	75	11	38
Added Vol:	22	148	0	0	129	8	4	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	855	32	16	865	64	66	2	76	75	11	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	75	900	33	17	911	68	69	2	80	79	12	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	900	33	17	911	68	69	2	80	79	12	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	900	33	17	911	68	69	2	80	79	12	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.76	0.76	0.76	0.64	0.64	0.85
Lanes:	1.00	1.93	0.07	1.00	1.86	0.14	0.46	0.01	0.53	0.87	0.13	1.00
Final Sat.:	1805	3464	128	1805	3327	247	662	23	765	1061	158	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.26	0.01	0.27	0.27	0.10	0.10	0.10	0.07	0.07	0.02
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.45	0.45	0.19	0.53	0.53	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	0.38	0.58	0.58	0.05	0.51	0.51	0.47	0.47	0.47	0.34	0.34	0.11
Delay/Veh:	38.3	18.8	18.8	29.6	13.7	13.7	31.5	31.5	31.5	30.2	30.2	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	18.8	18.8	29.6	13.7	13.7	31.5	31.5	31.5	30.2	30.2	28.1
LOS by Move:	D	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	10	10	0	9	9	4	4	4	2	2	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.944
Loss Time (sec):	16	Average Delay (sec/veh):	61.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	20	557	69	206	636	64	55	265	39	54	275	157
Added Vol:	45	108	17	27	115	46	50	51	12	9	41	12
PasserByVol:	7	0	0	2	7	1	3	2	0	0	4	0
Initial Fut:	72	665	86	235	758	111	108	318	51	63	320	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	76	700	90	247	798	117	114	334	54	66	337	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	700	90	247	798	117	114	334	54	66	337	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	700	90	247	798	117	114	334	54	66	337	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.77	0.23	1.00	1.74	0.26	0.25	0.75	1.00	0.16	0.84	1.00
Final Sat.:	1805	3144	405	1805	3089	453	476	1399	1615	310	1574	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.14	0.26	0.26	0.24	0.24	0.03	0.21	0.21	0.11
Crit Moves:		****		****				****		****		
Green/Cycle:	0.10	0.24	0.24	0.15	0.29	0.29	0.25	0.25	0.25	0.23	0.23	0.23
Volume/Cap:	0.44	0.94	0.94	0.94	0.91	0.91	0.94	0.94	0.13	0.94	0.94	0.49
Delay/Veh:	50.8	62.1	62.1	89.2	51.1	51.1	69.9	69.9	33.3	73.5	73.5	39.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.8	62.1	62.1	89.2	51.1	51.1	69.9	69.9	33.3	73.5	73.5	39.7
LOS by Move:	D	E	E	F	D	D	E	E	C	E	E	D
HCM2kAvgQ:	3	19	19	13	20	20	20	20	1	18	18	6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec): 70 Critical Vol./Cap.(X): 0.484
Loss Time (sec): 12 Average Delay (sec/veh): 20.4
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 2	0	1	1 0 1	1	0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	29	575	50	57	616	21	26	137	18	29	194	65
Added Vol:	0	152	0	15	117	5	3	18	0	0	13	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	727	50	72	733	26	29	155	18	29	207	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	30	755	51	75	761	27	30	161	19	30	215	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	755	51	75	761	27	30	161	19	30	215	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	755	51	75	761	27	30	161	19	30	215	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.43	0.98	0.98	0.60	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.90	0.10	1.00	0.72	0.28
Final Sat.:	1805	3610	1615	1805	3467	125	811	1675	194	1136	1306	514
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.03	0.04	0.22	0.22	0.04	0.10	0.10	0.03	0.16	0.16
Crit Moves:	****				****						****	
Green/Cycle:	0.14	0.31	0.31	0.21	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.12	0.68	0.10	0.20	0.59	0.59	0.12	0.31	0.31	0.09	0.52	0.52
Delay/Veh:	26.4	22.9	17.4	23.3	18.4	18.4	17.3	18.5	18.5	17.0	20.6	20.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.4	22.9	17.4	23.3	18.4	18.4	17.3	18.5	18.5	17.0	20.6	20.6
LOS by Move:	C	C	B	C	B	B	B	B	B	B	C	C
HCM2kAvgQ:	1	9	1	1	8	8	1	3	3	1	6	6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.871
Loss Time (sec): 16 Average Delay (sec/veh): 26.4
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	T	R	L	T	T	R	L	T	T	R	L	T	T	R
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	1	1 0	1	0	2	0 1	1	0	0	1 0	1	0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	37	445	12		31	511	46		79	104	43		18	70	29	
Growth Adj:	1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	42	501	14		35	575	52		89	117	48		20	79	33	
Added Vol:	0	140	0		10	99	8		5	0	0		0	0	8	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	42	641	14		45	674	60		94	117	48		20	79	41	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	44	675	14		47	710	63		99	123	51		21	83	43	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	44	675	14		47	710	63		99	123	51		21	83	43	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	44	675	14		47	710	63		99	123	51		21	83	43	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.96	0.96		0.95	1.00	0.85	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		1.00	0.71	0.29		1.00	1.00	1.00	
Final Sat.:	1805	3525	74		1805	3610	1615		1805	1285	531		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.19	0.19		0.03	0.20	0.04		0.05	0.10	0.10		0.01	0.04	0.03	
Crit Moves:	****					****				****				****		
Green/Cycle:	0.47	0.39	0.39		0.59	0.47	0.47		0.35	0.23	0.23		0.30	0.22	0.22	
Volume/Cap:	0.11	0.50	0.50		0.10	0.42	0.08		0.22	0.42	0.42		0.06	0.20	0.12	
Delay/Veh:	17.5	28.3	28.3		12.1	21.1	17.6		27.5	40.1	40.1		29.6	38.3	37.6	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.5	28.3	28.3		12.1	21.1	17.6		27.5	40.1	40.1		29.6	38.3	37.6	
LOS by Move:	B	C	C		B	C	B		C	D	D		C	D	D	
HCM2kAvgQ:	1	10	10		1	9	1		3	6	6		1	2	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.063
Loss Time (sec):	0	Average Delay (sec/veh):	53.5
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	60	42	63	15	37	60	55	419	77	71	381	11
Added Vol:	8	0	0	0	0	10	16	69	10	0	44	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	42	63	15	37	70	71	488	87	71	425	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	71	44	66	15	39	73	75	514	91	75	447	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	44	66	15	39	73	75	514	91	75	447	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	44	66	15	39	73	75	514	91	75	447	12
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.39	0.24	0.37	0.12	0.31	0.57	0.13	0.87	1.00	0.14	0.86	1.00
Final Sat.:	190	117	177	57	146	273	70	483	622	78	464	612
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.37	0.27	0.27	0.27	1.06	1.06	0.15	0.96	0.96	0.02
Crit Moves:		****				****	****				****	
Delay/Veh:	14.3	14.3	14.3	12.8	12.8	12.8	81.1	81.1	9.4	54.8	54.8	8.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.3	14.3	14.3	12.8	12.8	12.8	81.1	81.1	9.4	54.8	54.8	8.7
LOS by Move:	B	B	B	B	B	B	F	F	A	F	F	A
ApproachDel:		14.3			12.8			71.4			53.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		14.3			12.8			71.4			53.7	
LOS by Appr:		B			B			F			F	
AllWayAvgQ:	0.6	0.6	0.6	0.3	0.3	0.3	11.0	11.0	0.2	6.8	6.8	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 6.4

INTERIM YEAR 2016 WITHOUT PROJECT CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Lyon Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Menlo Av.				Critical Approach Speed (Minor)		40 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,943** vpd Minor Street Future ADT = **5,003** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied: XX	1 **10,943**	1 **5,003**	8,000 *	5,600	2,400 *	1,680
Not Satisfied	2 +	1	9,600	6,720	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied	1 **10,943**	1 **5,003**	12,000	8,400	1,200 *	850
Not Satisfied: XX	2 +	1	14,400	10,080	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied: XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
Not Satisfied: No one condition satisfied, but following conditions fulfilled 80% of more …..	A: 100%	B: 91%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Palm Av.				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,618** vpd Minor Street Future ADT = **3,148** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **10,618** / 1 **3,148**	8,000 *	5,600	2,400 *	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **10,618** / 1 **3,148**	12,000	8,400	1,200 *	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 100% B: 88%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: **City of Hemet**				CHK CH	DATE	10/25/10
Major Street: **Menlo Av.**				Critical Approach Speed (Major)		40 mph
Minor Street: **Gilbert St.**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,202** vpd

Minor Street Future ADT = **569** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **10,202** / 1 **569**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **10,202** / 1 **569**	12,000	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 24% B: 47%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,112** vpd

Minor Street Future ADT = **681** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied: Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **5,112**	1 **681**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied: Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **5,112**	1 **681**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied: Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 28% B: 43%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Alessandro St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,408** vpd

Minor Street Future ADT = **131** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1 **10,408**	1 **131**	8,000 *	5,600	2,400	1,680
	2 +	1	9,600	6,720	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1 **10,408**	1 **131**	12,000	8,400	1,200	850
	2 +	1	14,400	10,080	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5%	**B** 11%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Alessandro St.				Critical Approach Speed (Major)		25 mph
Minor Street: Ancla				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **294** vpd Minor Street Future ADT = **152** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **294**	1 **152**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **294**	1 **152**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A 4% B 2%		2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Alessandro				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,394** vpd Minor Street Future ADT = **163** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
XX	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **5,394** / *1* **163**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **5,394** / *1* **163**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 7% B: 14%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: **City of Hemet**				CHK CH	DATE	10/25/10
Major Street: **Menlo**				Critical Approach Speed (Major)		35 mph
Minor Street: **Buena Vista**				Critical Approach Speed (Minor)		30 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **13,195** vpd

Minor Street Future ADT = **2,195** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **13,195**	1 **2,195**	8,000 *	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
XX					
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **13,195**	1 **2,195**	12,000 *	8,400	1,200 *	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
XX		2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A / B				
	91% / 100%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 6.5

INTERIM YEAR 2016 WITH PROJECT CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **10,987** vpd

Minor Street Future ADT = **622** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1 **10,987**	1 **622**	8,000 *	5,600	2,400	1,680
	2 +	1	9,600	6,720	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1 **10,987**	1 **622**	12,000	8,400	1,200	850
	2 +	1	14,400	10,080	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 26%	**B** 52%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,158** vpd

Minor Street Future ADT = **719** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,158**	*1* **719**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,158**	*1* **719**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 30% **B** 43%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Alessandro St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **11,286** vpd Minor Street Future ADT = **139** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **11,286**	*1* **139**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
Satisfied	Not Satisfied	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **11,286**	*1* **139**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 6% **B** 12%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: **City of Hemet**				CHK CH	DATE	10/25/10
Major Street: **Alessandro St.**				Critical Approach Speed (Major)		25 mph
Minor Street: **Ancla**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **302** vpd Minor Street Future ADT = **160** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **302**	*1* **160**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **302**	*1* **160**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4% **B** 3%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2016 WP
				CALC	HQ	DATE	10/25/10
Jurisdiction:	City of Hemet			CHK	CH	DATE	10/25/10
Major Street:	Oakland				Critical Approach Speed (Major)		30 mph
Minor Street:	Alessandro				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,440** vpd Minor Street Future ADT = **163** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,440**	*1* **163**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,440**	*1* **163**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7% **B** 14%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2016 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Dwy 3				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **11,369** vpd

Minor Street Future ADT = **911** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1 **11,369**	*1* **911**	8,000 *	5,600	2,400	1,680
	2 +	*1*	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1 **11,369**	*1* **911**	12,000	8,400	1,200	850
	2 +	*1*	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 38%	**B** 76%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 6.6

INTERIM YEAR 2016 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE PRE-PROJECT CONDITIONS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Driveway 3 (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			1 0 2 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	283	0	0	253	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	319	0	0	285	0
Added Vol:	0	0	0	8	0	7	31	54	0	0	53	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	8	0	7	31	373	0	0	338	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	8	0	7	33	392	0	0	356	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	7	33	392	0	0	356	29
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	632	828	193	385	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	417	309	823	1184	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	409	300	823	1184	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	534	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.9			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 State Street (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 2	0	0		0 0 1	1	0		0 0 0	0	1		0 0 0	0	0	
Volume Module:																
Base Vol:	0 555	0	0		549	0	0		0	0	0		0	0	0	
Growth Adj:	1.13 1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	0 625	0	0		618	0	0		0	0	0		0	0	0	
Added Vol:	0 86	0	0		117	6	0		0	0	5		0	0	0	
PasserByVol:	0 0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0 711	0	0		735	6	0		0	0	5		0	0	0	
User Adj:	1.00 1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95 0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	0 748	0	0		774	6	0		0	0	5		0	0	0	
Reduct Vol:	0 0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0 748	0	0		774	6	0		0	0	5		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	6.9	xxxxx		xxxx	xxxxx		
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	3.3	xxxxx		xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	390	xxxx		xxxx	xxxxx		
Potent Cap.:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	614	xxxx		xxxx	xxxxx		
Move Cap.:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	614	xxxx		xxxx	xxxxx		
Volume/Cap:	xxxx xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.01	xxxx		xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	0.0	xxxx		xxxx	xxxxx		
Control Del:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	10.9	xxxxx		xxxx	xxxxx		
LOS by Move:	* *	*	*		*	*	*		*	B	*		*	*		
Movement:	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT	LT - LTR	- RT								
Shared Cap.:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx		
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Shared LOS:	* *	*	*		*	*	*		*	*	*		*	*		
ApproachDel:	xxxxxx		xxxxxx			10.9				xxxxxx						
ApproachLOS:	*		*			B				*						

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #46 State Street (NS) / Driveway 6 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.7]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0 0 2	0	0		0 0 1	1	0		0 0 0	0	1		0 0 0	0	0	
Volume Module:																
Base Vol:	0 555	0	0		549	0	0		0	0	0		0	0	0	
Growth Adj:	1.13 1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	0 625	0	0		618	0	0		0	0	0		0	0	0	
Added Vol:	0 86	0	0		117	4	0		0	0	5		0	0	0	
PasserByVol:	0 0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0 711	0	0		735	4	0		0	0	5		0	0	0	
User Adj:	1.00 1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00 1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	0 711	0	0		735	4	0		0	0	5		0	0	0	
Reduct Vol:	0 0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0 711	0	0		735	4	0		0	0	5		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	6.9	xxxxx		xxxx	xxxxx		
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	3.3	xxxxx		xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	370	xxxx		xxxx	xxxxx		
Potent Cap.:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	633	xxxx		xxxx	xxxxx		
Move Cap.:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	633	xxxx		xxxx	xxxxx		
Volume/Cap:	xxxx xxxx	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	0.01	xxxx		xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx xxxx	xxxxx	xxxx		xxxx	xxxxx	xxxx		xxxx	0.0	xxxx		xxxx	xxxxx		
Control Del:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	10.7	xxxxx		xxxx	xxxxx		
LOS by Move:	*	*	*		*	*	*		*	B	*		*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx xxxx	xxxxx			xxxx xxxx	xxxxx			xxxx xxxx	xxxxx			xxxx xxxx	xxxxx		
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx		
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*		
ApproachDel:	xxxxxx				xxxxxx				10.7				xxxxxx			
ApproachLOS:	*				*				B				*			

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.493
Loss Time (sec):	12	Average Delay (sec/veh):	18.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	10	20	20		10	20	20		21	21	21		21	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	0	1	0	1 0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	25	375	42		93	420	30		54	196	33		23	198	147	
Growth Adj:	1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13		1.13	1.13	1.13	
Initial Bse:	28	422	47		105	473	34		61	221	37		26	223	166	
Added Vol:	26	40	5		8	98	16		34	14	14		16	39	12	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	54	462	52		113	571	50		95	235	51		42	262	178	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	57	487	55		119	601	52		100	247	54		44	276	187	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	57	487	55		119	601	52		100	247	54		44	276	187	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	57	487	55		119	601	52		100	247	54		44	276	187	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.94	0.94		0.43	1.00	0.85		0.93	0.93	0.85	
Lanes:	1.00	1.80	0.20		1.00	1.84	0.16		1.00	1.00	1.00		0.14	0.86	1.00	
Final Sat.:	1805	3194	361		1805	3281	286		809	1900	1615		243	1522	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.15	0.15		0.07	0.18	0.18		0.12	0.13	0.03		0.18	0.18	0.12	
Crit Moves:		****				****								****		
Green/Cycle:	0.16	0.32	0.32		0.16	0.32	0.32		0.33	0.33	0.33		0.33	0.33	0.33	
Volume/Cap:	0.20	0.48	0.48		0.41	0.58	0.58		0.37	0.39	0.10		0.54	0.54	0.35	
Delay/Veh:	23.4	17.6	17.6		24.8	18.7	18.7		16.8	16.5	14.6		18.1	18.1	16.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	23.4	17.6	17.6		24.8	18.7	18.7		16.8	16.5	14.6		18.1	18.1	16.2	
LOS by Move:	C	B	B		C	B	B		B	B	B		B	B	B	
HCM2kAvgQ:	1	5	5		3	6	6		2	4	1		6	6	3	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Driveway 3 (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[14.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			1 0 2 0 0			0 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	319	0	0	319	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	359	0	0	359	0
Added Vol:	0	0	0	32	0	60	41	81	0	0	94	38
PasserByVol:	0	0	0	5	0	11	11	0	0	0	1	11
Initial Fut:	0	0	0	37	0	71	52	440	0	0	454	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	39	0	75	55	463	0	0	478	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	39	0	75	55	463	0	0	478	52
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	845	1077	265	530	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	306	221	740	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	293	209	740	1048	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.13	0.00	0.10	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	486	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			14.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 State Street (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[12.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	700	0	0	778	0	0	0	0	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	788	0	0	876	0	0	0	0	0	0	0
Added Vol:	0	170	0	0	133	8	0	0	31	0	0	0
PasserByVol:	0	3	0	0	1	2	0	0	5	0	0	0
Initial Fut:	0	961	0	0	1010	10	0	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1012	0	0	1063	11	0	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1012	0	0	1063	11	0	0	38	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	537	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	494	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	494	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.9	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.9			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #46 State Street (NS) / Driveway 6 (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[12.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	700	0	0	778	0	0	0	0	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	788	0	0	876	0	0	0	0	0	0	0
Added Vol:	0	170	0	0	158	6	0	0	31	0	0	0
PasserByVol:	0	3	0	0	5	1	0	0	5	0	0	0
Initial Fut:	0	961	0	0	1039	7	0	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	961	0	0	1039	7	0	0	36	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	961	0	0	1039	7	0	0	36	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	523	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	504	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	504	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.7	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.7			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec): 65 Critical Vol./Cap.(X): 0.763
Loss Time (sec): 12 Average Delay (sec/veh): 24.1
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	20	557	69	206	636	64	55	265	39	54	275	157
Added Vol:	45	108	17	27	115	46	50	51	12	9	41	12
PasserByVol:	7	0	0	2	7	1	3	2	0	0	4	0
Initial Fut:	72	665	86	235	758	111	108	318	51	63	320	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	76	700	90	247	798	117	114	334	54	66	337	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	700	90	247	798	117	114	334	54	66	337	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	700	90	247	798	117	114	334	54	66	337	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.32	1.00	0.85	0.81	0.81	0.85
Lanes:	1.00	1.77	0.23	1.00	1.74	0.26	1.00	1.00	1.00	0.16	0.84	1.00
Final Sat.:	1805	3144	405	1805	3089	453	606	1900	1615	253	1282	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.14	0.26	0.26	0.19	0.18	0.03	0.26	0.26	0.11
Crit Moves:		****		****							****	
Green/Cycle:	0.16	0.31	0.31	0.17	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.26	0.72	0.72	0.79	0.80	0.80	0.56	0.53	0.10	0.79	0.79	0.33
Delay/Veh:	24.4	22.5	22.5	38.1	24.5	24.5	21.4	18.4	15.0	27.5	27.5	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.4	22.5	22.5	38.1	24.5	24.5	21.4	18.4	15.0	27.5	27.5	16.6
LOS by Move:	C	C	C	D	C	C	C	B	B	C	C	B
HCM2kAvgQ:	2	9	9	7	11	11	3	6	1	10	10	3

Note: Queue reported is the number of cars per lane.

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APPENDIX 6.7

INTERIM YEAR 2016 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE REQUISITE LOS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.563
Loss Time (sec):	16	Average Delay (sec/veh):	31.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	20	20	10	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	214	41	51	275	29	18	249	34	30	224	17
Added Vol:	8	24	16	4	60	0	0	61	22	22	50	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	238	57	55	335	29	18	310	56	52	274	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	38	250	60	58	352	31	19	326	59	55	289	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	250	60	58	352	31	19	326	59	55	289	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	250	60	58	352	31	19	326	59	55	289	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	0.99	0.99	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.81	0.19	1.00	0.92	0.08	1.00	0.85	0.15	1.00	0.94	0.06
Final Sat.:	1805	1491	354	1805	1726	151	1805	1573	283	1805	1760	121
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.03	0.20	0.20	0.01	0.21	0.21	0.03	0.16	0.16
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.27	0.27	0.14	0.30	0.30	0.14	0.30	0.30	0.11	0.28	0.28
Volume/Cap:	0.19	0.63	0.63	0.23	0.69	0.69	0.08	0.69	0.69	0.28	0.59	0.59
Delay/Veh:	36.8	31.6	31.6	34.8	31.4	31.4	33.9	31.2	31.2	37.4	30.1	30.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.8	31.6	31.6	34.8	31.4	31.4	33.9	31.2	31.2	37.4	30.1	30.1
LOS by Move:	D	C	C	C	C	C	C	C	C	D	C	C
HCM2kAvgQ:	1	8	8	2	10	10	0	10	10	2	8	8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	16	Average Delay (sec/veh):	27.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	21	21	10	21	21	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	29	124	15	37	134	21	20	287	39	33	222	18
Added Vol:	0	9	3	6	15	6	2	76	0	3	63	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	133	18	43	149	27	22	363	39	36	285	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	31	140	19	45	157	29	23	382	41	38	300	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	140	19	45	157	29	23	382	41	38	300	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	140	19	45	157	29	23	382	41	38	300	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	0.98	0.98	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.88	0.12	1.00	0.84	0.16	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1805	1647	219	1805	1568	288	1805	1900	1615	1805	1752	129
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.08	0.03	0.10	0.10	0.01	0.20	0.03	0.02	0.17	0.17
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.23	0.23	0.11	0.23	0.23	0.15	0.37	0.37	0.11	0.32	0.32
Volume/Cap:	0.15	0.36	0.36	0.23	0.43	0.43	0.08	0.55	0.07	0.19	0.53	0.53
Delay/Veh:	36.5	29.4	29.4	37.1	30.1	30.1	32.8	23.5	18.6	36.8	25.7	25.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.5	29.4	29.4	37.1	30.1	30.1	32.8	23.5	18.6	36.8	25.7	25.7
LOS by Move:	D	C	C	D	C	C	C	C	B	D	C	C
HCM2kAvgQ:	1	4	4	1	5	5	1	9	1	1	8	8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.509
Loss Time (sec):	16	Average Delay (sec/veh):	29.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	422	47	105	473	34	61	221	37	26	223	166
Added Vol:	26	40	5	8	98	16	34	14	14	16	39	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	462	52	113	571	50	95	235	51	42	262	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	487	55	119	601	52	100	247	54	44	276	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	487	55	119	601	52	100	247	54	44	276	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	487	55	119	601	52	100	247	54	44	276	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.80	0.20	1.00	1.84	0.16	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3194	361	1805	3281	286	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.07	0.18	0.18	0.06	0.13	0.03	0.02	0.15	0.12
Crit Moves:		****		****			****				****	
Green/Cycle:	0.14	0.30	0.30	0.13	0.28	0.28	0.11	0.27	0.27	0.13	0.28	0.28
Volume/Cap:	0.22	0.51	0.51	0.51	0.64	0.64	0.50	0.49	0.12	0.19	0.51	0.41
Delay/Veh:	34.6	26.6	26.6	38.5	29.6	29.6	39.6	28.5	25.1	35.5	27.8	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.6	26.6	26.6	38.5	29.6	29.6	39.6	28.5	25.1	35.5	27.8	26.7
LOS by Move:	C	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	2	7	7	4	9	9	3	6	1	1	7	4

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.382
Loss Time (sec):	12	Average Delay (sec/veh):	19.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	14	14	10	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	48	36	51	10	35	48	36	268	46	51	365	28
Added Vol:	6	0	0	0	0	8	4	20	3	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	36	51	10	35	56	40	288	49	51	418	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	38	53	11	37	59	42	303	52	53	440	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	38	53	11	37	59	42	303	52	53	440	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	38	53	11	37	59	42	303	52	53	440	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.69	0.91	0.91	0.70	0.91	0.91	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.42	0.58	1.00	0.38	0.62	1.00	0.85	0.15	1.00	0.94	0.06
Final Sat.:	1317	720	1013	1322	659	1065	1805	1587	271	1805	1764	119
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.01	0.06	0.06	0.02	0.19	0.19	0.03	0.25	0.25
Crit Moves:					****		****				****	
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.12	0.39	0.39	0.24	0.52	0.52
Volume/Cap:	0.19	0.24	0.24	0.04	0.25	0.25	0.20	0.49	0.49	0.12	0.48	0.48
Delay/Veh:	27.1	27.4	27.4	25.9	27.5	27.5	34.3	19.9	19.9	25.3	13.5	13.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.1	27.4	27.4	25.9	27.5	27.5	34.3	19.9	19.9	25.3	13.5	13.5
LOS by Move:	C	C	C	C	C	C	C	B	B	C	B	B
HCM2kAvgQ:	1	2	2	0	2	2	1	7	7	1	8	8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.650
Loss Time (sec):	16	Average Delay (sec/veh):	37.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	20	20	10	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	28	286	55	35	330	46	33	244	18	50	230	35
Added Vol:	25	76	40	6	49	0	0	84	15	35	96	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	362	95	41	379	46	33	328	33	85	326	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	56	379	100	43	397	48	34	344	35	89	341	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	379	100	43	397	48	34	344	35	89	341	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	379	100	43	397	48	34	344	35	89	341	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	0.98	0.98	0.95	0.99	0.99	0.95	0.98	0.98
Lanes:	1.00	0.79	0.21	1.00	0.89	0.11	1.00	0.91	0.09	1.00	0.88	0.12
Final Sat.:	1805	1458	383	1805	1667	203	1805	1702	171	1805	1644	222
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.26	0.02	0.24	0.24	0.02	0.20	0.20	0.05	0.21	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.14	0.34	0.34	0.11	0.31	0.31	0.12	0.26	0.26	0.11	0.25	0.25
Volume/Cap:	0.22	0.77	0.77	0.21	0.78	0.78	0.15	0.77	0.77	0.44	0.83	0.83
Delay/Veh:	34.5	32.5	32.5	37.0	35.2	35.2	35.5	38.0	38.0	38.9	44.2	44.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	32.5	32.5	37.0	35.2	35.2	35.5	38.0	38.0	38.9	44.2	44.2
LOS by Move:	C	C	C	D	D	D	D	D	D	D	D	D
HCM2kAvgQ:	2	14	14	1	13	13	1	12	12	3	13	13

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	16	Average Delay (sec/veh):	30.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	21	21	10	21	21	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	24	170	33	36	145	30	43	277	18	51	297	47
Added Vol:	0	25	5	10	19	4	7	115	0	6	132	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	195	38	46	164	34	50	392	18	57	429	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	205	40	48	173	36	52	413	19	60	452	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	205	40	48	173	36	52	413	19	60	452	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	205	40	48	173	36	52	413	19	60	452	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.98	0.98
Lanes:	1.00	0.84	0.16	1.00	0.83	0.17	1.00	1.00	1.00	1.00	0.87	0.13
Final Sat.:	1805	1554	300	1805	1530	320	1805	1900	1615	1805	1628	236
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.03	0.11	0.11	0.03	0.22	0.01	0.03	0.28	0.28
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.22	0.22	0.11	0.22	0.22	0.11	0.34	0.34	0.16	0.40	0.40
Volume/Cap:	0.13	0.60	0.60	0.26	0.51	0.51	0.28	0.63	0.03	0.20	0.69	0.69
Delay/Veh:	38.9	35.6	35.6	39.8	33.6	33.6	40.0	28.3	20.8	34.8	26.5	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.9	35.6	35.6	39.8	33.6	33.6	40.0	28.3	20.8	34.8	26.5	26.5
LOS by Move:	D	D	D	D	C	C	D	C	C	C	C	C
HCM2kAvgQ:	1	7	7	2	6	6	2	11	0	2	13	13

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	16	Average Delay (sec/veh):	33.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	0 1	1 0	1	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	20	557	69	206	636	64	55	265	39	54	275	157
Added Vol:	45	108	17	27	115	46	50	51	12	9	41	12
PasserByVol:	7	0	0	2	7	1	3	2	0	0	4	0
Initial Fut:	72	665	86	235	758	111	108	318	51	63	320	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	76	700	90	247	798	117	114	334	54	66	337	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	700	90	247	798	117	114	334	54	66	337	177
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	76	700	90	247	798	117	114	334	54	66	337	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	1.77	0.23	1.00	1.74	0.26	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	3144	405	1805	3089	453	1805	1900	1615	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.14	0.26	0.26	0.06	0.18	0.03	0.04	0.18	0.11
Crit Moves:	****				****		****				****	
Green/Cycle:	0.11	0.29	0.29	0.18	0.36	0.36	0.11	0.24	0.24	0.11	0.24	0.24
Volume/Cap:	0.38	0.77	0.77	0.77	0.73	0.73	0.57	0.73	0.14	0.32	0.73	0.45
Delay/Veh:	38.3	32.9	32.9	46.1	27.3	27.3	41.7	37.5	27.0	37.5	36.9	29.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	32.9	32.9	46.1	27.3	27.3	41.7	37.5	27.0	37.5	36.9	29.7
LOS by Move:	D	C	C	D	C	C	D	D	C	D	D	C
HCM2kAvgQ:	2	12	12	9	13	13	4	10	1	2	10	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2016 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	12	Average Delay (sec/veh):	20.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	14	14	10	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	60	42	63	15	37	60	55	419	77	71	381	11
Added Vol:	8	0	0	0	0	10	16	69	10	0	44	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	42	63	15	37	70	71	488	87	71	425	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	71	44	66	15	39	73	75	514	91	75	447	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	44	66	15	39	73	75	514	91	75	447	12
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	44	66	15	39	73	75	514	91	75	447	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.67	0.91	0.91	0.67	0.90	0.90	0.95	0.98	0.98	0.95	1.00	1.00
Lanes:	1.00	0.40	0.60	1.00	0.35	0.65	1.00	0.85	0.15	1.00	0.97	0.03
Final Sat.:	1269	688	1041	1277	596	1118	1805	1577	280	1805	1844	49
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.01	0.07	0.07	0.04	0.33	0.33	0.04	0.24	0.24
Crit Moves:					****			****		****		
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.21	0.52	0.52	0.12	0.43	0.43
Volume/Cap:	0.25	0.29	0.29	0.05	0.29	0.29	0.20	0.63	0.63	0.35	0.57	0.57
Delay/Veh:	27.6	27.8	27.8	26.0	27.9	27.9	28.1	16.0	16.0	35.5	19.3	19.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.6	27.8	27.8	26.0	27.9	27.9	28.1	16.0	16.0	35.5	19.3	19.3
LOS by Move:	C	C	C	C	C	C	C	B	B	D	B	B
HCM2kAvgQ:	2	3	3	0	3	3	2	12	12	2	9	9

Note: Queue reported is the number of cars per lane.

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APPENDIX 7.1

YEAR 2020 AVERAGE DAILY TRAFFIC (ADT)

EXHIBIT 7.1-1

2020 WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)

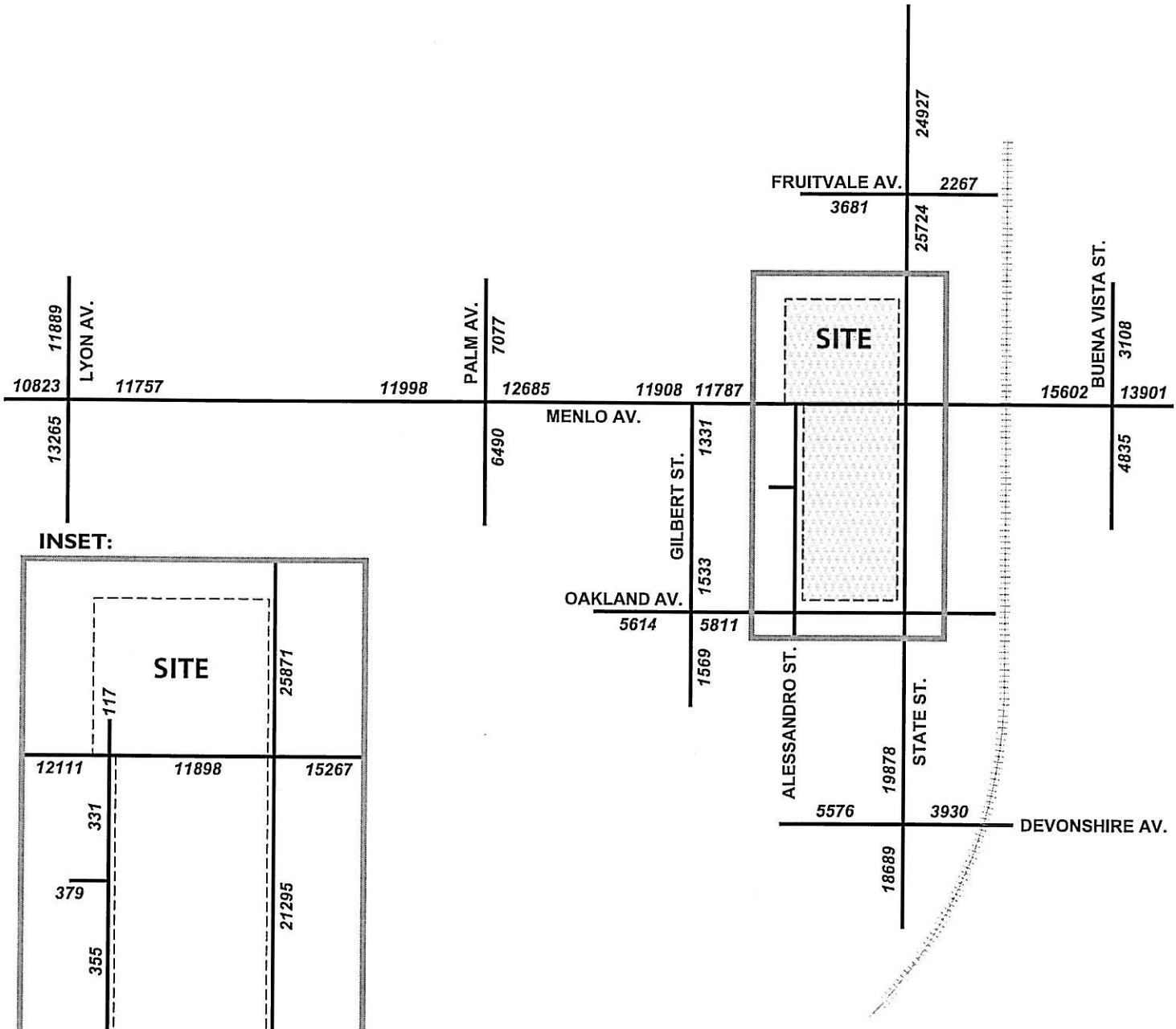
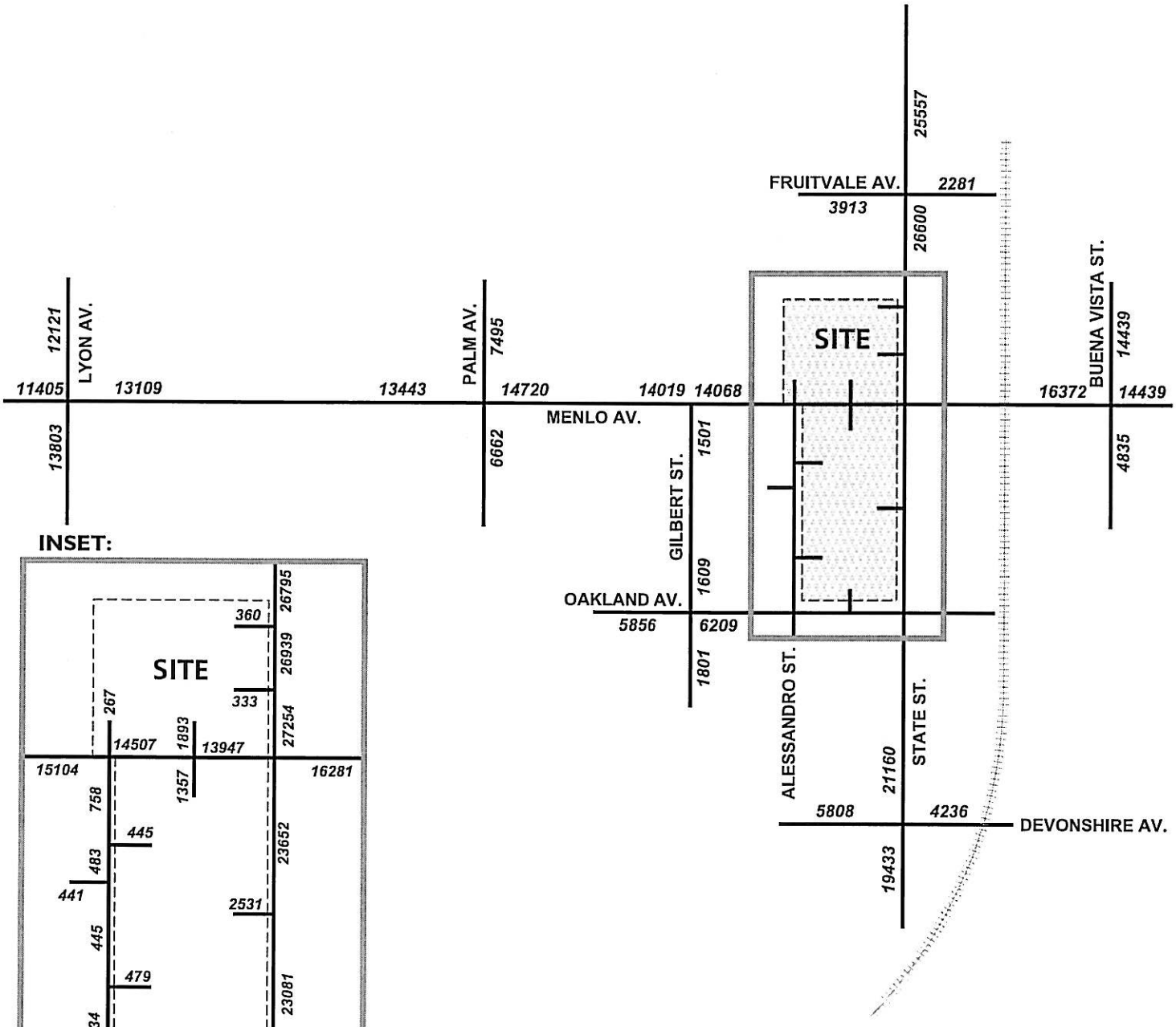


EXHIBIT 7.1-2

2020 WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



APPENDIX 7.2

YEAR 2020 WITHOUT PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.177
Loss Time (sec):	0	Average Delay (sec/veh):	84.3
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	232	44	55	297	32	20	269	37	33	243	18
Added Vol:	12	36	14	1	90	0	0	81	33	31	71	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	268	58	56	387	32	20	350	70	64	314	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	45	282	61	59	408	33	21	369	73	67	330	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	282	61	59	408	33	21	369	73	67	330	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	282	61	59	408	33	21	369	73	67	330	20
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.86	1.00	0.13	0.87	1.00	0.05	0.95	1.00	0.16	0.79	0.05
Final Sat.:	53	333	420	50	347	432	21	377	432	62	303	19
Capacity Analysis Module:												
Vol/Sat:	0.85	0.85	0.15	1.18	1.18	0.08	0.98	0.98	0.17	1.09	1.09	1.09
Crit Moves:		****			****			****			****	
Delay/Veh:	46.1	46.1	12.7	131.5	131	11.7	70.5	70.5	12.7	103.2	103	103.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.1	46.1	12.7	131.5	131	11.7	70.5	70.5	12.7	103.2	103	103.2
LOS by Move:	E	E	B	F	F	B	F	F	B	F	F	F
ApproachDel:		40.9			123.5			61.3			103.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		40.9			123.5			61.3			103.2	
LOS by Appr:		E			F			F			F	
AllWayAvgQ:	3.7	3.7	0.2	13.2	13.2	0.1	6.5	6.5	0.2	9.7	9.7	9.7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.874
Loss Time (sec):	0	Average Delay (sec/veh):	26.0
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	32	134	16	40	145	23	22	311	43	35	240	20
Added Vol:	0	13	1	1	23	9	3	87	0	3	84	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	147	17	41	168	32	25	398	43	38	324	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	33	155	18	43	177	34	26	419	45	40	341	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	155	18	43	177	34	26	419	45	40	341	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	155	18	43	177	34	26	419	45	40	341	23
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.82	1.00	0.20	0.80	1.00	1.00	1.00	1.00	1.00	0.94	0.06
Final Sat.:	75	350	469	86	349	480	441	479	518	455	466	31
Capacity Analysis Module:												
Vol/Sat:	0.44	0.44	0.04	0.51	0.51	0.07	0.06	0.87	0.09	0.09	0.73	0.73
Crit Moves:		****			****			****			****	
Delay/Veh:	16.1	16.1	10.1	17.5	17.5	10.2	11.1	41.5	10.1	11.0	25.4	25.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.1	16.1	10.1	17.5	17.5	10.2	11.1	41.5	10.1	11.0	25.4	25.4
LOS by Move:	C	C	B	C	C	B	B	E	B	B	D	D
ApproachDel:		15.6			16.5			37.0			24.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		15.6			16.5			37.0			24.0	
LOS by Appr:		C			C			E			C	
AllWayAvgQ:	0.6	0.6	0.0	0.8	0.8	0.1	0.1	4.2	0.1	0.1	2.2	2.2

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****
Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)
****
Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[15.7]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 0 1 0			1 0 1 0 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	0	15	0	0	0	0	312	11	11	293	0
Added Vol:	10	0	0	0	0	0	0	83	7	0	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	15	0	0	0	0	395	18	11	373	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	0	15	0	0	0	0	416	19	12	392	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	37	0	15	0	0	0	0	416	19	12	392	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	841	841	425	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	435	xxxx	xxxxx
Potent Cap.:	338	304	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1136	xxxx	xxxxx
Move Cap.:	335	300	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1136	xxxx	xxxxx
Volume/Cap:	0.11	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	388	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

****
Note: Queue reported is the number of cars per lane.
****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: B[12.2]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1!	0 0	0	0 1!	0 0	0	1	0	0	1		0	1	0	0	1	
Volume Module: >> Count Date: 10 Jun 2010 <<																		
Base Vol:	6	17	10	6	15	8	4	140	5				13	139	7			
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22				1.22	1.22	1.22			
Initial Bse:	7	21	12	7	18	10	5	171	6				16	169	9			
Added Vol:	7	5	0	0	3	3	1	9	2				0	16	0			
PasserByVol:	0	0	0	0	0	0	0	0	0				0	0	0			
Initial Fut:	14	26	12	7	21	13	6	180	8				16	185	9			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	15	27	13	8	22	13	6	189	9				17	195	9			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	15	27	13	8	22	13	6	189	9				17	195	9			
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	452	439	189	454	439	195	204	xxxx	xxxxx				198	xxxx	xxxxx			
Potent Cap.:	521	515	858	519	515	851	1379	xxxx	xxxxx				1387	xxxx	xxxxx			
Move Cap.:	489	506	858	485	507	851	1379	xxxx	xxxxx				1387	xxxx	xxxxx			
Volume/Cap:	0.03	0.05	0.01	0.02	0.04	0.02	0.00	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx				7.6	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	554	xxxxx	xxxx	574	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Shrd ConDel:	xxxxx	12.2	xxxxx	xxxxx	11.8	xxxxx	7.6	xxxx	xxxxx				7.6	xxxx	xxxxx			
Shared LOS:	*	B	*	*	B	*	A	*	*				A	*	*			
ApproachDel:		12.2			11.8			xxxxxx						xxxxxx				
ApproachLOS:		B			B			*						*				

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[18.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			1 0 0 0 0			0 1 0 0 1			0 1 0 0 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	1	0	4	1	0	0	0	278	4	2	251	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	1	0	5	1	0	0	0	339	5	2	306	0
Added Vol:	5	0	0	0	0	0	0	80	3	0	75	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	0	5	1	0	0	0	419	8	2	381	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	7	0	5	1	0	0	0	441	8	3	401	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	0	5	1	0	0	0	441	8	3	401	0
Critical Gap Module:												
Critical Gp:	7.1	6.5	6.2	7.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	847	847	441	854	xxxx	xxxxx	xxxx	xxxx	xxxxx	449	xxxx	xxxxx
Potent Cap.:	284	301	621	281	xxxx	xxxxx	xxxx	xxxx	xxxxx	1122	xxxx	xxxxx
Move Cap.:	284	300	621	278	xxxx	xxxxx	xxxx	xxxx	xxxxx	1122	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	18.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	372	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	xxxxx	15.0	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	8.2	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	A	*	*	A	*	*
ApproachDel:		15.0			18.0			xxxxxx			xxxxxx	
ApproachLOS:		B			C			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

****

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: A[8.6]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0 0	0	0	0 0	0 1 0	0	0 0	1! 0 0	0	0 0	0 0 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	4	0	0	4	2	1	0	4	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	5	0	0	5	2	1	0	5	0	0	0
Added Vol:	0	0	0	0	0	3	5	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	5	0	0	5	5	6	0	5	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	10	5	0	0	5	6	7	0	5	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	5	0	0	5	6	7	0	5	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	11	xxxx	xxxxx	xxxx	xxxx	xxxxx	34	34	8	xxxx	xxxx	xxxxx
Potent Cap.:	1622	xxxx	xxxxx	xxxx	xxxx	xxxxx	985	863	1080	xxxx	xxxx	xxxxx
Move Cap.:	1622	xxxx	xxxxx	xxxx	xxxx	xxxxx	980	857	1080	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1022	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.0]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	7	0	2	1	189	0	0	212	12
Added Vol:	0	0	0	0	0	0	0	9	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	7	0	2	1	198	0	0	228	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	8	0	3	1	208	0	0	240	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	3	1	208	0	0	240	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	457	457	247	253	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	565	503	797	1324	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	565	502	797	1324	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	609	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.0	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	80	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	12	Average Delay (sec/veh):	19.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	50	521	106	55	567	30	59	21	56	46	22	33
Added Vol:	5	115	0	0	148	3	11	0	21	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	636	106	55	715	33	70	21	77	46	22	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	58	669	112	58	752	35	73	22	81	49	23	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	669	112	58	752	35	73	22	81	49	23	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	669	112	58	752	35	73	22	81	49	23	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.79	0.79	0.79	0.78	0.78	0.85
Lanes:	1.00	1.71	0.29	1.00	1.91	0.09	0.42	0.12	0.46	0.68	0.32	1.00
Final Sat.:	1805	3029	505	1805	3424	160	625	186	693	1000	474	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.22	0.22	0.03	0.22	0.22	0.12	0.12	0.12	0.05	0.05	0.02
Crit Moves:	****				****			****				
Green/Cycle:	0.13	0.38	0.38	0.22	0.47	0.47	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.26	0.58	0.58	0.15	0.46	0.46	0.46	0.46	0.46	0.19	0.19	0.09
Delay/Veh:	32.2	20.2	20.2	25.6	14.4	14.4	26.2	26.2	26.2	23.8	23.8	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.2	20.2	20.2	25.6	14.4	14.4	26.2	26.2	26.2	23.8	23.8	23.0
LOS by Move:	C	C	C	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	9	9	1	7	7	4	4	4	1	1	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.747
Loss Time (sec):	16	Average Delay (sec/veh):	41.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	457	51	113	512	37	66	239	40	28	241	179
Added Vol:	7	59	7	10	136	23	44	19	17	25	45	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	516	58	123	648	60	110	258	57	53	286	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	39	543	61	130	682	63	116	271	60	56	301	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	543	61	130	682	63	116	271	60	56	301	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	543	61	130	682	63	116	271	60	56	301	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	0.30	0.70	1.00	0.16	0.84	1.00
Final Sat.:	1805	3196	360	1805	3263	300	559	1313	1615	295	1590	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.07	0.21	0.21	0.21	0.21	0.04	0.19	0.19	0.13
Crit Moves:	****				****		****				****	
Green/Cycle:	0.10	0.24	0.24	0.12	0.26	0.26	0.25	0.25	0.25	0.23	0.23	0.23
Volume/Cap:	0.22	0.72	0.72	0.61	0.82	0.82	0.82	0.82	0.15	0.82	0.82	0.55
Delay/Veh:	42.0	38.1	38.1	46.8	40.9	40.9	45.9	45.9	29.2	47.9	47.9	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.0	38.1	38.1	46.8	40.9	40.9	45.9	45.9	29.2	47.9	47.9	35.6
LOS by Move:	D	D	D	D	D	D	D	D	C	D	D	D
HCM2kAvgQ:	1	10	10	5	14	14	14	14	1	13	13	6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	70	Critical Vol./Cap.(X):	0.430
Loss Time (sec):	12	Average Delay (sec/veh):	19.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	16	496	15	54	513	23	22	151	23	27	185	43
Added Vol:	0	70	0	10	167	0	1	9	0	0	16	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	566	15	64	680	23	23	160	23	27	201	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	17	596	15	67	716	24	24	169	24	28	212	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	596	15	67	716	24	24	169	24	28	212	49
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	596	15	67	716	24	24	169	24	28	212	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.48	0.98	0.98	0.58	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.87	0.13	1.00	0.81	0.19
Final Sat.:	1805	3610	1615	1805	3474	118	912	1628	235	1100	1499	348
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.01	0.04	0.21	0.21	0.03	0.10	0.10	0.03	0.14	0.14
Crit Moves:	****				****						****	
Green/Cycle:	0.14	0.31	0.31	0.21	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.06	0.53	0.03	0.18	0.55	0.55	0.08	0.33	0.33	0.08	0.45	0.45
Delay/Veh:	26.1	20.6	16.9	23.2	17.9	17.9	17.0	18.7	18.7	17.0	19.7	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	20.6	16.9	23.2	17.9	17.9	17.0	18.7	18.7	17.0	19.7	19.7
LOS by Move:	C	C	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	6	0	1	7	7	0	3	3	0	5	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.849
Loss Time (sec): 16 Average Delay (sec/veh): 24.7
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	23	444	17		59	445	37		52	102	26		9	45	27	
Added Vol:	0	68	0		3	164	0		0	0	0		0	0	1	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	23	512	17		62	609	37		52	102	26		9	45	28	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	24	539	18		65	641	38		55	108	27		9	47	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	24	539	18		65	641	38		55	108	27		9	47	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	24	539	18		65	641	38		55	108	27		9	47	29	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.94	0.06		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3476	116		1805	3610	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.15	0.15		0.04	0.18	0.02		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:	****					****				****				****		
Green/Cycle:	0.46	0.38	0.38		0.61	0.50	0.50		0.32	0.20	0.20		0.29	0.20	0.20	
Volume/Cap:	0.06	0.41	0.41		0.11	0.36	0.05		0.12	0.36	0.36		0.02	0.12	0.09	
Delay/Veh:	17.6	27.5	27.5		10.4	18.7	15.6		28.7	41.6	41.6		30.8	39.2	38.9	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	17.6	27.5	27.5		10.4	18.7	15.6		28.7	41.6	41.6		30.8	39.2	38.9	
LOS by Move:	B	C	C		B	B	B		C	D	D		C	D	D	
HCM2kAvgQ:	1	8	8		1	7	1		1	4	4		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	0	Average Delay (sec/veh):	27.8
Optimal Cycle:	0	Level Of Service:	D

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1!	0 0		0 0 1!	0 0		0 1 0	0 1		0 1 0	0 1	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	52	39	55	11	38	52	39	290	50	55	395	30
Added Vol:	9	0	0	0	0	8	4	28	5	0	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	39	55	11	38	60	43	318	55	55	465	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	65	41	58	12	40	64	45	335	58	58	489	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	41	58	12	40	64	45	335	58	58	489	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	41	58	12	40	64	45	335	58	58	489	32
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.25	0.35	0.10	0.35	0.55	0.12	0.88	1.00	0.11	0.89	1.00
Final Sat.:	199	127	178	50	172	275	67	496	636	62	529	665
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.32	0.23	0.23	0.23	0.67	0.67	0.09	0.93	0.93	0.05
Crit Moves:	****				****		****			****		
Delay/Veh:	12.5	12.5	12.5	11.4	11.4	11.4	20.2	20.2	8.7	44.1	44.1	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.5	12.5	12.5	11.4	11.4	11.4	20.2	20.2	8.7	44.1	44.1	8.3
LOS by Move:	B	B	B	B	B	B	C	C	A	E	E	A
ApproachDel:	12.5			11.4			18.7			42.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.5			11.4			18.7			42.1		
LOS by Appr:	B			B			C			E		
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	1.8	1.8	0.1	5.8	5.8	0.0

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.404
Loss Time (sec):	0	Average Delay (sec/veh):	162.5
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	310	60	38	357	50	35	265	20	54	249	38
Added Vol:	38	114	47	4	73	0	0	111	22	31	123	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	424	107	42	430	50	35	376	42	85	372	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	72	444	112	44	450	52	37	393	43	89	389	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	444	112	44	450	52	37	393	43	89	389	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	444	112	44	450	52	37	393	43	89	389	43
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.86	1.00	0.09	0.91	1.00	0.09	0.91	1.00	0.17	0.75	0.08
Final Sat.:	54	331	419	34	351	419	33	353	420	63	277	30
Capacity Analysis Module:												
Vol/Sat:	1.34	1.34	0.27	1.28	1.28	0.12	1.12	1.12	0.10	1.40	1.40	1.40
Crit Moves:	****			****				****			****	
Delay/Veh:	195.2	195	14.4	172.1	172	12.5	110.7	111	12.3	223.4	223	223.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	195.2	195	14.4	172.1	172	12.5	110.7	111	12.3	223.4	223	223.4
LOS by Move:	F	F	B	F	F	B	F	F	B	F	F	F
ApproachDel:	163.0			156.8			101.6			223.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	163.0			156.8			101.6			223.4		
LOS by Appr:	F			F			F			F		
AllWayAvgQ:	19.6	19.6	0.4	17.1	17.1	0.1	10.6	10.6	0.1	21.7	21.7	21.7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	1.188
Loss Time (sec):	0	Average Delay (sec/veh):	76.0
Optimal Cycle:	0	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	184	35	39	157	33	46	300	20	55	322	51
Added Vol:	0	37	4	4	29	6	10	137	0	3	139	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	221	39	43	186	39	56	437	20	58	461	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	27	233	41	45	196	41	59	460	21	61	485	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	233	41	45	196	41	59	460	21	61	485	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	233	41	45	196	41	59	460	21	61	485	58
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.90	1.00	0.19	0.81	1.00	1.00	1.00	1.00	1.00	0.89	0.11
Final Sat.:	43	369	450	76	330	445	396	422	455	423	408	49
Capacity Analysis Module:												
Vol/Sat:	0.63	0.63	0.09	0.59	0.59	0.09	0.15	1.09	0.05	0.14	1.19	1.19
Crit Moves:		****		****				****				****
Delay/Veh:	24.8	24.8	11.4	23.3	23.3	11.5	13.3	99.4	10.9	12.6	130	130.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	24.8	11.4	23.3	23.3	11.5	13.3	99.4	10.9	12.6	130	130.3
LOS by Move:	C	C	B	C	C	B	B	F	B	B	F	F
ApproachDel:		23.0			21.6			86.6			118.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.0			21.6			86.6			118.4	
LOS by Appr:		C			C			F			F	
AllWayAvgQ:	1.5	1.5	0.1	1.3	1.3	0.1	0.2	10.3	0.0	0.2	15.2	15.2

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[17.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	0	33	0	0	0	0	362	22	16	344	0
Added Vol:	15	0	1	0	0	0	0	128	17	1	130	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	0	34	0	0	0	0	490	39	17	474	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	26	0	36	0	0	0	0	516	41	18	499	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	26	0	36	0	0	0	0	516	41	18	499	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1070	1070	536	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	557	xxxx	xxxxx
Potent Cap.:	247	223	548	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1024	xxxx	xxxxx
Move Cap.:	244	219	548	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1024	xxxx	xxxxx
Volume/Cap:	0.11	0.00	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	359	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	17.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		17.1		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[14.1]

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6	28	12	15	25	4	5	130	3		10	184	10							
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22		1.22	1.22	1.22							
Initial Bse:	7	34	15	18	30	5	6	158	4		12	224	12							
Added Vol:	5	8	0	0	9	3	5	28	10		0	21	0							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	12	42	15	18	39	8	11	186	14		12	245	12							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	13	44	15	19	42	8	12	196	14		13	258	13							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	13	44	15	19	42	8	12	196	14		13	258	13							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	535	516	196	541	518	258	271	xxxx	xxxxx		211	xxxx	xxxxx							
Potent Cap.:	459	466	850	455	465	785	1304	xxxx	xxxxx		1372	xxxx	xxxxx							
Move Cap.:	417	457	850	408	456	785	1304	xxxx	xxxxx		1372	xxxx	xxxxx							
Volume/Cap:	0.03	0.10	0.02	0.05	0.09	0.01	0.01	xxxx	xxxx		0.01	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx		7.6	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	497	xxxxx	xxxx	464	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	0.5	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Shrd ConDel:	xxxxx	13.5	xxxxx	xxxxx	14.1	xxxxx	7.8	xxxx	xxxxx		7.6	xxxx	xxxxx							
Shared LOS:	*	B	*	*	B	*	A	*	*		A	*	*							
ApproachDel:	13.5			14.1			xxxxxx				xxxxxx									
ApproachLOS:	B			B			*				*									

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[19.7]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	1	0	4	1	0	2	3	314	5		1	316	2							
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22		1.22	1.22	1.22							
Initial Bse:	1	0	5	1	0	2	4	383	6		1	385	2							
Added Vol:	7	0	0	0	0	0	0	121	8		0	124	0							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	8	0	5	1	0	2	4	504	14		1	509	2							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	9	0	5	1	0	3	4	530	15		1	536	3							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	9	0	5	1	0	3	4	530	15		1	536	3							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	1079	1079	530	1088	1093	537	539	xxxx	xxxxx		545	xxxx	xxxxx							
Potent Cap.:	198	220	553	195	216	548	1040	xxxx	xxxxx		1034	xxxx	xxxxx							
Move Cap.:	196	219	553	192	215	548	1040	xxxx	xxxxx		1034	xxxx	xxxxx							
Volume/Cap:	0.04	0.00	0.01	0.01	0.00	0.00	0.00	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx		8.5	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	258	xxxxx	xxxx	339	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.2	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx	19.7	xxxxx	xxxxx	15.7	xxxxx	8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	C	*	*	C	*	A	*	*		*	*	*							
ApproachDel:	19.7			15.7			xxxxxx				xxxxxx									
ApproachLOS:	C			C			*				*									

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0	0 0	1 0	0	0 1!	0 0	0	0 0	0 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	11	5	0	0	6	1	1	0	4	0	0	0
Added Vol:	0	0	0	0	0	8	7	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	5	0	0	6	9	8	0	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	12	5	0	0	6	10	9	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	5	0	0	6	10	9	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	16	xxxx	xxxxx	xxxx	xxxx	xxxxx	39	39	11	xxxx	xxxx	xxxxx
Potent Cap.:	1615	xxxx	xxxxx	xxxx	xxxx	xxxxx	977	857	1075	xxxx	xxxx	xxxxx
Move Cap.:	1615	xxxx	xxxxx	xxxx	xxxx	xxxxx	972	850	1075	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1002	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.4]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	9	0	5	4	188	0	0	252	12
Added Vol:	0	0	0	0	0	0	0	28	0	0	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	9	0	5	4	216	0	0	273	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	9	0	5	4	227	0	0	288	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	9	0	5	4	227	0	0	288	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	529	529	294	301	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	514	458	750	1272	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	513	457	750	1272	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	579	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.4	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.536
Loss Time (sec):	12	Average Delay (sec/veh):	19.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	54	766	34	17	797	61	67	2	69	82	12	41
Added Vol:	22	201	0	0	177	12	6	0	13	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	967	34	17	974	73	73	2	82	82	12	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	80	1017	36	18	1026	77	77	3	87	86	13	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1017	36	18	1026	77	77	3	87	86	13	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	1017	36	18	1026	77	77	3	87	86	13	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.75	0.75	0.75	0.60	0.60	0.85
Lanes:	1.00	1.93	0.07	1.00	1.86	0.14	0.46	0.02	0.52	0.87	0.13	1.00
Final Sat.:	1805	3469	123	1805	3325	249	663	22	748	997	149	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.01	0.31	0.31	0.12	0.12	0.12	0.09	0.09	0.03
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.49	0.49	0.18	0.56	0.56	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.42	0.60	0.60	0.06	0.55	0.55	0.55	0.55	0.55	0.41	0.41	0.13
Delay/Veh:	41.3	18.2	18.2	32.7	13.8	13.8	35.7	35.7	35.7	33.5	33.5	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.3	18.2	18.2	32.7	13.8	13.8	35.7	35.7	35.7	33.5	33.5	30.6
LOS by Move:	D	B	B	C	B	B	D	D	D	C	C	C
HCM2kAvgQ:	3	12	12	0	11	11	5	5	5	3	3	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	1.019
Loss Time (sec):	16	Average Delay (sec/veh):	74.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	F

F V/C>1.0

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	22	603	74	223	689	69	60	286	43	59	297	169
Added Vol:	22	162	26	21	109	59	44	62	14	14	43	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	765	100	244	798	128	104	348	57	73	340	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	46	806	106	257	840	135	109	367	60	76	358	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	806	106	257	840	135	109	367	60	76	358	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	806	106	257	840	135	109	367	60	76	358	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.77	0.23	1.00	1.72	0.28	0.23	0.77	1.00	0.18	0.82	1.00
Final Sat.:	1805	3137	411	1805	3044	490	431	1448	1615	331	1552	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.26	0.14	0.28	0.28	0.25	0.25	0.04	0.23	0.23	0.12
Crit Moves:		****		****			****			****		
Green/Cycle:	0.09	0.25	0.25	0.14	0.30	0.30	0.25	0.25	0.25	0.23	0.23	0.23
Volume/Cap:	0.28	1.02	1.02	1.02	0.92	0.92	1.02	1.02	0.15	1.02	1.02	0.54
Delay/Veh:	51.8	79.9	79.9	113.3	52.8	52.8	91.7	91.7	35.4	94.9	94.9	42.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	79.9	79.9	113.3	52.8	52.8	91.7	91.7	35.4	94.9	94.9	42.4
LOS by Move:	D	E	E	F	D	D	F	F	D	F	F	D
HCM2kAvgQ:	2	24	24	15	22	22	24	24	2	22	22	7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.540
Loss Time (sec):	12	Average Delay (sec/veh):	21.1
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	32	623	54	62	667	23	28	149	20	32	210	71
Added Vol:	0	196	0	8	128	2	1	27	0	0	20	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	819	54	70	795	25	29	176	20	32	230	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	33	850	56	73	825	26	30	182	20	33	238	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	850	56	73	825	26	30	182	20	33	238	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	850	56	73	825	26	30	182	20	33	238	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.38	0.99	0.99	0.55	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.94	0.06	1.00	0.90	0.10	1.00	0.74	0.26
Final Sat.:	1805	3610	1615	1805	3482	110	716	1685	187	1047	1341	483
Capacity Analysis Module:												
Vol/Sat:	0.02	0.24	0.03	0.04	0.24	0.24	0.04	0.11	0.11	0.03	0.18	0.18
Crit Moves:		****		****							****	
Green/Cycle:	0.19	0.40	0.40	0.13	0.34	0.34	0.30	0.30	0.30	0.30	0.30	0.30
Volume/Cap:	0.09	0.58	0.09	0.30	0.69	0.69	0.14	0.36	0.36	0.10	0.58	0.58
Delay/Veh:	25.0	18.1	13.9	30.1	22.9	22.9	19.3	20.8	20.8	18.9	23.7	23.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	18.1	13.9	30.1	22.9	22.9	19.3	20.8	20.8	18.9	23.7	23.7
LOS by Move:	C	B	B	C	C	C	B	C	C	B	C	C
HCM2kAvgQ:	1	9	1	2	10	10	1	4	4	1	7	7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.968
Loss Time (sec): 16 Average Delay (sec/veh): 26.6
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	37	445	12		31	511	46		79	104	43		18	70	29	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	45	542	15		38	623	56		96	127	52		22	85	35	
Added Vol:	0	191	0		3	124	1		1	0	0		0	0	4	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	45	733	15		41	747	57		97	127	52		22	85	39	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	47	772	15		43	786	60		102	133	55		23	90	41	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	47	772	15		43	786	60		102	133	55		23	90	41	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	47	772	15		43	786	60		102	133	55		23	90	41	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.95	0.85		0.95	0.96	0.96		0.95	1.00	0.85	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		1.00	0.71	0.29		1.00	1.00	1.00	
Final Sat.:	1805	3529	70		1805	3610	1615		1805	1285	531		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.22	0.22		0.02	0.22	0.04		0.06	0.10	0.10		0.01	0.05	0.03	
Crit Moves:	****					****				****				****		
Green/Cycle:	0.46	0.37	0.37		0.56	0.43	0.43		0.37	0.23	0.23		0.32	0.22	0.22	
Volume/Cap:	0.13	0.59	0.59		0.10	0.50	0.09		0.21	0.44	0.44		0.06	0.22	0.12	
Delay/Veh:	16.9	28.7	28.7		13.1	22.9	18.4		23.7	36.8	36.8		26.2	35.6	34.7	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	16.9	28.7	28.7		13.1	22.9	18.4		23.7	36.8	36.8		26.2	35.6	34.7	
LOS by Move:	B	C	C		B	C	B		C	D	D		C	D	C	
HCM2kAvgQ:	1	12	12		1	10	1		2	6	6		1	3	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 Without Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.188
Loss Time (sec):	0	Average Delay (sec/veh):	81.7
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	65	45	68	16	40	65	60	453	83	77	412	12
Added Vol:	11	0	1	0	0	10	13	81	15	1	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	45	69	16	40	75	73	534	98	78	465	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	80	47	73	17	42	79	77	563	103	82	489	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	47	73	17	42	79	77	563	103	82	489	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	47	73	17	42	79	77	563	103	82	489	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.24	0.36	0.12	0.31	0.57	0.12	0.88	1.00	0.14	0.86	1.00
Final Sat.:	192	114	176	57	145	268	64	473	607	76	454	597
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.29	0.29	0.29	1.19	1.19	0.17	1.08	1.08	0.02
Crit Moves:	****			****			****			****		
Delay/Veh:	15.3	15.3	15.3	13.4	13.4	13.4	125.1	125	9.8	87.2	87.2	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.3	15.3	15.3	13.4	13.4	13.4	125.1	125	9.8	87.2	87.2	8.9
LOS by Move:	C	C	C	B	B	B	F	F	A	F	F	A
ApproachDel:	15.3			13.4			109.1			85.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.3			13.4			109.1			85.5		
LOS by Appr:	C			B			F			F		
AllWayAvgQ:	0.7	0.7	0.7	0.4	0.4	0.4	17.3	17.3	0.2	11.4	11.4	0.0

Note: Queue reported is the number of cars per lane.

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APPENDIX 7.3

YEAR 2020 WITH PROJECT CONDITIONS
INTERSECTION ANALYSIS HCM CALCULATION WORKSHEETS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	1.199
Loss Time (sec):	0	Average Delay (sec/veh):	95.9
Optimal Cycle:	0	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	232	44	55	297	32	20	269	37	33	243	18
Added Vol:	12	36	26	7	90	0	0	91	33	40	90	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	268	70	62	387	32	20	360	70	73	333	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	45	282	74	65	408	33	21	379	73	77	350	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	282	74	65	408	33	21	379	73	77	350	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	282	74	65	408	33	21	379	73	77	350	23
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.86	1.00	0.14	0.86	1.00	0.05	0.95	1.00	0.17	0.78	0.05
Final Sat.:	53	332	419	54	340	431	20	377	431	65	296	20
Capacity Analysis Module:												
Vol/Sat:	0.85	0.85	0.18	1.20	1.20	0.08	1.01	1.01	0.17	1.18	1.18	1.18
Crit Moves:		****			****			****			****	
Delay/Veh:	46.7	46.7	13.1	139.9	140	11.8	77.6	77.6	12.7	134.8	135	134.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	46.7	13.1	139.9	140	11.8	77.6	77.6	12.7	134.8	135	134.8
LOS by Move:	E	E	B	F	F	B	F	F	B	F	F	F
ApproachDel:		40.5			131.5			67.5			134.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		40.5			131.5			67.5			134.8	
LOS by Appr:		E			F			F			F	
AllWayAvgQ:	3.7	3.7	0.2	14.0	14.0	0.1	7.3	7.3	0.2	13.0	13.0	13.0

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.970
Loss Time (sec):	0	Average Delay (sec/veh):	35.6
Optimal Cycle:	0	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	32	134	16	40	145	23	22	311	43	35	240	20
Added Vol:	0	13	5	12	23	9	3	118	0	7	116	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	147	21	52	168	32	25	429	43	42	356	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	33	155	22	55	177	34	26	451	45	45	375	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	155	22	55	177	34	26	451	45	45	375	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	155	22	55	177	34	26	451	45	45	375	27
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.82	1.00	0.24	0.76	1.00	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	74	342	456	101	326	470	429	465	501	450	453	32
Capacity Analysis Module:												
Vol/Sat:	0.45	0.45	0.05	0.54	0.54	0.07	0.06	0.97	0.09	0.10	0.83	0.83
Crit Moves:		****			****			****			****	
Delay/Veh:	17.2	17.2	10.6	19.5	19.5	10.6	11.4	61.7	10.4	11.4	34.8	34.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.2	17.2	10.6	19.5	19.5	10.6	11.4	61.7	10.4	11.4	34.8	34.8
LOS by Move:	C	C	B	C	C	B	B	F	B	B	D	D
ApproachDel:		16.5			18.4			54.8			32.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		16.5			18.4			54.8			32.5	
LOS by Appr:		C			C			F			D	
AllWayAvgQ:	0.7	0.7	0.0	1.0	1.0	0.1	0.1	6.6	0.1	0.1	3.3	3.3

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C[16.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	0	12	0	0	0	0	256	9	9	240	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	0	15	0	0	0	0	312	11	11	293	0
Added Vol:	10	0	6	0	0	0	0	129	7	2	119	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	21	0	0	0	0	441	18	13	412	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	37	0	22	0	0	0	0	464	19	14	433	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	37	0	22	0	0	0	0	464	19	14	433	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	934	934	474	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	483	xxxx	xxxxx
Potent Cap.:	297	268	595	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1090	xxxx	xxxxx
Move Cap.:	295	264	595	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1090	xxxx	xxxxx
Volume/Cap:	0.13	0.00	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	361	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		16.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[12.4]

****

Approach:	North Bound			South Bound			East Bound					West Bound				
Movement:	L	- T	- R	L	- T	- R	L	- T	- R			L	- T	- R		
Control:	Stop Sign			Stop Sign			Uncontrolled					Uncontrolled				
Rights:	Include			Include			Include					Include				
Lanes:	0	0 1! 0	0	0	0 1! 0	0	0	1 0	0	1		0	1 0	0	1	
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	6	17	10	6	15	8	4	140	5			13	139	7		
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22			1.22	1.22	1.22		
Initial Bse:	7	21	12	7	18	10	5	171	6			16	169	9		
Added Vol:	7	8	3	0	4	3	1	12	2			1	25	0		
PasserByVol:	0	0	0	0	0	0	0	0	0			0	0	0		
Initial Fut:	14	29	15	7	22	13	6	183	8			17	194	9		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	15	30	16	8	23	13	6	192	9			18	205	9		
Reduct Vol:	0	0	0	0	0	0	0	0	0			0	0	0		
FinalVolume:	15	30	16	8	23	13	6	192	9			18	205	9		
Critical Gap Module:																
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	468	454	192	472	453	205	214	xxxx	xxxxx			201	xxxx	xxxxx		
Potent Cap.:	509	505	854	505	505	841	1369	xxxx	xxxxx			1383	xxxx	xxxxx		
Move Cap.:	476	496	854	467	497	841	1369	xxxx	xxxxx			1383	xxxx	xxxxx		
Volume/Cap:	0.03	0.06	0.02	0.02	0.05	0.02	0.00	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx			7.6	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	A	*	*			A	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	551	xxxxx	xxxx	559	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.3	xxxxx	0.0	xxxx	xxxxx			0.0	xxxx	xxxxx		
Shrd ConDel:	xxxxx	12.4	xxxxx	xxxxx	12.0	xxxxx	7.6	xxxx	xxxxx			7.6	xxxx	xxxxx		
Shared LOS:	*	B	*	*	B	*	A	*	*			A	*	*		
ApproachDel:		12.4			12.0		xxxxxx					xxxxxx				
ApproachLOS:		B			B		*					*				

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.3]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	0	1!	0	0
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	1	0	4	1	0	0	0	278	4		2	251	0							
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22		1.22	1.22	1.22							
Initial Bse:	1	0	5	1	0	0	0	339	5		2	306	0							
Added Vol:	21	0	1	1	0	3	1	130	6		0	98	3							
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0							
Initial Fut:	22	0	6	2	0	3	1	469	11		2	404	3							
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00							
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95							
PHF Volume:	23	0	6	2	0	3	1	494	11		3	425	3							
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0							
FinalVolume:	23	0	6	2	0	3	1	494	11		3	425	3							
Critical Gap Module:																				
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx							
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx							
Capacity Module:																				
Cnflict Vol:	929	929	494	936	939	427	428	xxxx	xxxxx		505	xxxx	xxxxx							
Potent Cap.:	250	270	580	247	266	632	1142	xxxx	xxxxx		1070	xxxx	xxxxx							
Move Cap.:	248	269	580	244	265	632	1142	xxxx	xxxxx		1070	xxxx	xxxxx							
Volume/Cap:	0.09	0.00	0.01	0.01	0.00	0.00	0.00	xxxx	xxxx		0.00	xxxx	xxxx							
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx		8.4	xxxx	xxxxx							
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	282	xxxxx	xxxx	377	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	xxxxx	0.3	xxxxx	xxxxx	0.0	xxxxx	0.0	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	xxxxx	19.3	xxxxx	xxxxx	14.7	xxxxx	8.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	*	C	*	*	B	*	A	*	*		*	*	*							
ApproachDel:	19.3			14.7			xxxxxx				xxxxxx									
ApproachLOS:	C			B			*				*									

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Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: A[8.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	1	0	0	0		0	0	0	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module: >> Count Date: 10 Jun 2010 <<																								
Base Vol:	8	4	0				0	4	2				1	0	4				0	0	0			
Growth Adj:	1.22	1.22	1.22				1.22	1.22	1.22				1.22	1.22	1.22				1.22	1.22	1.22			
Initial Bse:	10	5	0				0	5	2				1	0	5				0	0	0			
Added Vol:	0	4	0				0	4	4				6	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	10	9	0				0	9	6				7	0	5				0	0	0			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	10	9	0				0	9	7				8	0	5				0	0	0			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	10	9	0				0	9	7				8	0	5				0	0	0			
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4	6.5	6.2	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																								
Cnflict Vol:	16	xxxx	xxxxx	xxxx	xxxx	xxxxx							43	43	13	xxxx	xxxx	xxxxx						
Potent Cap.:	1615	xxxx	xxxxx	xxxx	xxxx	xxxxx							973	853	1073	xxxx	xxxx	xxxxx						
Move Cap.:	1615	xxxx	xxxxx	xxxx	xxxx	xxxxx							969	848	1073	xxxx	xxxx	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx							0.01	0.00	0.00	xxxx	xxxx	xxxx						
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx												
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*												
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1008	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*												
ApproachDel:	xxxxxx			xxxxxx				8.6			xxxxxx													
ApproachLOS:	*			*				A			*													

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[11.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	0	0	0	6	0	2	1	155	0	0	174	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	7	0	2	1	189	0	0	212	12
Added Vol:	0	0	0	9	0	7	4	12	0	0	19	-1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	16	0	9	5	201	0	0	231	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	17	0	10	5	212	0	0	243	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	17	0	10	5	212	0	0	243	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	472	472	249	255	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	554	493	794	1322	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	553	491	794	1322	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	622	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.1	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.1			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.448
Loss Time (sec): 12 Average Delay (sec/veh): 19.2
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	41	427	87	45	465	25	48	17	46	38	18	27
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	50	521	106	55	567	30	59	21	56	46	22	33
Added Vol:	8	139	1	0	157	3	11	0	27	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	660	107	55	724	33	70	21	83	46	22	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	61	694	113	58	762	35	73	22	87	49	23	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	694	113	58	762	35	73	22	87	49	23	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	694	113	58	762	35	73	22	87	49	23	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.79	0.79	0.79	0.77	0.77	0.85
Lanes:	1.00	1.72	0.28	1.00	1.91	0.09	0.40	0.12	0.48	0.68	0.32	1.00
Final Sat.:	1805	3041	494	1805	3426	158	606	181	724	993	470	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.03	0.22	0.22	0.12	0.12	0.12	0.05	0.05	0.02
Crit Moves:		****		****				****				
Green/Cycle:	0.22	0.47	0.47	0.13	0.38	0.38	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.16	0.48	0.48	0.26	0.58	0.58	0.48	0.48	0.48	0.20	0.20	0.09
Delay/Veh:	25.7	14.6	14.6	32.2	20.2	20.2	26.5	26.5	26.5	23.9	23.9	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.7	14.6	14.6	32.2	20.2	20.2	26.5	26.5	26.5	23.9	23.9	23.0
LOS by Move:	C	B	B	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	1	7	7	1	9	9	4	4	4	1	1	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	16	Average Delay (sec/veh):	42.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	375	42	93	420	30	54	196	33	23	198	147
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	457	51	113	512	37	66	239	40	28	241	179
Added Vol:	36	82	9	11	148	24	48	28	22	28	60	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	539	60	124	660	61	114	267	62	56	301	196
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	70	568	63	131	695	64	120	281	66	59	317	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	568	63	131	695	64	120	281	66	59	317	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	568	63	131	695	64	120	281	66	59	317	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.94	0.94	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.80	0.20	1.00	1.83	0.17	0.30	0.70	1.00	0.16	0.84	1.00
Final Sat.:	1805	3199	357	1805	3264	300	559	1312	1615	296	1589	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.07	0.21	0.21	0.21	0.21	0.04	0.20	0.20	0.13
Crit Moves:	****				****		****			****		
Green/Cycle:	0.11	0.23	0.23	0.12	0.25	0.25	0.25	0.25	0.25	0.23	0.23	0.23
Volume/Cap:	0.37	0.76	0.76	0.62	0.86	0.86	0.86	0.86	0.16	0.86	0.86	0.55
Delay/Veh:	40.8	37.8	37.8	45.4	43.0	43.0	49.4	49.4	28.2	51.1	51.1	34.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	37.8	37.8	45.4	43.0	43.0	49.4	49.4	28.2	51.1	51.1	34.0
LOS by Move:	D	D	D	D	D	D	D	D	C	D	D	C
HCM2kAvgQ:	2	11	11	5	14	14	14	14	2	14	14	6

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	70	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	12	Average Delay (sec/veh):	19.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	13	407	12	44	421	19	18	124	19	22	152	35
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	16	496	15	54	513	23	22	151	23	27	185	43
Added Vol:	0	92	0	13	201	1	3	23	5	0	17	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	588	15	67	714	24	25	174	28	27	202	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	17	619	15	70	752	25	26	183	30	28	213	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	619	15	70	752	25	26	183	30	28	213	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	619	15	70	752	25	26	183	30	28	213	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.47	0.98	0.98	0.55	0.97	0.97
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.86	0.14	1.00	0.80	0.20
Final Sat.:	1805	3610	1615	1805	3474	118	897	1601	259	1043	1468	375
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.01	0.04	0.22	0.22	0.03	0.11	0.11	0.03	0.15	0.15
Crit Moves:	****				****						****	
Green/Cycle:	0.14	0.31	0.31	0.21	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.06	0.56	0.03	0.19	0.58	0.58	0.09	0.36	0.36	0.09	0.46	0.46
Delay/Veh:	26.1	20.8	16.9	23.2	18.3	18.3	17.1	19.0	19.0	17.0	19.8	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	20.8	16.9	23.2	18.3	18.3	17.1	19.0	19.0	17.0	19.8	19.8
LOS by Move:	C	C	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	6	0	1	8	8	0	4	4	0	5	5

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 25.3
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0	0	1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	19	364	14		48	365	30		43	84	21		7	37	22	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	23	444	17		59	445	37		52	102	26		9	45	27	
Added Vol:	0	78	0		10	194	2		7	0	0		0	0	7	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	23	522	17		69	639	39		59	102	26		9	45	34	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	24	549	18		72	673	41		63	108	27		9	47	36	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	24	549	18		72	673	41		63	108	27		9	47	36	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	24	549	18		72	673	41		63	108	27		9	47	36	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.98	0.85		0.95	0.97	0.97		0.95	1.00	0.85	
Lanes:	1.00	1.94	0.06		1.00	2.00	1.00		1.00	0.80	0.20		1.00	1.00	1.00	
Final Sat.:	1805	3478	114		1805	3729	1615		1805	1474	369		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.16	0.16		0.04	0.18	0.03		0.03	0.07	0.07		0.00	0.02	0.02	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.56	0.42	0.42		0.45	0.34	0.34		0.36	0.23	0.23		0.36	0.23	0.23	
Volume/Cap:	0.05	0.38	0.38		0.15	0.53	0.07		0.12	0.32	0.32		0.02	0.11	0.10	
Delay/Veh:	11.7	21.3	21.3		16.8	28.0	23.3		22.3	34.1	34.1		21.7	32.2	32.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	11.7	21.3	21.3		16.8	28.0	23.3		22.3	34.1	34.1		21.7	32.2	32.1	
LOS by Move:	B	C	C		B	C	C		C	C	C		C	C	C	
HCM2kAvgQ:	0	7	7		1	9	1		1	4	4		0	1	1	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	0	Average Delay (sec/veh):	30.9
Optimal Cycle:	0	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0	0 0	1!	0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	52	39	55	11	38	52	39	290	50	55	395	30
Added Vol:	9	0	0	0	0	14	7	37	5	0	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	39	55	11	38	66	46	327	55	55	477	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	65	41	58	12	40	70	48	344	58	58	502	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	41	58	12	40	70	48	344	58	58	502	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	41	58	12	40	70	48	344	58	58	502	32
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.25	0.35	0.09	0.33	0.58	0.12	0.88	1.00	0.10	0.90	1.00
Final Sat.:	197	125	176	47	162	285	69	489	632	60	526	658
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.25	0.25	0.25	0.70	0.70	0.09	0.95	0.95	0.05
Crit Moves:			****	****				****		****		
Delay/Veh:	12.8	12.8	12.8	11.7	11.7	11.7	21.8	21.8	8.8	50.3	50.3	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.8	12.8	12.8	11.7	11.7	11.7	21.8	21.8	8.8	50.3	50.3	8.3
LOS by Move:	B	B	B	B	B	B	C	C	A	F	F	A
ApproachDel:	12.8			11.7			20.2			48.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.8			11.7			20.2			48.1		
LOS by Appr:	B			B			C			E		
AllWayAvgQ:	0.4	0.4	0.4	0.3	0.3	0.3	2.0	2.0	0.1	6.8	6.8	0.0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	0	Critical Vol./Cap.(X):	1.609
Loss Time (sec):	0	Average Delay (sec/veh):	193.2
Optimal Cycle:	0	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1! 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	310	60	38	357	50	35	265	20	54	249	38
Added Vol:	38	114	73	14	73	0	0	143	22	61	151	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	424	133	52	430	50	35	408	42	115	400	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	72	444	139	54	450	52	37	427	43	120	419	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	444	139	54	450	52	37	427	43	120	419	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	444	139	54	450	52	37	427	43	120	419	58
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.86	1.00	0.11	0.89	1.00	0.08	0.92	1.00	0.20	0.70	0.10
Final Sat.:	54	331	419	41	344	419	31	355	420	75	260	36
Capacity Analysis Module:												
Vol/Sat:	1.34	1.34	0.33	1.31	1.31	0.12	1.20	1.20	0.10	1.61	1.61	1.61
Crit Moves:	****			****			****					****
Delay/Veh:	195.2	195	15.5	183.5	184	12.5	141.2	141	12.3	310.5	310	310.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	195.2	195	15.5	183.5	184	12.5	141.2	141	12.3	310.5	310	310.5
LOS by Move:	F	F	C	F	F	B	F	F	B	F	F	F
ApproachDel:	157.0			167.4			130.2			310.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	157.0			167.4			130.2			310.5		
LOS by Appr:	F			F			F			F		
AllWayAvgQ:	19.6	19.6	0.5	18.3	18.3	0.1	13.9	13.9	0.1	30.7	30.7	30.7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	1.448
Loss Time (sec):	0	Average Delay (sec/veh):	135.2
Optimal Cycle:	0	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	0 1		0 1 0	0 1		1 0 1	0 1		1 0	0 1 0	
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	184	35	39	157	33	46	300	20	55	322	51
Added Vol:	0	37	12	24	29	6	10	210	0	11	217	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	221	47	63	186	39	56	510	20	66	539	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	27	233	50	66	196	41	59	537	21	69	567	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	233	50	66	196	41	59	537	21	69	567	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	233	50	66	196	41	59	537	21	69	567	85
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.90	1.00	0.25	0.75	1.00	1.00	1.00	1.00	1.00	0.87	0.13
Final Sat.:	42	365	444	102	302	444	389	415	446	417	392	59
Capacity Analysis Module:												
Vol/Sat:	0.64	0.64	0.11	0.65	0.65	0.09	0.15	1.29	0.05	0.17	1.45	1.45
Crit Moves:		****			****			****			****	
Delay/Veh:	25.4	25.4	11.7	26.2	26.2	11.5	13.5	175	11.1	13.0	235	235.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.4	25.4	11.7	26.2	26.2	11.5	13.5	175	11.1	13.0	235	235.3
LOS by Move:	D	D	B	D	D	B	B	F	B	B	F	F
ApproachDel:		23.2			24.2			153.9			213.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		23.2			24.2			153.9			213.9	
LOS by Appr:		C			C			F			F	
AllWayAvgQ:	1.6	1.6	0.1	1.6	1.6	0.1	0.2	18.8	0.0	0.2	28.1	28.1

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Gilbert Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[21.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	0 0 0	1	0	1 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	8	0	27	0	0	0	0	297	18	13	282	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	10	0	33	0	0	0	0	362	22	16	344	0
Added Vol:	15	0	9	0	0	0	0	233	17	14	247	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	0	42	0	0	0	0	595	39	30	591	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	26	0	44	0	0	0	0	626	41	31	622	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	26	0	44	0	0	0	0	626	41	31	622	0
Critical Gap Module:												
Critical Gp:	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1332	1332	647	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	667	xxxx	xxxxx
Potent Cap.:	172	156	475	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	932	xxxx	xxxxx
Move Cap.:	168	151	475	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	932	xxxx	xxxxx
Volume/Cap:	0.16	0.00	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	21.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		21.9		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 Gilbert Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: C[15.1]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	0	1	0	1	0	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																				
Base Vol:	6		28		12	15		25		4	5		130		3	10		184		10
Growth Adj:	1.22		1.22		1.22	1.22		1.22		1.22	1.22		1.22		1.22	1.22		1.22		1.22
Initial Bse:	7		34		15	18		30		5	6		158		4	12		224		12
Added Vol:	5		12		7	0		16		3	5		42		10	7		33		0
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	12		46		22	18		46		8	11		200		14	19		257		12
User Adj:	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	13		49		23	19		49		8	12		211		14	20		271		13
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	13		49		23	19		49		8	12		211		14	20		271		13
Critical Gap Module:																				
Critical Gp:	7.1		6.5		6.2	7.1		6.5		6.2	4.1		xxxx		xxxxx	4.1		xxxx		xxxxx
FollowUpTim:	3.5		4.0		3.3	3.5		4.0		3.3	2.2		xxxx		xxxxx	2.2		xxxx		xxxxx
Capacity Module:																				
Cnflict Vol:	581		558		211	588		560		271	284		xxxx		xxxxx	225		xxxx		xxxxx
Potent Cap.:	428		441		834	423		440		773	1290		xxxx		xxxxx	1355		xxxx		xxxxx
Move Cap.:	380		430		834	369		429		773	1290		xxxx		xxxxx	1355		xxxx		xxxxx
Volume/Cap:	0.03		0.11		0.03	0.05		0.11		0.01	0.01		xxxx		xxxx	0.01		xxxx		xxxx
Level Of Service Module:																				
2Way95thQ:	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Control Del:	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx	7.8		xxxx		xxxxx	7.7		xxxx		xxxxx
LOS by Move:	*		*		*	*		*		*	A		*		*	A		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx		483		xxxxx	xxxx		432		xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx		0.6		xxxxx	xxxxx		0.6		xxxxx	0.0		xxxx		xxxxx	0.0		xxxx		xxxxx
Shrd ConDel:	xxxxx		14.0		xxxxx	xxxxx		15.1		xxxxx	7.8		xxxx		xxxxx	7.7		xxxx		xxxxx
Shared LOS:	*		B		*	*		C		*	A		*		*	A		*		*
ApproachDel:			14.0					15.1			xxxxxx					xxxxxx				
ApproachLOS:			B					C			*					*				

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Condition
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Alessandro Street (NS) / Menlo Avenue (EW)

****

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[34.9]

****

Approach:	North Bound			South Bound			East Bound						West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R				L	- T	- R			
Control:	Stop Sign			Stop Sign			Uncontrolled						Uncontrolled					
Rights:	Include			Include			Include						Include					
Lanes:	0	0 1!	0 0	0	0 1!	0 0	0	1 0	0 1				0	0 1!	0 0			
Volume Module: >> Count Date: 10 Jun 2010 <<																		
Base Vol:	1	0	4	1	0	2	3	314	5				1	316	2			
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22				1.22	1.22	1.22			
Initial Bse:	1	0	5	1	0	2	4	383	6				1	385	2			
Added Vol:	17	0	1	1	0	4	1	209	33				1	242	5			
PasserByVol:	2	0	0	0	0	0	0	28	4				0	30	0			
Initial Fut:	20	0	6	2	0	6	5	620	43				2	657	7			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95			
PHF Volume:	21	0	6	2	0	7	5	652	45				2	692	8			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
FinalVolume:	21	0	6	2	0	7	5	652	45				2	692	8			
Critical Gap Module:																		
Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	1366	1366	652	1388	1408	696	700	xxxx	xxxxx				698	xxxx	xxxxx			
Potent Cap.:	126	148	471	121	140	445	907	xxxx	xxxxx				908	xxxx	xxxxx			
Move Cap.:	123	147	471	119	139	445	907	xxxx	xxxxx				908	xxxx	xxxxx			
Volume/Cap:	0.17	0.00	0.01	0.02	0.00	0.02	0.01	xxxx	xxxx				0.00	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx				9.0	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*	A	*	*				A	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT				LT -	LTR -	RT			
Shared Cap.:	xxxx	148	xxxxx	xxxx	261	xxxxx	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	34.9	xxxxx	xxxxx	19.3	xxxxx	9.0	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	D	*	*	C	*	A	*	*				*	*	*			
ApproachDel:		34.9			19.3			xxxxxx						xxxxxx				
ApproachLOS:		D			C			*						*				

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Condition
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #7 Alessandro Street (NS) / Ancla Lane (EW)

****

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[8.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0	1! 0	0	0 0	0 0	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	9	4	0	0	5	1	1	0	3	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	11	5	0	0	6	1	1	0	4	0	0	0
Added Vol:	0	5	0	0	5	11	10	0	0	0	0	0
PasserByVol:	0	0	0	0	0	1	1	0	0	0	0	0
Initial Fut:	11	10	0	0	11	13	12	0	4	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	12	10	0	0	12	14	13	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	10	0	0	12	14	13	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	26	xxxx	xxxxx	xxxx	xxxx	xxxxx	52	52	19	xxxx	xxxx	xxxxx
Potent Cap.:	1602	xxxx	xxxxx	xxxx	xxxx	xxxxx	961	843	1066	xxxx	xxxx	xxxxx
Move Cap.:	1602	xxxx	xxxxx	xxxx	xxxx	xxxxx	956	837	1066	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	979	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			8.7			xxxxxx		
ApproachLOS:	*			*			A			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Alessandro Street (NS) / Oakland Avenue (EW)

****

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[11.4]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	7	0	4	3	154	0	0	207	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	9	0	5	4	188	0	0	252	12
Added Vol:	0	0	0	4	0	11	15	35	0	0	29	10
PasserByVol:	0	0	0	1	0	4	4	2	0	0	2	1
Initial Fut:	0	0	0	14	0	20	23	225	0	0	283	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	14	0	21	24	237	0	0	298	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	14	0	21	24	237	0	0	298	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	595	595	310	323	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	471	420	734	1249	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	464	412	734	1249	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.03	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	594	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.4	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			11.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 State Street (NS) / Fruitvale Avenue (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.566
Loss Time (sec):	12	Average Delay (sec/veh):	19.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	44	628	28	14	654	50	55	2	57	67	10	34
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	54	766	34	17	797	61	67	2	69	82	12	41
Added Vol:	36	230	0	0	214	12	6	0	23	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	996	34	17	1011	73	73	2	92	83	12	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	94	1048	36	18	1064	77	77	3	97	87	13	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	1048	36	18	1064	77	77	3	97	87	13	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	1048	36	18	1064	77	77	3	97	87	13	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.94	0.94	0.76	0.76	0.76	0.59	0.59	0.85
Lanes:	1.00	1.93	0.07	1.00	1.87	0.13	0.43	0.01	0.56	0.87	0.13	1.00
Final Sat.:	1805	3473	119	1805	3333	240	626	21	792	970	143	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.30	0.01	0.32	0.32	0.12	0.12	0.12	0.09	0.09	0.03
Crit Moves:	****				****			****				
Green/Cycle:	0.11	0.49	0.49	0.17	0.55	0.55	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.50	0.62	0.62	0.06	0.58	0.58	0.58	0.58	0.58	0.42	0.42	0.13
Delay/Veh:	42.2	18.4	18.4	33.1	14.2	14.2	36.2	36.2	36.2	33.5	33.5	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.2	18.4	18.4	33.1	14.2	14.2	36.2	36.2	36.2	33.5	33.5	30.4
LOS by Move:	D	B	B	C	B	B	D	D	D	C	C	C
HCM2kAvgQ:	3	13	13	0	12	12	5	5	5	3	3	1

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Condition
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	1.111
Loss Time (sec):	16	Average Delay (sec/veh):	101.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	20	10	20	20	21	21	21	21	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	18	495	61	183	565	57	49	235	35	48	244	139
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	22	603	74	223	689	69	60	286	43	59	297	169
Added Vol:	89	184	33	34	185	66	65	87	24	21	73	17
PasserByVol:	20	6	3	2	13	1	3	7	3	3	9	0
Initial Fut:	131	793	110	259	887	136	128	380	70	83	379	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	138	835	116	273	933	144	134	400	73	87	399	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	835	116	273	933	144	134	400	73	87	399	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	138	835	116	273	933	144	134	400	73	87	399	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.99	0.99	0.85	0.99	0.99	0.85
Lanes:	1.00	1.76	0.24	1.00	1.73	0.27	0.25	0.75	1.00	0.18	0.82	1.00
Final Sat.:	1805	3112	433	1805	3066	472	472	1405	1615	336	1547	1615
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.15	0.30	0.30	0.28	0.28	0.05	0.26	0.26	0.12
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.24	0.24	0.14	0.29	0.29	0.26	0.26	0.26	0.23	0.23	0.23
Volume/Cap:	0.92	1.11	1.11	1.11	1.03	1.03	1.11	1.11	0.18	1.11	1.11	0.52
Delay/Veh:	103.8	111	111.3	142.2	79.5	79.5	119.4	119	34.9	122.7	123	41.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	103.8	111	111.3	142.2	79.5	79.5	119.4	119	34.9	122.7	123	41.6
LOS by Move:	F	F	F	F	E	E	F	F	C	F	F	D
HCM2kAvgQ:	8	28	28	17	29	29	30	30	2	28	28	7

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 State Street (NS) / Oakland Avenue (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	12	Average Delay (sec/veh):	21.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	15	15	10	15	15	22	22	22	22	22	22
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	511	44	51	547	19	23	122	16	26	172	58
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	32	623	54	62	667	23	28	149	20	32	210	71
Added Vol:	5	261	0	18	189	7	5	37	3	0	38	20
PasserByVol:	1	13	0	1	13	1	1	3	1	0	3	1
Initial Fut:	38	897	54	81	869	31	34	189	24	32	251	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	39	931	56	84	902	32	35	196	24	33	260	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	931	56	84	902	32	35	196	24	33	260	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	39	931	56	84	902	32	35	196	24	33	260	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.95	0.33	0.98	0.98	0.53	0.96	0.96
Lanes:	1.00	2.00	1.00	1.00	1.93	0.07	1.00	0.89	0.11	1.00	0.73	0.27
Final Sat.:	1805	3610	1615	1805	3468	124	633	1661	207	999	1335	489
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.03	0.05	0.26	0.26	0.06	0.12	0.12	0.03	0.19	0.19
Crit Moves:		****		****							****	
Green/Cycle:	0.18	0.40	0.40	0.13	0.35	0.35	0.30	0.30	0.30	0.30	0.30	0.30
Volume/Cap:	0.12	0.64	0.09	0.35	0.73	0.73	0.18	0.39	0.39	0.11	0.64	0.64
Delay/Veh:	25.8	19.0	13.9	30.4	23.4	23.4	19.7	21.0	21.0	18.9	25.1	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.8	19.0	13.9	30.4	23.4	23.4	19.7	21.0	21.0	18.9	25.1	25.1
LOS by Move:	C	B	B	C	C	C	B	C	C	B	C	C
HCM2kAvgQ:	1	10	1	2	11	11	1	4	4	1	8	8

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Condition
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 State Street (NS) / Devonshire Avenue (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.984
Loss Time (sec): 16 Average Delay (sec/veh): 27.0
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Prot+Permit				Prot+Permit				Prot+Permit				Prot+Permit			
Rights:	Include				Include				Include				Include			
Min. Green:	10	19	19		10	19	19		10	24	24		10	24	24	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 2	0	1	1	0 0	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	37	445	12		31	511	46		79	104	43		18	70	29	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	45	542	15		38	623	56		96	127	52		22	85	35	
Added Vol:	0	234	0		19	158	15		12	0	0		0	0	20	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	45	776	15		57	781	71		108	127	52		22	85	55	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	47	817	15		60	822	75		114	133	55		23	90	58	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	47	817	15		60	822	75		114	133	55		23	90	58	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	47	817	15		60	822	75		114	133	55		23	90	58	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.95		0.95	0.98	0.85		0.95	0.96	0.96		0.95	1.00	0.85	
Lanes:	1.00	1.96	0.04		1.00	2.00	1.00		1.00	0.71	0.29		1.00	1.00	1.00	
Final Sat.:	1805	3533	67		1805	3729	1615		1805	1285	531		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.23	0.23		0.03	0.22	0.05		0.06	0.10	0.10		0.01	0.05	0.04	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.56	0.43	0.43		0.46	0.37	0.37		0.37	0.24	0.24		0.32	0.22	0.22	
Volume/Cap:	0.12	0.54	0.54		0.17	0.60	0.13		0.23	0.44	0.44		0.06	0.22	0.17	
Delay/Veh:	13.7	23.8	23.8		17.4	28.9	23.2		23.5	36.5	36.5		26.1	35.6	35.1	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	13.7	23.8	23.8		17.4	28.9	23.2		23.5	36.5	36.5		26.1	35.6	35.1	
LOS by Move:	B	C	C		B	C	C		C	D	D		C	D	D	
HCM2kAvgQ:	1	11	11		1	12	2		3	6	6		1	3	2	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

****

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

****

Cycle (sec):	0	Critical Vol./Cap.(X):	1.289
Loss Time (sec):	0	Average Delay (sec/veh):	105.1
Optimal Cycle:	0	Level Of Service:	F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	65	45	68	16	40	65	60	453	83	77	412	12
Added Vol:	11	0	1	0	0	21	27	112	15	1	79	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	45	69	16	40	86	87	565	98	78	491	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	80	47	73	17	42	90	91	595	103	82	517	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	47	73	17	42	90	91	595	103	82	517	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	47	73	17	42	90	91	595	103	82	517	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.24	0.36	0.11	0.28	0.61	0.13	0.87	1.00	0.14	0.86	1.00
Final Sat.:	190	113	174	53	134	285	71	462	601	72	454	591
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.32	0.32	0.32	1.29	1.29	0.17	1.14	1.14	0.02
Crit Moves:			****	****				****			****	
Delay/Veh:	15.5	15.5	15.5	13.7	13.7	13.7	164.7	165	9.9	107.8	108	8.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.5	15.5	15.5	13.7	13.7	13.7	164.7	165	9.9	107.8	108	8.9
LOS by Move:	C	C	C	B	B	B	F	F	A	F	F	A
ApproachDel:	15.5			13.7			144.5			105.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.5			13.7			144.5			105.7		
LOS by Appr:	C			B			F			F		
AllWayAvgQ:	0.7	0.7	0.7	0.4	0.4	0.4	23.0	23.0	0.2	14.3	14.3	0.0

****

Note: Queue reported is the number of cars per lane.

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APPENDIX 7.4

YEAR 2020 WITHOUT PROJECT CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **11,848** vpd

Minor Street Future ADT = **666** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1 **11,848**	1 **666**	8,000 *	5,600	2,400	1,680
	2 +	1	9,600	6,720	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1 **11,848**	1 **666**	12,000	8,400	1,200	850
	2 +	1	14,400	10,080	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 28%	**B** 55%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **5,713** vpd Minor Street Future ADT = **785** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,713**	1 **785**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,713**	1 **785**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 33% B 48%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2020 NP
				CALC	HQ	DATE	10/25/10
Jurisdiction:	City of Hemet			CHK	CH	DATE	10/25/10
Major Street:	Menlo Av.				Critical Approach Speed (Major)		40 mph
Minor Street:	Alessandro St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **12,004** vpd Minor Street Future ADT = **166** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **12,004**	*1* **166**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **12,004**	*1* **166**	12,000 *	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7% **B** 14%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Alessandro St.				Critical Approach Speed (Major)		25 mph
Minor Street: Ancla				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **343** vpd Minor Street Future ADT = **190** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **343** / 1 **190**	8,000	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **343** / 1 **190**	12,000	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / XX Not Satisfied				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 4% B: 3%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 NP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Alessandro				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **5,986** vpd Minor Street Future ADT = **178** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **5,986** / 1 **178**	8,000	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **5,986** / 1 **178**	12,000	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 7% B: 15%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

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APPENDIX 7.5

YEAR 2020 WITHOUT PROJECT CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: **City of Hemet**				CHK CH	DATE	10/25/10
Major Street: **Menlo Av.**				Critical Approach Speed (Major)		40 mph
Minor Street: **Gilbert St.**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **14,044** vpd Minor Street Future ADT = **751** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1 **14,044**	1 **751**	8,000 *	5,600	2,400	1,680
	2 +	1	9,600	6,720	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1 **14,044**	1 **751**	12,000 *	8,400	1,200	850
	2 +	1	14,400	10,080	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 31%	**B** 63%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Gilbert St.				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **6,033** vpd Minor Street Future ADT = **901** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,033**	1 **901**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,033**	1 **901**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 38% B 50%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	2020 WP
				CALC IC	DATE 05/18/10
Jurisdiction: City of Hemet				CHK IC	DATE 05/18/10
Major Street: Menlo Av.				Critical Approach Speed (Major)	40 mph
Minor Street: Alessandro St.				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **14,806** vpd

Minor Street Future ADT = **379** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **14,806** / 1 **379**	8,000 *	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied (XX)				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 **14,806** / 1 **379**	12,000 *	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A **16%** B **32%**				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	2020 WP
				CALC IC	DATE 05/18/10
Jurisdiction: City of Hemet				CHK IC	DATE 05/18/10
Major Street: Alessandro St.				Critical Approach Speed (Major)	25 mph
Minor Street: Dwy 1				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **621** vpd Minor Street Future ADT = **223** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
Satisfied: XX				
Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **621** / 1 **223**	8,000	5,600	2,400	1,680
2 + / 1	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Urban	Rural	Urban	Rural
Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **621** / 1 **223**	12,000	8,400	1,200	850
2 + / 1	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied				
Not Satisfied: XX				
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 8% B: 5%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2020 WP
				CALC	IC	DATE	05/18/10
Jurisdiction:	City of Hemet			CHK	IC	DATE	05/18/10
Major Street:	Alessandro St.				Critical Approach Speed (Major)		25 mph
Minor Street:	Ancla				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **464** vpd Minor Street Future ADT = **221** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **464**	*1* **221**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **464**	*1* **221**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 6% **B** 4%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 WP
				CALC IC	DATE	05/18/10
Jurisdiction: City of Hemet				CHK IC	DATE	05/18/10
Major Street: Alessandro St.				Critical Approach Speed (Major)		25 mph
Minor Street: Dwy 2				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **640** vpd Minor Street Future ADT = **240** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **640**	*1* **240**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **640**	*1* **240**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 8% **B** 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2020 WP
				CALC	HQ	DATE	10/25/10
Jurisdiction:	City of Hemet			CHK	CH	DATE	10/25/10
Major Street:	Oakland				Critical Approach Speed (Major)		30 mph
Minor Street:	Alessandro				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **6,390** vpd Minor Street Future ADT = **417** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,390**	1 **417**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,390**	1 **417**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 17% B 35%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	2020 WP
				CALC IC	DATE 05/18/10
Jurisdiction: City of Hemet				CHK IC	DATE 05/18/10
Major Street: Menlo Av.				Critical Approach Speed (Major)	40 mph
Minor Street: Dwy 3				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **14,227** vpd Minor Street Future ADT = **947** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **14,227**	*1* **947**	8,000 *	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **14,227**	*1* **947**	12,000 *	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 39% **B** 79%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2020 With Project Conditions (AM)**

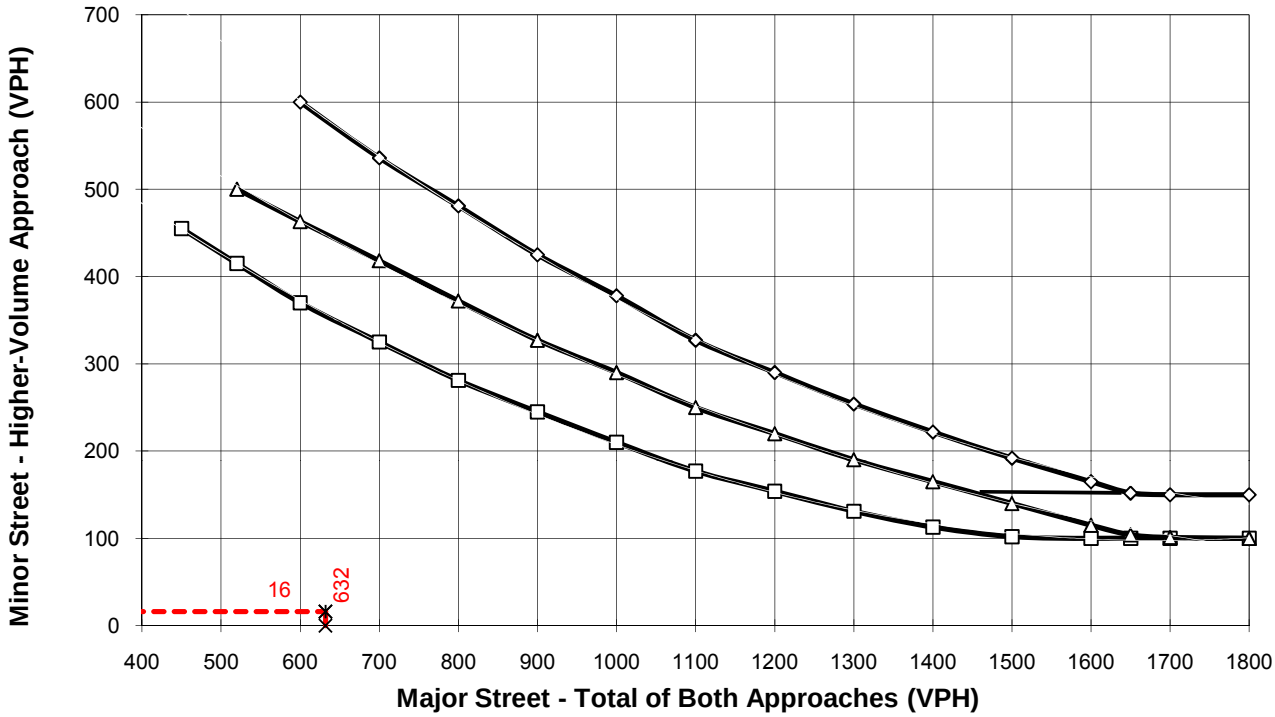
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **632**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dwy 3**

High Volume Approach (VPH) = **16**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2020 With Project Conditions (PM)**

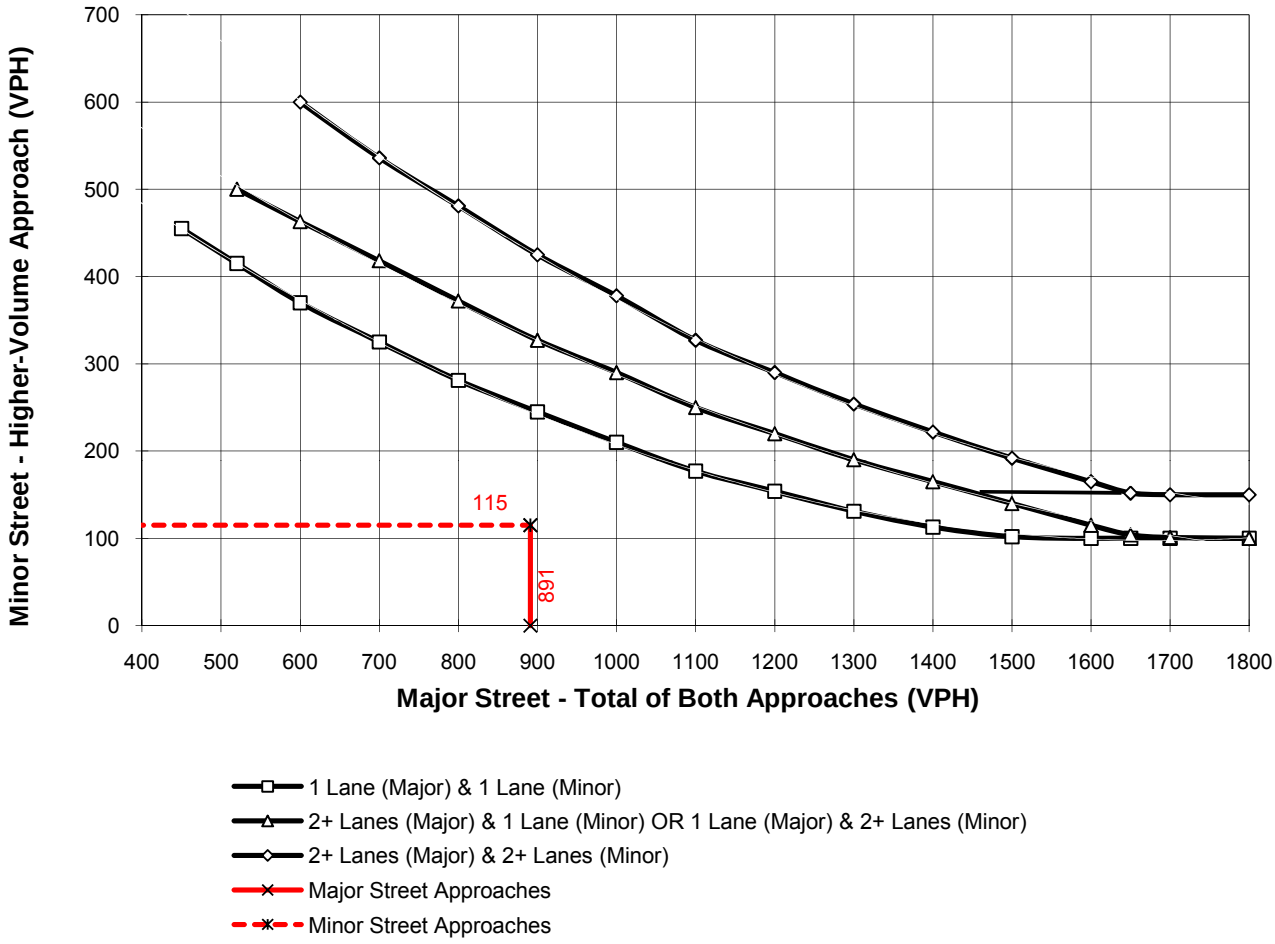
Major Street Name = **Menlo**

Total of Both Approaches (VPH) = **891**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dwy 3**

High Volume Approach (VPH) = **115**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2020 WP
				CALC HQ	DATE	10/25/10
Jurisdiction: City of Hemet				CHK CH	DATE	10/25/10
Major Street: Oakland				Critical Approach Speed (Major)		30 mph
Minor Street: Dwy 4				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **6,472** vpd Minor Street Future ADT = **175** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,472**	1 **175**	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **6,472**	1 **175**	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 7% B 15%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM		TRAFFIC CONDITIONS		2020 WP
				CALC	IC	DATE	05/18/10
Jurisdiction:	City of Hemet			CHK	IC	DATE	05/18/10
Major Street:	State				Critical Approach Speed (Major)		35 mph
Minor Street:	Dwy 7				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **23,367** vpd Minor Street Future ADT = **1,266** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or **URBAN (U)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **23,367**	*1* **1,266**	9,600 *	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied (XX) / Not Satisfied						
	1	*1*	12,000	8,400	1,200	850
	2 + **23,367**	*1* **1,266**	14,400 *	10,080	1,200 *	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 53%	**B** 100%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2020 With Project Conditions (AM)**

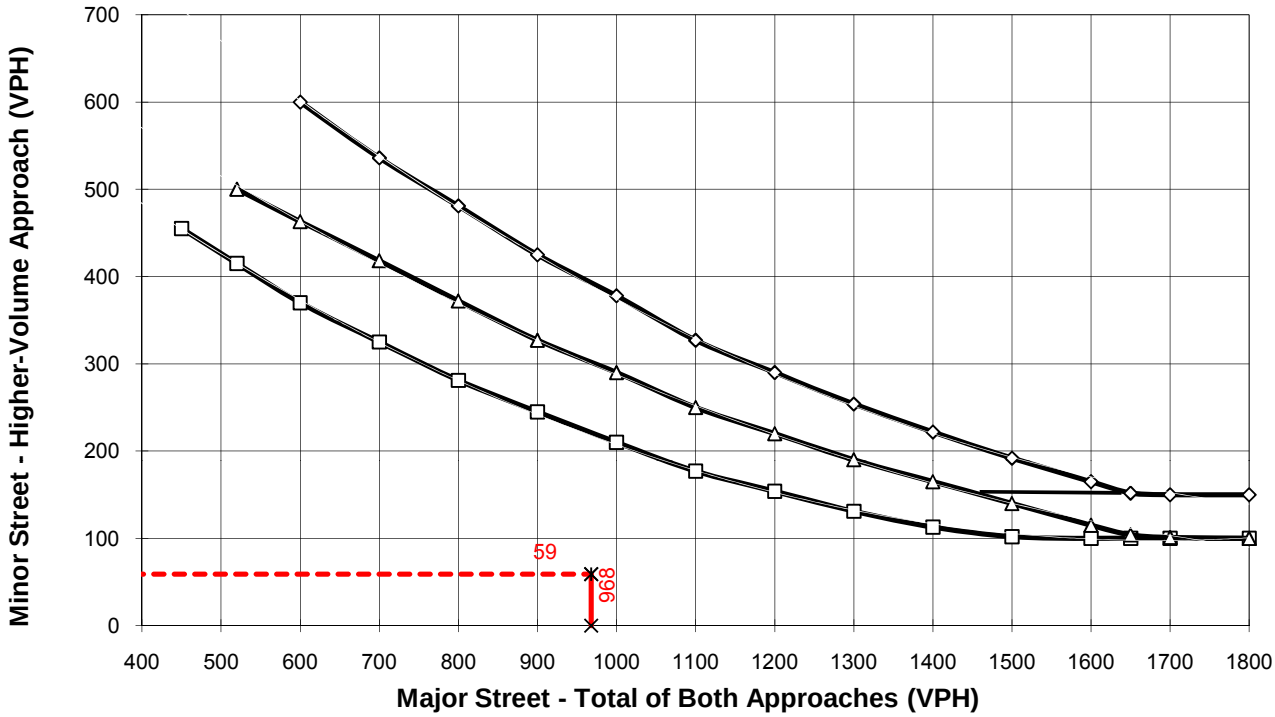
Major Street Name = **State**

Total of Both Approaches (VPH) = **968**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dwy 7**

High Volume Approach (VPH) = **59**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **2020 With Project Conditions (PM)**

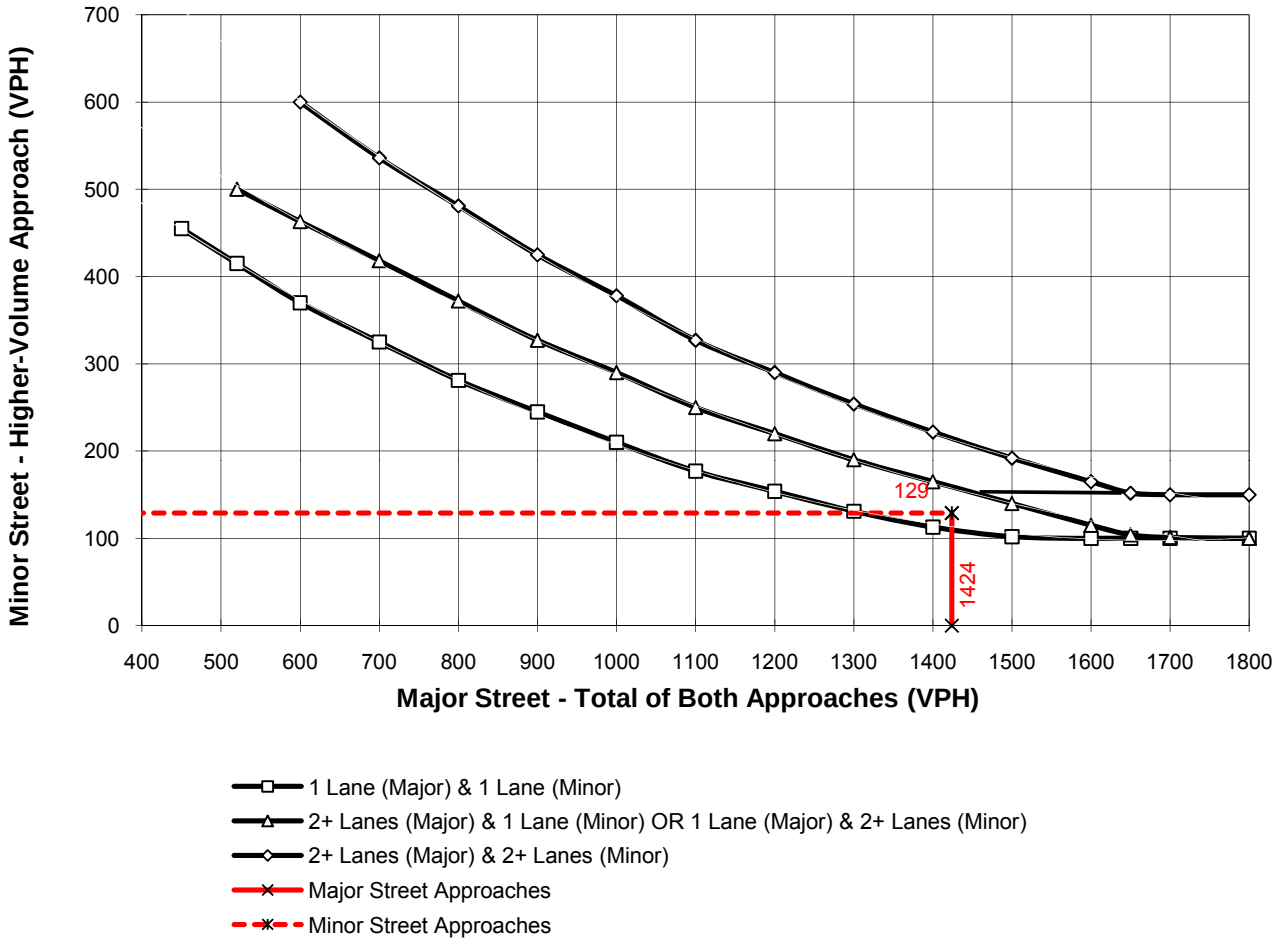
Major Street Name = **State**

Total of Both Approaches (VPH) = **1424**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dwy 7**

High Volume Approach (VPH) = **129**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach

APPENDIX 7.6

YEAR 2020 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE PRE-PROJECT CONDITIONS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.432
Loss Time (sec):	8	Average Delay (sec/veh):	10.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	21	21	21		21	21	21		21	21	21		21	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	1	0	0	1	0	1	0	0	1	1	0	1	0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	26	110	13		33	119	19		18	255	35		29	197	16	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	32	134	16		40	145	23		22	311	43		35	240	20	
Added Vol:	0	13	5		12	23	9		3	118	0		7	116	6	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	32	147	21		52	168	32		25	429	43		42	356	26	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	33	155	22		55	177	34		26	451	45		45	375	27	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	33	155	22		55	177	34		26	451	45		45	375	27	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	33	155	22		55	177	34		26	451	45		45	375	27	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.92	0.92	0.85		0.89	0.89	0.85		0.45	1.00	0.85		0.41	0.99	0.99	
Lanes:	0.18	0.82	1.00		0.24	0.76	1.00		1.00	1.00	1.00		1.00	0.93	0.07	
Final Sat.:	311	1444	1615		403	1296	1615		859	1900	1615		775	1755	126	
Capacity Analysis Module:																
Vol/Sat:	0.11	0.11	0.01		0.14	0.14	0.02		0.03	0.24	0.03		0.06	0.21	0.21	
Crit Moves:						****				****						
Green/Cycle:	0.35	0.35	0.35		0.35	0.35	0.35		0.52	0.52	0.52		0.52	0.52	0.52	
Volume/Cap:	0.31	0.31	0.04		0.39	0.39	0.06		0.06	0.46	0.05		0.11	0.41	0.41	
Delay/Veh:	14.5	14.5	12.9		15.1	15.1	13.0		7.3	9.5	7.2		7.6	9.2	9.2	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	14.5	14.5	12.9		15.1	15.1	13.0		7.3	9.5	7.2		7.6	9.2	9.2	
LOS by Move:	B	B	B		B	B	B		A	A	A		A	A	A	
HCM2kAvgQ:	3	3	0		4	4	0		0	6	0		1	5	5	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Alessandro Street (NS) / Driveway 1 (EW)

****

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[8.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1 0	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	5	0	0	6	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	6	0	0	7	0	0	0	0	0	0	0
Added Vol:	0	10	0	3	3	0	0	0	0	5	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	16	0	3	10	0	0	0	0	5	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	17	0	3	11	0	0	0	0	5	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	17	0	3	11	0	0	0	0	5	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	17	xxxx	xxxxx	xxxx	xxxx	xxxxx	34	34	17
Potent Cap.:	xxxx	xxxx	xxxxx	1613	xxxx	xxxxx	xxxx	xxxx	xxxxx	984	862	1068
Move Cap.:	xxxx	xxxx	xxxxx	1613	xxxx	xxxxx	xxxx	xxxx	xxxxx	983	861	1068
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1041	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.5		
ApproachLOS:	*			*			*			A		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #8 Alessandro Street (NS) / Driveway 2 (EW)

****

Average Delay (sec/veh): 7.7 Worst Case Level Of Service: A[9.3]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 0	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	11	0	0	8	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	13	0	0	10	0	0	0	0	0	0	0
Added Vol:	0	-1	4	-1	5	0	0	0	0	12	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	12	4	-1	15	0	0	0	0	12	0	5
User Adj:	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	13	4	0	16	0	0	0	0	13	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	13	4	0	16	0	0	0	0	13	0	5
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	6.2	xxxxx	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	3.3	xxxxx	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	31	0	xxxx	28	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Potent Cap.:	xxxx	866	1091	xxxx	869	xxxxx	xxxx	xxxx	xxxxx	1636	xxxx	xxxxx
Move Cap.:	xxxx	860	1091	xxxx	862	xxxxx	xxxx	xxxx	xxxxx	1636	xxxx	xxxxx
Volume/Cap:	xxxx	0.02	0.00	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	9.3	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	A	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	906	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	0.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	9.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	A	*	*	*	*	*	*	*	*	*
ApproachDel:		9.0			9.3			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Driveway 3 (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[14.3]

Approach:	North Bound			South Bound			East Bound				West Bound			
Movement:	L	T	R	L	T	R	L	T	R		L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled				Uncontrolled			
Rights:	Include			Include			Include				Include			
Lanes:	0 0 1! 0 0			0 0 1! 0 0			1 0 1 1 0				1 0 1 1 0			
Volume Module:														
Base Vol:	0	0	0	0	0	0	0	283	0		0	253	0	
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	0	0	0	0	0	0	0	345	0		0	308	0	
Added Vol:	7	1	7	8	1	7	31	84	16		6	86	28	
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0	0	
Initial Fut:	7	1	7	8	1	7	31	429	16		6	394	28	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	7	1	7	8	1	7	33	452	17		6	415	29	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
FinalVolume:	7	1	7	8	1	7	33	452	17		6	415	29	
Critical Gap Module:														
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx	
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx	
Capacity Module:														
Cnflict Vol:	746	983	234	734	976	222	445	xxxx	xxxxx		468	xxxx	xxxxx	
Potent Cap.:	306	251	774	312	253	787	1126	xxxx	xxxxx		1104	xxxx	xxxxx	
Move Cap.:	294	242	774	300	244	787	1126	xxxx	xxxxx		1104	xxxx	xxxxx	
Volume/Cap:	0.03	0.00	0.01	0.03	0.00	0.01	0.03	xxxx	xxxx		0.01	xxxx	xxxx	
Level Of Service Module:														
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx		8.3	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	A	*	*		A	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT		LT	LTR	RT	
Shared Cap.:	xxxx	405	xxxxx	xxxx	403	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	14.2	xxxxx	xxxxx	14.3	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	B	*	*	B	*	*	*	*		*	*	*	
ApproachDel:		14.2			14.3		xxxxxx				xxxxxx			
ApproachLOS:		B			B		*				*			

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Driveway 4 (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[11.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 0 1	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	161	0	0	184	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	0	0	0	0	196	0	0	224	0
Added Vol:	0	0	0	10	0	2	0	21	0	0	17	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	10	0	2	0	217	0	0	241	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	11	0	2	0	229	0	0	254	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	11	0	2	0	229	0	0	254	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	484	484	255	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	546	486	789	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	546	486	789	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	575	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	11.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #13 State Street (NS) / Driveway 5 (EW)

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	555	0	0	549	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	677	0	0	669	0	0	0	0	0	0	0
Added Vol:	0	147	0	0	178	6	0	0	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	824	0	0	847	6	0	0	5	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	867	0	0	892	6	0	0	5	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	867	0	0	892	6	0	0	5	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	449	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	563	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	563	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.5	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.5			xxxxxx		
ApproachLOS:	*			*			B			*		

****

Note: Queue reported is the number of cars per lane.

****

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #46 State Street (NS) / Driveway 6 (EW)

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	555	0	0	549	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	677	0	0	669	0	0	0	0	0	0	0
Added Vol:	0	147	0	0	178	4	0	0	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	824	0	0	847	4	0	0	5	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	824	0	0	847	4	0	0	5	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	824	0	0	847	4	0	0	5	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	426	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	583	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	583	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.2	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.2			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 State Street (NS) / Driveway 7 (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.298
Loss Time (sec):	12	Average Delay (sec/veh):	9.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	0	0	20	20	20	0	20	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	442	0	0	476	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	539	0	0	580	0	0	0	0	0	0	0
Added Vol:	8	95	0	0	187	11	31	0	28	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	634	0	0	767	11	31	0	28	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	8	667	0	0	808	12	33	0	29	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	667	0	0	808	12	33	0	29	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	667	0	0	808	12	33	0	29	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.95	0.95	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.97	0.03	0.53	0.00	0.47	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	3552	51	910	0	822	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.00	0.00	0.23	0.23	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.08	0.73	0.00	0.00	0.65	0.65	0.17	0.00	0.17	0.00	0.00	0.00
Volume/Cap:	0.06	0.25	0.00	0.00	0.35	0.35	0.22	0.00	0.22	0.00	0.00	0.00
Delay/Veh:	50.8	5.3	0.0	0.0	9.6	9.6	43.6	0.0	43.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.8	5.3	0.0	0.0	9.6	9.6	43.6	0.0	43.6	0.0	0.0	0.0
LOS by Move:	D	A	A	A	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	4	0	0	7	7	2	0	2	0	0	0

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.589
Loss Time (sec):	8	Average Delay (sec/veh):	12.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Permitted				Permitted				Permitted				Permitted			
Rights:	Include				Include				Include				Include			
Min. Green:	21	21	21		21	21	21		21	21	21		21	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	0	1 0	0	1	0	1 0	0	1	1	0 1	0	1	1	0 0	1	0
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	21	151	29		32	129	27		38	246	16		45	264	42	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	26	184	35		39	157	33		46	300	20		55	322	51	
Added Vol:	0	37	12		24	29	6		10	210	0		11	217	30	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	26	221	47		63	186	39		56	510	20		66	539	81	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	27	233	50		66	196	41		59	537	21		69	567	85	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	27	233	50		66	196	41		59	537	21		69	567	85	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	27	233	50		66	196	41		59	537	21		69	567	85	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.96	0.96	0.85		0.86	0.86	0.85		0.25	1.00	0.85		0.34	0.98	0.98	
Lanes:	0.10	0.90	1.00		0.25	0.75	1.00		1.00	1.00	1.00		1.00	0.87	0.13	
Final Sat.:	189	1628	1615		414	1225	1615		466	1900	1615		638	1618	244	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.14	0.03		0.16	0.16	0.03		0.13	0.28	0.01		0.11	0.35	0.35	
Crit Moves:						****								****		
Green/Cycle:	0.35	0.35	0.35		0.35	0.35	0.35		0.52	0.52	0.52		0.52	0.52	0.52	
Volume/Cap:	0.41	0.41	0.09		0.46	0.46	0.07		0.25	0.55	0.02		0.21	0.68	0.68	
Delay/Veh:	15.2	15.2	13.1		15.7	15.7	13.1		8.6	10.4	7.1		8.2	12.8	12.8	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	15.2	15.2	13.1		15.7	15.7	13.1		8.6	10.4	7.1		8.2	12.8	12.8	
LOS by Move:	B	B	B		B	B	B		A	B	A		A	B	B	
HCM2kAvgQ:	4	4	1		4	4	1		1	7	0		1	10	10	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Alessandro Street (NS) / Driveway 1 (EW)

Average Delay (sec/veh): 3.7 Worst Case Level Of Service: A[8.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	5	0	0	6	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	6	0	0	7	0	0	0	0	0	0	0
Added Vol:	0	9	5	21	14	0	0	0	0	3	0	9
PasserByVol:	0	0	1	2	0	0	0	0	0	1	0	2
Initial Fut:	0	15	6	23	21	0	0	0	0	4	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	16	6	24	22	0	0	0	0	4	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	16	6	24	22	0	0	0	0	4	0	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	22	xxxx	xxxxx	xxxx	xxxx	xxxxx	90	90	19
Potent Cap.:	xxxx	xxxx	xxxxx	1606	xxxx	xxxxx	xxxx	xxxx	xxxxx	916	804	1065
Move Cap.:	xxxx	xxxx	xxxxx	1606	xxxx	xxxxx	xxxx	xxxx	xxxxx	905	792	1065
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	1017	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.6	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.6		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Alessandro Street (NS) / Driveway 2 (EW)

Average Delay (sec/veh): 8.5 Worst Case Level Of Service: A[9.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	13	0	0	11	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	16	0	0	13	0	0	0	0	0	0	0
Added Vol:	0	4	20	4	1	0	0	0	0	14	0	1
PasserByVol:	0	0	4	0	0	0	0	0	0	4	0	0
Initial Fut:	0	20	24	4	14	0	0	0	0	18	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	21	25	4	15	0	0	0	0	19	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	21	25	4	15	0	0	0	0	19	0	1
Critical Gap Module:												
Critical Gp:	xxxxx	6.5	6.2	7.1	6.5	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	4.0	3.3	3.5	4.0	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	39	0	49	38	xxxxx	xxxx	xxxx	xxxxx	0	xxxx	xxxxx
Potent Cap.:	xxxx	857	1091	956	858	xxxxx	xxxx	xxxx	xxxxx	1636	xxxx	xxxxx
Move Cap.:	xxxx	847	1091	909	848	xxxxx	xxxx	xxxx	xxxxx	1636	xxxx	xxxxx
Volume/Cap:	xxxx	0.02	0.02	0.00	0.02	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	965	860	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	0.2	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	8.9	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	A	A	*	*	*	*	*	*	*	*
ApproachDel:		8.9			9.3			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Driveway 3 (NS) / Menlo Avenue (EW)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: D[25.8]

Approach:	North Bound			South Bound			East Bound					West Bound				
Movement:	L	- T	- R	L	- T	- R	L	- T	- R			L	- T	- R		
Control:	Stop Sign			Stop Sign			Uncontrolled					Uncontrolled				
Rights:	Include			Include			Include					Include				
Lanes:	0	0 1!	0	0	0 1!	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																
Base Vol:	0	0	0	0	0	0	0	319	0			0	319	0		
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22			1.22	1.22	1.22		
Initial Bse:	0	0	0	0	0	0	0	389	0			0	389	0		
Added Vol:	15	5	15	32	7	60	41	128	41			18	173	38		
PasserByVol:	5	0	5	5	0	11	12	3	14			5	14	10		
Initial Fut:	20	5	20	37	7	71	53	520	55			23	576	48		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	21	5	21	39	7	75	56	547	58			24	606	51		
Reduct Vol:	0	0	0	0	0	0	0	0	0			0	0	0		
FinalVolume:	21	5	21	39	7	75	56	547	58			24	606	51		
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	1043	1393	303	1068	1397	328	657	xxxx	xxxxx			605	xxxx	xxxxx		
Potent Cap.:	186	143	699	179	142	673	940	xxxx	xxxxx			983	xxxx	xxxxx		
Move Cap.:	149	131	699	158	131	673	940	xxxx	xxxxx			983	xxxx	xxxxx		
Volume/Cap:	0.14	0.04	0.03	0.25	0.06	0.11	0.06	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx			8.8	xxxx	xxxxx		
LOS by Move:	*	*	*	*	*	*	A	*	*			A	*	*		
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT			LT	- LTR	- RT		
Shared Cap.:	xxxx	224	xxxxx	xxxx	292	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	0.8	xxxxx	xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	25.4	xxxxx	xxxxx	25.8	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	D	*	*	D	*	*	*	*			*	*	*		
ApproachDel:		25.4			25.8			xxxxxx					xxxxxx			
ApproachLOS:		D			D			*					*			

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Driveway 4 (NS) / Oakland Avenue (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		0 1 0	0 0		0 0 0	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	161	0	0	217	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	0	0	0	0	0	0	196	0	0	265	0
Added Vol:	0	0	0	9	0	2	3	36	0	0	37	14
PasserByVol:	0	0	0	3	0	1	1	2	0	0	2	3
Initial Fut:	0	0	0	12	0	3	4	234	0	0	304	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	13	0	3	4	247	0	0	319	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	13	0	3	4	247	0	0	319	18
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	583	583	328	337	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	478	427	718	1233	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	476	425	718	1233	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	511	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.3	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			12.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #13 State Street (NS) / Driveway 5 (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[14.2]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	700	0	0	778	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	853	0	0	948	0	0	0	0	0	0	0
Added Vol:	0	266	0	0	230	8	0	0	31	0	0	0
PasserByVol:	0	9	0	0	7	2	0	0	5	0	0	0
Initial Fut:	0	1128	0	0	1185	10	0	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1188	0	0	1248	11	0	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1188	0	0	1248	11	0	0	38	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	629	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	430	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	430	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.2	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.2			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #46 State Street (NS) / Driveway 6 (EW)

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[13.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	0	0	0 0 1	1	0	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	700	0	0	778	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	853	0	0	948	0	0	0	0	0	0	0
Added Vol:	0	266	0	0	254	6	0	0	31	0	0	0
PasserByVol:	0	9	0	0	11	1	0	0	5	0	0	0
Initial Fut:	0	1128	0	0	1213	7	0	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1128	0	0	1213	7	0	0	36	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1128	0	0	1213	7	0	0	36	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	610	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	442	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	442	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.9	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions - WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 State Street (NS) / Driveway 7 (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.460
Loss Time (sec): 12 Average Delay (sec/veh): 11.8
Optimal Cycle: OPTIMIZED Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	20	0	0	20	20	20	0	20	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	0 1	1 0	0	0 1!	0 0	0	0 0	0 0
Volume Module:												
Base Vol:	0	574	0	0	648	0	0	0	0	0	0	0
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	0	700	0	0	790	0	0	0	0	0	0	0
Added Vol:	45	240	0	0	183	48	66	0	32	0	0	0
PasserByVol:	9	7	0	0	7	11	22	0	9	0	0	0
Initial Fut:	54	947	0	0	980	59	88	0	41	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	57	997	0	0	1031	62	93	0	43	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	997	0	0	1031	62	93	0	43	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	997	0	0	1031	62	93	0	43	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.94	0.94	0.93	1.00	0.93	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	0.68	0.00	0.32	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	3374	203	1199	0	559	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.00	0.00	0.31	0.31	0.08	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.08	0.73	0.00	0.00	0.65	0.65	0.17	0.00	0.17	0.00	0.00	0.00
Volume/Cap:	0.38	0.38	0.00	0.00	0.47	0.47	0.46	0.00	0.46	0.00	0.00	0.00
Delay/Veh:	53.7	6.0	0.0	0.0	10.7	10.7	46.3	0.0	46.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.7	6.0	0.0	0.0	10.7	10.7	46.3	0.0	46.3	0.0	0.0	0.0
LOS by Move:	D	A	A	A	B	B	D	A	D	A	A	A
HCM2kAvgQ:	2	7	0	0	11	11	5	0	5	0	0	0

Note: Queue reported is the number of cars per lane.

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APPENDIX 7.7

YEAR 2020 WITH PROJECT CONDITIONS
WITH MITIGATION MEASURES TO ACHIEVE REQUISITE LOS

NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	16	Average Delay (sec/veh):	36.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	20	20	10	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	190	36	45	244	26	16	221	30	27	199	15
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	232	44	55	297	32	20	269	37	33	243	18
Added Vol:	12	36	26	7	90	0	0	91	33	40	90	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	268	70	62	387	32	20	360	70	73	333	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	45	282	74	65	408	33	21	379	73	77	350	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	282	74	65	408	33	21	379	73	77	350	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	282	74	65	408	33	21	379	73	77	350	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	0.99	0.99	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.79	0.21	1.00	0.92	0.08	1.00	0.84	0.16	1.00	0.94	0.06
Final Sat.:	1805	1460	381	1805	1737	142	1805	1554	300	1805	1765	118
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.04	0.23	0.23	0.01	0.24	0.24	0.04	0.20	0.20
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.27	0.27	0.14	0.29	0.29	0.14	0.31	0.31	0.11	0.28	0.28
Volume/Cap:	0.22	0.73	0.73	0.26	0.80	0.80	0.08	0.80	0.80	0.38	0.71	0.71
Delay/Veh:	37.0	35.5	35.5	35.1	37.3	37.3	33.9	36.5	36.5	38.4	33.9	33.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.0	35.5	35.5	35.1	37.3	37.3	33.9	36.5	36.5	38.4	33.9	33.9
LOS by Move:	D	D	D	D	D	D	C	D	D	D	C	C
HCM2kAvgQ:	1	10	10	2	13	13	1	14	14	2	11	11

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.480
Loss Time (sec):	16	Average Delay (sec/veh):	28.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	21	21	10	21	21	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	26	110	13	33	119	19	18	255	35	29	197	16
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	32	134	16	40	145	23	22	311	43	35	240	20
Added Vol:	0	13	5	12	23	9	3	118	0	7	116	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	147	21	52	168	32	25	429	43	42	356	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	33	155	22	55	177	34	26	451	45	45	375	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	155	22	55	177	34	26	451	45	45	375	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	155	22	55	177	34	26	451	45	45	375	27
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	0.98	0.98	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.88	0.12	1.00	0.84	0.16	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1805	1633	231	1805	1557	298	1805	1900	1615	1805	1755	126
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.03	0.11	0.11	0.01	0.24	0.03	0.02	0.21	0.21
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.23	0.23	0.11	0.23	0.23	0.15	0.37	0.37	0.11	0.32	0.32
Volume/Cap:	0.17	0.41	0.41	0.27	0.49	0.49	0.09	0.65	0.08	0.22	0.66	0.66
Delay/Veh:	36.6	29.8	29.8	37.4	30.7	30.7	32.8	25.8	18.6	37.0	28.9	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.6	29.8	29.8	37.4	30.7	30.7	32.8	25.8	18.6	37.0	28.9	28.9
LOS by Move:	D	C	C	D	C	C	C	C	B	D	C	C
HCM2kAvgQ:	1	4	4	2	5	5	1	11	1	1	10	10

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec):	80	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	16	Average Delay (sec/veh):	28.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	20	20		10	20	20		10	21	21		10	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	25	375	42		93	420	30		54	196	33		23	198	147	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	30	457	51		113	512	37		66	239	40		28	241	179	
Added Vol:	29	82	9		11	148	24		48	28	19		28	60	17	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	59	539	60		124	660	61		114	267	59		56	301	196	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	63	568	63		131	695	64		120	281	62		59	317	207	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	63	568	63		131	695	64		120	281	62		59	317	207	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	63	568	63		131	695	64		120	281	62		59	317	207	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.94	0.94		0.95	0.94	0.94		0.95	0.92	0.92		0.95	1.00	0.85	
Lanes:	1.00	1.80	0.20		1.00	1.83	0.17		1.00	1.64	0.36		1.00	1.00	1.00	
Final Sat.:	1805	3199	357		1805	3264	300		1805	2875	638		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.18	0.18		0.07	0.21	0.21		0.07	0.10	0.10		0.03	0.17	0.13	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.14	0.28	0.28		0.13	0.27	0.27		0.13	0.27	0.27		0.13	0.27	0.27	
Volume/Cap:	0.25	0.63	0.63		0.58	0.78	0.78		0.53	0.37	0.37		0.26	0.63	0.48	
Delay/Veh:	31.5	26.2	26.2		36.8	31.1	31.1		35.2	24.2	24.2		32.2	28.3	25.5	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	31.5	26.2	26.2		36.8	31.1	31.1		35.2	24.2	24.2		32.2	28.3	25.5	
LOS by Move:	C	C	C		D	C	C		D	C	C		C	C	C	
HCM2kAvgQ:	2	8	8		4	11	11		4	4	4		2	8	5	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
AM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	80	Critical Vol./Cap.(X):	0.440
Loss Time (sec):	12	Average Delay (sec/veh):	20.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	14	14	10	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	43	32	45	9	31	43	32	238	41	45	324	25
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	52	39	55	11	38	52	39	290	50	55	395	30
Added Vol:	9	0	0	0	0	14	7	37	5	0	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	39	55	11	38	66	46	327	55	55	477	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	65	41	58	12	40	70	48	344	58	58	502	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	41	58	12	40	70	48	344	58	58	502	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	41	58	12	40	70	48	344	58	58	502	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.68	0.91	0.91	0.69	0.90	0.90	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.42	0.58	1.00	0.36	0.64	1.00	0.86	0.14	1.00	0.94	0.06
Final Sat.:	1298	720	1013	1311	623	1095	1805	1591	267	1805	1770	113
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.06	0.01	0.06	0.06	0.03	0.22	0.22	0.03	0.28	0.28
Crit Moves:					****		****				****	
Green/Cycle:	0.24	0.24	0.24	0.24	0.24	0.24	0.13	0.39	0.39	0.22	0.49	0.49
Volume/Cap:	0.21	0.24	0.24	0.04	0.27	0.27	0.21	0.56	0.56	0.14	0.58	0.58
Delay/Veh:	24.8	25.0	25.0	23.5	25.2	25.2	31.9	20.1	20.1	25.0	15.6	15.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	25.0	25.0	23.5	25.2	25.2	31.9	20.1	20.1	25.0	15.6	15.6
LOS by Move:	C	C	C	C	C	C	C	C	C	C	B	B
HCM2kAvgQ:	1	2	2	0	2	2	1	8	8	1	10	10

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N. Lyon Avenue (NS) / Menlo Avenue (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 16 Average Delay (sec/veh): 45.3
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	19	19	10	19	19	10	20	20	10	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	25	254	49	31	293	41	29	217	16	44	204	31
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	30	310	60	38	357	50	35	265	20	54	249	38
Added Vol:	38	114	73	14	73	0	0	143	22	61	151	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	424	133	52	430	50	35	408	42	115	400	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	72	444	139	54	450	52	37	427	43	120	419	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	444	139	54	450	52	37	427	43	120	419	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	444	139	54	450	52	37	427	43	120	419	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.98	0.98	0.95	0.99	0.99	0.95	0.98	0.98
Lanes:	1.00	0.76	0.24	1.00	0.90	0.10	1.00	0.91	0.09	1.00	0.88	0.12
Final Sat.:	1805	1395	437	1805	1675	195	1805	1700	173	1805	1637	229
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	0.32	0.03	0.27	0.27	0.02	0.25	0.25	0.07	0.26	0.26
Crit Moves:		****			****			****			****	
Green/Cycle:	0.11	0.38	0.38	0.09	0.35	0.35	0.09	0.29	0.29	0.10	0.31	0.31
Volume/Cap:	0.35	0.84	0.84	0.35	0.76	0.76	0.24	0.86	0.86	0.66	0.84	0.84
Delay/Veh:	48.0	40.9	40.9	50.7	38.0	38.0	49.7	51.5	51.5	58.2	47.5	47.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.0	40.9	40.9	50.7	38.0	38.0	49.7	51.5	51.5	58.2	47.5	47.5
LOS by Move:	D	D	D	D	D	D	D	D	D	E	D	D
HCM2kAvgQ:	3	21	21	2	17	17	1	18	18	5	18	18

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Palm Avenue (NS) / Menlo Avenue (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	16	Average Delay (sec/veh):	34.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	21	21	10	21	21	10	21	21	10	21	21
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	21	151	29	32	129	27	38	246	16	45	264	42
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	26	184	35	39	157	33	46	300	20	55	322	51
Added Vol:	0	37	12	24	29	6	10	210	0	11	217	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	221	47	63	186	39	56	510	20	66	539	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	27	233	50	66	196	41	59	537	21	69	567	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	233	50	66	196	41	59	537	21	69	567	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	233	50	66	196	41	59	537	21	69	567	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.98	0.98
Lanes:	1.00	0.82	0.18	1.00	0.83	0.17	1.00	1.00	1.00	1.00	0.87	0.13
Final Sat.:	1805	1524	326	1805	1531	320	1805	1900	1615	1805	1618	244
Capacity Analysis Module:												
Vol/Sat:	0.01	0.15	0.15	0.04	0.13	0.13	0.03	0.28	0.01	0.04	0.35	0.35
Crit Moves:		****		****			****				****	
Green/Cycle:	0.10	0.20	0.20	0.10	0.20	0.20	0.10	0.41	0.41	0.14	0.46	0.46
Volume/Cap:	0.16	0.76	0.76	0.39	0.64	0.64	0.34	0.68	0.03	0.28	0.77	0.77
Delay/Veh:	44.1	48.7	48.7	46.1	42.3	42.3	45.6	27.7	18.3	41.0	28.1	28.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	48.7	48.7	46.1	42.3	42.3	45.6	27.7	18.3	41.0	28.1	28.1
LOS by Move:	D	D	D	D	D	D	D	C	B	D	C	C
HCM2kAvgQ:	1	10	10	2	8	8	2	15	0	2	19	19

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 State Street (NS) / Menlo Avenue (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.847
Loss Time (sec): 16 Average Delay (sec/veh): 39.4
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	10	20	20		10	20	20		10	21	21		10	21	21	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Lanes:	1	0 1	1	0	1	0 1	1	0	1	0 1	1	0	1	0 1	0	1
Volume Module: >> Count Date: 10 Jun 2010 <<																
Base Vol:	18	495	61		183	565	57		49	235	35		48	244	139	
Growth Adj:	1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22		1.22	1.22	1.22	
Initial Bse:	22	603	74		223	689	69		60	286	43		59	297	169	
Added Vol:	52	184	33		34	185	66		65	87	17		21	73	17	
PasserByVol:	7	6	3		2	13	1		3	7	0		3	9	0	
Initial Fut:	81	793	110		259	887	136		128	380	60		83	379	186	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	85	835	116		273	933	144		134	400	63		87	399	196	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	85	835	116		273	933	144		134	400	63		87	399	196	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	85	835	116		273	933	144		134	400	63		87	399	196	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.93	0.93		0.95	0.93	0.93		0.95	0.93	0.93		0.95	1.00	0.85	
Lanes:	1.00	1.76	0.24		1.00	1.73	0.27		1.00	1.73	0.27		1.00	1.00	1.00	
Final Sat.:	1805	3112	433		1805	3066	472		1805	3058	480		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.27	0.27		0.15	0.30	0.30		0.07	0.13	0.13		0.05	0.21	0.12	
Crit Moves:		****				****				****				****		
Green/Cycle:	0.12	0.31	0.31		0.17	0.36	0.36		0.11	0.24	0.24		0.11	0.24	0.24	
Volume/Cap:	0.38	0.87	0.87		0.87	0.85	0.85		0.71	0.56	0.56		0.43	0.87	0.50	
Delay/Veh:	39.3	38.4	38.4		59.7	33.5	33.5		52.7	32.8	32.8		40.8	50.4	32.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	39.3	38.4	38.4		59.7	33.5	33.5		52.7	32.8	32.8		40.8	50.4	32.0	
LOS by Move:	D	D	D		E	C	C		D	C	C		D	D	C	
HCM2kAvgQ:	3	17	17		11	18	18		5	7	7		3	14	5	

Note: Queue reported is the number of cars per lane.

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NORTH HEMET RE-DEVELOPMENT TRAFFIC IMPACT ANALYSIS (JN 05456)
2020 With Project Conditions WITH IMPROVEMENTS
PM PEAK HOUR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Buena Vista Street (NS) / Menlo Avenue (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	12	Average Delay (sec/veh):	22.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	19	19	19	19	19	19	10	14	14	10	14	14
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module: >> Count Date: 10 Jun 2010 <<												
Base Vol:	53	37	56	13	33	53	49	372	68	63	338	10
Growth Adj:	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Initial Bse:	65	45	68	16	40	65	60	453	83	77	412	12
Added Vol:	11	0	1	0	0	21	27	112	15	1	79	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	45	69	16	40	86	87	565	98	78	491	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	80	47	73	17	42	90	91	595	103	82	517	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	47	73	17	42	90	91	595	103	82	517	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	47	73	17	42	90	91	595	103	82	517	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.61	0.91	0.91	0.64	0.90	0.90	0.95	0.98	0.98	0.95	1.00	1.00
Lanes:	1.00	0.39	0.61	1.00	0.32	0.68	1.00	0.85	0.15	1.00	0.98	0.02
Final Sat.:	1161	681	1046	1212	545	1161	1805	1584	274	1805	1847	46
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.01	0.08	0.08	0.05	0.38	0.38	0.05	0.28	0.28
Crit Moves:					****			****		****		
Green/Cycle:	0.21	0.21	0.21	0.21	0.21	0.21	0.19	0.54	0.54	0.11	0.47	0.47
Volume/Cap:	0.32	0.33	0.33	0.07	0.37	0.37	0.27	0.69	0.69	0.41	0.60	0.60
Delay/Veh:	30.8	30.6	30.6	28.5	31.0	31.0	31.8	17.0	17.0	38.6	18.7	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	30.6	30.6	28.5	31.0	31.0	31.8	17.0	17.0	38.6	18.7	18.7
LOS by Move:	C	C	C	C	C	C	C	B	B	D	B	B
HCM2kAvgQ:	2	3	3	0	3	3	2	15	15	3	11	11

Note: Queue reported is the number of cars per lane.

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Appendix L
Water Supply Assessment: Eastern Municipal Water District



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EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

Board of Directors

President and Treasurer
Joseph J. Kuebler, CPA

Vice President
Philip E. Paule

Ronald W. Sullivan
Randy A. Record
David J. Slawson

Board Secretary
Rosemarie V. Howard

General Manager
Anthony J. Pack

Director of The Metropolitan Water District of So. Calif.
Randy A. Record

Legal Counsel
Redwine and Sherrill

July 6, 2011

TO: Board of Directors

FROM: General Manager

SUBJECT: Approve and Authorize a Water Supply Assessment for a Portion of the North Hemet Specific Plan Located Within the City of Hemet

RECOMMENDATION

That the Board, by Minute Order, approve and authorize in accordance to the Board's guidance, the attached Water Supply Assessment for the portion of the North Hemet Specific Plan within Eastern Municipal Water District's service area, in accordance with the provisions of Senate Bill 221 (SB 221) and Senate Bill 610 (SB 610).

Concur:

Anthony J. Pack
General Manager

Submitted by:

Behrooz Mortazavi
Assistant General Manager
Resource Development

Director: Paule
Division: 1

BACKGROUND

Senate Bills 221 and 610 require Eastern Municipal Water District (EMWD) respond to requests for a statement that adequate water supplies are or will be available to meet the water demands associated with proposed land development. Senate Bill 610 focuses on the content of a water supply agency's Urban Water Management Plan and stipulates that, when an Environmental Impact Report is required in connection with a project, the appropriate water supply agency must provide an assessment of whether its total projected water supplies will meet the projected water demands associated with the proposed project. Senate Bill 221 also requires water supply verification when a tentative map, parcel map or development agreement for a project is submitted to a land-use agency for approval. Senate Bill 221 applies to proposed residential development of more than 500 dwelling units with some exceptions. Senate Bill 610 applies to a proposed residential development of more than 500 dwelling units, or large commercial, industrial or mixed-use development.

This assessment is prepared for the portion of the North Hemet Specific Plan supplied by EMWD. As shown on the attached Exhibit A, the proposed specific plan is located in the City of Hemet, in the County of Riverside. It is bounded on the west by Alessandro Street, on the south by Oakland Avenue and on the east by State Street. Only a portion of the project is located within EMWD's service area, the remainder of the project will be supplied by Lake Hemet Municipal Water District. This assessment evaluates only the portion of the proposed project supplied by EMWD, which includes 192 residential units and four acres of commercial/office development. The demand for EMWD's portion of the project is 54.8 acre-feet annually. Lake Hemet Municipal Water District will prepare a separate water supply assessment for the remainder of the project area.

Providing an accurate and timely response to a request for a water supply assessment supports the Strategic Plan Objective I (Community Relations) to, "Promote and sustain effective communication between the District and its stakeholders."

Attachments: WSA
Exhibit A – Vicinity Map (Attached)
Available upon request:
Appendix A – Year 2010 Urban Water Management Plan
Appendix B – MWD 2010 Regional Urban Water Management Plan

Finance n/a

Purchasing/Contracts n/a

Author: Elizabeth Lovsted

BM:EL:tm

NHemetWSA Brd Ltr_070611

Exhibit A


Eastern Municipal Water District
Water Supply Assessment
Vicinity Map
Exhibit A
SAN JACINTO
HEMET
North Hemet Specific Plan
Diamond Valley Lake
0
1
2
Miles



Water Supply Assessment for the North Hemet Specific Plan

July 6, 2011

Section I - Introduction

1.1 Purpose

Water Code 10910 (a)(b)(c)

The purpose of the "Water Supply Assessment Report" is to satisfy the requirements under Senate Bill 610 (Costa) (Water Code Section 10910 et seq.) and Senate Bill 221 (Kuehl) (Government Code Section 66473.7) that adequate water supplies are or will be available to meet the water demand associated with the proposed development. SB 610 focuses on the content of a water supply agency's Urban Water Management Plan (UWMP). It also stipulates that, when an environmental impact report is required in connection with a project, the appropriate water supply agency must provide an assessment of whether its total projected water supplies will meet the projected water demand associated with the proposed project. SB 221 requires a water supply verification when a tentative map, parcel map, or development agreement for a project is submitted to a land use agency for approval. Senate Bill 221 applies to proposed residential development of more than 500 dwelling units with some exceptions. Senate Bill 610 applies to a proposed residential development of more than 500 dwelling units, or large commercial, industrial, or mixed-use development. The need for an assessment or verification is determined by the lead agency for the project.

1.2 Project Description

This assessment is prepared for the portion of the North Hemet Specific Plan supplied by EMWD. As shown on the attached Exhibit A, the proposed specific plan is located in the City of Hemet, in the County of Riverside. It is bounded on the west by Alessandro Street, on the south by Oakland Avenue and on the east by State Street. Only a portion of the project is located within EMWD's service area, the remainder of the project will be supplied by Lake Hemet Municipal Water District. This assessment evaluates only the portion of the proposed project supplied by EMWD, which includes 192 residential units and 4 acres of commercial/office development. The demand for the EMWD's portion of the project is 54.8 acre-feet annually. Lake Hemet Municipal Water District will prepare a separate water supply assessment for the remainder of the project area.

1.3 Requirements

The City of Hemet requested that Eastern Municipal Water District (EMWD) prepare this Water Supply Assessment Report. EMWD has confirmed that the demand from the Proposed Project is within the limits of demand accounted for in the EMWD's 2010 UWMP was adopted in June of 2011. Accordingly, the District has elected to incorporate information from the 2010 in the preparation of this Water Supply Assessment Report as authorized by Water Code Section 10910 (c)(2). The 2010 UWMP is attached as Appendix A.

In accordance with Water Code Section 10910(d) – (f), the Water Supply Assessment shall:

1. Identify any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Proposed Project, and provide a description of the quantities of water received in prior years by the public water system, under existing water supply entitlements, water rights, or water service contracts;

2. If no water has been received in prior years by the public water system, identify other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts to the same source of water as the public water system.

3. If groundwater is included in the proposed supply, identify the groundwater basin or basins from which the Proposed Project will be supplied; and include any applicable documentation of adjudicated rights to pump. If the basin is not adjudicated, regardless of whether the basin has been identified as over-drafted; provide a detailed description and analysis of the amount and location of groundwater pumped by the public water system for the past five (5) years from any groundwater basin from which the Proposed Project will be supplied; and provide a detailed description and analysis of the amount and location of groundwater from the basin or basins from which the Proposed Project will be supplied to meet the projected water demand associated with the Proposed Project.

If the Proposed Project includes a "subdivision" of more than 500 residential dwelling units as defined by Government Code Section 66473.7(a)(1), the public water system shall also provide verification as to whether the public water system is able or unable to provide a sufficient water supply based upon an analysis of whether water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection, will meet the projected demand associated with the proposed subdivision which considers:

1. The historical record for at least 20 years;
2. The applicability of any urban water shortage contingency analysis;
3. The reduction in water supply for "specific water use sector" per an adopted resolution, ordinance or contract; and
4. The amount of water that can be reasonably relied upon from specified supply projects.

This assessment is a technical, informational, advisory opinion only. It is a supporting document for an environmental impact report and is not a commitment by EMWD to supply water for the proposed project. The information included is based on information available at the time of the report and changing circumstances could affect EMWD's water supply evaluation presented in this document.

This assessment does not specifically address funding of new or existing supplies. The cost of water supplies will increase over time. The developer of this project will be required to fund the acquisition of new supplemental supplies, treatment or recycled water facilities and water efficiency measures for existing customers. The extent of additional funding will be determined by EMWD and may take the form of a new component of connection fees or a separate charge. New customers may also be required to pay a higher commodity rate for water used than existing customers. This would offset the rising costs of new supplies.

Prior to project construction, the developer of this project is required to meet with EMWD staff to develop a plan of service. The plan of service will detail water, wastewater and recycled water requirements to serve the projects. If there is a change in the circumstances detailed in this assessment, EMWD will address the changes in the plan of service for the project. Modifications at the plan of service stage could reduce the amount of water available to serve this project.

1.4 Background

Eastern Municipal Water District was formed in 1950 and annexed into the Metropolitan Water District of Southern California (MWD) in 1951. EMWD was formed to augment dwindling local water supplies with imported water available through MWD. With the acquisition of the Fruitvale Mutual Water Company in 1971, EMWD assumed the role of a groundwater producer. Presently, EMWD is one of MWD's twenty six member agencies and relies on imported water for most of its potable supply. Potable groundwater, desalted groundwater and recycled water are also part of EMWD's supply portfolio.

EMWD's service area currently encompasses 555 square miles with an estimated population of over 660,000. T he service area includes areas where EMWD directly or indirectly provides water to the following EMWD sub-agencies:

City of Hemet Water Department
City of Perris Water System
City of San Jacinto Water Department
Lake Hemet Municipal Water District (LHMWD)
North Perris Water System
Nuevo Water Company
Rancho California Water District (RCWD)

1.5 Urban Water Management Plan

Water Code 10910 (c) (1)

The EMWD Board of Directors adopted the 2010 UWMP in June of 2011. This plan details EMWD's demand projections and provides information regarding EMWD's supply. The majority of EMWD's existing and future planned demand is met through imported water delivered by MWD. EMWD's 2010 UWMP relies heavily on information and assurances included in the 2010 MWD Regional Urban Water Management Plan (2010 RUWMP) when determining supply reliability. Demand for EMWD included in the 2010 UWMP is calculated across the District and is not project-specific. The 2010 R2010 is attached as Appendix B.

1.6 Population Projection

To insure that planning efforts for future growth are comprehensive, EMWD incorporates regional projections in its 2010 UWMP. The Riverside County Center for Demographic Research (RCCDR) 2010 Projection is used to calculate future population. RCCDR considers land use and land agency information to develop projections. The RCCDR projection has been adopted by the Western Riverside Council of Governments.

Table 1 - Projected Population – 2010 – 2035

	2015	2020	2025	2030	2035
EMWD Retail Service Area	548,718	628,918	709,729	785,810	849,059
City Of Perris Water Department	9,151	9,464	9,906	10,312	10,699
North Perris Water Company	4,977	4,977	4,977	4,977	4,977
Nuevo Water Company	7,781	8,580	6,903	5,902	5,346
City of San Jacinto Water Department	19,706	21,467	22,738	23,635	24,341
City of Hemet Water Department	27,474	29,363	31,273	33,181	35,217
Lake Hemet Municipal Water District	47,446	50,865	54,296	57,742	59,167
Rancho California Water District	114,604	116,969	120,231	122,259	122,923
Total	**779,857**	**870,603**	**960,053**	**1,043,818**	**1,111,729**

Source: Riverside County Center for Demographic Research

Section 2 - Identification of Supply and Quantity

Water Code 10910 (d) (1)

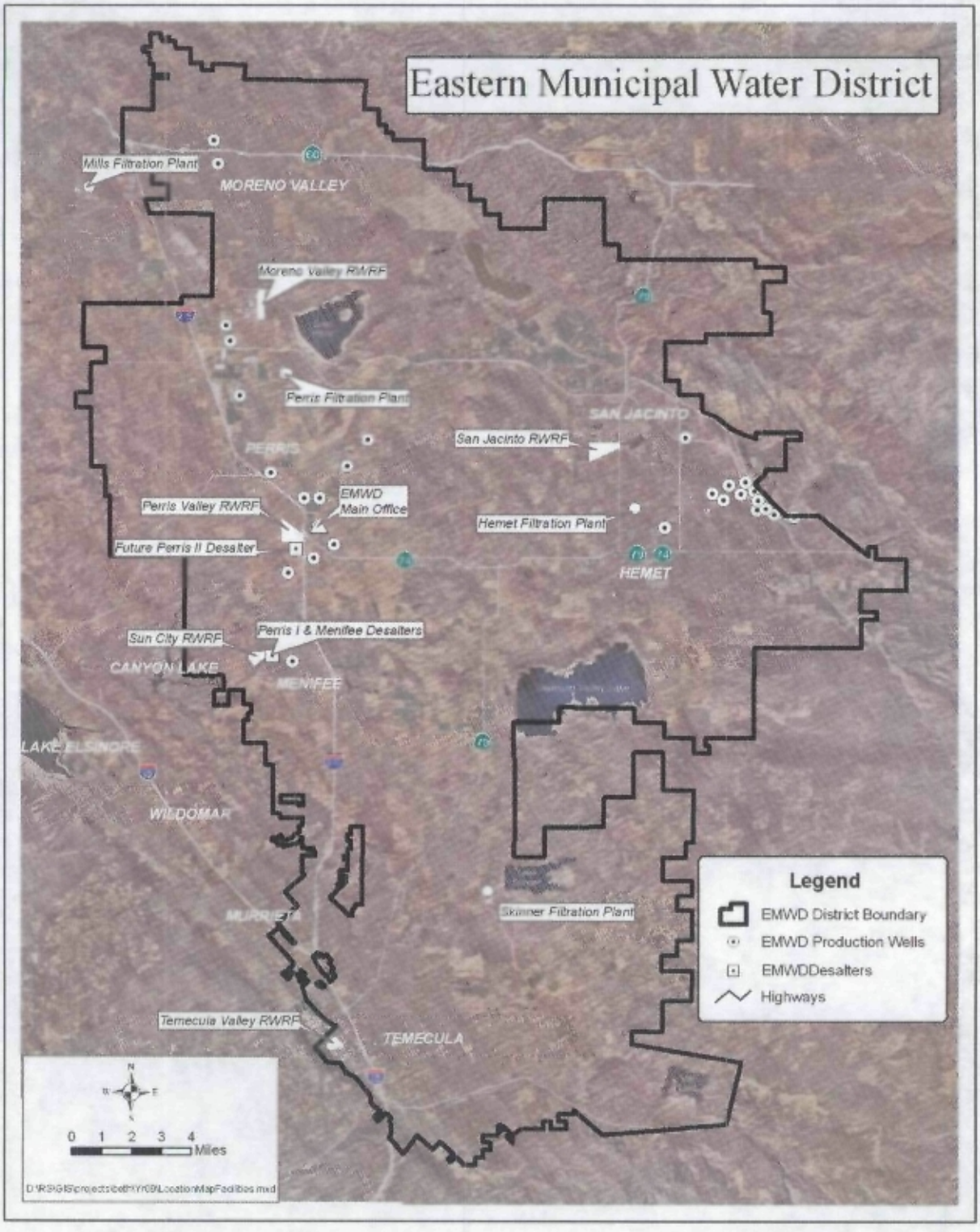
2.1 Overview of Supplies

EMWD has four (4) sources of water supply: imported water purchased from MWD, local potable groundwater, local desalted groundwater and recycled water. Imported water accounts for approximately 65 percent, local potable groundwater is approximately 11 percent, desalted groundwater is 3 percent, and recycled water is 21 percent of supply. Table 2, with information taken from the 2010 UWMP, lists the past supply quantities by source. Figure 1 shows the location of EMWD supplies.

Table 2 - Water Supply (AFY) – 2005 – 2010

Type	Source	2005	2006	2007	2008	2009	2010
Imported	Metropolitan Water District	104,400	110,400	109,900	94,400	84,200	75,000
Imported – Locally Treated	Metropolitan Water District	5,600	8,400	17,300	16,600	17,000	16,600
Groundwater	West San Jacinto Management Area	18,100	19,600	19,500	20,000	18,100	15,800
Desalination	West San Jacinto Management Area	900	4,800	4,800	3,000	4,800	5,800
Recycled	EMWD Regional Water Reclamation Facilities	32,600	28,800	38,600	35,100	39,200	41,500
Total		**161,600**	**172,000**	**190,100**	**169,100**	**163,300**	**154,700**

Figure 1 - Location of Supply Sources



It is anticipated that the majority of the water demands within EMWD's jurisdiction caused by future development will be met through additional water imports from MWD recognizing the conditions described in this document. Imported sources will be supplemented by an increase in desalination of brackish groundwater, recycled water use and water use efficiency. I n the 2010 RUWMP, MWD analyzed the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct and concluded that with the storage and transfer programs developed by MWD, MWD will have a reliable source of water to serve its member agencies' needs through 2030 during normal, historic single-dry and historic multiple-dry years within a 20-year projection. Unprecedented shortage will be addressed through the principles of the Water Surplus and Drought Management Plan as described in the MWD RUMP.

Table 3 - Existing Water Supply Resources – Average Year Hydrology – 2015 – 2035

	2015	2020	2025	2030	2035
Metropolitan Water District	149,300	170,700	190,700	210,000	226,200
Recycled	43,900	50,000	53,900	54,900	55,300
Groundwater	13,200	13,200	13,200	13,200	13,200
Existing Desalter	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	**213,900**	**241,400**	**265,300**	**285,600**	**302,200**

Based on a average of 2004-2009 conditions

To supplement existing water supplies, EMWD has identified several projects that would supplement imported supplies, retrofit of potable water landscape customers, indirect potable recharge and additional water use efficiency. These projects will offset the demand of existing water and free up resources for new development. Table 4 provides a summary of additional potential local supplies.

Table 4 - Potential Water Supply – 2015 - 2035

	2015	2020	2025	2030	2035
Recycled Water	6,100	13,500	16,400	22,200	28,200
Desalination	4,500	4,500	4,500	4,500	4,500
Planned Additional Conservation	0	0	1,300	4,300	6,400
Water Transfers/Exchanges	0	0	0	0	0
Total	**10,600**	**18,000**	**22,200**	**31,000**	**39,100**

These projects are in the planning stage of development and costs and implementation timelines are subject to change. New development will be required to help fund new water supply sources. The extent of additional funding will be determined by the EMWD and may take the form of a new component of connection fees or a separate charge. Details about funding will be developed with the plan of service

2.2 Wholesale Water Supplies

2.2a Written Contracts or Other Proof of Entitlement
Water Code Section 10910 (d) (2) (A)

EMWD is one of the 26 member agencies that make up MWD. The statutory relationship between MWD and its member agencies establishes the scope of EMWD's entitlements from MWD. Typically there are no set limits on supply quantities to member agencies and MWD has provided evidence in the 2010 RUWMP that its supplies will meet member agency demands during normal, historic single-dry and historic multiple-dry years within a 20-year projection.

During unprecedented shortage events, the MWD Water Supply (WSAP) Plan is implemented, requiring a reduction in demand by member agencies. The allocation plan takes into account member agency population growth and investments in local resources. Member agencies are allocated a portion of their anticipated demand with the assurance that a member agency will not see a retail shortage greater than the regional shortage. Water supply is not limited under the allocation plan but water use above a member agency's allocation is charged at a much higher rate. Several years of dry conditions and limitations on State Water Project operations required MWD to implement the allocation plan at a 10 percent regional shortage level in from July of 2009 through April of 2011. This action follows the principles in the Water Surplus and Drought Management Plan as described in the 2010 RUWMP.

2.2b Metropolitan Water District of Southern California Supply

EMWD relies on MWD to provide the majority of its potable water supply and a small percent of its non-potable water supply. The majority of EMWD's potable water is supplied in the northern part of EMWD by the Mills MWD Water Treatment Facility and in the southeastern portion of EMWD by the MWD Lake Skinner Water Treatment Facility. Untreated water from MWD is treated at EMWD's Perris and Hemet Microfiltration Plants for use as a potable source of water.

It is anticipated that the majority of the water demands within EMWD's jurisdiction caused by future development will be met through additional water imports from MWD recognizing the conditions described in this document. Imported sources will be supplemented by an increase in desalination of brackish groundwater, recycled water use and water use efficiency. In the 2010 MWD RUWMP, MWD analyzed the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct and concluded that with the storage and transfer programs developed by MWD, MWD will have a reliable source of water to serve its member agencies' needs through 2030 during normal, historic single-dry and historic multiple-dry years within a 20-year projection. Unprecedented shortage will be addressed through the principles of the Water Surplus and Drought Management Plan as described in the MWD RUMP.

2.2c MWD Regional Urban Water Management Plan

The 2010 RUWMP provides information about MWD supply reliability and demand. MWD does not provide supply projections for each member agency; instead MWD uses a regional approach to developing projections. MWD calculates the demand for the entire region, as discussed in Appendix A.1 of the 2010 RUWMP, and then, using information about existing and proposed local projects, determines the amount of imported water that will be needed in the future. While preparing EMWD's 2010 UWMP, EMWD staff worked with MWD on the 2010 RUWMP, exchanging information about demand, local supply and projects, and clarification on boundary information and population projections. Based on this information and additional data

provided by other member agencies, MWD states it is able to meet the projected demands of all member agencies through 2035. The information supplied in the 2010 RUWMP provides assurance that MWD will have a reliable water supply available to deliver the demand required by all the member agencies including EMWD through 2035, even during dry periods. Under extreme conditions, water supply could be allocated to member agencies using the WSAP to preserve storage. The 2010 RUWMP is included as Attachment B of this assessment.

2.3 Local Resources

Water Code 10910 (d) (1)

In an effort to reduce dependency on imported water from MWD, EMWD has developed several programs designed to take advantage of local resources. High-quality groundwater is a source of water for local customers in the Hemet/San Jacinto Area. In the West San Jacinto Basin, groundwater is blended with imported water for use in the western portion of EMWD. EMWD has also constructed two (2) desalination facilities to recover poor quality groundwater with high total dissolved solids (TDS) levels in the West San Jacinto groundwater basin areas. The product water from the desalters enters EMWD's potable distribution system. A third desalter is now in the final stages of design. In addition to groundwater extraction, EMWD is one of the leading suppliers of recycled water in Southern California.

2.4 Groundwater

Water Code Section 10910 (f)

Groundwater is Eastern Municipal Water District's (EMWD's) only source of locally produced potable water. Protecting and developing local resources to reduce dependency on imported water is an important objective in EMWD's Strategic Plan. Groundwater information is included in this assessment to assist the lead agency in determining the adequacy of EMWD's total supply. Groundwater, however, is not being proposed to serve this project. New developments, including this project, will be supplied with imported water – (1) treated imported water directly from the Metropolitan Water District of Southern California (MWD); (2) untreated imported water from MWD subsequently treated by EMWD; or (3) untreated imported water treated by EMWD and recharged into the basin for later withdrawal.

2.4a Urban Water Management Plan Review

Water Code Section 10910 (f) (1)

The 2010 UWMP discusses projected groundwater use in EMWD and explains assumptions made about groundwater. In the following sections, portions of the 2010 UWMP are included with information about groundwater resources. The water supply for the proposed project will not include groundwater. The following information regarding EMWD's groundwater supply is for informational purposes only.

2.4b San Jacinto Watershed - Groundwater Management Zones in EMWD's Service *Area*

Water Code Section 10910 (f) (2)

The San Jacinto Watershed covers an area of approximately 728 square miles, measured above a point just downstream from Railroad Canyon Dam. The groundwater management zones of the San Jacinto Watershed lie within alluvium-filled valleys carved into the elevated bedrock plateau of the Perris Block. Collectively, the groundwater management zones are nearly surrounded by impermeable bedrock mountains and hills. Internally, island-like masses of granite and metamorphic bedrock rise above the valley floor.

The San Jacinto Fault Zone, which contains the Claremont and Casa Loma faults, is the major geologic feature that bounds and/or crosscuts many of the groundwater management zones, and typically provides effective barriers to groundwater flow. The area between the Claremont and Casa Loma faults is a deep, alluvium-filled graben of tectonic origin, commonly referred to as the San Jacinto Graben. The effective base of freshwater in the graben is known to be quite deep but has not been precisely determined. The San Jacinto Graben consists of a fore-bay area in the southeast where surface water recharge primarily occurs, and a pressure area in the northwest where deep aquifers exist under confined conditions. To the east, the San Jacinto mountain range is the dominant geographic feature of the region, rising to a height of 10,805 feet.

Groundwater management zones were delineated based on major impermeable boundaries, constrictions in impermeable bedrock, groundwater divides, and internal flow systems. The eight groundwater management zones in the San Jacinto Watershed within EMWD's service area include the Canyon, San Jacinto Upper Pressure, San Jacinto Lower Pressure, Lakeview/Hemet North, Hemet South, Perris South, Perris North, and Menifee Management Zones.

Detailed descriptions of each Management Zone are included in the 2010 UWMP under Section 3 attached as Appendix A of this report.

2.4c Groundwater Management
Water Code 10910 (f) (2)

In the Hemet/San Jacinto Water Management Plan area, EMWD's groundwater production is currently constrained by the 1954 Fruitvale Judgment and Decree. Under that Judgment and Decree, EMWD, as successor-in-interest to the Fruitvale Mutual Water Company, may extract the subsurface waters of the Canyon Basin for use over or outside the entire basin without restriction as long as the static water level in a specific well is not over 25 feet below a specific elevation. If the water level in the well is more than 25 feet below the specified elevation, EMWD's extraction is limited to 4,500 AFY. The District may extract from the Entire Basin, a total of not more than 12,000 AFY from the Entire Basin for use outside the basin, subject to the 4,500 AFY Canyon Basin extraction limit. The perimeters of the Canyon Basin and Entire Basin are defined in the Judgment and Decree. The Hemet/San Jacinto area contains good quality water and is a major source of municipal as well as private production, although water levels are in serious decline. Once the Stipulated Judgment for the Hemet/San Jacinto Water Management Plan is in effect, it will supersede the Fruitvale Judgment and Decree.

Since 2001, the Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District (LHMWD), EMWD, and representatives of the private groundwater producers, with DWR acting as an impartial mediator, have been working on a groundwater management plan for the Hemet/San Jacinto Water Management Plan area. Over the past several years, the group has discussed and resolved several controversial issues, including San Jacinto Tunnel seepage water, the Fruitvale Judgment and Decree, export of groundwater from the basins, and how to maximize the use of recycled water. As a result of their efforts, a final Hemet/San Jacinto Water Management Plan (HSJWMP) was completed in 2007 and a Stipulated Judgment is scheduled to be submitted to the courts in 2011.

The Hemet/San Jacinto Water Management Plan:

- Limits the amount of water being extracted from the basin to a sustainable yield.
- Implements continued recharge of the basin using imported water through the Integrated Recharge and Recovery Project.
- Insures settlement claims by the Soboba Band of Luiseño Indians are facilitated and accommodated.
- Expands existing water production and water services system to meet future urban growth through the use of imported water recharged into the basin.
- Protects and/or enhances water quality in the management plan area.
- Supports cost-effective water supplies and treatment by the public agencies.
- Eliminates groundwater overdraft and enhances basin yield.
- Continues the monitoring program to promote and provide for best management and engineering principles to protect water resources.

Long term groundwater management includes plans for artificial recharge using MWD replenishment water via permanent facilities through the Integrated Recharge and Recovery (IRRP) Program. An agreement with the Soboba Band of Luiseño Indians requires that, on average, an annual delivery of 7,500 acre-feet of water from MWD for the next 30 years to EMWD, LHMWD, and the Cities of Hemet and San Jacinto as part of an effort to recharge groundwater in the Hemet/San Jacinto area, fulfilling the Soboba Tribe's water rights and addressing chronic groundwater overdrafts.

EMWD's rights under the Hemet/San Jacinto Water Management Plan will be a base groundwater production right of 10,869 AFY. Any pumping above that amount is subject to replenishment fees.

In the West San Jacinto area, a cooperative groundwater management plan is already in place to insure the reliability and quality of the water supply. In June 1995, EMWD adopted the West San Jacinto Groundwater Basin Management Plan (WSJGBMP) in accordance with the statutes in the State Water Code Sections 10750 through 10755 resulting from the passage of Assembly Bill 3030 (AB 3030). The plan was adopted after extensive public outreach and meetings with interested individuals and agencies.

Implementation of the WSJGBMP began directly after its adoption. Initial efforts to implement the WSJGBMP included establishing an advisory committee; prioritizing the management zones; evaluating groundwater resources including establishing groundwater quality, level, and extraction monitoring programs; and conducting hydro-geophysical investigations. The West San Jacinto Groundwater Basin Management Plan Annual Report, documenting the implementation of the plan and activities in the groundwater management zones, has been published annually since 1996.

2.4d Groundwater Recharge

Through pilot programs and using temporary facilities, EMWD has recharged groundwater in the Hemet/San Jacinto area with imported surplus water from MWD since 1990. In April of 2004, EMWD, LHMWD, and the Cities of Hemet and San Jacinto executed a Memorandum of Understanding (MOU) for an Interim Water Supply Plan. The purpose of the plan was to address the deteriorating situation in the Hemet/San Jacinto area by providing recharge of imported water from the SWP into the aquifer at two sites – the Conjunctive Use Ponds in the Intake portion of the San Jacinto Upper Pressure Management Zone, and the Grant Avenue

Ponds in the Canyon Management Zone. From 2004 through 2007, 20,819 AF of imported water from the SWP was recharged into the aquifer. Due to dry conditions, environmental restriction, and the level of demands in its service area, MWD curtailed Replenishment Service effective as of May 1, 2007. Since then, permits to recharge water at the two sites have expired. To replace the temporary recharge facilities, long term facilities are being designed and built as part of the IRRP, an integral piece of the water management plan and the Soboba settlement. The IRRP initially consists of 35 acres of basins or ponds for recharging State Project Water; three extraction wells; three monitoring wells; modification to two existing pump stations; and pipelines within, and adjacent to, the San Jacinto River.

EMWD is also contributing to the replenishment of the basin by providing recycled water in lieu of groundwater production. The Recycled In-Lieu Program supplies recycled water for agricultural irrigation in-lieu of pumping native groundwater. The project can deliver up to 8,540 acre-feet per year to local agricultural water producers. The project costs are jointly funded by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Agreements that set limits on groundwater production, and provide for a payment of a portion of the operation and maintenance costs have been in place since 2008.

2.4e Groundwater Pumping Rights

Water Code 10910 (f)

In the eastern portion of EMWD's service area or Hemet/San Jacinto area, EMWD's groundwater production is currently constrained by the 1954 Fruitvale Judgment and Decree. Under that Judgment and Decree, EMWD, as successor-in-interest to the Fruitvale Mutual Water Company, may extract the subsurface waters of the Canyon Basin for use over or outside the Entire Basin without restriction as long as the static groundwater level in a specific well is not over 25 feet below a specific elevation. If the groundwater level in the well is more than 25 feet below the specified elevation, EMWD's extraction is limited to 4,500 AFY. EMWD may extract a total of not more than 12,000 AFY from the Entire Basin for use outside the basin, subject to the 4,500 AFY Canyon Basin extraction limit. The perimeters of the Canyon Basin and Entire Basin are defined in the Judgment and Decree but they basically cover the east side of the Hemet/San Jacinto Valley, from Bridge Street on the northwest to the Park Hill area on the southeast. The Hemet/San Jacinto area contains good quality groundwater and is a major source of municipal as well as private production, although groundwater levels are in serious decline. Once the Stipulated Judgment for the HSJWMP is in effect, it will supersede the Fruitvale Judgment and Decree. EMWD's rights under the HSJWMP will be a base groundwater production right of 10,869 AFY. Any pumping above that amount is subject to replenishment fees.

2.4f Surface Water Diversion Rights

License No. 10667

EMWD holds a right to divert up to 5,760 AFY of San Jacinto River flows for recharge and subsequent use from November 1 through June 30 each year. EMWD's diversion and recharge of San Jacinto River surface water to the Canyon Management Zone takes place at EMWD's Grant Avenue Ponds in the Valle Vista area. EMWD's diverted water is recharged into the groundwater aquifer of the Canyon Management Zone and is not used for direct use or sale. The San Jacinto River is an ephemeral river and, consequently, river flows may be insufficient for any diversion at all. In 2008, river flows were sufficient to divert 4,278 AF of surface water. Additional information about surface water diversion is available in Chapter 3 of the Annual Report.

2.4g Past Groundwater Extraction
Water Code 10910 (f) (3)

Table 4 depicts the total potable groundwater extracted by EMWD from 2005 through 2010. The majority of EMWD's groundwater is extracted from the Hemet/San Jacinto area. The remaining groundwater is extracted from the area covered by the WSJGBMP, including brackish groundwater extraction for the desalters. The location of wells used to pump groundwater and the desalters can be seen on Map 1.

2.4h Projected Groundwater Extraction
Water Code 10910 (f) (4)

Table 5 lists the amount of potable groundwater that EMWD is projecting will be supplied. Groundwater extraction in the Hemet/San Jacinto area, currently covered by the Fruitvale Agreement, will decrease as the HSJWMP is implemented. The Perris/Moreno Valley wells in the WSJGBMP area are projected to continue to produce 6,000 AFY. The desalters are part of managing the WSJGBMP area and will reduce salinity in the groundwater management zones with the added benefit of providing a source of potable water. The well locations shown on Map 1 should remain consistent in the future.

2.4i Analysis of the Sufficiency of Groundwater
Water Code 10910 (f) (5)

Protecting the available groundwater supply is an important part of EMWD's planning efforts. EMWD is actively working with other agencies and groups to insure that groundwater will be a reliable resource far into the future. Part of managing groundwater responsibly requires the replacement of groundwater extracted beyond the safe yield. Groundwater extraction in Hemet/San Jacinto area will be replaced with imported water as the HSJWMP is implemented, and groundwater extraction in the WSJGBMP area will remain static. Although the desalters will provide an additional supply of water, the amount of water produced is not sufficient to accommodate the proposed growth within EMWD. The majority of the increased water demand caused by this project will be met by increasing the use of imported water from MWD recognizing the conditions of approval outlined in this document.

2.5 Recycled Water
Water Code 10910 (d) (1)

Recycled water is extensively used in EMWD's service area in place of potable water. To offset municipal demand recycled water is use to irrigate landscape and for industrial purposes. The majority of EMWD's agricultural customers also use recycled water. In some cases recycled water is used by agricultural customers in lieu of groundwater production, increasing the amount of groundwater available for municipal use without increased recharge.

The supply of recycled water will continue to grow with EMWD's population growth. The four (4) regional water reclamation facilities that EMWD is currently operating are all either in the process of expansion or have an expansion planned in the near future. Recycled water is currently used for both municipal and agricultural purposes. Municipal customer use recycled water for landscape irrigation and industrial process water. Agricultural customers use recycled water for irrigation of crops. A portion of agricultural demand of recycled water is in lieu of using groundwater. Currently the use of recycled water is limited by the amount available to serve during peak demands and with livestream discharge occurring in off peak periods. EMWD has developed plans to eliminate discharge and use all of the recycled water available within the

District and to offset demand of existing potable customers including retrofit of potable water landscape customers and indirect potable recharge.

2.6 Water Use Efficiency Measures

The Water Conservation Act of 2009, Senate Bill 7x-7, set a requirement for water agencies to reduce their per capita water use by the year 2020. The overall goal is to reach a state wide reduction of per capita urban water use of 20% by December 31, 2020 with an intermediate 10% reduction by December 31, 2015. Demand reduction can be achieved through both conservation and the use of recycled water as a potable demand offset. EMWD will reduce potable water demand to meet the goals of SB7x-7 two ways; using recycled water to offset potable water demand and reducing demand for water through conservation. Three methods have been identified for conserving water: 1) a budget based tiered rate, 2) requirements for water efficiency in new construction and 3) an active conservation program. Water use reduction will be focused on outdoor demand reduction by all customer types. Table 5 summarizes water savings by type.

Table 5 - Water Efficiency Savings (AFY) – 2005 - 2035

Saving Type	2005	2010	2015	2020	2025	2030	2035
Recycled Water Potable Offset	3,601	4,041	5,000	6,300	11,500	13,900	14,300
Tiered Rate	0	8,700	8,700	8,700	8,700	8,700	8,700
New Construction	0	200	2,000	4,100	6,100	8,000	9,600
Active Conservation	1,500	3,400	6,500	9,500	10,700	11,700	12,600
Total	**5,101**	**16,341**	**22,200**	**28,600**	**37,000**	**42,300**	**45,200**

Recycled water will be used to offset potable demand through the expansion of the existing recycled water system.

Tiered Rate savings are an estimate of water saved by customers after the implementation of a budget based tiered rate. In April 2009, EMWD implemented a tiered rate billing structure for its residential and landscape customers. Customers are provided an allocation for reasonable water use and are required to pay a higher rate for water use over their allocated limit. Water savings by existing customers has been estimated. Actual water demand since the implementation of the tiered rate has been lower than the estimated amounts, likely as a result of several factors and not the tiered rate implementation alone.

Water Use Efficiency Requirements in New Development includes installing lower water use landscape and interior fixtures. Water use efficiency is mandated statewide through existing ordinances, plumbing codes and legislation. To enforce water use efficiency in new development EMWD has lowered the water budget allocations for new development. Any residential or dedicated landscape account installed after January 1, 2011 will have an outdoor budget allocation based on only 70% of ET, compared to up to 100% of ET for older accounts. Water use savings shown in Table 5 are calculated assuming lower budgets allocation will result in a reduction in a proportionate reduction in water use. Actual savings will be measured based on average use by new meters.

Active Conservation savings are the result of water use efficiency programs implemented by EMWD. EMWD encourages the replacement of inefficient devices and includes monetary rebate, distribution and direct installation programs. Water savings are based on estimated water savings for each device and takes into account the lifetime of each device.

Through the above three methods of reducing water use, and recycled water use, EMWD anticipates the reduction of potable water demand to meet the requirements of SB7x-7.

2.7 Local Resources Documentation

2.7a Written Contracts or Other Proof

Water Code 10910 (d) (2) (A)

Below is a list of documents related to EMWD's local water supply:

- **EMWD 2010 Urban Water Management Plan (June 2010)** - EMWD's 2010 Urban Water Management Plan is attached as Appendix A. This plan supplies additional information on EMWD, its service area, and water management and supply capabilities.
- **West San Jacinto Groundwater Basin Management Plan 2008 Annual Report on the Status of the Groundwater Subbasins (October 2009).** - Detailed information on the history and progress of groundwater basin management and the Groundwater Monitoring Program can be found in the 2008 Annual Report on the Status of the Groundwater Subbasins, located on EMWD's Website (www.emwd.org)
- **The Fruitvale Agreement (June 1954)** –A Judgment and Decree (No. 54546) filed in Riverside County which quantifies EMWD's groundwater extraction in the Hemet/San Jacinto area.
- **Hemet/San Jacinto Water Management Area 2008 Annual Report (December 2009)**. - Detailed information on the history and progress of the Water Management Plan and Groundwater Monitoring Program can be found in the 2008 Annual Report on the Status of the Groundwater Subbasins, located on EMWD's Website (www.emwd.org).
- **Hemet/San Jacinto Groundwater Management Area Water Management Plan** – This plan was developed by the stakeholders in the Hemet/San Jacinto area to provide a foundation to guide and support responsible water management into the future. The plan was finalized in 2007 and an EIR was approved for the project on November 21, 2007 by EMWD's Board of Directors.

With regard to EMWD's ownership and use of reclaimed/recycled water, California Water Code Section 1210 states:

The owner of a waste water treatment plant operated for the purpose of treating wastes from a sanitary sewer system shall hold the exclusive right to the treated waste water as against anyone who has supplied the water discharged into the waste water collection and treatment system, including a person using water under a water service contract, unless otherwise provided by agreement.

With regard to the Water Use Efficiency Ordinance that will result in additional supplies through conservation:

The County of Riverside Board of Supervisors approved an update to Ordinance No. 859 on October 20, 2009 requiring water efficient landscaping in any new development requiring a permit.

EMWD's Board of Directors approved Ordinance 72.24 for implementation on March 1, 2009 requiring water efficient landscaping in new developments and requiring water efficiency

enforced through tiered rates. Ordinance 72.24 can be found on EMWD's website www.emwd.org.

2.7b EMWD's Capital Improvement Plan
Water Code 10910 (d) (2) (B)

EMWD maintains and periodically updates a comprehensive Water Facilities Master Plan (WFMP). This working plan defines water supply, transmission mains, and storage facilities required for the accommodation of projected growth within EMWD. On a yearly basis, a 5-year Capital Improvement Plan (CIP) is prepared, which is based on a further refinement of the WFMP. The CIP outlines specific projects and their funding source. Each project is also submitted individually to the Board for authorization and approval. This allows EMWD to accurately match facilities' needs with development trends. Financing information for the desalter plant construction, regional water reclamation facilities expansion, and well replacement can also be found in the CIP.

2.7c Federal, State and Local Permits Needed for Construction
Water Code 10910 (d) (2) (C)

As part of EMWD's CIP, an Environmental Review Committee has been established. This Committee, made up of representatives from the Engineering, Planning, and Environmental and Regulatory Compliance Departments, discusses each project and the steps needed to comply with regulatory requirements. EMWD works with various government agencies, including the U.S. Department of Fish and Wildlife, the U.S. Army Corps of Engineers, the California Department of Public Health, the California State Water Resources Board, the California Air Quality Management District, and the California Department of Fish & Game to obtain permits when necessary. The Engineering Department procures additional construction permits on a case-by-case basis. EMWD has already, or is in the process of, obtaining Environmental Impact Reports or other environmental documents necessary for desalter construction, regional water reclamation facilities expansion, and well replacements. Any necessary permits secured by EMWD are kept on file at the District office.

2.7d Regulatory Approvals
Water Code 10910 (d) (2) (D)

The Department of Public Health (DPH) has issued a system-wide permit for EMWD's water supply system. EMWD's Environmental and Regulatory Compliance Department conforms to specific regulations and obtains any additional necessary approvals. As new facilities are constructed by EMWD, they are subject to inspection and testing by regulatory agencies and the DPH permit is amended.

2.8 Section 3 - Demand

2.8a Demand Projections
Water Code 10910 (c) (2), 10631 (e) (1)

EMWD's primary retail customers can be divided into residential, commercial, industrial, institutional and landscape sectors. Although the residential section is by far EMWD's largest customer segment, each market segment plays a role in the growth and development of EMWD's service area. See Table 6 for water use by various customer types.

Table 6 - Potable Retail Water Deliveries by Customer Type – 2005 - 2035

Year /Type	Units	Single family Res.	Multi-family Res.	Com-mercial	Indus-trial	Inst/ gov.	Land-scape	Agricult ure	Total
2005	No. of accounts	114,100	1,000	1,500	100	40	1,500	200	**118,440**
Actual	Volume (AF)	62,300	5,500	3,900	400	2,900	7,500	2,400	**84,900**
2010	No. of accounts	129,400	4,300	2,100	100	500	2,200	100	**138,700**
Actual	Volume (AF)	54,000	6,100	4,200	400	2,300	8,900	1,800	**77,700**
2015	No. of accounts	140,600	5,700	2,300	1,200	100	3,300	100	**153,300**
Projected	Volume (AF)	74,400	8,300	5,600	600	3,600	18,500	2,800	**113,800**
2020	No. of accounts	150,200	6,100	2,400	1,300	100	3,500	85	**163,685**
Projected	Volume (AF)	79,600	8,800	5,900	600	3,800	19,600	2,400	**120,700**
2025	No. of accounts	169,600	6,900	2,700	1,400	100	4,000	85	**184,785**
Projected	Volume (AF)	89,800	10,000	6,700	700	4,300	22,200	2,400	**136,100**
2030	No. of accounts	187,700	7,700	3,000	1,500	100	4,400	85	**204,485**
Projected	Volume (AF)	99,400	11,000	7,400	800	4,800	24,500	2,400	**150,300**
2035	No. of accounts	202,800	8,200	3,300	1,700	100	4,700	85	**220,885**
Projected	Volume (AF)	107,400	11,900	8,000	800	5,200	26,500	2,400	**162,200**

Table 7 shows sub-agency water use and Table 8 shows other water uses. Total water use is shown in Table 9.

Table 7 - Wholesale to Other Agencies – 2005 - 2035

	Actual Sales (AF)		Projected Sales (AF)				
Water distributed	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**
City of Hemet	100	0	0	0	0	0	0
City of Perris	1,900	1,700	1,700	1,800	1,900	2,000	2,100
City of San Jacinto	0	0	0	0	0	0	0
Lake Hemet MWD[1]	100	1,300	1,100	1,100	1,000	1,100	1,100
North Perris Water Company	0	0	0	0	0	0	0
Nuevo Water Company	800	600	800	1,600	1,700	1,700	1,700
Murrieta Water Company	100	1,600	0	0	0	0	0
Rancho California Water District	26,300	21,900	36,500	48,600	50,800	53,000	55,200
Hemet/San Jacinto Basin Plan Water Master	0	0	7,500	8,500	9,600	11,200	12,300
Total	29,400	27,100	47,600	61,600	65,000	69,000	72,400

1. Sales of water to Lake Hemet are for non-potable supplies used to meet agricultural demand.

Table 8 - Other Water Uses – 2005 – 2035

	Actual Use (AF)		Projected Use (AF)				
	2005	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**
Recycled Water	32,600	41,500	43,900	50,000	53,900	54,900	55,300
Recharge Water [1]	7,000	0	0	0	0	0	0
Distribution System Water Loses	7,600	8,200	8,400	8,900	10,100	11,200	12,100
Treatment Water Losses	100	200	200	200	200	200	200
Total	47,300	49,900	52,500	59,100	64,200	66,300	67,600

Table 9 - Water Demand (AFY) – 2005 - 2035

	Actual		Projected				
	2005	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**
Retail Potable Water Sales	84,900	77,700	113,800	120,700	136,100	150,300	162,200
Water Sales to Other Agencies	29,400	27,100	47,600	61,600	65,000	69,000	72,400
Other Water Uses/Losses	47,300	49,900	52,500	59,100	64,200	66,300	67,600
Total	**161,600**	**154,700**	**213,900**	**241,400**	**265,300**	**285,600**	**302,200**

2.8b Project Demand

This assessment is prepared for the portion of the North Hemet Specific Plan supplied by EMWD. As shown on the attached Exhibit A, the proposed specific plan is located in the City of Hemet, in the County of Riverside. It is bounded on the west by Alessandro Street, on the south by Oakland Avenue and on the east by State Street. Only a portion of the project is located within EMWD's service area, the remainder of the project will be supplied by Lake Hemet Municipal Water District. This assessment evaluates only the portion of the proposed project supplied by EMWD, which includes 192 residential units and 4 acres of commercial/office development. The demand for the EMWD's portion of the project is 54.8 acre-feet annually. Lake Hemet Municipal Water District will prepare a separate water supply assessment for the remainder of the project area. Table 10 summarizes the demand for the project by type.

Table 10 – Project Demand

Type	Amount	Units	Demand per Unit (AF)	AFY
Multi- Family	192		0.27	51.84
Commercial/Office	4	Acres	0.75	3
Total	**3,170**		**0.75**	**54.8**

(1) Per Land Use Plan Statistical Summary

The demand for this project is within the limits of projected demand accounted for in the 2010 UWMP and would be included in the projected demand shown in Table 6 of this water supply assessment report.

2.8c Database of Proposed Projects

Water Code 10910 (c) (3)

To develop the projections used in this Water Supply Assessment, EMWD uses a development-tracking database that assesses future water demands for specific projects. EMWD uses this database to help plan for future water supply and infrastructure needs by monitoring new projects through various stages of development. Subject to the Board of Director's approval of this project, information associated with this project will be included in the supply and demand projections EMWD uses for planning. Changes in density and land use are also tracked in this database for planning purposes. The developer is required to notify EMWD if any changes to project density or land use occur.

2.8d Evaluation of Supply and Demand

Water Code 10910 (c) (2)

Tables 11, 12 and 13 taken from the 2010 UWMP are an estimate of EMWD's demand during average, single and multiple dry years. EMWD is located in an arid region with limited rainfall.

Table 11- Existing Water Supply Resources – Average Year Hydrology – 2015 - 2035

	2015	2020	2025	2030	2035
Groundwater	149,300	170,700	190,700	210,000	226,200
Existing Desalter	43,900	50,000	53,900	54,900	55,300
Metropolitan Water District	13,200	13,200	13,200	13,200	13,200
EMWD Recycled Water System	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	**213,900**	**241,400**	**265,300**	**285,600**	**302,200**
Total Projected Demands	**213,900**	**241,400**	**265,300**	**285,600**	**302,200**
Shortfall/Surplus	**0**	**0**	**0**	**0**	**0**

Based on a repeat of 2004-2009 conditions

Table 12 - Existing Water Supply Resources – Dry Year Hydrology – 2015 – 2035

	2015	2020	2025	2030	2035
Groundwater	155,300	177,600	198,300	218,300	235,100
Existing Desalter	45,500	51,800	55,800	56,900	57,300
Metropolitan Water District	13,200	13,200	13,200	13,200	13,200
EMWD Recycled Water System	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	**221,500**	**250,100**	**274,800**	**295,900**	**313,100**
Total Projected Demands	**221,500**	**250,100**	**274,800**	**295,900**	**313,100**
Shortfall/Surplus	**0**	**0**	**0**	**0**	**0**

Note: Based on a repeat of 1977 conditions

Table 13 - Existing Water Supply Resources – Multi - Dry Year – 2015 - 2035

	2015	2020	2025	2030	2035
Groundwater	156,600	179,000	199,800	219,900	236,900
Existing Desalter	45,800	52,200	56,200	57,300	57,700
Metropolitan Water District	13,200	13,200	13,200	13,200	13,200
EMWD Recycled Water System	7,500	7,500	7,500	7,500	7,500
Total Existing Supplies	**223,100**	**251,900**	**276,700**	**297,900**	**315,300**
Total Projected Demands	**223,100**	**251,900**	**276,700**	**297,900**	**315,300**
Shortfall/Surplus	**0**	**0**	**0**	**0**	**0**

Note: Based on a repeat of 1990-1992 conditions

EMWD's 2010 UWMP discusses the supply reliability for EMWD during dry years. It is anticipated that the majority of water for future development will be supplied by imported water from MWD during single dry years. Typically, MWD does not place imported water limits on a member agency, but predicts the future water demand based on regional growth information. MWD stated in its 2010 RUWMP that, with the addition of all water supplies, existing and planned, MWD would have the ability to meet all of its member agencies' projected supplemental demand through 2035 even under a repeat of historic drought scenarios.

Section 5 - Water Supply Assessment

5.1 Potable Water

From a facilities perspective, the proposed project would be conditioned to construct off-site and on-site water facilities needed to distribute water throughout the project area. A plan of service for the proposed project should be created, and after approval by EMWD, be consulted for specific improvements. See Exhibit "B" for existing water facilities in relation to the project.

With respect to water supply, as discussed above, the project will be served using imported water from MWD supplemented with new local supply projects during multi-dry years, if needed. Allocation from MWD may result in water supplies being made available at a significantly higher cost depending on circumstances.

5.2 Recycled Water

EMWD policy recognizes recycled water as the preferred source of supply for all non-potable water demands, including irrigation of recreation areas, green-belts, open space common areas, commercial landscaping, and supply for aesthetic impoundment or other water features. The proposed project is not near existing or proposed recycled water lines. But EMWD will make a final determination on requirements for recycled water use and facilities during the design phase of the project.

5.3 Duration of Approval – 3 Year Maximum

This assessment will be reviewed every three years until the project begins construction. The project applicant shall notify EMWD when construction has begun. The review will insure that the information included in this assessment remains accurate and no significant changes to either the project or EMWD's water supply have occurred. If neither the project applicant nor the lead agency contacts EMWD within three years of approval of this WSA, it will be assumed that the proposed project no longer requires the estimated water demand calculated, the demand for this project will not be considered in assessments for future projects, and the assessment provided by this document will become invalid.

5.4 Conclusion

EMWD relies on MWD to meet the needs of its growing population. MWD stated in its 2010 RUWMP that, with the addition of all water supplies, existing and planned, MWD would have the ability to meet all of its member agencies' projected supplemental demand through 2035 even under a repeat of historic multi year drought scenarios.

Based on present information and the assurance that MWD is engaged in planning processes that will identify solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supply to meet the potable water demand for this project as part of its existing and future demands.

In the event the lead agency determines adequate water supply exists for this project, the developer of this project is required to meet with EMWD staff to develop a plan of service. The plan of service will detail water, wastewater and recycled water requirements to serve the projects. An agreement developed prior to construction will determine additional funding required to reduce existing customer demand on imported supplies through the expansion of local resources. The reduction of existing customer demand on imported water supplies will free up allocated imported water to be used to serve this project under multiple dry year conditions. The amount of funding will be determined by the EMWD and may take the form of a new component of connection fees or a separate charge. The estimated cost of desalinated water is between $1,400 and $1,700 per AF. These costs are expected to increase over time.

If there is a change in the circumstances detailed in this assessment, EMWD will address the changes in the plan of service for the project. Modifications at the plan of service stage could reduce the amount of water available to serve this project.

Section 6 - Conditions of Approval

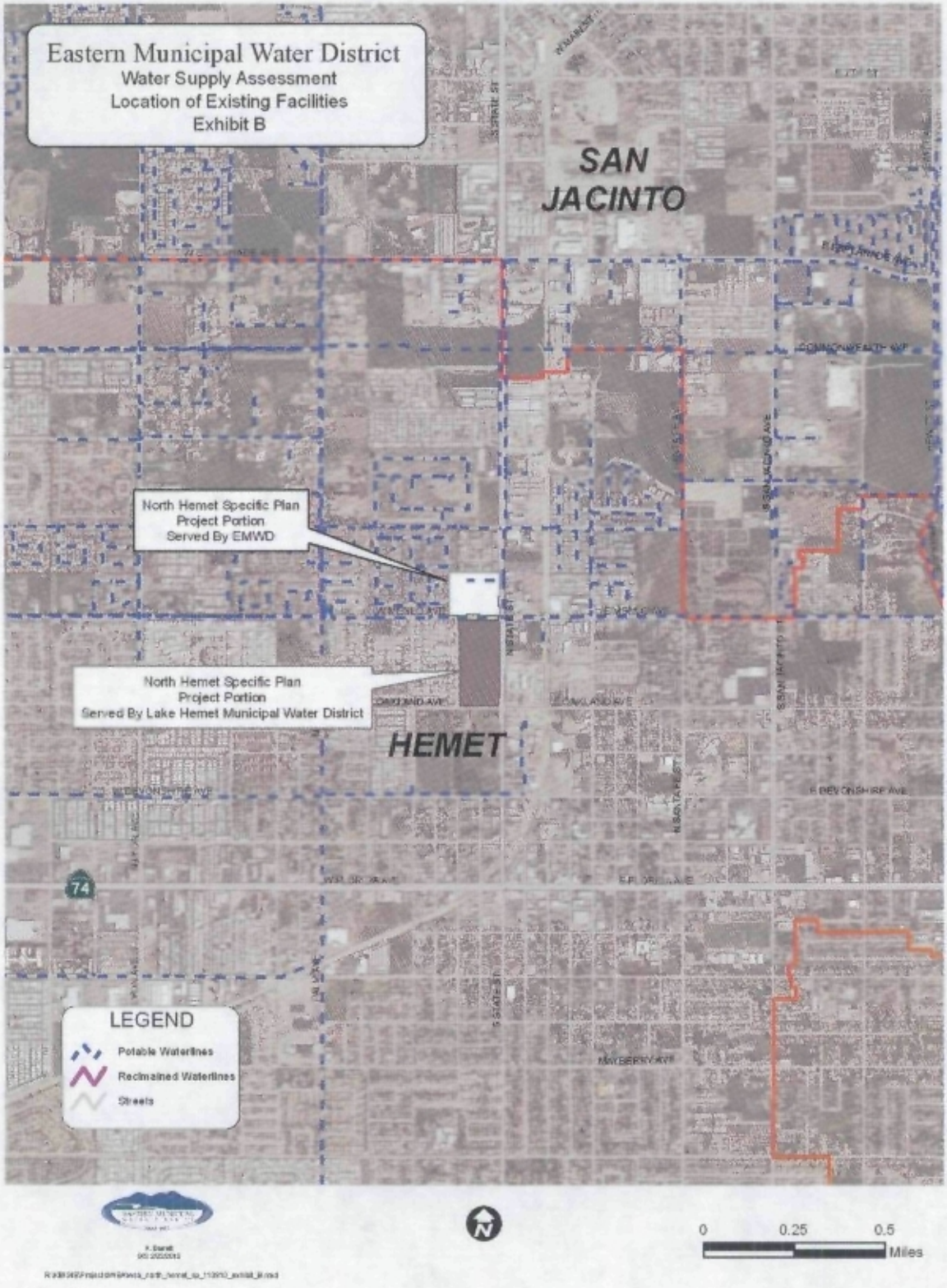
This assessment is not a commitment to serve the project, but a review of EMWD supplies based on present information available. This assessment is conditioned on MWD's ability to continue to supply imported water to meet EMWD's requirements including the requirements for this project. This project is subject to any special or additional requirements imposed by MWD or EMWD on such deliveries, including increased pricing or a different pricing structure.

The lead agency for the project is responsible to evaluate the adequacy of the water supply assessment and make the ultimate decision of the sufficiency of the water supply. T he developer for the project is responsible for keeping EMWD informed about progress in the planning and development of the project so that a review can be completed. If the lead agency

determines adequate water supply exists for this project, the project applicant shall notify EMWD on the status of this project, and the lead agency shall request a review and update of this WSA every three (3) years until the project starts construction.

If the lead agency determines adequate water supply exists for this project, to the greatest extent possible recycled water shall be used on the proposed project. Details about the extent of recycled water use shall be included in the plan of service for the project.


Eastern Municipal Water District
Water Supply Assessment
Vicinity Map
Exhibit A
SAN JACINTO
HEMET
North Hemet Specific Plan
Project Portion
Served By EMWD
North Hemet Specific Plan
Project Portion
Served By Lake Hemet Municipal Water District
HEMET
Diamond Valley Lake
0
1
2
Miles


Eastern Municipal Water District
Water Supply Assessment
Location of Existing Facilities
Exhibit B
SAN JACINTO
North Hemet Specific Plan
Project Portion
Served By EMWD
North Hemet Specific Plan
Project Portion
Served By Lake Hemet Municipal Water District
HEMET
74
LEGEND
Potable Waterlines
Reclmained Waterlines
Streets
0
0.25
0.5
Miles

WATER SUPPLY ASSESSMENT REPORT

Supplemental Information

Appendix A
2010 Urban Water Management Plan

Appendix B
2010 MWD's RUWMP

Appendix C
EMWD's CIP Budget

Appendix M
Water Supply Assessment: Lake Hemet Municipal Water District



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Construction Manager

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www.lhmwd.org

November 18, 2011

Ron Running
Planning Department
City of Hemet
445 E. Florida Avenue
Hemet, CA 92543

Subject: Water Supply Assessment
North Hemet Specific Plan 10-001

Dear Mr. Running,

The District received your request dated February 7, 2011, for a water supply assessment for the North Hemet Specific Plan 10-001. The WSA approved by the LHMWD Board on November 7, 2011 is attached. In summary, the District has available water supply to serve the proposed project. Please contact me if you have any questions regarding the WSA and thank you for consulting the District regarding its resources.

Sincerely,

Mike Gow
AGM/Chief Engineer

WATER SUPPLY ASSESSMENT

NORTH HEMET SPECIFIC PLAN 10-001

TABLE OF CONTENTS

EXECUTIVE SUMMARY…..... i

1. INTRODUCTION..... 1

1.1 Project Overview..... 2

1.1.1 Description of Location and Climatology..... 2

2. WATER SUPPLIES..... 3

2.1 Existing Water Supply..... 4

2.1.1 Hemet-San Jacinto Groundwater Basins..... 4

2.1.2 Purchased Water…… . 5

2.1.3 Recycled Water 5

3. WATER DEMAND..... 5

4. SUPPLY RELIABILITY..... 7

5. CONCLUSIONS..... 8

LIST OF FIGURES

1. Regional Map
2. Local Vicinity Map
3. Aerial Photograph
4. Proposed Land use

LIST OF TABLES

1. Project Water Demands
2. LHMWD Water Supplies
3. Population Projections
4. 2010 Actual LHMWD Water Demands
5. 2015 Projected LHMWD Demands
6. 2020 Projected LHMWD Demands
7. 2025 and 2030 Projected LHMWD Demands

EXECUTIVE SUMMARY

A water supply assessment for the proposed North Hemet Specific Plan 10-001 (the Project) located between State Street and Alessandro Street, north of Oakland Avenue (Site) was performed by the Lake Hemet Municipal Water District (LHMWD) at the request of the City of Hemet. The WSA evaluates the adequacy of water supply sources to meet future water demand. The City submitted a request for a Water Supply Assessment (WSA) dated February 7, 2011. The request included a description of the Project that was utilized in the preparation of the WSA. The LHMWD water system currently serves about 14,340 connections with a service area of about 12,700 acres. Based on the 2010 LHMWD Urban Water Management Plan (UWMP), LHMWD service connections are 92.5% residential and 7.5% for other land uses.

The Site is located in the City of Hemet, Riverside County, California (Figures 1 and 2) and currently consists of approximately 28.6 acres of lightly developed parcels including18 structures with several residences, 6 businesses, a 39-unit mobile home park, and vacant land (Figure 3). Only the 16.9 acre portion of the Site between Menlo and Oakland Avenues including Planning Areas 3, 4, 5, 6, and 7 are within the LHMWD service area. The remaining portion of the Site north of Menlo Avenue is served by Eastern Municipal Water District (EMWD). EMWD prepared a separate WSA for the area in their service area. Existing LHMWD services to the properties within the Site were provided an average of 11,050 gallons per day (12.4 acre-feet per year (afy)) in 2010. Existing General Plan land uses include R1- Residential (7 dwelling units (DU) per acre), RIII-Residential (17 to 25 DU per acre), C-Commercial and SP- Specific Plan. Existing zoning is R-1 (single family residential), R-3 (multiple family residential), C-1 (neighborhood commercial), and C-2 (General Commercial).

The proposed development includes up to 525 multi-family residential units, 118,919 square feet (sf) of commercial uses, and 16,335 sf of office space (Figure 4). Within the 16.9 acres of the Site in the LHWMD service area, 333 DU and 80,804 sf of retail builing space is proposed. The project will be completed in numerous phases by multiple future landowners within the framework of the proposed specific plan. The construction schedule was not reported and assumed to be unknown at this time. The Project meets the qualifying definition of a project under Water Code 10912. Although the portion of the Project within the LHMWD service is itself below the definition criteria for a project, a WSA was still requested from both EMWD and LHMWD to meet the truest intent of SB 610. The project is not a subdivision and does not yet require a SB 221 verification of the availability of a sufficient water supply.

Based on the expected increase in population within the Project Site and assuming the proposed multifamily units will have 2.5 people per unit, the demand to LHMWD from the Project is approximately 123.8 afy which is a net increase of 111.4 afy.

NORTH HEMET SPECIFIC PLAN

SP 10-001

PLANNING AREA	LAND USE	GROSS ACRES	MAX DENSITY DU/AC	DU	CAP/DU	GPCD	GPD/AC	AVERAGE DAILY DEMAND (gpd)	AVERAGE DAILY DEMAND (af/yr)
3	MDR	2.2	18	40	2.5	120		12,000	13.4
4	HDR		30	40	2.5	120		12,000	13.4
	COMM	3.5					2,000	7,000	7.8
5	HDR	5	30	150	2.5	120		45,000	50.4
6	HDR	2	30	60	2.5	120		18,000	20.2
	COMM	1.8					2,000	3,600	4.0
7	MDR	2.4	18	43	2.5	120		12,900	14.5
TOTAL		16.9		333				110,500	123.8
Water Usage from Existing Services in 2010 =								11,052	12.4
Net Increase created by Project =								99,448	111.4

Table 1: Estimated Project Demands

The LHMWD 2010 UWMP estimated a total increase in district-wide demand of 1,729 afy from 13,331 afy in 2010 (Table 7, page 16) to 16,313 afy in 2030 (Table 10, page 17). Of that projected 2,982 afy demand increase, 248 afy was estimated to be in multi-family and 340 afy in commercial. land uses. The demand increase from the Project of 111.4 afy represents 19% of the 588 afy demand increase estimated district-wide for commercial and multi-family land uses and 3.7% of the total estimated demand increase for 2030. The 2010 UWMP did not allocate a specific demand estimate to the Project or its underlying property. However, LHMWD approved an updated Water Master Plan that included 18 acres of vacant land in the project boundary and estimated 43 afy of increased demand associated with the development of property within the Project. The Water Master Plan assumed 4 DU/acre and 530 gpd/DU of ADD for the 18 vacant acres.

Based on an analysis of water supply reliability, the added Project demand does not alter the results of the reliability evaluation conducted as part of the 2010 Urban Water Management Plan. For the average, single dry, and multiple dry years reliability scenarios evaluated for water demands in 2030, the additional demand from the Project does not exceed LHMWD's groundwater and other supply sources.

An analysis was also performed for supply reliability for future normal, single dry, and multiple dry water years. This analysis was based on historical groundwater production records for LHMWD.

As part of the supply assessment, supply reliability was evaluated by analyzing water supply in five year increments for normal, single dry, and multiple dry water years as presented in the 2010 Water Master Plan and the 2010 Urban Water Management Plan. Based on these evaluations, the Project does not change the conclusions of LHMWD's reliability and sufficient water supplies are available over the next 20 years to serve both existing demands and those from the proposed Project.

1 . INTRODUCTION

A water supply assessment for the proposed North Hemet Specific Plan No. 10-001 (the Project) located along the west side of State Street, east of Alessandro Street, north of Oakland Avenue, extending north of Menlo Avenue (the Site) was performed by Lake Hemet Municipal Water District (LHMWD). The objectives of the assessment is to determine if the projected supply for the next 20 years, based on normal, single dry, and multiple dry years, will meet the demand projected for the Project, existing demands, and planned future uses including agricultural and manufacturing uses.

Water Code sections 10910 and 10911, require land use planning entities, when evaluating certain large development and redevelopment projects, to request an assessment of the availability of water supplies from the water supply entity that will provide water to the Project. In accordance with Water Code Sections 10910 and 10911, a water supply assessment is performed in conjunction with the land-use approval process associated with the Project and includes an evaluation of the sufficiency of the water supplies available to meet existing and anticipated future demands, including the demand associated with the Project over a twenty-year period for normal, single-dry, and multiple-dry years. The assessment must identify any existing water supply entitlements, water rights, or water service contracts held by the water supplier or relevant to the identified water supply for the proposed Project and include a description of the quantities of water received in prior years by the public water system.

LHMWD's water system currently serves about 14,340 connections. The existing service area covers about 12,700 acres and includes parts of the City of Hemet, a small part of the City of San Jacinto, and unincorporated parts of the County of Riverside in the southeasterly portion of the Hemet-San Jacinto Valley. LHMWD's potable distribution system consists of 13 domestic storage reservoirs, 20 groundwater wells, four imported water connections, 10 booster pumping stations, and 16 pressure regulating stations. LHMWD's distribution system is divided into 15 pressure zones. The various pressure zones provide water to customers with elevations ranging from about 1,565 feet above mean sea level (msl) to 2,400 feet msl. LHMWD also provides potable water to Garner Valley in the San Jacinto Mountains which is a completely separate system and aquifer than the system in the Hemet-San Jacinto Valley. LHMWD also owns and operates an irrigation system for agricultural uses that includes 4 raw water reservoirs, gravity pipelines, concrete-lined flume including Lake Hemet with a storage capacity of 12,775 af.

Much of the same discussion is included in the 2010 Urban Water Management Plan for LHMWD that is at https://www.lhmwd.org/files/UWMP.pdf.

1.1 Project Overview

The Project is located in the City of Hemet, Riverside County, California. As shown on Figure 1, the Site is bounded by State Street to the east, Oakland Avenue to the south, Alessandro Street to the west, and extends northerly of Menlo Avenue (Figures 1 and 2). The Site is approximately 28.6 acres and currently consists of lightly developed parcels including 18 structures with several residences, 6 businesses, a 39-unit mobile home park, and vacant land (Figure 3). Only the portion of the Site between Menlo and Oakland Avenues including Planning Areas 3, 4, 5, 6, and 7 are within the LHMWD service area. The remaining portion of the Site north of Menlo Avenue is served by Eastern Municipal Water District (EMWD). EMWD is preparing a separate WSA for the portion of the Project within their service area.

Existing LHMWD services were provided an average of 11,050 gallons per day (12.4 acre-feet per year(afy)) to the Site in 2010. Existing General Plan land use include R1-Residential (7 dwelling units (DU) per acre), RIII-Residential (17 to 25 DU per acre), C-Commercial and SP- Specific Plan. Existing zoning are R-1 (single family residential), R-3 (multiple family residential), C-1 (neighborhood commercial), and C-2 (General Commercial).

The Site is surrounded by mobile home lots on the west, county government offices to the north, industrial/commercial on the east, and the Hemet Stock Farm on the south.

The proposed development includes up to 525 multi-family residential units, 118,919 square feet (sf) of commercial uses, and 16,335 sf of office space. Within the 16.7 acres of the Site in the LHWMD service area, 333 DU and 80,804 sf of retail builing space is proposed (Figure 4). The project will be completed in numerous phases by multiple future landowners within the framework of the proposed specific plan. The construction schedule was not reported and assumed to be unknown at this time. The Project meets the qualifying definition of a project under Water Code 10912. Although the portion of the Project within the LHMWD service is itself below the definition criteria for a project, a WSA was still requested from both EMWD and LHMWD to meet the truest intent of SB 610. The project is not a subdivision and does not yet require a SB 221 verification of the availability of a sufficient water supply.

1.1.1 Description of Location and Climatology

Hemet has cool and humid winters, and hot and dry summers. Based on the historical data obtained from the Western Regional Climate Center (http://www.wrcc.dri.edu/) for Riverside, California, located approximately 20 miles northwest of Hemet, the average monthly temperature ranges from 40 to 94 degrees Fahrenheit, reported extreme low and high temperatures have been 24 and 113 degrees Fahrenheit, respectively.

The historical annual average precipitation for the City is approximately 12.24 inches according to HemetWeather.com. Rain in areas closer to the mountains tends to be heavier than in the flatter parts of the valley. The rainy season usually begins in October and ends in April. Average monthly precipitation during the winter months is 1

to two inches, but records indicate that the monthly precipitation has been as high as 8 inches. Winter water demands are relatively low. Low humidity usually occurs in the summer months, from May to September. The combination of hot and dry weather during the summer results in high water demands. Landscape irrigation, including lawn watering, in the summer is a major contributor to the higher summer demands.

2 . WATER SUPPLIES

LHMWD currently has three sources of drinking water; groundwater, surface water from the San Jacinto River, and imported water (Colorado River Aqueduct and the east branch extension of the California State Water Project) from Eastern Municipal Water District and the Metropolitan Water District of Southern California (MWD). Outlined below is a summary of historical water demand and water sources used by LHMWD. The supplies are discussed in more detail in Section 4 of the 2010 UWMP.

The current and planned water supplies are summarized in Table 2 below.

Table 2. Current and Planned Water Supplies – AF/Y

Water Supply Sources	2010	2015	2020	2025	2030
Wholesale purchases EMWD-Raw Surface Water	1,125	1,000	1,000	1,000	1,000
Wholesale purchases EMWD-Domestic	15	300	300	300	300
Recycled Water from EMWD	0	800	800	800	800
Water Master	0	1,000	1,000	1,000	1,000
LHMWD produced groundwater-Domestic	9,181	9,611	9,446	9,968	11,092
LHMWD produced groundwater-Ag. Irrigation	863	750	750	750	750
LHMWD surface diversions	4,963	4,283	4,493	4,563	4,705
Total	**16,147**	**17,744**	**17,790**	**18,381**	**19,647**

2.1 Existing Water Supply

LHMWD currently pumps groundwater from both the San Jacinto and Hemet Groundwater Basins using 20 groundwater supply wells. The Basins provide approximately 86% of the water demand in LHMWD service area. EMWD, as a member agency of the MWD is the imported water wholesaler in the Hemet-San Jacinto

Valley. Retail water purveyors in the Hemet San Jacinto Valley include the City of Hemet, City of San Jacinto, EMWD, and LHMWD. All four agencies pump groundwater for retail potable sales.

2.1.1 Hemet and San Jacinto Groundwater Basins

The Hemet and San Jacinto Groundwater Basins are located in the Hemet-San Jacinto Valley in Riverside County, within the San Jacinto River Watershed which ultimately is tributary to the Santa Ana River via Canyon Lake and Lake Elsinore. The groundwater basins are all in the South Coast Hydrologic Region as mapped by the California Department of Water Resources. The San Jacinto River and its tributaries are ephemeral with the South Fork, North Fork, and Strawberry Creek flowing during most of the rain season usually between October and April. The San Jacinto Basin is comprised of the Upper Pressure and Canyon Sub-basins. The San Jacinto Basin is relatively narrow and deep with fluctuating water levels while the Hemet Basin is relatively wide and shallow with more stable water levels. Niether basin is adjudicated or under the jurisdiction of the Groundwater Management Act (AB 3030). Both basins are considered to be in overdraft with the total groundwater extractions from local agencies and private pumpers exceeding long-term natural recharge. The basins are described in more detail in the Hemet/San Jacinto Water Management Plan dated November 7, 2007.

During the five years of 2006 through 2010, groundwater production by LHMWD averaged 11,539 afy and accounted for approximately 86% of LHMWD total demand. Groundwater production for LHMWD during this period ranged from 10,044 afy in 2010 to 12,727 afy in 2007.

2.1.2 Purchased Water

Imported water from Northern California and the Colorado River supplements groundwater and surface water supplies when needed. The water is provided by EMWD which serves parts of unincorporated western Riverside County and the cities of Temecula, Murrieta, Wildomar, Menifee, Perris, Moreno Valley, San Jacinto, and Hemet.

Based on the 1972 Agreement between the District and the Fruitvale Mutual Water Company (FMWC, predecessor to EMWD), the District is entitled to a maximum of 336 af/yr of EMWD's Fruitvale System water at a special water rate and can purchase additional groundwater as needed, provided that EMWD has adequate supplies to meet its own demands. These additional water supplies are purchased at EMWD's normal wholesale billing rate. As previously described, under the proposed WMP, participating water agencies must fund the acquisition of supplemental surface water which can be stored as part of an aggressive groundwater conjunctive use program, to increase existing supply reliability and provide for new growth. Therefore, it is assumed that in the future, if the District requests additional water supplies from EMWD, the requested groundwater quantities will be available. The Fruitvale Agreement will be superseded by the proposed WMP.

Since 1985, purchases from EMWD for domestic and agricultural use averaged about 2,000 af/yr. In the early nineties, purchases from EMWD were significantly higher than average due to drought conditions, particularly in 1990 when over 8,000 acre-feet of water was purchased. Future purchases from EMWD, and the Watermaster once the WMP is adopted, are anticipated to be approximately 300 af/yr or less during normal hydrologic periods. From 2007 to 2009, an average of 2,021 afy of imported raw water was purchased from EMWD to supplement agricultural irrigation demands.

2.1.3 Recycled Water

LHMWD currently sends untreated wastewater to the Eastern Municipal Water District (EMWD) San Jacinto Regional Water Reclamation Facility for treatment and disposal or reuse. Recycle water is currently not used within LHMWD's service area primarily due to the lack of transmission facilities and demands exceeding supply during summer season. However, a recycled water transmission system is planned by EMWD to be extended into parts of LHMWD's service area in the the future.

3 . WATER DEMAND

Based on the expected increase in population within the Project Site and assuming the proposed multifamily units will have 2.5 people per unit, the demand to LHMWD from the Project is approximately 123.8 afy which is a net increase of 111.4 afy.

The LHMWD 2010 UWMP (Table 11, page 14) estimated a 22.4% total increase in district-wide demand of 2,982 afy from 13,331 afy in 2010 to 16,313 afy in 2030. Of that projected demand increase, 248 afy was estimated to be in multi-family and 340 afy in commercial land uses similar to those in the Project. The demand increase from the Project of 111.4 afy represents 19% of the 588 afy demand increase estimated district-wide for commercial and multi-family land uses and 3.7% of the total estimated demand increase for 2030. The 2010 UWMP did not allocate a specific demand estimate to the Project or its underlying property. However, LHMWD approved an updated Water Master Plan that included 18 acres of vacant land in the project boundary and estimated 43 afy of increased demand associated with the development of property within the Project. The Water Master Plan assumed 4 DU/acre and 530 gpd/DU of ADD for the 18 vacant acres.

Existing and future water demand was estimated for LHMWD in Section 3 of the 2010 UWMP and are summarized below in Tables 3 through 7.

Table 3 Population Estimate Projections				
2010	2015	2020	2025	2030
52,914	55,710	58,654	61,754	65,017

Table 4 Water deliveries — actual, 2010		
Water use sectors	# of accounts	Volume (AF)
Single family	13,266	6,158
Multi-family	458	630
Mobile Homes	26	0
Commercial/Institutional	468	900
Industrial	0	0
Landscape	72	219
Agriculture	51	5,424
Other	0	0
Total	14,341	13,331

Table 5 Water deliveries — projected, 2015		
Water use sectors	# of accounts	Volume (AF)
Single family	13,984	7,388
Multi-family	483	756
Mobile Homes	27	0
Commercial/Institutional	493	1,080
Industrial	0	0
Landscape	76	262
Agriculture	51	5,424
Other	0	0
Total	15,115	14,910

Table 6 Water deliveries — projected, 2020		
Water use sectors	# of accounts	Volume (AF)
Single family	14,741	7,266
Multi-family	509	744
Mobile Homes	29	0
Commercial/Institutional	520	1,062
Industrial	0	0
Landscape	80	258
Agriculture	51	5,424
Total	15,930	14,754

Table 7 Water deliveries — projected 2025 and 2030				
	2025		**2030**	
Water use sectors	# of accounts	Volume (AF)	# of accounts	Volume (AF)
Single family	15,539	7,650	16,380	8,480
Multi-family	536	783	566	868
Mobile Homes	30	0	32	0
Commercial/Industrial	548	1,118	578	1,240
Industrial	0	0	0	0
Landscape	84	272	89	301
Agriculture	51	5,424	51	5,424
Other	0	0	0	0
Total	16,790	15,247	17,696	16,313

4 . SUPPLY RELIABILITY

The reliability of LHMWD's water supply is discussed in Section 5 of its UWMP. Based on an analysis of water supply reliability, the added Project demand does not alter the results of the reliability evaluation conducted as part of the 2010 Urban Water Management Plan. For the average, single dry, and multiple dry years reliability scenarios evaluated for water demands in 2030, the additional demand from the Project does not exceed LHMWD's groundwater and other supply sources.

An analysis was also performed for supply reliability for future average, single dry, and multiple dry water years in Tables 37 through 54 of the 2010 UWMP. This analysis was based on historical groundwater production records for LHMWD.

As part of the supply assessment, supply reliability was evaluated by analyzing water supply in five year increments for normal, single dry, and multiple dry water years as presented in the 2010 Water Master Plan and the 2010 Urban Water Management Plan. Based on these evaluations, the Project does not change the conclusions of LHMWD's reliability and sufficient water supplies are available over the next 20 years to serve both existing demands and future demands including those from the proposed Project.

5 . CONCLUSIONS

Based on the expected increase in population and the current per capita water use, the future additional demand on LHMWD for the Project is as much as 111 afy. The additional increase is only 3.7% of the total demand increase included in the 2010 UWMP. Based on an evaluation of water availability, during normal climate years, adequate water supplies are available to serve the projected demand of the Project, in addition to existing and planned future uses. Furthermore, water supply and demand reliability analyses show that even during multiple dry-water years, adequate water supplies are anticipated to be available. Based on the scenarios evaluated, no unusual water shortages due to the Project are anticipated.