

Appendix K

Transportation Impact Analysis

Transportation Impact Analysis Stetson Corner City of Hemet

Prepared for:

City of Hemet

445 E Florida Ave

Hemet, California 92543

Contact: H.P. Kang, Community Development Director

Prepared by:

DUDEK

605 Third Street

Encinitas, California 92024

Contact: Dennis Pascua, Transportation Services Manager

SEPTEMBER 2020

Table of Contents

<u>SECTION</u>	<u>PAGE NO.</u>
1 INTRODUCTION.....	1
1.1 Purpose and Scope of the TIA	1
1.2 Project Description and Location	3
1.3 Analysis Methodology.....	9
1.3.1 Vehicle Miles Traveled (VMT) Analysis for CEQA.....	9
1.3.2 Level of Service (LOS) for General Plan Consistency.....	9
1.4 Improvements for Transportation Impacts	11
2 PROJECT TRAFFIC.....	13
2.1 Trip Generation.....	13
2.2 Trip Distribution and Assignment	14
3 VEHICLE MILES TRAVELED ANALYSIS.....	21
3.1 Background and Methodology.....	21
3.2 Project Screening	21
4 EXISTING CONDITIONS	23
4.1 Roadway System	23
4.2 Transit System.....	23
4.3 Pedestrian and Bicycle Facilities.....	24
4.4 Existing Traffic Operations	24
4.4.1 Traffic Volumes	24
4.4.2 Intersection Operations.....	25
4.5 Existing plus Project Traffic Operations	25
4.5.1 Traffic Volumes.....	25
4.5.2 Intersection Operations.....	25
5 OPENING YEAR 2022 CONDITIONS	39
5.1 Opening Year 2022 Conditions.....	39
5.1.1 Traffic Volumes	39
5.1.2 Intersection Operations.....	39
5.2 Opening Year plus Project Traffic Operations.....	40
5.2.1 Traffic Volumes.....	40
5.2.2 Intersection Operations.....	40
6 CUMULATIVE CONDITIONS	47
6.1 Cumulative Projects	47
6.1.1 Cumulative Projects Trip Generation.....	47
6.1.2 Cumulative Projects Trip Distribution and Assignment	48

6.2	Cumulative Year Conditions.....	53
6.2.1	Traffic Volumes	53
6.2.2	Intersection Operations	53
6.3	Cumulative Year plus Project Traffic Operations	57
6.3.1	Traffic Volumes	57
6.3.2	Intersection Operations	57
7	PROJECT ACCESS, QUEUING AND SAFETY CONSIDERATIONS	61
7.1	Project Access.....	61
7.2	Queuing Analysis	62
7.3	Site Access Considerations.....	63
8	PROJECT IMPACTS, MITIGATION MEASURES AND LEVEL OF SERVICE IMPROVEMENTS.....	65
8.1	Project Impacts.....	65
8.2	Mitigation Measures	65
8.2.1	Direct and Cumulative Impact	65
8.3	Level of Service Improvements	65
8.3.1	Improvement Measures	65
9	FINDINGS AND RECOMMENDATIONS.....	67
10	REFERENCES	69

APPENDICES

A	Scoping Agreement
B	Excerpt from WRCOG VMT Screening Tool
C	Traffic Counts
D	Synchro Worksheets – Intersection Level of Service Analysis
E	Cumulative Projects Data
F	Project Access and SimTraffic Queuing Worksheets
G	Mitigation Worksheets
H	Trip Generation for Project Alternatives

FIGURES

1	Project Location and Study Area	5
2	Project Site Plan	7
3	Project Trip Distribution	15
4	Project Trip Assignment (with Pass-by Reduction and Internal Trip Capture)	17
5	Project Trip Assignment (Project Driveways)	19
6	City of Hemet Roadway Circulation Master Plan.....	27
7	Existing Transit Facilities	29

8	Existing Bicycle Facilities	31
9	Existing Intersection Controls and Geometrics	33
10	Existing Peak Hour Traffic Volumes	35
11	Existing plus project Peak Hour Traffic Volumes.....	37
12	Opening Year 2022 Peak Hour Traffic Volumes	43
13	Opening Year 2022 plus Project Peak Hour Traffic Volumes.....	45
14	Cumulative Projects Location.....	49
15	Cumulative Projects Peak Hour Traffic Volumes.....	51
16	Cumulative Year Peak Hour Traffic Volumes.....	55
17	Cumulative Year plus Project Peak Hour Traffic Volumes	59

TABLES

1	Levels of Service Description	9
2	Levels of Service for Intersections using HCM Methodology	10
3	Project Trip Generation.....	13
4	Existing Peak Hour Intersection Level of Service.....	25
5	Existing plus Project Peak Hour Intersection Level of Service	26
6	Opening Year 2022 Peak Hour Intersection Level of Service	39
7	Opening Year 2022 plus Project Peak Hour Intersection Level of Service	41
8	Cumulative Projects Trip Generation Summary	47
9	Cumulative Conditions Peak Hour Intersection Level of Service	53
10	Cumulative Year plus Project Peak Hour Intersection Level of Service.....	58
11	Project Access Level of Service.....	61
12	Cumulative Year plus Project Queuing Summary.....	62
13	Operational Improvement Cumulative plus Project Weekday Peak Hour Intersection LOS.....	65

INTENTIONALLY LEFT BLANK

1 Introduction

1.1 Purpose and Scope of the TIA

The purpose of this Traffic Impact Analysis (TIA) is to identify traffic impacts associated with the proposed commercial uses on Stetson Corner (proposed project) in the City of Hemet (City), in Riverside County (County). This TIA has been prepared per the Traffic Impact Analysis Preparation Guide, Riverside County Transportation Department (2008) and complies with the City of Hemet General Plan Circulation Element requirements. The scope of analysis has been approved by the City's Traffic Engineering Department and a copy of the scoping document is provided in Appendix A of the TIA. In addition, this TIA utilizes the Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG 2020) provided in a Staff Report dated February 13, 2020 by Western Riverside Council of Governments (WRCOG) to address the requirements of Senate Bill (SB) 743. WRCOG also administers the Transportation Uniform Mitigation Fees (TUMF) which is a regional fee program that mitigates the impact of new growth in western Riverside County.

The objectives of this TIA are to:

- Provide a Vehicle Miles Traveled (VMT) screening analysis per SB 743, updated California Environmental Quality Act (CEQA) and WRCOG guidelines;
- Document existing roadway, pedestrian, bicycle, transit and traffic conditions, including intersection levels of service in the study area;
- Estimate trip generation, distribution, and assignment characteristics for the proposed project;
- Document existing plus ambient (Opening Year 2022) and existing plus ambient plus cumulative projects (Cumulative Year) traffic conditions intersection levels of service in the study area per traffic volumes estimated using ambient growth factor and approved or pending projects in the area.
- Analyze the traffic impacts that would occur as a result of the proposed project under the Existing, Opening Year 2022, and Cumulative Year conditions;
- Describe the significance of the potential impacts under the Existing, Opening Year 2022, and Cumulative Year conditions;
- Identify improvement measures for any substantial transportation impacts; and,
- Provide findings and recommendations based on the traffic analysis of the proposed project.

Figure 1 shows the project location and study area intersections selected per the scoping document approved by the City.

As shown on Figure 1, the study area is comprised of the following 10 intersections.

1. Sanderson Avenue/Acacia Avenue
2. Sanderson Avenue/Tanya Avenue – Johnston Avenue
3. Sanderson Avenue/Stetson Avenue
4. Sanderson Avenue/Page Plaza Place
5. Sanderson Avenue/Thornton Avenue
6. Sanderson Avenue/Mustang Way

7. Cawston Avenue/Stetson Avenue
8. Kirby Street - Seven Hills Drive/Stetson Avenue
9. Lyon Avenue/Stetson Avenue
10. Palm Avenue/Stetson Avenue

The study area intersections are analyzed in the TIA for the following scenarios:

Existing Condition

The TIA includes a description of existing traffic conditions in the site vicinity, including existing intersections and freeway mainline and ramp intersections weekday AM and PM peak hour traffic volumes, and traffic operations. The existing condition is representative of the year 2020 (it should be noted that the traffic counts were collected in February, 2020 before COVID-19 restrictions were in effect).

Existing plus Project Condition

This condition includes analysis of traffic operations under existing conditions with project-related traffic, added to the existing AM and PM peak hour intersection traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining project’s direct impacts.

Opening Year 2022 (Existing plus Ambient Growth) Condition

This condition includes the time that the proposed project is completed and will be estimated by increasing the existing traffic counts by an ambient growth rate (i.e., 2% per year as determined per scoping agreement). Since the project would be operational in the fall of year 2022, a 4% growth rate was applied to existing traffic and to estimate the Opening Year 2022 conditions.

Opening Year 2022 plus Project

This condition includes analysis of traffic operations under the Opening Year 2022 (described above) condition with project-related traffic added to the AM and PM peak hour traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining the project’s contribution to cumulative impacts.

Cumulative Year (Existing plus Ambient Growth plus Cumulative Projects) Condition

This condition includes analysis of traffic operations Traffic generated by other cumulative projects in the study area shall be identified and added to the Opening Year 2022 traffic along with project traffic to provide Cumulative Year traffic conditions analysis.

Cumulative Year plus Project

This condition includes analysis of traffic operations under Cumulative Year conditions with project-related traffic added to the AM and PM peak hour traffic volumes. The traffic impacts specific to the project under this condition were used as the basis for determining the project’s contribution to cumulative impacts.

1.2 Project Description and Location

The project proposes to relocate the existing McCrometer parking lot to the eastern currently vacant portion of the site, and to construct and operate commercial uses along the western portion of the site. The proposed commercial uses would include a 12-bay gas station with an approximately 4,088-square-foot convenience store (7-Eleven store), an approximately 2,660-square-foot drive-thru fast food restaurant, and an approximately 3,590 square-foot car wash with 20 self-serve vacuum stations under a 3,096-square-foot canopy.

Figure 2 illustrates the project's site plan. Local access to the project is provided via Sanderson Avenue and Stetson Avenue. The project access driveway along Stetson Avenue would provide full-access and the north and south project access driveways along Sanderson Avenue would be a right turn in only and a right turn in/out only, respectively.

The existing uses on the project site i.e., the parking lot would be relocated to the site, east of the McCrometer Industrial building. The access to the parking lot would be separate from the proposed project and would be via a full access driveway along Stetson Avenue.

It should be noted that TIA analyzes the transportation impacts related to the proposed project and not the relocation of the parking lot. The traffic from the parking lot is included in the existing traffic counts and is therefore accounted for in the existing intersection operations and analysis provided in Chapter 4 Existing Conditions.

INTENTIONALLY LEFT BLANK



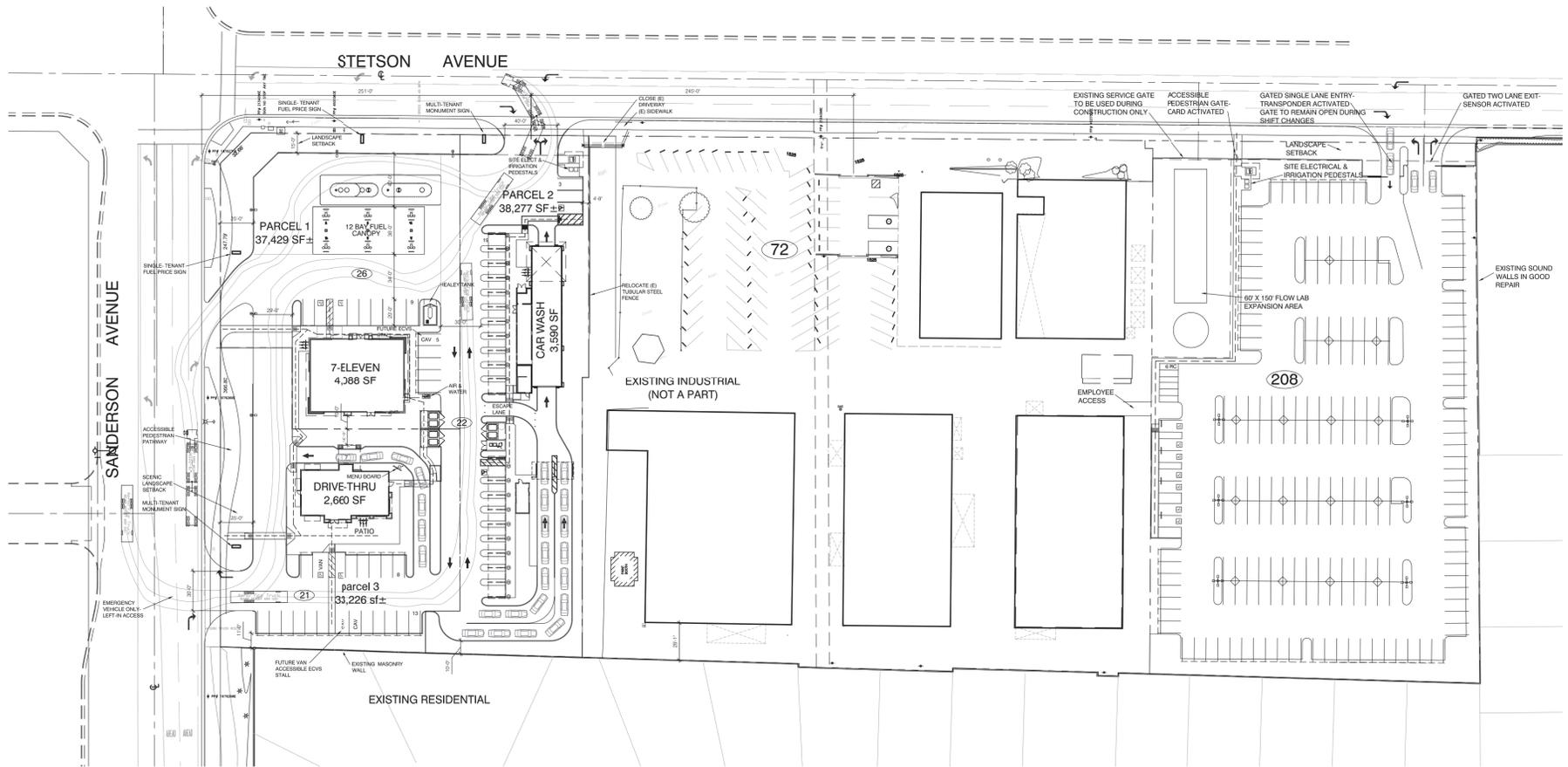
Legend

-  Project Site
-  Study Intersection

Source: Bing Maps

FIGURE 1
Project Location and Study Area
 Stetson Corner

INTENTIONALLY LEFT BLANK



Source: GK Pierce Architects 2020

INTENTIONALLY LEFT BLANK

1.3 Analysis Methodology

1.3.1 Vehicle Miles Traveled (VMT) Analysis for CEQA

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under California Environmental Quality Act (CEQA). SB 743 required the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. OPR recommended Vehicle Miles Traveled (VMT) as the most appropriate measure of project transportation impacts for land use projects and land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018.

Under the new guidelines, VMT has been adopted as the most appropriate measure of transportation impacts under CEQA. The OPR’s regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines must be implemented statewide by July 1, 2020. The City of Hemet has not yet adopted VMT specific guidelines however, the City is a member agency of WRCOG. Therefore, the guidance published by WRCOG has been used for the proposed project’s VMT analysis to determine its CEQA specific transportation impact. The details of applicable screening and VMT analysis methodology has been provided in Chapter 3 of the TIA.

1.3.2 Level of Service (LOS) for General Plan Consistency

Level of Service (LOS) is a tool used to describe the operating characteristics of the street system in terms of the level of congestion or delay experienced by vehicles with service levels range from A through F, with each level defined by a range of V/C ratios, as shown in Table 1.

Table 1. Levels of Service Description

Level of Service	Volume-to-Capacity Ratio	Definition
A	0.00-0.60	Free Flow/Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.
B	0.61-0.70	Stable Operation/Minimal Delays: An occasional approach phase is fully utilized. Many drivers feel somewhat restricted within platoons of vehicles.
C	0.71-0.80	Stable Operation/Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.
D	0.81-0.90	Approaching Unstable/Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91-1.00	Unstable Operation/Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	N/A	Forced Flow/Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

Source: City of Hemet General Plan 2030

1.3.2.1 Intersections

The Highway Capacity Manual, 6th Edition (HCM 6) methodology was used to assess level of service for intersections within the study area per requirement of the respective jurisdiction.

The HCM intersection analysis methodology was used to analyze the operation of signalized and unsignalized study intersections. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding control delay experienced per vehicle for unsignalized intersections. The Synchro 10 LOS software was used to determine intersection LOS. Synchro is consistent with the HCM 6 methodology (Transportation Research Board 2016). Table 1 shows the LOS values by delay ranges for unsignalized and signalized intersections under the HCM methodology.

Table 2. Levels of Service for Intersections using HCM Methodology

Level of Service	Unsignalized Intersections Control Delay (in seconds per vehicle)	Signalized Intersections Control Delay (in seconds per vehicle)
A	< 10.0	< 10.0
B	> 10.0 to < 15.0	> 10.0 to < 20.0
C	> 15.0 to < 25.0	> 20.0 to < 35.0
D	> 25.0 to < 35.0	> 35.0 to < 55.0
E	> 35.0 to < 50.0	> 55.0 to < 80.0
F	> 50.0	> 80.0

Source: HCM 6

1.3.2.2 Intersection General Plan Consistency Requirements

Per WRCOG guidance, consistent with the acceptable LOS in the local agency’s General Plan, the local agency may consider the following criteria for application in this traffic study to identify infrastructure improvements required to provide acceptable operations. The study area intersections are located within the jurisdiction of the City of Hemet, therefore, the following consistency requirements would apply.

City of Hemet General Plan Circulation Element

This TIA uses the level of service policy standard established in the City of Hemet General Plan 2030 Circulation Element. According to Circulation Element Policy C-1.3 *Traffic Flow*:

“Maintain LOS C or better for roadway segment operations, and LOS D or better for peak-hour intersection movements. Portions of Florida Avenue and Sanderson Avenue may operate at or below LOS D on a case-by-case basis”

The City has not adopted a LOS standard for unsignalized intersections. Performance of unsignalized intersections is evaluated on a case-by-case basis.

At the regional planning level, Riverside County’s congestion management plan (CMP) specifies LOS E as the operating standard for roadways and intersections on the CMP highway system.

Relevant to the study area for this project, the Hemet General Plan Final Environmental Impact Report (AECOM 2012; page 4.13-15) states the following:

As early as 1992, when the EIR for the last comprehensive General Plan update was prepared, it was recognized that certain segments and intersections would exceed LOS “D” — the voter approved LOS standard under Measure C. These segments include portions of Florida Avenue, Stetson Avenue, and Sanderson Avenue. Consequently, the City Council approved a Statement of Overriding Considerations for circulation for the 1992 EIR. Measure C incorporated these problematic roads in the measure language with the result that while most intersections within the City need to comply with the “D” level of service, portions of Florida, Sanderson and Stetson do not need to comply.

Also relevant to this analysis, the General Plan Final Environmental Impact Report Traffic Impact Analysis (General Plan TIA; Urban Crossroads 2011) identifies that the Sanderson Avenue and Stetson Avenue intersection should be improved to include three through, two right turn lanes and one left turn lane southbound: two left turn lanes, two thru lanes, and one shared through-right turn lane westbound; two left turn lanes, three through lanes and one right turn only northbound lanes; and two left turn lanes, two through lanes, and one shared through-right turn lane eastbound. The General Plan Traffic Impact Report does also provide the following clarifications regarding the additions of turn lanes:

Locations with additional turn lanes (i.e., dual left turn lanes and / or exclusive right turn lanes) may require additional right of way in the immediate vicinity of the intersection. Monitoring / ongoing analysis of arterial level intersections should be conducted in conjunction with specific development projects to ensure that adequate intersection configurations are implemented in a phased manner in conjunction with ongoing development.

If there are right-of-way constraints which preclude the implementation of the recommended improvements, then City staff may allow for reduced peak hour level of service operations at these select locations based on their discretion. The recommended roadway designations / cross-sections have been developed in consultation with the project team, with final direction provided by City staff. The recommended roadway designations reflect these types of right of way constraints.

Project Access, Safety and Other Analyses

An analysis of Project access, safety and traffic signal warrant analysis for any unsignalized intersections around the project and on adjacent streets is recommended per WRCOG TIA guidelines.

1.4 Improvements for Transportation Impacts

As part of the final acceptance of a TIA, the City would review and approve any required improvements and/or fair share contributions necessary to improve the transportation-related deficiencies caused by the proposed development. These improvements would be included as part of the conditions of approval and should be in addition to any improvements required by any other departments. Any transportation improvements based on a transportation study will be in addition to any other fees related to the existing TUMF fee program. Fair share contributions identified in the TIA and subsequently listed in the conditions of approval shall be required before a building permit will be issued. Improvements required in a TIA and subsequently listed in the conditions of approval shall be completed prior to occupancy.

INTENTIONALLY LEFT BLANK

2 Project Traffic

This section documents the trip generation, distribution, and assignment of project traffic in the study area.

2.1 Trip Generation

Trip generation estimates for the proposed project are based on daily and AM and PM peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Handbook, 10th Edition (2017)* and San Diego Association of Governments (SANDAG) Brief Guide of Vehicular Trip Generation Rates for the San Diego Region (2002).

Trip reductions for pass-by trips pursuant to the *ITE Trip Generation Handbook, 3rd Edition* were applied to both gas station and fast food restaurant with drive through uses. Some of the trips generated by retail and restaurant uses within the proposed project would be pass-by trips, or trips whose primary destination are not those uses. These would include trips such as a home-to-work or work-to-home trip that stops at the gas station or car wash on the way and therefore is not a primary trip. These trips would not be new trips generated by the project; rather, they are trips that are already on the roadway network that would make a stop at the project site.

In addition, a 10% trip reduction for internal trip capture was applied to the proposed land uses. Internal trip capture is the potential for trips to take place among the various complementary uses (gas station, convenience store, restaurant and car wash) proposed on the site. These would be trips generated by the project land uses that do not result in additional traffic through study intersections.

Trip generation rates and resulting trip generation estimates are summarized in Table 3.

Table 3. Project Trip Generation

Trip Generation Rates									
Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				% In	% Out	Total	% In	% Out	Total
Gasoline/Service Station w Convenience Market	945	VFP	205.36	6.36	6.11	12.47	7.13	6.86	13.99
Car Wash	2	Wash Stall	100	50%	50%	4%	50%	50%	8%
Fast Food Restaurants with Drive-through	934	TSF	470.95	20.50	19.69	40.19	16.99	15.68	32.67
Trip Generation									
Gas Station with Convenience Market	945	12 VFP	2,464	76	73	150	86	82	168
Pass-by Reduction ³			-1,528	-47	-45	-93	-48	-46	-94
Car Wash	2	20 wash stall	2,000	40	40	80	80	80	160
Fast Food Restaurants with Drive-through	934	2,840 ⁴	1,337	58	56	114	48	45	93
Pass-by Reduction ⁵			-655	-29	-27	-56	-24	-22	-46
Subtotal without Pass-by Reduction			5,802	175	169	344	214	207	421
Subtotal with Pass-by Reduction			3,619	99	96	195	142	138	280

Table 3. Project Trip Generation

Trip Generation Rates									
Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				% In	% Out	Total	% In	% Out	Total
Internal Capture ⁶			-580	-17	-17	-34	-21	-21	-42
Total Trip Generation (with Internal Capture)			5,222	157	152	309	193	186	379
Total Trip Generation (with Pass-by Reduction and Internal Capture)			3,038	81	79	160	121	117	238

Notes:

VFP – Vehicle Fueling Position; TSF – Thousand square feet

- ¹ Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017
- ² Trip rates for Car Wash (self-serve) from SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002
- ³ Pass-by trip rates derived from the average of pass-by trip percentages provided for all Gasoline/Service Station with Convenience Market (945), from the ITE Trip Generation Handbook, 3rd Edition - Table E.37, Pass-by and Non-Pass-By Weekday, AM Peak Period (62%) and E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (56%) Trips (Weekday, PM Peak Hour), ITE 945 - Gasoline/Service Station with Convenience Market
- ⁴ A higher square footage for the fast-food restaurant i.e., 2,840 square foot has been used to estimate the trip generation and level of service analysis compared to the 2,660 square foot proposed for the project.
- ⁵ Pass-by trip rates derived from the average of pass-by trip percentages provided for all fast-Food Restaurant with Drive-Through Window (934), from the ITE Trip Generation Handbook, 3rd Edition - Table E.31, Pass-by and Non-Pass-By Weekday, AM Peak Period (49%) and E.32 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (50%) Trips (Weekday, PM Peak Hour), ITE 934 - Fast-Food Restaurant with Drive-Through Window
- ⁶ 10% Internal Capture assumed for the site

As shown in Table 3, with internal trip capture, the proposed project would generate 5,222 net daily trips, 309 net AM peak hour trips (157 inbound and 152 outbound), and 379 net PM peak hour trips (193 inbound and 186 outbound).

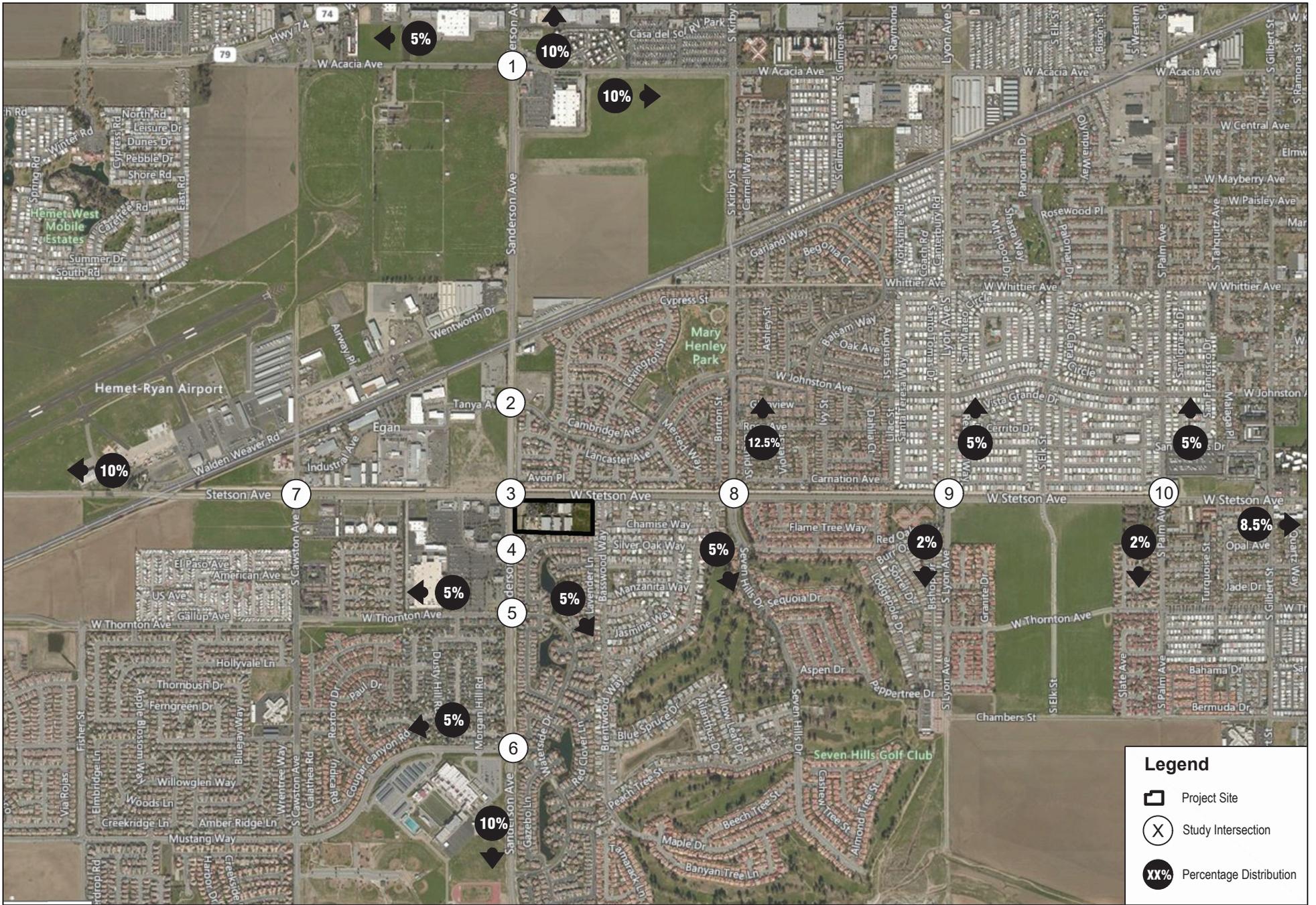
As shown in Table 3, with trip reductions for pass-by trips and internal trip capture, the proposed project would generate 3,038 net daily trips, 160 net AM peak hour trips (81 inbound and 79 outbound), and 238 net PM peak hour trips (121 inbound and 171 outbound).

2.2 Trip Distribution and Assignment

Project trip distribution percentages were based on logical travel paths to commute corridors in the study area; since the project is a local-serving retail use, most of the project traffic would be from the surrounding land uses. Appendix A includes the figure showing the project's study area and trip distribution percentages that the City staff approved prior to the initiation of the traffic analysis.

Project traffic will utilize the project access from Sanderson Avenue (full-access) and Stetson Avenue (right-in-right-out) to access project site. Approximately 25% of the traffic would travel south and 25% would travel north along Sanderson Avenue. Approximately 10% and 40% was assumed to be destined to/from the west and east along Stetson Avenue, respectively.

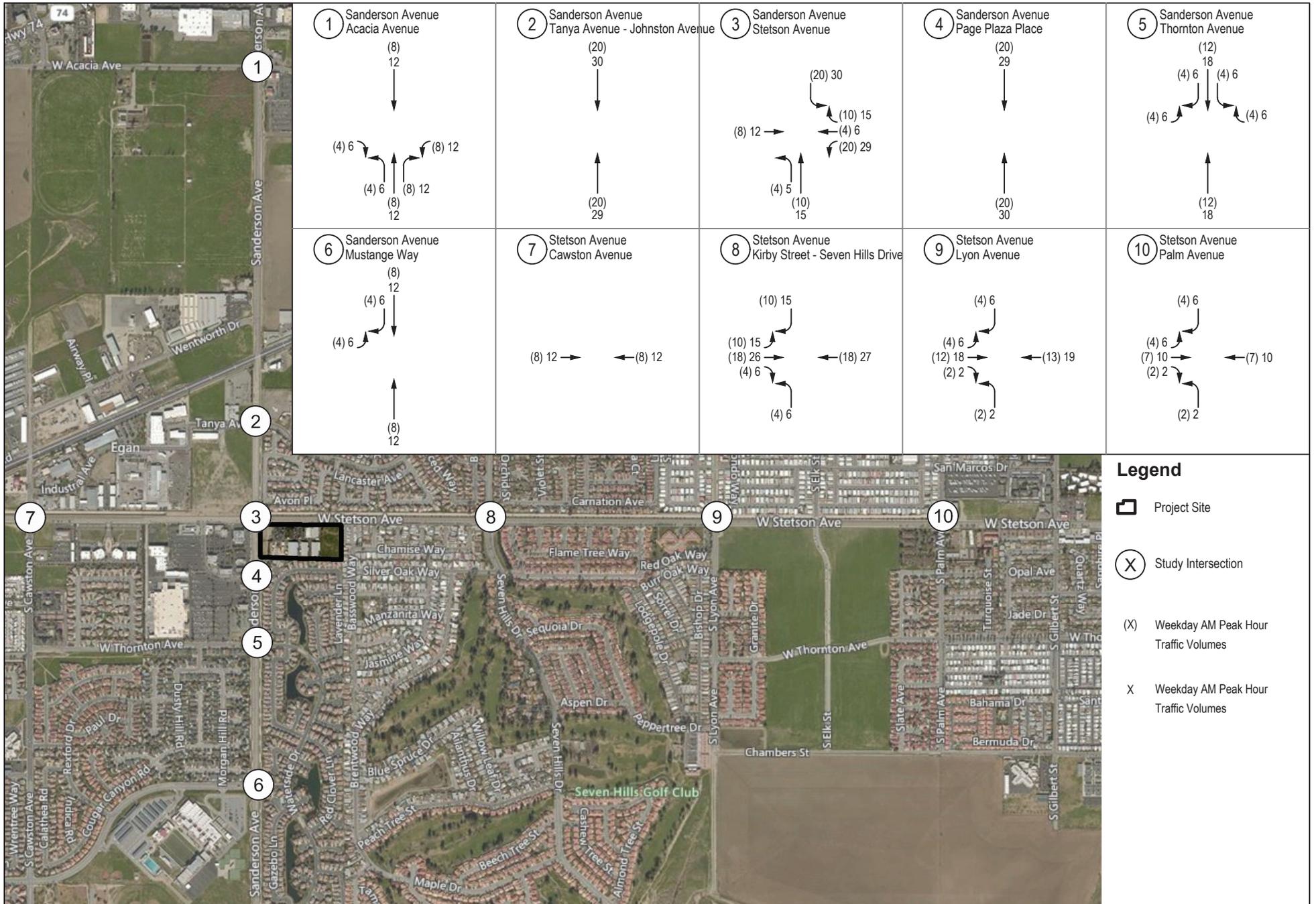
Project trips were assigned to the study area intersections by applying the above-referenced project trip generation estimates to the trip distribution percentages at each study area roadway segment and intersection. The project trip distribution percentages are shown on Figure 3 Project Trip Distribution and the resulting project trips with pass-by reduction and internal trip capture is shown on Figure 4 Project Trip Assignment (with Pass-by Reduction and Internal Trip Capture). Figure 5 Project Trip Assignment (Project Driveways) illustrates the project trips with internal trip capture, which is assigned only to the project driveways.



Source: Bing Maps

FIGURE 3
Project Trip Distribution
Stetson Corner

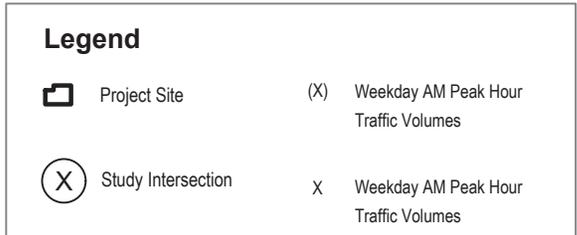
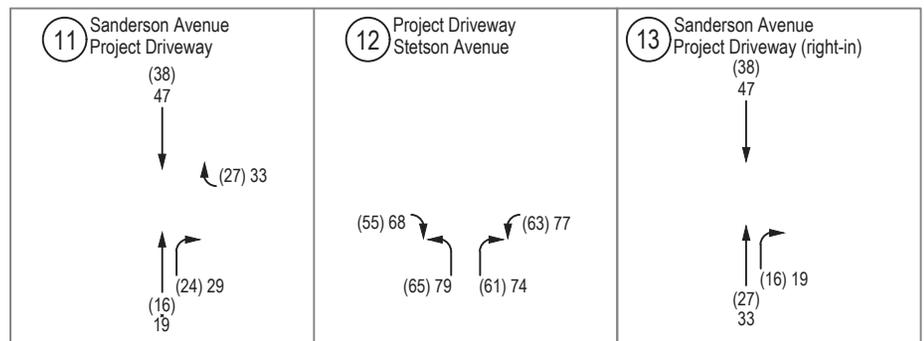
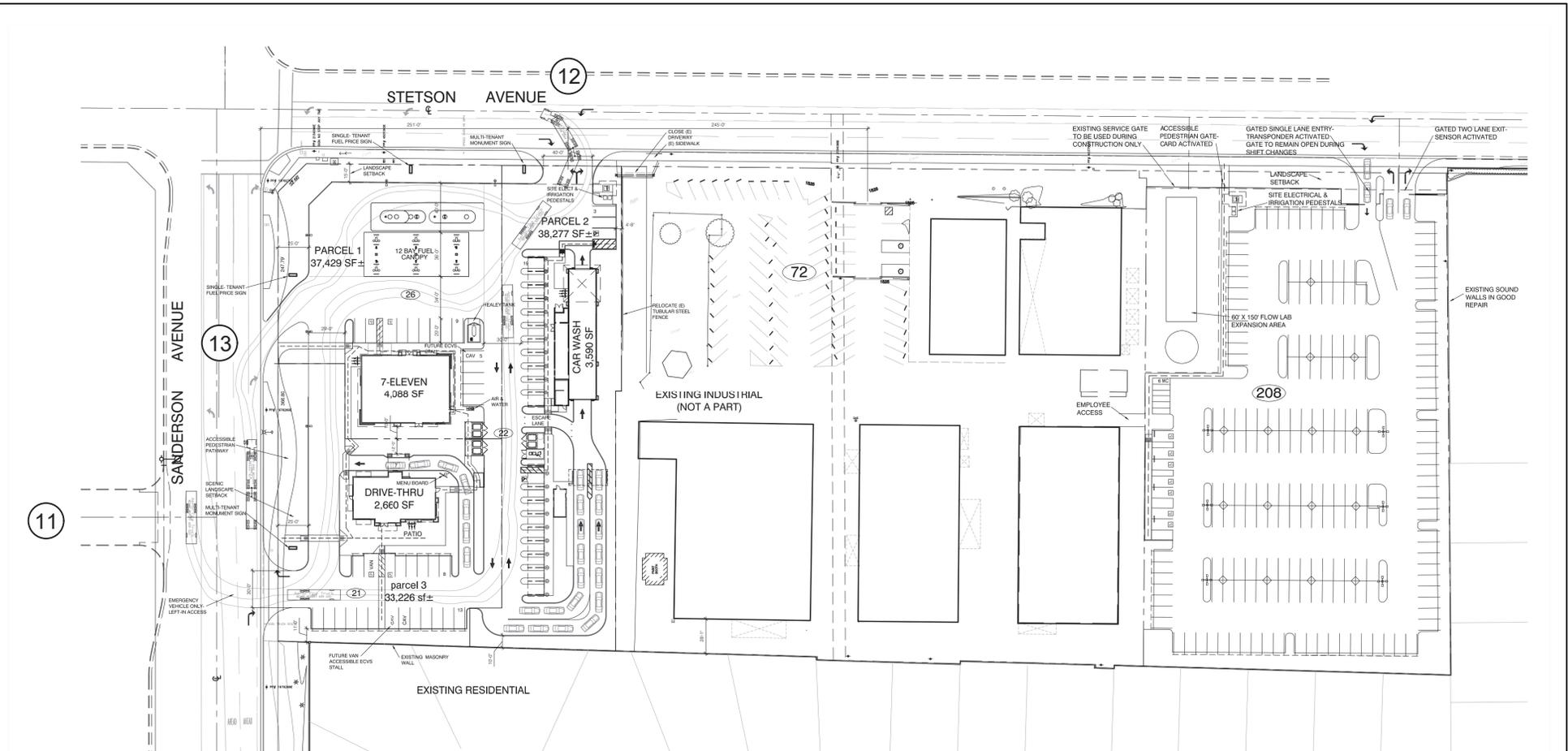
INTENTIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 4
Project Trip Assignment (with Pass-by Reduction and Internal Trip Capture)
 Stetson Corner

INTENTIONALLY LEFT BLANK



Source: GK Pierce Architects 2019

FIGURE 5
Project Trip Assignment (Project Driveways)
 Stetson Corner

INTENTIONALLY LEFT BLANK

3 Vehicle Miles Traveled Analysis

3.1 Background and Methodology

Office of Planning Research (OPR) has approved the addition of new Section 15064.3, “Determining the Significance of Transportation Impacts” to the State’s CEQA Guidelines, compliance with which will be required beginning July 1, 2020. The Updated CEQA Guidelines state that “...generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts...” and define VMT as “...the amount and distance of automobile travel attributable to a project...”. It should be noted that “automobile” refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). Other relevant considerations may include the effects of the project on transit and non-motorized travel.

As mentioned in Chapter 1, WRCOG Recommended TIA Guidelines (WRCOG 2020) designed to comply with the new CEQA guidelines intended for the sole use of WRCOG member agencies such as City of Hemet have been utilized in screening the proposed project’s VMT analysis.

The WRCOG screening tool (available at <http://gis.fehrandpeers.com/WRCOGVMT/>) and the following steps have been used in the project’s VMT assessment:

- Identify the Traffic Analysis Zone (TAZ) and jurisdiction associated with the project location.
- Determine if the project meets screening criteria related to being located within a transit priority area.
- Determine if project meets screening criteria related to being located within a low VMT generating TAZ. This test largely applies to residential and work-related land uses. Retail uses such as proposed project are required to have a separate screening related to whether the project is local serving, which is based on size (i.e., less than 50,000 square feet). This step relies on Riverside County Transportation Analysis Model ‘s (RIVTAM) base year estimate of the TAZ VMT per service population and would compare that value to the proposed threshold measured at the jurisdictional or a reasonable sub-regional area (i.e., WRCOG or TUMF districts).
- Provide baseline and cumulative estimates of project generated VMT if the project fails to be screened out including VMT estimates for use in other sections of CEQA analysis, such as air quality, greenhouse gases, and energy based on TAZ VMT averages.

As shown in the screening analysis below, the proposed project would be screened out using two of the three criteria and therefore would not need to provide baseline and cumulative estimates of project generated VMT.

3.2 Project Screening

The project passes the following screening criteria to screen it from a project-level assessment:

- **Project Type Screening:** Local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Furthermore, WRGOG TIA guidelines do not require local serving retail and gas station projects to prepare a VMT analysis. This is due to the fact that local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel instead of increasing or inducing vehicular travel. Further, the proposed project is consistent with the current and proposed General Plan use for the site i.e., Business Park.

As described in Chapter 1, the project proposes local serving retail uses which include a 12-bay gas station with an approximately 4,088-square-foot convenience store (7-Eleven store), an approximately 2,660-square-foot drive-thru fast food restaurant, and an approximately 3,590 square-foot car wash with 20 self-serve vacuum stations under a 3,096-square-foot canopy. The proposed project is a local serving gas station with retail use (less than 50,000 square feet) and would be screened using this criteria.

As shown in the analysis, the proposed project the screening criteria, of Project Type Screening. Therefore, the proposed project can be presumed to have a less than significant VMT impact under existing and cumulative conditions. A project-level detailed VMT analysis would not be required.

4 Existing Conditions

This section describes existing conditions within the study area. Characteristics are provided for the existing roadway, transit, bike and pedestrian facilities, daily roadway segment traffic volumes, peak hour intersection traffic volumes and traffic operations.

4.1 Roadway System

Regional access to the City of Hemet is provided via Interstate (I)-215 and I-15 that are located west of Hemet, and SR-60 and I-10 that are located to the north. State Route (SR)-74 (Florida Avenue) also carries a significant amount of regional traffic and generally traverses the City from west to east. Figure 6 illustrates the Roadway Circulation Master Plan included in the Hemet General Plan.

Characteristics of the existing street system adjacent to the proposed project is described below.

Sanderson Avenue is a north-south Major that is generally built as a 4 lane roadway with a two-way left-turn lane (TWLTL). Within the study area it extends from Domenigoni Parkway in the south to Ramona Expressway (SR-79) and provides connectivity to I-10 to the north. The posted speed limit is 45 miles per hour (MPH). There are paved sidewalks on either sides and parking is generally not permitted along either side of the roadway. Sanderson Avenue is designated as a truck route. The average daily traffic volumes along Sanderson Avenue adjacent to the proposed project was observed to be 28,484 vehicles.

Stetson Avenue is Major roadway that runs east-west through the City and the unincorporated area of the Riverside County. It is generally built as a 4 lane roadway with a TWLTL from Cawston Avenue to just east of State Street. Per Hemet General Plan Roadway Circulation Master Plan, Stetson Avenue is proposed as a 6-lane arterial from Winchester Avenue to Sanderson Avenue. The posted speed limit along Stetson Avenue is 45 MPH to the east of Sanderson Avenue and 50 MPH to the west of Sanderson Avenue. There are paved sidewalks on either sides and parking is generally not permitted along either side of the roadway. Stetson Avenue is designated as a truck route between Sanderson Avenue and State Street. The average daily traffic volumes along Stetson Avenue adjacent to the proposed project was observed to be 26,029 vehicles.

4.2 Transit System

Public transit in the Hemet area consists of taxis, paratransit vans, buses, and future passenger services through the Metrolink rail system. Currently there is no Metrolink service in Hemet, however future station locations have been identified for Downtown Hemet.

Figure 7 illustrates the Existing Transit Facilities. The Riverside Transit Agency (RTA) provides public transportation throughout Riverside County. RTA operates fixed bus routes providing public transit service throughout western Riverside County. The routes that serve the study area are Route 32, 33, 74, and 79. Due to ongoing shelter in place orders due to COVID-19, the transit services have been reduced and services on some routes are not operating. However, it should be noted that the proposed project is not located within a transit priority area.

Route 32 operates along Stetson Avenue and connects Hemet Valley Mall and Mt. San Jacinto College. Currently, this service is provided approximately every hour on weekdays and weekends.

Route 33 operates along Sanderson Avenue and Stetson Avenue and connects Hemet Valley Mall, Sanderson Avenue/Thornton Avenue intersection and Stanford Avenue/Stetson Avenue intersection. Currently, this service is provided approximately every 2 hours on weekdays and weekends.

Route 74 operates along Sanderson Avenue and connects San Jacinto, Hemet Valley Mall and Perris Station Transit Center. Currently, this service is provided approximately every 1.5 hours on weekdays and weekends.

Route 79 operates along Sanderson Avenue and connects San Jacinto, Hemet Valley Mall, Winchester and Temecula Stage Stop. Currently, this service is provided approximately every 1.5 hours on weekdays and weekends.

The nearest bus stops are located along northbound Sanderson Avenue, approximately 350 feet north of the Sanderson Avenue/Stetson Avenue intersection and along southbound Sanderson Avenue approximately 850 feet south of the Sanderson Avenue/Stetson Avenue intersection.

4.3 Pedestrian and Bicycle Facilities

The City’s Circulation Element identifies a master plan for bicycle and pedestrian trail system throughout the City. Figure 8 illustrates the Existing Bicycle Facilities. The Bikeway Circulation Plan uses three classes of bikeways to create a system that serves both local and regional bicycle trips.

Class 1 bikeway (bike path) - Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with minimized cross-flow by motorists

Class 2 bikeway (bike lane) - Provides a striped lane for one-way bike travel on a street

Class 3 bikeway (bike route) - Provides for shared use with pedestrian or motor-vehicle traffic

In the study area, Class 2, on road, striped bike lane exists along Stetson Avenue and there is a northbound bike lane on Sanderson Avenue from Domenigoni Parkway to Wentworth Avenue and a southbound bike lane on Sanderson Avenue between Stetson Avenue and Domenigoni Parkway. .

With the exception of the project’s western boundary, the study area is generally built with paved sidewalks along Sanderson Avenue and Stetson Avenue. The proposed project would be responsible for making frontage improvements along Stetson Avenue including paved sidewalk.

4.4 Existing Traffic Operations

The existing traffic controls and geometrics at the study area intersections is shown in Figure 9. This section details the existing traffic volumes and the existing intersection operations within the study area.

4.4.1 Traffic Volumes

Existing weekday peak hour turning movement counts at the study intersections were collected in February 2020, on a typical non-holiday week while area schools were in-session.

This analysis focuses on the weekday daily, AM (7:00 a.m. to 9:00 a.m.) and the PM (4:00 p.m. to 6:00 p.m.) peak periods. The peak periods represent the highest volume of traffic for the adjacent street system. A 4% heavy vehicle factor was observed from the axle classification in the daily roadway segment counts. Raw traffic count worksheets are provided in Appendix C. Existing weekday AM and PM peak hour volumes are summarized on Figure 10.

4.4.2 Intersection Operations

An intersection LOS analysis was prepared for the existing conditions using HCM 6th Edition methodology via the Synchro LOS software in Section 1.3. Table 4 shows the results of the existing conditions analysis. LOS worksheets are provided in Appendix D.

As shown in the table, all the study area intersections are currently operating at satisfactory levels of service per i.e., LOS D under existing conditions per City of Hemet’s General Plan requirements.

Table 4. Existing Peak Hour Intersection Level of Service

No.	Intersection	Control	Existing			
			AM Peak		PM Peak	
			Delay ¹	LOS ²	Delay ¹	LOS ²
1	Sanderson Avenue/Acacia Avenue	Signal	21.2	C	33.3	C
2	Sanderson Avenue/Tanya Avenue – Johnston Avenue	Signal	13.5	B	14.9	B
3	Sanderson Avenue/Stetson Avenue	Signal	37.3	D	43.2	D
4	Sanderson Avenue/Page Plaza Place	Signal	5.9	A	8.9	A
5	Sanderson Avenue/Thornton Avenue	Signal	43.6	D	21.4	C
6	Sanderson Avenue/Mustang Way	Signal	26.8	C	12.7	B
7	Cawston Avenue/Stetson Avenue	Signal	17.4	B	21.2	C
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Signal	27.3	C	21.3	C
9	Lyon Avenue/Stetson Avenue	Signal	37.5	D	36.0	D
10	Palm Avenue/Stetson Avenue	Signal	25.1	C	24.0	C

Notes

- ¹ Delay in seconds per vehicle
- ² Level of Service (LOS)

4.5 Existing plus Project Traffic Operations

This section details the existing plus traffic volumes and intersection operations within the study area.

4.5.1 Traffic Volumes

Project traffic volumes shown in Figure 4 were added to the Existing traffic volumes shown in Figure 10 to derive the Existing plus Project traffic condition. Figure 11 shows the Existing plus Project traffic volumes.

4.5.2 Intersection Operations

An intersection LOS analysis was prepared for the Existing plus Project condition using the HCM 6th methodology for signalized intersections. Table 6 summarizes the results of the Existing plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix D.

As shown in Table 5, all of the study area intersections are forecast to continue to operate with satisfactory LOS, at LOS D or better, under Existing plus Project conditions during both peak hours. Since all study area intersections are forecast to operate at LOS D or better, the project would not cause a substantial effect to intersection operations under the Existing plus Project conditions.

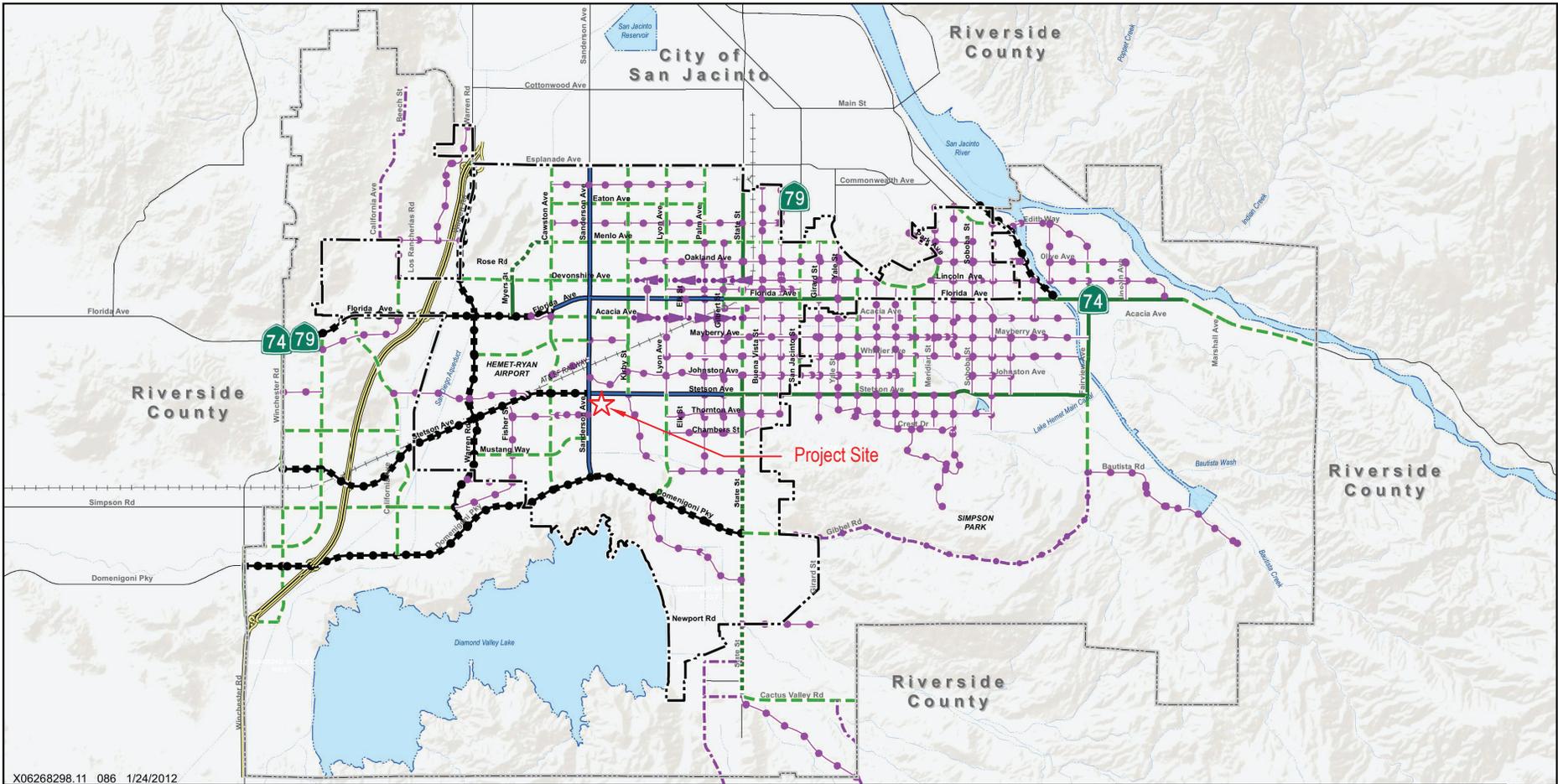
Table 5. Existing plus Project Peak Hour Intersection Level of Service

No.	Intersection	Control	Existing				Existing plus Project				Change in Delay 1		Substantial Effect	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Sanderson Avenue/Acacia Avenue	Sig	21.2	C	33.3	C	21.9	C	34.5	C	0.7	1.2	No	No
2	Sanderson Avenue/Tanya Avenue – Johnston Avenue	Sig	13.5	B	14.9	B	13.5	B	15.3	B	0.0	0.4	No	No
3	Sanderson Avenue/Stetson Avenue	Sig	37.3	D	43.2	D	39.4	D	46.0	D	2.1	2.8	No	No
4	Sanderson Avenue/Page Plaza Place	Sig	5.9	A	8.9	A	5.9	A	8.9	A	0.0	0.0	No	No
5	Sanderson Avenue/Thornton Avenue	Sig	43.6	D	21.4	C	46.0	D	22.6	C	2.4	1.2	No	No
6	Sanderson Avenue/Mustang Way	Sig	26.8	C	12.7	B	26.9	C	12.8	B	0.1	0.1	No	No
7	Cawston Avenue/Stetson Avenue	Sig	17.4	B	21.2	C	17.6	B	21.4	C	0.2	0.2	No	No
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Sig	27.3	C	21.3	C	29.1	C	23.6	C	1.8	2.3	No	No
9	Lyon Avenue/Stetson Avenue	Sig	37.5	D	36.0	D	39.3	D	38.2	D	1.8	2.2	No	No
10	Palm Avenue/Stetson Avenue	Sig	25.1	C	24.0	C	25.5	C	24.0	C	0.4	0.0	No	No

Notes

¹ Delay in seconds per vehicle

² Level of Service (LOS)



X06268298.11 086 1/24/2012

Sources:
Census Tiger Line Data 2005
Urban Crossroads 2011
ESRI 2010

LEGEND	
Expressway 6D	Secondary 4U
Arterial 6D	Express Collector 3U
Major 4D-6D	Collector 2U
Divided Secondary-A 4D	Rural-A 2U
Divided Secondary-B 4D	Rural-B 2U
	Ramp
	Hemet City Boundary
	Planning Area
	River/Lake
	Creek/Canal
	Street
	Railroad

Note: The ultimate design and alignment of the proposed Hwy 79 has not yet been adopted and will be determined upon approval of the project by Caltrans and the Riverside County Transportation Commission. The adopted design alternative may result in changes to the circulation network shown on this Figure, including existing and proposed roadway connections in the vicinity of the proposed Hwy 79, and may or may not include the Tres Cerritos Avenue offramp.

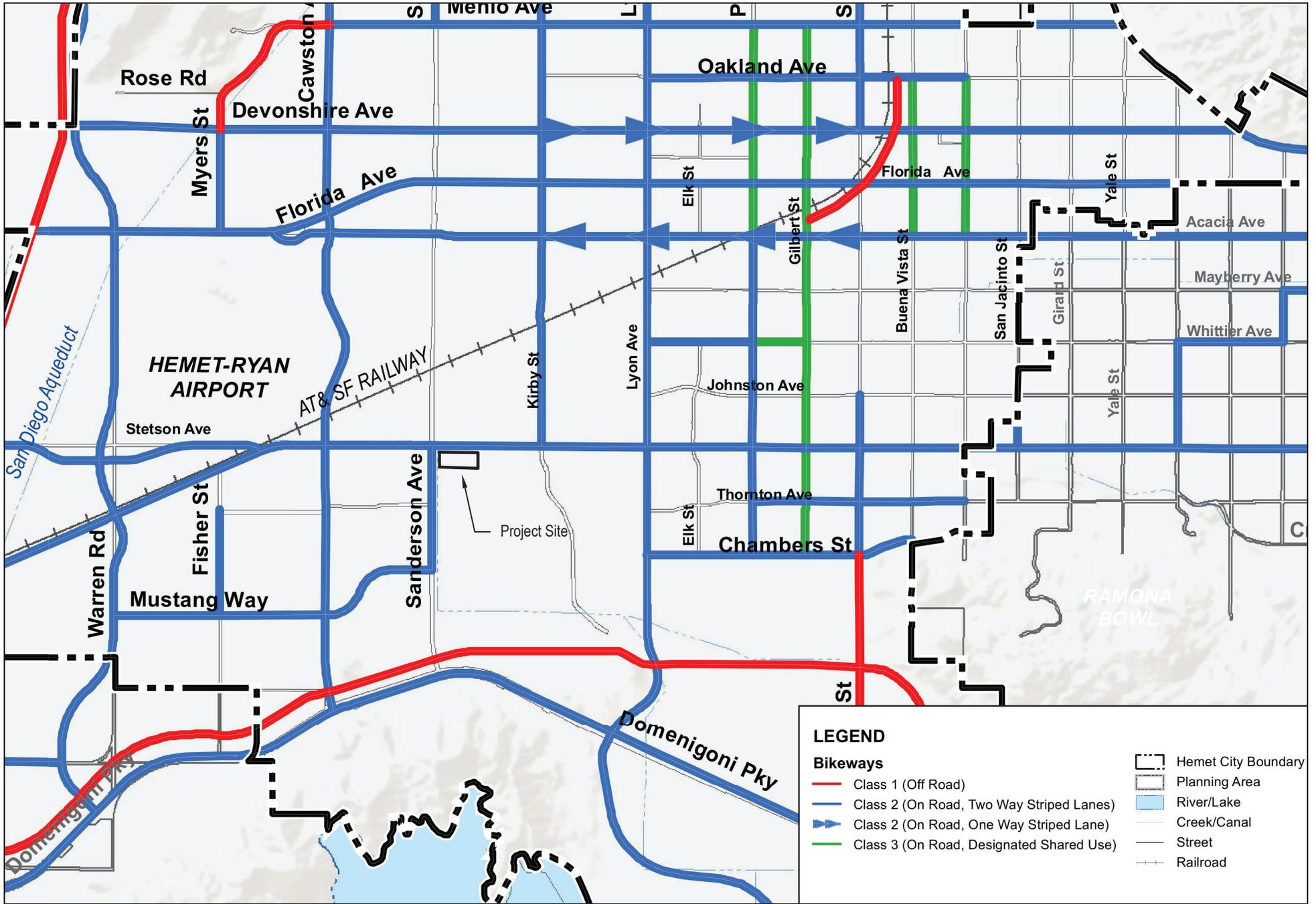
Figure 4.1
ROADWAY CIRCULATION
MASTER PLAN
Hemet General Plan

Source: City of Hemet 2017

Sep 21, 2020 - 10:28am P:\300_Environmental\12472 Stetson Corner\DUDEK WORK PRODUCTS\DOCUMENTS\Transportation\Graphics\Stetson Corner_082120.dwg Layout: Fg6_Hemet.MXD

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

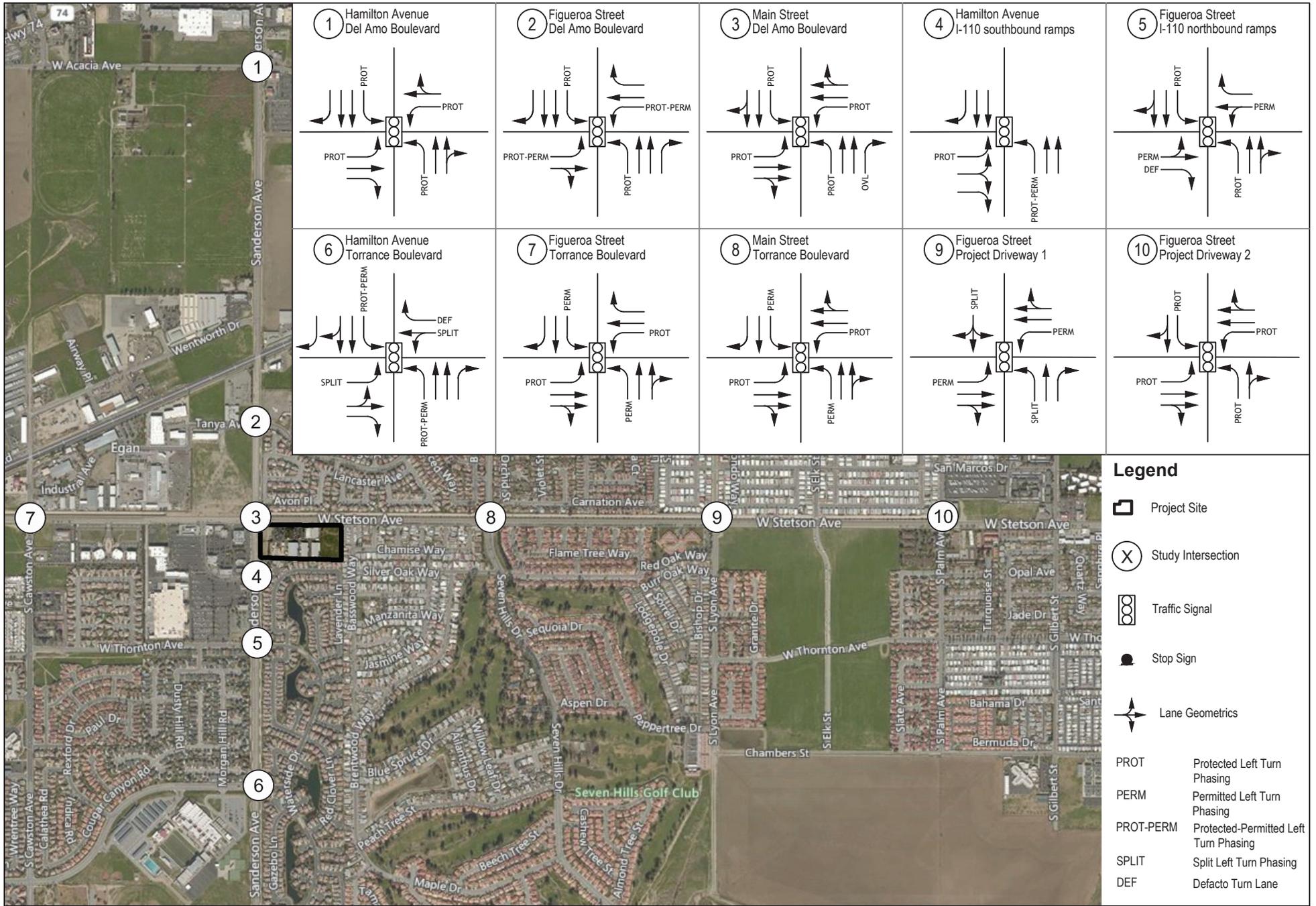


Source: City of Hemet 2017

FIGURE 8
Existing Bicycle Facilities

Stetson Corner

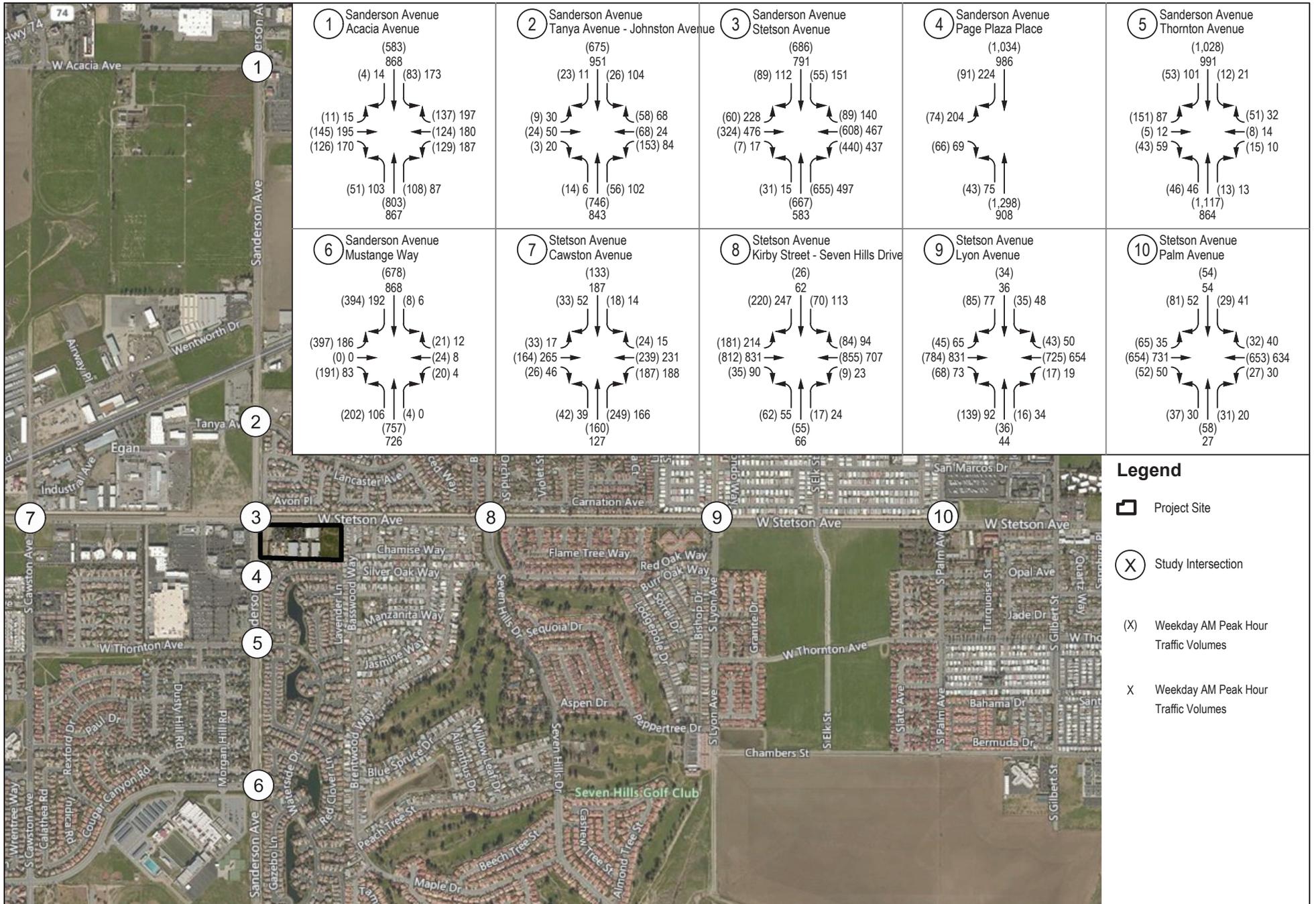
INTENTIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 9
Existing Intersection Controls and Geometrics
 Stetson Corner

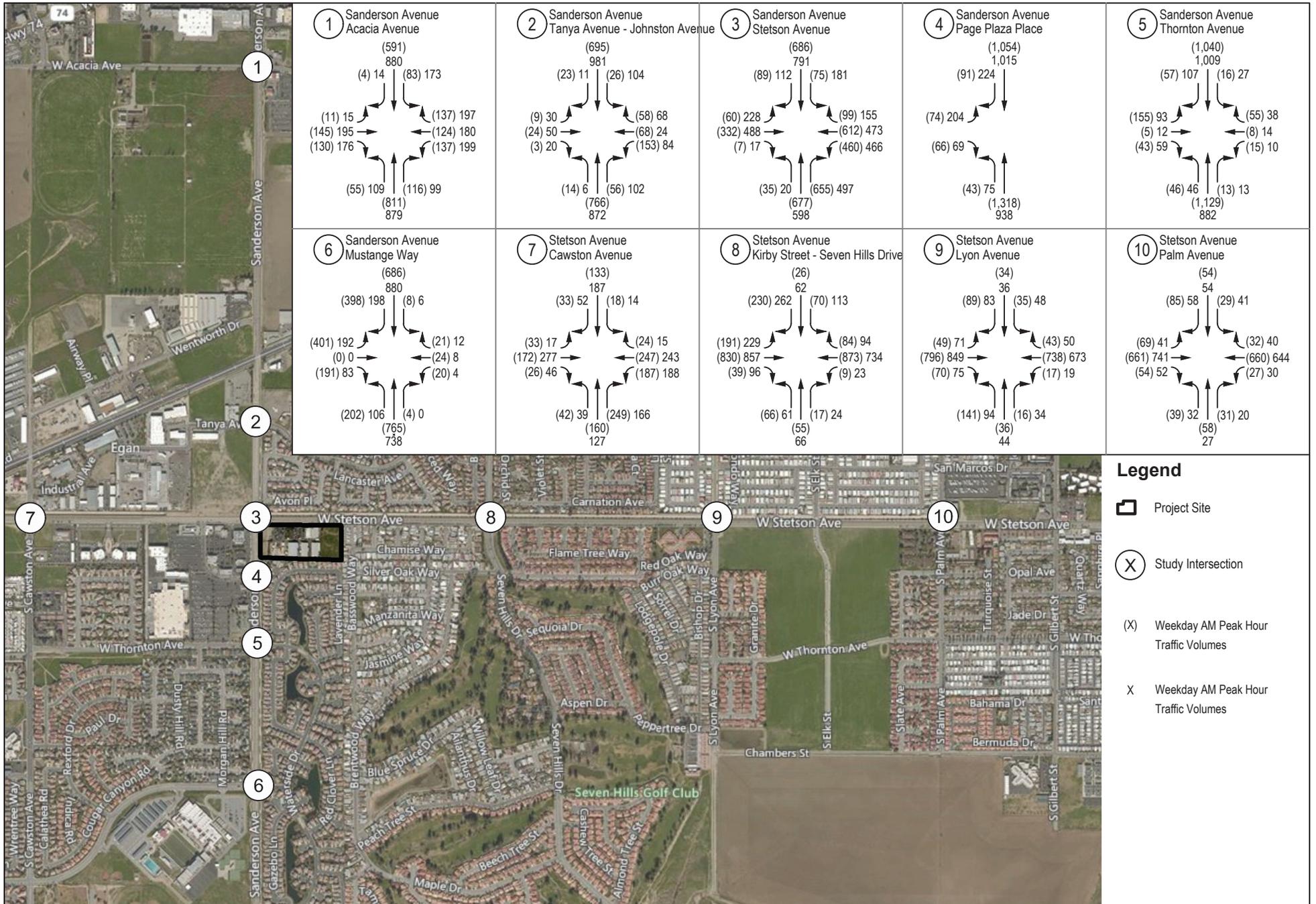
INTENTIIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 10
Existing Peak Hour Traffic Volumes
 Stetson Corner

INTENTIONALLY LEFT BLANK



Legend

- Project Site
- Study Intersection
- (X) Weekday AM Peak Hour Traffic Volumes
- X Weekday AM Peak Hour Traffic Volumes

Source: Bing Maps

FIGURE 11
Existing plus Project Peak Hour Traffic Volumes
Stetson Corner

INTENTIONALLY LEFT BLANK

5 Opening Year 2022 Conditions

This section includes analysis of traffic operation under Opening Year 2022 conditions which represents the short-term horizon period when the proposed project is constructed and fully occupied.

5.1 Opening Year 2022 Conditions

5.1.1 Traffic Volumes

The Opening Year 2022 is representative of the Existing plus Ambient Growth conditions. The traffic volumes for this scenario were estimated by increasing the existing traffic counts by an ambient growth rate. Per scoping agreement provided in Appendix A, a growth rate of 2% per year was determined to be appropriate. Since the project would be operational in the fall of year 2022, a 4% growth rate was applied to existing traffic and to estimate the Opening Year 2022 conditions. Figure 12 illustrates the Opening Year 2022 Peak Hour Traffic Volumes.

5.1.2 Intersection Operations

An intersection LOS analysis was prepared for the existing conditions using HCM 6th Edition methodology for signalized intersections. Table 7 shows the results of the Opening year 2022 analysis. LOS worksheets are provided in Appendix D.

As shown in Table 6, all the study area intersections would operate at satisfactory levels of service per i.e., LOS D under Opening Year 2022 conditions per City of Hemet’s General Plan requirements.

Table 6. Opening Year 2022 Peak Hour Intersection Level of Service

No.	Intersection	Control	Opening Year 2022			
			AM Peak		PM Peak	
			Delay ¹	LOS ²	Delay ¹	LOS ²
1	Sanderson Avenue/Acacia Avenue	Signal	22.2	C	35.8	D
2	Sanderson Avenue/Tanya Avenue - Johnston Avenue	Signal	13.8	B	15.4	B
3	Sanderson Avenue/Stetson Avenue	Signal	38.9	D	46.5	D
4	Sanderson Avenue/Page Plaza Place	Signal	6.0	A	9.1	A
5	Sanderson Avenue/Thornton Avenue	Signal	48.4	D	22.6	C
6	Sanderson Avenue/Mustang Way	Signal	28.0	C	13.0	B
7	Cawston Avenue/Stetson Avenue	Signal	17.6	B	21.5	C
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Signal	28.6	C	23.5	C
9	Lyon Avenue/Stetson Avenue	Signal	42.2	D	40.1	D
10	Palm Avenue/Stetson Avenue	Signal	25.0	C	25.0	C

Notes

- ¹ Delay in seconds per vehicle
- ² Level of Service (LOS)

5.2 Opening Year plus Project Traffic Operations

This section details the Opening Year 2022 plus traffic volumes and the intersection operations within the study area.

5.2.1 Traffic Volumes

Project traffic volumes shown in Figure 4 were added to the Opening Year 2022 traffic volumes shown in Figure 12 to derive the Opening Year 2022 plus Project traffic condition. Figure 13 shows the Opening Year 2022 plus Project traffic volumes.

5.2.2 Intersection Operations

An intersection LOS analysis was prepared for the Opening Year 2022 plus Project condition using the HCM 6th methodology for signalized intersections. Table 8 summarizes the results of the Opening Year 2022 plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix D.

As shown in Table 7, all of the study area intersections are forecast to continue to operate with satisfactory LOS, at LOS D or better, under Opening Year 2022 plus Project conditions during both peak hours. Since all study area intersections are forecast to operate at LOS D or better, the project would not cause a substantial direct or cumulative effect to intersection operations under the Opening Year 2022 plus Project conditions.

Table 7. Opening Year 2022 plus Project Peak Hour Intersection Level of Service

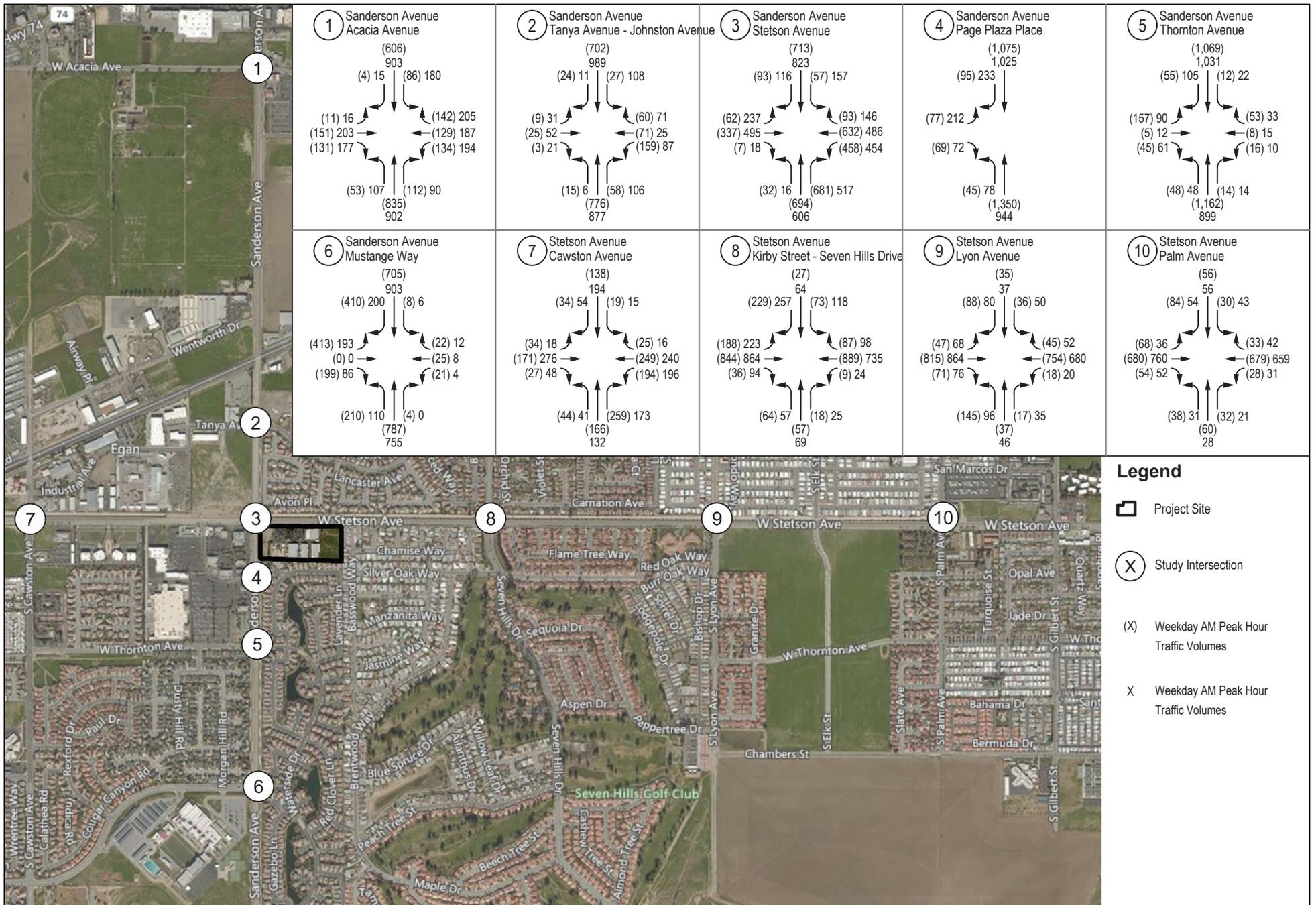
No.	Intersection	Control	Opening Year 2022				Opening Year 2022 plus Project				Change in Delay ¹		Substantial Effect	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Sanderson Avenue/Acacia Avenue	Signal	22.2	C	35.8	D	22.8	C	37.4	D	0.6	1.6	No	No
2	Sanderson Avenue/Tanya Avenue – Johnston Avenue	Signal	13.8	B	15.4	B	13.9	B	15.7	B	0.1	0.3	No	No
3	Sanderson Avenue/Stetson Avenue	Signal	38.9	D	46.5	D	41.6	D	50.9	D	2.7	4.4	No	No
4	Sanderson Avenue/Page Plaza Place	Signal	6.0	A	9.1	A	6.0	A	9.0	A	0.0	-0.1	No	No
5	Sanderson Avenue/Thornton Avenue	Signal	48.4	D	22.6	C	51.3	D	24.0	C	2.9	1.4	No	No
6	Sanderson Avenue/Mustang Way	Signal	28.0	C	13.0	B	28.2	C	13.1	B	0.2	0.1	No	No
7	Cawston Avenue/Stetson Avenue	Signal	17.6	B	21.5	C	17.8	B	21.7	C	0.2	0.2	No	No
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Signal	28.6	C	23.5	C	32.9	C	25.1	C	4.3	1.6	No	No
9	Lyon Avenue/Stetson Avenue	Signal	42.2	D	40.1	D	44.4	D	42.9	D	2.2	2.8	No	No
10	Palm Avenue/Stetson Avenue	Signal	25.0	C	25.0	C	26.7	C	25.6	C	1.7	0.6	No	No

Notes

¹ Delay in seconds per vehicle

² Level of Service (LOS)

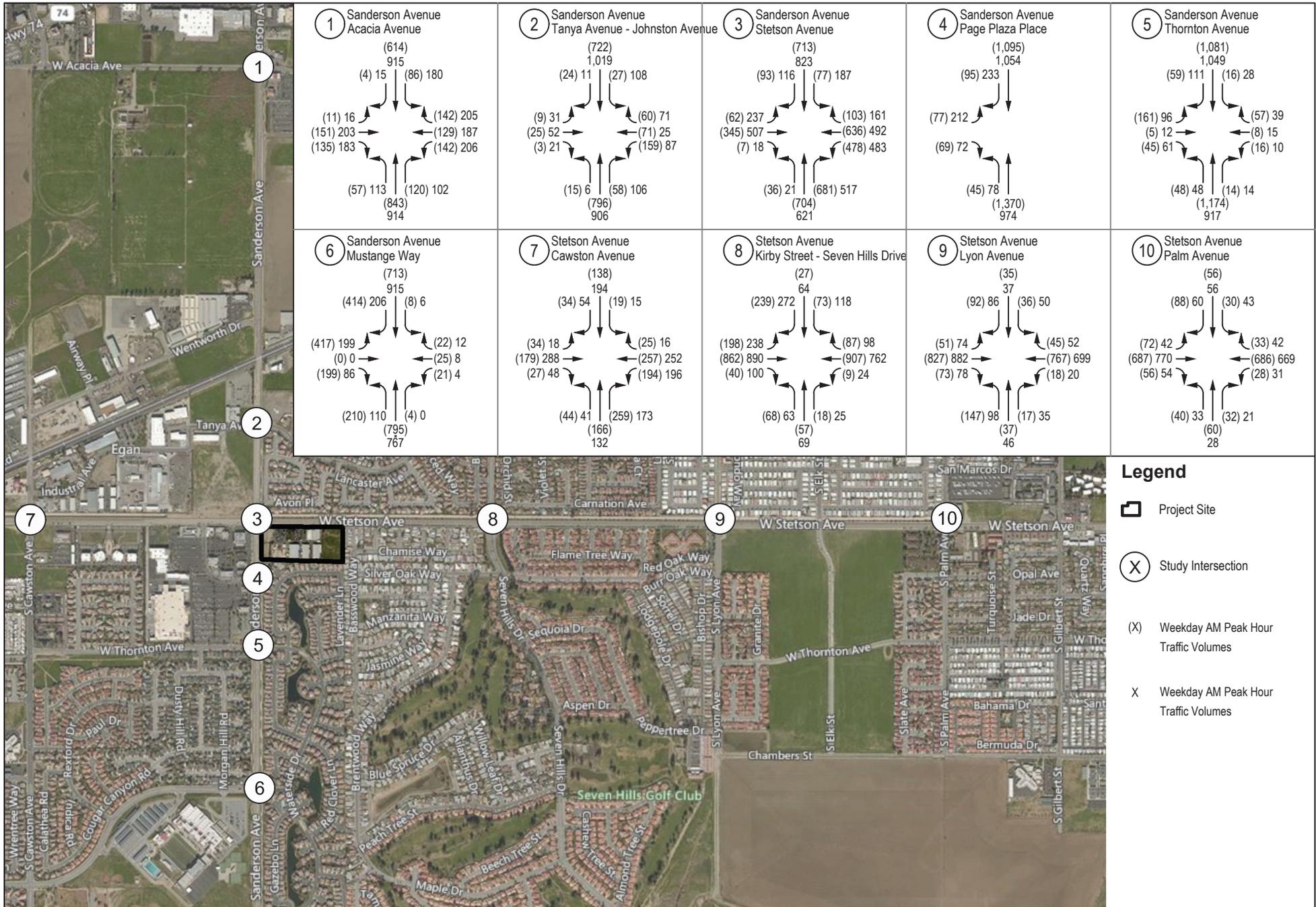
INTENTIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 12
Opening Year 2022 Peak Hour Traffic Volumes
 Stetson Corner

INTENTIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 13
 Opening Year (2022) plus Project Peak Hour Traffic Volumes

INTENTIONALLY LEFT BLANK

6 Cumulative Conditions

This section presents the results of a cumulative condition analysis that was conducted for a cumulative year, assuming construction and occupancy of some of the approved and pending projects in the vicinity of the proposed project. This section describes conditions within the study area in the cumulative conditions.

6.1 Cumulative Projects

Cumulative projects are projects that are proposed and in the review process, but not yet fully approved; or, projects that have been approved, but not fully constructed or occupied. A list of cumulative projects was provided by the City is included in Appendix E. Based on review of the cumulative projects and locations, 24 cumulative projects were identified that would potentially add traffic to the study area. Table 8 provides a brief description of these cumulative projects. Figure 14 illustrates the locations of the cumulative project within the City of Hemet.

6.1.1 Cumulative Projects Trip Generation

Project trip generation estimates for the cumulative projects were taken from traffic studies prepared for the recent development projects and/or derived using ITE *Trip Generation, 10th Edition (2017)* trip rates or from the traffic impact studies or environmental documents available for some of the projects. As shown in Table 8, the cumulative projects are forecast to generate approximately 66,036 daily trips, 3,599 AM peak hour trips, and 4,644 PM peak hour trips.

Table 8. Cumulative Projects Trip Generation Summary

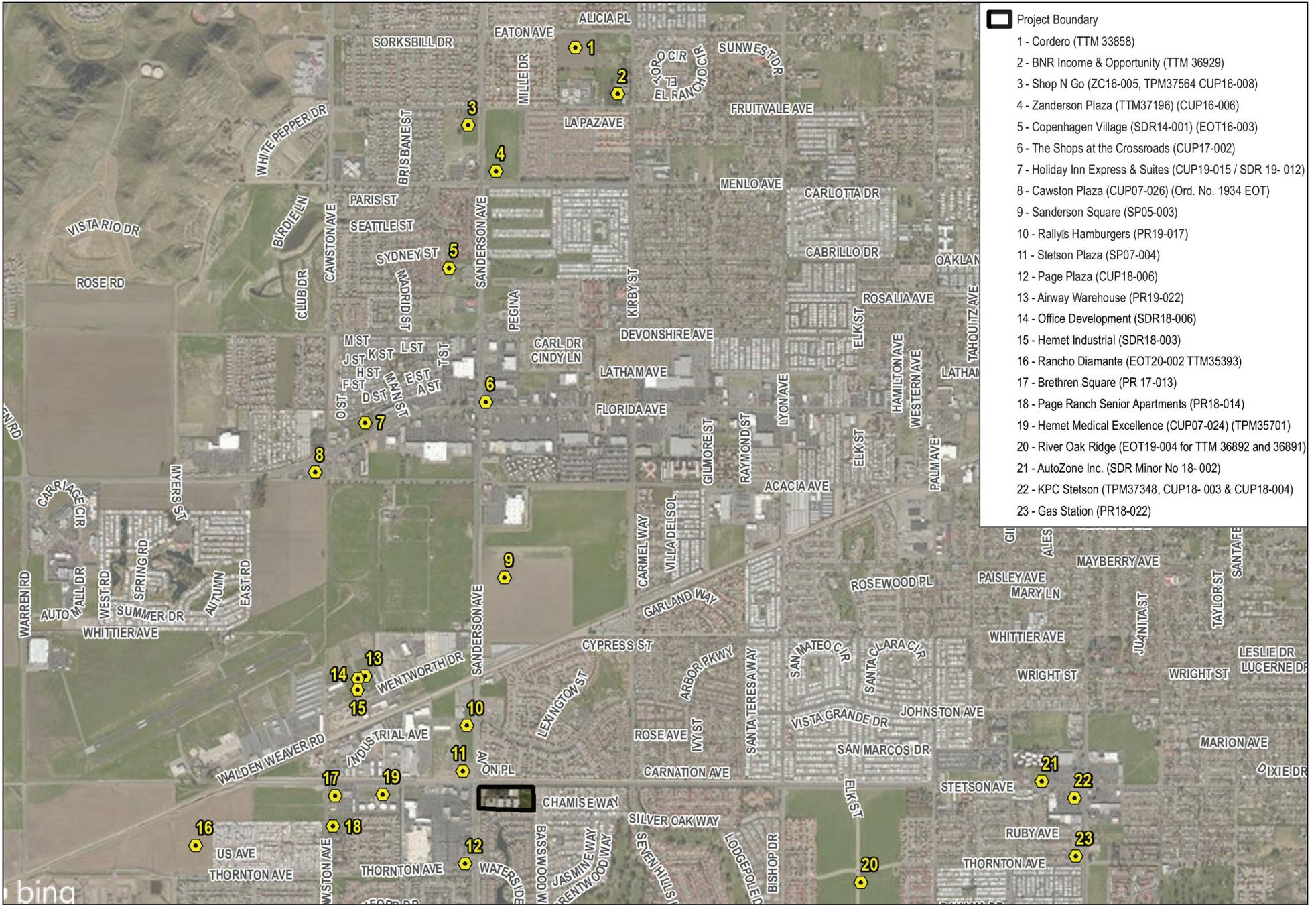
No.	Project	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
1	Cordero (TTM 33858) - Single Family subdivision	330	6	19	26	22	13	35
2	BNR Income & Opportunity (TTM36929)	189	4	11	15	12	7	20
3	Shop N Go (ZC16-005,TPM37564 CUP16- 008) - Gas station, convenience store and fast food restaurant	1,479	61	61	121	56	54	110
4	Zanderson Plaza (TTM37196) (CUP16-006)	6,261	204	181	385	202	200	402
5	Copenhagen Village (SDR14-001) (EOT16-003)	293	4	14	18	14	8	22
6	The Shops at the Crossroads (CUP17-002)	293	5	3	7	10	11	21
7	Holiday Inn Express & Suites (CUP19-015 / SDR 19-012) -	669	22	15	38	24	24	48
8	Cawston Plaza (CUP07-026)	611	9	6	15	21	22	43
9	Sanderson Square (SP05-003)	21,523	422	270	692	334	392	727
10	Rally's Hamburgers (PR19-017)	918	32	35	68	44	42	85
11	Stetson Plaza (SP07-004)	5,666	87	54	141	202	218	420

Table 8. Cumulative Projects Trip Generation Summary

No.	Project	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
12	Page Plaza (CUP18-006)- Starbucks coffee shop with a drive-thru and drive-thru restaurant	1,907	71	67	138	45	47	92
13	Airway Warehouse (PR19-022)	15	1	0	1	1	1	2
14	Office Development (SDR18-006)	21	2	0	2	0	2	2
15	Hemet Industrial (SDR18-003)	48	4	1	5	1	4	5
16	Rancho Diamante (EOT20-002 TTM 35393) - Residential development on 103.6 acres	5,617	110	330	440	371	218	589
17	Brethren Square (PR 17-013) - gas station, convenience store and car wash	4,485	245	245	489	236	236	472
18	Page Ranch Senior Apartments (PR18-014)	122	2	4	7	5	4	9
19	Hemet Medical Excellence (CUP07-024) (TPM35701) - Phase 2	2,203	137	39	176	61	158	219
20	River Oak Ridge (EOT19-004 for TTM 36892 and 36891)	1,492	29	88	117	99	58	156
21	AutoZone Inc. (SDR Minor No 18- 002)	120	11	4	14	7	10	17
22	KPC Stetson (TPM37348, CUP18- 003 & CUP18-004) - Retail and/or office space and McDonald's fast food restaurant	3,562	76	63	139	134	139	273
23	Gas Station with 2.5 TSF convenience store and two retail tenant spaces of 2.5 TSF each (PR18-022)	2,916	120	120	239	94	90	184
24	Downtown Specific Plan	5,297	254	51	305	210	481	691
Total Trip Generation		66,036	1,918	1,681	3,599	2,205	2,439	4,644

6.1.2 Cumulative Projects Trip Distribution and Assignment

Trip distributions and assignments for the cumulative projects were obtained from traffic studies prepared for recent development projects, and/or assuming logical commute corridors. The trips generated by the cumulative projects were distributed through the study area network. Figure 15 shows the cumulative projects traffic volumes for the peak hour conditions. Worksheets showing the cumulative projects data are provided in Appendix E.

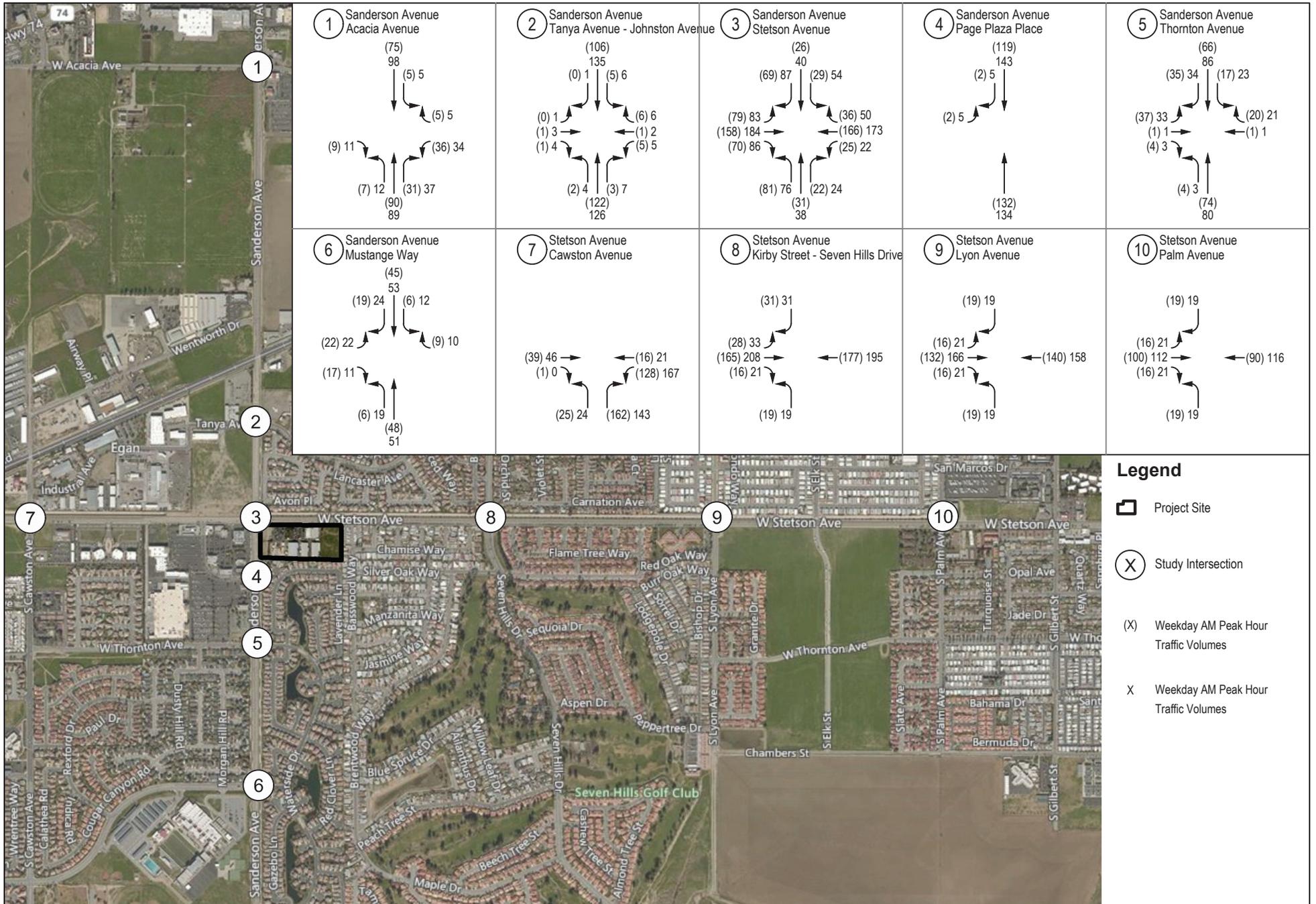


Source: Riverside County 2020; Bing Maps

FIGURE 14
Cumulative Projects Location

Stetson Corner

INTENTIONALLY LEFT BLANK



Source: Bing Maps

FIGURE 15
Cumulative Projects Peak Hour Traffic Volumes
 Stetson Corner

INTENTIONALLY LEFT BLANK

6.2 Cumulative Year Conditions

6.2.1 Traffic Volumes

The Cumulative Year is representative of the Existing plus Ambient Growth plus Cumulative Projects conditions. The traffic volumes for this scenario were estimated by adding traffic from approved/pending projects listed in Table 12 to the Opening Year 2022 traffic volumes. Figure 16 illustrates the Cumulative Year Peak Hour Traffic Volumes.

6.2.2 Intersection Operations

An intersection LOS analysis was prepared for the cumulative conditions using HCM 6th Edition methodology for signalized intersections. Table 9 shows the results of the Cumulative Year analysis. LOS worksheets are provided in Appendix D.

Table 9. Cumulative Conditions Peak Hour Intersection Level of Service

No.	Intersection	Control	Cumulative Year			
			AM Peak		PM Peak	
			Delay ¹	LOS ²	Delay ¹	LOS ²
1	Sanderson Avenue/Acacia Avenue	Signal	27.6	C	45.2	D
2	Sanderson Avenue/Tanya Avenue – Johnston Avenue	Signal	14.1	B	17.1	B
3	Sanderson Avenue/Stetson Avenue	Signal	68.2	E	81.1	F
4	Sanderson Avenue/Page Plaza Place	Signal	6.2	A	9.0	A
5	Sanderson Avenue/Thornton Avenue	Signal	28.6	C	19.9	B
6	Sanderson Avenue/Mustang Way	Signal	30.7	C	13.6	B
7	Cawston Avenue/Stetson Avenue	Signal	20.9	C	24.9	C
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Signal	42.2	D	34.3	C
9	Lyon Avenue/Stetson Avenue	Signal	31.1	C	31.5	C
10	Palm Avenue/Stetson Avenue	Signal	30.8	C	32.3	C

Notes

¹ Delay in seconds per vehicle

² Level of Service (LOS)

As shown in the table, all the study area intersections with the exception of Sanderson Avenue/Stetson Avenue intersection would operate at satisfactory levels of service per i.e., LOS D under Cumulative Year conditions per City of Hemet’s General Plan requirements. The intersection of Sanderson Avenue/Stetson Avenue would operate at unacceptable LOS E and F during the AM and the PM peak hours, respectively.

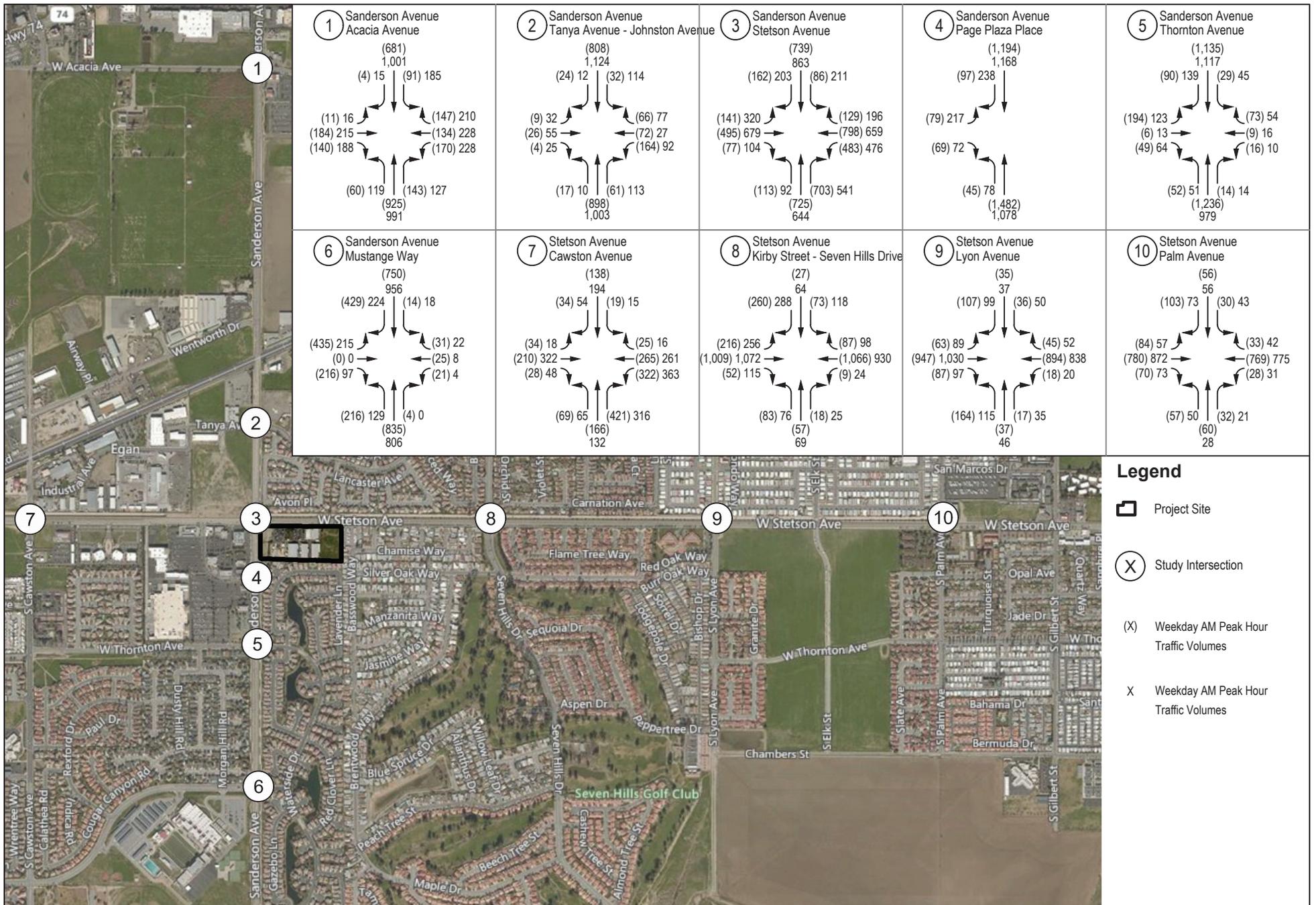
Per the City of Hemet General Plan Circulation Element (City of Hemet 2012a), the City accepts a LOS below LOS D for certain segments and intersections along Sanderson Avenue on a case-by-case basis. As discussed with the City, below LOS D conditions would be accepted at this intersection as there are closely spaced traffic signals; through-traffic slowed by left turns into commercial driveways; a lack of available right-of-way along this segment of Sanderson Avenue., and a need to provide multi-modal transportation facilities and landscape buffer along this scenic corridor.

The City's General Plan Circulation Element promotes maximizing overall efficiency of roadway system by exploring ways to reduce the demand for vehicular transportation through provision and maintenance of bike and pedestrian routes compared to addition of vehicular turn lanes to improve traffic flow. City of Hemet General Plan Circulation Element Goal C-5 provides policies that would be required to develop, expand and maintain a network of bicycle and pedestrian accessways that provide safe and comfortable travel between residential neighborhoods, parks, schools and commercial and office centers.

As discussed in the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012 b), Sanderson Avenue is a scenic highway corridor and is intended to be designed in accordance with the Scenic Highway Elements from Domenigoni Parkway to Esplanade Avenue. This roadway corridor is intended to emphasize pedestrian and bicycle travel, and includes a meandering pathway within a landscape buffer area. As detailed in the Scenic Highway Setback Manual (City of Hemet 1990), the City has set forth specific design criteria for the scenic highway corridors. The Scenic Highway Program adopted in 1990 requires an additional 25-foot-wide landscape setback with meandering paved path and streetscape furniture next to the roadway. The Scenic Highway Setback Manual specified the landscape palette, wall design, signage, and pavement required for the setback area. The enhanced scale of the streetscapes will allow for the establishment of pedestrian and bicycle pathways. The design criterion specifies the path shall be a minimum of 12-feet wide with enhanced paving at street corners. To date, Sanderson Avenue has largely been developed with the Scenic Highway Elements.

The implementation of the additional turn lanes at the intersection in order to improve LOS would impede on the ability to meet the City's multi-modal vision for the Sanderson Avenue corridor consistent with the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012b). With the addition of the turn-lanes within the right-of-way, it would not be possible to provide the scenic highway improvements near the intersection consistent within the right-of-way consistent with the Scenic Highway Setback Manual (City of Hemet 1990). In addition, the width of the pedestrian/bicycle crossing distance across the vehicular roadway would be extended due to the additional turn lanes. The combined reduction in the meandering path with the extended crossing distance would discourage bicycle and pedestrian travel through this area, and would result in an additional emphasis on vehicular travel over bicycle and pedestrian travel.

In consideration of the General Plan Circulation Element allowing operations below LOS D for segments along Sanderson Avenue, the City's Circulation Element Goal to encourage pedestrian and bicycle travel, and the General Plan Community Design Element for the Sanderson Avenue to be a scenic highway corridor with a multi-modal transportation focus, no additional turn lanes are recommended to be incorporated at the Sanderson Avenue/Stetson Avenue intersection.



Source: Bing Maps

FIGURE 16
Cumulative Year Peak Hour Traffic Volumes
Stetson Corner

INTENTIONALLY LEFT BLANK

6.3 Cumulative Year plus Project Traffic Operations

This section details the Cumulative Year plus Project traffic volumes and the intersection operations within the study area.

6.3.1 Traffic Volumes

Project traffic volumes shown in Figure 4 were added to the Cumulative Year traffic volumes shown in Figure 16 to derive the Cumulative Year plus Project traffic condition. Figure 17 shows the Cumulative Year plus Project traffic volumes.

6.3.2 Intersection Operations

An intersection LOS analysis was prepared for the Cumulative Year plus Project condition using the HCM 6th methodology for signalized intersections. Table 10 summarizes the results of the Cumulative Year plus Project intersection analysis for the AM and PM peak hours. Detailed LOS calculation worksheets are included in Appendix D.

As shown in Table 10, with the exception of Sanderson Avenue/Stetson Avenue intersection would operate at satisfactory levels of service per i.e., LOS D under Cumulative Year conditions per City of Hemet's General Plan requirements. The Sanderson Avenue/Stetson Avenue intersection would operate at unacceptable LOS E and F during the AM and the PM peak hours, respectively. The project would be part of a cumulative effect to the Sanderson Avenue/Stetson Avenue intersection operations under the Cumulative Year plus Project conditions.

However, as discussed above, per the General Plan Circulation Element, the City accepts a LOS below LOS D for certain segments and intersections along Sanderson Avenue on a case-by-case basis. As discussed with the City, below LOS D conditions would be accepted at this intersection as there are closely spaced traffic signals; through-traffic slowed by left turns into commercial driveways; and, a lack of available right-of-way along this segment of Sanderson Avenue. Additionally, roadway widening on Sanderson Avenue for LOS improvements would be inconsistent with the City's General Plan Circulation Element which promotes maximizing overall efficiency of roadway system by exploring ways to reduce the demand for vehicular transportation through provision and maintenance of bike and pedestrian routes compared to addition of vehicular turn lanes to improve traffic flow; as well as, be inconsistent with the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012 b), which designates Sanderson Avenue as a scenic highway corridor.

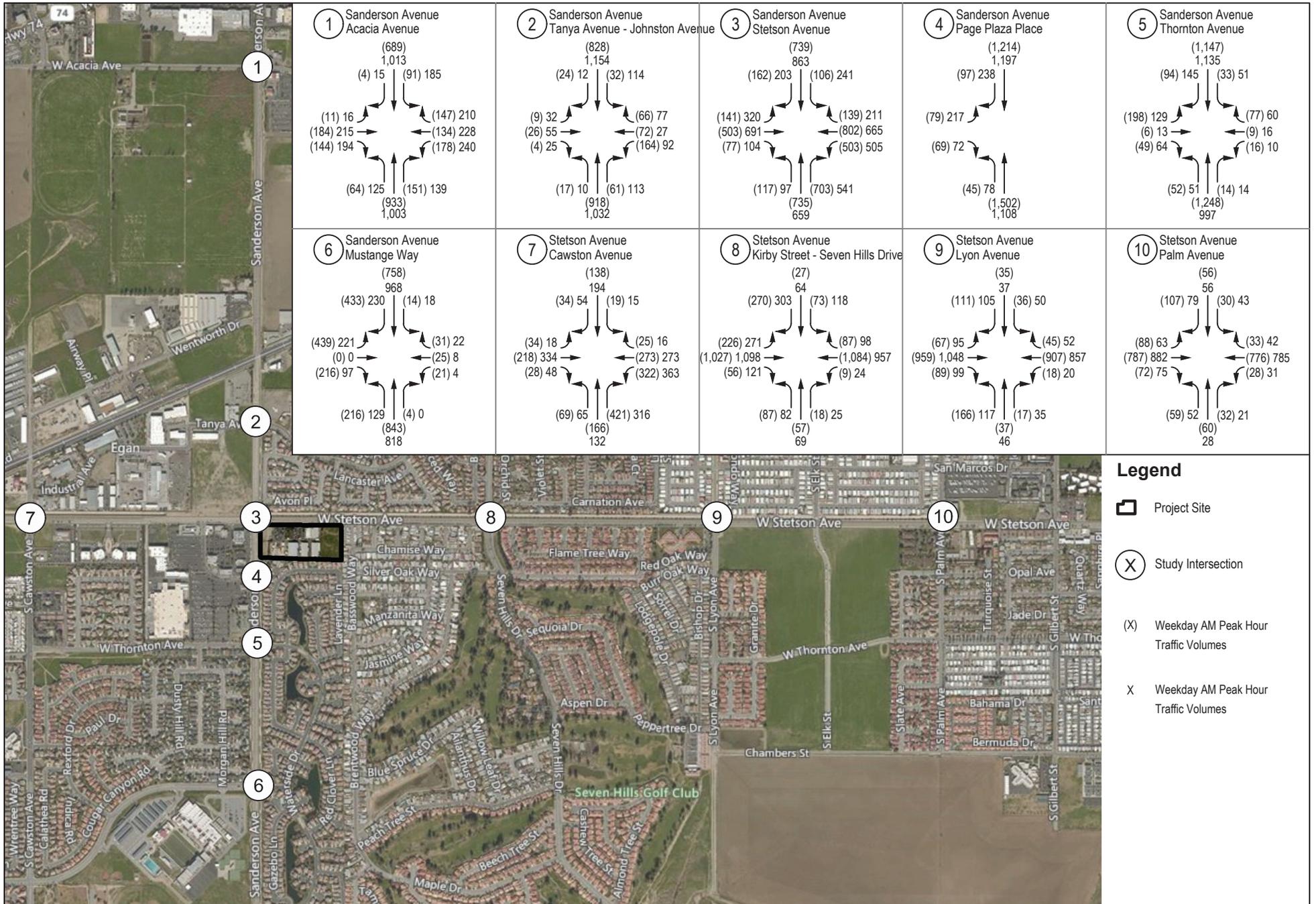
Table 10. Cumulative Year plus Project Peak Hour Intersection Level of Service

No.	Intersection	Control	Cumulative Year				Cumulative Year plus Project				Change in Delay ¹		Substantial Effect	
			AM Peak		PM Peak		AM Peak		PM Peak		AM	PM	AM	PM
			Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²	Delay ¹	LOS ²				
1	Sanderson Avenue/Acacia Avenue	Signal	27.6	C	45.2	D	29.0	C	47.4	D	1.4	2.2	No	No
2	Sanderson Avenue/Tanya Avenue – Johnston Avenue	Signal	14.1	B	17.1	B	14.2	B	17.4	B	0.1	0.3	No	No
3	Sanderson Avenue/Stetson Avenue	Signal	68.2	E	81.1	F	72.2	E	88.2	F	4.0	7.1	Yes	Yes
4	Sanderson Avenue/Page Plaza Place	Signal	6.2	A	9.0	A	6.2	A	8.9	A	0.0	-0.1	No	No
5	Sanderson Avenue/Thornton Avenue	Signal	28.6	C	19.9	B	30.2	C	20.7	C	1.6	0.8	No	No
6	Sanderson Avenue/Mustang Way	Signal	30.7	C	13.6	B	30.8	C	14.5	B	0.1	0.9	No	No
7	Cawston Avenue/Stetson Avenue	Signal	20.9	C	24.9	C	21.1	C	25.0	C	0.2	0.1	No	No
8	Kirby Street - Seven Hills Drive/Stetson Avenue	Signal	42.2	D	34.3	C	45.8	D	41.3	D	3.6	7.0	No	No
9	Lyon Avenue/Stetson Avenue	Signal	31.1	C	31.5	C	32.0	C	32.8	C	0.9	1.3	No	No
10	Palm Avenue/Stetson Avenue	Signal	30.8	C	32.3	C	31.9	C	33.5	C	1.1	1.2	No	No

Notes

¹ Delay in seconds per vehicle

² Level of Service (LOS)



Legend

- Project Site
- Study Intersection
- Weekday AM Peak Hour Traffic Volumes
- Weekday AM Peak Hour Traffic Volumes

Source: Bing Maps

FIGURE 17
Cumulative Year plus Project Peak Hour Traffic Volumes

INTENTIONALLY LEFT BLANK

7 Project Access, Queuing and Safety Considerations

7.1 Project Access

As shown in the site plan (Figure 2) and as described in Chapter 1, local access to the project is provided via Sanderson Avenue and Stetson Avenue. All project access driveways are unsignalized.

- Sanderson Avenue North Driveway – right turn in only
- Sanderson Avenue South Driveway – right turn in/out only (Intersection #11)
- Stetson Avenue Driveway - full-access (Intersection #12)

The existing uses on the project site i.e., the parking lot would be relocated to the site, east of the McCrometer Industrial building. The access to the parking lot would be separate from the proposed project and would be via a full access driveway along Stetson Avenue.

The levels of service at the two project access driveways (intersections #11 and #12) is provided in Table 11 for all analysis scenarios. Intersection #13 is right-in only, therefore, the vehicles would not experience any delay at this access.

Table 11. Project Access Level of Service

Scenario	Peak Hour	# 11. Sanderson Avenue Driveway		#12. Stetson Avenue Driveway	
		Delay ¹	LOS ²	Delay ¹	LOS ²
Existing plus Project	AM	16.2	C	39.1	E
	PM	14.1	B	61.8	F
Opening Year 2022 plus Project	AM	16.8	C	43.1	E
	PM	14.5	C	72.6	F
Cumulative Year plus Project	AM	18.3	C	75.9	F
	PM	15.8	C	171.5	F

Notes

- ¹ Delay in seconds per vehicle
- ² Level of Service (LOS)

The project access driveways were analyzed as a stop-controlled intersection. As shown in Table 11, the Sanderson Avenue project access driveway is forecast to operate with satisfactory LOS, at LOS C or better, during both peak hours under all study scenarios. The Stetson Avenue project access driveway would operate at unacceptable LOS, during both the AM and the PM peak hour under all scenarios. The detailed LOS worksheets for project access intersections (#11 and #12) are included in Appendix F.

It should be noted that the Stetson Avenue project access driveway is located within 250 feet of the Sanderson Avenue/Stetson Avenue intersection. Due to proximity to an existing signalized intersection, it would not be feasible to install a traffic signal the project driveway along Stetson Avenue nor would the low volumes along project access driveway

warrant signalization. Further, the level of service at the project’s unsignalized driveway would not substantially impact the LOS of the adjacent Sanderson Avenue/Stetson Avenue intersection. However, a queuing analysis shown below was prepared to assess if the vehicular queues at the Sanderson Avenue/Stetson Avenue intersection would impact the inbound and outbound project traffic from the Stetson Avenue project access driveway.

7.2 Queuing Analysis

A queuing analysis was prepared for the Sanderson Avenue/Stetson Avenue intersection to assess the adequacy of the northbound right and westbound left storage pocket at the intersection. Also, the number of vehicles at the project’s driveways were noted to determine if there would be adequate driveway throat length or space on-site for vehicles to queue without effecting the internal circulation on the project site. Queuing reports are provided in Appendix F.

As shown in Table 12, the calculated 95th percentile (design) queue for the Cumulative Year plus Project condition at the Sanderson Avenue/Stetson Avenue intersection, the westbound left queue during the AM and PM peak hour exceed the storage length available for those movements. The northbound right queue at the Sanderson Avenue/Stetson Avenue intersection is not exceeded, hence is not considered to significant.

- At the Sanderson Avenue/Stetson Avenue intersection, the westbound left queue is approximately 162 feet which exceeds the 100-foot storage length. Assuming approximately 20 feet per car, the vehicle queue at the westbound left movement would extend approximately 3 cars beyond the available storage length. However, the 95th percentile queue would not block the project driveway which is located approximately 250 feet from Sanderson Avenue/Stetson Avenue intersection. However, to accommodate the storage length requirements under cumulative conditions, it is recommended that the westbound left turn lane be extended to approximately 175 feet at the Sanderson Avenue/Stetson Avenue intersection.

Additionally, as shown on Figure 2, there is adequate storage length on the project site that cars can queue on-site if needed, near the project driveways. Approximate length of queue based on number of vehicles (assuming 20 feet per car) is provided in Table 12 for the unsignalized project driveways.

Table 12. Cumulative Year plus Project Queuing Summary

Intersection/Driveway	Move-ment	Vehicle Storage Length ¹	Cumulative Year plus Project Queue ²		Exceeds Vehicle Storage Length?		Improvement Warranted
			AM	PM	AM	PM	
Sanderson Avenue/Stetson Avenue	WBL ³	100	162	162	Yes	Yes	Yes
	NBL ³	200	88	94	No	No	No
	NBR ³	180	96	100	No	No	No
Sanderson Avenue/Project Driveway (Right In/Out)	WBLn	-- ⁴	6	6	No	No	No
Stetson Avenue/Project Driveway (Full Access)	NBLn	-- ⁵	104	182	No	No	No
	WBL ⁶	200	10	16	No	No	No

Notes:

- ¹ Measured in feet
- ² Based on 95th percentile (design) queue length in SimTraffic 10
- ³ Length measured from nearest stop/signalized intersection and rounded to the nearest foot
- ⁴ Site plan shows an approximately 25 foot driveway throat length
- ⁵ Site plan shows an approximately 25 foot driveway throat length

⁶ Length available within the two-way-left-turn-lane along Stetson Avenue
XX Queue exceeds storage length

7.3 Site Access Considerations

Project access and queuing analysis has been conducted to provide recommendation regarding safe and efficient vehicular movement to and from the project site. There is adequate sight distance for project access driveways along Stetson Avenue and Sanderson Avenue. Parking is not allowed along Sanderson Avenue or Stetson Avenue and there are no landscape elements such as trees or bushes that would impact sight distance for vehicles exiting the project site.

There are adequate pedestrian facilities in the vicinity of the proposed project. The project would be responsible for constructing frontage improvements including sidewalks along Stetson Avenue, which would connect to existing sidewalks and improve pedestrian connectivity. An accessible pedestrian pathway is also proposed to connect restaurant use on project site from the sidewalk.

The project would not conflict with the existing and proposed bicycle and transit facilities in its vicinity. However, since the proposed project is primarily a gas station, the proposed use would not likely significantly increase use of those facilities.

INTENTIONALLY LEFT BLANK

8 Project Impacts, Mitigation Measures and Level of Service Improvements

8.1 Project Impacts

As shown in queuing analysis, the project traffic would add to the deficiency of storage length along westbound left turn lane at the Sanderson Avenue/Stetson Avenue intersection under Cumulative plus Project conditions, resulting in a potentially significant impact.

8.2 Mitigation Measures

8.2.1 Direct and Cumulative Impact

To provide additional storage length for vehicles at the Sanderson Avenue/Stetson Avenue intersection, the project proposes following mitigation measure:

- Re-stripe the westbound left-turn lane to accommodate additional vehicle storage. The existing turn lane along Stetson Avenue can be re-striped to extend the westbound left-turn lane to approximately 175 feet to provide adequate storage under the Cumulative Year plus Project conditions.

8.3 Level of Service Improvements

8.3.1 Improvement Measures

The project’s substantial cumulative effect at the Sanderson Avenue/Stetson Avenue intersection could be alleviated through the construction of second northbound left, eastbound left, westbound left and southbound left turn lanes. Table 13 summarizes the results of the Cumulative Year plus Project intersection analysis for the AM and PM peak hour with the additional turn lane mentioned above. With this operational improvement, the intersection would operate at LOS D during the AM and the PM peak hour under Cumulative plus Project conditions. LOS worksheets for under the operational improvement condition are provided in Appendix G.

Table 13. Operational Improvement Cumulative plus Project Weekday Peak Hour Intersection LOS

No.	Intersection	Control	AM Peak		PM Peak	
			Delay ¹	LOS ²	Delay ¹	LOS ²
3	Sanderson Avenue/Stetson Avenue	Signalized	46.2	D	53.5	D

Notes:

- ¹ Delay in seconds per vehicle
- ² Level of Service (LOS)

Per WRCOG guidelines, cumulative effects may be addressed by a fair-share contribution toward achieving acceptable levels of service. In addition, the General Plan states “General Plan. Policy C-1.3 requires projects to meet the City’s LOS standard, and Policy C-1.15 requires that projects implementing the Draft General Plan construct improvements as identified in the Draft General Plan and provide fair-share funding to mitigate traffic

impacts.” Alternatively, if a cumulative location is included in an existing traffic impact fee program (such as TUMF), payment of those fees would constitute an appropriate contribution. Review of the Transportation Uniform Mitigation Fee Nexus Study 2016 Update (WRCOG, Adopted July 2017) shows that the Sanderson Avenue/Stetson Avenue intersection is not included in the document and there are no improvements to this intersection included in the program. Therefore, the project’s payment of TUMF to the City would not directly provide improvements to this intersection. Currently there are no planned improvements to the Sanderson Avenue/Stetson Avenue intersection and there is no program currently in place to contribute fair-share contributions. As such, there is no mechanism to collect a fair-share payment specifically towards this improvement and no fair-share payment specifically towards this improvement is required. Regardless, the project would be required to provide payment towards the TUMF that provides transportation improvements.

As previously discussed, the City’s General Plan Circulation Element accepts a LOS below D for certain segments and intersections along Sanderson Avenue and Stetson Avenue on a case-by-case basis. As discussed with the City, the intersection of Sanderson Avenue/Stetson Avenue would be allowed to have a LOS below LOS D as there are closely spaced traffic signals, through-traffic slowed by left turns into commercial driveways, and a lack of available right-of-way along this roadway. The City’s General Plan Circulation Element promotes maximizing overall efficiency of roadway system by exploring ways to reduce the demand for vehicular transportation through provision and maintenance of bike and pedestrian routes compared to addition of vehicular turn lanes to improve traffic flow. City of Hemet General Plan Circulation Element Goal C-5 provides policies that would be required to develop, expand and maintain a network of bicycle and pedestrian accessways that provide safe and comfortable travel between residential neighborhoods, parks, schools and commercial and office centers.

As discussed in the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012 b), Sanderson Avenue is a scenic highway corridor and is intended to be designed in accordance with the Scenic Highway Elements from Domenigoni Parkway to Esplanade Avenue. This roadway corridor is intended to emphasize pedestrian and bicycle travel, and includes a meandering sidewalk within a landscape buffer area. As detailed in the Scenic Highway Setback Manual (City of Hemet 1990), the City has set forth specific design criteria for the scenic highway corridors. The Scenic Highway Program adopted in 1990 required an additional 25 foot-wide landscape setback with meandering sidewalk and streetscape furniture next to the roadway. The Scenic Highway Setback Manual specified the landscape palette, wall design, signage, and pavement required for the setback area. The enhanced scale of the streetscapes will allow for the establishment of pedestrian and bicycle pathways. The design criterion specifies the path shall be a minimum of 12-feet wide with enhanced paving at street corners. As such, Sanderson Avenue has largely been developed with the Scenic Highway Elements.

The implementation of the additional turn lanes would impede on the ability to meet the City’s multi-modal vision for the Sanderson Avenue corridor consistent with the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012b). With the addition of the turn-lanes within the right-of-way, it would not be possible to provide the scenic highway improvements near the intersection consistent within the right-of-way consistent with the Scenic Highway Setback Manual (City of Hemet 1990). In addition, the width of the pedestrian/bicycle crossing distance over the vehicular roadway would be extended due to the additional turn lanes. The combined reduction in the meandering path with the extended crossing distance would discourage bicycle and pedestrian travel through this area, and would result in an additional emphasis on vehicular travel over bicycle and pedestrian travel.

In consideration of the General Plan Circulation Element allowing operations below LOS D for segments along Sanderson Avenue, the City’s Circulation Element Goal to encourage pedestrian and bicycle travel, and the General Plan Community Design Element for the Sanderson Avenue to be a scenic highway corridor with a multi-modal transportation focus, no additional turn lanes are recommended to be incorporated at the Sanderson Avenue/Stetson Avenue intersection.

9 Findings and Recommendations

Based on the traffic analysis of the proposed project, the following findings on VMT and LOS analysis are made:

- With trip reductions for pass-by trips and internal trip capture, the proposed project would generate 3,038 net daily trips, 160 net AM peak hour trips (81 inbound and 79 outbound), and 238 net PM peak hour trips (121 inbound and 171 outbound).
- As shown in Chapter 3, the proposed project passes two of the three screening criteria, i.e., Project Type Screening and Low VMT Area Screening. Therefore, the proposed project can be presumed to have a less than significant VMT impact under existing and cumulative conditions. A project-level detailed VMT analysis would not be required.
- Under Existing plus Project conditions, the study area intersections operate at LOS D or better, respectively. Per City's applicable LOS consistency analysis, no substantial project-specific effect would occur in the Existing plus Project conditions.
- Under Opening Year 2022 plus Project conditions, the study area intersections operate at LOS D or better. Per City's applicable LOS consistency analysis, no substantial project-specific effect would occur in the Opening Year 2022 plus Project conditions.
- Under Cumulative plus Project conditions, with the exception of the Sanderson Avenue/Stetson Avenue intersection, all other study area intersections operate at LOS D or better.
- The Sanderson Avenue/Stetson Avenue intersection would operate at unacceptable LOS E and F during the AM and the PM peak hours, respectively. The project would be part of a cumulative effect to the Sanderson Avenue/Stetson Avenue intersection operations under the Cumulative Year plus Project conditions.
- The project's substantial cumulative effect at the Sanderson Avenue/Stetson Avenue intersection could be alleviated through the construction of second northbound left, eastbound left, westbound left and southbound left turn lanes. However, such widening would conflict with the City of Hemet General Plan 2030 Community Design Element (City of Hemet 2012b) as well as the Scenic Highway Setback Manual (City of Hemet 1990). Currently there are no planned improvements to the Sanderson Avenue/Stetson Avenue intersection and there is no program currently in place to contribute fair-share contributions. As such, there is no mechanism to collect a fair-share payment specifically towards this improvement and no fair-share payment specifically towards this improvement is required. Regardless, the project would be required to provide payment towards the TUMF that provides transportation improvements. As such, no improvements are proposed.
- To provide additional storage length for vehicles at the Sanderson Avenue/Stetson Avenue intersection, the project proposes following mitigation measure:
 - Re-stripe the westbound left-turn lane to accommodate additional vehicle storage. The existing turn lane along Stetson Avenue can be re-striped to extend the westbound left-turn lane to approximately 175 feet to provide adequate storage under the Cumulative Year plus Project conditions.

INTENTIONALLY LEFT BLANK

10 References

- City of Hemet. 2012a. City of Hemet General Plan 2030. Circulation Element. Adopted January 24, 2012 Accessed May 2020. https://www.hemetca.gov/DocumentCenter/View/4520/4_Circulation_web-4-11-2017
- City of Hemet. 2012b. City of Hemet General Plan 2030. Community Design. Adopted January 24, 2012 Accessed May 2020. https://www.hemetca.gov/DocumentCenter/View/2169/3_Community_Design_web?bidId=
- City of Hemet. 2012. City of Hemet General Plan 2030 Environmental Impact Report. Final. January 12, 2012. Accessed May 2020. https://www.hemetca.gov/DocumentCenter/View/864/000_Title-Page?bidId=
- City of Hemet. 1990. Scenic Highway Setback Manual Design Criteria. Accessed May 2020. <https://www.hemetca.gov/DocumentCenter/View/1688/Scenic-Highway-Setback-Manual?bidId=>
- ITE. 2017. *Trip Generation Manual*. 10th ed.
- OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed May 2020. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
- Western Riverside Council of Governments (WRCOG). Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment. January 2020
- Riverside County Transportation Department. *Traffic Impact Analysis Preparation Guide*. January 2008
- SANDAG (San Diego Association of Governments). 2002. *Brief Guide of Vehicular Trip Generation Rates for the San Diego Region*. April 2002.
- Transportation Research Board. 2016. *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis*.

INTENTIONALLY LEFT BLANK

Appendix A

Scoping Agreement

INTEROFFICE MEMORANDUM

TO: SABRINA TEWANI, TRANSPORTATION PLANNER - DUDEK
FROM: STEVE LORISO, ACTING CITY ENGINEER
CAROLINA FERNANDEZ, ASSISTANT ENGINEER
SUBJECT: STETSON CORNER – FIRST COMMENTS ON SCOPING AGREEMENT
REVIEWED: SCOPING AGREEMENT, REVISION DATED MARCH 24, 2020; FOR STETSON CORNER PROJECT.
DATE: MARCH 27, 2020
CC: ENGINEERING FILES

The Scoping Agreement and supporting documentation have been received and deemed acceptable.

Please note added language on section G of the agreement. In compliance with Senate Bill 743, the City of Hemet will be basing transportation analysis in Vehicle Miles Traveled thresholds.

Thank you.

Exhibit B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Hemet requirements for traffic impact analysis of the following project. The analysis must follow the standards adopted by the City and listed in the Riverside County Transportation Department's document *Traffic Study Guidelines* (current version), and requirements identified by the Engineering Department.

Case No. CUP, TPM and Site Development Review
 Related Cases – (List all that apply; e.g., CUP, SP, PP, SDP, EIR, GPA, EIR, etc., Include City MA #.)

Project Name: Stetson Corner Project
 Project Address: 3145 and 3255 Stetson Avenue, Hemet
 Project Description: The proposed project would include commercial uses comprised of a 12 fueling position (pump) gas station with an approximately 3,062 square foot (SF) convenience store (7-Eleven), an approximately 2,840 SF drive-through fast food restaurant, and an approximately 3,590 SF car wash with 20 self-serve vacuum stations under a 3,096-square-foot canopy. Attachment A contains the project's site plan. Figure 1 shows the proposed study area.

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Dudek</u>	<u>Ralph W. Deppisch</u>
Address:	<u>605 Third Street</u>	<u>Sage Investco, LLC</u>
	<u>Encinitas, CA 92024</u>	<u>3837 Birch St. Newport Beach, CA 92660</u>
Telephone:	<u>760-942-5147</u>	<u>(949) 705-0426</u>
Fax:	<u>760-632-0164</u>	
Email:	<u>stewani@dudek.com</u>	

A. Trip Generation Source: (ITE 10th Edition and SANDAG Trip Generators)

Current GP Land Use	<u>Business Park (BP)</u>	Proposed Land Use	<u>Business Park (BP)</u>
Current Zoning	<u>Limited Manufacturing (M-1)</u>	Proposed Zoning	<u>Limited Manufacturing (M-1)</u>

	<i>Current Trip Generation</i>			<i>Proposed Trip Generation</i>		
<i>Period</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>
AM Trips				89	86	175
PM Trips				128	124	252
Daily Trips				1,629	1,629	3,257

Internal Trip Allowance Yes No 0 10% Trip Discount
 Pass-By Trip Allowance Yes No 0 See Attached Table 1 for Pass-by Trip Reduction % Trip Discount

A pass-by trip discount may be allowed for appropriate land uses. Justification for trip discounts must be provided. The pass-by trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: N 25% S 25% E 10% W 40%

(Attach exhibit for detailed assignment) See attached Figure 2

C. Background Traffic:

Project Build-out Year: 2022 Annual Ambient Growth Rate: 2%

Phase Year(s) _____

(Provide realistic opening year, considering time needed for approvals and construction.)

Other area projects or issues to be analyzed: A list of all cumulative projects provided by the City

Model/Forecast methodology: Ambient growth rate and traffic from cumulative projects will be used to estimate Existing plus Ambient Growth and Cumulative Projects conditions.

Intersection level of service (LOS) analyses will be prepared for the weekday AM and PM peak hours in the study area for the following analysis scenarios:

- Existing Condition - This scenario includes LOS analyses of the above mentioned study area intersections, with traffic counts collected in February 2020.
- Existing plus Project - This scenario includes project traffic added to existing traffic conditions and would provide an analysis of Existing plus Project traffic conditions as required per CEQA.
- Project Completion (Existing plus Ambient Growth plus Project) - This scenario includes the time that the proposed development/construction is completed and will be estimated by increasing the existing traffic counts by an appropriate growth rate (i.e. 1% per year). Since the project would be operational in the fall of year 2022, to be conservative a 2% growth rate would be applied to existing traffic and to estimate the Project Completion Year 2022 conditions. Project traffic would be added to Project Completion Year 2022 forecast.
- Cumulative (Existing plus Ambient Growth plus Project plus Cumulative Projects) - Traffic generated by other cumulative projects in the study area shall be identified and added to the Project Completion Year 2022 traffic along with project traffic to provide Cumulative Year 2022 plus Project traffic conditions analysis.

D. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

1. Sanderson Avenue/Acacia Avenue
2. Sanderson Avenue/Tanya Avenue – Johnston Avenue
3. Sanderson Avenue/Stetson Avenue
4. Sanderson Avenue/Page Plaza Place
5. Sanderson Avenue/Thornton Avenue
6. Sanderson Avenue/Mustang Way
7. Cawston Avenue/Stetson Avenue
8. Kirby Street - Seven Hills Drive/Stetson Avenue
9. Lyon Avenue/Stetson Avenue
10. Palm Avenue/Stetson Avenue

Project Access Intersections

- Sanderson Avenue/project driveway (future intersection) – right-turn in/out only
- Stetson Avenue/project driveway (future intersection) – full access

E. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

Average daily traffic counts have been collected for the Noise analysis along Sanderson Avenue and Stetson Avenue in the vicinity of the project site. No roadway segment analysis is required for the project.

E. Other Jurisdictional Impacts:

Yes No

Is this project within another City's Sphere of Influence or one-mile radius of another City's boundaries?

If so, name of City Jurisdiction: _____

F. Site Plan (please attach reduced copy) Attachment A Site Plan is included.

G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by the City Engineering Department)

In compliance with SB 743, the analysis shall use Vehicle Miles Traveled (VMT) as threshold.

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts: Traffic counts for above mentioned intersections were collected on Tuesday, February 25, 2020

Proposed by:

Sabita Tewani

Approved Scoping Agreement:

Consultant's Representative	Date	City of Hemet	Date
Scoping Agreement Submitted on	<u>3/10/2020</u>		
Revised on	<u>3/24/2020</u>		

Table 1

Project Trip Generation									
Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Gasoline/Service Station w Convenience Market (atleast 3000 sf and atleast 10 VFS)	945	per VFP	205.36	6.36	6.11	12.47	7.13	6.86	13.99
Car Wash (self serve)	²	per Wash Stall	100	50%	50%	4%	50%	50%	8%
Fast Food Restaurants with Drive-ththrough	934	per TSF	470.95	20.50	19.69	40.19	16.99	15.68	32.67
Trip Generation									
Gas Station with Convenience Market	945	12 VFP	2,464	76	73	150	86	82	168
		Pass-by Reduction ³	-1,528	-47	-45	-93	-48	-46	-94
Car Wash (self serve)	²	20.00 Wash Stall	2,000	40	40	80	80	80	160
Fast Food Restaurants with Drive-through	934	2.84 TSF	1,337	58	56	114	48	45	93
		Pass-by Reduction ⁴	-655	-29	-27	-56	-24	-22	-46
Subtotal without Pass-by Reduction			5,802	175	169	344	214	207	421
Subtotal with Pass-by Reduction			3,619	99	96	195	142	138	280
		Internal Capture ⁵	-362	-10	-10	-20	-14	-14	-28
Total Net Trip Generation			3,257	89	86	175	128	124	252

Notes:

¹ Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017

² Trip rates from SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

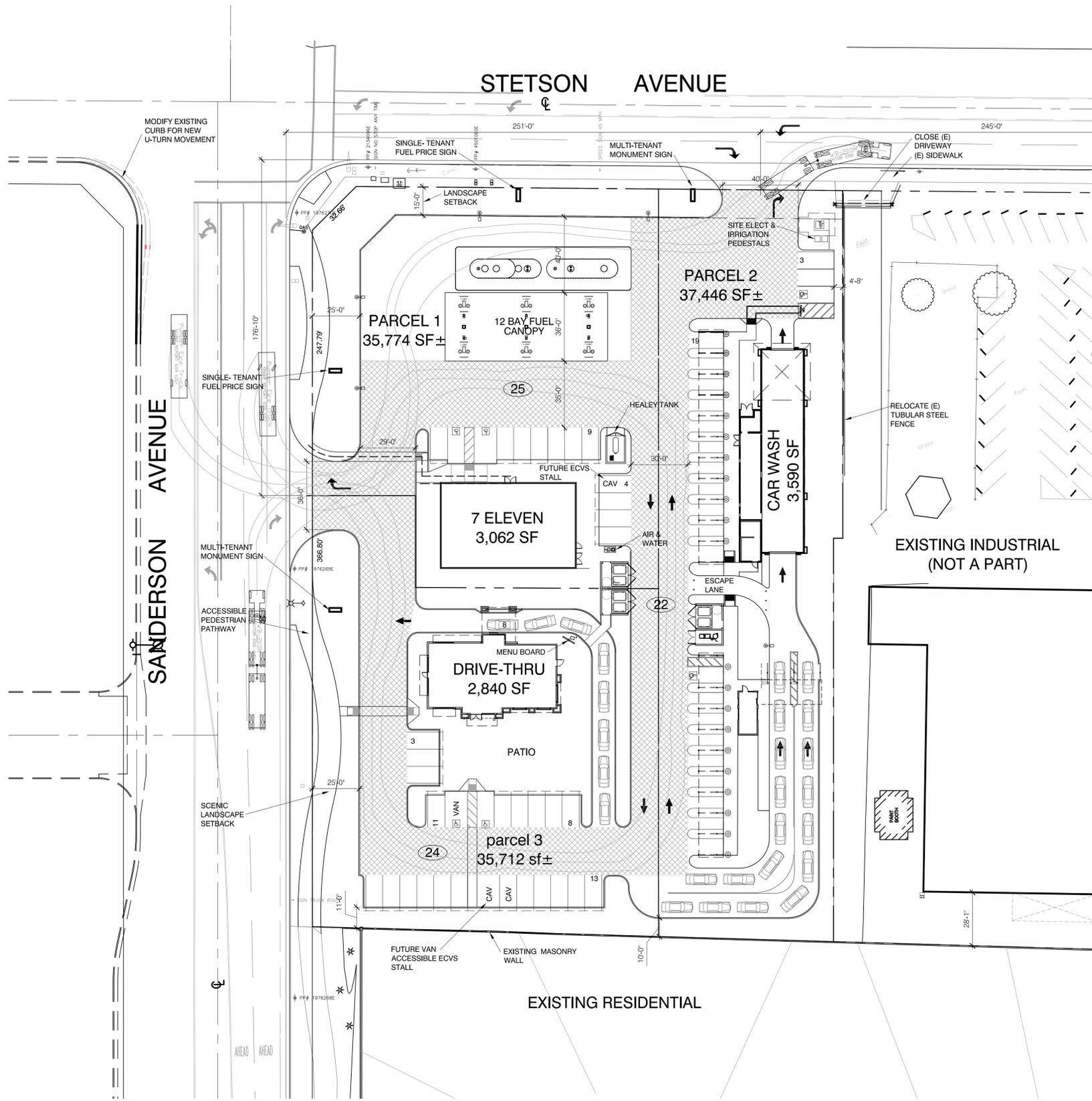
Pass-by trip rates derived from the average of pass-by trip percentages provided for all Gasoline/Service Station with Convenience Market (945), from the ITE Trip Generation Handbook, 3rd Edition - Table E.37, Pass-by and Non-Pass-By Weekday, AM Peak Period (62%) and E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (56%) Trips (Weekday, PM Peak Hour), ITE 945 -

³ Gasoline/Service Station with Convenience Market.

Pass-by trip rates derived from the average of pass-by trip percentages provided for all fast-Food Restaurant with Drive-Through Window (934), from the ITE Trip Generation Handbook, 3rd Edition - Table E.31, Pass-by and Non-Pass-By Weekday, AM Peak Period (49%) and E.32 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (50%) Trips (Weekday, PM Peak Hour), ITE 934 - Fast-Food

⁴ Restaurant with Drive-Through Window

⁵ 10% Internal Capture assumed for the site.



ZONING

GENERAL PLAN: BP- BUSINESS PARK
 ZONING: M-1 (LIMITED MANUFACTURING)

SETBACKS:
 FRONT (SANDERSON AVENUE): 25'
 SIDE (ADJ. TO STREET): 10'
 SIDE (ADJ. TO RESIDENTIAL ZONE): 30'
 VARIANCE REQUESTED: 24'
 REAR (ADJ. TO RESIDENTIAL ZONE): 30'

MAXIMUM BUILDING HEIGHT: 60'
 MAXIMUM BUILDING COVERAGE: 60%
 MAXIMUM FLOOR AREA RATIO (F.A.R.): .45

PROJECT SUMMARY

LAND AREA: 2.50 AC (108,932 SF ±)

RETAIL: 3,062 SF
 FUELING CANOPY: 3,096 SF
 AUTOMATED CARWASH: 3,590 SF
 DRIVE-THRU RESTAURANT: 2,480 SF

TOTAL BUILDING AREA: 12,228 SF
 BUILDING COVERAGE (F.A.R.): 11.2%

REQUIRED PARKING:
 RETAIL (1:250): 12 STALLS
 AUTOMATED CARWASH (1/1 EMPL): 3 STALLS
 DRIVE-THRU RESTAURANT: 10 STALLS
 1:200 UP TO 2,000 SF: 14 STALLS
 1:60 AREA OVER 2,000 SF: 14 STALLS

TOTAL PARKING REQUIRED: 39 STALLS
 TOTAL PARKING PROVIDED: 52 STALLS
 (INCLUDES FUELING CANOPY)

CLEAN AIR VEHICLE TABULATIONS

CLEAN AIR VEHICLE PARKING
 CAL GREEN TABLE 5.106.5.2

TOTAL NUMBER OF PARKING SPACES	TOTAL NUMBER OF PARKING SPACES
0-9	0
10-25	1
26-50	3
51-75	6
76-100	8
101-150	11
151-200	16
201 AND OVER	AT LEAST 8 PERCENT OF TOTAL

TOTAL PARKING PROVIDED: 49 STALLS
 TOTAL CAV PARKING REQUIRED: 3 STALLS
 TOTAL CAV PARKING PROVIDED: 3 STALLS

FUTURE EV CHARGING STATIONS
 CAL GREEN TABLE 5.106.5.3.3

TOTAL NUMBER OF PARKING SPACES	NUMBER OF EV CHARGING SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 AND OVER	6 PERCENT OF TOTAL

FUTURE EVCS REQUIRED: 4 STALLS
 FUTURE EVCS PROVIDED: 4 STALLS

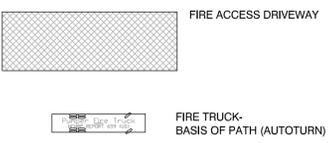
ACCESSIBLE EV CHARGING STATIONS
 CBC TABLE 11B-228.3.2.1

TOTAL # OF EVCS	VAN ACCESSIBLE	STANDARD ACCESSIBLE	AMBULATORY
1-4	1	0	0
5-25	1	1	0
26-50	1	1	1
51-75	1	2	2
76-100	1	3	3
101 +	1 PLUS 1 FOR EACH 300 OR FRACTION OVER 100	3 PLUS 1 FOR EACH 60 OR FRACTION OVER 100	3 PLUS 1 FOR EACH 90 OR FRACTION OVER 100

FUTURE VAN ACCESSIBLE EVCS REQUIRED: 1 STALL
 FUTURE VAN ACCESSIBLE EVCS PROVIDED: 1 STALL

FUTURE STANDARD ACCESSIBLE EVCS REQUIRED: 0 STALLS
 FUTURE STANDARD ACCESSIBLE EVCS PROVIDED: 0 STALLS

FUTURE AMBULATORY EVCS REQUIRED: 0 STALLS
 FUTURE AMBULATORY EVCS PROVIDED: 0 STALLS

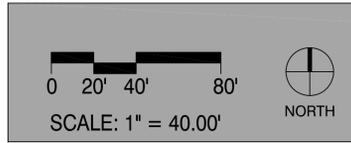


NOTE:
 THIS SITE PLAN SHOWS DEVELOPER'S PLAN FOR THE CONFIGURATION OF THE PROJECT AS OF THE DATE OF THE SITE PLAN. ONLY IT IS ONLY A PLAN, AND IT SHALL NOT BE DEEMED TO BIND DEVELOPER AS TO:
 (A) THE SIZE OF ANY PARTICULAR BUILDING OR SPACE DEPICTED HEREON, OR
 (B) THE CONFIGURATION, LOCATION OR FLOOR AREA OF ANY PARTICULAR BUILDING OR SPACE DEPICTED HEREON, OR
 (C) THE PROPOSED USE OR OCCUPANCY OF ANY PARTICULAR BUILDING OR SPACE DEPICTED HEREON.

BUILDING AREAS AND LAND COVERAGE ARE PRELIMINARY AND SUBJECT TO ADJUSTMENT. ANY PROPOSED DEVELOPMENT IS SUBJECT TO APPROVAL OF GOVERNMENT OR OTHER AGENCIES HAVING JURISDICTION. ALL DIMENSIONS AND SITE CONDITIONS ARE SUBJECT TO VERIFICATION.

CONCEPTUAL SITE PLAN SCHEME Uv11

SAGE RETAIL HEMET, CA GKPA PROJECT # 19126.01 11 JUNE 2019

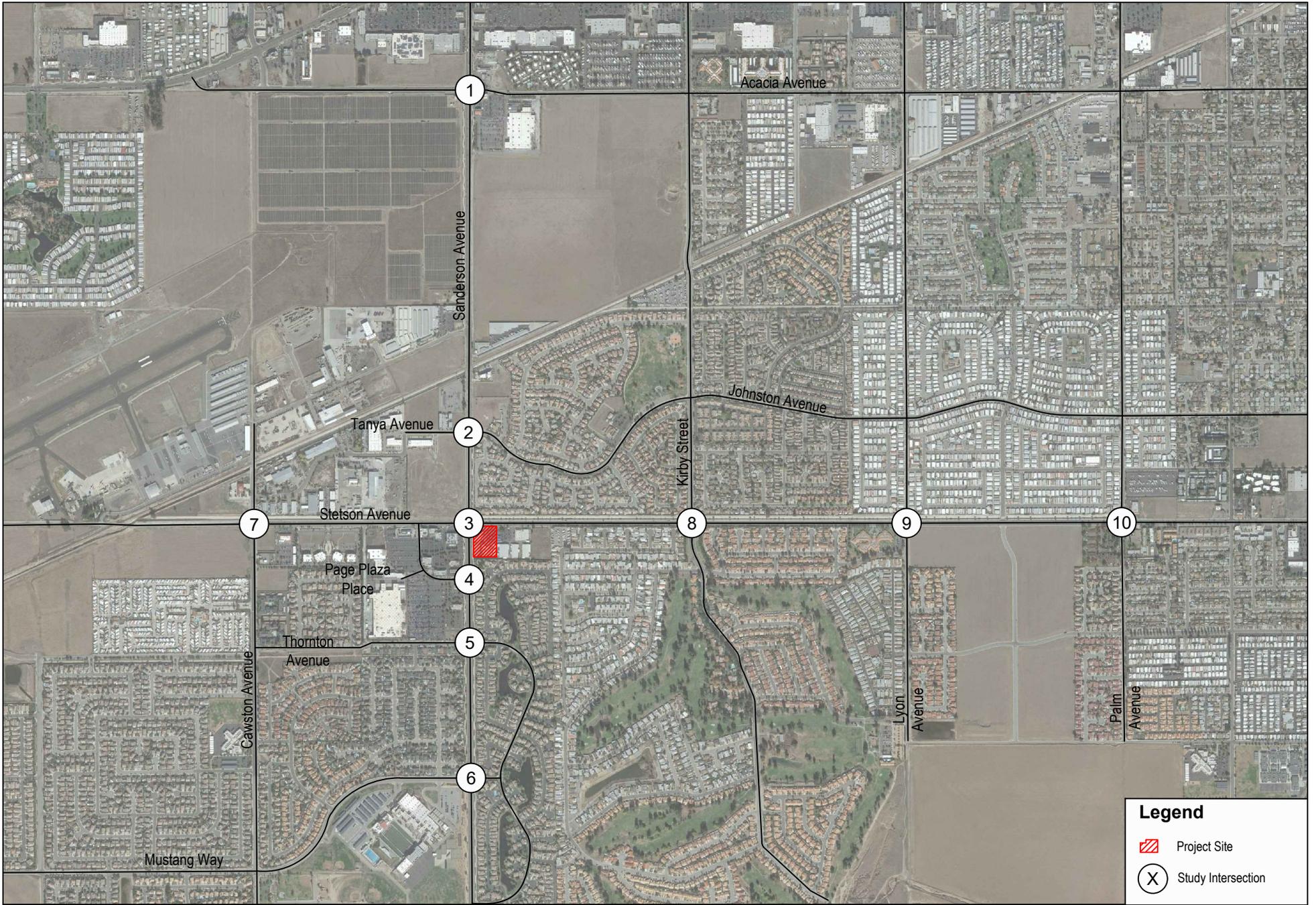


SAGE RETAIL HEMET, CALIFORNIA

RANCHO McHOLLAND, LLC

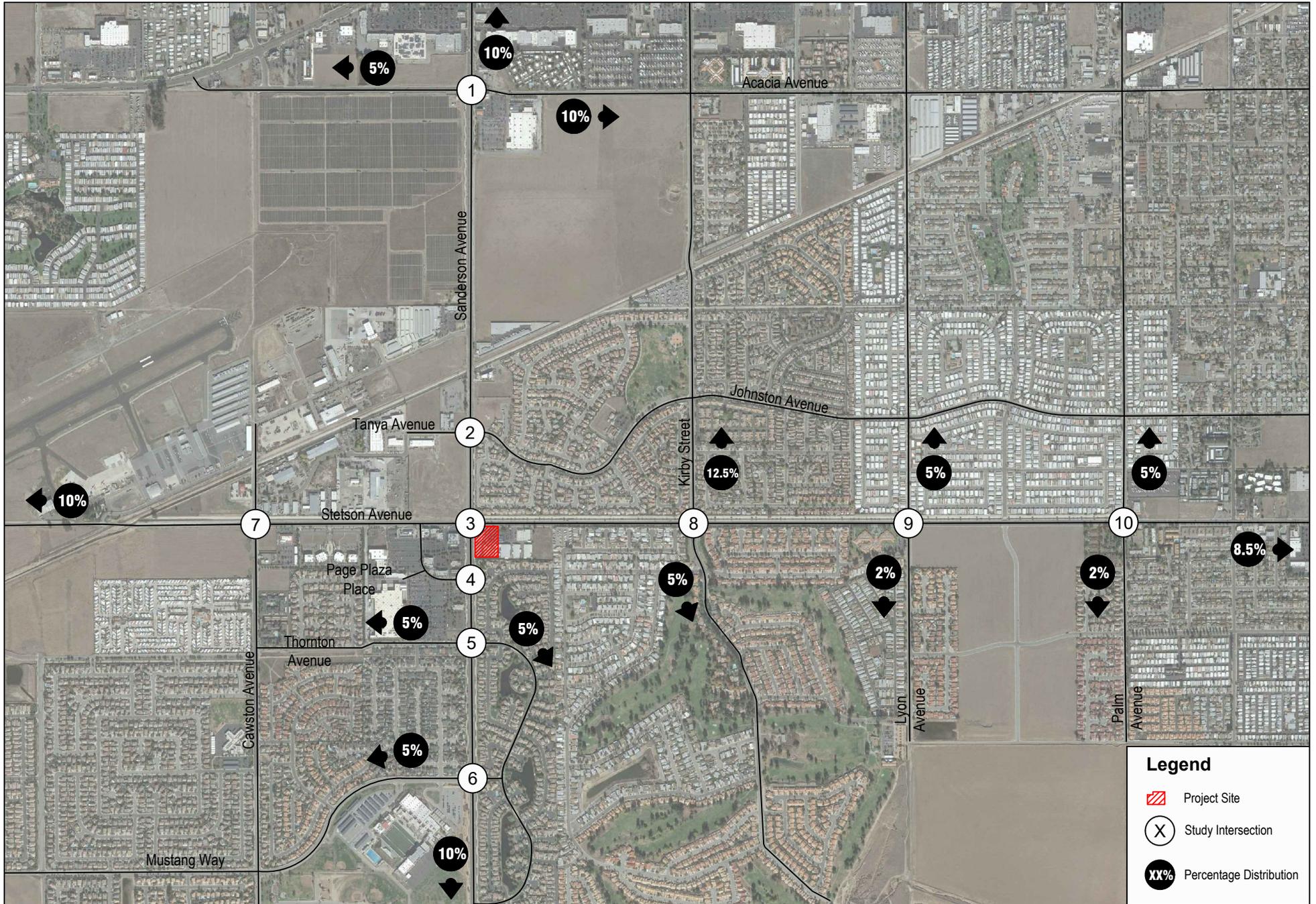
3837 BIRCH STREET
 NEWPORT BEACH, CA 92660
 949.954.6100





Source: Google Maps 2018

FIGURE 1
Project Location and Study Area
Stetson Corner



Source: Google Maps 2018

FIGURE 2
Project Trip Distribution
Stetson Corner

Appendix B

Excerpt from WRCOG VMT Screening Tool

3145 W Stetson Ave

APN:460150015; TAZ:4,224

Within a Transit Priority Area (TPA)?

No (Fail)

Within a low VMT generating TAZ based on Total VMT?

Yes (Pass)

Jurisdictional average 2012 daily total VMT per service population = 22.75

Project TAZ 2012 daily total VMT per service population = 22.41

Within a low VMT generating TAZ based on Residential Home-Based VMT?

No (Fail)

Jurisdictional average 2012 daily residential home-based VMT per capita = 11.58

Project TAZ 2012 daily residential home-based VMT per capita = 12.83

Within a low VMT generating TAZ based on Home-Based Work VMT?

No (Fail)

Jurisdictional average 2012 daily home-based work VMT per worker = 7.62

Project TAZ 2012 daily home-based work VMT per worker = 9.29

Notes:

- TPA designation is based on October 2018 conditions.
- Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.
- If VMT screening is desired for current baseline conditions, contact WRCOG for 2012 and 2040 VMT data. Interpolated VMT results can be obtained using the complete data set.
- VMT results do not account for full length of trips that occur beyond the SCAG region.

3255 W Stetson Ave

APN:460150014; TAZ:4,224

Within a Transit Priority Area (TPA)?

No (Fail)

Within a low VMT generating TAZ based on Total VMT?

Yes (Pass)

Jurisdictional average 2012 daily total VMT per service population = 22.75

Project TAZ 2012 daily total VMT per service population = 22.41

Within a low VMT generating TAZ based on Residential Home-Based VMT?

No (Fail)

Jurisdictional average 2012 daily residential home-based VMT per capita = 11.58

Project TAZ 2012 daily residential home-based VMT per capita = 12.83

Within a low VMT generating TAZ based on Home-Based Work VMT?

No (Fail)

Jurisdictional average 2012 daily home-based work VMT per worker = 7.62

Project TAZ 2012 daily home-based work VMT per worker = 9.29

Notes:

- TPA designation is based on October 2018 conditions.
- Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.
- If VMT screening is desired for current baseline conditions, contact WRCOG for 2012 and 2040 VMT data. Interpolated VMT results can be obtained using the complete data set.
- VMT results do not account for full length of trips that occur beyond the SCAG region.

Appendix C

Traffic Counts

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Feb 25, 20	LOCATION: NORTH & SOUTH: EAST & WEST:	Hemet Sanderson Acacia	PROJECT #: SC2540	LOCATION #: 1	CONTROL: SIGNAL
---------------------------------	----------------------------------------------------	------------------------------	-----------------------------	-------------------------	---------------------------

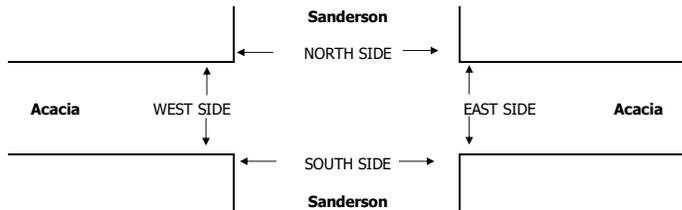
NOTES:	AM	
	PM	
	MD	
	OTHER	



LANES:	NORTHBOUND Sanderson			SOUTHBOUND Sanderson			EASTBOUND Acacia			WESTBOUND Acacia			TOTAL
	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	
7:00 AM	12	167	12	16	131	1	0	26	18	17	33	26	459
7:15 AM	14	163	15	18	168	0	2	24	31	36	33	26	530
7:30 AM	11	188	27	17	172	2	3	34	44	39	26	24	587
7:45 AM	12	199	27	21	136	0	4	34	22	37	33	38	563
8:00 AM	15	207	26	23	127	1	3	49	32	26	37	29	575
8:15 AM	13	209	28	22	148	1	1	28	28	27	28	46	579
8:30 AM	20	192	15	19	143	3	3	39	27	25	25	40	551
8:45 AM	15	195	20	28	158	1	4	47	25	16	31	40	580
VOLUMES	112	1,520	170	164	1,183	9	20	281	227	223	246	269	4,424
APPROACH %	6%	84%	9%	12%	87%	1%	4%	53%	43%	30%	33%	36%	
APP/DEPART	1,802	/	1,810	1,356	/	1,633	528	/	614	738	/	367	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	51	803	108	83	583	4	11	145	126	129	124	137	2,304
APPROACH %	5%	83%	11%	12%	87%	1%	4%	51%	45%	33%	32%	35%	
PEAK HR FACTOR	0.962			0.877			0.839			0.903			0.981
APP/DEPART	962	/	952	670	/	838	282	/	335	390	/	179	0
4:00 PM	33	216	24	44	205	4	6	58	45	66	55	49	805
4:15 PM	22	217	22	39	239	6	4	44	49	34	35	52	763
4:30 PM	33	215	29	47	229	0	2	49	39	51	43	60	797
4:45 PM	15	219	12	43	195	4	3	44	37	36	47	36	691
5:00 PM	27	221	20	41	196	4	5	45	36	49	50	59	753
5:15 PM	23	197	18	34	243	6	6	51	32	45	26	42	723
5:30 PM	20	211	18	42	202	3	3	44	42	34	42	53	714
5:45 PM	18	207	14	40	186	5	5	42	38	33	31	54	673
VOLUMES	191	1,703	157	330	1,695	32	34	377	318	348	329	405	5,919
APPROACH %	9%	83%	8%	16%	82%	2%	5%	52%	44%	32%	30%	37%	
APP/DEPART	2,051	/	2,142	2,057	/	2,361	729	/	864	1,082	/	552	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	103	867	87	173	868	14	15	195	170	187	180	197	3,056
APPROACH %	10%	82%	8%	16%	82%	1%	4%	51%	45%	33%	32%	35%	
PEAK HR FACTOR	0.954			0.929			0.872			0.829			0.949
APP/DEPART	1,057	/	1,079	1,055	/	1,225	380	/	455	564	/	297	0

U-TURNS				
NB	SB	EB	WB	TTL
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	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

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	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	0	0	0



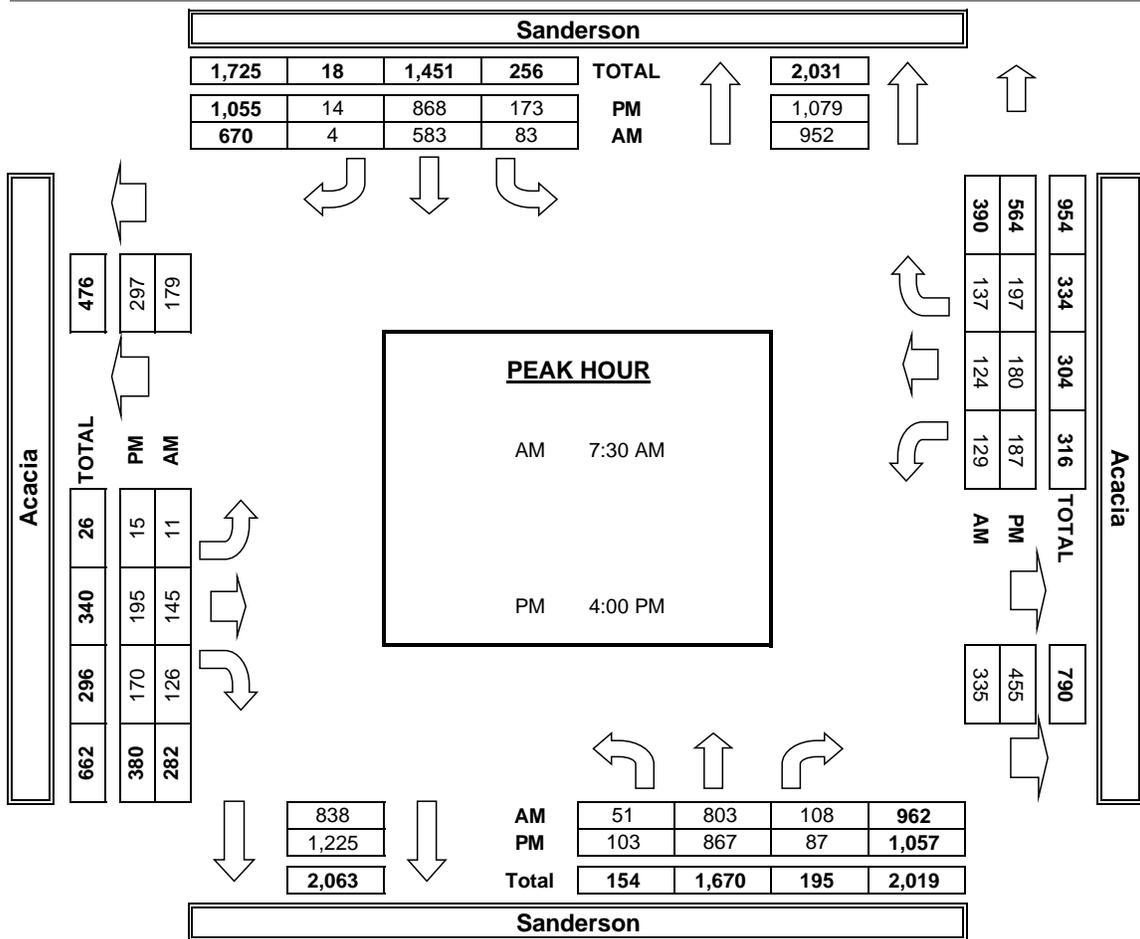
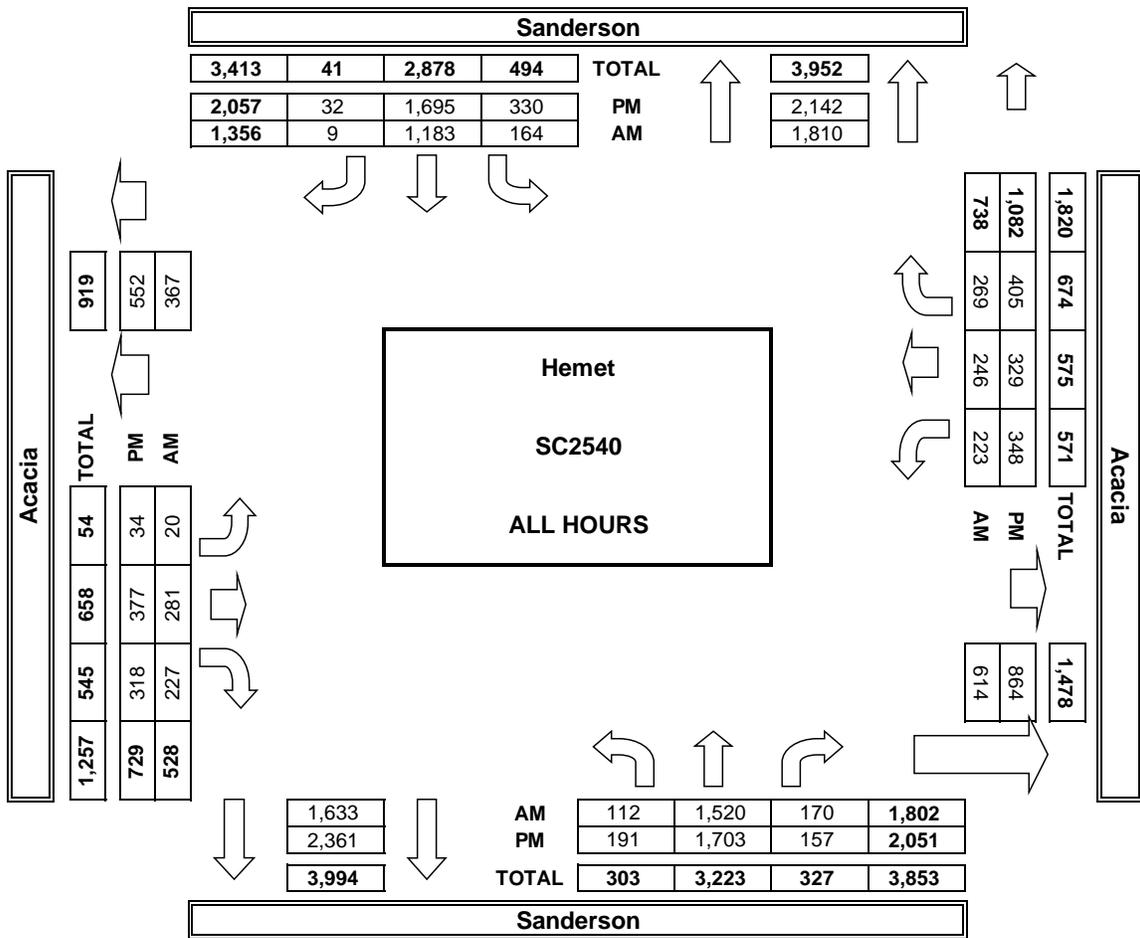
Time	N Side	S Side	E Side	W Side	TOTAL
7:00 AM	0	1	1	1	3
7:15 AM	1	1	1	0	3
7:30 AM	1	1	0	0	2
7:45 AM	0	1	1	0	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	1	2
8:45 AM	0	1	1	1	3
TOTAL	3	5	4	3	15
AM BEGIN PEAK HR	7:30 AM				
4:00 PM	0	0	1	1	2
4:15 PM	2	0	0	1	3
4:30 PM	0	0	0	0	0
4:45 PM	1	0	1	3	5
5:00 PM	2	1	0	0	3
5:15 PM	2	0	2	3	7
5:30 PM	1	0	1	1	3
5:45 PM	0	1	0	0	1
TOTAL	8	2	5	9	24
PM BEGIN PEAK HR	4:00 PM				

PEDESTRIAN + BIKE CROSSINGS					
N Side	S Side	E Side	W Side	TOTAL	
0	1	1	1	3	
1	1	1	0	3	
1	1	0	0	2	
0	1	1	0	2	
0	0	0	0	0	
0	0	0	0	0	
1	0	0	1	2	
0	1	1	1	3	
3	5	4	3	15	
AM BEGIN PEAK HR	7:30 AM				
4:00 PM	0	0	1	1	2
4:15 PM	2	0	0	1	3
4:30 PM	0	0	0	0	0
4:45 PM	1	0	1	3	5
5:00 PM	2	1	0	0	3
5:15 PM	2	0	2	3	7
5:30 PM	1	0	1	1	3
5:45 PM	0	1	0	0	1
TOTAL	8	2	5	9	24
PM BEGIN PEAK HR	4:00 PM				

PEDESTRIAN CROSSINGS					
N Side	S Side	E Side	W Side	TOTAL	
0	1	0	0	1	
1	0	0	0	1	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
1	0	0	1	2	
0	0	0	0	0	
2	2	0	1	5	
AM BEGIN PEAK HR	7:30 AM				
4:00 PM	0	1	0	1	2
4:15 PM	2	0	0	1	3
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	3	4
5:00 PM	2	1	0	0	3
5:15 PM	2	0	1	3	6
5:30 PM	1	0	1	1	3
5:45 PM	0	1	0	0	1
TOTAL	7	2	4	9	22
PM BEGIN PEAK HR	4:00 PM				

BICYCLE CROSSINGS					
NS	SS	ES	WS	TOTAL	
0	0	1	1	2	
0	1	1	0	2	
1	0	0	0	1	
0	1	1	0	2	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	1	1	1	3	
1	3	4	2	10	
AM BEGIN PEAK HR	7:30 AM				
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	1	0	1	0	2
PM BEGIN PEAK HR	4:00 PM				

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Feb 25, 20	LOCATION: NORTH & SOUTH: EAST & WEST:	Hemet Sanderson Stetson	PROJECT #: LOCATION #: CONTROL:	SC2540 3 SIGNAL
---------------------------------	---------------------------------------------	-------------------------------	---------------------------------------	-----------------------

NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼	
--------	----------------------------------	--------------------------------	--

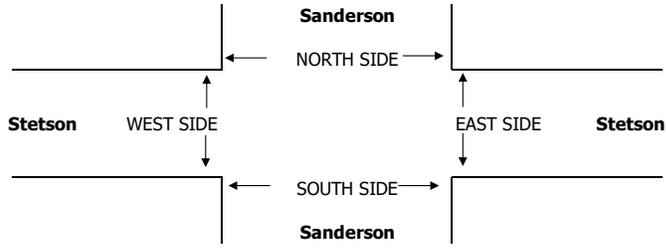
Add U-Turns to Left Turns

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	1	1	2	0	1	2	0	1	2	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0

AM	7:00 AM	3	144	73	19	137	14	17	60	1	94	98	26	686
	7:15 AM	5	122	118	14	178	20	11	66	2	122	103	25	786
	7:30 AM	7	184	175	14	219	26	18	79	2	116	188	23	1,051
	7:45 AM	12	191	221	15	152	20	12	72	1	128	193	17	1,034
	8:00 AM	7	170	141	12	137	23	19	107	2	74	124	24	840
	8:15 AM	3	146	104	25	110	31	32	94	2	86	86	25	744
	8:30 AM	5	113	85	10	131	25	36	106	3	85	100	36	735
	8:45 AM	4	135	76	27	129	29	41	73	0	84	97	27	722
	VOLUMES	46	1,205	993	136	1,193	188	186	657	13	789	989	203	6,598
	APPROACH %	2%	54%	44%	9%	79%	12%	22%	77%	2%	40%	50%	10%	
APP/DEPART	2,244	/	1,594	1,517	/	1,995	856	/	1,786	1,981	/	1,223	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	31	667	655	55	686	89	60	324	7	440	608	89	3,711	
APPROACH %	2%	49%	48%	7%	83%	11%	15%	83%	2%	39%	53%	8%		
PEAK HR FACTOR	0.798			0.801			0.764			0.841			0.883	
APP/DEPART	1,353	/	816	830	/	1,133	391	/	1,034	1,137	/	728	0	
PM	4:00 PM	4	159	147	28	197	32	54	137	3	108	120	34	1,023
	4:15 PM	6	135	122	38	171	27	61	133	3	110	120	41	967
	4:30 PM	4	152	103	39	200	28	56	101	8	106	123	30	950
	4:45 PM	1	137	125	46	223	25	57	105	3	113	104	35	974
	5:00 PM	2	155	125	28	163	19	51	113	11	110	103	38	918
	5:15 PM	7	132	126	39	225	21	45	104	4	123	133	26	985
	5:30 PM	4	147	129	43	201	21	40	115	7	107	100	31	945
	5:45 PM	6	141	119	31	141	29	56	118	4	100	79	38	862
	VOLUMES	34	1,158	996	292	1,521	202	420	926	43	877	882	273	7,624
	APPROACH %	2%	53%	46%	14%	75%	10%	30%	67%	3%	43%	43%	13%	
APP/DEPART	2,188	/	1,851	2,015	/	2,441	1,389	/	2,214	2,032	/	1,118	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	15	583	497	151	791	112	228	476	17	437	467	140	3,914	
APPROACH %	1%	53%	45%	14%	75%	11%	32%	66%	2%	42%	45%	13%		
PEAK HR FACTOR	0.883			0.896			0.915			0.963			0.957	
APP/DEPART	1,095	/	951	1,054	/	1,245	721	/	1,124	1,044	/	594	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
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	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	0	0	0



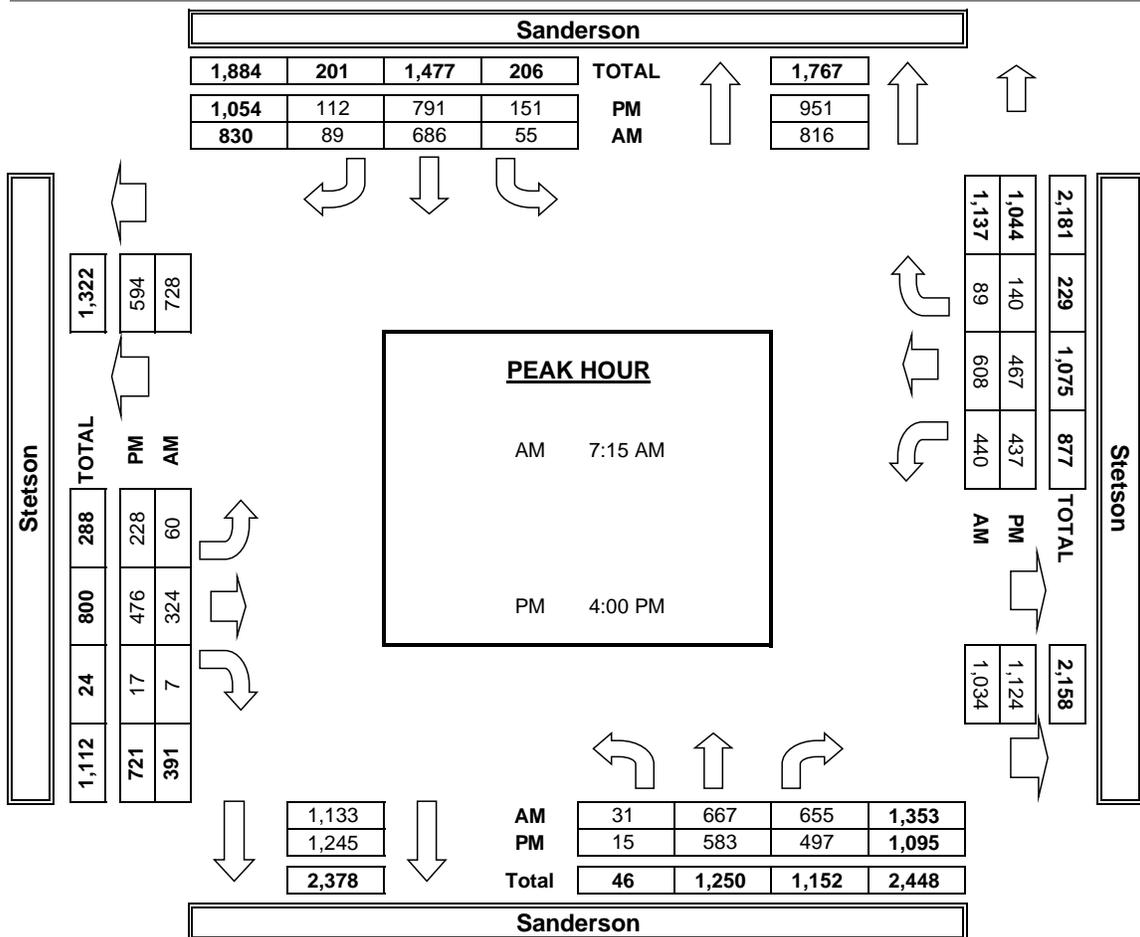
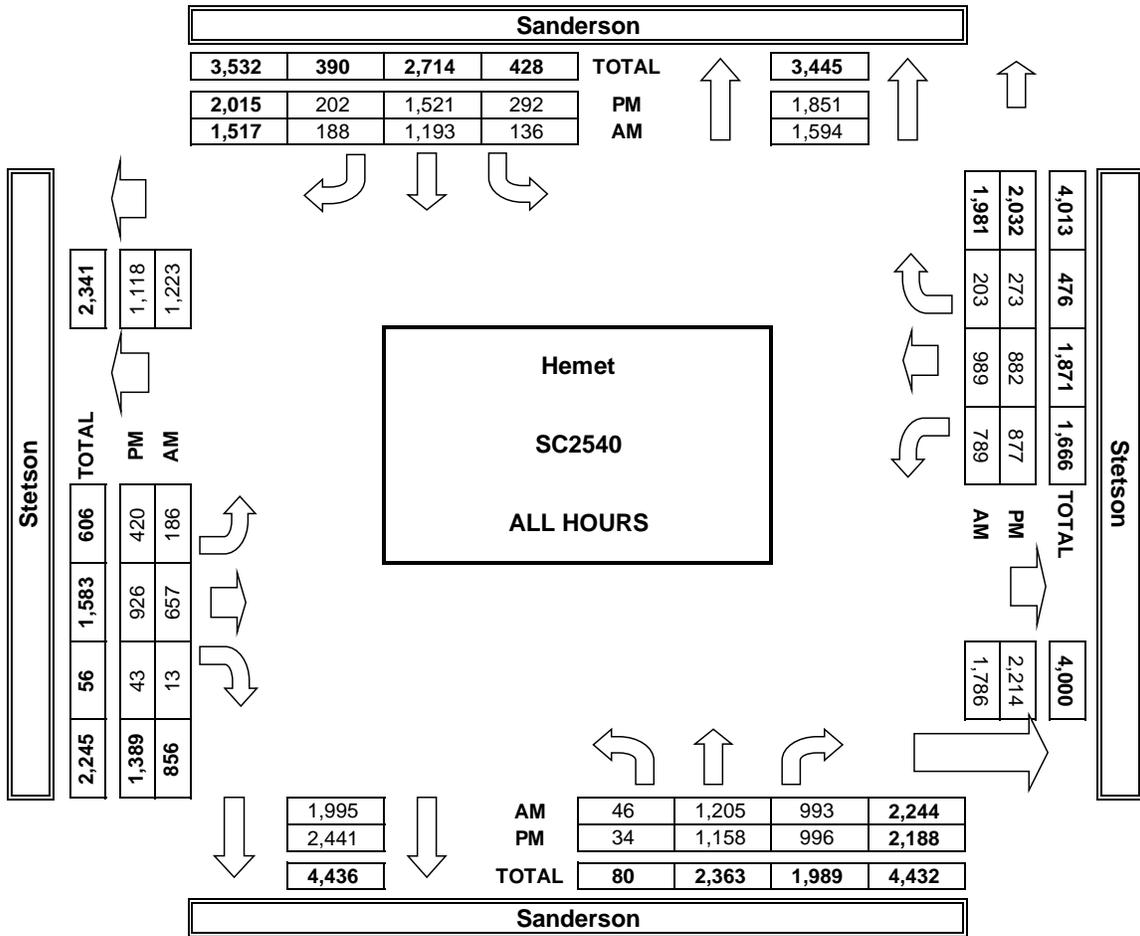
AM	7:00 AM	1	6	5	0	12
	7:15 AM	2	9	7	3	21
	7:30 AM	0	7	5	1	13
	7:45 AM	0	11	7	1	19
	8:00 AM	0	7	3	0	10
	8:15 AM	0	3	1	0	4
	8:30 AM	0	4	5	0	9
	8:45 AM	0	5	1	1	7
TOTAL	3	52	34	6	95	
AM BEGIN PEAK HR	7:15 AM					
PM	4:00 PM	1	3	0	0	4
	4:15 PM	0	10	8	1	19
	4:30 PM	0	8	5	5	18
	4:45 PM	0	5	3	1	9
	5:00 PM	1	11	7	0	19
	5:15 PM	1	2	2	1	6
	5:30 PM	0	3	2	1	6
	5:45 PM	4	2	1	0	7
TOTAL	7	44	28	9	88	
PM BEGIN PEAK HR	4:00 PM					

PEDESTRIAN + BIKE CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	6	5	0	12
2	9	7	3	21
0	7	5	1	13
0	11	7	1	19
0	7	3	0	10
0	3	1	0	4
0	4	5	0	9
0	5	1	1	7
3	52	34	6	95
7:15 AM				
1	3	0	0	4
0	10	8	1	19
0	8	5	5	18
0	5	3	1	9
1	11	7	0	19
1	2	2	1	6
0	3	2	1	6
4	2	1	0	7
7	44	28	9	88
4:00 PM				

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	5	5	0	11
1	5	1	2	9
0	5	4	1	10
0	7	6	1	14
0	4	1	0	5
0	3	1	0	4
0	3	3	0	6
0	5	1	1	7
2	37	22	5	66
1	21	12	4	38
0	1	0	0	1
0	9	6	1	16
0	6	4	4	14
0	4	3	0	7
1	8	7	0	16
0	2	2	0	4
0	2	2	1	5
4	2	1	0	7
5	34	25	6	70
0	20	13	5	38

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
0	1	0	0	1
1	4	6	1	12
0	2	1	0	3
0	4	1	0	5
0	3	2	0	5
0	0	0	0	0
0	1	2	0	3
0	0	0	0	0
1	15	12	1	29
1	2	0	0	3
0	1	2	0	3
0	2	1	1	4
0	1	0	1	2
0	3	0	0	3
1	0	0	1	2
0	1	0	0	1
0	0	0	0	0
2	10	3	3	18

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Feb 25, 20	LOCATION: NORTH & SOUTH: EAST & WEST:	Hemet Sanderson Page Plaza Place	PROJECT #: LOCATION #: CONTROL:	SC2540 4 SIGNAL
---------------------------------	---------------------------------------------	----------------------------------------	---------------------------------------	-----------------------

NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼	<input checked="" type="checkbox"/> Add U-Turns to Left Turns
--------	----------------------------------	----------------------------------	---------------------------------------------------------------

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	X	X		1	1.5	X	1.5	X	X	X	

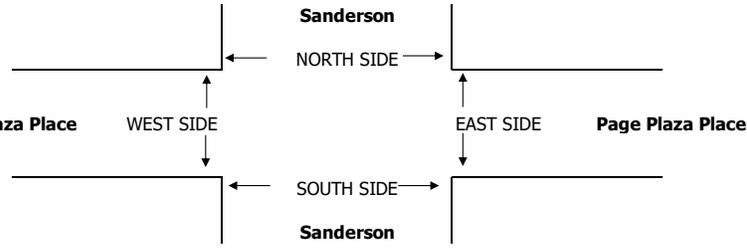
U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0

AM	7:00 AM	5	208	0	0	186	16	12	0	5	0	0	0	432
	7:15 AM	8	235	0	0	260	23	12	0	11	0	0	0	549
	7:30 AM	10	324	0	0	301	23	24	0	12	0	0	0	694
	7:45 AM	10	396	0	0	266	21	23	0	30	0	0	0	746
	8:00 AM	15	343	0	0	207	24	15	0	13	0	0	0	617
	8:15 AM	12	214	0	0	162	31	30	0	13	0	0	0	462
	8:30 AM	9	205	0	0	185	45	23	0	8	0	0	0	475
	8:45 AM	15	184	0	0	158	33	18	0	3	0	0	0	411
	VOLUMES	84	2,109	0	0	1,725	216	157	0	95	0	0	0	4,386
	APPROACH %	4%	96%	0%	0%	89%	11%	62%	0%	38%	0%	0%	0%	
APP/DEPART	2,193	/	2,266	1,941	/	1,820	252	/	0	0	/	300	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	43	1,298	0	0	1,034	91	74	0	66	0	0	0	2,606	
APPROACH %	3%	97%	0%	0%	92%	8%	53%	0%	47%	0%	0%	0%		
PEAK HR FACTOR	0.826			0.868			0.660			0.000			0.873	
APP/DEPART	1,341	/	1,372	1,125	/	1,100	140	/	0	0	/	134	0	
PM	4:00 PM	5	230	0	0	227	52	58	0	19	0	0	0	591
	4:15 PM	13	223	0	0	261	59	51	0	12	0	0	0	619
	4:30 PM	19	229	0	0	241	52	51	0	14	0	0	0	606
	4:45 PM	25	214	0	0	249	58	54	0	20	0	0	0	620
	5:00 PM	18	242	0	0	235	55	48	0	23	0	0	0	621
	5:15 PM	19	210	0	0	271	50	49	0	16	0	0	0	615
	5:30 PM	19	212	0	0	253	54	33	0	21	0	0	0	592
	5:45 PM	20	233	0	0	227	37	53	0	18	0	0	0	588
	VOLUMES	138	1,793	0	0	1,964	417	397	0	143	0	0	0	4,852
	APPROACH %	7%	93%	0%	0%	82%	18%	74%	0%	26%	0%	0%	0%	
APP/DEPART	1,931	/	2,190	2,381	/	2,108	540	/	0	0	/	554	0	
BEGIN PEAK HR	4:15 PM													
VOLUMES	75	908	0	0	986	224	204	0	69	0	0	0	2,466	
APPROACH %	8%	92%	0%	0%	81%	19%	75%	0%	25%	0%	0%	0%		
PEAK HR FACTOR	0.945			0.945			0.922			0.000			0.993	
APP/DEPART	983	/	1,112	1,210	/	1,056	273	/	0	0	/	298	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
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	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	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	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
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	0	0	0	0
0	0	0	0	0
1	0	0	0	1



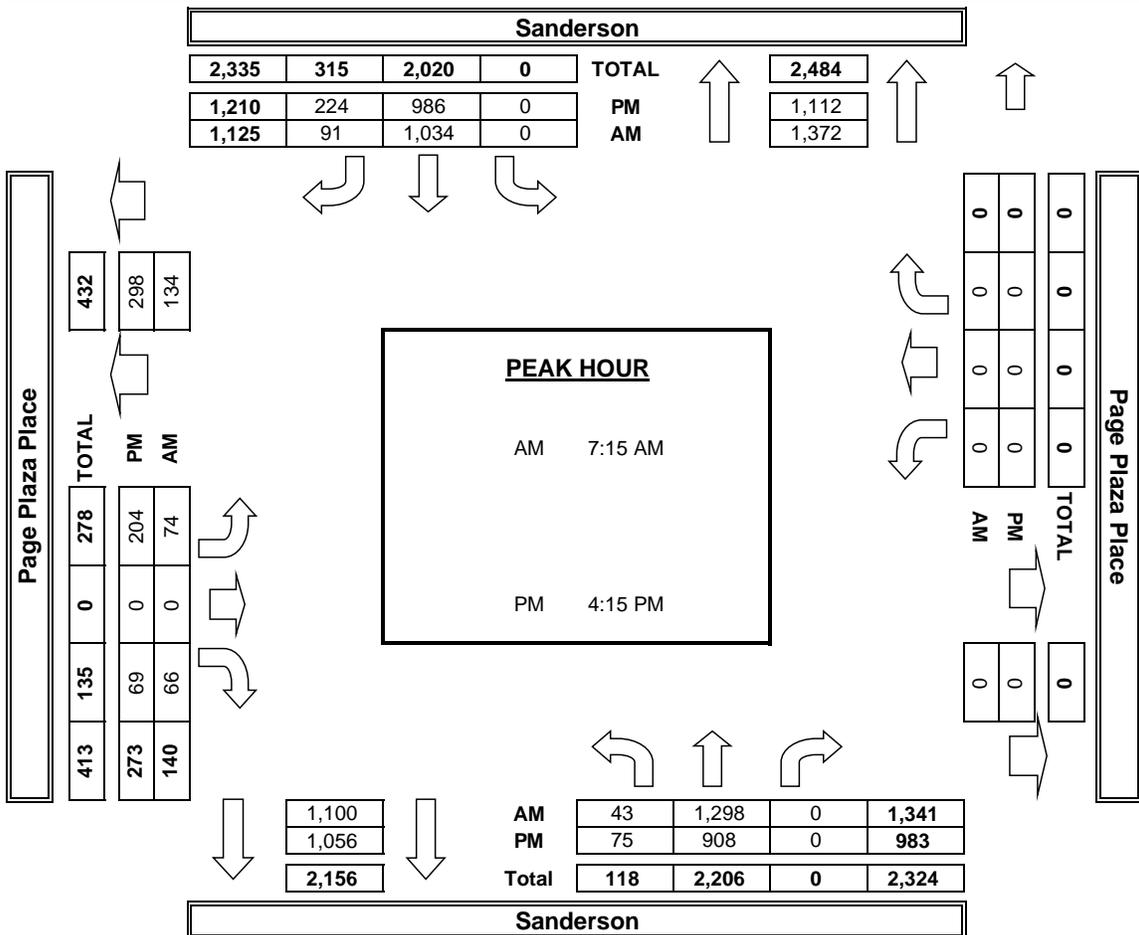
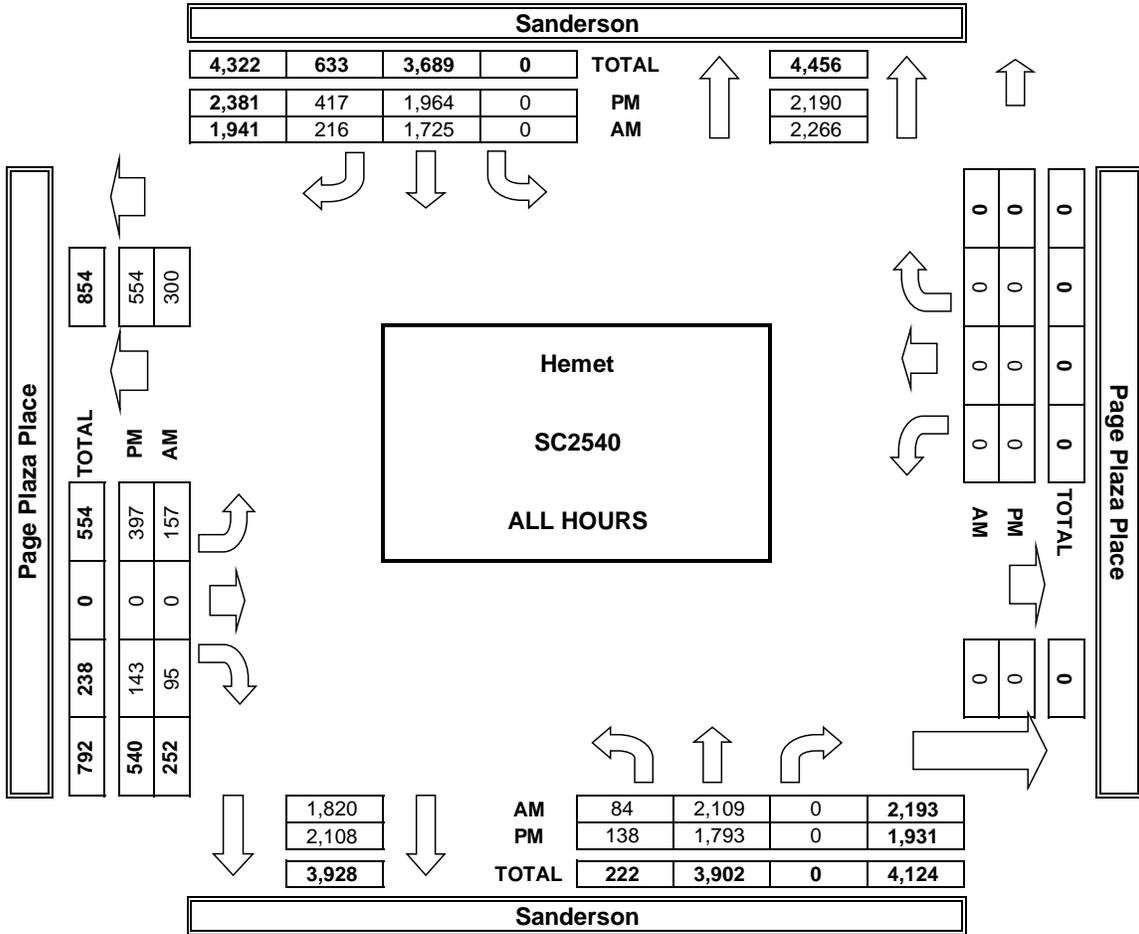
AM	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	0	4	4
	7:30 AM	0	0	0	4	4
	7:45 AM	0	0	0	6	6
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	1	0	1
	8:45 AM	0	0	0	3	3
TOTAL	0	0	1	18	19	
AM BEGIN PEAK HR	7:15 AM					
PM	4:00 PM	0	0	0	2	2
	4:15 PM	0	0	0	2	2
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	0	2	2
	5:00 PM	0	0	1	2	3
	5:15 PM	0	0	1	4	5
	5:30 PM	0	0	0	1	1
	5:45 PM	0	0	0	4	4
TOTAL	0	0	2	17	19	
PM BEGIN PEAK HR	4:15 PM					

PEDESTRIAN + BIKE CROSSINGS					
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	
0	0	0	1	1	
0	0	0	4	4	
0	0	0	4	4	
0	0	0	6	6	
0	0	0	0	0	
0	0	0	0	0	
0	0	1	0	1	
0	0	0	3	3	
0	0	1	18	19	
7:15 AM					
0	0	0	2	2	
0	0	0	2	2	
0	0	0	0	0	
0	0	0	2	2	
0	0	1	2	3	
0	0	1	4	5	
0	0	0	1	1	
0	0	0	4	4	
0	0	2	17	19	
4:15 PM					
0	0	0	5	5	

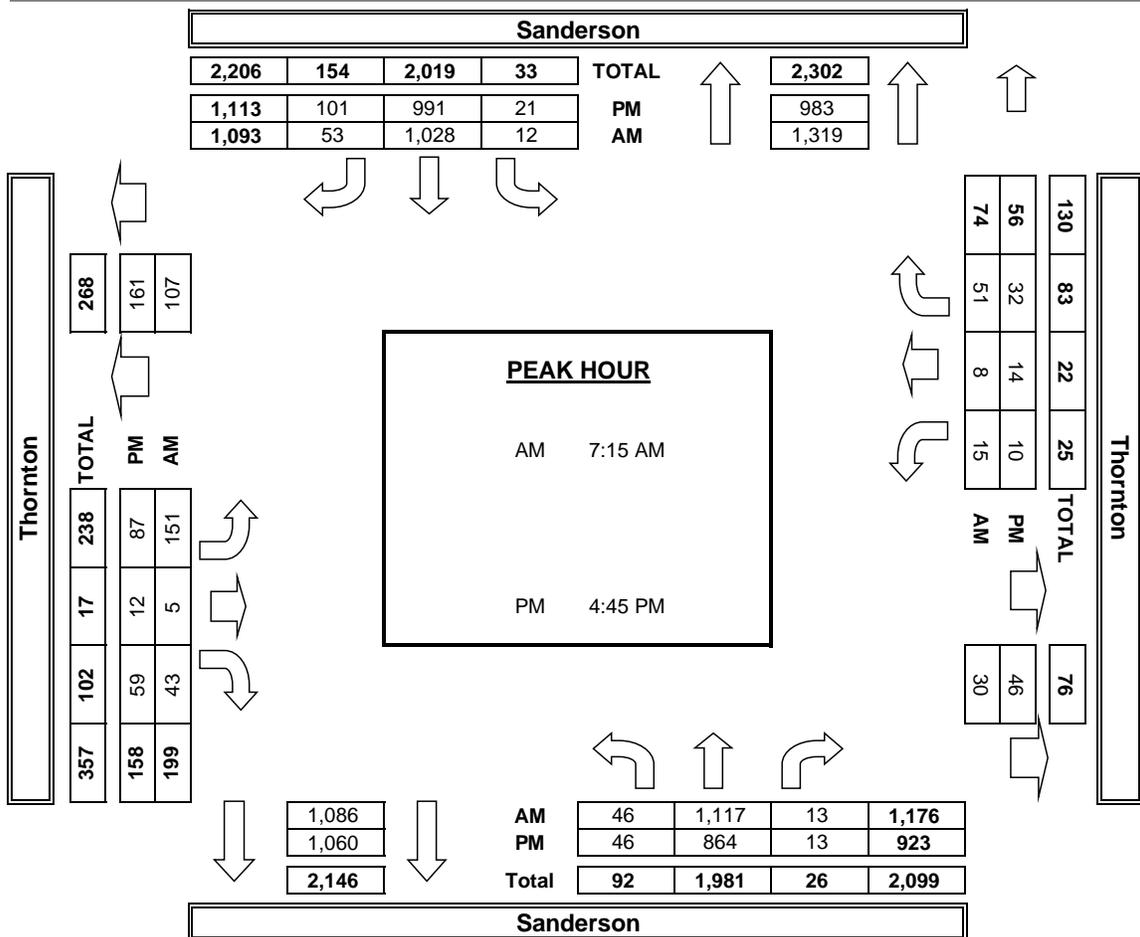
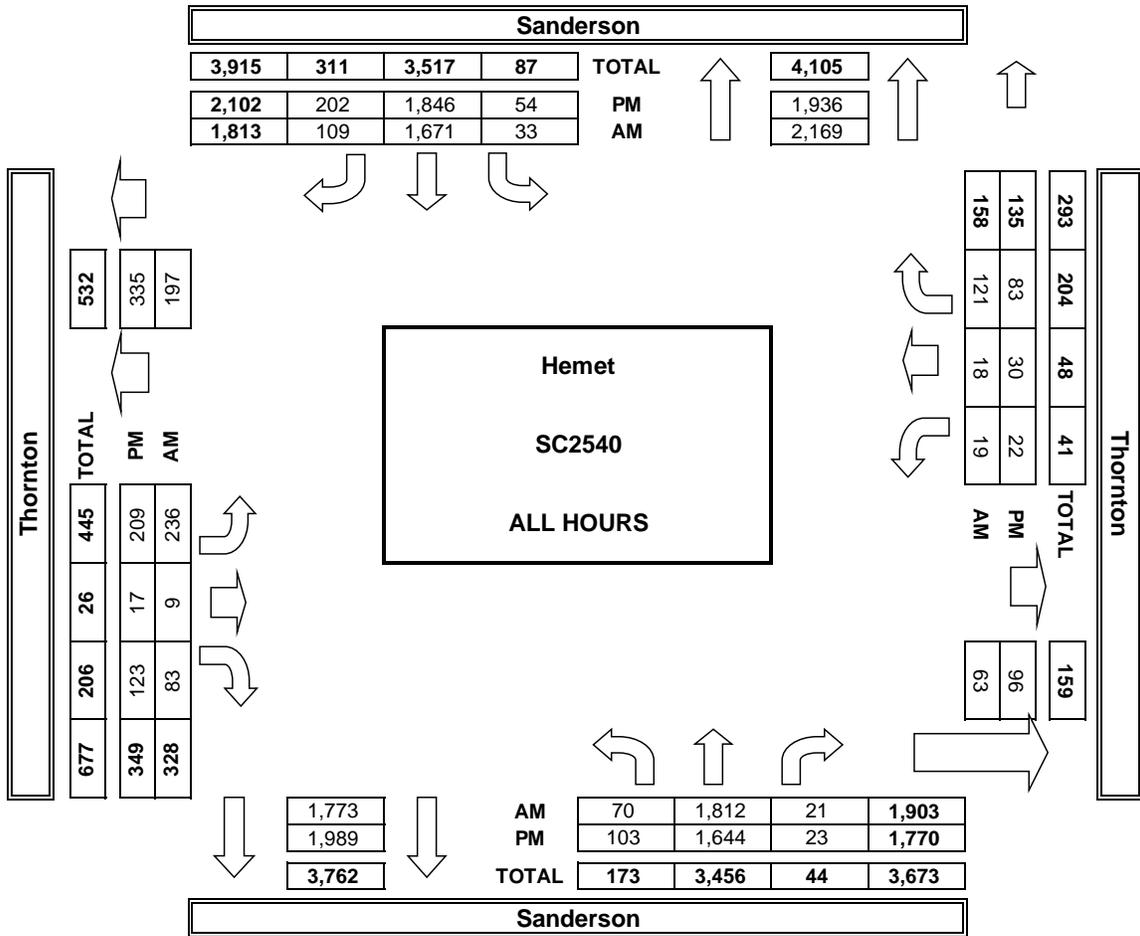
PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	0	0	1	1
0	0	0	2	2
0	0	0	1	1
0	0	0	4	4
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	3	3
0	0	0	3	3
0	0	0	11	11
0	0	0	7	7
0	0	0	2	2
0	0	0	2	2
0	0	0	0	0
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	1	1
0	0	0	3	3
0	0	0	14	14
0	0	0	5	5

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	0	0	2	2
0	0	0	3	3
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	1	1	2
0	0	0	0	0
0	0	0	1	1
0	0	2	3	5

AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Feb 25, 20	LOCATION: NORTH & SOUTH: EAST & WEST:	Hemet Sanderson Mustang	PROJECT #: LOCATION #: CONTROL:	SC2540 6 SIGNAL
---------------------------------	---------------------------------------------	-------------------------------	---------------------------------------	-----------------------

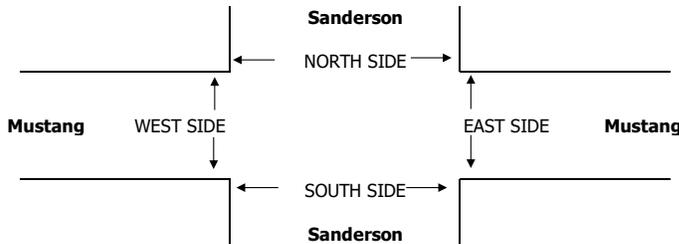
NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N ▼ S	▶ E
--------	----------------------------------	-----	------------	-----

Add U-Turns to Left Turns

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Sanderson			Sanderson			Mustang			Mustang			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	1.5	1.5	1.5	0.5	1	0	1	0	
AM													
7:00 AM	14	150	0	0	168	35	29	0	21	1	2	2	422
7:15 AM	37	152	1	3	194	76	66	0	33	2	2	7	573
7:30 AM	75	210	1	1	184	147	126	0	65	9	9	3	830
7:45 AM	60	215	1	1	139	137	156	0	54	3	7	6	779
8:00 AM	30	180	1	3	161	34	49	0	39	6	6	5	514
8:15 AM	17	149	1	2	145	29	38	0	64	3	4	4	456
8:30 AM	19	146	1	1	133	22	27	0	15	1	1	5	371
8:45 AM	15	144	0	1	123	28	26	0	10	0	0	4	351
VOLUMES	267	1,346	6	12	1,247	508	517	0	301	25	31	36	4,296
APPROACH %	16%	83%	0%	1%	71%	29%	63%	0%	37%	27%	34%	39%	
APP/DEPART	1,619	/	1,899	1,767	/	1,575	818	/	18	92	/	804	0
BEGIN PEAK HR	7:15 AM												
VOLUMES	202	757	4	8	678	394	397	0	191	20	24	21	2,696
APPROACH %	21%	79%	0%	1%	63%	36%	68%	0%	32%	31%	37%	32%	
PEAK HR FACTOR	0.842			0.813			0.700			0.774			0.812
APP/DEPART	963	/	1,175	1,080	/	890	588	/	12	65	/	619	0
PM													
4:00 PM	23	153	0	1	194	35	50	0	25	2	2	1	486
4:15 PM	21	171	0	8	192	33	43	0	18	3	4	5	498
4:30 PM	20	167	0	3	225	28	31	1	34	2	2	4	517
4:45 PM	23	172	0	0	220	41	40	0	20	1	1	3	521
5:00 PM	26	194	0	2	214	36	51	0	27	2	1	4	557
5:15 PM	30	187	0	3	212	64	51	0	16	1	1	3	568
5:30 PM	27	173	0	1	222	51	44	0	20	0	5	2	545
5:45 PM	20	167	0	3	158	49	48	0	13	3	2	3	466
VOLUMES	190	1,384	0	21	1,637	337	358	1	173	14	18	25	4,158
APPROACH %	12%	88%	0%	1%	82%	17%	67%	0%	33%	25%	32%	44%	
APP/DEPART	1,574	/	1,778	1,995	/	1,824	532	/	11	57	/	545	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	106	726	0	6	868	192	186	0	83	4	8	12	2,191
APPROACH %	13%	87%	0%	1%	81%	18%	69%	0%	31%	17%	33%	50%	
PEAK HR FACTOR	0.945			0.955			0.862			0.857			0.964
APP/DEPART	832	/	928	1,066	/	955	269	/	2	24	/	306	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
2	0	0	0	2

0	0	0	0	0
0	4	0	0	4
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	2	0	0	2
0	1	0	0	1
0	2	0	0	2
0	11	0	0	11



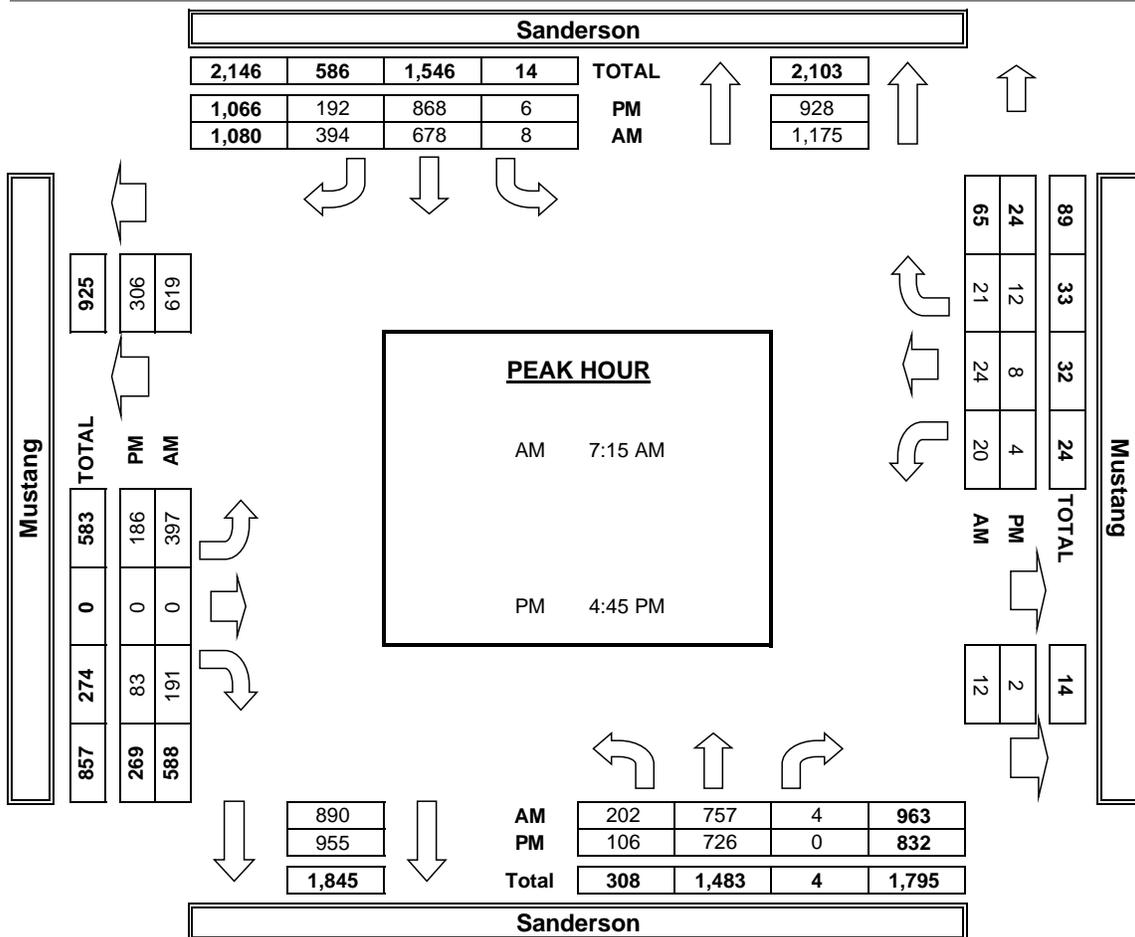
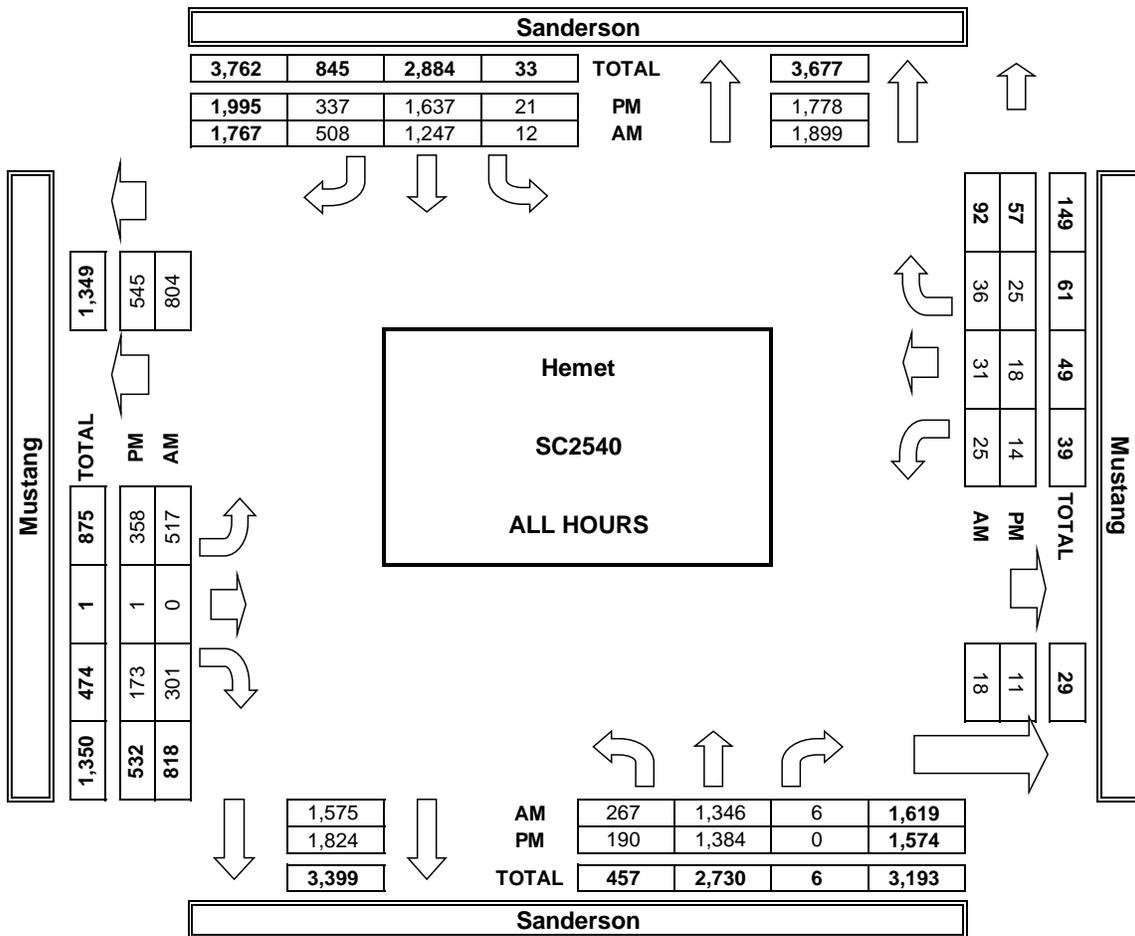
	AM	PM
7:00 AM		
7:15 AM		
7:30 AM		
7:45 AM		
8:00 AM		
8:15 AM		
8:30 AM		
8:45 AM		
TOTAL		
AM BEGIN PEAK HR		
4:00 PM		
4:15 PM		
4:30 PM		
4:45 PM		
5:00 PM		
5:15 PM		
5:30 PM		
5:45 PM		
TOTAL		
PM BEGIN PEAK HR		

PEDESTRIAN + BIKE CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	2	0	1	3
0	4	2	3	9
0	13	1	1	15
0	20	0	0	20
0	0	0	0	0
3	3	0	0	6
0	0	0	0	0
0	0	0	0	0
3	42	3	5	53
7:15 AM				
0	7	0	1	8
0	0	0	0	0
0	2	0	0	2
0	0	0	1	1
0	2	0	0	2
0	2	0	0	2
3	0	1	0	4
1	1	0	0	2
4	14	1	2	21
4:45 PM				

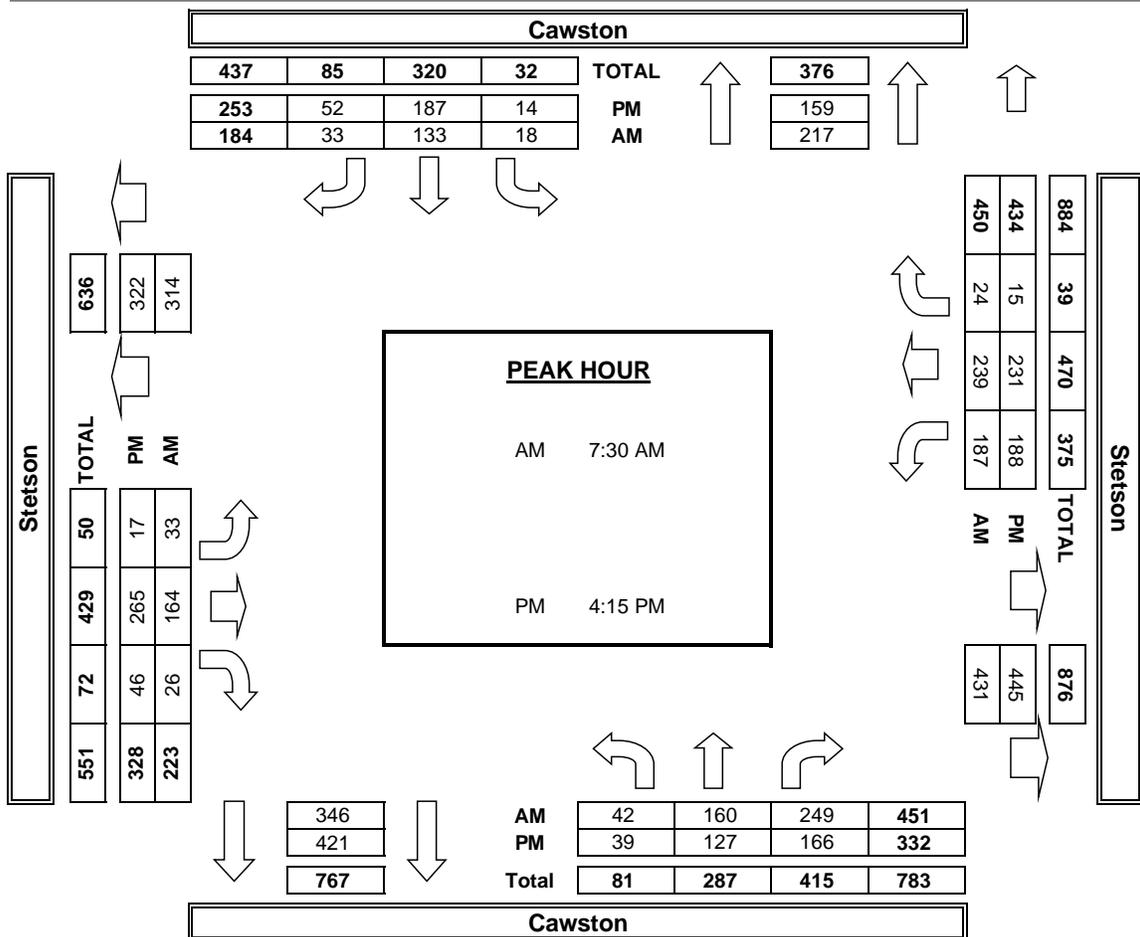
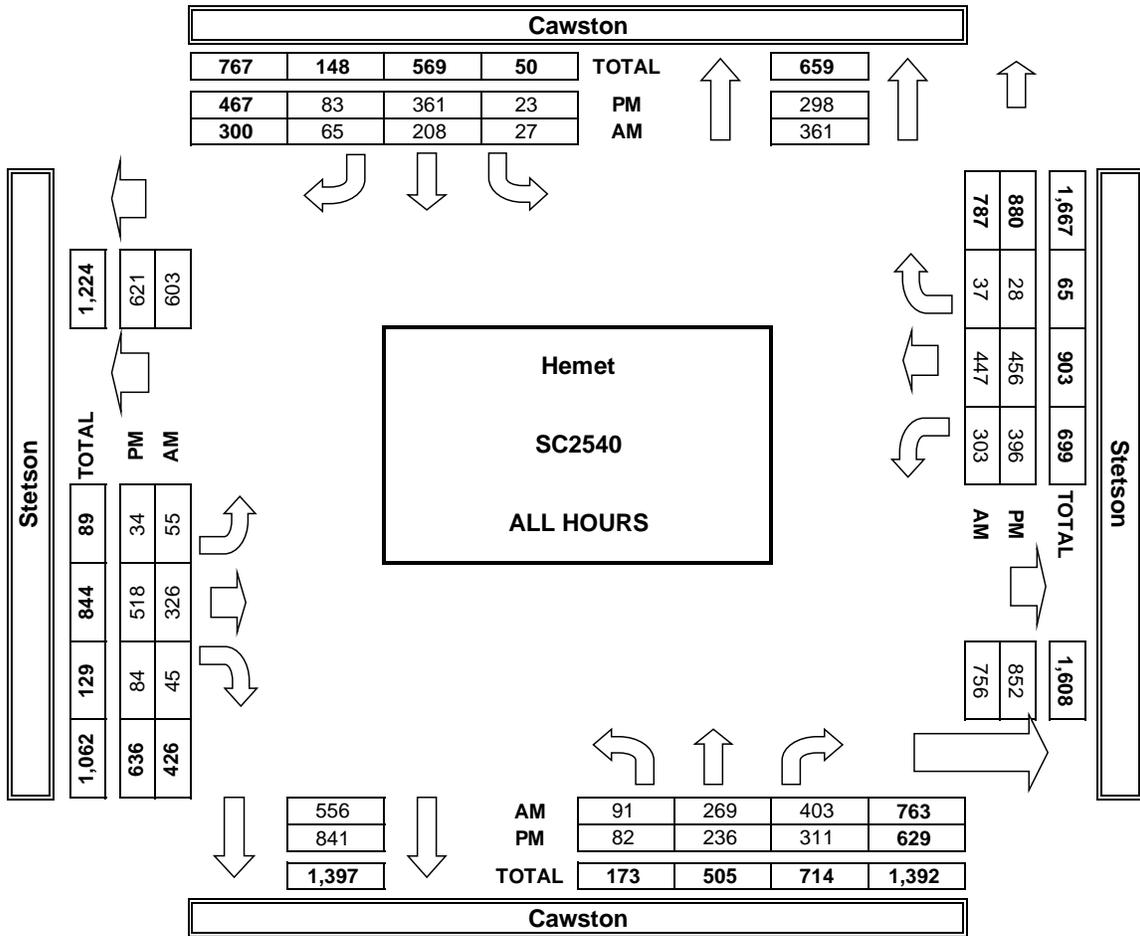
PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
0	2	0	1	3
0	2	0	3	5
0	11	0	1	12
0	20	0	0	20
0	0	0	0	0
3	3	0	0	6
0	0	0	0	0
0	0	0	0	0
3	38	0	5	46
0	33	0	4	37
0	7	0	1	8
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
0	2	0	0	2
0	2	0	0	2
3	0	1	0	4
1	1	0	0	2
4	14	1	1	20
3	4	1	0	8

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
0	0	0	0	0
0	2	2	0	4
0	2	1	0	3
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	4	3	0	7
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1

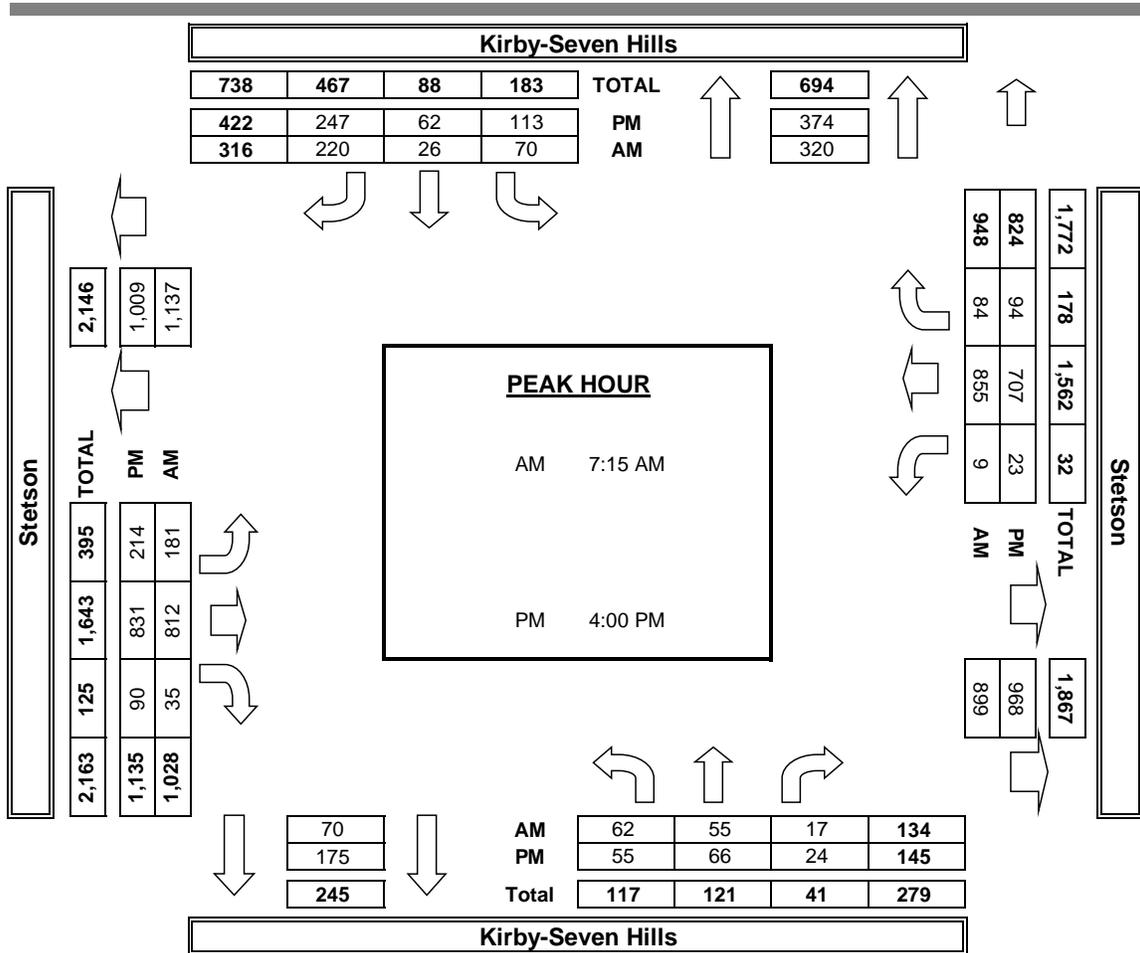
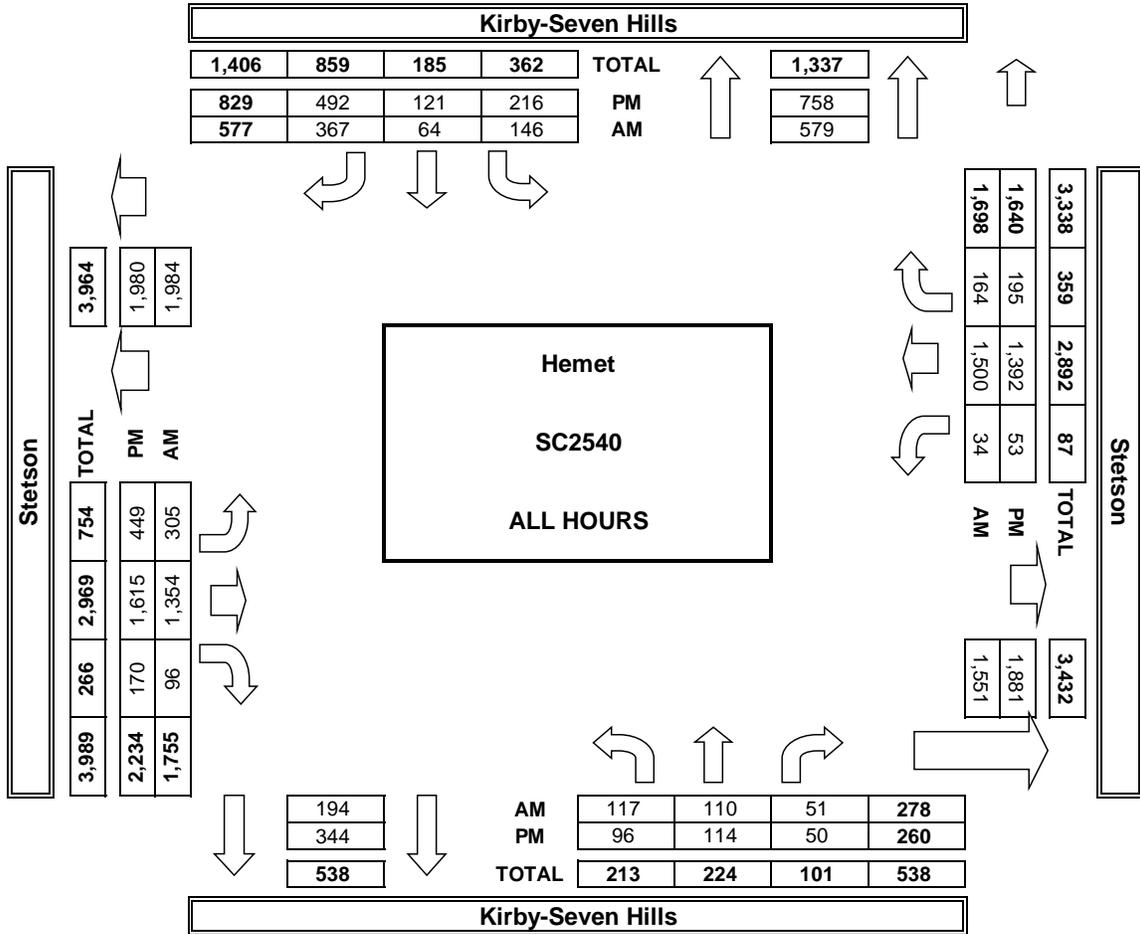
AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Feb 25, 20	LOCATION: NORTH & SOUTH: EAST & WEST:	Hemet Lyon Stetson	PROJECT #: SC2540	LOCATION #: 9	CONTROL: SIGNAL
---------------------------------	----------------------------------------------------	--------------------------	-----------------------------	-------------------------	---------------------------

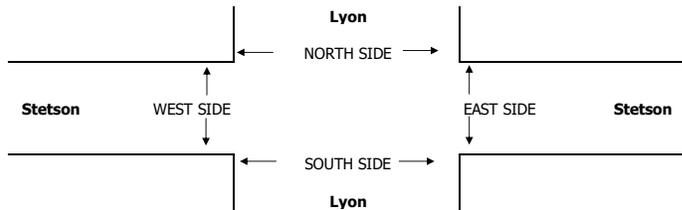
NOTES:	AM	
	PM	
	MD	
	OTHER	



LANES:	NORTHBOUND Lyon			SOUTHBOUND Lyon			EASTBOUND Stetson			WESTBOUND Stetson			TOTAL
	NL 1	NT 1	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
7:00 AM	28	9	4	9	8	8	7	113	11	5	152	4	358
7:15 AM	27	9	3	13	10	25	5	164	10	6	160	11	443
7:30 AM	55	10	2	8	12	23	9	194	19	3	220	12	567
7:45 AM	40	8	6	7	8	20	17	213	20	4	186	12	541
8:00 AM	17	9	5	7	4	17	14	213	19	4	159	8	476
8:15 AM	22	9	7	7	7	16	3	159	17	1	137	11	396
8:30 AM	32	13	5	11	11	18	15	160	8	5	133	14	425
8:45 AM	25	15	2	7	5	17	9	141	8	6	169	11	415
VOLUMES	246	82	34	69	65	144	79	1,357	112	34	1,316	83	3,621
APPROACH %	68%	23%	9%	25%	23%	52%	5%	88%	7%	2%	92%	6%	
APP/DEPART	362	/	244	278	/	211	1,548	/	1,460	1,433	/	1,706	0
BEGIN PEAK HR	7:15 AM												
VOLUMES	139	36	16	35	34	85	45	784	68	17	725	43	2,027
APPROACH %	73%	19%	8%	23%	22%	55%	5%	87%	8%	2%	92%	5%	
PEAK HR FACTOR	0.713												
APP/DEPART	191	/	124	154	/	119	897	/	835	785	/	949	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	183	99	54	104	80	160	131	1,622	137	32	1,307	98	4,007
APPROACH %	54%	29%	16%	30%	23%	47%	7%	86%	7%	2%	91%	7%	
APP/DEPART	336	/	328	344	/	249	1,890	/	1,780	1,437	/	1,650	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	92	44	34	48	36	77	65	831	73	19	654	50	2,023
APPROACH %	54%	26%	20%	30%	22%	48%	7%	86%	8%	3%	90%	7%	
PEAK HR FACTOR	0.654												
APP/DEPART	170	/	159	161	/	128	969	/	913	723	/	823	0

U-TURNS				
NB	SB	EB	WB	TTL
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	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	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	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	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
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0



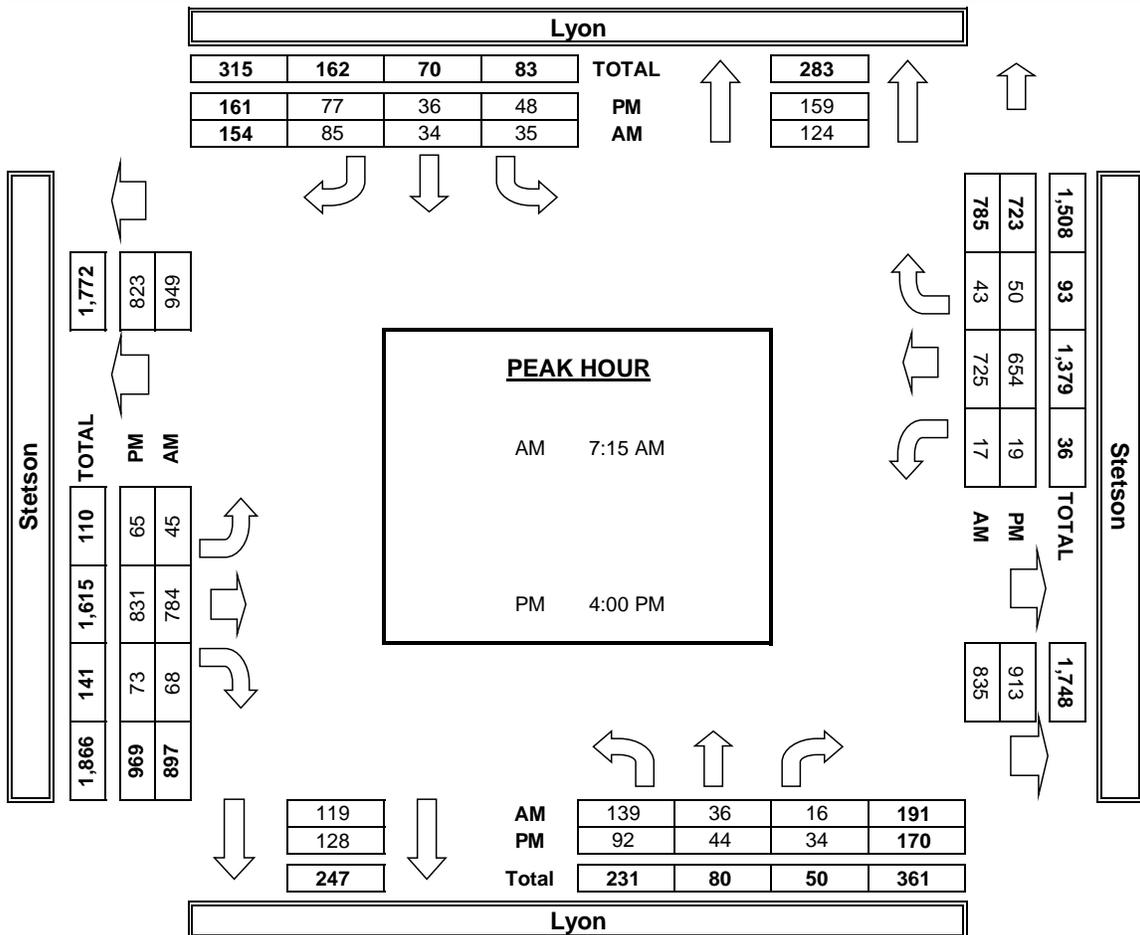
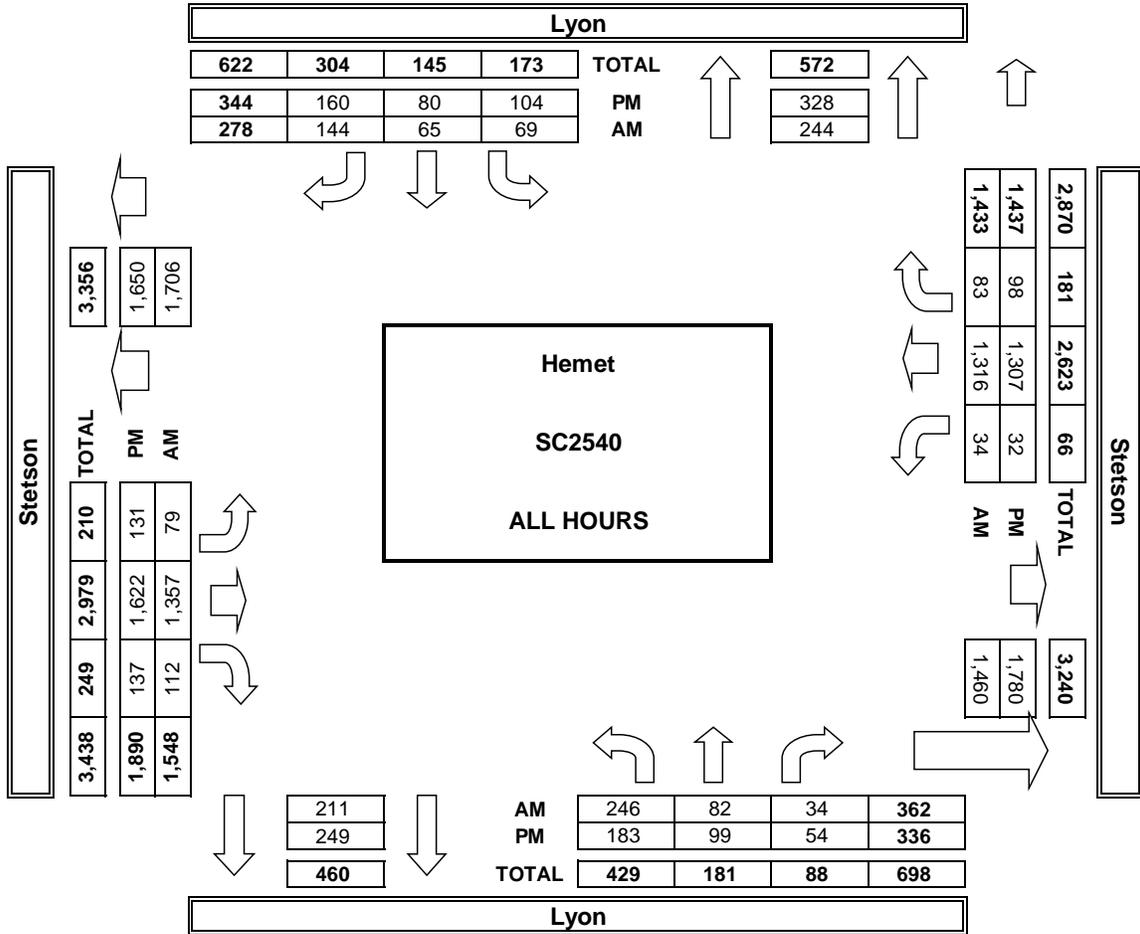
Time	N Side	S Side	E Side	W Side	TOTAL
7:00 AM	1	1	0	0	2
7:15 AM	3	0	0	0	3
7:30 AM	6	1	0	0	7
7:45 AM	2	2	0	0	4
8:00 AM	0	0	0	0	0
8:15 AM	0	6	0	0	6
8:30 AM	0	0	0	0	0
8:45 AM	1	0	0	0	1
TOTAL	13	10	0	0	23
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	8	3	0	0	11
4:15 PM	0	3	0	0	3
4:30 PM	1	1	1	0	3
4:45 PM	0	3	0	0	3
5:00 PM	0	1	0	2	3
5:15 PM	0	1	0	0	1
5:30 PM	0	0	1	0	1
5:45 PM	0	0	1	0	1
TOTAL	9	12	3	2	26
PM BEGIN PEAK HR	4:00 PM				

PEDESTRIAN + BIKE CROSSINGS				
N Side	S Side	E Side	W Side	TOTAL
1	1	0	0	2
3	0	0	0	3
6	1	0	0	7
2	2	0	0	4
0	0	0	0	0
0	6	0	0	6
0	0	0	0	0
1	0	0	0	1
TOTAL	13	10	0	23
AM BEGIN PEAK HR	7:15 AM			
4:00 PM	8	3	0	11
4:15 PM	0	3	0	3
4:30 PM	1	1	1	3
4:45 PM	0	3	0	3
5:00 PM	0	1	0	2
5:15 PM	0	1	0	1
5:30 PM	0	0	1	1
5:45 PM	0	0	1	1
TOTAL	9	12	3	26
PM BEGIN PEAK HR	4:00 PM			

PEDESTRIAN CROSSINGS				
N Side	S Side	E Side	W Side	TOTAL
1	1	0	0	2
2	0	0	0	2
3	1	0	0	4
1	2	0	0	3
0	0	0	0	0
0	3	0	0	3
0	0	0	0	0
0	0	0	0	0
7	7	0	0	14
TOTAL	6	3	0	9
AM BEGIN PEAK HR	7:15 AM			
4:00 PM	8	2	0	10
4:15 PM	0	3	0	3
4:30 PM	1	1	0	2
4:45 PM	0	0	0	0
5:00 PM	0	0	0	2
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL	9	6	0	15
PM BEGIN PEAK HR	4:00 PM			

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
0	0	0	0	0
1	0	0	0	1
3	0	0	0	3
1	0	0	0	1
0	0	0	0	0
0	3	0	0	3
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	1	0	1
0	0	1	0	1
0	6	3	0	9

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:
Tue, Feb 25, 20

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Hemet
Palm
Stetson

PROJECT #: SC2540
LOCATION #: 10
CONTROL: SIGNAL

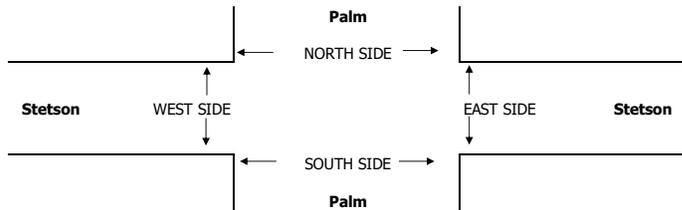
NOTES:	AM	
	PM	
	MD	
	OTHER	

Add U-Turns to Left Turns

LANES:	NORTHBOUND Palm			SOUTHBOUND Palm			EASTBOUND Stetson			WESTBOUND Stetson			TOTAL
	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
7:00 AM	8	6	5	6	9	17	4	104	9	2	124	3	297
7:15 AM	12	15	11	2	17	22	6	134	15	12	137	4	387
7:30 AM	11	15	11	10	10	26	19	159	11	3	209	7	491
7:45 AM	6	14	3	9	9	19	16	186	11	5	169	14	461
8:00 AM	8	14	6	8	18	14	24	175	15	7	138	7	434
8:15 AM	6	9	5	3	20	14	4	147	18	5	133	6	370
8:30 AM	12	14	7	13	19	14	8	143	23	5	126	6	390
8:45 AM	11	10	2	7	5	13	7	122	12	5	151	11	356
VOLUMES	74	97	50	58	107	139	88	1,170	114	44	1,187	58	3,186
APPROACH %	33%	44%	23%	19%	35%	46%	6%	85%	8%	3%	92%	4%	
APP/DEPART	221	/	243	304	/	265	1,372	/	1,278	1,289	/	1,400	0
BEGIN PEAK HR	7:15 AM												
VOLUMES	37	58	31	29	54	81	65	654	52	27	653	32	1,773
APPROACH %	29%	46%	25%	18%	33%	49%	8%	85%	7%	4%	92%	4%	
PEAK HR FACTOR	0.829			0.891			0.901			0.813			0.903
APP/DEPART	126	/	155	164	/	133	771	/	714	712	/	771	0
4:00 PM	6	6	4	11	11	17	10	172	13	7	142	8	407
4:15 PM	3	9	3	15	10	19	15	195	7	4	118	7	405
4:30 PM	3	7	2	19	6	18	8	194	15	9	154	14	449
4:45 PM	6	7	6	10	14	19	7	190	16	9	142	11	437
5:00 PM	6	8	3	13	12	11	5	173	16	8	175	12	442
5:15 PM	10	7	1	7	16	14	13	166	10	5	160	6	415
5:30 PM	8	5	10	11	12	8	10	202	8	8	157	11	450
5:45 PM	2	9	7	8	13	11	8	190	11	6	132	7	404
VOLUMES	44	58	36	94	94	117	76	1,482	96	56	1,180	76	3,409
APPROACH %	32%	42%	26%	31%	31%	38%	5%	90%	6%	4%	90%	6%	
APP/DEPART	138	/	210	305	/	246	1,654	/	1,612	1,312	/	1,341	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	30	27	20	41	54	52	35	731	50	30	634	40	1,744
APPROACH %	39%	35%	26%	28%	37%	35%	4%	90%	6%	4%	90%	6%	
PEAK HR FACTOR	0.837			0.855			0.927			0.903			0.969
APP/DEPART	77	/	102	147	/	134	816	/	792	704	/	716	0

U-TURNS				
NB	SB	EB	WB	TTL
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	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	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	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	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



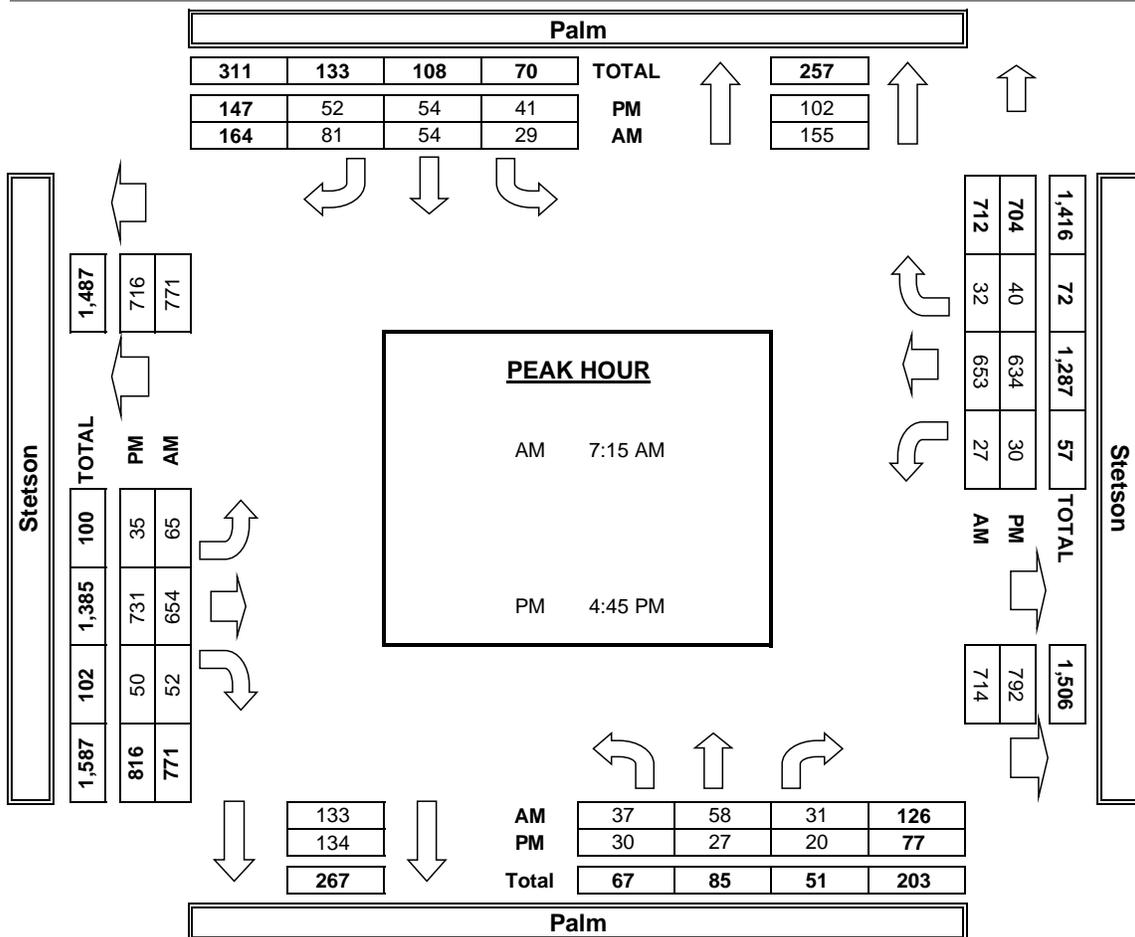
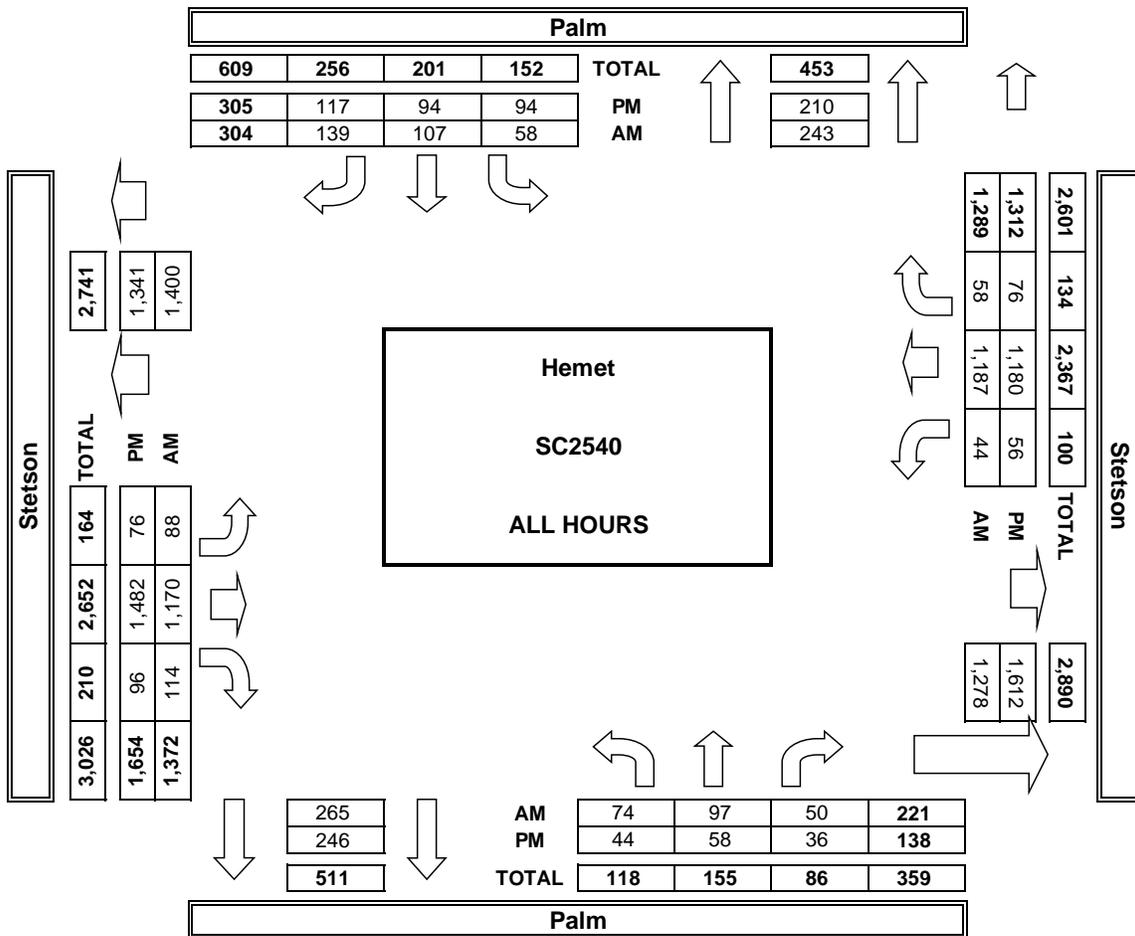
Time	N Side	S Side	E Side	W Side	TOTAL
7:00 AM	2	1	0	3	6
7:15 AM	0	0	0	0	0
7:30 AM	6	0	0	2	8
7:45 AM	4	0	1	1	6
8:00 AM	1	2	0	1	4
8:15 AM	0	3	1	1	5
8:30 AM	1	3	0	1	5
8:45 AM	0	1	0	0	1
TOTAL	14	10	2	9	35
AM BEGIN PEAK HR	7:15 AM				
4:00 PM	1	4	0	1	6
4:15 PM	2	1	0	0	3
4:30 PM	0	3	2	0	5
4:45 PM	0	3	1	1	5
5:00 PM	0	0	3	0	3
5:15 PM	1	1	0	0	2
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL	4	12	6	2	24
PM BEGIN PEAK HR	4:45 PM				

PEDESTRIAN + BIKE CROSSINGS				
N Side	S Side	E Side	W Side	TOTAL
1	1	0	3	5
0	0	0	0	0
3	0	0	1	4
2	0	1	1	4
0	2	0	0	2
0	1	0	0	1
0	2	0	1	3
0	0	0	0	0
6	6	1	6	19
5	2	1	2	10
1	3	0	1	5
2	1	0	0	3
0	0	0	0	0
0	1	0	0	1
0	0	1	0	1
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
4	5	1	1	11
1	1	1	0	3

PEDESTRIAN CROSSINGS				
N Side	S Side	E Side	W Side	TOTAL
1	1	0	3	5
0	0	0	0	0
3	0	0	1	4
2	0	1	1	4
0	2	0	0	2
0	1	0	0	1
0	2	0	1	3
0	0	0	0	0
6	6	1	6	19
5	2	1	2	10
1	3	0	1	5
2	1	0	0	3
0	0	0	0	0
0	1	0	0	1
0	0	1	0	1
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
4	5	1	1	11
1	1	1	0	3

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
1	0	0	0	1
0	0	0	0	0
3	0	0	1	4
2	0	0	0	2
1	0	0	1	2
0	2	1	1	4
1	1	0	0	2
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
8	4	1	3	16
0	1	0	0	1
0	0	0	0	0
0	3	2	0	5
0	2	1	1	4
0	0	2	0	2
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	7	5	1	13

AimTD LLC
TURNING MOVEMENT COUNTS



24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, February 25, 2020
JOB #: SC2540

CITY# Hemet
CLASS1 Stetson Avenue east of Sanderson Ave

AM TIME	EASTBOUND													TOTAL	PM Time	EASTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25	12:00	1	158	16	0	4	1	0	0	1	0	0	0	181	
0:15	0	25	1	0	0	0	0	0	0	0	0	0	0	26	12:15	3	164	18	0	4	0	0	0	0	0	0	0	189	
0:30	0	17	1	0	1	0	0	0	0	0	0	0	0	19	12:30	0	179	11	1	2	0	0	0	1	0	0	0	194	
0:45	0	15	1	0	0	0	0	0	0	0	0	0	0	16	12:45	4	162	16	0	3	0	0	0	0	0	0	0	185	
1:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7	13:00	0	153	23	1	3	1	1	0	0	0	0	0	182	
1:15	0	10	0	0	0	0	0	0	0	0	0	0	0	10	13:15	0	161	12	0	3	4	1	1	0	1	0	0	183	
1:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9	13:30	2	166	17	0	1	3	1	2	0	0	0	0	192	
1:45	0	8	0	0	0	0	0	0	0	0	0	0	0	8	13:45	2	173	19	0	3	1	1	0	0	0	0	0	199	
2:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9	14:00	3	185	20	0	6	4	0	0	0	0	0	0	218	
2:15	0	6	2	0	0	0	0	0	0	0	0	0	0	8	14:15	1	203	24	0	5	2	0	1	1	0	0	0	237	
2:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4	14:30	2	227	17	0	2	3	0	0	0	0	0	0	251	
2:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9	14:45	0	237	20	0	2	2	0	0	0	0	0	0	261	
3:00	0	13	0	0	1	0	0	0	0	0	0	0	0	14	15:00	4	277	26	0	3	3	0	0	0	0	0	1	314	
3:15	0	4	1	0	0	0	0	0	0	0	0	0	0	5	15:15	3	300	20	0	3	1	1	0	0	0	0	1	330	
3:30	0	10	1	0	1	0	0	0	0	0	0	0	0	12	15:30	3	263	28	0	3	2	1	0	0	0	0	0	300	
3:45	0	13	2	0	0	0	0	0	0	0	0	0	0	15	15:45	9	243	24	1	4	8	0	0	0	0	0	0	289	
4:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12	16:00	4	268	28	1	4	4	1	0	1	0	0	0	311	
4:15	0	5	3	0	0	0	0	0	0	0	0	0	0	8	16:15	3	257	15	0	5	2	1	0	0	0	0	0	283	
4:30	0	6	0	1	1	0	0	0	1	0	0	0	0	9	16:30	1	223	31	1	5	2	1	0	0	0	0	0	264	
4:45	0	16	5	0	0	0	0	0	0	0	0	0	0	21	16:45	1	247	26	0	4	3	1	0	1	0	0	0	283	
5:00	0	14	0	0	0	0	0	0	0	1	0	0	0	15	17:00	3	239	30	0	4	1	0	0	0	1	0	0	278	
5:15	0	21	4	0	0	0	0	0	0	0	0	0	0	25	17:15	4	221	24	0	4	5	1	0	0	0	0	0	259	
5:30	0	25	3	0	0	0	0	0	1	0	0	0	0	29	17:30	4	236	26	1	5	4	2	0	0	1	0	1	280	
5:45	0	32	6	0	0	0	0	0	0	0	0	0	0	38	17:45	5	236	24	0	1	1	3	0	0	0	0	0	270	
6:00	0	39	1	0	1	0	0	0	0	0	0	0	0	41	18:00	2	202	20	0	1	2	1	0	0	0	0	1	229	
6:15	0	57	5	0	0	1	0	0	0	0	0	0	0	63	18:15	0	199	27	0	5	4	2	0	0	0	0	0	237	
6:30	0	84	4	1	2	1	1	0	1	0	0	0	1	95	18:30	1	170	16	0	2	0	0	0	0	0	0	0	189	
6:45	0	110	13	0	1	1	0	0	0	0	0	0	0	125	18:45	0	141	11	0	2	1	0	0	0	0	0	0	155	
7:00	1	145	13	0	2	0	0	0	0	0	0	0	0	161	19:00	5	160	18	0	2	0	0	0	0	0	0	0	185	
7:15	0	170	18	0	2	0	0	1	1	0	0	0	1	193	19:15	4	138	16	0	1	1	1	0	0	0	0	0	161	
7:30	0	247	16	0	1	4	0	0	0	0	0	0	0	268	19:30	2	135	13	0	0	0	0	0	0	0	0	0	150	
7:45	1	265	21	0	1	1	1	0	1	0	0	0	0	291	19:45	0	128	9	0	0	1	0	0	0	0	0	0	138	
8:00	4	228	15	1	2	0	0	0	0	0	0	0	1	251	20:00	0	102	12	0	0	0	0	0	0	0	0	0	114	
8:15	0	196	17	2	3	3	0	0	1	0	0	0	0	222	20:15	1	107	5	0	1	0	2	0	0	0	0	0	116	
8:30	1	181	9	0	0	1	0	0	0	0	0	0	0	192	20:30	2	97	10	0	0	1	0	0	0	0	0	0	110	
8:45	2	157	23	0	4	1	0	0	1	0	0	0	0	188	20:45	1	92	9	1	0	0	0	0	0	0	0	0	103	
9:00	0	117	15	0	2	2	0	0	0	0	0	0	0	136	21:00	2	90	8	0	0	0	1	0	0	0	0	0	101	
9:15	2	141	17	0	3	0	0	0	2	0	0	0	0	165	21:15	2	76	5	0	0	0	0	0	1	0	0	0	84	
9:30	3	125	19	0	2	2	1	0	0	0	0	0	0	152	21:30	1	69	7	0	0	1	0	0	0	0	0	0	78	
9:45	1	143	10	0	5	2	0	0	1	0	0	0	0	162	21:45	1	62	3	0	0	0	1	0	0	0	0	0	67	
10:00	3	133	10	0	3	1	1	0	0	0	0	0	0	151	22:00	0	72	7	0	0	0	0	0	0	0	0	0	79	
10:15	2	106	14	0	4	3	0	0	0	0	0	0	0	129	22:15	0	79	3	0	0	0	0	0	0	0	0	0	82	
10:30	0	152	19	0	1	2	1	0	0	0	0	0	1	176	22:30	0	62	1	0	0	0	0	0	0	0	0	0	63	
10:45	2	149	15	0	2	1	0	0	0	0	0	1	0	170	22:45	0	50	3	0	0	1	0	0	0	0	0	0	54	
11:00	2	163	11	0	2	2	0	0	0	0	0	0	0	180	23:00	0	40	2	0	0	0	0	0	0	0	0	0	42	
11:15	0	139	14	0	6	0	0	0	0	0	0	0	0	159	23:15	0	46	3	0	1	0	0	0	0	0	0	0	50	
11:30	0	157	21	0	2	1	0	0	0	0	0	0	0	181	23:30	0	31	3	0	1	0	0	0	0	0	0	0	35	
11:45	3	165	13	0	4	1	1	1	0	0	0	0	0	188	23:45	0	30	3	0	0	0	0	0	0	0	0	0	33	
TOTAL	27	3,879	368	5	57	32	6	3	10	0	1	4	0	4,392	TOTAL	86	7,556	729	7	99	69	24	4	6	3	0	4	1	8,588

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 1,032

PM PEAK HOUR 3:00 PM
PM PEAK VOLUME 1,233

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	113	11,435	1,097	12	156	101	30	7	16	3	1	8	1	12,980
% OF TOTAL	0.9%	88.1%	8.5%	0.1%	1.2%	0.8%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

Class 1 2 3 4 5 6 7 8 9 10 11 12 13

TOTAL: ALL	898	21,804	2,157	28	778	201	73	15	28	9	5	29	4	26,029
% OF TOTAL	3.4%	83.8%	8.3%	0.1%	3.0%	0.8%	0.3%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, February 25, 2020
JOB #: SC2540

CITY# Hemet
CLASS1 Stetson Avenue east of Sanderson Ave

AM TIME	WESTBOUND													TOTAL	PM Time	WESTBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	17	3	0	1	0	0	0	0	0	0	0	0	21	12:00	23	154	11	0	8	2	2	0	0	0	0	0	200	
0:15	0	11	1	0	0	0	0	0	0	0	0	0	0	12	12:15	20	154	13	0	13	2	0	0	0	0	1	0	203	
0:30	0	14	1	0	1	0	0	0	0	0	0	0	0	16	12:30	28	145	15	1	8	2	0	0	0	0	0	0	199	
0:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6	12:45	29	143	8	0	11	1	1	1	0	0	0	0	194	
1:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9	13:00	21	111	14	0	5	5	0	0	0	0	0	0	156	
1:15	0	13	2	0	0	0	0	0	0	0	0	0	0	15	13:15	23	158	19	0	11	1	1	0	0	0	0	0	213	
1:30	0	3	0	0	0	0	0	0	0	0	0	1	0	4	13:30	27	145	15	0	8	1	2	0	0	1	0	1	200	
1:45	0	4	0	0	0	0	0	0	0	0	0	0	0	4	13:45	22	157	7	0	6	0	1	0	0	0	0	0	193	
2:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11	14:00	18	131	10	1	7	3	1	0	0	1	0	1	173	
2:15	1	11	1	0	1	0	0	0	0	0	0	0	0	14	14:15	17	156	12	0	9	1	0	0	1	0	0	1	197	
2:30	0	11	2	0	1	0	0	0	0	0	0	0	0	14	14:30	19	133	15	0	11	1	1	0	0	0	0	1	181	
2:45	0	14	1	0	2	0	0	0	0	0	0	0	0	17	14:45	28	133	12	0	11	0	1	0	1	0	0	1	187	
3:00	0	19	1	0	3	1	0	0	0	0	0	0	0	24	15:00	20	152	15	0	11	4	0	0	1	0	1	1	205	
3:15	0	21	4	0	6	0	0	0	0	0	0	0	0	31	15:15	17	149	11	0	12	3	1	0	1	0	0	1	195	
3:30	0	27	6	0	5	0	0	0	0	0	0	0	0	38	15:30	16	148	18	0	9	3	2	0	0	0	0	1	197	
3:45	1	40	10	0	2	0	0	0	0	0	0	0	0	53	15:45	21	165	20	0	8	1	0	0	0	0	0	0	215	
4:00	0	49	5	0	7	0	0	0	0	0	0	0	0	61	16:00	28	196	14	0	6	2	0	1	0	0	0	0	247	
4:15	0	64	8	0	6	0	0	0	0	0	0	0	0	78	16:15	26	213	15	0	11	2	1	0	1	0	0	0	269	
4:30	0	80	11	0	4	0	0	0	0	0	0	0	0	95	16:30	20	199	11	0	7	1	1	0	0	0	0	1	240	
4:45	0	69	11	0	6	0	0	0	0	0	0	0	0	86	16:45	6	188	19	0	12	3	0	0	0	0	0	0	228	
5:00	0	79	16	0	13	2	0	0	0	0	0	0	0	110	17:00	15	211	14	0	7	1	2	0	0	1	0	0	251	
5:15	2	81	18	0	15	1	0	0	0	0	0	0	0	117	17:15	12	214	9	0	10	1	2	2	0	0	0	1	251	
5:30	0	86	19	0	10	0	0	0	0	0	0	0	0	115	17:30	9	218	14	0	8	1	1	0	0	0	0	0	251	
5:45	2	103	23	0	15	0	1	0	0	1	0	0	0	145	17:45	17	209	9	0	11	0	1	0	0	0	0	0	247	
6:00	4	82	17	0	14	2	0	0	0	0	0	0	0	119	18:00	11	171	10	1	7	2	2	0	0	0	0	1	205	
6:15	0	100	21	0	9	0	0	0	0	0	0	0	0	130	18:15	12	143	17	0	10	1	0	0	0	0	0	0	183	
6:30	1	136	17	1	9	1	0	0	0	0	0	0	0	165	18:30	4	125	17	0	3	0	0	0	0	0	0	0	149	
6:45	3	140	23	1	11	3	0	0	0	0	0	0	0	181	18:45	5	115	19	0	8	2	1	0	0	0	0	0	150	
7:00	1	221	18	1	7	2	0	0	1	0	0	0	0	251	19:00	4	98	9	0	10	1	1	0	0	0	0	0	123	
7:15	4	212	24	0	8	2	1	0	0	0	0	0	0	251	19:15	3	87	11	0	4	0	0	0	0	0	0	0	105	
7:30	2	229	31	0	6	2	2	2	2	1	0	1	0	276	19:30	5	74	10	0	10	0	0	0	0	0	0	0	99	
7:45	8	200	19	1	10	4	3	0	0	0	1	3	1	250	19:45	4	90	8	0	1	0	0	0	0	0	0	0	103	
8:00	14	203	17	1	10	2	1	0	0	0	0	2	0	250	20:00	3	89	5	0	5	1	0	0	0	0	0	0	103	
8:15	6	197	17	0	12	1	1	0	0	0	0	0	0	234	20:15	1	71	8	0	0	1	0	0	0	0	0	0	81	
8:30	10	193	16	0	5	3	0	0	1	0	0	2	0	230	20:30	1	74	9	0	1	0	0	0	0	0	0	0	85	
8:45	8	200	16	0	12	5	0	0	0	0	0	0	0	241	20:45	2	62	6	0	3	0	0	0	0	0	0	0	73	
9:00	10	177	15	0	6	5	1	0	1	0	0	1	0	216	21:00	0	59	2	0	5	0	0	0	0	0	0	0	66	
9:15	16	159	14	4	10	1	3	0	0	0	0	0	0	207	21:15	0	54	0	0	1	0	0	0	0	0	0	0	55	
9:30	15	149	17	0	16	0	2	1	1	0	0	0	0	201	21:30	1	61	1	0	3	0	0	0	0	0	0	0	66	
9:45	10	155	20	0	10	2	1	0	0	0	0	0	0	198	21:45	0	47	3	0	1	0	0	0	0	0	0	0	51	
10:00	9	150	19	1	10	1	0	1	0	0	0	0	0	191	22:00	0	53	6	0	1	0	0	0	0	0	0	0	60	
10:15	8	145	19	1	7	2	0	0	1	0	0	0	0	183	22:15	0	36	4	0	1	0	0	0	0	0	0	0	41	
10:30	10	130	17	1	6	4	0	0	0	0	0	0	0	168	22:30	0	39	5	0	2	0	0	0	0	0	0	0	46	
10:45	10	120	13	1	12	0	1	0	0	0	0	0	0	157	22:45	0	34	2	0	3	0	0	0	0	0	0	0	39	
11:00	20	149	19	0	10	2	0	0	1	1	0	0	0	202	23:00	1	31	1	0	2	0	0	0	0	0	0	0	35	
11:15	21	137	15	0	7	1	0	0	0	0	0	0	0	181	23:15	0	25	3	0	0	0	0	0	0	0	0	0	28	
11:30	27	134	16	0	6	1	1	0	0	0	0	0	0	185	23:30	0	25	0	0	1	0	0	0	0	0	0	0	26	
11:45	23	153	16	0	7	1	0	0	1	0	1	2	0	204	23:45	0	15	1	0	2	0	0	0	0	0	0	0	18	
TOTAL	246	4,709	583	13	318	51	18	4	7	3	3	11	1	5,967	TOTAL	539	5,660	477	3	304	49	25	4	5	3	1	10	2	7,082

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,028

PM PEAK HOUR 5:00 PM
PM PEAK VOLUME 1,000

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	785	###	1,060	16	622	100	43	8	12	6	4	21	3	13,049
% OF TOTAL	6.0%	79.5%	8.1%	0.1%	4.8%	0.8%	0.3%	0.1%	0.1%	0.0%	0.0%	0.2%	0.0%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, February 25, 2020
JOB #: SC2540

CITY# Hemet
CLASS2 Sanderson Avenue south of Stetson Ave

AM Time	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	40	2	0	0	0	0	0	0	0	0	0	0	42	12:00	7	137	24	1	5	0	3	1	0	0	0	0	178	
0:15	0	23	2	0	0	0	0	0	0	0	0	0	0	25	12:15	5	158	14	0	1	5	0	0	1	0	0	0	184	
0:30	0	29	1	0	0	0	0	0	0	0	0	0	0	30	12:30	6	151	18	0	5	3	0	0	0	0	1	0	184	
0:45	0	24	1	0	0	0	0	0	0	0	0	0	0	25	12:45	4	156	17	0	0	3	0	0	1	0	0	1	182	
1:00	0	20	1	0	0	0	0	0	0	0	0	0	0	21	13:00	3	147	17	0	2	3	3	1	2	0	0	1	179	
1:15	1	16	1	0	0	0	0	0	0	0	0	0	0	18	13:15	9	138	11	0	2	2	2	0	1	0	3	1	169	
1:30	0	10	1	0	1	0	0	0	0	0	0	0	0	12	13:30	6	160	20	0	3	5	1	2	0	1	0	0	198	
1:45	0	10	1	0	0	0	0	0	0	0	0	0	0	11	13:45	6	150	12	1	2	2	0	1	0	1	1	0	176	
2:00	0	14	4	0	2	0	0	0	0	0	0	0	0	20	14:00	7	174	20	1	4	4	1	0	0	0	0	0	211	
2:15	0	11	3	0	2	1	0	0	0	0	0	0	0	17	14:15	5	159	18	1	8	6	2	0	2	0	0	2	203	
2:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13	14:30	7	113	11	0	3	3	1	3	1	0	0	0	142	
2:45	0	15	2	0	0	0	0	0	0	0	0	0	0	17	14:45	5	182	15	0	3	7	1	0	0	0	0	0	213	
3:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16	15:00	5	137	13	2	5	11	3	2	2	1	3	2	188	
3:15	0	9	0	0	1	1	0	0	0	0	0	0	0	11	15:15	5	110	10	2	5	5	7	2	0	1	2	1	151	
3:30	0	22	0	0	0	0	0	0	0	0	0	0	0	22	15:30	7	188	17	3	7	4	2	3	0	0	2	1	235	
3:45	0	18	6	0	0	0	0	0	0	0	0	0	0	24	15:45	12	193	23	0	6	3	2	0	1	1	0	0	241	
4:00	0	20	3	1	0	0	0	0	0	0	0	0	0	24	16:00	4	221	21	0	2	2	4	2	1	0	1	1	259	
4:15	1	22	4	0	4	1	0	0	0	0	0	0	0	32	16:15	5	234	11	1	7	4	4	1	0	0	1	1	270	
4:30	0	35	6	1	7	2	0	0	0	0	0	0	0	51	16:30	10	218	17	3	5	5	0	1	0	0	1	0	260	
4:45	0	44	9	1	4	1	0	0	0	0	0	0	0	59	16:45	7	247	11	0	2	5	0	0	1	0	0	0	274	
5:00	0	32	6	0	4	0	0	0	0	0	0	0	0	42	17:00	7	239	20	1	7	3	1	1	0	0	0	0	279	
5:15	2	52	13	0	4	0	0	2	1	0	0	0	0	74	17:15	6	232	16	0	8	8	0	1	1	0	0	1	274	
5:30	0	64	13	0	6	2	0	1	1	0	0	0	0	87	17:30	12	240	16	1	5	6	0	0	1	0	0	1	282	
5:45	0	70	18	0	4	0	0	0	0	0	0	0	0	92	17:45	3	261	19	0	3	3	0	1	0	0	1	0	291	
6:00	0	94	16	0	5	4	0	0	0	0	0	0	0	119	18:00	11	246	14	0	5	3	0	1	2	0	0	1	3	286
6:15	1	128	20	0	7	3	0	0	0	0	0	0	1	160	18:15	3	213	26	0	3	3	2	1	0	0	0	0	251	
6:30	2	157	20	1	8	1	0	0	1	0	0	0	1	191	18:30	0	197	16	0	3	3	0	0	0	0	0	1	220	
6:45	8	183	26	1	6	2	3	0	1	0	1	0	0	231	18:45	4	161	12	2	1	3	2	0	0	0	0	0	185	
7:00	6	214	16	2	3	5	2	0	0	1	0	0	0	249	19:00	6	168	14	1	1	4	1	0	0	0	0	0	0	195
7:15	9	244	15	2	5	4	0	1	0	0	0	2	0	282	19:15	3	155	12	0	5	2	1	0	0	0	0	0	178	
7:30	5	291	18	2	3	7	2	0	3	0	0	0	5	336	19:30	7	154	8	0	3	0	0	0	0	0	1	0	173	
7:45	12	266	19	4	5	4	2	0	4	0	0	2	6	324	19:45	4	145	14	0	5	3	0	0	0	0	0	0	171	
8:00	4	232	20	1	1	6	2	1	2	0	0	0	3	272	20:00	4	116	16	0	1	1	0	0	0	0	0	0	138	
8:15	7	223	19	1	3	8	2	2	2	0	1	1	1	270	20:15	0	130	6	1	3	3	0	0	1	0	0	0	145	
8:30	1	246	20	0	2	1	1	0	1	0	0	0	1	273	20:30	0	139	12	0	0	1	0	0	0	0	0	0	152	
8:45	3	221	21	0	7	5	0	0	0	0	0	0	0	257	20:45	0	115	10	0	0	2	0	0	0	1	0	0	128	
9:00	0	194	24	0	10	3	0	1	3	0	0	0	0	235	21:00	0	103	9	0	0	1	0	0	0	0	0	0	113	
9:15	1	176	11	1	6	1	1	0	0	1	1	0	0	199	21:15	0	108	7	0	2	1	0	0	0	0	0	0	118	
9:30	5	158	15	1	10	2	0	0	0	0	0	0	0	191	21:30	3	85	5	0	1	1	1	0	0	0	0	0	96	
9:45	9	129	20	0	5	6	2	0	0	0	0	1	0	172	21:45	2	81	8	0	1	1	0	0	1	0	0	0	94	
10:00	7	121	9	0	6	3	0	1	1	0	0	0	1	149	22:00	0	87	6	0	2	1	1	0	0	0	0	0	97	
10:15	5	135	11	1	9	1	1	1	0	0	0	0	0	164	22:15	0	86	2	0	1	2	0	0	0	0	0	0	91	
10:30	5	132	14	0	7	0	1	0	2	2	0	0	0	163	22:30	0	68	5	0	1	0	0	0	0	0	0	0	74	
10:45	4	154	15	0	8	2	0	0	1	0	0	0	0	184	22:45	0	57	4	0	0	0	0	0	0	0	0	0	61	
11:00	5	124	12	0	4	1	0	0	2	0	1	3	2	154	23:00	0	38	3	0	1	0	0	0	0	0	0	0	42	
11:15	3	118	17	1	0	3	0	0	2	0	0	0	2	146	23:15	0	50	3	0	1	2	0	0	0	0	0	0	56	
11:30	2	128	15	0	6	4	2	2	0	0	0	0	0	159	23:30	0	40	3	0	1	0	0	0	0	0	0	0	44	
11:45	1	177	10	1	5	4	1	0	1	0	0	0	0	200	23:45	0	43	0	0	1	0	0	0	1	0	0	0	45	
TOTAL	109	4,873	501	22	170	88	22	12	28	4	4	9	23	5,865	TOTAL	200	7,130	606	21	142	139	45	24	20	6	14	14	15	8,376

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,214

PM PEAK HOUR 5:15 PM
PM PEAK VOLUME 1,133

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	309	12,003	1,107	43	312	227	67	36	48	10	18	23	38	14,241
% OF TOTAL	2.2%	84.3%	7.8%	0.3%	2.2%	1.6%	0.5%	0.3%	0.3%	0.1%	0.1%	0.2%	0.3%	100.0%

Class 1 2 3 4 5 6 7 8 9 10 11 12 13

TOTAL: ALL	527	24,505	2,023	55	573	372	128	50	99	22	26	44	60	28,484
% OF TOTAL	1.9%	86.0%	7.1%	0.2%	2.0%	1.3%	0.4%	0.2%	0.3%	0.1%	0.1%	0.2%	0.2%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, February 25, 2020
JOB #: SC2540

CITY# Hemet
CLASS2 Sanderson Avenue south of Stetson Ave

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24	12:00	5	155	17	0	5	1	1	0	2	0	0	1	0	187
0:15	0	17	3	0	0	0	0	0	0	0	0	0	0	20	12:15	5	183	15	3	3	4	1	0	0	0	0	1	0	215
0:30	0	20	1	0	0	0	0	0	0	0	0	0	0	21	12:30	1	152	13	0	2	2	0	1	1	0	0	0	172	
0:45	0	13	0	0	0	0	0	0	0	0	0	0	0	13	12:45	7	158	12	0	4	0	1	0	1	1	0	0	184	
1:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18	13:00	2	157	8	0	9	1	1	2	0	0	0	0	180	
1:15	0	10	2	0	1	0	0	0	1	0	0	0	0	14	13:15	4	185	14	1	6	1	3	0	2	0	0	0	216	
1:30	0	11	1	0	0	0	0	0	0	0	0	0	0	12	13:30	1	159	14	0	6	1	1	1	1	0	0	0	184	
1:45	0	14	0	0	0	0	0	0	0	0	0	0	0	14	13:45	4	176	19	0	6	4	0	0	1	1	0	0	211	
2:00	0	16	3	0	0	0	0	0	0	0	0	0	0	19	14:00	6	162	14	0	6	2	1	0	0	0	0	1	0	192
2:15	0	9	2	0	0	1	0	0	0	0	0	0	0	12	14:15	2	197	16	0	3	2	0	0	1	0	0	1	0	222
2:30	0	13	0	0	1	0	0	0	1	0	0	0	0	15	14:30	1	188	17	0	5	5	0	0	1	1	0	0	218	
2:45	0	22	2	0	1	0	0	0	1	0	0	0	0	26	14:45	2	212	17	0	3	3	2	0	0	0	1	0	241	
3:00	0	19	1	0	0	0	0	0	0	0	0	1	0	21	15:00	8	172	12	1	4	4	2	0	2	0	0	0	205	
3:15	0	28	0	0	1	0	0	0	1	0	0	0	0	30	15:15	4	158	13	0	3	3	2	0	0	0	0	0	183	
3:30	0	30	6	0	0	1	0	0	0	0	0	0	0	37	15:30	3	195	11	0	5	4	2	0	1	0	0	0	221	
3:45	0	53	2	0	4	0	1	0	0	0	0	0	0	60	15:45	1	232	17	1	6	4	1	1	2	1	1	0	269	
4:00	1	54	4	0	2	2	0	0	0	0	0	0	0	63	16:00	3	242	16	0	3	2	1	1	0	2	1	1	0	272
4:15	0	81	11	0	6	1	0	0	0	0	0	0	0	99	16:15	0	240	16	1	6	2	1	0	2	0	0	2	0	270
4:30	1	94	9	0	3	2	0	0	1	0	0	0	1	111	16:30	6	285	14	0	0	5	1	0	1	0	0	1	1	314
4:45	1	85	7	0	2	2	0	0	0	0	0	0	0	97	16:45	10	281	18	0	7	3	0	0	2	0	1	2	0	324
5:00	0	103	14	0	4	0	1	0	0	0	0	0	0	122	17:00	0	274	16	0	3	3	2	0	0	0	0	0	1	299
5:15	3	115	8	0	1	0	0	0	1	0	0	0	0	128	17:15	6	284	12	0	3	6	1	0	0	3	0	0	0	315
5:30	4	106	14	0	6	1	1	1	0	0	1	0	0	134	17:30	4	301	13	0	2	5	0	0	1	0	0	0	1	327
5:45	0	89	16	0	2	2	0	0	1	0	0	0	0	110	17:45	0	251	9	0	2	0	1	0	0	0	0	0	1	264
6:00	3	125	20	1	9	0	0	0	0	0	0	1	0	159	18:00	6	210	16	0	8	0	1	0	2	0	0	1	0	244
6:15	3	124	13	0	3	0	0	0	1	0	0	0	0	144	18:15	9	184	6	0	3	4	1	0	0	0	0	0	1	208
6:30	3	164	13	0	6	1	1	0	2	0	1	0	1	192	18:30	0	152	5	0	1	1	1	0	1	0	0	1	0	162
6:45	3	184	21	0	7	2	0	0	1	0	0	0	0	218	18:45	4	147	8	0	3	2	1	0	1	0	0	0	1	167
7:00	6	213	13	0	2	2	0	0	0	0	0	0	0	236	19:00	6	127	9	0	2	1	0	1	0	0	0	2	0	148
7:15	12	248	17	0	1	3	0	0	1	0	1	1	2	286	19:15	4	126	6	0	3	2	1	1	0	0	0	0	0	143
7:30	1	276	23	1	2	4	1	0	0	0	0	0	1	309	19:30	0	113	9	0	0	1	0	0	0	0	0	0	1	124
7:45	6	233	13	0	3	4	1	1	1	1	0	1	2	266	19:45	3	127	9	0	2	2	0	0	0	0	0	0	0	143
8:00	1	186	11	2	5	2	5	2	2	0	0	0	0	216	20:00	3	113	3	0	1	1	1	0	0	0	0	0	0	122
8:15	3	198	10	0	3	2	0	0	0	0	0	0	0	216	20:15	2	117	8	0	2	0	0	0	1	0	0	0	0	130
8:30	2	180	12	0	3	2	4	0	0	0	0	0	1	204	20:30	0	103	5	0	0	1	0	0	0	0	0	0	0	109
8:45	2	190	11	1	6	3	0	0	0	0	0	0	0	213	20:45	1	84	5	0	2	1	0	0	1	0	0	0	0	94
9:00	1	168	14	0	2	3	1	0	1	0	0	1	1	192	21:00	0	74	4	0	0	0	0	0	1	0	0	0	0	79
9:15	4	142	17	0	3	0	0	0	0	0	0	0	0	166	21:15	0	75	5	0	1	0	2	0	0	0	1	0	0	84
9:30	4	163	18	0	5	2	2	0	0	0	0	0	2	196	21:30	2	67	5	0	1	0	0	1	0	0	0	0	0	76
9:45	1	142	20	0	2	2	2	0	0	1	0	0	1	171	21:45	0	67	3	0	0	0	0	0	1	0	0	0	0	71
10:00	2	152	13	0	0	1	1	0	1	1	0	0	0	171	22:00	0	54	2	0	1	0	0	0	0	0	0	0	0	57
10:15	5	168	11	0	7	0	2	0	1	0	0	0	0	194	22:15	1	52	2	0	1	0	0	0	0	0	0	0	0	56
10:30	2	170	18	0	3	1	0	0	1	0	0	0	0	195	22:30	0	57	4	0	0	0	0	0	0	0	0	0	0	61
10:45	2	148	16	0	3	3	1	0	1	0	0	0	0	174	22:45	0	44	3	0	2	1	0	0	1	0	0	0	0	51
11:00	2	173	15	0	5	2	0	0	0	0	0	0	0	197	23:00	1	52	1	0	0	0	0	0	0	0	0	0	0	54
11:15	3	163	6	0	1	7	1	0	0	0	0	0	0	181	23:15	0	38	4	0	0	0	0	0	0	0	0	0	0	42
11:30	1	173	8	0	3	0	0	0	1	0	0	0	0	186	23:30	0	27	0	0	0	0	0	1	0	0	0	0	0	28
11:45	9	145	7	0	8	3	2	0	0	0	0	1	1	176	23:45	0	23	3	0	0	0	1	0	0	0	0	0	0	27
TOTAL	91	5,270	448	5	126	61	27	4	21	3	3	6	13	6,078	TOTAL	127	7,232	468	7	135	84	34	10	30	9	5	15	9	8,165

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,097

PM PEAK HOUR 4:45 PM
PM PEAK VOLUME 1,265

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	218	###	916	12	261	145	61	14	51	12	8	21	22	14,243
% OF TOTAL	1.5%	87.8%	6.4%	0.1%	1.8%	1.0%	0.4%	0.1%	0.4%	0.1%	0.1%	0.1%	0.2%	100.0%

Class **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13**

Stetson Corner		Average Daily Traffic							
Roadway Segment	Existing Heavy Vehicle %	Existing	Project	Existing + Project	Opening Year (Existing+Ambient)	Opening Year plus Project (Year 2022)	Cumulative Projects	Cumulative (Existing+Ambient Cumulative Projects)	Cumulative plus Project
Stetson Avenue, near project site	4.0%	26,029	4,112	30,141	27,070	31,182	5,818	32,888	37,000
Sanderson Avenue, near project site	4.0%	28,484	1,371	29,855	29,623	30,994	3,592	33,215	34,586

Growth Factor

2%

Years

2

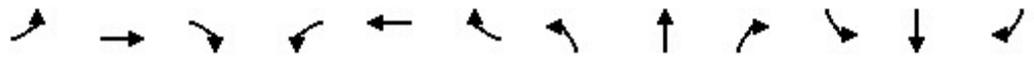
Appendix D

Synchro Worksheets – Intersection Level of Service Analysis

- Existing Conditions

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

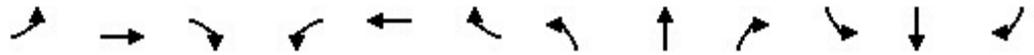
Existing AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	145	126	129	124	137	51	803	108	83	583	4
Future Volume (veh/h)	11	145	126	129	124	137	51	803	108	83	583	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	11	148	129	132	127	140	52	819	110	85	595	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	25	247	206	168	171	189	88	1206	162	116	1421	644
Arrive On Green	0.01	0.13	0.13	0.09	0.21	0.21	0.05	0.39	0.39	0.07	0.41	0.41
Sat Flow, veh/h	1781	1870	1560	1781	806	889	1781	3089	415	1781	3497	1585
Grp Volume(v), veh/h	11	148	129	132	0	267	52	464	465	85	595	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1695	1781	1749	1756	1781	1749	1585
Q Serve(g_s), s	0.3	4.2	4.4	4.1	0.0	8.3	1.6	12.4	12.4	2.7	6.9	0.1
Cycle Q Clear(g_c), s	0.3	4.2	4.4	4.1	0.0	8.3	1.6	12.4	12.4	2.7	6.9	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	25	247	206	168	0	360	88	683	685	116	1421	644
V/C Ratio(X)	0.44	0.60	0.63	0.78	0.00	0.74	0.59	0.68	0.68	0.73	0.42	0.01
Avail Cap(c_a), veh/h	157	595	496	208	0	587	173	683	685	167	1421	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	23.2	23.2	25.1	0.0	20.8	26.3	14.3	14.3	26.0	12.0	10.0
Incr Delay (d2), s/veh	11.7	2.3	3.1	14.5	0.0	3.0	6.2	5.4	5.4	9.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	1.7	2.3	0.0	3.2	0.8	5.3	5.3	1.3	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	25.5	26.4	39.5	0.0	23.9	32.6	19.7	19.7	35.1	12.9	10.0
LnGrp LOS	D	C	C	D	A	C	C	B	B	D	B	B
Approach Vol, veh/h		288			399			981			684	
Approach Delay, s/veh		26.4			29.0			20.4			15.7	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	26.6	9.8	12.0	7.3	27.5	5.3	16.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.3	22.1	6.6	18.0	5.5	21.9	5.0	19.6				
Max Q Clear Time (g_c+l1), s	4.7	14.4	6.1	6.4	3.6	8.9	2.3	10.3				
Green Ext Time (p_c), s	0.0	3.6	0.0	0.9	0.0	3.3	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.2									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

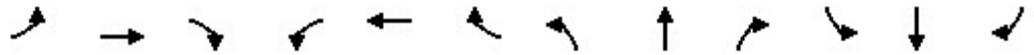
Existing AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	9	24	3	153	68	58	14	746	56	26	675	23
Future Volume (veh/h)	9	24	3	153	68	58	14	746	56	26	675	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	27	3	172	76	65	16	838	63	29	758	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	233	126	14	395	325	275	35	1728	764	56	1771	783
Arrive On Green	0.01	0.08	0.08	0.11	0.17	0.17	0.02	0.49	0.49	0.03	0.51	0.51
Sat Flow, veh/h	1781	1650	183	1781	1870	1585	1781	3497	1546	1781	3497	1546
Grp Volume(v), veh/h	10	0	30	172	76	65	16	838	63	29	758	26
Grp Sat Flow(s),veh/h/ln	1781	0	1833	1781	1870	1585	1781	1749	1546	1781	1749	1546
Q Serve(g_s), s	0.3	0.0	1.0	5.2	2.2	2.2	0.6	10.0	1.3	1.0	8.5	0.5
Cycle Q Clear(g_c), s	0.3	0.0	1.0	5.2	2.2	2.2	0.6	10.0	1.3	1.0	8.5	0.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	140	395	325	275	35	1728	764	56	1771	783
V/C Ratio(X)	0.04	0.00	0.21	0.44	0.23	0.24	0.46	0.48	0.08	0.51	0.43	0.03
Avail Cap(c_a), veh/h	353	0	528	413	613	520	142	1728	764	160	1771	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	27.1	21.2	22.3	22.3	30.3	10.5	8.3	29.8	9.7	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.8	0.4	0.4	9.3	1.0	0.2	7.1	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	2.1	0.9	0.8	0.3	3.1	0.4	0.5	2.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	27.9	22.0	22.6	22.7	39.7	11.5	8.6	36.9	10.5	7.8
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		40			313			917				813
Approach Delay, s/veh		27.4			22.3			11.8				11.3
Approach LOS		C			C			B				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	35.4	11.4	9.3	5.7	36.2	5.3	15.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	30.9	7.5	18.0	5.0	31.5	5.0	20.5				
Max Q Clear Time (g_c+I1), s	3.0	12.0	7.2	3.0	2.6	10.5	2.3	4.2				
Green Ext Time (p_c), s	0.0	5.4	0.0	0.1	0.0	4.9	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				13.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 3: Sanderson Avenue & Stetson Avenue

Existing AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	324	7	440	608	89	31	667	655	55	686	89
Future Volume (veh/h)	60	324	7	440	608	89	31	667	655	55	686	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	68	368	8	500	691	101	35	758	744	62	780	101
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	87	478	10	535	1196	175	50	1277	1030	79	1185	153
Arrive On Green	0.05	0.14	0.14	0.31	0.39	0.39	0.03	0.37	0.37	0.05	0.38	0.38
Sat Flow, veh/h	1753	3493	76	1753	3049	445	1753	3497	1517	1753	3105	402
Grp Volume(v), veh/h	68	184	192	500	396	396	35	758	744	62	439	442
Grp Sat Flow(s),veh/h/ln	1753	1749	1820	1753	1749	1745	1753	1749	1517	1753	1749	1758
Q Serve(g_s), s	4.7	12.4	12.4	33.8	21.7	21.7	2.4	21.4	38.7	4.3	25.3	25.3
Cycle Q Clear(g_c), s	4.7	12.4	12.4	33.8	21.7	21.7	2.4	21.4	38.7	4.3	25.3	25.3
Prop In Lane	1.00		0.04	1.00		0.26	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	87	239	249	535	686	685	50	1277	1030	79	668	671
V/C Ratio(X)	0.78	0.77	0.77	0.93	0.58	0.58	0.70	0.59	0.72	0.78	0.66	0.66
Avail Cap(c_a), veh/h	174	280	291	727	831	830	79	1277	1030	122	668	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	50.7	50.7	41.1	29.1	29.1	58.6	31.3	13.0	57.5	31.1	31.1
Incr Delay (d2), s/veh	14.0	10.5	10.3	16.0	0.8	0.8	16.3	2.0	4.4	15.9	5.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.9	6.2	16.3	8.9	8.9	1.3	9.0	12.4	2.2	11.1	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.2	61.2	61.1	57.1	29.8	29.9	74.9	33.4	17.4	73.4	36.1	36.1
LnGrp LOS	E	E	E	E	C	C	E	C	B	E	D	D
Approach Vol, veh/h		444			1292			1537			943	
Approach Delay, s/veh		62.7			40.4			26.6			38.5	
Approach LOS		E			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	49.0	41.7	21.2	8.0	51.0	10.5	52.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	43.5	50.5	19.5	5.5	46.5	12.1	57.9				
Max Q Clear Time (g_c+I1), s	6.3	40.7	35.8	14.4	4.4	27.3	6.7	23.7				
Green Ext Time (p_c), s	0.0	2.0	1.4	0.8	0.0	5.0	0.0	5.0				
Intersection Summary												
HCM 6th Ctrl Delay				37.3								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

Existing AM
Timing Plan: AM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	74	66	43	1298	1034	91
Future Volume (veh/h)	74	66	43	1298	1034	91
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	106	54	49	1492	1189	105
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	198	88	417	3004	2728	1202
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	106	54	49	1492	1189	105
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.1	3.5	0.5	11.1	11.9	1.7
Cycle Q Clear(g_c), s	3.1	3.5	0.5	11.1	11.9	1.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	198	88	417	3004	2728	1202
V/C Ratio(X)	0.53	0.61	0.12	0.50	0.44	0.09
Avail Cap(c_a), veh/h	693	308	496	3004	2728	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	48.6	2.5	1.8	3.9	2.7
Incr Delay (d2), s/veh	2.2	6.7	0.1	0.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.2	0.1	1.0	2.8	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.6	55.3	2.6	2.4	4.4	2.9
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	160			1541	1294	
Approach Delay, s/veh	52.2			2.4	4.2	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.0		10.4	8.3	86.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		90.5		20.5	8.5	77.5
Max Q Clear Time (g_c+I1), s		13.1		5.5	2.5	13.9
Green Ext Time (p_c), s		16.5		0.4	0.0	11.4

Intersection Summary

HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

5: Sanderson Avenue & Thornton Avenue

Existing AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	151	5	43	15	8	51	46	1117	13	12	1028	53
Future Volume (veh/h)	151	5	43	15	8	51	46	1117	13	12	1028	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	178	6	51	18	9	60	54	1314	15	14	1209	62
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	123	2	494	104	32	494	89	1543	18	31	1362	70
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.44	0.44	0.02	0.40	0.40
Sat Flow, veh/h	0	7	1579	0	103	1579	1781	3540	40	1781	3379	173
Grp Volume(v), veh/h	184	0	51	27	0	60	54	649	680	14	625	646
Grp Sat Flow(s),veh/h/ln	7	0	1579	103	0	1579	1781	1749	1832	1781	1749	1803
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	1.6	1.7	19.2	19.3	0.4	19.2	19.3
Cycle Q Clear(g_c), s	18.1	0.0	1.3	18.1	0.0	1.6	1.7	19.2	19.3	0.4	19.2	19.3
Prop In Lane	0.97		1.00	0.67		1.00	1.00		0.02	1.00		0.10
Lane Grp Cap(c), veh/h	125	0	494	136	0	494	89	762	799	31	705	727
V/C Ratio(X)	1.48	0.00	0.10	0.20	0.00	0.12	0.60	0.85	0.85	0.45	0.89	0.89
Avail Cap(c_a), veh/h	125	0	494	136	0	494	157	762	799	157	705	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	14.1	16.4	0.0	14.2	26.9	14.6	14.6	28.1	16.0	16.0
Incr Delay (d2), s/veh	251.9	0.0	0.1	0.7	0.0	0.1	6.4	11.5	11.1	9.9	15.4	15.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.0	0.5	0.3	0.0	0.5	0.8	8.1	8.4	0.3	8.9	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	280.5	0.0	14.2	17.1	0.0	14.3	33.3	26.2	25.7	38.0	31.4	31.2
LnGrp LOS	F	A	B	B	A	B	C	C	C	D	C	C
Approach Vol, veh/h		235			87			1383			1285	
Approach Delay, s/veh		222.7			15.1			26.2			31.4	
Approach LOS		F			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	29.7		22.6	7.4	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	2.4	21.3		20.1	3.7	21.3		20.1				
Green Ext Time (p_c), s	0.0	1.5		0.0	0.0	1.4		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				43.6								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

Existing AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	0	191	20	24	21	202	757	4	8	678	394
Future Volume (veh/h)	397	0	191	20	24	21	202	757	4	8	678	394
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.89	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	490	0	236	25	30	26	249	935	5	10	904	441
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	670	0	278	78	94	134	347	1862	822	306	1658	712
Arrive On Green	0.19	0.00	0.19	0.09	0.09	0.09	0.09	0.53	0.53	0.01	0.45	0.45
Sat Flow, veh/h	3563	0	1477	831	998	1418	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	490	0	236	55	0	26	249	935	5	10	904	441
Grp Sat Flow(s),veh/h/ln	1781	0	1477	1829	0	1418	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	13.4	0.0	16.0	2.9	0.0	1.8	7.4	17.7	0.2	0.3	18.6	22.1
Cycle Q Clear(g_c), s	13.4	0.0	16.0	2.9	0.0	1.8	7.4	17.7	0.2	0.3	18.6	22.1
Prop In Lane	1.00		1.00	0.45		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	670	0	278	172	0	134	347	1862	822	306	1658	712
V/C Ratio(X)	0.73	0.00	0.85	0.32	0.00	0.19	0.72	0.50	0.01	0.03	0.55	0.62
Avail Cap(c_a), veh/h	806	0	334	319	0	247	480	1862	822	372	1658	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	0.0	40.8	43.9	0.0	43.4	16.7	15.5	11.4	15.5	20.8	21.8
Incr Delay (d2), s/veh	2.8	0.0	16.0	1.1	0.0	0.7	3.2	1.0	0.0	0.0	1.3	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	7.1	1.4	0.0	0.6	2.9	6.6	0.1	0.1	7.7	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	0.0	56.7	45.0	0.0	44.1	19.9	16.5	11.4	15.6	22.1	25.8
LnGrp LOS	D	A	E	D	A	D	B	B	B	B	C	C
Approach Vol, veh/h		726			81			1189			1355	
Approach Delay, s/veh		47.1			44.7			17.2			23.2	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	59.8		24.0	14.3	51.3		14.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	55.3		23.5	17.5	42.9		18.1				
Max Q Clear Time (g_c+I1), s	2.3	19.7		18.0	9.4	24.1		4.9				
Green Ext Time (p_c), s	0.0	7.1		1.5	0.4	7.4		0.2				

Intersection Summary

HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
7: Cawston Avenue & Stetson Avenue

Existing AM
Timing Plan: AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	164	26	187	239	24	42	160	249	18	133	33
Future Volume (veh/h)	33	164	26	187	239	24	42	160	249	18	133	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	178	28	203	260	26	46	174	271	20	145	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	68	327	51	262	399	344	690	956	800	560	956	810
Arrive On Green	0.04	0.11	0.11	0.15	0.22	0.22	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	3035	470	1781	1841	1585	1203	1870	1565	945	1870	1585
Grp Volume(v), veh/h	36	101	105	203	260	26	46	174	271	20	145	36
Grp Sat Flow(s),veh/h/ln	1781	1749	1756	1781	1841	1585	1203	1870	1565	945	1870	1585
Q Serve(g_s), s	1.1	3.2	3.3	6.3	7.4	0.8	1.2	2.9	5.9	0.7	2.4	0.7
Cycle Q Clear(g_c), s	1.1	3.2	3.3	6.3	7.4	0.8	3.6	2.9	5.9	3.6	2.4	0.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	189	189	262	399	344	690	956	800	560	956	810
V/C Ratio(X)	0.53	0.54	0.55	0.77	0.65	0.08	0.07	0.18	0.34	0.04	0.15	0.04
Avail Cap(c_a), veh/h	293	651	654	787	1196	1030	690	956	800	560	956	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	24.4	24.4	23.7	20.6	18.0	8.4	7.6	8.3	8.6	7.5	7.1
Incr Delay (d2), s/veh	6.3	2.4	2.5	4.9	1.8	0.1	0.2	0.4	1.1	0.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.4	1.4	2.8	3.1	0.3	0.3	1.1	1.9	0.1	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	26.7	26.9	28.5	22.4	18.1	8.6	8.0	9.5	8.7	7.8	7.2
LnGrp LOS	C	C	C	C	C	B	A	A	A	A	A	A
Approach Vol, veh/h		242			489			491			201	
Approach Delay, s/veh		27.8			24.7			8.9			7.8	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		34.0	13.0	10.7		34.0	6.7	17.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		29.5	25.5	21.5		29.5	9.5	37.5				
Max Q Clear Time (g_c+I1), s		7.9	8.3	5.3		5.6	3.1	9.4				
Green Ext Time (p_c), s		2.1	0.5	1.0		1.0	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay				17.4								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

Existing AM
 Timing Plan: AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	812	35	9	855	84	62	55	17	70	26	220
Future Volume (veh/h)	181	812	35	9	855	84	62	55	17	70	26	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	944	41	10	994	98	72	64	20	81	30	256
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	254	1591	69	23	1080	106	438	834	249	495	579	483
Arrive On Green	0.14	0.47	0.47	0.01	0.34	0.34	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3409	148	1781	3208	316	1091	2694	805	1311	1870	1560
Grp Volume(v), veh/h	210	484	501	10	542	550	72	41	43	81	30	256
Grp Sat Flow(s),veh/h/ln	1781	1749	1809	1781	1749	1776	1091	1777	1723	1311	1870	1560
Q Serve(g_s), s	7.3	13.1	13.1	0.4	19.0	19.1	3.2	1.0	1.1	3.0	0.7	8.7
Cycle Q Clear(g_c), s	7.3	13.1	13.1	0.4	19.0	19.1	3.9	1.0	1.1	4.1	0.7	8.7
Prop In Lane	1.00		0.08	1.00		0.18	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	254	816	844	23	589	598	438	550	533	495	579	483
V/C Ratio(X)	0.83	0.59	0.59	0.44	0.92	0.92	0.16	0.07	0.08	0.16	0.05	0.53
Avail Cap(c_a), veh/h	276	816	844	139	596	605	438	550	533	495	579	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	12.6	12.6	31.4	20.4	20.4	16.9	15.6	15.6	17.1	15.5	18.2
Incr Delay (d2), s/veh	17.2	1.2	1.1	12.9	19.6	19.4	0.8	0.3	0.3	0.7	0.2	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.2	4.4	0.2	9.7	9.8	0.9	0.4	0.5	0.9	0.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	13.7	13.7	44.2	39.9	39.8	17.7	15.9	15.9	17.8	15.7	22.4
LnGrp LOS	D	B	B	D	D	D	B	B	B	B	B	C
Approach Vol, veh/h		1195			1102			156			367	
Approach Delay, s/veh		19.0			39.9			16.7			20.8	
Approach LOS		B			D			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.3	5.3	34.4		24.3	13.6	26.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.8	5.0	26.7		19.8	9.9	21.8				
Max Q Clear Time (g_c+I1), s		5.9	2.4	15.1		10.7	9.3	21.1				
Green Ext Time (p_c), s		0.6	0.0	4.5		0.9	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				27.3								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

9: Lyon Avenue & Stetson Avenue

Existing AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	784	68	17	725	43	139	36	16	35	34	85
Future Volume (veh/h)	45	784	68	17	725	43	139	36	16	35	34	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	881	76	19	815	48	156	40	18	39	38	96
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	145	953	82	121	980	58	458	481	408	98	95	240
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	640	3255	281	587	3348	197	1781	1870	1585	379	370	934
Grp Volume(v), veh/h	51	473	484	19	426	437	156	40	18	173	0	0
Grp Sat Flow(s),veh/h/ln	640	1749	1787	587	1749	1796	1781	1870	1585	1683	0	0
Q Serve(g_s), s	4.6	18.4	18.4	2.1	15.9	15.9	5.0	1.1	0.6	6.0	0.0	0.0
Cycle Q Clear(g_c), s	20.5	18.4	18.4	20.5	15.9	15.9	5.0	1.1	0.6	6.0	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	0.23		0.55
Lane Grp Cap(c), veh/h	145	512	523	121	512	526	458	481	408	433	0	0
V/C Ratio(X)	0.35	0.92	0.92	0.16	0.83	0.83	0.34	0.08	0.04	0.40	0.00	0.00
Avail Cap(c_a), veh/h	145	512	523	121	512	526	458	481	408	433	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.1	24.0	24.0	34.0	23.1	23.1	21.2	19.7	19.5	21.5	0.0	0.0
Incr Delay (d2), s/veh	1.5	22.7	22.4	0.6	11.1	10.9	2.0	0.3	0.2	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.8	10.0	0.3	7.3	7.5	2.2	0.5	0.2	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	46.7	46.3	34.6	34.2	34.0	23.2	20.1	19.7	24.3	0.0	0.0
LnGrp LOS	C	D	D	C	C	C	C	C	B	C	A	A
Approach Vol, veh/h		1008			882			214				173
Approach Delay, s/veh		45.9			34.1			22.3				24.3
Approach LOS		D			C			C				C
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		7.0		22.5		8.0		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				37.5								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Existing AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	654	52	27	653	32	37	58	31	29	54	81
Future Volume (veh/h)	65	654	52	27	653	32	37	58	31	29	54	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	727	58	30	726	36	41	64	34	32	60	90
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	105	965	77	59	908	45	74	378	201	62	216	323
Arrive On Green	0.06	0.29	0.29	0.03	0.27	0.27	0.04	0.33	0.33	0.03	0.32	0.32
Sat Flow, veh/h	1781	3278	261	1781	3384	168	1781	1149	610	1781	669	1003
Grp Volume(v), veh/h	72	388	397	30	375	387	41	0	98	32	0	150
Grp Sat Flow(s),veh/h/ln	1781	1749	1791	1781	1749	1803	1781	0	1759	1781	0	1672
Q Serve(g_s), s	2.3	11.7	11.7	1.0	11.6	11.7	1.3	0.0	2.3	1.0	0.0	3.9
Cycle Q Clear(g_c), s	2.3	11.7	11.7	1.0	11.6	11.7	1.3	0.0	2.3	1.0	0.0	3.9
Prop In Lane	1.00		0.15	1.00		0.09	1.00		0.35	1.00		0.60
Lane Grp Cap(c), veh/h	105	515	527	59	469	484	74	0	579	62	0	539
V/C Ratio(X)	0.68	0.75	0.75	0.51	0.80	0.80	0.55	0.00	0.17	0.52	0.00	0.28
Avail Cap(c_a), veh/h	156	543	556	156	543	559	153	0	579	153	0	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	18.7	18.7	27.7	19.9	19.9	27.4	0.0	13.9	27.7	0.0	14.7
Incr Delay (d2), s/veh	7.6	5.6	5.5	6.7	7.3	7.1	6.3	0.0	0.6	6.6	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.7	4.8	0.5	5.0	5.1	0.7	0.0	1.0	0.5	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	24.2	24.2	34.4	27.1	27.0	33.7	0.0	14.5	34.2	0.0	16.0
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		857			792			139				182
Approach Delay, s/veh		25.1			27.3			20.2				19.2
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	23.7	6.4	21.7	6.9	23.3	7.9	20.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.8	5.1	18.1	5.0	18.8	5.1	18.1				
Max Q Clear Time (g_c+I1), s	3.0	4.3	3.0	13.7	3.3	5.9	4.3	13.7				
Green Ext Time (p_c), s	0.0	0.4	0.0	1.8	0.0	0.6	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			25.1									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

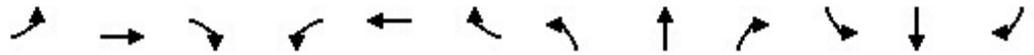
Existing PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	195	170	187	180	197	103	867	87	173	868	14
Future Volume (veh/h)	15	195	170	187	180	197	103	867	87	173	868	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	16	205	179	197	189	207	108	913	92	182	914	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	33	280	237	236	213	233	138	1192	120	220	1461	660
Arrive On Green	0.02	0.15	0.15	0.13	0.26	0.26	0.08	0.37	0.37	0.12	0.42	0.42
Sat Flow, veh/h	1781	1870	1579	1781	809	886	1781	3207	323	1781	3497	1581
Grp Volume(v), veh/h	16	205	179	197	0	396	108	498	507	182	914	15
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1695	1781	1749	1782	1781	1749	1581
Q Serve(g_s), s	0.7	8.4	8.8	8.7	0.0	18.1	4.8	20.2	20.2	8.1	16.6	0.5
Cycle Q Clear(g_c), s	0.7	8.4	8.8	8.7	0.0	18.1	4.8	20.2	20.2	8.1	16.6	0.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	33	280	237	236	0	446	138	650	662	220	1461	660
V/C Ratio(X)	0.48	0.73	0.76	0.84	0.00	0.89	0.78	0.77	0.77	0.83	0.63	0.02
Avail Cap(c_a), veh/h	110	417	352	276	0	535	192	650	662	254	1461	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	32.8	32.9	34.2	0.0	28.6	36.6	22.3	22.3	34.6	18.5	13.8
Incr Delay (d2), s/veh	10.4	3.7	5.2	17.4	0.0	14.6	13.2	8.4	8.3	17.9	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.9	3.6	4.8	0.0	8.7	2.5	9.3	9.5	4.5	6.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	36.4	38.1	51.6	0.0	43.1	49.7	30.7	30.5	52.5	20.6	13.9
LnGrp LOS	D	D	D	D	A	D	D	C	C	D	C	B
Approach Vol, veh/h		400			593			1113			1111	
Approach Delay, s/veh		37.7			45.9			32.5			25.7	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	34.5	15.2	16.6	10.7	38.2	6.0	25.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.5	30.0	12.5	18.0	8.7	32.8	5.0	25.5				
Max Q Clear Time (g_c+I1), s	10.1	22.2	10.7	10.8	6.8	18.6	2.7	20.1				
Green Ext Time (p_c), s	0.1	3.9	0.1	1.0	0.0	5.6	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			33.3									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

Existing PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	50	20	84	24	68	6	843	102	104	951	11
Future Volume (veh/h)	30	50	20	84	24	68	6	843	102	104	951	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	32	54	22	90	26	73	6	906	110	112	1023	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	328	129	53	337	254	211	14	1453	642	144	1708	754
Arrive On Green	0.04	0.10	0.10	0.07	0.14	0.14	0.01	0.42	0.42	0.08	0.49	0.49
Sat Flow, veh/h	1781	1258	513	1781	1870	1550	1781	3497	1544	1781	3497	1545
Grp Volume(v), veh/h	32	0	76	90	26	73	6	906	110	112	1023	12
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1781	1870	1550	1781	1749	1544	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.2	2.4	0.7	2.3	0.2	11.1	2.4	3.3	11.5	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.2	2.4	0.7	2.3	0.2	11.1	2.4	3.3	11.5	0.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	0	182	337	254	211	14	1453	642	144	1708	754
V/C Ratio(X)	0.10	0.00	0.42	0.27	0.10	0.35	0.42	0.62	0.17	0.78	0.60	0.02
Avail Cap(c_a), veh/h	429	0	589	380	622	515	165	1453	642	214	1708	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	0.0	22.8	19.6	20.5	21.2	26.7	12.5	10.0	24.4	10.0	7.1
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.4	0.2	1.0	18.7	2.0	0.6	10.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.9	0.9	0.3	0.8	0.1	3.6	0.8	1.6	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	24.3	20.0	20.7	22.2	45.4	14.5	10.5	34.6	11.6	7.2
LnGrp LOS	C	A	C	C	C	C	D	B	B	C	B	A
Approach Vol, veh/h		108			189			1022			1147	
Approach Delay, s/veh		23.2			21.0			14.3			13.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	27.0	8.2	10.1	4.9	30.9	6.4	11.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	22.5	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.3	13.1	4.4	4.2	2.2	13.5	2.9	4.3				
Green Ext Time (p_c), s	0.0	4.2	0.0	0.2	0.0	4.8	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			14.9									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary
 3: Sanderson Avenue & Stetson Avenue

Existing PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	476	17	437	467	140	15	583	497	151	791	112
Future Volume (veh/h)	228	476	17	437	467	140	15	583	497	151	791	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	238	496	18	455	486	146	16	607	518	157	824	117
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	271	576	21	489	770	229	30	1018	877	186	1163	165
Arrive On Green	0.15	0.17	0.17	0.28	0.29	0.29	0.02	0.29	0.29	0.11	0.38	0.38
Sat Flow, veh/h	1753	3434	124	1753	2632	785	1753	3497	1517	1753	3064	435
Grp Volume(v), veh/h	238	252	262	455	322	310	16	607	518	157	470	471
Grp Sat Flow(s),veh/h/ln	1753	1749	1810	1753	1749	1668	1753	1749	1517	1753	1749	1750
Q Serve(g_s), s	15.3	16.1	16.2	29.1	18.4	18.6	1.0	17.1	25.7	10.1	26.3	26.3
Cycle Q Clear(g_c), s	15.3	16.1	16.2	29.1	18.4	18.6	1.0	17.1	25.7	10.1	26.3	26.3
Prop In Lane	1.00		0.07	1.00		0.47	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	271	293	304	489	511	488	30	1018	877	186	664	664
V/C Ratio(X)	0.88	0.86	0.86	0.93	0.63	0.64	0.52	0.60	0.59	0.85	0.71	0.71
Avail Cap(c_a), veh/h	438	345	357	617	522	498	78	1018	877	251	664	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	46.6	46.6	40.4	35.3	35.4	56.1	35.0	16.2	50.6	30.3	30.3
Incr Delay (d2), s/veh	11.4	17.1	17.0	18.3	2.3	2.6	13.3	2.6	2.9	17.5	6.3	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.1	8.4	14.5	7.8	7.6	0.6	7.4	8.7	5.2	11.6	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	63.7	63.6	58.7	37.7	38.0	69.4	37.6	19.1	68.1	36.6	36.6
LnGrp LOS	E	E	E	E	D	D	E	D	B	E	D	D
Approach Vol, veh/h		752			1087			1141			1098	
Approach Delay, s/veh		62.2			46.6			29.6			41.1	
Approach LOS		E			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	38.0	36.6	23.8	6.5	48.2	22.3	38.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.5	32.3	40.5	22.7	5.1	43.7	28.8	34.4				
Max Q Clear Time (g_c+I1), s	12.1	27.7	31.1	18.2	3.0	28.3	17.3	20.6				
Green Ext Time (p_c), s	0.1	2.4	1.0	1.1	0.0	5.0	0.5	3.0				
Intersection Summary												
HCM 6th Ctrl Delay				43.2								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

Existing PM
Timing Plan: PM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	69	75	908	986	224
Future Volume (veh/h)	204	69	75	908	986	224
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	206	70	76	917	996	226
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	298	132	438	2903	2603	1152
Arrive On Green	0.08	0.08	0.04	0.83	0.74	0.74
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	206	70	76	917	996	226
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	5.9	4.4	0.9	6.3	10.6	4.6
Cycle Q Clear(g_c), s	5.9	4.4	0.9	6.3	10.6	4.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	298	132	438	2903	2603	1152
V/C Ratio(X)	0.69	0.53	0.17	0.32	0.38	0.20
Avail Cap(c_a), veh/h	838	373	559	2903	2603	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	45.8	3.0	2.0	4.8	4.0
Incr Delay (d2), s/veh	2.9	3.2	0.2	0.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.1	0.2	1.0	2.8	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.3	49.0	3.1	2.3	5.2	4.4
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	276			993	1222	
Approach Delay, s/veh	49.3			2.4	5.0	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		91.0		13.2	8.9	82.1
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		24.5	11.5	70.5
Max Q Clear Time (g_c+I1), s		8.3		7.9	2.9	12.6
Green Ext Time (p_c), s		7.2		0.8	0.1	9.3

Intersection Summary

HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

5: Sanderson Avenue & Thornton Avenue

Existing PM
Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	87	12	59	10	14	32	46	864	13	21	991	101
Future Volume (veh/h)	87	12	59	10	14	32	46	864	13	21	991	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	88	12	60	10	14	32	46	873	13	21	1001	102
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	118	9	489	89	90	495	81	1501	22	44	1295	132
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.43	0.43	0.02	0.41	0.41
Sat Flow, veh/h	0	28	1553	0	287	1573	1781	3526	53	1781	3196	326
Grp Volume(v), veh/h	100	0	60	24	0	32	46	433	453	21	548	555
Grp Sat Flow(s),veh/h/ln	28	0	1553	287	0	1573	1781	1749	1830	1781	1749	1772
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.8	1.5	10.9	10.9	0.7	15.6	15.6
Cycle Q Clear(g_c), s	18.1	0.0	1.6	18.1	0.0	0.8	1.5	10.9	10.9	0.7	15.6	15.6
Prop In Lane	0.88		1.00	0.42		1.00	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	127	0	489	179	0	495	81	744	779	44	709	718
V/C Ratio(X)	0.79	0.00	0.12	0.13	0.00	0.06	0.57	0.58	0.58	0.48	0.77	0.77
Avail Cap(c_a), veh/h	127	0	489	179	0	495	158	744	779	158	709	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	14.0	15.7	0.0	13.8	26.9	12.6	12.6	27.7	14.8	14.8
Incr Delay (d2), s/veh	27.7	0.0	0.1	0.3	0.0	0.1	6.2	3.3	3.2	7.7	8.0	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.5	0.2	0.0	0.3	0.7	3.9	4.1	0.3	6.3	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	0.0	14.2	16.1	0.0	13.8	33.1	15.9	15.8	35.4	22.8	22.7
LnGrp LOS	D	A	B	B	A	B	C	B	B	D	C	C
Approach Vol, veh/h		160			56			932			1124	
Approach Delay, s/veh		39.6			14.8			16.7			23.0	
Approach LOS		D			B			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	29.0		22.6	7.1	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	2.7	12.9		20.1	3.5	17.6		20.1				
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	3.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.4									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

Existing PM
Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	0	83	4	8	12	106	726	0	6	868	192
Future Volume (veh/h)	186	0	83	4	8	12	106	726	0	6	868	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	194	0	86	4	8	12	110	756	0	6	904	200
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	399	0	175	23	46	59	397	1696	769	400	1528	649
Arrive On Green	0.11	0.00	0.11	0.04	0.04	0.04	0.08	0.49	0.00	0.01	0.42	0.42
Sat Flow, veh/h	3563	0	1568	613	1226	1566	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	194	0	86	12	0	12	110	756	0	6	904	200
Grp Sat Flow(s),veh/h/ln	1781	0	1568	1840	0	1566	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	2.6	0.0	2.6	0.3	0.0	0.4	1.6	7.2	0.0	0.1	9.6	4.3
Cycle Q Clear(g_c), s	2.6	0.0	2.6	0.3	0.0	0.4	1.6	7.2	0.0	0.1	9.6	4.3
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	0	175	69	0	59	397	1696	769	400	1528	649
V/C Ratio(X)	0.49	0.00	0.49	0.17	0.00	0.20	0.28	0.45	0.00	0.01	0.59	0.31
Avail Cap(c_a), veh/h	1274	0	561	658	0	560	438	1696	769	563	1528	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	21.0	23.5	0.0	23.5	7.8	8.5	0.0	8.5	11.4	9.9
Incr Delay (d2), s/veh	0.9	0.0	2.1	1.2	0.0	1.7	0.4	0.9	0.0	0.0	1.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.2	0.0	0.2	0.4	2.0	0.0	0.0	3.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	23.1	24.7	0.0	25.2	8.2	9.4	0.0	8.6	13.1	11.1
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		280			24			866			1110	
Approach Delay, s/veh		22.3			24.9			9.2			12.7	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	28.9		10.1	8.4	25.4		6.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	21.0		18.0	5.1	20.9		18.0				
Max Q Clear Time (g_c+I1), s	2.1	9.2		4.6	3.6	11.6		2.4				
Green Ext Time (p_c), s	0.0	3.7		0.8	0.0	4.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
 7: Cawston Avenue & Stetson Avenue

Existing PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	265	46	188	231	15	39	127	166	14	187	52
Future Volume (veh/h)	17	265	46	188	231	15	39	127	166	14	187	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	273	47	194	238	15	40	131	171	14	193	54
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	37	426	72	245	478	411	642	996	844	635	996	844
Arrive On Green	0.02	0.14	0.14	0.14	0.26	0.26	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	2978	505	1781	1841	1582	1133	1870	1585	1077	1870	1585
Grp Volume(v), veh/h	18	159	161	194	238	15	40	131	171	14	193	54
Grp Sat Flow(s),veh/h/ln	1781	1749	1734	1781	1841	1582	1133	1870	1585	1077	1870	1585
Q Serve(g_s), s	0.7	6.2	6.4	7.6	7.9	0.5	1.4	2.5	4.1	0.5	3.9	1.2
Cycle Q Clear(g_c), s	0.7	6.2	6.4	7.6	7.9	0.5	5.3	2.5	4.1	3.0	3.9	1.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	250	248	245	478	411	642	996	844	635	996	844
V/C Ratio(X)	0.48	0.63	0.65	0.79	0.50	0.04	0.06	0.13	0.20	0.02	0.19	0.06
Avail Cap(c_a), veh/h	283	738	731	924	1438	1236	642	996	844	635	996	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	29.2	29.3	30.2	22.7	20.0	10.2	8.5	8.9	9.3	8.8	8.2
Incr Delay (d2), s/veh	9.3	2.6	2.9	5.6	0.8	0.0	0.2	0.3	0.5	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.7	2.7	3.5	3.4	0.2	0.3	1.0	1.4	0.1	1.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	31.8	32.1	35.8	23.5	20.0	10.4	8.8	9.4	9.3	9.2	8.3
LnGrp LOS	D	C	C	D	C	C	B	A	A	A	A	A
Approach Vol, veh/h		338			447			342			261	
Approach Delay, s/veh		32.6			28.8			9.3			9.1	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		43.0	14.5	14.9		43.0	6.0	23.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		38.5	37.5	30.5		38.5	11.5	56.5				
Max Q Clear Time (g_c+I1), s		7.3	9.6	8.4		5.9	2.7	9.9				
Green Ext Time (p_c), s		1.5	0.5	1.8		1.4	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay				21.2								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

Existing PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	831	90	23	707	94	55	66	24	113	62	247
Future Volume (veh/h)	214	831	90	23	707	94	55	66	24	113	62	247
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	857	93	24	729	97	57	68	25	116	64	255
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	272	1307	142	50	891	119	442	826	289	519	598	507
Arrive On Green	0.15	0.41	0.41	0.03	0.29	0.29	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3169	344	1781	3099	412	1060	2581	902	1302	1870	1584
Grp Volume(v), veh/h	221	473	477	24	411	415	57	46	47	116	64	255
Grp Sat Flow(s),veh/h/ln	1781	1749	1765	1781	1749	1763	1060	1777	1707	1302	1870	1584
Q Serve(g_s), s	6.8	12.3	12.3	0.7	12.3	12.3	2.3	1.0	1.1	3.8	1.4	7.3
Cycle Q Clear(g_c), s	6.8	12.3	12.3	0.7	12.3	12.3	3.6	1.0	1.1	4.9	1.4	7.3
Prop In Lane	1.00		0.19	1.00		0.23	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	272	721	728	50	503	507	442	568	546	519	598	507
V/C Ratio(X)	0.81	0.66	0.66	0.48	0.82	0.82	0.13	0.08	0.09	0.22	0.11	0.50
Avail Cap(c_a), veh/h	332	730	737	158	559	564	442	568	546	519	598	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	13.3	13.3	27.0	18.7	18.7	14.7	13.4	13.4	15.1	13.5	15.5
Incr Delay (d2), s/veh	12.0	2.1	2.1	7.2	8.5	8.5	0.6	0.3	0.3	1.0	0.4	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.1	4.1	0.4	5.2	5.3	0.6	0.4	0.4	1.1	0.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	15.4	15.4	34.1	27.2	27.1	15.3	13.6	13.7	16.1	13.8	19.1
LnGrp LOS	D	B	B	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1171			850			150			435	
Approach Delay, s/veh		19.1			27.3			14.3			17.5	
Approach LOS		B			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	6.1	27.7		22.5	13.1	20.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.0	5.0	23.5		18.0	10.5	18.0				
Max Q Clear Time (g_c+I1), s		5.6	2.7	14.3		9.3	8.8	14.3				
Green Ext Time (p_c), s		0.5	0.0	3.8		1.1	0.1	1.6				
Intersection Summary												
HCM 6th Ctrl Delay				21.3								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

Existing PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	831	73	19	654	50	92	44	34	48	36	77
Future Volume (veh/h)	65	831	73	19	654	50	92	44	34	48	36	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	884	78	20	696	53	98	47	36	51	38	82
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	176	948	84	119	963	73	458	481	402	130	97	209
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	711	3238	286	584	3289	250	1781	1870	1565	507	377	814
Grp Volume(v), veh/h	69	477	485	20	370	379	98	47	36	171	0	0
Grp Sat Flow(s),veh/h/ln	711	1749	1775	584	1749	1791	1781	1870	1565	1698	0	0
Q Serve(g_s), s	6.7	18.6	18.6	1.9	13.3	13.3	3.0	1.3	1.2	5.8	0.0	0.0
Cycle Q Clear(g_c), s	20.0	18.6	18.6	20.5	13.3	13.3	3.0	1.3	1.2	5.8	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.14	1.00		1.00	0.30		0.48
Lane Grp Cap(c), veh/h	176	512	520	119	512	525	458	481	402	437	0	0
V/C Ratio(X)	0.39	0.93	0.93	0.17	0.72	0.72	0.21	0.10	0.09	0.39	0.00	0.00
Avail Cap(c_a), veh/h	176	512	520	119	512	525	458	481	402	437	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.2	24.1	24.1	34.2	22.2	22.2	20.4	19.8	19.8	21.5	0.0	0.0
Incr Delay (d2), s/veh	1.4	24.1	23.9	0.7	5.0	4.9	1.1	0.4	0.4	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	10.1	10.2	0.3	5.5	5.6	1.3	0.6	0.5	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	48.2	47.9	34.9	27.1	27.1	21.5	20.2	20.2	24.1	0.0	0.0
LnGrp LOS	C	D	D	C	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1031			769			181			171	
Approach Delay, s/veh		47.0			27.3			20.9			24.1	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		5.0		22.0		7.8		22.5				
Green Ext Time (p_c), s		0.4		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				36.0								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Existing PM
 Timing Plan: PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	731	50	30	634	40	30	27	20	41	54	52
Future Volume (veh/h)	35	731	50	30	634	40	30	27	20	41	54	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	754	52	31	654	41	31	28	21	42	56	54
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	68	930	64	61	925	58	61	320	240	76	290	279
Arrive On Green	0.04	0.28	0.28	0.03	0.28	0.28	0.03	0.32	0.32	0.04	0.33	0.33
Sat Flow, veh/h	1781	3313	228	1781	3342	209	1781	985	739	1781	869	838
Grp Volume(v), veh/h	36	398	408	31	342	353	31	0	49	42	0	110
Grp Sat Flow(s),veh/h/ln	1781	1749	1793	1781	1749	1803	1781	0	1724	1781	0	1706
Q Serve(g_s), s	1.1	12.0	12.0	1.0	10.0	10.0	1.0	0.0	1.1	1.3	0.0	2.6
Cycle Q Clear(g_c), s	1.1	12.0	12.0	1.0	10.0	10.0	1.0	0.0	1.1	1.3	0.0	2.6
Prop In Lane	1.00		0.13	1.00		0.12	1.00		0.43	1.00		0.49
Lane Grp Cap(c), veh/h	68	491	503	61	484	499	61	0	560	76	0	569
V/C Ratio(X)	0.53	0.81	0.81	0.51	0.71	0.71	0.51	0.00	0.09	0.55	0.00	0.19
Avail Cap(c_a), veh/h	157	571	585	157	571	589	160	0	560	160	0	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.8	19.0	19.0	26.9	18.4	18.4	26.9	0.0	13.3	26.6	0.0	13.5
Incr Delay (d2), s/veh	6.3	7.5	7.4	6.5	3.2	3.2	6.5	0.0	0.3	6.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.0	5.1	0.5	3.9	4.0	0.5	0.0	0.4	0.7	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	26.5	26.4	33.4	21.7	21.6	33.4	0.0	13.6	32.7	0.0	14.2
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		842			726			80				152
Approach Delay, s/veh		26.7			22.1			21.3				19.3
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	22.9	6.4	20.4	6.4	23.4	6.7	20.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	18.4	5.0	18.5	5.1	18.4	5.0	18.5				
Max Q Clear Time (g_c+I1), s	3.3	3.1	3.0	14.0	3.0	4.6	3.1	12.0				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.9	0.0	0.4	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			24.0									
HCM 6th LOS			C									

- Existing plus Project Conditions

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	145	130	137	124	137	55	811	116	83	591	4
Future Volume (veh/h)	11	145	130	137	124	137	55	811	116	83	591	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	11	148	133	140	127	140	56	828	118	85	603	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	25	250	209	178	177	195	92	1184	169	115	1399	634
Arrive On Green	0.01	0.13	0.13	0.10	0.22	0.22	0.05	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1781	1870	1560	1781	806	889	1781	3063	437	1781	3497	1585
Grp Volume(v), veh/h	11	148	133	140	0	267	56	473	473	85	603	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1695	1781	1749	1751	1781	1749	1585
Q Serve(g_s), s	0.4	4.3	4.6	4.4	0.0	8.3	1.8	13.0	13.0	2.7	7.1	0.1
Cycle Q Clear(g_c), s	0.4	4.3	4.6	4.4	0.0	8.3	1.8	13.0	13.0	2.7	7.1	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	25	250	209	178	0	372	92	676	677	115	1399	634
V/C Ratio(X)	0.44	0.59	0.64	0.79	0.00	0.72	0.61	0.70	0.70	0.74	0.43	0.01
Avail Cap(c_a), veh/h	156	589	491	206	0	581	171	676	677	165	1399	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	23.3	23.4	25.1	0.0	20.7	26.5	14.7	14.7	26.3	12.4	10.3
Incr Delay (d2), s/veh	11.7	2.2	3.2	16.1	0.0	2.6	6.4	5.9	5.9	9.6	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	1.7	2.5	0.0	3.2	0.9	5.6	5.6	1.4	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	25.5	26.6	41.2	0.0	23.2	32.9	20.7	20.7	35.9	13.4	10.3
LnGrp LOS	D	C	C	D	A	C	C	C	C	D	B	B
Approach Vol, veh/h		292			407			1002			692	
Approach Delay, s/veh		26.5			29.4			21.3			16.2	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	26.6	10.2	12.2	7.4	27.4	5.3	17.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.3	22.1	6.6	18.0	5.5	21.9	5.0	19.6				
Max Q Clear Time (g_c+I1), s	4.7	15.0	6.4	6.6	3.8	9.1	2.4	10.3				
Green Ext Time (p_c), s	0.0	3.4	0.0	0.9	0.0	3.3	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			21.9									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary

2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	24	3	153	68	58	14	766	56	26	695	23
Future Volume (veh/h)	9	24	3	153	68	58	14	766	56	26	695	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	27	3	172	76	65	16	861	63	29	781	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	233	126	14	395	325	275	35	1728	764	56	1771	783
Arrive On Green	0.01	0.08	0.08	0.11	0.17	0.17	0.02	0.49	0.49	0.03	0.51	0.51
Sat Flow, veh/h	1781	1650	183	1781	1870	1585	1781	3497	1546	1781	3497	1546
Grp Volume(v), veh/h	10	0	30	172	76	65	16	861	63	29	781	26
Grp Sat Flow(s),veh/h/ln	1781	0	1833	1781	1870	1585	1781	1749	1546	1781	1749	1546
Q Serve(g_s), s	0.3	0.0	1.0	5.2	2.2	2.2	0.6	10.3	1.3	1.0	8.9	0.5
Cycle Q Clear(g_c), s	0.3	0.0	1.0	5.2	2.2	2.2	0.6	10.3	1.3	1.0	8.9	0.5
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	140	395	325	275	35	1728	764	56	1771	783
V/C Ratio(X)	0.04	0.00	0.21	0.44	0.23	0.24	0.46	0.50	0.08	0.51	0.44	0.03
Avail Cap(c_a), veh/h	353	0	528	413	613	520	142	1728	764	160	1771	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	27.1	21.2	22.3	22.3	30.3	10.6	8.3	29.8	9.8	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.8	0.4	0.4	9.3	1.0	0.2	7.1	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	2.1	0.9	0.8	0.3	3.2	0.4	0.5	2.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	27.9	22.0	22.6	22.7	39.7	11.6	8.6	36.9	10.6	7.8
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		40			313			940			836	
Approach Delay, s/veh		27.4			22.3			11.9			11.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	35.4	11.4	9.3	5.7	36.2	5.3	15.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	30.9	7.5	18.0	5.0	31.5	5.0	20.5				
Max Q Clear Time (g_c+13), s	13.6	12.3	7.2	3.0	2.6	10.9	2.3	4.2				
Green Ext Time (p_c), s	0.0	5.5	0.0	0.1	0.0	5.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				13.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	332	7	460	612	99	35	677	655	75	686	89
Future Volume (veh/h)	60	332	7	460	612	99	35	677	655	75	686	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	68	377	8	523	695	112	40	769	744	85	780	101
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	87	480	10	557	1217	196	53	1181	1007	107	1143	148
Arrive On Green	0.05	0.14	0.14	0.32	0.41	0.41	0.03	0.34	0.34	0.06	0.37	0.37
Sat Flow, veh/h	1753	3495	74	1753	3003	483	1753	3497	1515	1753	3104	402
Grp Volume(v), veh/h	68	188	197	523	404	403	40	769	744	85	439	442
Grp Sat Flow(s),veh/h/ln	1753	1749	1820	1753	1749	1737	1753	1749	1515	1753	1749	1758
Q Serve(g_s), s	4.7	12.8	12.9	35.7	22.0	22.0	2.8	22.9	40.9	5.9	26.0	26.1
Cycle Q Clear(g_c), s	4.7	12.8	12.9	35.7	22.0	22.0	2.8	22.9	40.9	5.9	26.0	26.1
Prop In Lane	1.00		0.04	1.00		0.28	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	87	240	250	557	709	704	53	1181	1007	107	644	647
V/C Ratio(X)	0.78	0.78	0.79	0.94	0.57	0.57	0.75	0.65	0.74	0.80	0.68	0.68
Avail Cap(c_a), veh/h	173	277	289	720	824	818	107	1181	1007	150	644	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	51.3	51.3	40.8	28.3	28.3	59.1	34.6	14.3	57.0	32.8	32.8
Incr Delay (d2), s/veh	14.0	12.0	11.9	17.4	0.7	0.7	19.1	2.8	4.9	17.8	5.8	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.2	6.5	17.4	8.9	8.9	1.5	9.8	13.4	3.1	11.6	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.8	63.3	63.2	58.1	29.0	29.0	78.2	37.4	19.2	74.8	38.5	38.5
LnGrp LOS	E	E	E	E	C	C	E	D	B	E	D	D
Approach Vol, veh/h		453		1330			1553			966		
Approach Delay, s/veh		64.5		40.5			29.7			41.7		
Approach LOS		E		D			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	2.0	46.0	43.6	21.4	8.2	49.8	10.6	54.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	41.5	50.5	19.5	7.5	44.5	12.1	57.9				
Max Q Clear Time (g_c+1), s	17.5	42.9	37.7	14.9	4.8	28.1	6.7	24.0				
Green Ext Time (p_c), s	0.0	0.0	1.4	0.8	0.0	4.7	0.0	5.1				

Intersection Summary

HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	74	66	43	1318	1054	91
Future Volume (veh/h)	74	66	43	1318	1054	91
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	106	54	49	1515	1211	105
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	198	88	410	3004	2728	1202
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	106	54	49	1515	1211	105
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.1	3.5	0.5	11.4	12.3	1.7
Cycle Q Clear(g_c), s	3.1	3.5	0.5	11.4	12.3	1.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	198	88	410	3004	2728	1202
V/C Ratio(X)	0.53	0.61	0.12	0.50	0.44	0.09
Avail Cap(c_a), veh/h	693	308	489	3004	2728	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	48.6	2.6	1.9	3.9	2.7
Incr Delay (d2), s/veh	2.2	6.7	0.1	0.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.2	0.1	1.0	2.9	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.6	55.3	2.7	2.5	4.4	2.9
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	160			1564	1316	
Approach Delay, s/veh	52.2			2.5	4.3	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.0		10.4	8.3	86.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		90.5		20.5	8.5	77.5
Max Q Clear Time (g_c+I1), s		13.4		5.5	2.5	14.3
Green Ext Time (p_c), s		17.0		0.4	0.0	11.7

Intersection Summary

HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
 5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	
Traffic Volume (veh/h)	155	5	43	15	8	55	46	1129	13	16	1040	57
Future Volume (veh/h)	155	5	43	15	8	55	46	1129	13	16	1040	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	182	6	51	18	9	65	54	1328	15	19	1224	67
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	123	2	494	104	32	494	89	1524	17	41	1357	74
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.43	0.43	0.02	0.40	0.40
Sat Flow, veh/h	0	7	1579	0	103	1579	1781	3541	40	1781	3366	184
Grp Volume(v), veh/h	188	0	51	27	0	65	54	656	687	19	635	656
Grp Sat Flow(s),veh/h/ln	7	0	1579	103	0	1579	1781	1749	1832	1781	1749	1801
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	1.7	1.7	19.7	19.8	0.6	19.7	19.8
Cycle Q Clear(g_c), s	18.1	0.0	1.3	18.1	0.0	1.7	1.7	19.7	19.8	0.6	19.7	19.8
Prop In Lane	0.97		1.00	0.67		1.00	1.00		0.02	1.00		0.10
Lane Grp Cap(c), veh/h	125	0	494	136	0	494	89	753	789	41	705	726
V/C Ratio(X)	1.51	0.00	0.10	0.20	0.00	0.13	0.60	0.87	0.87	0.47	0.90	0.90
Avail Cap(c_a), veh/h	125	0	494	136	0	494	157	753	789	157	705	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	14.1	16.4	0.0	14.2	26.9	15.0	15.0	27.9	16.2	16.2
Incr Delay (d2), s/veh	265.3	0.0	0.1	0.7	0.0	0.1	6.4	13.1	12.7	8.2	16.9	16.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ft	0.9	0.0	0.5	0.3	0.0	0.6	0.8	8.6	8.9	0.3	9.3	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	293.8	0.0	14.2	17.1	0.0	14.3	33.3	28.1	27.7	36.1	33.0	32.9
LnGrp LOS	F	A	B	B	A	B	C	C	C	D	C	C
Approach Vol, veh/h		239			92			1397			1310	
Approach Delay, s/veh		234.2			15.1			28.1			33.0	
Approach LOS		F			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	29.4		22.6	7.4	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.8	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+1/2C), s	12.6	21.8		20.1	3.7	21.8		20.1				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				46.0								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	401	0	191	20	24	21	202	765	4	8	686	398
Future Volume (veh/h)	401	0	191	20	24	21	202	765	4	8	686	398
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.89	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	495	0	236	25	30	26	249	944	5	10	914	446
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	670	0	278	78	94	134	345	1862	822	303	1658	712
Arrive On Green	0.19	0.00	0.19	0.09	0.09	0.09	0.09	0.53	0.53	0.01	0.45	0.45
Sat Flow, veh/h	3563	0	1477	831	998	1418	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	495	0	236	55	0	26	249	944	5	10	914	446
Grp Sat Flow(s),veh/h/ln	1781	0	1477	1829	0	1418	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	13.6	0.0	16.0	2.9	0.0	1.8	7.4	18.0	0.2	0.3	18.9	22.4
Cycle Q Clear(g_c), s	13.6	0.0	16.0	2.9	0.0	1.8	7.4	18.0	0.2	0.3	18.9	22.4
Prop In Lane	1.00		1.00	0.45		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	670	0	278	172	0	134	345	1862	822	303	1658	712
V/C Ratio(X)	0.74	0.00	0.85	0.32	0.00	0.19	0.72	0.51	0.01	0.03	0.55	0.63
Avail Cap(c_a), veh/h	806	0	334	319	0	247	477	1862	822	369	1658	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	40.7	43.9	0.0	43.4	16.9	15.6	11.4	15.5	20.9	21.9
Incr Delay (d2), s/veh	2.9	0.0	15.9	1.1	0.0	0.7	3.3	1.0	0.0	0.0	1.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	7.1	1.4	0.0	0.6	2.9	6.7	0.1	0.1	7.8	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	56.7	45.0	0.0	44.1	20.2	16.5	11.4	15.6	22.2	26.0
LnGrp LOS	D	A	E	D	A	D	C	B	B	B	C	C
Approach Vol, veh/h		731			81			1198			1370	
Approach Delay, s/veh		47.2			44.7			17.3			23.4	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	59.8		24.0	14.3	51.3		14.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.8	55.3		23.5	17.5	42.9		18.1				
Max Q Clear Time (g_c+1/3), s	12.3	20.0		18.0	9.4	24.4		4.9				
Green Ext Time (p_c), s	0.0	7.2		1.5	0.4	7.4		0.2				

Intersection Summary

HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	172	26	187	247	24	42	160	249	18	133	33
Future Volume (veh/h)	33	172	26	187	247	24	42	160	249	18	133	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	187	28	203	268	26	46	174	271	20	145	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	68	339	50	262	405	349	687	952	797	558	952	807
Arrive On Green	0.04	0.11	0.11	0.15	0.22	0.22	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	3057	451	1781	1841	1585	1203	1870	1565	945	1870	1585
Grp Volume(v), veh/h	36	106	109	203	268	26	46	174	271	20	145	36
Grp Sat Flow(s),veh/h/ln	1781	1749	1760	1781	1841	1585	1203	1870	1565	945	1870	1585
Q Serve(g_s), s	1.1	3.3	3.4	6.4	7.7	0.8	1.2	2.9	6.0	0.7	2.4	0.7
Cycle Q Clear(g_c), s	1.1	3.3	3.4	6.4	7.7	0.8	3.6	2.9	6.0	3.6	2.4	0.7
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	194	195	262	405	349	687	952	797	558	952	807
V/C Ratio(X)	0.53	0.55	0.56	0.77	0.66	0.07	0.07	0.18	0.34	0.04	0.15	0.04
Avail Cap(c_a), veh/h	292	649	653	784	1191	1026	687	952	797	558	952	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	24.4	24.4	23.8	20.6	17.9	8.5	7.7	8.4	8.7	7.6	7.1
Incr Delay (d2), s/veh	6.4	2.4	2.5	4.9	1.9	0.1	0.2	0.4	1.2	0.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.6	1.4	1.5	2.8	3.2	0.3	0.3	1.1	1.9	0.1	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	26.8	26.9	28.7	22.5	18.0	8.7	8.1	9.6	8.8	7.9	7.2
LnGrp LOS	C	C	C	C	C	B	A	A	A	A	A	A
Approach Vol, veh/h		251			497			491			201	
Approach Delay, s/veh		27.8			24.8			9.0			7.9	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		34.0	13.0	10.9		34.0	6.7	17.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		29.5	25.5	21.5		29.5	9.5	37.5				
Max Q Clear Time (g_c+I1), s		8.0	8.4	5.4		5.6	3.1	9.7				
Green Ext Time (p_c), s		2.1	0.5	1.0		1.0	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay											17.6	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary

8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	830	39	9	873	84	66	55	17	70	26	230
Future Volume (veh/h)	191	830	39	9	873	84	66	55	17	70	26	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	965	45	10	1015	98	77	64	20	81	30	267
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	266	1607	75	23	1082	104	429	824	246	489	572	477
Arrive On Green	0.15	0.47	0.47	0.01	0.34	0.34	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3397	158	1781	3215	310	1080	2694	805	1311	1870	1560
Grp Volume(v), veh/h	222	497	513	10	552	561	77	41	43	81	30	267
Grp Sat Flow(s),veh/h/ln	1781	1749	1806	1781	1749	1777	1080	1777	1723	1311	1870	1560
Q Serve(g_s), s	7.8	13.5	13.5	0.4	19.8	19.8	3.5	1.1	1.1	3.0	0.7	9.3
Cycle Q Clear(g_c), s	7.8	13.5	13.5	0.4	19.8	19.8	4.2	1.1	1.1	4.2	0.7	9.3
Prop In Lane	1.00		0.09	1.00		0.17	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	266	827	855	23	589	598	429	543	527	489	572	477
V/C Ratio(X)	0.83	0.60	0.60	0.44	0.94	0.94	0.18	0.08	0.08	0.17	0.05	0.56
Avail Cap(c_a), veh/h	272	827	855	138	589	598	429	543	527	489	572	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	12.6	12.6	31.7	20.8	20.8	17.4	16.0	16.0	17.5	15.9	18.8
Incr Delay (d2), s/veh	19.3	1.2	1.2	12.9	22.9	22.7	0.9	0.3	0.3	0.7	0.2	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.4	4.5	0.2	10.5	10.6	0.9	0.5	0.5	0.9	0.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	13.8	13.7	44.7	43.7	43.6	18.3	16.3	16.3	18.2	16.0	23.5
LnGrp LOS	D	B	B	D	D	D	B	B	B	B	B	C
Approach Vol, veh/h		1232			1123			161			378	
Approach Delay, s/veh		19.6			43.6			17.2			21.8	
Approach LOS		B			D			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.3	5.3	35.1		24.3	14.2	26.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.8	5.0	26.7		19.8	9.9	21.8				
Max Q Clear Time (g_c+I1), s		6.2	2.4	15.5		11.3	9.8	21.8				
Green Ext Time (p_c), s		0.6	0.0	4.5		0.9	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay											29.1	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	796	70	17	738	43	141	36	16	35	34	89
Future Volume (veh/h)	49	796	70	17	738	43	141	36	16	35	34	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	894	79	19	829	48	158	40	18	39	38	100
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	141	951	84	117	982	57	458	481	408	95	93	244
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	632	3247	287	578	3352	194	1781	1870	1585	370	361	950
Grp Volume(v), veh/h	55	481	492	19	432	445	158	40	18	177	0	0
Grp Sat Flow(s),veh/h/ln	632	1749	1786	578	1749	1797	1781	1870	1585	1681	0	0
Q Serve(g_s), s	4.2	18.8	18.8	1.7	16.3	16.3	5.1	1.1	0.6	6.1	0.0	0.0
Cycle Q Clear(g_c), s	20.5	18.8	18.8	20.5	16.3	16.3	5.1	1.1	0.6	6.1	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	0.22		0.56
Lane Grp Cap(c), veh/h	141	512	523	117	512	526	458	481	408	432	0	0
V/C Ratio(X)	0.39	0.94	0.94	0.16	0.84	0.84	0.34	0.08	0.04	0.41	0.00	0.00
Avail Cap(c_a), veh/h	141	512	523	117	512	526	458	481	408	432	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.5	24.2	24.2	34.4	23.3	23.3	21.2	19.7	19.5	21.6	0.0	0.0
Incr Delay (d2), s/veh	1.8	25.6	25.3	0.6	12.3	12.0	2.1	0.3	0.2	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	10.4	10.6	0.3	7.6	7.8	2.2	0.5	0.2	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	49.8	49.4	35.0	35.5	35.3	23.2	20.1	19.7	24.4	0.0	0.0
LnGrp LOS	D	D	D	D	D	D	C	C	B	C	A	A
Approach Vol, veh/h		1028			896			216			177	
Approach Delay, s/veh		48.8			35.4			22.4			24.4	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		7.1		22.5		8.1		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay											39.3	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	69	661	54	27	660	32	39	58	31	29	54	85
Future Volume (veh/h)	69	661	54	27	660	32	39	58	31	29	54	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	734	60	30	733	36	43	64	34	32	60	94
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	109	972	79	59	911	45	76	378	201	62	208	326
Arrive On Green	0.06	0.30	0.30	0.03	0.27	0.27	0.04	0.33	0.33	0.03	0.32	0.32
Sat Flow, veh/h	1781	3271	267	1781	3385	166	1781	1149	610	1781	650	1018
Grp Volume(v), veh/h	77	392	402	30	378	391	43	0	98	32	0	154
Grp Sat Flow(s),veh/h/ln	1781	1749	1790	1781	1749	1803	1781	0	1759	1781	0	1668
Q Serve(g_s), s	2.5	11.9	11.9	1.0	11.8	11.9	1.4	0.0	2.3	1.0	0.0	4.1
Cycle Q Clear(g_c), s	2.5	11.9	11.9	1.0	11.8	11.9	1.4	0.0	2.3	1.0	0.0	4.1
Prop In Lane	1.00		0.15	1.00		0.09	1.00		0.35	1.00		0.61
Lane Grp Cap(c), veh/h	109	520	532	59	471	485	76	0	578	62	0	534
V/C Ratio(X)	0.71	0.75	0.76	0.51	0.80	0.80	0.56	0.00	0.17	0.52	0.00	0.29
Avail Cap(c_a), veh/h	155	539	552	155	539	556	152	0	578	152	0	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	18.7	18.7	27.9	20.0	20.0	27.5	0.0	14.0	27.8	0.0	14.9
Incr Delay (d2), s/veh	8.2	5.8	5.7	6.7	7.7	7.5	6.3	0.0	0.6	6.6	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.8	4.9	0.5	5.1	5.3	0.7	0.0	1.0	0.5	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	24.5	24.4	34.6	27.7	27.5	33.9	0.0	14.6	34.4	0.0	16.3
LnGrp LOS	D	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		871			799			141				186
Approach Delay, s/veh		25.4			27.9			20.5				19.4
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	23.8	6.4	21.9	7.0	23.3	8.1	20.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.8	5.1	18.1	5.0	18.8	5.1	18.1				
Max Q Clear Time (g_c+1), s	13.0	4.3	3.0	13.9	3.4	6.1	4.5	13.9				
Green Ext Time (p_c), s	0.0	0.4	0.0	1.7	0.0	0.6	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay					25.5							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	195	176	199	180	197	109	879	99	173	880	14
Future Volume (veh/h)	15	195	176	199	180	197	109	879	99	173	880	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	16	205	185	209	189	207	115	925	104	182	926	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	33	284	240	247	220	241	146	1161	131	219	1426	645
Arrive On Green	0.02	0.15	0.15	0.14	0.27	0.27	0.08	0.37	0.37	0.12	0.41	0.41
Sat Flow, veh/h	1781	1870	1579	1781	809	886	1781	3168	356	1781	3497	1581
Grp Volume(v), veh/h	16	205	185	209	0	396	115	511	518	182	926	15
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1695	1781	1749	1775	1781	1749	1581
Q Serve(g_s), s	0.7	8.5	9.2	9.4	0.0	18.2	5.2	21.4	21.4	8.2	17.5	0.5
Cycle Q Clear(g_c), s	0.7	8.5	9.2	9.4	0.0	18.2	5.2	21.4	21.4	8.2	17.5	0.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	33	284	240	247	0	461	146	641	651	219	1426	645
V/C Ratio(X)	0.48	0.72	0.77	0.85	0.00	0.86	0.79	0.80	0.80	0.83	0.65	0.02
Avail Cap(c_a), veh/h	109	411	347	272	0	528	189	641	651	250	1426	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	33.1	33.3	34.4	0.0	28.3	36.9	23.2	23.2	35.1	19.5	14.5
Incr Delay (d2), s/veh	10.4	3.5	6.4	19.9	0.0	12.2	15.3	9.9	9.8	18.5	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.9	3.8	5.3	0.0	8.5	2.8	10.1	10.2	4.6	7.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	36.5	39.7	54.3	0.0	40.5	52.2	33.1	33.0	53.6	21.8	14.6
LnGrp LOS	D	D	D	D	A	D	D	C	C	D	C	B
Approach Vol, veh/h		406			605			1144			1123	
Approach Delay, s/veh		38.5			45.3			35.0			26.9	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	34.5	15.8	16.9	11.2	37.9	6.0	26.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.5	30.0	12.5	18.0	8.7	32.8	5.0	25.5				
Max Q Clear Time (g_c+I1), s	10.2	23.4	11.4	11.2	7.2	19.5	2.7	20.2				
Green Ext Time (p_c), s	0.1	3.5	0.1	1.0	0.0	5.5	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			34.5									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	50	20	84	24	68	6	872	102	104	981	11
Future Volume (veh/h)	30	50	20	84	24	68	6	872	102	104	981	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	32	54	22	90	26	73	6	938	110	112	1055	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	323	127	52	331	250	207	14	1487	657	143	1740	769
Arrive On Green	0.04	0.10	0.10	0.07	0.13	0.13	0.01	0.43	0.43	0.08	0.50	0.50
Sat Flow, veh/h	1781	1258	513	1781	1870	1550	1781	3497	1545	1781	3497	1545
Grp Volume(v), veh/h	32	0	76	90	26	73	6	938	110	112	1055	12
Grp Sat Flow(s),veh/h/ln	1781	0	1771	1781	1870	1550	1781	1749	1545	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.2	2.4	0.7	2.4	0.2	11.6	2.4	3.4	12.0	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.2	2.4	0.7	2.4	0.2	11.6	2.4	3.4	12.0	0.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	179	331	250	207	14	1487	657	143	1740	769
V/C Ratio(X)	0.10	0.00	0.42	0.27	0.10	0.35	0.42	0.63	0.17	0.78	0.61	0.02
Avail Cap(c_a), veh/h	421	0	577	371	609	505	161	1487	657	177	1740	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	23.3	20.2	21.0	21.8	27.3	12.5	9.8	24.9	10.0	7.0
Incr Delay (d2), s/veh	0.1	0.0	1.6	0.4	0.2	1.0	18.8	2.0	0.6	16.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.9	1.0	0.3	0.9	0.1	3.8	0.8	1.9	3.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	24.9	20.6	21.2	22.8	46.1	14.5	10.4	41.3	11.6	7.1
LnGrp LOS	C	A	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		108			189			1054			1179	
Approach Delay, s/veh		23.8			21.5			14.3			14.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	28.0	8.2	10.1	4.9	32.0	6.4	11.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	23.5	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+1/4), s	15.4	13.6	4.4	4.2	2.2	14.0	2.9	4.4				
Green Ext Time (p_c), s	0.0	4.4	0.0	0.2	0.0	4.8	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay											15.3	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	488	17	466	473	155	20	598	497	181	791	112
Future Volume (veh/h)	228	488	17	466	473	155	20	598	497	181	791	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	238	508	18	485	493	161	21	623	518	189	824	117
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	270	586	21	518	802	260	37	896	848	218	1100	156
Arrive On Green	0.15	0.17	0.17	0.30	0.31	0.31	0.02	0.26	0.26	0.12	0.36	0.36
Sat Flow, veh/h	1753	3438	122	1753	2573	834	1753	3497	1514	1753	3064	435
Grp Volume(v), veh/h	238	258	268	485	334	320	21	623	518	189	470	471
Grp Sat Flow(s),veh/h/ln	1753	1749	1811	1753	1749	1659	1753	1749	1514	1753	1749	1750
Q Serve(g_s), s	15.5	16.8	16.9	31.5	19.0	19.2	1.4	18.9	27.3	12.4	27.6	27.6
Cycle Q Clear(g_c), s	15.5	16.8	16.9	31.5	19.0	19.2	1.4	18.9	27.3	12.4	27.6	27.6
Prop In Lane	1.00		0.07	1.00		0.50	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	270	298	309	518	545	517	37	896	848	218	628	628
V/C Ratio(X)	0.88	0.87	0.87	0.94	0.61	0.62	0.57	0.70	0.61	0.87	0.75	0.75
Avail Cap(c_a), veh/h	432	345	358	622	545	517	81	896	848	277	628	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	47.2	47.2	40.1	34.2	34.3	56.7	39.4	17.9	50.3	32.9	32.9
Incr Delay (d2), s/veh	12.0	18.0	17.9	19.9	2.0	2.2	12.9	4.4	3.3	20.3	8.0	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.5	8.8	15.8	8.1	7.8	0.7	8.4	9.4	6.5	12.5	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	65.2	65.1	60.0	36.2	36.6	69.6	43.8	21.2	70.6	40.8	40.8
LnGrp LOS	E	E	E	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		764		1139			1162			1130		
Approach Delay, s/veh		63.7		46.4			34.2			45.8		
Approach LOS		E		D			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	34.4	39.0	24.4	7.0	46.5	22.5	41.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.5	28.9	41.5	23.1	5.4	42.0	28.8	35.8				
Max Q Clear Time (g_c+1/4), s	14.4	29.3	33.5	18.9	3.4	29.6	17.5	21.2				
Green Ext Time (p_c), s	0.2	0.0	1.0	1.1	0.0	4.4	0.5	3.2				

Intersection Summary

HCM 6th Ctrl Delay	46.0
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	69	75	938	1015	224
Future Volume (veh/h)	204	69	75	938	1015	224
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	206	70	76	947	1025	226
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	296	132	429	2908	2610	1155
Arrive On Green	0.08	0.08	0.04	0.83	0.75	0.75
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	206	70	76	947	1025	226
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	5.9	4.5	0.9	6.6	11.1	4.6
Cycle Q Clear(g_c), s	5.9	4.5	0.9	6.6	11.1	4.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	296	132	429	2908	2610	1155
V/C Ratio(X)	0.70	0.53	0.18	0.33	0.39	0.20
Avail Cap(c_a), veh/h	795	354	531	2908	2610	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	46.3	3.0	2.1	4.8	4.0
Incr Delay (d2), s/veh	2.9	3.3	0.2	0.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.1	0.2	1.0	3.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.9	49.6	3.2	2.4	5.2	4.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	276			1023	1251	
Approach Delay, s/veh	49.8			2.4	5.1	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.0		13.2	9.0	83.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	10.5	72.5
Max Q Clear Time (g_c+I1), s		8.6		7.9	2.9	13.1
Green Ext Time (p_c), s		7.6		0.8	0.1	9.7
Intersection Summary						
HCM 6th Ctrl Delay			8.9			
HCM 6th LOS			A			
Notes						
User approved volume balancing among the lanes for turning movement.						

HCM 6th Signalized Intersection Summary
5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕	↖	↖	↕	↖
Traffic Volume (veh/h)	93	12	59	10	14	38	46	882	13	27	1009	107
Future Volume (veh/h)	93	12	59	10	14	38	46	882	13	27	1009	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	94	12	60	10	14	38	46	891	13	27	1019	108
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	118	8	489	89	90	495	81	1481	22	54	1289	137
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.42	0.42	0.03	0.41	0.41
Sat Flow, veh/h	0	26	1553	0	287	1573	1781	3527	51	1781	3182	337
Grp Volume(v), veh/h	106	0	60	24	0	38	46	442	462	27	560	567
Grp Sat Flow(s),veh/h/ln	26	0	1553	287	0	1573	1781	1749	1830	1781	1749	1770
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	1.0	1.5	11.3	11.3	0.9	16.1	16.1
Cycle Q Clear(g_c), s	18.1	0.0	1.6	18.1	0.0	1.0	1.5	11.3	11.3	0.9	16.1	16.1
Prop In Lane	0.89		1.00	0.42		1.00	1.00		0.03	1.00		0.19
Lane Grp Cap(c), veh/h	126	0	489	179	0	495	81	734	769	54	709	717
V/C Ratio(X)	0.84	0.00	0.12	0.13	0.00	0.08	0.57	0.60	0.60	0.50	0.79	0.79
Avail Cap(c_a), veh/h	126	0	489	179	0	495	158	734	769	158	709	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	14.0	15.7	0.0	13.8	26.9	12.9	12.9	27.4	15.0	15.0
Incr Delay (d2), s/veh	36.7	0.0	0.1	0.3	0.0	0.1	6.2	3.6	3.5	6.9	8.7	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.5	0.2	0.0	0.3	0.7	4.1	4.3	0.4	6.6	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	0.0	14.2	16.1	0.0	13.9	33.1	16.6	16.4	34.3	23.7	23.7
LnGrp LOS	E	A	B	B	A	B	C	B	B	C	C	C
Approach Vol, veh/h		166			62			950			1154	
Approach Delay, s/veh		46.0			14.7			17.3			23.9	
Approach LOS		D			B			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	28.7		22.6	7.1	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+1/2g), s	12.0	13.3		20.1	3.5	18.1		20.1				
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	2.9		0.0				
Intersection Summary												
HCM 6th Ctrl Delay											22.6	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	0	83	4	8	12	106	738	0	6	880	198
Future Volume (veh/h)	192	0	83	4	8	12	106	738	0	6	880	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	200	0	86	4	8	12	110	769	0	6	917	206
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	404	0	178	23	46	59	392	1697	769	394	1529	650
Arrive On Green	0.11	0.00	0.11	0.04	0.04	0.04	0.08	0.49	0.00	0.01	0.42	0.42
Sat Flow, veh/h	3563	0	1568	613	1226	1566	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	200	0	86	12	0	12	110	769	0	6	917	206
Grp Sat Flow(s),veh/h/ln	1781	0	1568	1840	0	1566	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	2.7	0.0	2.6	0.3	0.0	0.4	1.6	7.3	0.0	0.1	9.8	4.5
Cycle Q Clear(g_c), s	2.7	0.0	2.6	0.3	0.0	0.4	1.6	7.3	0.0	0.1	9.8	4.5
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	0	178	69	0	59	392	1697	769	394	1529	650
V/C Ratio(X)	0.50	0.00	0.48	0.17	0.00	0.20	0.28	0.45	0.00	0.02	0.60	0.32
Avail Cap(c_a), veh/h	1268	0	558	655	0	557	430	1697	769	556	1529	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	21.0	23.6	0.0	23.6	7.9	8.6	0.0	8.6	11.5	10.0
Incr Delay (d2), s/veh	0.9	0.0	2.0	1.2	0.0	1.7	0.4	0.9	0.0	0.0	1.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.2	0.0	0.2	0.4	2.0	0.0	0.0	3.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	23.1	24.8	0.0	25.3	8.3	9.5	0.0	8.6	13.3	11.2
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		286			24			879			1129	
Approach Delay, s/veh		22.3			25.0			9.3			12.9	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	29.0		10.2	8.4	25.5		6.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	21.0		18.0	5.0	21.0		18.0				
Max Q Clear Time (g_c+1), s	12.5	9.3		4.7	3.6	11.8		2.4				
Green Ext Time (p_c), s	0.0	3.7		0.8	0.0	4.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
 7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	277	46	188	243	15	39	127	166	14	187	52
Future Volume (veh/h)	17	277	46	188	243	15	39	127	166	14	187	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	286	47	194	251	15	40	131	171	14	193	54
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	37	441	72	245	486	417	638	990	839	631	990	839
Arrive On Green	0.02	0.15	0.15	0.14	0.26	0.26	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	3001	486	1781	1841	1582	1133	1870	1585	1077	1870	1585
Grp Volume(v), veh/h	18	165	168	194	251	15	40	131	171	14	193	54
Grp Sat Flow(s),veh/h/ln	1781	1749	1738	1781	1841	1582	1133	1870	1585	1077	1870	1585
Q Serve(g_s), s	0.7	6.5	6.6	7.7	8.5	0.5	1.4	2.6	4.1	0.5	3.9	1.2
Cycle Q Clear(g_c), s	0.7	6.5	6.6	7.7	8.5	0.5	5.3	2.6	4.1	3.1	3.9	1.2
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	257	256	245	486	417	638	990	839	631	990	839
V/C Ratio(X)	0.48	0.64	0.66	0.79	0.52	0.04	0.06	0.13	0.20	0.02	0.19	0.06
Avail Cap(c_a), veh/h	282	734	729	919	1430	1229	638	990	839	631	990	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	29.2	29.3	30.3	22.8	19.9	10.4	8.7	9.0	9.4	9.0	8.3
Incr Delay (d2), s/veh	9.3	2.7	2.9	5.7	0.9	0.0	0.2	0.3	0.5	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.4	2.8	2.9	3.5	3.6	0.2	0.4	1.0	1.4	0.1	1.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	31.9	32.1	36.0	23.7	19.9	10.6	8.9	9.6	9.5	9.4	8.5
LnGrp LOS	D	C	C	D	C	B	B	A	A	A	A	A
Approach Vol, veh/h		351		460		342		261				
Approach Delay, s/veh		32.6		28.7		9.4		9.2				
Approach LOS		C		C		A		A				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		43.0	14.5	15.2		43.0	6.0	23.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		38.5	37.5	30.5		38.5	11.5	56.5				
Max Q Clear Time (g_c+I1), s		7.3	9.7	8.6		5.9	2.7	10.5				
Green Ext Time (p_c), s		1.5	0.5	1.9		1.4	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay				21.4								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	857	96	23	734	94	61	66	24	113	62	262
Future Volume (veh/h)	229	857	96	23	734	94	61	66	24	113	62	262
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	884	99	24	757	97	63	68	25	116	64	270
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	283	1321	148	49	893	114	436	836	292	520	606	513
Arrive On Green	0.16	0.42	0.42	0.03	0.29	0.29	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3158	354	1781	3115	399	1046	2581	902	1302	1870	1584
Grp Volume(v), veh/h	236	490	493	24	425	429	63	46	47	116	64	270
Grp Sat Flow(s),veh/h/ln	1781	1749	1763	1781	1749	1765	1046	1777	1707	1302	1870	1584
Q Serve(g_s), s	7.5	13.3	13.3	0.8	13.4	13.4	2.6	1.0	1.1	4.0	1.4	8.1
Cycle Q Clear(g_c), s	7.5	13.3	13.3	0.8	13.4	13.4	4.0	1.0	1.1	5.1	1.4	8.1
Prop In Lane	1.00		0.20	1.00		0.23	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	283	731	737	49	502	506	436	576	553	520	606	513
V/C Ratio(X)	0.83	0.67	0.67	0.49	0.85	0.85	0.14	0.08	0.09	0.22	0.11	0.53
Avail Cap(c_a), veh/h	289	731	737	152	537	542	436	576	553	520	606	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	13.8	13.8	28.1	19.7	19.7	15.3	13.8	13.8	15.6	13.9	16.2
Incr Delay (d2), s/veh	18.2	2.4	2.3	7.3	11.5	11.4	0.7	0.3	0.3	1.0	0.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.5	4.5	0.4	6.1	6.2	0.7	0.4	0.5	1.2	0.6	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	16.1	16.1	35.4	31.2	31.1	16.0	14.0	14.1	16.6	14.2	20.0
LnGrp LOS	D	B	B	D	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1219			878			156			450	
Approach Delay, s/veh		21.2			31.3			14.8			18.3	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	6.1	29.0		23.5	13.8	21.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	5.0	22.5		19.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s		6.0	2.8	15.3		10.1	9.5	15.4				
Green Ext Time (p_c), s		0.6	0.0	3.3		1.1	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay					23.6							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	849	75	19	673	50	94	44	34	48	36	83
Future Volume (veh/h)	71	849	75	19	673	50	94	44	34	48	36	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	903	80	20	716	53	100	47	36	51	38	88
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	170	948	84	114	966	71	458	481	402	126	94	217
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	698	3237	287	572	3297	244	1781	1870	1565	488	364	842
Grp Volume(v), veh/h	76	488	495	20	380	389	100	47	36	177	0	0
Grp Sat Flow(s),veh/h/ln	698	1749	1775	572	1749	1792	1781	1870	1565	1694	0	0
Q Serve(g_s), s	6.8	19.2	19.2	1.3	13.7	13.7	3.1	1.3	1.2	6.1	0.0	0.0
Cycle Q Clear(g_c), s	20.5	19.2	19.2	20.5	13.7	13.7	3.1	1.3	1.2	6.1	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.14	1.00		1.00	0.29		0.50
Lane Grp Cap(c), veh/h	170	512	520	114	512	525	458	481	402	436	0	0
V/C Ratio(X)	0.45	0.95	0.95	0.18	0.74	0.74	0.22	0.10	0.09	0.41	0.00	0.00
Avail Cap(c_a), veh/h	170	512	520	114	512	525	458	481	402	436	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.0	24.3	24.3	34.6	22.4	22.4	20.5	19.8	19.8	21.6	0.0	0.0
Incr Delay (d2), s/veh	1.8	28.2	27.9	0.7	5.7	5.6	1.1	0.4	0.4	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	10.9	11.0	0.3	5.7	5.9	1.3	0.6	0.5	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	52.4	52.2	35.4	28.1	28.0	21.6	20.2	20.2	24.4	0.0	0.0
LnGrp LOS	C	D	D	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1059			789			183			177	
Approach Delay, s/veh		51.0			28.2			20.9			24.4	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		5.1		22.5		8.1		22.5				
Green Ext Time (p_c), s		0.4		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay											38.2	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	741	52	30	644	40	32	27	20	41	54	58
Future Volume (veh/h)	41	741	52	30	644	40	32	27	20	41	54	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	764	54	31	664	41	33	28	21	42	56	60
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	76	942	67	61	924	57	64	315	237	76	268	287
Arrive On Green	0.04	0.28	0.28	0.03	0.28	0.28	0.04	0.32	0.32	0.04	0.33	0.33
Sat Flow, veh/h	1781	3306	234	1781	3345	206	1781	985	739	1781	820	878
Grp Volume(v), veh/h	42	404	414	31	347	358	33	0	49	42	0	116
Grp Sat Flow(s),veh/h/ln	1781	1749	1791	1781	1749	1803	1781	0	1724	1781	0	1698
Q Serve(g_s), s	1.3	12.1	12.2	1.0	10.1	10.1	1.0	0.0	1.1	1.3	0.0	2.8
Cycle Q Clear(g_c), s	1.3	12.1	12.2	1.0	10.1	10.1	1.0	0.0	1.1	1.3	0.0	2.8
Prop In Lane	1.00		0.13	1.00		0.11	1.00		0.43	1.00		0.52
Lane Grp Cap(c), veh/h	76	498	510	61	483	498	64	0	552	76	0	555
V/C Ratio(X)	0.55	0.81	0.81	0.51	0.72	0.72	0.52	0.00	0.09	0.55	0.00	0.21
Avail Cap(c_a), veh/h	161	578	592	161	578	596	161	0	552	161	0	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	18.8	18.8	26.8	18.5	18.5	26.8	0.0	13.5	26.5	0.0	13.7
Incr Delay (d2), s/veh	6.1	7.5	7.4	6.5	3.4	3.4	6.4	0.0	0.3	6.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.1	5.2	0.5	3.9	4.0	0.5	0.0	0.5	0.7	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	26.3	26.2	33.3	21.9	21.9	33.2	0.0	13.8	32.7	0.0	14.6
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		860			736			82				158
Approach Delay, s/veh		26.6			22.4			21.6				19.4
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	22.6	6.4	20.6	6.5	23.0	6.9	20.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	18.1	5.1	18.7	5.1	18.1	5.1	18.7				
Max Q Clear Time (g_c+1/3), s	13.3	3.1	3.0	14.2	3.0	4.8	3.3	12.1				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.9	0.0	0.4	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay				24.0								
HCM 6th LOS				C								

- Opening Year 2022 Conditions

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

Opening Year
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	151	131	134	129	142	53	835	112	86	606	4
Future Volume (veh/h)	11	151	131	134	129	142	53	835	112	86	606	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	11	154	134	137	132	145	54	852	114	88	618	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	25	252	210	174	176	194	89	1203	161	117	1415	641
Arrive On Green	0.01	0.13	0.13	0.10	0.22	0.22	0.05	0.39	0.39	0.07	0.40	0.40
Sat Flow, veh/h	1781	1870	1560	1781	808	887	1781	3091	414	1781	3497	1585
Grp Volume(v), veh/h	11	154	134	137	0	277	54	482	484	88	618	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1695	1781	1749	1756	1781	1749	1585
Q Serve(g_s), s	0.4	4.5	4.7	4.3	0.0	8.8	1.7	13.4	13.4	2.8	7.4	0.1
Cycle Q Clear(g_c), s	0.4	4.5	4.7	4.3	0.0	8.8	1.7	13.4	13.4	2.8	7.4	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	25	252	210	174	0	370	89	681	683	117	1415	641
V/C Ratio(X)	0.44	0.61	0.64	0.79	0.00	0.75	0.60	0.71	0.71	0.75	0.44	0.01
Avail Cap(c_a), veh/h	155	585	488	201	0	574	195	681	683	158	1415	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	23.5	23.6	25.4	0.0	21.0	26.8	14.8	14.8	26.4	12.4	10.2
Incr Delay (d2), s/veh	11.7	2.4	3.2	16.3	0.0	3.0	6.4	6.1	6.1	12.9	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	1.8	2.5	0.0	3.4	0.8	5.7	5.8	1.5	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	25.9	26.8	41.7	0.0	24.1	33.2	20.9	20.9	39.3	13.4	10.2
LnGrp LOS	D	C	C	D	A	C	C	C	C	D	B	B
Approach Vol, veh/h		299			414			1020			710	
Approach Delay, s/veh		26.8			29.9			21.6			16.6	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	26.9	10.1	12.2	7.4	27.8	5.3	17.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	22.4	6.5	18.0	6.3	21.2	5.0	19.5				
Max Q Clear Time (g_c+I1), s	4.8	15.4	6.3	6.7	3.7	9.4	2.4	10.8				
Green Ext Time (p_c), s	0.0	3.5	0.0	0.9	0.0	3.3	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay				22.2								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

Opening Year
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	9	25	3	159	71	60	15	776	58	27	702	24
Future Volume (veh/h)	9	25	3	159	71	60	15	776	58	27	702	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	28	3	179	80	67	17	872	65	30	789	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	237	129	14	407	336	285	37	1685	745	58	1727	764
Arrive On Green	0.01	0.08	0.08	0.11	0.18	0.18	0.02	0.48	0.48	0.03	0.49	0.49
Sat Flow, veh/h	1781	1657	178	1781	1870	1585	1781	3497	1546	1781	3497	1546
Grp Volume(v), veh/h	10	0	31	179	80	67	17	872	65	30	789	27
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1781	1870	1585	1781	1749	1546	1781	1749	1546
Q Serve(g_s), s	0.3	0.0	1.0	5.3	2.3	2.2	0.6	10.6	1.4	1.0	9.1	0.6
Cycle Q Clear(g_c), s	0.3	0.0	1.0	5.3	2.3	2.2	0.6	10.6	1.4	1.0	9.1	0.6
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	143	407	336	285	37	1685	745	58	1727	764
V/C Ratio(X)	0.04	0.00	0.22	0.44	0.24	0.23	0.47	0.52	0.09	0.52	0.46	0.04
Avail Cap(c_a), veh/h	359	0	537	458	664	562	145	1685	745	162	1727	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	26.6	20.6	21.6	21.6	29.8	11.0	8.6	29.2	10.2	8.0
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.7	0.4	0.4	9.0	1.1	0.2	6.9	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	2.1	1.0	0.8	0.3	3.3	0.5	0.5	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	0.0	27.3	21.3	21.9	22.0	38.7	12.1	8.8	36.2	11.0	8.1
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		41			326			954			846	
Approach Delay, s/veh		26.9			21.6			12.4			11.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	34.1	11.5	9.3	5.8	34.8	5.3	15.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	29.6	8.8	18.0	5.0	30.2	5.0	21.8				
Max Q Clear Time (g_c+I1), s	3.0	12.6	7.3	3.0	2.6	11.1	2.3	4.3				
Green Ext Time (p_c), s	0.0	5.4	0.1	0.1	0.0	4.9	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				13.8								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
3: Sanderson Avenue & Stetson Avenue

Opening Year
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	337	7	458	632	93	32	694	681	57	713	93
Future Volume (veh/h)	62	337	7	458	632	93	32	694	681	57	713	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	70	383	8	520	718	106	36	789	774	65	810	106
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	89	483	10	554	1228	181	50	1230	1027	83	1148	150
Arrive On Green	0.05	0.14	0.14	0.32	0.40	0.40	0.03	0.35	0.35	0.05	0.37	0.37
Sat Flow, veh/h	1753	3496	73	1753	3044	449	1753	3497	1516	1753	3100	406
Grp Volume(v), veh/h	70	191	200	520	412	412	36	789	774	65	457	459
Grp Sat Flow(s),veh/h/ln	1753	1749	1821	1753	1749	1745	1753	1749	1516	1753	1749	1757
Q Serve(g_s), s	4.8	13.0	13.1	35.4	22.6	22.6	2.5	23.2	42.5	4.5	27.4	27.4
Cycle Q Clear(g_c), s	4.8	13.0	13.1	35.4	22.6	22.6	2.5	23.2	42.5	4.5	27.4	27.4
Prop In Lane	1.00		0.04	1.00		0.26	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	89	241	251	554	705	704	50	1230	1027	83	648	651
V/C Ratio(X)	0.78	0.79	0.80	0.94	0.58	0.59	0.71	0.64	0.75	0.78	0.71	0.71
Avail Cap(c_a), veh/h	176	278	289	735	836	834	78	1230	1027	121	648	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	51.2	51.3	40.8	28.6	28.6	59.2	33.3	13.8	57.9	33.0	33.0
Incr Delay (d2), s/veh	13.8	12.8	12.6	16.6	0.8	0.8	17.0	2.6	5.1	18.0	6.4	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.4	6.6	17.2	9.2	9.2	1.3	9.9	13.7	2.4	12.2	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.4	64.0	63.9	57.5	29.4	29.4	76.1	35.9	19.0	75.9	39.3	39.3
LnGrp LOS	E	E	E	E	C	C	E	D	B	E	D	D
Approach Vol, veh/h		461			1344			1599			981	
Approach Delay, s/veh		65.1			40.2			28.6			41.7	
Approach LOS		E			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	47.7	43.4	21.5	8.0	50.0	10.8	54.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	42.5	51.5	19.5	5.5	45.5	12.3	58.7				
Max Q Clear Time (g_c+I1), s	6.5	44.5	37.4	15.1	4.5	29.4	6.8	24.6				
Green Ext Time (p_c), s	0.0	0.0	1.4	0.8	0.0	4.9	0.0	5.3				
Intersection Summary												
HCM 6th Ctrl Delay				38.9								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

Opening Year
Timing Plan: AM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	69	45	1350	1075	95
Future Volume (veh/h)	77	69	45	1350	1075	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	110	56	52	1552	1236	109
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	204	91	401	2999	2721	1199
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	110	56	52	1552	1236	109
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.2	3.6	0.5	12.0	12.8	1.8
Cycle Q Clear(g_c), s	3.2	3.6	0.5	12.0	12.8	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	204	91	401	2999	2721	1199
V/C Ratio(X)	0.54	0.62	0.13	0.52	0.45	0.09
Avail Cap(c_a), veh/h	692	308	478	2999	2721	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	48.6	2.7	1.9	4.0	2.8
Incr Delay (d2), s/veh	2.2	6.7	0.1	0.6	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.2	0.1	1.1	3.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.6	55.3	2.8	2.6	4.6	3.0
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	166			1604	1345	
Approach Delay, s/veh	52.2			2.6	4.4	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.0		10.5	8.4	86.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		90.5		20.5	8.5	77.5
Max Q Clear Time (g_c+I1), s		14.0		5.6	2.5	14.8
Green Ext Time (p_c), s		17.8		0.4	0.0	12.1
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
5: Sanderson Avenue & Thornton Avenue

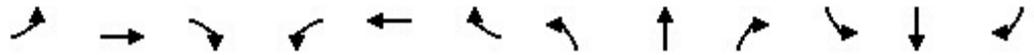
Opening Year
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕		↖	↕	
Traffic Volume (veh/h)	157	5	45	16	8	53	48	1162	14	12	1069	55
Future Volume (veh/h)	157	5	45	16	8	53	48	1162	14	12	1069	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	185	6	53	19	9	62	56	1367	16	14	1258	65
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	122	2	494	104	31	494	91	1545	18	31	1360	70
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.44	0.44	0.02	0.40	0.40
Sat Flow, veh/h	0	7	1579	0	98	1579	1781	3539	41	1781	3378	174
Grp Volume(v), veh/h	191	0	53	28	0	62	56	675	708	14	650	673
Grp Sat Flow(s),veh/h/ln	7	0	1579	98	0	1579	1781	1749	1832	1781	1749	1803
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	1.6	1.8	20.5	20.5	0.5	20.5	20.6
Cycle Q Clear(g_c), s	18.1	0.0	1.4	18.1	0.0	1.6	1.8	20.5	20.5	0.5	20.5	20.6
Prop In Lane	0.97		1.00	0.68		1.00	1.00		0.02	1.00		0.10
Lane Grp Cap(c), veh/h	125	0	494	135	0	494	91	763	800	31	704	726
V/C Ratio(X)	1.53	0.00	0.11	0.21	0.00	0.13	0.61	0.88	0.89	0.45	0.92	0.93
Avail Cap(c_a), veh/h	125	0	494	135	0	494	157	763	800	157	704	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	14.1	16.4	0.0	14.2	26.9	15.0	15.0	28.2	16.4	16.5
Incr Delay (d2), s/veh	276.1	0.0	0.1	0.8	0.0	0.1	6.5	14.2	13.7	9.9	19.7	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	0.5	0.3	0.0	0.6	0.8	9.1	9.4	0.3	10.1	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	304.7	0.0	14.2	17.2	0.0	14.3	33.4	29.1	28.7	38.1	36.1	36.1
LnGrp LOS	F	A	B	B	A	B	C	C	C	D	D	D
Approach Vol, veh/h		244			90			1439			1337	
Approach Delay, s/veh		241.6			15.2			29.1			36.1	
Approach LOS		F			B			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	29.8		22.6	7.5	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	2.5	22.5		20.1	3.8	22.6		20.1				
Green Ext Time (p_c), s	0.0	0.6		0.0	0.0	0.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			48.4									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
6: Sanderson Avenue & Mustang Way

Opening Year
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷	↸		↷	↸	↶	↷	↸	↶	↷	↸
Traffic Volume (veh/h)	413	0	199	21	25	22	210	787	4	8	705	410
Future Volume (veh/h)	413	0	199	21	25	22	210	787	4	8	705	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	510	0	246	26	31	27	259	972	5	10	941	459
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	691	0	287	79	94	135	340	1843	814	289	1621	696
Arrive On Green	0.19	0.00	0.19	0.09	0.09	0.09	0.10	0.53	0.53	0.01	0.44	0.44
Sat Flow, veh/h	3563	0	1480	834	995	1420	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	510	0	246	57	0	27	259	972	5	10	941	459
Grp Sat Flow(s),veh/h/ln	1781	0	1480	1829	0	1420	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	14.1	0.0	16.8	3.0	0.0	1.8	7.9	19.0	0.2	0.3	20.1	23.9
Cycle Q Clear(g_c), s	14.1	0.0	16.8	3.0	0.0	1.8	7.9	19.0	0.2	0.3	20.1	23.9
Prop In Lane	1.00		1.00	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	691	0	287	173	0	135	340	1843	814	289	1621	696
V/C Ratio(X)	0.74	0.00	0.86	0.33	0.00	0.20	0.76	0.53	0.01	0.03	0.58	0.66
Avail Cap(c_a), veh/h	811	0	337	317	0	246	480	1843	814	353	1621	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	40.7	44.2	0.0	43.7	18.2	16.2	11.7	16.2	22.0	23.1
Incr Delay (d2), s/veh	3.0	0.0	17.2	1.1	0.0	0.7	4.5	1.1	0.0	0.0	1.5	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	7.5	1.4	0.0	0.7	3.2	7.1	0.1	0.1	8.4	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	0.0	57.9	45.3	0.0	44.4	22.7	17.3	11.7	16.3	23.5	27.9
LnGrp LOS	D	A	E	D	A	D	C	B	B	B	C	C
Approach Vol, veh/h		756			84			1236			1410	
Approach Delay, s/veh		47.6			45.0			18.4			24.9	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	59.6		24.8	14.8	50.5		14.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	55.1		23.8	18.5	41.6		18.1				
Max Q Clear Time (g_c+I1), s	2.3	21.0		18.8	9.9	25.9		5.0				
Green Ext Time (p_c), s	0.0	7.4		1.5	0.5	7.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
7: Cawston Avenue & Stetson Avenue

Opening Year
Timing Plan: AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	171	27	194	249	25	44	166	259	19	138	34
Future Volume (veh/h)	34	171	27	194	249	25	44	166	259	19	138	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	186	29	211	271	27	48	180	282	21	150	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	69	336	52	271	412	355	677	946	792	545	946	802
Arrive On Green	0.04	0.11	0.11	0.15	0.22	0.22	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	3039	466	1781	1841	1585	1196	1870	1565	930	1870	1585
Grp Volume(v), veh/h	37	106	109	211	271	27	48	180	282	21	150	37
Grp Sat Flow(s),veh/h/ln	1781	1749	1757	1781	1841	1585	1196	1870	1565	930	1870	1585
Q Serve(g_s), s	1.2	3.3	3.4	6.6	7.8	0.8	1.3	3.1	6.3	0.7	2.5	0.7
Cycle Q Clear(g_c), s	1.2	3.3	3.4	6.6	7.8	0.8	3.8	3.1	6.3	3.8	2.5	0.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	193	194	271	412	355	677	946	792	545	946	802
V/C Ratio(X)	0.54	0.55	0.56	0.78	0.66	0.08	0.07	0.19	0.36	0.04	0.16	0.05
Avail Cap(c_a), veh/h	260	645	648	779	1215	1046	677	946	792	545	946	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	24.6	24.6	23.8	20.6	17.9	8.8	7.9	8.7	8.9	7.7	7.3
Incr Delay (d2), s/veh	6.4	2.4	2.5	4.8	1.8	0.1	0.2	0.4	1.3	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.4	1.5	3.0	3.3	0.3	0.3	1.1	2.0	0.1	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	27.0	27.1	28.6	22.4	18.0	9.0	8.3	9.9	9.1	8.1	7.4
LnGrp LOS	C	C	C	C	C	B	A	A	A	A	A	A
Approach Vol, veh/h		252			509			510			208	
Approach Delay, s/veh		28.1			24.7			9.3			8.1	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		34.0	13.4	10.9		34.0	6.8	17.6				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		29.5	25.5	21.5		29.5	8.5	38.5				
Max Q Clear Time (g_c+I1), s		8.3	8.6	5.4		5.8	3.2	9.8				
Green Ext Time (p_c), s		2.2	0.5	1.0		1.0	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay				17.6								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

Opening Year
 Timing Plan: AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	844	36	9	889	87	64	57	18	73	27	229
Future Volume (veh/h)	188	844	36	9	889	87	64	57	18	73	27	229
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	981	42	10	1034	101	74	66	21	85	31	266
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	261	1634	70	23	1109	108	423	806	245	479	562	469
Arrive On Green	0.15	0.48	0.48	0.01	0.35	0.35	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3412	146	1781	3211	314	1080	2682	816	1307	1870	1560
Grp Volume(v), veh/h	219	503	520	10	563	572	74	43	44	85	31	266
Grp Sat Flow(s),veh/h/ln	1781	1749	1809	1781	1749	1776	1080	1777	1721	1307	1870	1560
Q Serve(g_s), s	7.8	13.7	13.7	0.4	20.2	20.2	3.4	1.1	1.2	3.2	0.8	9.3
Cycle Q Clear(g_c), s	7.8	13.7	13.7	0.4	20.2	20.2	4.2	1.1	1.2	4.4	0.8	9.3
Prop In Lane	1.00		0.08	1.00		0.18	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	261	837	866	23	604	613	423	534	517	479	562	469
V/C Ratio(X)	0.84	0.60	0.60	0.44	0.93	0.93	0.18	0.08	0.09	0.18	0.06	0.57
Avail Cap(c_a), veh/h	261	837	866	137	606	616	423	534	517	479	562	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	12.4	12.4	31.8	20.5	20.5	17.6	16.3	16.3	17.9	16.1	19.1
Incr Delay (d2), s/veh	21.0	1.2	1.2	12.9	21.4	21.3	0.9	0.3	0.3	0.8	0.2	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	4.4	4.5	0.2	10.4	10.6	0.9	0.5	0.5	1.0	0.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	13.6	13.5	44.7	41.9	41.9	18.5	16.6	16.6	18.7	16.3	24.1
LnGrp LOS	D	B	B	D	D	D	B	B	B	B	B	C
Approach Vol, veh/h		1242			1145			161			382	
Approach Delay, s/veh		19.6			41.9			17.5			22.2	
Approach LOS		B			D			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.0	5.3	35.6		24.0	14.0	26.9				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.5	5.0	27.0		19.5	9.5	22.5				
Max Q Clear Time (g_c+I1), s		6.2	2.4	15.7		11.3	9.8	22.2				
Green Ext Time (p_c), s		0.6	0.0	4.6		0.9	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay				28.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

Opening Year
 Timing Plan: AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	815	71	18	754	45	145	37	17	36	35	88
Future Volume (veh/h)	47	815	71	18	754	45	145	37	17	36	35	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	916	80	20	847	51	163	42	19	40	39	99
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	136	952	83	112	979	59	458	481	408	97	95	241
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	620	3251	284	565	3343	201	1781	1870	1585	378	369	936
Grp Volume(v), veh/h	53	493	503	20	443	455	163	42	19	178	0	0
Grp Sat Flow(s),veh/h/ln	620	1749	1786	565	1749	1796	1781	1870	1585	1683	0	0
Q Serve(g_s), s	3.7	19.4	19.4	1.1	16.8	16.8	5.2	1.2	0.6	6.2	0.0	0.0
Cycle Q Clear(g_c), s	20.5	19.4	19.4	20.5	16.8	16.8	5.2	1.2	0.6	6.2	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	0.22		0.56
Lane Grp Cap(c), veh/h	136	512	523	112	512	526	458	481	408	433	0	0
V/C Ratio(X)	0.39	0.96	0.96	0.18	0.87	0.87	0.36	0.09	0.05	0.41	0.00	0.00
Avail Cap(c_a), veh/h	136	512	523	112	512	526	458	481	408	433	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.9	24.4	24.4	34.8	23.4	23.4	21.3	19.8	19.5	21.6	0.0	0.0
Incr Delay (d2), s/veh	1.8	30.3	29.9	0.8	14.4	14.1	2.2	0.4	0.2	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	11.3	11.5	0.3	8.1	8.3	2.3	0.5	0.2	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	54.6	54.2	35.5	37.8	37.5	23.4	20.1	19.8	24.5	0.0	0.0
LnGrp LOS	D	D	D	D	D	D	C	C	B	C	A	A
Approach Vol, veh/h		1049			918			224			178	
Approach Delay, s/veh		53.5			37.6			22.5			24.5	
Approach LOS		D			D			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		7.2		22.5		8.2		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				42.2								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Opening Year
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	680	54	28	679	33	38	60	32	30	56	84
Future Volume (veh/h)	68	680	54	28	679	33	38	60	32	30	56	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	756	60	31	754	37	42	67	36	33	62	93
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	108	997	79	60	938	46	75	364	196	63	208	313
Arrive On Green	0.06	0.30	0.30	0.03	0.28	0.28	0.04	0.32	0.32	0.04	0.31	0.31
Sat Flow, veh/h	1781	3280	260	1781	3386	166	1781	1144	615	1781	669	1003
Grp Volume(v), veh/h	76	403	413	31	389	402	42	0	103	33	0	155
Grp Sat Flow(s),veh/h/ln	1781	1749	1791	1781	1749	1803	1781	0	1758	1781	0	1671
Q Serve(g_s), s	2.4	12.2	12.2	1.0	12.1	12.1	1.4	0.0	2.5	1.1	0.0	4.1
Cycle Q Clear(g_c), s	2.4	12.2	12.2	1.0	12.1	12.1	1.4	0.0	2.5	1.1	0.0	4.1
Prop In Lane	1.00		0.15	1.00		0.09	1.00		0.35	1.00		0.60
Lane Grp Cap(c), veh/h	108	531	544	60	484	499	75	0	560	63	0	521
V/C Ratio(X)	0.70	0.76	0.76	0.51	0.80	0.80	0.56	0.00	0.18	0.52	0.00	0.30
Avail Cap(c_a), veh/h	156	560	574	156	560	577	153	0	560	153	0	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	18.4	18.4	27.7	19.6	19.6	27.4	0.0	14.4	27.7	0.0	15.2
Incr Delay (d2), s/veh	8.0	5.7	5.6	6.6	7.3	7.2	6.3	0.0	0.7	6.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.9	5.0	0.5	5.2	5.3	0.7	0.0	1.0	0.5	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	24.0	23.9	34.4	27.0	26.8	33.7	0.0	15.1	34.2	0.0	16.7
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		892			822			145				188
Approach Delay, s/veh		24.9			27.2			20.5				19.8
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	23.1	6.5	22.2	7.0	22.7	8.0	20.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.2	5.1	18.7	5.0	18.2	5.1	18.7				
Max Q Clear Time (g_c+I1), s	3.1	4.5	3.0	14.2	3.4	6.1	4.4	14.1				
Green Ext Time (p_c), s	0.0	0.4	0.0	1.9	0.0	0.6	0.0	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			25.0									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

Opening Year PM
 Timing Plan: PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	203	177	194	187	205	107	902	90	180	903	15
Future Volume (veh/h)	16	203	177	194	187	205	107	902	90	180	903	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	17	214	186	204	197	216	113	949	95	189	951	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	35	290	245	242	219	240	143	1169	117	226	1436	649
Arrive On Green	0.02	0.15	0.15	0.14	0.27	0.27	0.08	0.36	0.36	0.13	0.41	0.41
Sat Flow, veh/h	1781	1870	1579	1781	808	886	1781	3209	321	1781	3497	1581
Grp Volume(v), veh/h	17	214	186	204	0	413	113	517	527	189	951	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1695	1781	1749	1782	1781	1749	1581
Q Serve(g_s), s	0.8	9.0	9.3	9.2	0.0	19.4	5.1	22.0	22.0	8.5	18.1	0.5
Cycle Q Clear(g_c), s	0.8	9.0	9.3	9.2	0.0	19.4	5.1	22.0	22.0	8.5	18.1	0.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	35	290	245	242	0	459	143	637	649	226	1436	649
V/C Ratio(X)	0.49	0.74	0.76	0.84	0.00	0.90	0.79	0.81	0.81	0.84	0.66	0.02
Avail Cap(c_a), veh/h	108	409	345	270	0	525	190	637	649	249	1436	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	33.2	33.4	34.8	0.0	28.9	37.2	23.6	23.6	35.1	19.7	14.5
Incr Delay (d2), s/veh	10.2	4.3	6.1	19.4	0.0	17.0	14.7	10.8	10.7	20.0	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.2	3.8	5.1	0.0	9.6	2.8	10.5	10.6	4.9	7.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	37.5	39.5	54.2	0.0	45.9	51.9	34.5	34.3	55.1	22.1	14.5
LnGrp LOS	D	D	D	D	A	D	D	C	C	E	C	B
Approach Vol, veh/h		417			617			1157			1156	
Approach Delay, s/veh		38.9			48.6			36.1			27.4	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	34.5	15.7	17.3	11.1	38.3	6.1	26.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	11.5	30.0	12.5	18.0	8.8	32.7	5.0	25.5				
Max Q Clear Time (g_c+I1), s	10.5	24.0	11.2	11.3	7.1	20.1	2.8	21.4				
Green Ext Time (p_c), s	0.1	3.3	0.1	1.0	0.0	5.4	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay				35.8								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

Opening Year PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	52	21	87	25	71	6	877	106	108	989	11
Future Volume (veh/h)	31	52	21	87	25	71	6	877	106	108	989	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	33	56	23	94	27	76	6	943	114	116	1063	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	328	129	53	336	255	211	14	1446	638	149	1710	755
Arrive On Green	0.04	0.10	0.10	0.07	0.14	0.14	0.01	0.41	0.41	0.08	0.49	0.49
Sat Flow, veh/h	1781	1255	515	1781	1870	1550	1781	3497	1544	1781	3497	1545
Grp Volume(v), veh/h	33	0	79	94	27	76	6	943	114	116	1063	12
Grp Sat Flow(s),veh/h/ln	1781	0	1770	1781	1870	1550	1781	1749	1544	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.3	2.5	0.7	2.4	0.2	11.8	2.5	3.5	12.1	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.3	2.5	0.7	2.4	0.2	11.8	2.5	3.5	12.1	0.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	0	182	336	255	211	14	1446	638	149	1710	755
V/C Ratio(X)	0.10	0.00	0.43	0.28	0.11	0.36	0.42	0.65	0.18	0.78	0.62	0.02
Avail Cap(c_a), veh/h	427	0	585	376	618	512	164	1446	638	213	1710	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	0.0	22.9	19.7	20.6	21.3	26.9	12.8	10.1	24.5	10.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	1.6	0.4	0.2	1.0	18.7	2.3	0.6	11.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.0	1.0	0.3	0.9	0.1	3.9	0.8	1.7	3.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	24.6	20.2	20.8	22.4	45.6	15.1	10.7	35.5	11.9	7.2
LnGrp LOS	C	A	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		112			197			1063			1191	
Approach Delay, s/veh		23.4			21.1			14.8			14.2	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	27.0	8.3	10.1	4.9	31.1	6.5	11.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	22.5	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.5	13.8	4.5	4.3	2.2	14.1	2.9	4.4				
Green Ext Time (p_c), s	0.0	4.1	0.0	0.3	0.0	4.8	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			15.4									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary
 3: Sanderson Avenue & Stetson Avenue

Opening Year PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	495	18	454	486	146	16	606	517	157	823	116
Future Volume (veh/h)	237	495	18	454	486	146	16	606	517	157	823	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	247	516	19	473	506	152	17	631	539	164	857	121
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	276	587	22	505	793	237	32	977	873	192	1137	161
Arrive On Green	0.16	0.17	0.17	0.29	0.30	0.30	0.02	0.28	0.28	0.11	0.37	0.37
Sat Flow, veh/h	1753	3432	126	1753	2632	785	1753	3497	1516	1753	3066	433
Grp Volume(v), veh/h	247	262	273	473	335	323	17	631	539	164	489	489
Grp Sat Flow(s),veh/h/ln	1753	1749	1810	1753	1749	1668	1753	1749	1516	1753	1749	1751
Q Serve(g_s), s	16.4	17.3	17.4	31.1	19.6	19.8	1.1	18.8	28.2	10.9	28.9	28.9
Cycle Q Clear(g_c), s	16.4	17.3	17.4	31.1	19.6	19.8	1.1	18.8	28.2	10.9	28.9	28.9
Prop In Lane	1.00		0.07	1.00		0.47	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	276	299	310	505	527	503	32	977	873	192	648	649
V/C Ratio(X)	0.89	0.88	0.88	0.94	0.64	0.64	0.54	0.65	0.62	0.86	0.75	0.75
Avail Cap(c_a), veh/h	348	332	344	600	583	557	76	977	873	244	648	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	47.9	47.9	41.1	35.7	35.8	57.6	37.5	17.2	51.8	32.5	32.5
Incr Delay (d2), s/veh	20.9	20.9	20.8	20.6	2.0	2.2	13.3	3.3	3.3	20.4	7.9	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	9.0	9.3	15.7	8.3	8.1	0.6	8.2	9.7	5.7	13.0	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	68.8	68.7	61.7	37.7	38.0	71.0	40.8	20.4	72.2	40.5	40.4
LnGrp LOS	E	E	E	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		782			1131			1187			1142	
Approach Delay, s/veh		69.0			47.8			32.0			45.0	
Approach LOS		E			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.5	37.6	38.6	24.8	6.6	48.4	23.2	40.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	16.5	32.5	40.5	22.5	5.1	43.9	23.5	39.5				
Max Q Clear Time (g_c+I1), s	12.9	30.2	33.1	19.4	3.1	30.9	18.4	21.8				
Green Ext Time (p_c), s	0.1	1.3	0.9	0.9	0.0	4.8	0.3	3.5				
Intersection Summary												
HCM 6th Ctrl Delay			46.5									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
4: Sanderson Avenue & Page Plaza Place

Opening Year PM
Timing Plan: PM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	212	72	78	944	1025	233
Future Volume (veh/h)	212	72	78	944	1025	233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	214	73	79	954	1035	235
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	305	136	422	2900	2601	1151
Arrive On Green	0.09	0.09	0.04	0.83	0.74	0.74
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	214	73	79	954	1035	235
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	6.2	4.7	1.0	6.8	11.4	4.8
Cycle Q Clear(g_c), s	6.2	4.7	1.0	6.8	11.4	4.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	305	136	422	2900	2601	1151
V/C Ratio(X)	0.70	0.54	0.19	0.33	0.40	0.20
Avail Cap(c_a), veh/h	793	353	523	2900	2601	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	46.3	3.1	2.1	4.9	4.1
Incr Delay (d2), s/veh	2.9	3.3	0.2	0.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.1	0.2	1.1	3.1	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.9	49.5	3.3	2.4	5.4	4.5
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	287			1033	1270	
Approach Delay, s/veh	49.8			2.5	5.2	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.0		13.5	9.0	83.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	10.5	72.5
Max Q Clear Time (g_c+I1), s		8.8		8.2	3.0	13.4
Green Ext Time (p_c), s		7.7		0.9	0.1	9.9
Intersection Summary						
HCM 6th Ctrl Delay			9.1			
HCM 6th LOS			A			
Notes						
User approved volume balancing among the lanes for turning movement.						

HCM 6th Signalized Intersection Summary
5: Sanderson Avenue & Thornton Avenue

Opening Year PM
Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	12	61	10	15	33	48	899	14	22	1031	105
Future Volume (veh/h)	90	12	61	10	15	33	48	899	14	22	1031	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	91	12	62	10	15	33	48	908	14	22	1041	106
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	118	9	488	88	97	494	83	1499	23	46	1293	132
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.43	0.43	0.03	0.40	0.40
Sat Flow, veh/h	0	27	1553	0	307	1573	1781	3524	54	1781	3196	325
Grp Volume(v), veh/h	103	0	62	25	0	33	48	451	471	22	569	578
Grp Sat Flow(s),veh/h/ln	27	0	1553	307	0	1573	1781	1749	1829	1781	1749	1773
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.8	1.5	11.5	11.5	0.7	16.5	16.6
Cycle Q Clear(g_c), s	18.1	0.0	1.6	18.1	0.0	0.8	1.5	11.5	11.5	0.7	16.5	16.6
Prop In Lane	0.88		1.00	0.40		1.00	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	126	0	488	184	0	494	83	744	778	46	708	717
V/C Ratio(X)	0.82	0.00	0.13	0.14	0.00	0.07	0.58	0.61	0.61	0.48	0.80	0.81
Avail Cap(c_a), veh/h	126	0	488	184	0	494	158	744	778	158	708	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	14.1	15.7	0.0	13.8	26.9	12.8	12.8	27.7	15.1	15.1
Incr Delay (d2), s/veh	32.2	0.0	0.1	0.3	0.0	0.1	6.2	3.6	3.5	7.6	9.5	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.6	0.2	0.0	0.3	0.7	4.2	4.3	0.4	6.9	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	0.0	14.2	16.0	0.0	13.9	33.1	16.4	16.3	35.2	24.6	24.5
LnGrp LOS	E	A	B	B	A	B	C	B	B	D	C	C
Approach Vol, veh/h		165			58			970			1169	
Approach Delay, s/veh		42.5			14.8			17.2			24.8	
Approach LOS		D			B			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	29.0		22.6	7.2	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	2.7	13.5		20.1	3.5	18.6		20.1				
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				22.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

Opening Year PM
Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	0	86	4	8	12	110	755	0	6	903	200
Future Volume (veh/h)	193	0	86	4	8	12	110	755	0	6	903	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	201	0	90	4	8	12	115	786	0	6	941	208
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	409	0	180	23	46	59	387	1696	769	387	1524	647
Arrive On Green	0.11	0.00	0.11	0.04	0.04	0.04	0.08	0.48	0.00	0.01	0.41	0.41
Sat Flow, veh/h	3563	0	1568	613	1226	1566	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	201	0	90	12	0	12	115	786	0	6	941	208
Grp Sat Flow(s),veh/h/ln	1781	0	1568	1840	0	1566	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	2.7	0.0	2.7	0.3	0.0	0.4	1.7	7.6	0.0	0.1	10.2	4.6
Cycle Q Clear(g_c), s	2.7	0.0	2.7	0.3	0.0	0.4	1.7	7.6	0.0	0.1	10.2	4.6
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	0	180	69	0	59	387	1696	769	387	1524	647
V/C Ratio(X)	0.49	0.00	0.50	0.17	0.00	0.20	0.30	0.46	0.00	0.02	0.62	0.32
Avail Cap(c_a), veh/h	1264	0	556	653	0	555	421	1696	769	549	1524	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	21.1	23.7	0.0	23.7	8.0	8.7	0.0	8.7	11.7	10.1
Incr Delay (d2), s/veh	0.9	0.0	2.1	1.2	0.0	1.7	0.4	0.9	0.0	0.0	1.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.2	0.0	0.2	0.4	2.1	0.0	0.0	3.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	23.2	24.8	0.0	25.4	8.5	9.6	0.0	8.7	13.6	11.4
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		291			24			901			1155	
Approach Delay, s/veh		22.4			25.1			9.4			13.2	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	29.1		10.3	8.5	25.5		6.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	21.0		18.0	5.0	21.0		18.0				
Max Q Clear Time (g_c+I1), s	2.1	9.6		4.7	3.7	12.2		2.4				
Green Ext Time (p_c), s	0.0	3.8		0.8	0.0	4.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
7: Cawston Avenue & Stetson Avenue

Opening Year PM
Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	276	48	196	240	16	41	132	173	15	194	54
Future Volume (veh/h)	18	276	48	196	240	16	41	132	173	15	194	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	285	49	202	247	16	42	136	178	15	200	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	39	438	74	254	492	423	626	984	834	619	984	834
Arrive On Green	0.02	0.15	0.15	0.14	0.27	0.27	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1781	2978	505	1781	1841	1582	1124	1870	1585	1066	1870	1585
Grp Volume(v), veh/h	19	166	168	202	247	16	42	136	178	15	200	56
Grp Sat Flow(s),veh/h/ln	1781	1749	1734	1781	1841	1582	1124	1870	1585	1066	1870	1585
Q Serve(g_s), s	0.8	6.5	6.7	8.0	8.3	0.5	1.5	2.7	4.4	0.5	4.2	1.3
Cycle Q Clear(g_c), s	0.8	6.5	6.7	8.0	8.3	0.5	5.7	2.7	4.4	3.3	4.2	1.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	39	257	255	254	492	423	626	984	834	619	984	834
V/C Ratio(X)	0.49	0.64	0.66	0.80	0.50	0.04	0.07	0.14	0.21	0.02	0.20	0.07
Avail Cap(c_a), veh/h	256	705	699	937	1446	1243	626	984	834	619	984	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	29.4	29.5	30.3	22.7	19.8	10.7	8.9	9.3	9.7	9.2	8.5
Incr Delay (d2), s/veh	9.1	2.7	2.9	5.6	0.8	0.0	0.2	0.3	0.6	0.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.8	2.9	3.7	3.5	0.2	0.4	1.1	1.5	0.1	1.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	32.1	32.4	36.0	23.5	19.9	10.9	9.2	9.8	9.8	9.7	8.7
LnGrp LOS	D	C	C	D	C	B	B	A	A	A	A	A
Approach Vol, veh/h		353			465			356			271	
Approach Delay, s/veh		32.9			28.8			9.7			9.5	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		43.0	14.9	15.3		43.0	6.1	24.1				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		38.5	38.5	29.5		38.5	10.5	57.5				
Max Q Clear Time (g_c+I1), s		7.7	10.0	8.7		6.2	2.8	10.3				
Green Ext Time (p_c), s		1.6	0.6	1.9		1.4	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay			21.5									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

Opening Year PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↕		↖	↕		↗	↕		↖	↕	↗
Traffic Volume (veh/h)	223	864	94	24	735	98	57	69	25	118	64	257
Future Volume (veh/h)	223	864	94	24	735	98	57	69	25	118	64	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	891	97	25	758	101	59	71	26	122	66	265
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	278	1316	143	51	893	119	438	840	293	519	608	515
Arrive On Green	0.16	0.42	0.42	0.03	0.29	0.29	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1781	3168	345	1781	3099	413	1048	2584	900	1297	1870	1584
Grp Volume(v), veh/h	230	492	496	25	428	431	59	48	49	122	66	265
Grp Sat Flow(s),veh/h/ln	1781	1749	1765	1781	1749	1763	1048	1777	1707	1297	1870	1584
Q Serve(g_s), s	7.3	13.4	13.4	0.8	13.5	13.5	2.4	1.1	1.2	4.2	1.4	7.9
Cycle Q Clear(g_c), s	7.3	13.4	13.4	0.8	13.5	13.5	3.9	1.1	1.2	5.4	1.4	7.9
Prop In Lane	1.00		0.20	1.00		0.23	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	278	727	733	51	504	508	438	578	555	519	608	515
V/C Ratio(X)	0.83	0.68	0.68	0.49	0.85	0.85	0.13	0.08	0.09	0.24	0.11	0.51
Avail Cap(c_a), veh/h	289	727	733	152	538	543	438	578	555	519	608	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	13.9	13.9	28.0	19.6	19.6	15.2	13.7	13.7	15.6	13.8	16.0
Incr Delay (d2), s/veh	17.4	2.5	2.5	7.2	11.6	11.5	0.6	0.3	0.3	1.1	0.4	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.6	4.6	0.4	6.1	6.2	0.6	0.5	0.5	1.3	0.6	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	16.4	16.4	35.2	31.2	31.1	15.8	14.0	14.0	16.6	14.2	19.6
LnGrp LOS	D	B	B	D	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1218			884			156				453
Approach Delay, s/veh		21.1			31.3			14.7				18.0
Approach LOS		C			C			B				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	6.2	28.8		23.5	13.6	21.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	5.0	22.5		19.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s		5.9	2.8	15.4		9.9	9.3	15.5				
Green Ext Time (p_c), s		0.6	0.0	3.3		1.2	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay				23.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

Opening Year PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	864	76	20	680	52	96	46	35	50	37	80
Future Volume (veh/h)	68	864	76	20	680	52	96	46	35	50	37	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	919	81	21	723	55	102	49	37	53	39	85
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	168	948	84	110	963	73	458	481	402	131	96	210
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	692	3239	285	563	3290	250	1781	1870	1565	508	374	815
Grp Volume(v), veh/h	72	496	504	21	384	394	102	49	37	177	0	0
Grp Sat Flow(s),veh/h/ln	692	1749	1775	563	1749	1791	1781	1870	1565	1698	0	0
Q Serve(g_s), s	6.5	19.6	19.6	0.9	13.9	14.0	3.2	1.4	1.3	6.1	0.0	0.0
Cycle Q Clear(g_c), s	20.5	19.6	19.6	20.5	13.9	14.0	3.2	1.4	1.3	6.1	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.14	1.00		1.00	0.30		0.48
Lane Grp Cap(c), veh/h	168	512	520	110	512	525	458	481	402	437	0	0
V/C Ratio(X)	0.43	0.97	0.97	0.19	0.75	0.75	0.22	0.10	0.09	0.41	0.00	0.00
Avail Cap(c_a), veh/h	168	512	520	110	512	525	458	481	402	437	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.1	24.4	24.4	34.8	22.4	22.4	20.5	19.8	19.8	21.6	0.0	0.0
Incr Delay (d2), s/veh	1.7	31.8	31.6	0.8	6.1	6.0	1.1	0.4	0.5	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	11.6	11.7	0.4	5.9	6.0	1.3	0.6	0.5	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	56.3	56.0	35.7	28.5	28.4	21.6	20.3	20.2	24.3	0.0	0.0
LnGrp LOS	C	E	E	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1072			799			188			177	
Approach Delay, s/veh		54.6			28.7			21.0			24.3	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		5.2		22.5		8.1		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				40.1								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Opening Year PM
 Timing Plan: PM

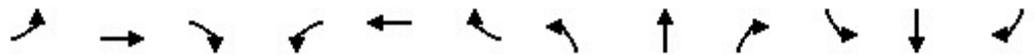
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	760	52	31	659	42	31	28	21	43	56	54
Future Volume (veh/h)	36	760	52	31	659	42	31	28	21	43	56	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	784	54	32	679	43	32	29	22	44	58	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	69	949	65	62	943	60	62	314	239	78	286	277
Arrive On Green	0.04	0.29	0.29	0.03	0.28	0.28	0.03	0.32	0.32	0.04	0.33	0.33
Sat Flow, veh/h	1781	3313	228	1781	3340	211	1781	980	743	1781	868	838
Grp Volume(v), veh/h	37	414	424	32	355	367	32	0	51	44	0	114
Grp Sat Flow(s),veh/h/ln	1781	1749	1793	1781	1749	1802	1781	0	1723	1781	0	1706
Q Serve(g_s), s	1.2	12.7	12.7	1.0	10.5	10.5	1.0	0.0	1.2	1.4	0.0	2.8
Cycle Q Clear(g_c), s	1.2	12.7	12.7	1.0	10.5	10.5	1.0	0.0	1.2	1.4	0.0	2.8
Prop In Lane	1.00		0.13	1.00		0.12	1.00		0.43	1.00		0.49
Lane Grp Cap(c), veh/h	69	501	513	62	494	509	62	0	553	78	0	563
V/C Ratio(X)	0.53	0.83	0.83	0.52	0.72	0.72	0.52	0.00	0.09	0.56	0.00	0.20
Avail Cap(c_a), veh/h	155	564	578	155	564	582	158	0	553	158	0	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	19.1	19.1	27.2	18.5	18.5	27.2	0.0	13.6	26.9	0.0	13.8
Incr Delay (d2), s/veh	6.3	8.9	8.8	6.5	3.8	3.7	6.5	0.0	0.3	6.2	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.5	5.6	0.5	4.1	4.2	0.5	0.0	0.5	0.7	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	28.0	27.9	33.7	22.3	22.3	33.7	0.0	14.0	33.1	0.0	14.6
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		875			754			83				158
Approach Delay, s/veh		28.2			22.8			21.6				19.7
Approach LOS		C			C			C				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	22.9	6.5	20.9	6.5	23.4	6.7	20.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	18.4	5.0	18.5	5.1	18.4	5.0	18.5				
Max Q Clear Time (g_c+I1), s	3.4	3.2	3.0	14.7	3.0	4.8	3.2	12.5				
Green Ext Time (p_c), s	0.0	0.2	0.0	1.7	0.0	0.4	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay				25.0								
HCM 6th LOS				C								

- Opening Year 2022 plus Project Conditions

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	151	135	142	129	142	57	843	120	86	614	4
Future Volume (veh/h)	11	151	135	142	129	142	57	843	120	86	614	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	11	154	138	145	132	145	58	860	122	88	627	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	25	256	214	183	183	201	93	1173	166	117	1384	627
Arrive On Green	0.01	0.14	0.14	0.10	0.23	0.23	0.05	0.38	0.38	0.07	0.40	0.40
Sat Flow, veh/h	1781	1870	1560	1781	808	888	1781	3065	435	1781	3497	1585
Grp Volume(v), veh/h	11	154	138	145	0	277	58	491	491	88	627	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1695	1781	1749	1751	1781	1749	1585
Q Serve(g_s), s	0.4	4.5	4.8	4.6	0.0	8.7	1.8	13.9	13.9	2.8	7.6	0.1
Cycle Q Clear(g_c), s	0.4	4.5	4.8	4.6	0.0	8.7	1.8	13.9	13.9	2.8	7.6	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	25	256	214	183	0	383	93	669	670	117	1384	627
V/C Ratio(X)	0.44	0.60	0.65	0.79	0.00	0.72	0.62	0.73	0.73	0.75	0.45	0.01
Avail Cap(c_a), veh/h	154	583	486	204	0	576	170	669	670	164	1384	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	23.4	23.6	25.3	0.0	20.7	26.8	15.3	15.3	26.5	12.8	10.6
Incr Delay (d2), s/veh	11.7	2.3	3.3	17.2	0.0	2.6	6.6	7.0	7.0	11.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	1.8	2.7	0.0	3.4	0.9	6.1	6.1	1.5	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	25.7	26.8	42.5	0.0	23.3	33.4	22.3	22.2	38.3	13.9	10.6
LnGrp LOS	D	C	C	D	A	C	C	C	C	D	B	B
Approach Vol, veh/h		303			422			1040			719	
Approach Delay, s/veh		26.7			29.9			22.9			16.9	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	26.6	10.4	12.4	7.5	27.4	5.3	17.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.3	22.1	6.6	18.0	5.5	21.9	5.0	19.6				
Max Q Clear Time (g_c+I1), s	4.8	15.9	6.6	6.8	3.8	9.6	2.4	10.7				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.9	0.0	3.4	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			22.8									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary

2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	25	3	159	71	60	15	796	58	27	722	24
Future Volume (veh/h)	9	25	3	159	71	60	15	796	58	27	722	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	28	3	179	80	67	17	894	65	30	811	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	232	127	14	400	332	281	36	1718	760	58	1760	778
Arrive On Green	0.01	0.08	0.08	0.11	0.18	0.18	0.02	0.49	0.49	0.03	0.50	0.50
Sat Flow, veh/h	1781	1657	178	1781	1870	1585	1781	3497	1546	1781	3497	1546
Grp Volume(v), veh/h	10	0	31	179	80	67	17	894	65	30	811	27
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1781	1870	1585	1781	1749	1546	1781	1749	1546
Q Serve(g_s), s	0.3	0.0	1.0	5.5	2.3	2.3	0.6	11.0	1.4	1.0	9.4	0.6
Cycle Q Clear(g_c), s	0.3	0.0	1.0	5.5	2.3	2.3	0.6	11.0	1.4	1.0	9.4	0.6
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	0	140	400	332	281	36	1718	760	58	1760	778
V/C Ratio(X)	0.04	0.00	0.22	0.45	0.24	0.24	0.47	0.52	0.09	0.52	0.46	0.03
Avail Cap(c_a), veh/h	351	0	525	410	610	517	142	1718	760	159	1760	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	27.3	21.2	22.2	22.2	30.5	10.9	8.5	29.9	10.1	7.9
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.8	0.4	0.4	9.0	1.1	0.2	7.0	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	2.2	1.0	0.8	0.3	3.5	0.5	0.5	2.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	28.1	22.0	22.6	22.7	39.5	12.1	8.7	37.0	11.0	8.0
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		41			326			976			868	
Approach Delay, s/veh		27.6			22.3			12.3			11.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	35.4	11.6	9.3	5.8	36.2	5.3	15.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	30.9	7.5	18.0	5.0	31.5	5.0	20.5				
Max Q Clear Time (g_c+13), s	13.0	13.0	7.5	3.0	2.6	11.4	2.3	4.3				
Green Ext Time (p_c), s	0.0	5.7	0.0	0.1	0.0	5.2	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay											13.9	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	345	7	478	636	103	36	704	681	77	713	93
Future Volume (veh/h)	62	345	7	478	636	103	36	704	681	77	713	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	70	392	8	543	723	117	41	800	774	88	810	106
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	89	481	10	575	1244	201	53	1149	1009	110	1119	146
Arrive On Green	0.05	0.14	0.14	0.33	0.41	0.41	0.03	0.33	0.33	0.06	0.36	0.36
Sat Flow, veh/h	1753	3498	71	1753	3001	485	1753	3497	1514	1753	3100	406
Grp Volume(v), veh/h	70	196	204	543	421	419	41	800	774	88	457	459
Grp Sat Flow(s),veh/h/ln	1753	1749	1821	1753	1749	1737	1753	1749	1514	1753	1749	1757
Q Serve(g_s), s	5.0	13.7	13.7	37.9	23.3	23.4	2.9	25.0	41.3	6.2	28.4	28.4
Cycle Q Clear(g_c), s	5.0	13.7	13.7	37.9	23.3	23.4	2.9	25.0	41.3	6.2	28.4	28.4
Prop In Lane	1.00		0.04	1.00		0.28	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	89	240	250	575	725	720	53	1149	1009	110	631	634
V/C Ratio(X)	0.78	0.81	0.82	0.94	0.58	0.58	0.77	0.70	0.77	0.80	0.72	0.72
Avail Cap(c_a), veh/h	172	274	285	704	805	800	105	1149	1009	146	631	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	52.7	52.7	41.1	28.4	28.4	60.5	36.7	15.1	58.1	34.7	34.7
Incr Delay (d2), s/veh	13.8	15.3	15.1	19.2	0.9	0.9	20.7	3.5	5.6	20.2	7.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.8	7.1	18.7	9.5	9.5	1.6	10.9	14.9	3.3	12.8	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	67.9	67.8	60.2	29.2	29.2	81.2	40.2	20.7	78.3	41.8	41.8
LnGrp LOS	E	E	E	E	C	C	F	D	C	E	D	D
Approach Vol, veh/h		470		1383			1615			1004		
Approach Delay, s/veh		68.6		41.4			31.9			45.0		
Approach LOS		E		D			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	2.4	45.8	45.8	21.8	8.3	49.9	10.9	56.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	41.3	50.5	19.7	7.5	44.3	12.3	57.9				
Max Q Clear Time (g_c+1/2), s	19.2	43.3	39.9	15.7	4.9	30.4	7.0	25.4				
Green Ext Time (p_c), s	0.0	0.0	1.4	0.7	0.0	4.6	0.0	5.4				

Intersection Summary

HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	69	45	1370	1095	95
Future Volume (veh/h)	77	69	45	1370	1095	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	110	56	52	1575	1259	109
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	204	91	394	2999	2721	1199
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	110	56	52	1575	1259	109
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.2	3.6	0.5	12.3	13.2	1.8
Cycle Q Clear(g_c), s	3.2	3.6	0.5	12.3	13.2	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	204	91	394	2999	2721	1199
V/C Ratio(X)	0.54	0.62	0.13	0.53	0.46	0.09
Avail Cap(c_a), veh/h	692	308	471	2999	2721	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	48.6	2.8	1.9	4.1	2.8
Incr Delay (d2), s/veh	2.2	6.7	0.2	0.7	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.2	0.1	1.2	3.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.6	55.3	2.9	2.6	4.6	3.0
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	166			1627	1368	
Approach Delay, s/veh	52.2			2.6	4.5	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.0		10.5	8.4	86.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		90.5		20.5	8.5	77.5
Max Q Clear Time (g_c+I1), s		14.3		5.6	2.5	15.2
Green Ext Time (p_c), s		18.4		0.4	0.0	12.5
Intersection Summary						
HCM 6th Ctrl Delay			6.0			
HCM 6th LOS			A			
Notes						
User approved volume balancing among the lanes for turning movement.						

HCM 6th Signalized Intersection Summary

5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	161	5	45	16	8	57	48	1174	14	16	1081	59
Future Volume (veh/h)	161	5	45	16	8	57	48	1174	14	16	1081	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	189	6	53	19	9	67	56	1381	16	19	1272	69
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	123	2	494	104	31	494	91	1526	18	41	1356	73
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.43	0.43	0.02	0.40	0.40
Sat Flow, veh/h	0	7	1579	0	98	1579	1781	3540	41	1781	3368	182
Grp Volume(v), veh/h	195	0	53	28	0	67	56	682	715	19	660	681
Grp Sat Flow(s),veh/h/ln	7	0	1579	98	0	1579	1781	1749	1832	1781	1749	1801
Q Serve(g_s), s	0.0	0.0	1.4	0.0	0.0	1.8	1.8	21.0	21.1	0.6	20.9	21.0
Cycle Q Clear(g_c), s	18.1	0.0	1.4	18.1	0.0	1.8	1.8	21.0	21.1	0.6	20.9	21.0
Prop In Lane	0.97		1.00	0.68		1.00	1.00		0.02	1.00		0.10
Lane Grp Cap(c), veh/h	125	0	494	135	0	494	91	754	790	41	704	725
V/C Ratio(X)	1.57	0.00	0.11	0.21	0.00	0.14	0.61	0.90	0.91	0.47	0.94	0.94
Avail Cap(c_a), veh/h	125	0	494	135	0	494	157	754	790	157	704	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	14.1	16.4	0.0	14.3	26.9	15.3	15.4	27.9	16.6	16.6
Incr Delay (d2), s/veh	289.6	0.0	0.1	0.8	0.0	0.1	6.5	16.4	15.9	8.2	21.5	21.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.5	0.3	0.0	0.6	0.8	9.7	10.0	0.3	10.6	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	318.3	0.0	14.2	17.2	0.0	14.4	33.4	31.7	31.2	36.1	38.1	38.1
LnGrp LOS	F	A	B	B	A	B	C	C	C	D	D	D
Approach Vol, veh/h		248			95			1453			1360	
Approach Delay, s/veh		253.3			15.2			31.5			38.1	
Approach LOS		F			B			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	29.5		22.6	7.5	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.8	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+1/2), s	12.6	23.1		20.1	3.8	23.0		20.1				
Green Ext Time (p_c), s	0.0	0.2		0.0	0.0	0.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay											51.3	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	417	0	199	21	25	22	210	795	4	8	713	414
Future Volume (veh/h)	417	0	199	21	25	22	210	795	4	8	713	414
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	515	0	246	26	31	27	259	981	5	10	951	464
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	689	0	286	79	94	135	338	1847	815	286	1627	698
Arrive On Green	0.19	0.00	0.19	0.09	0.09	0.09	0.10	0.53	0.53	0.01	0.44	0.44
Sat Flow, veh/h	3563	0	1480	834	995	1420	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	515	0	246	57	0	27	259	981	5	10	951	464
Grp Sat Flow(s),veh/h/ln	1781	0	1480	1829	0	1420	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	14.3	0.0	16.8	3.1	0.0	1.8	7.9	19.3	0.2	0.3	20.4	24.3
Cycle Q Clear(g_c), s	14.3	0.0	16.8	3.1	0.0	1.8	7.9	19.3	0.2	0.3	20.4	24.3
Prop In Lane	1.00		1.00	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	689	0	286	173	0	135	338	1847	815	286	1627	698
V/C Ratio(X)	0.75	0.00	0.86	0.33	0.00	0.20	0.77	0.53	0.01	0.03	0.58	0.66
Avail Cap(c_a), veh/h	799	0	332	316	0	245	460	1847	815	352	1627	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	0.0	40.9	44.3	0.0	43.7	18.3	16.2	11.7	16.2	22.0	23.1
Incr Delay (d2), s/veh	3.3	0.0	17.9	1.1	0.0	0.7	5.3	1.1	0.0	0.0	1.5	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	7.6	1.4	0.0	0.7	3.3	7.2	0.1	0.1	8.5	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	58.7	45.4	0.0	44.5	23.6	17.3	11.7	16.3	23.5	28.0
LnGrp LOS	D	A	E	D	A	D	C	B	B	B	C	C
Approach Vol, veh/h		761			84			1245			1425	
Approach Delay, s/veh		48.2			45.1			18.6			25.0	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	59.8		24.7	14.8	50.8		14.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.8	55.3		23.5	17.5	42.9		18.1				
Max Q Clear Time (g_c+1/3), s	12.3	21.3		18.8	9.9	26.3		5.1				
Green Ext Time (p_c), s	0.0	7.5		1.4	0.4	7.3		0.2				

Intersection Summary

HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	179	27	194	257	25	44	166	259	19	138	34
Future Volume (veh/h)	34	179	27	194	257	25	44	166	259	19	138	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	195	29	211	279	27	48	180	282	21	150	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	69	347	51	271	418	360	674	943	789	543	943	799
Arrive On Green	0.04	0.11	0.11	0.15	0.23	0.23	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1781	3060	448	1781	1841	1585	1196	1870	1565	930	1870	1585
Grp Volume(v), veh/h	37	110	114	211	279	27	48	180	282	21	150	37
Grp Sat Flow(s),veh/h/ln	1781	1749	1760	1781	1841	1585	1196	1870	1565	930	1870	1585
Q Serve(g_s), s	1.2	3.5	3.6	6.7	8.1	0.8	1.3	3.1	6.4	0.7	2.5	0.7
Cycle Q Clear(g_c), s	1.2	3.5	3.6	6.7	8.1	0.8	3.9	3.1	6.4	3.8	2.5	0.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	198	200	271	418	360	674	943	789	543	943	799
V/C Ratio(X)	0.54	0.56	0.57	0.78	0.67	0.08	0.07	0.19	0.36	0.04	0.16	0.05
Avail Cap(c_a), veh/h	289	642	646	776	1179	1015	674	943	789	543	943	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	24.6	24.6	23.9	20.6	17.8	8.9	8.0	8.8	9.0	7.8	7.4
Incr Delay (d2), s/veh	6.4	2.4	2.5	4.8	1.9	0.1	0.2	0.5	1.3	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.6	1.5	1.5	3.0	3.4	0.3	0.3	1.1	2.0	0.2	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	27.0	27.1	28.7	22.5	17.9	9.1	8.4	10.1	9.2	8.2	7.5
LnGrp LOS	C	C	C	C	C	B	A	A	B	A	A	A
Approach Vol, veh/h		261			517			510			208	
Approach Delay, s/veh		28.0			24.8			9.4			8.2	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		34.0	13.4	11.1		34.0	6.8	17.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		29.5	25.5	21.5		29.5	9.5	37.5				
Max Q Clear Time (g_c+I1), s		8.4	8.7	5.6		5.8	3.2	10.1				
Green Ext Time (p_c), s		2.2	0.5	1.1		1.0	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay											17.8	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	862	40	9	907	87	68	57	18	73	27	239
Future Volume (veh/h)	198	862	40	9	907	87	68	57	18	73	27	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	1002	47	10	1055	101	79	66	21	85	31	278
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	271	1613	76	23	1079	103	424	817	248	485	570	475
Arrive On Green	0.15	0.47	0.47	0.01	0.34	0.34	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3396	159	1781	3218	308	1068	2682	816	1307	1870	1560
Grp Volume(v), veh/h	230	516	533	10	573	583	79	43	44	85	31	278
Grp Sat Flow(s),veh/h/ln	1781	1749	1806	1781	1749	1777	1068	1777	1721	1307	1870	1560
Q Serve(g_s), s	8.2	14.3	14.3	0.4	21.1	21.1	3.7	1.1	1.2	3.2	0.8	9.8
Cycle Q Clear(g_c), s	8.2	14.3	14.3	0.4	21.1	21.1	4.4	1.1	1.2	4.4	0.8	9.8
Prop In Lane	1.00		0.09	1.00		0.17	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	271	831	858	23	586	596	424	541	524	485	570	475
V/C Ratio(X)	0.85	0.62	0.62	0.44	0.98	0.98	0.19	0.08	0.08	0.18	0.05	0.58
Avail Cap(c_a), veh/h	271	831	858	137	586	596	424	541	524	485	570	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	12.7	12.7	31.9	21.4	21.4	17.5	16.1	16.1	17.7	16.0	19.1
Incr Delay (d2), s/veh	21.4	1.4	1.4	12.9	31.2	31.2	1.0	0.3	0.3	0.8	0.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.7	4.8	0.2	12.3	12.5	1.0	0.5	0.5	1.0	0.3	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.2	14.1	14.1	44.8	52.6	52.6	18.5	16.4	16.4	18.5	16.2	24.3
LnGrp LOS	D	B	B	D	D	D	B	B	B	B	B	C
Approach Vol, veh/h		1279			1166			166			394	
Approach Delay, s/veh		20.3			52.5			17.4			22.4	
Approach LOS		C			D			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		24.3	5.3	35.4		24.3	14.4	26.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.8	5.0	26.7		19.8	9.9	21.8				
Max Q Clear Time (g_c+I1), s		6.4	2.4	16.3		11.8	10.2	23.1				
Green Ext Time (p_c), s		0.6	0.0	4.5		0.9	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay											32.9	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	827	73	18	767	45	147	37	17	36	35	92
Future Volume (veh/h)	51	827	73	18	767	45	147	37	17	36	35	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	929	82	20	862	51	165	42	19	40	39	103
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	132	951	84	108	980	58	458	481	408	95	93	245
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	611	3248	287	558	3347	198	1781	1870	1585	369	360	951
Grp Volume(v), veh/h	57	500	511	20	450	463	165	42	19	182	0	0
Grp Sat Flow(s),veh/h/ln	611	1749	1786	558	1749	1796	1781	1870	1585	1681	0	0
Q Serve(g_s), s	3.3	19.8	19.8	0.7	17.2	17.2	5.3	1.2	0.6	6.3	0.0	0.0
Cycle Q Clear(g_c), s	20.5	19.8	19.8	20.5	17.2	17.2	5.3	1.2	0.6	6.3	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	0.22		0.57
Lane Grp Cap(c), veh/h	132	512	523	108	512	526	458	481	408	432	0	0
V/C Ratio(X)	0.43	0.98	0.98	0.18	0.88	0.88	0.36	0.09	0.05	0.42	0.00	0.00
Avail Cap(c_a), veh/h	132	512	523	108	512	526	458	481	408	432	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.2	24.5	24.5	34.9	23.6	23.6	21.3	19.8	19.5	21.7	0.0	0.0
Incr Delay (d2), s/veh	2.2	33.7	33.3	0.8	16.0	15.7	2.2	0.4	0.2	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.9	12.1	0.3	8.5	8.6	2.3	0.5	0.2	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	58.2	57.8	35.7	39.6	39.3	23.5	20.1	19.8	24.7	0.0	0.0
LnGrp LOS	D	E	E	D	D	D	C	C	B	C	A	A
Approach Vol, veh/h		1068			933			226			182	
Approach Delay, s/veh		56.9			39.4			22.5			24.7	
Approach LOS		E			D			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		7.3		22.5		8.3		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				44.4								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020

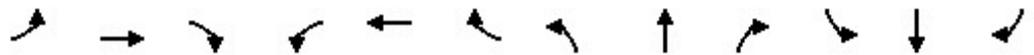


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	72	687	56	28	686	33	40	60	32	30	56	88
Future Volume (veh/h)	72	687	56	28	686	33	40	60	32	30	56	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	763	62	31	762	37	44	67	36	33	62	98
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	110	988	80	60	928	45	77	372	200	63	205	324
Arrive On Green	0.06	0.30	0.30	0.03	0.27	0.27	0.04	0.33	0.33	0.04	0.32	0.32
Sat Flow, veh/h	1781	3273	266	1781	3388	164	1781	1144	615	1781	646	1022
Grp Volume(v), veh/h	80	408	417	31	393	406	44	0	103	33	0	160
Grp Sat Flow(s),veh/h/ln	1781	1749	1790	1781	1749	1803	1781	0	1758	1781	0	1668
Q Serve(g_s), s	2.6	12.6	12.6	1.0	12.5	12.5	1.4	0.0	2.5	1.1	0.0	4.3
Cycle Q Clear(g_c), s	2.6	12.6	12.6	1.0	12.5	12.5	1.4	0.0	2.5	1.1	0.0	4.3
Prop In Lane	1.00		0.15	1.00		0.09	1.00		0.35	1.00		0.61
Lane Grp Cap(c), veh/h	110	528	541	60	479	494	77	0	572	63	0	529
V/C Ratio(X)	0.73	0.77	0.77	0.52	0.82	0.82	0.57	0.00	0.18	0.52	0.00	0.30
Avail Cap(c_a), veh/h	153	534	547	153	534	551	150	0	572	150	0	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	18.8	18.8	28.2	20.2	20.2	27.8	0.0	14.3	28.1	0.0	15.3
Incr Delay (d2), s/veh	10.1	6.8	6.7	6.7	9.1	8.9	6.4	0.0	0.7	6.6	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.2	5.3	0.5	5.6	5.7	0.7	0.0	1.0	0.6	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	25.6	25.5	34.9	29.2	29.0	34.2	0.0	15.0	34.7	0.0	16.8
LnGrp LOS	D	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		905			830			147			193	
Approach Delay, s/veh		26.6			29.3			20.8			19.8	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	23.8	6.5	22.4	7.1	23.3	8.2	20.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.8	5.1	18.1	5.0	18.8	5.1	18.1				
Max Q Clear Time (g_c+1), s	13.5	4.5	3.0	14.6	3.4	6.3	4.6	14.5				
Green Ext Time (p_c), s	0.0	0.4	0.0	1.6	0.0	0.7	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay					26.7							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	203	183	206	187	205	113	914	102	180	915	15
Future Volume (veh/h)	16	203	183	206	187	205	113	914	102	180	915	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	17	214	193	217	197	216	119	962	107	189	963	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	35	290	245	253	225	246	150	1151	128	225	1416	640
Arrive On Green	0.02	0.16	0.16	0.14	0.28	0.28	0.08	0.36	0.36	0.13	0.40	0.40
Sat Flow, veh/h	1781	1870	1579	1781	808	886	1781	3172	353	1781	3497	1581
Grp Volume(v), veh/h	17	214	193	217	0	413	119	530	539	189	963	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1695	1781	1749	1776	1781	1749	1581
Q Serve(g_s), s	0.8	9.2	9.9	10.0	0.0	19.6	5.5	23.4	23.4	8.7	19.1	0.5
Cycle Q Clear(g_c), s	0.8	9.2	9.9	10.0	0.0	19.6	5.5	23.4	23.4	8.7	19.1	0.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	35	290	245	253	0	471	150	635	645	225	1416	640
V/C Ratio(X)	0.49	0.74	0.79	0.86	0.00	0.88	0.79	0.84	0.84	0.84	0.68	0.02
Avail Cap(c_a), veh/h	106	399	337	264	0	513	192	635	645	230	1416	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	34.0	34.3	35.3	0.0	29.1	37.9	24.6	24.6	36.0	20.6	15.1
Incr Delay (d2), s/veh	10.3	4.5	8.2	22.7	0.0	14.9	15.8	12.3	12.2	23.1	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.3	4.2	5.8	0.0	9.5	3.0	11.3	11.5	5.2	7.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	38.5	42.5	58.0	0.0	43.9	53.7	36.9	36.7	59.2	23.3	15.2
LnGrp LOS	D	D	D	E	A	D	D	D	D	E	C	B
Approach Vol, veh/h		424			630			1188			1168	
Approach Delay, s/veh		40.8			48.8			38.5			29.0	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	35.1	16.5	17.6	11.6	38.6	6.1	27.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.9	30.6	12.5	18.0	9.1	32.4	5.0	25.5				
Max Q Clear Time (g_c+I1), s	10.7	25.4	12.0	11.9	7.5	21.1	2.8	21.6				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.9	0.0	5.2	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			37.4									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	52	21	87	25	71	6	906	106	108	1019	11
Future Volume (veh/h)	31	52	21	87	25	71	6	906	106	108	1019	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	33	56	23	94	27	76	6	974	114	116	1096	12
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	323	127	52	330	251	208	14	1476	652	148	1739	768
Arrive On Green	0.04	0.10	0.10	0.07	0.13	0.13	0.01	0.42	0.42	0.08	0.50	0.50
Sat Flow, veh/h	1781	1255	515	1781	1870	1550	1781	3497	1545	1781	3497	1545
Grp Volume(v), veh/h	33	0	79	94	27	76	6	974	114	116	1096	12
Grp Sat Flow(s),veh/h/ln	1781	0	1770	1781	1870	1550	1781	1749	1545	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.3	2.6	0.7	2.5	0.2	12.4	2.6	3.5	12.7	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.3	2.6	0.7	2.5	0.2	12.4	2.6	3.5	12.7	0.2
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	179	330	251	208	14	1476	652	148	1739	768
V/C Ratio(X)	0.10	0.00	0.44	0.28	0.11	0.36	0.42	0.66	0.17	0.78	0.63	0.02
Avail Cap(c_a), veh/h	420	0	575	368	607	503	161	1476	652	180	1739	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	23.4	20.2	21.1	21.8	27.4	12.8	10.0	24.9	10.2	7.1
Incr Delay (d2), s/veh	0.1	0.0	1.7	0.5	0.2	1.1	18.8	2.3	0.6	16.6	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.0	1.0	0.3	0.9	0.1	4.1	0.8	2.0	3.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	25.1	20.7	21.3	22.9	46.1	15.2	10.6	41.5	12.0	7.1
LnGrp LOS	C	A	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		112			197			1094			1224	
Approach Delay, s/veh		24.0			21.6			14.9			14.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	27.9	8.3	10.1	4.9	32.1	6.5	12.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	23.4	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+1/5), s	15.5	14.4	4.6	4.3	2.2	14.7	2.9	4.5				
Green Ext Time (p_c), s	0.0	4.3	0.0	0.3	0.0	4.7	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay											15.7	
HCM 6th LOS											B	

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	507	18	483	492	161	21	621	517	187	823	116
Future Volume (veh/h)	237	507	18	483	492	161	21	621	517	187	823	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	247	528	19	503	512	168	22	647	539	195	857	121
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	275	589	21	530	813	265	38	891	857	221	1102	156
Arrive On Green	0.16	0.17	0.17	0.30	0.32	0.32	0.02	0.25	0.25	0.13	0.36	0.36
Sat Flow, veh/h	1753	3436	123	1753	2569	838	1753	3497	1514	1753	3066	433
Grp Volume(v), veh/h	247	268	279	503	348	332	22	647	539	195	489	489
Grp Sat Flow(s),veh/h/ln	1753	1749	1810	1753	1749	1658	1753	1749	1514	1753	1749	1750
Q Serve(g_s), s	17.1	18.6	18.6	34.7	21.0	21.2	1.5	20.9	30.3	13.5	30.7	30.7
Cycle Q Clear(g_c), s	17.1	18.6	18.6	34.7	21.0	21.2	1.5	20.9	30.3	13.5	30.7	30.7
Prop In Lane	1.00		0.07	1.00		0.51	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	275	300	310	530	554	525	38	891	857	221	628	629
V/C Ratio(X)	0.90	0.89	0.90	0.95	0.63	0.63	0.59	0.73	0.63	0.88	0.78	0.78
Avail Cap(c_a), veh/h	356	318	329	574	554	525	78	891	857	248	628	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	50.2	50.2	42.2	36.1	36.1	60.0	42.2	18.9	53.1	35.2	35.2
Incr Delay (d2), s/veh	20.5	25.2	25.0	24.7	2.3	2.5	13.6	5.2	3.5	26.8	9.2	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	9.9	10.3	18.1	9.0	8.7	0.8	9.4	10.6	7.5	14.1	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	75.3	75.2	66.9	38.3	38.6	73.6	47.3	22.3	79.9	44.4	44.4
LnGrp LOS	E	E	E	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		794		1183			1208		1173			
Approach Delay, s/veh		74.2		50.6			36.7		50.3			
Approach LOS		E		D			D		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.1	36.0	41.9	25.7	7.2	49.0	23.9	43.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	31.5	40.5	40.5	22.5	5.5	43.5	25.1	37.9				
Max Q Clear Time (g_c+115), s	32.3	36.7	36.7	20.6	3.5	32.7	19.1	23.2				
Green Ext Time (p_c), s	0.1	0.0	0.6	0.6	0.0	4.3	0.3	3.4				

Intersection Summary

HCM 6th Ctrl Delay	50.9
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	212	72	78	974	1054	233
Future Volume (veh/h)	212	72	78	974	1054	233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	214	73	79	984	1065	235
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	305	136	412	2900	2601	1151
Arrive On Green	0.09	0.09	0.04	0.83	0.74	0.74
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	214	73	79	984	1065	235
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	6.2	4.7	1.0	7.1	11.8	4.8
Cycle Q Clear(g_c), s	6.2	4.7	1.0	7.1	11.8	4.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	305	136	412	2900	2601	1151
V/C Ratio(X)	0.70	0.54	0.19	0.34	0.41	0.20
Avail Cap(c_a), veh/h	793	353	513	2900	2601	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	46.3	3.2	2.1	5.0	4.1
Incr Delay (d2), s/veh	2.9	3.3	0.2	0.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.1	0.2	1.1	3.2	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.9	49.5	3.4	2.5	5.5	4.5
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	287			1063	1300	
Approach Delay, s/veh	49.8			2.5	5.3	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.0		13.5	9.0	83.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		87.5		23.5	10.5	72.5
Max Q Clear Time (g_c+l1), s		9.1		8.2	3.0	13.8
Green Ext Time (p_c), s		8.0		0.9	0.1	10.3
Intersection Summary						
HCM 6th Ctrl Delay			9.0			
HCM 6th LOS			A			
Notes						
User approved volume balancing among the lanes for turning movement.						

HCM 6th Signalized Intersection Summary
 5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕	↖		↖	↕
Traffic Volume (veh/h)	96	12	61	10	15	39	48	917	14	28	1049	111
Future Volume (veh/h)	96	12	61	10	15	39	48	917	14	28	1049	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	97	12	62	10	15	39	48	926	14	28	1060	112
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	118	8	488	88	96	494	83	1480	22	56	1288	136
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.05	0.42	0.42	0.03	0.40	0.40
Sat Flow, veh/h	0	26	1553	0	307	1573	1781	3525	53	1781	3183	336
Grp Volume(v), veh/h	109	0	62	25	0	39	48	459	481	28	582	590
Grp Sat Flow(s),veh/h/ln	26	0	1553	307	0	1573	1781	1749	1829	1781	1749	1770
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	1.0	1.5	11.9	11.9	0.9	17.1	17.1
Cycle Q Clear(g_c), s	18.1	0.0	1.6	18.1	0.0	1.0	1.5	11.9	11.9	0.9	17.1	17.1
Prop In Lane	0.89		1.00	0.40		1.00	1.00		0.03	1.00		0.19
Lane Grp Cap(c), veh/h	126	0	488	184	0	494	83	734	768	56	708	716
V/C Ratio(X)	0.86	0.00	0.13	0.14	0.00	0.08	0.58	0.63	0.63	0.50	0.82	0.82
Avail Cap(c_a), veh/h	126	0	488	184	0	494	158	734	768	158	708	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	14.1	15.7	0.0	13.9	26.9	13.1	13.1	27.4	15.3	15.3
Incr Delay (d2), s/veh	42.1	0.0	0.1	0.3	0.0	0.1	6.2	4.0	3.8	6.8	10.4	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.6	0.2	0.0	0.3	0.7	4.4	4.6	0.4	7.2	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.6	0.0	14.2	16.0	0.0	13.9	33.1	17.1	17.0	34.2	25.7	25.7
LnGrp LOS	E	A	B	B	A	B	C	B	B	C	C	C
Approach Vol, veh/h		171			64			988			1200	
Approach Delay, s/veh		49.5			14.8			17.8			25.9	
Approach LOS		D			B			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	28.7		22.6	7.2	27.8		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+1/2g), s	12.5	13.9		20.1	3.5	19.1		20.1				
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	2.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				24.0								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	0	86	4	8	12	110	767	0	6	915	206
Future Volume (veh/h)	199	0	86	4	8	12	110	767	0	6	915	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	207	0	90	4	8	12	115	799	0	6	953	215
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	413	0	182	23	46	59	383	1694	768	382	1522	647
Arrive On Green	0.12	0.00	0.12	0.04	0.04	0.04	0.08	0.48	0.00	0.01	0.41	0.41
Sat Flow, veh/h	3563	0	1569	613	1226	1566	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	207	0	90	12	0	12	115	799	0	6	953	215
Grp Sat Flow(s),veh/h/ln	1781	0	1569	1840	0	1566	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	2.8	0.0	2.7	0.3	0.0	0.4	1.7	7.8	0.0	0.1	10.4	4.7
Cycle Q Clear(g_c), s	2.8	0.0	2.7	0.3	0.0	0.4	1.7	7.8	0.0	0.1	10.4	4.7
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	0	182	69	0	59	383	1694	768	382	1522	647
V/C Ratio(X)	0.50	0.00	0.50	0.17	0.00	0.20	0.30	0.47	0.00	0.02	0.63	0.33
Avail Cap(c_a), veh/h	1262	0	556	652	0	555	417	1694	768	543	1522	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	21.1	23.7	0.0	23.7	8.1	8.8	0.0	8.7	11.8	10.1
Incr Delay (d2), s/veh	0.9	0.0	2.1	1.2	0.0	1.7	0.4	0.9	0.0	0.0	2.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.2	0.0	0.2	0.4	2.1	0.0	0.0	3.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	23.2	24.9	0.0	25.4	8.6	9.7	0.0	8.7	13.8	11.5
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		297			24			914			1174	
Approach Delay, s/veh		22.4			25.1			9.6			13.3	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	29.1		10.4	8.5	25.5		6.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	21.0		18.0	5.0	21.0		18.0				
Max Q Clear Time (g_c+1), s	12.5	9.8		4.8	3.7	12.4		2.4				
Green Ext Time (p_c), s	0.0	3.8		0.8	0.0	4.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	288	48	196	252	16	41	132	173	15	194	54
Future Volume (veh/h)	18	288	48	196	252	16	41	132	173	15	194	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	297	49	202	260	16	42	136	178	15	200	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	39	452	73	254	499	429	622	979	830	616	979	830
Arrive On Green	0.02	0.15	0.15	0.14	0.27	0.27	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1781	2998	488	1781	1841	1582	1124	1870	1585	1066	1870	1585
Grp Volume(v), veh/h	19	172	174	202	260	16	42	136	178	15	200	56
Grp Sat Flow(s),veh/h/ln	1781	1749	1738	1781	1841	1582	1124	1870	1585	1066	1870	1585
Q Serve(g_s), s	0.8	6.8	7.0	8.1	8.8	0.5	1.5	2.7	4.4	0.5	4.2	1.3
Cycle Q Clear(g_c), s	0.8	6.8	7.0	8.1	8.8	0.5	5.7	2.7	4.4	3.3	4.2	1.3
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	39	263	262	254	499	429	622	979	830	616	979	830
V/C Ratio(X)	0.49	0.65	0.67	0.80	0.52	0.04	0.07	0.14	0.21	0.02	0.20	0.07
Avail Cap(c_a), veh/h	254	701	697	932	1439	1237	622	979	830	616	979	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	29.4	29.5	30.5	22.8	19.7	10.9	9.0	9.4	9.9	9.4	8.7
Incr Delay (d2), s/veh	9.1	2.7	2.9	5.7	0.8	0.0	0.2	0.3	0.6	0.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.4	2.9	3.0	3.7	3.8	0.2	0.4	1.1	1.5	0.1	1.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.7	32.1	32.4	36.2	23.6	19.8	11.1	9.3	10.0	9.9	9.8	8.8
LnGrp LOS	D	C	C	D	C	B	B	A	A	A	A	A
Approach Vol, veh/h		365			478			356			271	
Approach Delay, s/veh		32.9			28.8			9.9			9.6	
Approach LOS		C			C			A			A	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		43.0	15.0	15.6		43.0	6.1	24.4				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		38.5	38.5	29.5		38.5	10.5	57.5				
Max Q Clear Time (g_c+I1), s		7.7	10.1	9.0		6.2	2.8	10.8				
Green Ext Time (p_c), s		1.6	0.6	2.0		1.4	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay											21.7	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	890	100	24	762	98	63	69	25	118	64	272
Future Volume (veh/h)	238	890	100	24	762	98	63	69	25	118	64	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	918	103	25	786	101	65	71	26	122	66	280
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	286	1335	150	51	906	116	428	829	289	512	600	508
Arrive On Green	0.16	0.42	0.42	0.03	0.29	0.29	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3157	354	1781	3114	400	1034	2584	900	1297	1870	1584
Grp Volume(v), veh/h	245	508	513	25	441	446	65	48	49	122	66	280
Grp Sat Flow(s),veh/h/ln	1781	1749	1763	1781	1749	1765	1034	1777	1707	1297	1870	1584
Q Serve(g_s), s	7.9	14.0	14.0	0.8	14.2	14.2	2.8	1.1	1.2	4.3	1.5	8.6
Cycle Q Clear(g_c), s	7.9	14.0	14.0	0.8	14.2	14.2	4.3	1.1	1.2	5.5	1.5	8.6
Prop In Lane	1.00		0.20	1.00		0.23	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	286	739	745	51	509	513	428	570	548	512	600	508
V/C Ratio(X)	0.86	0.69	0.69	0.49	0.87	0.87	0.15	0.08	0.09	0.24	0.11	0.55
Avail Cap(c_a), veh/h	286	739	745	150	531	537	428	570	548	512	600	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	13.9	13.9	28.3	19.9	19.9	15.7	14.0	14.1	16.0	14.2	16.6
Incr Delay (d2), s/veh	21.9	2.7	2.7	7.2	13.8	13.8	0.8	0.3	0.3	1.1	0.4	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.8	4.8	0.4	6.7	6.8	0.7	0.5	0.5	1.3	0.6	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	16.6	16.6	35.6	33.8	33.7	16.4	14.3	14.4	17.1	14.5	20.9
LnGrp LOS	D	B	B	D	C	C	B	B	B	B	B	C
Approach Vol, veh/h		1266			912			162				468
Approach Delay, s/veh		22.3			33.8			15.2				19.0
Approach LOS		C			C			B				B
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	6.2	29.5		23.5	14.0	21.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	5.0	22.5		19.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s		6.3	2.8	16.0		10.6	9.9	16.2				
Green Ext Time (p_c), s		0.6	0.0	3.2		1.2	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay					25.1							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary

9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	882	78	20	699	52	98	46	35	50	37	86
Future Volume (veh/h)	74	882	78	20	699	52	98	46	35	50	37	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	938	83	21	744	55	104	49	37	53	39	91
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	162	948	84	105	966	71	458	481	402	126	93	217
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	679	3237	286	552	3297	244	1781	1870	1565	491	361	842
Grp Volume(v), veh/h	79	507	514	21	394	405	104	49	37	183	0	0
Grp Sat Flow(s),veh/h/ln	679	1749	1775	552	1749	1792	1781	1870	1565	1694	0	0
Q Serve(g_s), s	6.1	20.2	20.2	0.3	14.4	14.4	3.2	1.4	1.3	6.3	0.0	0.0
Cycle Q Clear(g_c), s	20.5	20.2	20.2	20.5	14.4	14.4	3.2	1.4	1.3	6.3	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.14	1.00		1.00	0.29		0.50
Lane Grp Cap(c), veh/h	162	512	520	105	512	525	458	481	402	436	0	0
V/C Ratio(X)	0.49	0.99	0.99	0.20	0.77	0.77	0.23	0.10	0.09	0.42	0.00	0.00
Avail Cap(c_a), veh/h	162	512	520	105	512	525	458	481	402	436	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.7	24.6	24.6	35.0	22.6	22.6	20.5	19.8	19.8	21.7	0.0	0.0
Incr Delay (d2), s/veh	2.3	36.9	36.6	0.9	7.1	6.9	1.2	0.4	0.5	3.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.5	12.6	0.4	6.2	6.3	1.4	0.6	0.5	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	61.5	61.3	35.9	29.7	29.5	21.7	20.3	20.2	24.6	0.0	0.0
LnGrp LOS	D	E	E	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1100			820			190			183	
Approach Delay, s/veh		59.5			29.7			21.0			24.6	
Approach LOS		E			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		25.0		22.5		25.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		20.5		18.0		20.5				
Max Q Clear Time (g_c+I1), s		5.2		22.5		8.3		22.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay					42.9							
HCM 6th LOS					D							

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	770	54	31	669	42	33	28	21	43	56	60
Future Volume (veh/h)	42	770	54	31	669	42	33	28	21	43	56	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	794	56	32	690	43	34	29	22	44	58	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	77	954	67	62	936	58	65	313	238	78	269	287
Arrive On Green	0.04	0.29	0.29	0.03	0.28	0.28	0.04	0.32	0.32	0.04	0.33	0.33
Sat Flow, veh/h	1781	3307	233	1781	3343	208	1781	980	743	1781	821	877
Grp Volume(v), veh/h	43	420	430	32	361	372	34	0	51	44	0	120
Grp Sat Flow(s),veh/h/ln	1781	1749	1792	1781	1749	1803	1781	0	1723	1781	0	1698
Q Serve(g_s), s	1.4	12.9	12.9	1.0	10.8	10.8	1.1	0.0	1.2	1.4	0.0	2.9
Cycle Q Clear(g_c), s	1.4	12.9	12.9	1.0	10.8	10.8	1.1	0.0	1.2	1.4	0.0	2.9
Prop In Lane	1.00		0.13	1.00		0.12	1.00		0.43	1.00		0.52
Lane Grp Cap(c), veh/h	77	504	517	62	490	505	65	0	551	78	0	556
V/C Ratio(X)	0.56	0.83	0.83	0.52	0.74	0.74	0.52	0.00	0.09	0.56	0.00	0.22
Avail Cap(c_a), veh/h	155	562	576	155	562	580	158	0	551	158	0	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	19.2	19.2	27.3	18.8	18.8	27.2	0.0	13.7	27.0	0.0	14.0
Incr Delay (d2), s/veh	6.2	9.5	9.3	6.5	4.3	4.2	6.4	0.0	0.3	6.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.6	5.8	0.5	4.3	4.4	0.6	0.0	0.5	0.7	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	28.6	28.5	33.8	23.1	23.0	33.6	0.0	14.0	33.2	0.0	14.9
LnGrp LOS	C	C	C	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		893			765			85			164	
Approach Delay, s/veh		28.8			23.5			21.9			19.8	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	22.9	6.5	21.1	6.6	23.3	7.0	20.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.4	18.4	5.0	18.5	5.1	18.4	5.0	18.5				
Max Q Clear Time (g_c+1), s	13.4	13.4	3.2	14.9	3.1	13.4	3.4	12.8				
Green Ext Time (p_c), s	0.0	0.2	0.0	1.6	0.0	0.5	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay					25.6							
HCM 6th LOS					C							

- Cumulative Conditions

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

Cumulative AM
 Timing Plan: AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	184	140	170	134	147	60	925	143	91	681	4
Future Volume (veh/h)	11	184	140	170	134	147	60	925	143	91	681	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	11	188	143	173	137	150	61	944	146	93	695	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	25	278	232	215	207	226	95	1096	169	119	1313	595
Arrive On Green	0.01	0.15	0.15	0.12	0.26	0.26	0.05	0.36	0.36	0.07	0.38	0.38
Sat Flow, veh/h	1781	1870	1561	1781	810	886	1781	3026	468	1781	3497	1585
Grp Volume(v), veh/h	11	188	143	173	0	287	61	545	545	93	695	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1561	1781	0	1696	1781	1749	1745	1781	1749	1585
Q Serve(g_s), s	0.4	5.7	5.1	5.6	0.0	9.0	2.0	17.2	17.3	3.1	9.2	0.1
Cycle Q Clear(g_c), s	0.4	5.7	5.1	5.6	0.0	9.0	2.0	17.2	17.3	3.1	9.2	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	25	278	232	215	0	433	95	633	632	119	1313	595
V/C Ratio(X)	0.44	0.68	0.62	0.80	0.00	0.66	0.64	0.86	0.86	0.78	0.53	0.01
Avail Cap(c_a), veh/h	149	564	471	218	0	577	149	633	632	152	1313	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	24.0	23.8	25.5	0.0	19.9	27.7	17.6	17.6	27.4	14.5	11.7
Incr Delay (d2), s/veh	11.8	2.9	2.7	19.1	0.0	1.7	7.0	14.4	14.4	17.9	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.5	1.9	3.3	0.0	3.4	1.0	8.6	8.6	1.8	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	26.9	26.5	44.6	0.0	21.6	34.7	32.0	32.1	45.3	16.0	11.7
LnGrp LOS	D	C	C	D	A	C	C	C	C	D	B	B
Approach Vol, veh/h		342			460			1151			792	
Approach Delay, s/veh		27.2			30.3			32.2			19.5	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	26.1	11.7	13.4	7.7	26.9	5.3	19.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	21.6	7.3	18.0	5.0	21.7	5.0	20.3				
Max Q Clear Time (g_c+I1), s	5.1	19.3	7.6	7.7	4.0	11.2	2.4	11.0				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.0	0.0	3.5	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay				27.6								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

Cumulative AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	26	4	164	72	66	17	898	61	32	808	24
Future Volume (veh/h)	9	26	4	164	72	66	17	898	61	32	808	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	29	4	184	81	74	19	1009	69	36	908	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	229	122	17	376	309	262	40	1757	777	66	1808	799
Arrive On Green	0.01	0.08	0.08	0.10	0.17	0.17	0.02	0.50	0.50	0.04	0.52	0.52
Sat Flow, veh/h	1781	1605	221	1781	1870	1585	1781	3497	1546	1781	3497	1547
Grp Volume(v), veh/h	10	0	33	184	81	74	19	1009	69	36	908	27
Grp Sat Flow(s),veh/h/ln	1781	0	1826	1781	1870	1585	1781	1749	1546	1781	1749	1547
Q Serve(g_s), s	0.3	0.0	1.1	5.8	2.4	2.6	0.7	12.9	1.5	1.3	10.8	0.5
Cycle Q Clear(g_c), s	0.3	0.0	1.1	5.8	2.4	2.6	0.7	12.9	1.5	1.3	10.8	0.5
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	0	139	376	309	262	40	1757	777	66	1808	799
V/C Ratio(X)	0.04	0.00	0.24	0.49	0.26	0.28	0.48	0.57	0.09	0.55	0.50	0.03
Avail Cap(c_a), veh/h	347	0	516	376	573	485	140	1757	777	154	1808	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	27.7	22.3	23.2	23.3	30.8	11.1	8.3	30.1	10.0	7.6
Incr Delay (d2), s/veh	0.1	0.0	0.9	1.0	0.4	0.6	8.5	1.4	0.2	6.9	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.1	0.0	0.5	2.4	1.0	1.0	0.4	4.1	0.5	0.6	3.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	28.6	23.3	23.6	23.9	39.3	12.5	8.5	37.0	11.0	7.6
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		43			339			1097			971	
Approach Delay, s/veh		28.1			23.5			12.7			11.9	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	36.5	11.0	9.3	5.9	37.4	5.3	15.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	32.0	6.5	18.0	5.0	32.5	5.0	19.5				
Max Q Clear Time (g_c+1), s	13.3	14.9	7.8	3.1	2.7	12.8	2.3	4.6				
Green Ext Time (p_c), s	0.0	6.4	0.0	0.1	0.0	5.9	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				14.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 3: Sanderson Avenue & Stetson Avenue

Cumulative AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	495	77	483	798	129	113	725	703	86	739	162
Future Volume (veh/h)	141	495	77	483	798	129	113	725	703	86	739	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	160	562	88	549	907	147	128	824	799	98	840	184
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	183	551	86	547	1173	190	141	1076	952	119	837	183
Arrive On Green	0.10	0.18	0.18	0.31	0.39	0.39	0.08	0.31	0.31	0.07	0.29	0.29
Sat Flow, veh/h	1753	3002	468	1753	2999	486	1753	3497	1512	1753	2837	621
Grp Volume(v), veh/h	160	326	324	549	529	525	128	824	799	98	518	506
Grp Sat Flow(s),veh/h/ln	1753	1749	1721	1753	1749	1737	1753	1749	1512	1753	1749	1710
Q Serve(g_s), s	12.6	25.7	25.7	43.7	36.9	37.0	10.1	29.9	43.1	7.7	41.3	41.3
Cycle Q Clear(g_c), s	12.6	25.7	25.7	43.7	36.9	37.0	10.1	29.9	43.1	7.7	41.3	41.3
Prop In Lane	1.00		0.27	1.00		0.28	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	183	321	316	547	684	679	141	1076	952	119	516	505
V/C Ratio(X)	0.87	1.02	1.02	1.00	0.77	0.77	0.90	0.77	0.84	0.82	1.00	1.00
Avail Cap(c_a), veh/h	215	321	316	547	684	679	141	1076	952	144	516	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	57.2	57.2	48.2	37.2	37.2	63.8	43.9	21.4	64.4	49.4	49.4
Incr Delay (d2), s/veh	27.1	54.6	57.0	39.3	5.5	5.5	48.3	5.2	8.8	26.0	40.5	41.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	15.9	15.8	24.4	16.3	16.2	6.3	13.4	21.3	4.3	23.3	22.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.9	111.7	114.1	87.4	42.7	42.8	112.1	49.1	30.2	90.4	89.8	90.3
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		810			1603			1751			1122	
Approach Delay, s/veh		108.2			58.0			45.1			90.1	
Approach LOS		F			E			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	47.6	48.2	30.2	15.8	45.8	19.2	59.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	1.5	41.1	43.7	25.7	11.3	41.3	17.2	52.2				
Max Q Clear Time (g_c+19), s	19.7	45.1	45.7	27.7	12.1	43.3	14.6	39.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5.3				
Intersection Summary												
HCM 6th Ctrl Delay											68.2	
HCM 6th LOS											E	

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

Cumulative AM
Timing Plan: AM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	79	69	45	1482	1194	97
Future Volume (veh/h)	79	69	45	1482	1194	97
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	112	57	52	1703	1372	111
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	205	91	360	3001	2725	1201
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	112	57	52	1703	1372	111
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.3	3.7	0.5	14.4	15.2	1.8
Cycle Q Clear(g_c), s	3.3	3.7	0.5	14.4	15.2	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	91	360	3001	2725	1201
V/C Ratio(X)	0.55	0.63	0.14	0.57	0.50	0.09
Avail Cap(c_a), veh/h	651	290	419	3001	2725	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	49.1	3.1	2.1	4.3	2.8
Incr Delay (d2), s/veh	2.3	6.8	0.2	0.8	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.2	0.1	1.4	3.6	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.2	56.0	3.3	2.9	5.0	3.0
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	169			1755	1483	
Approach Delay, s/veh	52.8			2.9	4.8	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		96.0		10.6	8.4	87.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		91.5		19.5	7.5	79.5
Max Q Clear Time (g_c+l1), s		16.4		5.7	2.5	17.2
Green Ext Time (p_c), s		21.6		0.4	0.0	14.5
Intersection Summary						
HCM 6th Ctrl Delay			6.2			
HCM 6th LOS			A			

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
5: Sanderson Avenue & Thornton Avenue

Cumulative AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↗	↕↗		↗	↕↗	
Traffic Volume (veh/h)	194	6	49	16	9	73	52	1236	14	29	1135	90
Future Volume (veh/h)	194	6	49	16	9	73	52	1236	14	29	1135	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	228	7	58	19	11	86	61	1454	16	34	1335	106
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	282	9	257	94	54	128	81	1784	20	58	1607	127
Arrive On Green	0.16	0.16	0.16	0.08	0.08	0.08	0.05	0.50	0.50	0.03	0.49	0.49
Sat Flow, veh/h	1731	53	1573	1148	665	1562	1781	3542	39	1781	3275	259
Grp Volume(v), veh/h	235	0	58	30	0	86	61	717	753	34	710	731
Grp Sat Flow(s),veh/h/ln	1784	0	1573	1813	0	1562	1781	1749	1832	1781	1749	1785
Q Serve(g_s), s	10.5	0.0	2.6	1.3	0.0	4.4	2.8	28.4	28.5	1.5	28.7	29.0
Cycle Q Clear(g_c), s	10.5	0.0	2.6	1.3	0.0	4.4	2.8	28.4	28.5	1.5	28.7	29.0
Prop In Lane	0.97		1.00	0.63		1.00	1.00		0.02	1.00		0.15
Lane Grp Cap(c), veh/h	291	0	257	148	0	128	81	880	923	58	858	876
V/C Ratio(X)	0.81	0.00	0.23	0.20	0.00	0.67	0.75	0.81	0.82	0.58	0.83	0.83
Avail Cap(c_a), veh/h	396	0	350	396	0	341	115	880	923	110	858	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	29.9	35.3	0.0	36.7	38.8	17.2	17.2	39.3	18.0	18.1
Incr Delay (d2), s/veh	8.5	0.0	0.4	0.7	0.0	6.0	15.5	8.2	7.9	8.8	9.0	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	5.2	0.0	1.0	0.6	0.0	1.9	1.5	11.5	12.0	0.8	11.8	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	0.0	30.4	35.9	0.0	42.7	54.3	25.4	25.1	48.1	27.0	27.3
LnGrp LOS	D	A	C	D	A	D	D	C	C	D	C	C
Approach Vol, veh/h		293			116			1531			1475	
Approach Delay, s/veh		39.5			41.0			26.4			27.6	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	46.0		17.9	8.3	44.9		11.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	40.6		18.3	5.3	40.4		18.0				
Max Q Clear Time (g_c+1/3), s	13.5	30.5		12.5	4.8	31.0		6.4				
Green Ext Time (p_c), s	0.0	6.2		0.8	0.0	5.8		0.3				
Intersection Summary												
HCM 6th Ctrl Delay											28.6	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

Cumulative AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	435	0	216	21	25	31	216	835	4	14	750	429
Future Volume (veh/h)	435	0	216	21	25	31	216	835	4	14	750	429
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	537	0	267	26	31	38	267	1031	5	17	993	485
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	722	0	301	79	94	135	327	1807	798	271	1599	686
Arrive On Green	0.20	0.00	0.20	0.09	0.09	0.09	0.10	0.52	0.52	0.02	0.43	0.43
Sat Flow, veh/h	3563	0	1484	834	995	1420	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	537	0	267	57	0	38	267	1031	5	17	993	485
Grp Sat Flow(s),veh/h/ln	1781	0	1484	1829	0	1420	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	15.2	0.0	18.8	3.1	0.0	2.7	8.5	21.7	0.2	0.6	22.5	26.9
Cycle Q Clear(g_c), s	15.2	0.0	18.8	3.1	0.0	2.7	8.5	21.7	0.2	0.6	22.5	26.9
Prop In Lane	1.00		1.00	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	722	0	301	173	0	135	327	1807	798	271	1599	686
V/C Ratio(X)	0.74	0.00	0.89	0.33	0.00	0.28	0.82	0.57	0.01	0.06	0.62	0.71
Avail Cap(c_a), veh/h	779	0	325	306	0	238	421	1807	798	321	1599	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	41.7	45.4	0.0	45.2	20.0	17.8	12.6	17.0	23.5	24.8
Incr Delay (d2), s/veh	3.6	0.0	23.4	1.1	0.0	1.1	9.3	1.3	0.0	0.1	1.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	8.8	1.5	0.0	1.0	3.9	8.3	0.1	0.2	9.5	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.0	65.1	46.5	0.0	46.4	29.3	19.1	12.6	17.1	25.4	30.8
LnGrp LOS	D	A	E	D	A	D	C	B	B	B	C	C
Approach Vol, veh/h		804			95			1303			1495	
Approach Delay, s/veh		50.9			46.5			21.2			27.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	60.0		26.3	15.3	51.2		14.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	55.5		23.5	16.5	44.0		18.0				
Max Q Clear Time (g_c+1), s	12.6	23.7		20.8	10.5	28.9		5.1				
Green Ext Time (p_c), s	0.0	7.9		1.0	0.4	7.3		0.3				

Intersection Summary

HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
7: Cawston Avenue & Stetson Avenue

Cumulative AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	210	28	322	265	25	69	166	421	19	138	34
Future Volume (veh/h)	34	210	28	322	265	25	69	166	421	19	138	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	228	30	350	288	27	75	180	458	21	150	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	67	368	48	415	577	497	580	824	689	412	824	698
Arrive On Green	0.04	0.12	0.12	0.23	0.31	0.31	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	3112	405	1781	1841	1585	1196	1870	1565	790	1870	1585
Grp Volume(v), veh/h	37	127	131	350	288	27	75	180	458	21	150	37
Grp Sat Flow(s),veh/h/ln	1781	1749	1768	1781	1841	1585	1196	1870	1565	790	1870	1585
Q Serve(g_s), s	1.3	4.5	4.6	12.1	8.2	0.8	2.6	3.9	15.0	1.1	3.2	0.9
Cycle Q Clear(g_c), s	1.3	4.5	4.6	12.1	8.2	0.8	5.8	3.9	15.0	4.9	3.2	0.9
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	207	209	415	577	497	580	824	689	412	824	698
V/C Ratio(X)	0.55	0.61	0.63	0.84	0.50	0.05	0.13	0.22	0.66	0.05	0.18	0.05
Avail Cap(c_a), veh/h	179	500	505	812	1180	1016	580	824	689	412	824	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	27.1	27.2	23.7	18.1	15.5	12.8	11.2	14.3	12.7	11.0	10.4
Incr Delay (d2), s/veh	7.0	2.9	3.1	4.8	0.7	0.0	0.5	0.6	5.0	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.7	1.9	2.0	5.3	3.3	0.3	0.7	1.6	5.6	0.2	1.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	30.1	30.3	28.5	18.8	15.6	13.2	11.8	19.3	13.0	11.5	10.5
LnGrp LOS	D	C	C	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		295		665		713		208				
Approach Delay, s/veh		31.1		23.7		16.8		11.5				
Approach LOS		C		C		B		B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		33.0	19.6	12.1		33.0	6.9	24.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	29.5	18.5		28.5	6.5	41.5				
Max Q Clear Time (g_c+I1), s		17.0	14.1	6.6		6.9	3.3	10.2				
Green Ext Time (p_c), s		2.5	1.0	1.1		1.0	0.0	1.9				
Intersection Summary												
HCM 6th Ctrl Delay				20.9								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

8: Seven Hills Drive/Kirby Street & Stetson Avenue

Cumulative AM
Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	1009	52	9	1066	87	83	57	18	73	27	260
Future Volume (veh/h)	216	1009	52	9	1066	87	83	57	18	73	27	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	1173	60	10	1240	101	97	66	21	85	31	302
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	263	1678	86	23	1182	96	394	759	231	456	529	442
Arrive On Green	0.15	0.50	0.50	0.01	0.36	0.36	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	3379	173	1781	3269	266	1045	2682	816	1307	1870	1560
Grp Volume(v), veh/h	251	607	626	10	662	679	97	43	44	85	31	302
Grp Sat Flow(s),veh/h/ln	1781	1749	1803	1781	1749	1786	1045	1777	1720	1307	1870	1560
Q Serve(g_s), s	9.1	17.4	17.4	0.4	23.5	23.5	4.8	1.1	1.2	3.3	0.8	11.2
Cycle Q Clear(g_c), s	9.1	17.4	17.4	0.4	23.5	23.5	5.6	1.1	1.2	4.6	0.8	11.2
Prop In Lane	1.00		0.10	1.00		0.15	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	263	868	895	23	632	646	394	503	487	456	529	442
V/C Ratio(X)	0.95	0.70	0.70	0.44	1.05	1.05	0.25	0.08	0.09	0.19	0.06	0.68
Avail Cap(c_a), veh/h	263	868	895	137	632	646	394	503	487	456	529	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	12.6	12.6	31.9	20.8	20.8	19.0	17.1	17.1	18.8	17.0	20.7
Incr Delay (d2), s/veh	42.9	2.5	2.4	12.9	48.7	49.7	1.5	0.3	0.4	0.9	0.2	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	6.6	5.7	5.9	0.2	16.4	17.0	1.3	0.5	0.5	1.0	0.3	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.4	15.1	15.1	44.8	69.5	70.5	20.5	17.4	17.5	19.7	17.2	29.0
LnGrp LOS	E	B	B	D	F	F	C	B	B	B	B	C
Approach Vol, veh/h		1484			1351			184			418	
Approach Delay, s/veh		24.4			69.8			19.1			26.3	
Approach LOS		C			E			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.9	5.3	36.8		22.9	14.1	28.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.4	5.0	28.1		18.4	9.6	23.5				
Max Q Clear Time (g_c+I1), s		7.6	2.4	19.4		13.2	11.1	25.5				
Green Ext Time (p_c), s		0.6	0.0	4.7		0.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				42.2								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

Cumulative AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	947	87	18	894	45	164	37	17	36	35	107
Future Volume (veh/h)	63	947	87	18	894	45	164	37	17	36	35	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	1064	98	20	1004	51	184	42	19	40	39	120
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	154	1233	114	128	1289	65	401	421	357	76	74	227
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	535	3235	298	483	3380	172	1781	1870	1585	336	328	1008
Grp Volume(v), veh/h	71	575	587	20	519	536	184	42	19	199	0	0
Grp Sat Flow(s),veh/h/ln	535	1749	1784	483	1749	1803	1781	1870	1585	1672	0	0
Q Serve(g_s), s	9.6	24.2	24.3	3.2	20.9	20.9	7.1	1.4	0.8	8.4	0.0	0.0
Cycle Q Clear(g_c), s	30.5	24.2	24.3	27.5	20.9	20.9	7.1	1.4	0.8	8.4	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.10	1.00		1.00	0.20		0.60
Lane Grp Cap(c), veh/h	154	667	680	128	667	687	401	421	357	376	0	0
V/C Ratio(X)	0.46	0.86	0.86	0.16	0.78	0.78	0.46	0.10	0.05	0.53	0.00	0.00
Avail Cap(c_a), veh/h	154	667	680	128	667	687	401	421	357	376	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.7	22.8	22.8	35.5	21.8	21.8	26.8	24.6	24.3	27.3	0.0	0.0
Incr Delay (d2), s/veh	2.1	11.2	11.1	0.6	5.9	5.7	3.8	0.5	0.3	5.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	10.8	11.0	0.4	8.6	8.9	3.3	0.7	0.3	3.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	34.0	33.9	36.1	27.7	27.5	30.5	25.1	24.6	32.5	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1233			1075			245			199	
Approach Delay, s/veh		34.2			27.7			29.1			32.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		35.0		22.5		35.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		30.5		18.0		30.5				
Max Q Clear Time (g_c+I1), s		9.1		32.5		10.4		29.5				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.7				
Intersection Summary												
HCM 6th Ctrl Delay				31.1								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Cumulative AM
 Timing Plan: AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↖		↖	↖	
Traffic Volume (veh/h)	84	780	70	28	769	33	57	60	32	30	56	103
Future Volume (veh/h)	84	780	70	28	769	33	57	60	32	30	56	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	867	78	31	854	37	63	67	36	33	62	114
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	119	1045	94	60	985	43	96	361	194	62	173	319
Arrive On Green	0.07	0.32	0.32	0.03	0.29	0.29	0.05	0.32	0.32	0.04	0.30	0.30
Sat Flow, veh/h	1781	3242	292	1781	3408	148	1781	1144	615	1781	584	1073
Grp Volume(v), veh/h	93	468	477	31	438	453	63	0	103	33	0	176
Grp Sat Flow(s),veh/h/ln	1781	1749	1786	1781	1749	1807	1781	0	1758	1781	0	1657
Q Serve(g_s), s	3.2	15.2	15.2	1.0	14.6	14.6	2.1	0.0	2.6	1.1	0.0	5.1
Cycle Q Clear(g_c), s	3.2	15.2	15.2	1.0	14.6	14.6	2.1	0.0	2.6	1.1	0.0	5.1
Prop In Lane	1.00		0.16	1.00		0.08	1.00		0.35	1.00		0.65
Lane Grp Cap(c), veh/h	119	564	575	60	505	522	96	0	555	62	0	492
V/C Ratio(X)	0.78	0.83	0.83	0.52	0.87	0.87	0.66	0.00	0.19	0.53	0.00	0.36
Avail Cap(c_a), veh/h	148	564	575	148	534	551	145	0	555	145	0	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.2	19.2	19.2	29.1	20.7	20.7	28.5	0.0	15.3	29.1	0.0	16.9
Incr Delay (d2), s/veh	18.9	10.1	9.9	6.9	13.6	13.3	7.5	0.0	0.7	6.8	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.7	6.8	0.5	7.0	7.2	1.1	0.0	1.1	0.6	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	29.3	29.1	36.0	34.3	33.9	35.9	0.0	16.0	35.8	0.0	19.0
LnGrp LOS	D	C	C	D	C	C	D	A	B	D	A	B
Approach Vol, veh/h		1038			922			166			209	
Approach Delay, s/veh		30.8			34.2			23.6			21.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	23.8	6.6	24.3	7.8	22.7	8.6	22.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.2	18.2	5.1	18.7	5.0	18.2	5.1	18.7				
Max Q Clear Time (g_c+1), s	4.6	4.6	3.0	17.2	4.1	7.1	5.2	16.6				
Green Ext Time (p_c), s	0.0	0.4	0.0	0.9	0.0	0.7	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay												30.8
HCM 6th LOS												C

HCM 6th Signalized Intersection Summary
 1: Sanderson Avenue & Acacia Avenue

Cumulative PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	215	188	228	228	210	119	991	127	185	1001	15
Future Volume (veh/h)	16	215	188	228	228	210	119	991	127	185	1001	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	17	226	198	240	240	221	125	1043	134	195	1054	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	35	302	255	263	258	237	156	1114	143	220	1376	622
Arrive On Green	0.02	0.16	0.16	0.15	0.29	0.29	0.09	0.36	0.36	0.12	0.39	0.39
Sat Flow, veh/h	1781	1870	1579	1781	889	819	1781	3116	400	1781	3497	1581
Grp Volume(v), veh/h	17	226	198	240	0	461	125	585	592	195	1054	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1708	1781	1749	1767	1781	1749	1581
Q Serve(g_s), s	0.8	9.9	10.3	11.4	0.0	22.5	5.9	27.7	27.8	9.3	22.5	0.5
Cycle Q Clear(g_c), s	0.8	9.9	10.3	11.4	0.0	22.5	5.9	27.7	27.8	9.3	22.5	0.5
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	35	302	255	263	0	495	156	625	632	220	1376	622
V/C Ratio(X)	0.49	0.75	0.78	0.91	0.00	0.93	0.80	0.94	0.94	0.89	0.77	0.03
Avail Cap(c_a), veh/h	104	392	331	263	0	511	176	625	632	220	1376	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	34.3	34.5	36.0	0.0	29.6	38.4	26.6	26.6	37.0	22.6	16.0
Incr Delay (d2), s/veh	10.4	5.7	8.4	33.0	0.0	23.5	20.5	23.2	23.3	32.3	4.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.8	4.4	7.2	0.0	12.0	3.4	15.0	15.2	5.9	9.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	40.0	42.9	69.0	0.0	53.2	58.9	49.8	49.9	69.3	26.7	16.0
LnGrp LOS	D	D	D	E	A	D	E	D	D	E	C	B
Approach Vol, veh/h		441			701			1302			1265	
Approach Delay, s/veh		41.8			58.6			50.7			33.2	
Approach LOS		D			E			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	35.2	17.2	18.4	12.0	38.3	6.2	29.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.6	30.7	12.7	18.0	8.5	32.8	5.0	25.7				
Max Q Clear Time (g_c+I1), s	11.3	29.8	13.4	12.3	7.9	24.5	2.8	24.5				
Green Ext Time (p_c), s	0.0	0.7	0.0	0.9	0.0	4.5	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			45.2									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

Cumulative PM
 Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	55	25	92	27	77	10	1003	113	114	1124	12
Future Volume (veh/h)	32	55	25	92	27	77	10	1003	113	114	1124	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	34	59	27	99	29	83	11	1078	122	123	1209	13
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	323	123	56	326	252	209	25	1463	646	157	1722	761
Arrive On Green	0.04	0.10	0.10	0.07	0.13	0.13	0.01	0.42	0.42	0.09	0.49	0.49
Sat Flow, veh/h	1781	1209	553	1781	1870	1550	1781	3497	1545	1781	3497	1545
Grp Volume(v), veh/h	34	0	86	99	29	83	11	1078	122	123	1209	13
Grp Sat Flow(s),veh/h/ln	1781	0	1763	1781	1870	1550	1781	1749	1545	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.6	2.7	0.8	2.7	0.3	14.5	2.8	3.8	15.0	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.6	2.7	0.8	2.7	0.3	14.5	2.8	3.8	15.0	0.2
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	179	326	252	209	25	1463	646	157	1722	761
V/C Ratio(X)	0.11	0.00	0.48	0.30	0.11	0.40	0.44	0.74	0.19	0.78	0.70	0.02
Avail Cap(c_a), veh/h	417	0	567	360	602	499	159	1463	646	178	1722	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	23.7	20.4	21.3	22.1	27.4	13.7	10.3	25.0	11.0	7.3
Incr Delay (d2), s/veh	0.1	0.0	2.0	0.5	0.2	1.2	11.7	3.3	0.6	18.0	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.1	1.1	0.3	1.0	0.2	4.9	0.9	2.2	4.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	25.7	20.9	21.5	23.3	39.0	17.0	10.9	43.0	13.4	7.3
LnGrp LOS	C	A	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		120			211			1211			1345	
Approach Delay, s/veh		24.5			21.9			16.6			16.1	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	27.9	8.4	10.2	5.3	32.0	6.6	12.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	23.4	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	5.8	16.5	4.7	4.6	2.3	17.0	2.9	4.7				
Green Ext Time (p_c), s	0.0	3.9	0.0	0.3	0.0	4.2	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				17.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

Cumulative PM
Timing Plan: PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	679	104	476	659	196	92	644	541	211	863	203
Future Volume (veh/h)	320	679	104	476	659	196	92	644	541	211	863	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	333	707	108	496	686	204	96	671	564	220	899	211
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	353	655	100	471	748	222	107	839	782	239	882	207
Arrive On Green	0.20	0.22	0.22	0.27	0.28	0.28	0.06	0.24	0.24	0.14	0.32	0.32
Sat Flow, veh/h	1753	3020	461	1753	2634	783	1753	3497	1512	1753	2796	656
Grp Volume(v), veh/h	333	409	406	496	455	435	96	671	564	220	562	548
Grp Sat Flow(s),veh/h/ln	1753	1749	1732	1753	1749	1668	1753	1749	1512	1753	1749	1702
Q Serve(g_s), s	24.3	28.2	28.2	34.9	32.8	32.8	7.1	23.5	31.2	16.1	41.0	41.0
Cycle Q Clear(g_c), s	24.3	28.2	28.2	34.9	32.8	32.8	7.1	23.5	31.2	16.1	41.0	41.0
Prop In Lane	1.00		0.27	1.00		0.47	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	353	379	376	471	496	473	107	839	782	239	552	537
V/C Ratio(X)	0.94	1.08	1.08	1.05	0.92	0.92	0.90	0.80	0.72	0.92	1.02	1.02
Avail Cap(c_a), veh/h	353	379	376	471	496	473	107	839	782	239	552	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	50.9	50.9	47.5	45.1	45.1	60.7	46.5	25.0	55.5	44.5	44.5
Incr Delay (d2), s/veh	33.3	68.8	69.6	56.4	22.0	22.9	57.0	7.9	5.7	37.6	43.2	44.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	19.1	19.0	22.1	16.8	16.1	4.8	10.8	14.0	9.4	23.7	23.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.4	119.7	120.5	104.0	67.1	68.0	117.7	54.3	30.7	93.1	87.7	88.6
LnGrp LOS	F	F	F	F	E	E	F	D	C	F	F	F
Approach Vol, veh/h		1148			1386			1331			1330	
Approach Delay, s/veh		109.7			80.6			48.9			89.0	
Approach LOS		F			F			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.2	35.7	39.4	32.7	12.4	45.5	30.7	41.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	17.7	31.2	34.9	28.2	7.9	41.0	26.2	36.9				
Max Q Clear Time (g_c+I1), s	18.1	33.2	36.9	30.2	9.1	43.0	26.3	34.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay				81.1								
HCM 6th LOS				F								

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

Cumulative PM
Timing Plan: PM



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↗	↖	↑↑	↓↓	↘
Traffic Volume (veh/h)	217	72	78	1078	1168	238
Future Volume (veh/h)	217	72	78	1078	1168	238
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	219	73	79	1089	1180	240
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	308	137	375	2900	2604	1152
Arrive On Green	0.09	0.09	0.04	0.83	0.74	0.74
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	219	73	79	1089	1180	240
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	6.4	4.7	1.0	8.2	13.9	5.0
Cycle Q Clear(g_c), s	6.4	4.7	1.0	8.2	13.9	5.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	308	137	375	2900	2604	1152
V/C Ratio(X)	0.71	0.53	0.21	0.38	0.45	0.21
Avail Cap(c_a), veh/h	751	334	458	2900	2604	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	46.7	3.6	2.3	5.3	4.1
Incr Delay (d2), s/veh	3.0	3.2	0.3	0.4	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.1	0.2	1.3	3.8	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.5	49.9	3.9	2.6	5.8	4.5
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h				1168	1420	
Approach Delay, s/veh	50.3			2.7	5.6	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		93.0		13.7	9.0	84.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		88.5		22.5	9.5	74.5
Max Q Clear Time (g_c+I1), s		10.2		8.4	3.0	15.9
Green Ext Time (p_c), s		9.4		0.8	0.1	12.1

Intersection Summary

HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
5: Sanderson Avenue & Thornton Avenue

Cumulative PM
Timing Plan: PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↕	↗	↖	↕	↗
Traffic Volume (veh/h)	123	13	64	10	16	54	51	979	14	45	1117	139
Future Volume (veh/h)	123	13	64	10	16	54	51	979	14	45	1117	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	124	13	65	10	16	55	52	989	14	45	1128	140
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	200	21	189	53	84	115	84	1696	24	76	1488	184
Arrive On Green	0.12	0.12	0.12	0.07	0.07	0.07	0.05	0.48	0.48	0.04	0.48	0.48
Sat Flow, veh/h	1620	170	1533	706	1129	1536	1781	3529	50	1781	3122	387
Grp Volume(v), veh/h	137	0	65	26	0	55	52	490	513	45	631	637
Grp Sat Flow(s),veh/h/ln	1789	0	1533	1835	0	1536	1781	1749	1830	1781	1749	1760
Q Serve(g_s), s	4.7	0.0	2.5	0.9	0.0	2.2	1.9	13.1	13.1	1.6	19.1	19.2
Cycle Q Clear(g_c), s	4.7	0.0	2.5	0.9	0.0	2.2	1.9	13.1	13.1	1.6	19.1	19.2
Prop In Lane	0.91		1.00	0.38		1.00	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	221	0	189	137	0	115	84	840	879	76	833	839
V/C Ratio(X)	0.62	0.00	0.34	0.19	0.00	0.48	0.62	0.58	0.58	0.59	0.76	0.76
Avail Cap(c_a), veh/h	501	0	429	511	0	428	141	840	879	141	833	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	25.9	28.1	0.0	28.7	30.2	12.1	12.1	30.4	13.9	13.9
Incr Delay (d2), s/veh	2.8	0.0	1.1	0.7	0.0	3.1	7.3	3.0	2.8	7.0	6.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.9	0.4	0.0	0.9	0.9	4.6	4.8	0.8	7.2	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	27.0	28.7	0.0	31.8	37.6	15.1	14.9	37.4	20.2	20.3
LnGrp LOS	C	A	C	C	A	C	D	B	B	D	C	C
Approach Vol, veh/h		202			81			1055			1313	
Approach Delay, s/veh		28.9			30.8			16.1			20.8	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	35.6		12.5	7.5	35.3		9.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	30.8		18.1	5.1	30.8		18.0				
Max Q Clear Time (g_c+I1), s	3.6	15.1		6.7	3.9	21.2		4.2				
Green Ext Time (p_c), s	0.0	5.3		0.7	0.0	5.2		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				19.9								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

Cumulative PM
Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	0	97	4	8	22	129	806	0	18	956	224
Future Volume (veh/h)	215	0	97	4	8	22	129	806	0	18	956	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	224	0	101	4	8	23	134	840	0	19	996	233
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	403	0	177	28	55	70	375	1866	846	407	1783	758
Arrive On Green	0.11	0.00	0.11	0.05	0.05	0.05	0.07	0.53	0.00	0.02	0.48	0.48
Sat Flow, veh/h	3563	0	1568	613	1226	1561	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	224	0	101	12	0	23	134	840	0	19	996	233
Grp Sat Flow(s),veh/h/ln	1781	0	1568	1840	0	1561	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	3.7	0.0	3.8	0.4	0.0	0.9	2.2	9.3	0.0	0.3	12.0	5.7
Cycle Q Clear(g_c), s	3.7	0.0	3.8	0.4	0.0	0.9	2.2	9.3	0.0	0.3	12.0	5.7
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	177	83	0	70	375	1866	846	407	1783	758
V/C Ratio(X)	0.56	0.00	0.57	0.14	0.00	0.33	0.36	0.45	0.00	0.05	0.56	0.31
Avail Cap(c_a), veh/h	1018	0	448	526	0	446	403	1866	846	508	1783	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	26.5	28.9	0.0	29.1	8.2	9.0	0.0	8.1	11.5	9.8
Incr Delay (d2), s/veh	1.2	0.0	2.9	0.8	0.0	2.7	0.6	0.8	0.0	0.0	1.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.5	0.2	0.0	0.4	0.6	2.7	0.0	0.1	4.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	29.3	29.7	0.0	31.8	8.8	9.8	0.0	8.1	12.8	10.9
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		325			35			974			1248	
Approach Delay, s/veh		28.2			31.1			9.7			12.3	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	38.1		11.6	9.0	35.0		7.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	31.0		18.0	5.5	30.5		18.0				
Max Q Clear Time (g_c+I1), s	2.3	11.3		5.8	4.2	14.0		2.9				
Green Ext Time (p_c), s	0.0	5.3		0.9	0.0	6.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
7: Cawston Avenue & Stetson Avenue

Cumulative PM
Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	322	48	363	261	16	65	132	316	15	194	54
Future Volume (veh/h)	18	322	48	363	261	16	65	132	316	15	194	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	332	49	374	269	16	67	136	326	15	200	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	2	2	2	2	2	2	2
Cap, veh/h	38	470	69	429	687	591	506	820	695	456	820	695
Arrive On Green	0.02	0.15	0.15	0.24	0.37	0.37	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	3050	445	1781	1841	1583	1124	1870	1585	930	1870	1585
Grp Volume(v), veh/h	19	189	192	374	269	16	67	136	326	15	200	56
Grp Sat Flow(s),veh/h/ln	1781	1749	1747	1781	1841	1583	1124	1870	1585	930	1870	1585
Q Serve(g_s), s	0.9	8.3	8.5	16.3	8.7	0.5	3.2	3.6	11.8	0.8	5.4	1.7
Cycle Q Clear(g_c), s	0.9	8.3	8.5	16.3	8.7	0.5	8.7	3.6	11.8	4.4	5.4	1.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	269	269	429	687	591	506	820	695	456	820	695
V/C Ratio(X)	0.50	0.70	0.71	0.87	0.39	0.03	0.13	0.17	0.47	0.03	0.24	0.08
Avail Cap(c_a), veh/h	165	529	528	1023	1443	1241	506	820	695	456	820	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	32.5	32.6	29.5	18.6	16.1	17.0	13.8	16.1	15.1	14.3	13.2
Incr Delay (d2), s/veh	9.6	3.3	3.5	5.6	0.4	0.0	0.5	0.4	2.3	0.1	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.7	3.7	7.4	3.6	0.2	0.9	1.5	4.4	0.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	35.8	36.1	35.1	19.0	16.1	17.6	14.2	18.3	15.2	15.0	13.5
LnGrp LOS	D	D	D	D	B	B	B	B	B	B	B	B
Approach Vol, veh/h		400			659			529			271	
Approach Delay, s/veh		36.5			28.1			17.2			14.7	
Approach LOS		D			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		40.0	24.0	17.0		40.0	6.2	34.7				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	46.5	24.5		35.5	7.5	63.5				
Max Q Clear Time (g_c+I1), s		13.8	18.3	10.5		7.4	2.9	10.7				
Green Ext Time (p_c), s		2.2	1.2	1.9		1.4	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay				24.9								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

Cumulative PM
 Timing Plan: PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1072	115	24	930	98	76	69	25	118	64	288
Future Volume (veh/h)	256	1072	115	24	930	98	76	69	25	118	64	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	1105	119	25	959	101	78	71	26	122	66	297
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	282	1391	150	51	984	104	408	797	278	493	577	488
Arrive On Green	0.16	0.44	0.44	0.03	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	3173	341	1781	3190	336	1018	2584	900	1297	1870	1584
Grp Volume(v), veh/h	264	608	616	25	526	534	78	48	49	122	66	297
Grp Sat Flow(s),veh/h/ln	1781	1749	1766	1781	1749	1778	1018	1777	1707	1297	1870	1584
Q Serve(g_s), s	8.8	18.0	18.0	0.8	17.8	17.8	3.6	1.1	1.2	4.4	1.5	9.6
Cycle Q Clear(g_c), s	8.8	18.0	18.0	0.8	17.8	17.8	5.1	1.1	1.2	5.7	1.5	9.6
Prop In Lane	1.00		0.19	1.00		0.19	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	282	766	774	51	539	548	408	548	526	493	577	488
V/C Ratio(X)	0.94	0.79	0.80	0.49	0.97	0.98	0.19	0.09	0.09	0.25	0.11	0.61
Avail Cap(c_a), veh/h	282	766	774	148	539	548	408	548	526	493	577	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	14.5	14.5	28.7	20.5	20.5	16.7	14.7	14.8	16.8	14.9	17.7
Incr Delay (d2), s/veh	36.9	5.8	5.8	7.3	32.3	32.0	1.0	0.3	0.4	1.2	0.4	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.6	6.8	0.4	10.8	11.0	0.9	0.5	0.5	1.3	0.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	20.3	20.3	36.0	52.8	52.5	17.7	15.1	15.1	18.0	15.3	23.2
LnGrp LOS	E	C	C	D	D	D	B	B	B	B	B	C
Approach Vol, veh/h		1488			1085			175			485	
Approach Delay, s/veh		27.7			52.3			16.3			20.8	
Approach LOS		C			D			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.0	6.2	30.8		23.0	14.0	23.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.5	5.0	23.0		18.5	9.5	18.5				
Max Q Clear Time (g_c+I1), s		7.1	2.8	20.0		11.6	10.8	19.8				
Green Ext Time (p_c), s		0.6	0.0	1.9		1.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			34.3									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
9: Lyon Avenue & Stetson Avenue

Cumulative PM
Timing Plan: PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1030	97	20	838	52	115	46	35	50	37	99
Future Volume (veh/h)	89	1030	97	20	838	52	115	46	35	50	37	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	1096	103	21	891	55	122	49	37	53	39	105
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	183	1227	115	119	1275	79	401	421	352	102	75	202
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	593	3220	302	467	3343	206	1781	1870	1564	454	334	899
Grp Volume(v), veh/h	95	595	604	21	466	480	122	49	37	197	0	0
Grp Sat Flow(s),veh/h/ln	593	1749	1773	467	1749	1801	1781	1870	1564	1686	0	0
Q Serve(g_s), s	12.5	25.5	25.6	3.5	18.0	18.0	4.6	1.7	1.5	8.2	0.0	0.0
Cycle Q Clear(g_c), s	30.5	25.5	25.6	29.1	18.0	18.0	4.6	1.7	1.5	8.2	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.11	1.00		1.00	0.27		0.53
Lane Grp Cap(c), veh/h	183	667	676	119	667	687	401	421	352	379	0	0
V/C Ratio(X)	0.52	0.89	0.89	0.18	0.70	0.70	0.30	0.12	0.11	0.52	0.00	0.00
Avail Cap(c_a), veh/h	183	667	676	119	667	687	401	421	352	379	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.9	23.2	23.2	36.9	20.9	20.9	25.8	24.7	24.6	27.2	0.0	0.0
Incr Delay (d2), s/veh	2.6	14.3	14.4	0.7	3.2	3.1	2.0	0.6	0.6	5.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.8	12.0	0.4	7.1	7.3	2.0	0.8	0.6	3.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	37.5	37.6	37.6	24.1	24.0	27.7	25.2	25.2	32.2	0.0	0.0
LnGrp LOS	D	D	D	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1294			967			208			197	
Approach Delay, s/veh		37.5			24.4			26.7			32.2	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		35.0		22.5		35.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		30.5		18.0		30.5				
Max Q Clear Time (g_c+I1), s		6.6		32.5		10.2		31.1				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				31.5								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 10: Palm Avenue & Stetson Avenue

Cumulative PM
 Timing Plan: PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	872	73	31	775	42	50	28	21	43	56	73
Future Volume (veh/h)	57	872	73	31	775	42	50	28	21	43	56	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1841	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	899	75	32	799	43	52	29	22	44	58	75
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	4	2	4	4	2	2	2	2	2	2
Cap, veh/h	93	996	83	61	971	52	86	308	234	77	227	294
Arrive On Green	0.05	0.31	0.31	0.03	0.29	0.29	0.05	0.31	0.31	0.04	0.31	0.31
Sat Flow, veh/h	1781	3260	272	1781	3375	182	1781	980	743	1781	734	950
Grp Volume(v), veh/h	59	482	492	32	414	428	52	0	51	44	0	133
Grp Sat Flow(s),veh/h/ln	1781	1749	1783	1781	1749	1808	1781	0	1723	1781	0	1684
Q Serve(g_s), s	1.9	15.7	15.7	1.1	13.1	13.2	1.7	0.0	1.2	1.4	0.0	3.5
Cycle Q Clear(g_c), s	1.9	15.7	15.7	1.1	13.1	13.2	1.7	0.0	1.2	1.4	0.0	3.5
Prop In Lane	1.00		0.15	1.00		0.10	1.00		0.43	1.00		0.56
Lane Grp Cap(c), veh/h	93	534	545	61	503	520	86	0	541	77	0	521
V/C Ratio(X)	0.63	0.90	0.90	0.52	0.82	0.82	0.60	0.00	0.09	0.57	0.00	0.26
Avail Cap(c_a), veh/h	153	543	554	153	543	562	150	0	541	150	0	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.6	19.8	19.8	28.3	19.8	19.8	27.8	0.0	14.4	27.9	0.0	15.4
Incr Delay (d2), s/veh	6.9	18.2	17.9	6.7	9.3	9.1	6.6	0.0	0.3	6.4	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.0	8.1	0.5	5.9	6.0	0.9	0.0	0.5	0.7	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	38.0	37.7	34.9	29.1	28.8	34.3	0.0	14.8	34.3	0.0	16.6
LnGrp LOS	C	D	D	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		1033			874			103				177
Approach Delay, s/veh		37.6			29.2			24.7				21.0
Approach LOS		D			C			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	23.2	6.6	22.7	7.4	22.9	7.6	21.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.4	5.1	18.5	5.0	18.4	5.1	18.5				
Max Q Clear Time (g_c+I1), s	3.4	3.2	3.1	17.7	3.7	5.5	3.9	15.2				
Green Ext Time (p_c), s	0.0	0.2	0.0	0.4	0.0	0.5	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay				32.3								
HCM 6th LOS				C								

- Cumulative Year plus Project Conditions

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	184	144	178	134	147	64	933	151	91	689	4
Future Volume (veh/h)	11	184	144	178	134	147	64	933	151	91	689	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	11	188	147	182	137	150	65	952	154	93	703	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	25	278	232	225	211	231	98	1072	173	119	1288	584
Arrive On Green	0.01	0.15	0.15	0.13	0.26	0.26	0.06	0.36	0.36	0.07	0.37	0.37
Sat Flow, veh/h	1781	1870	1561	1781	810	886	1781	3004	486	1781	3497	1585
Grp Volume(v), veh/h	11	188	147	182	0	287	65	554	552	93	703	4
Grp Sat Flow(s),veh/h/ln	1781	1870	1561	1781	0	1696	1781	1749	1741	1781	1749	1585
Q Serve(g_s), s	0.4	5.7	5.3	5.9	0.0	9.0	2.1	17.8	17.8	3.1	9.5	0.1
Cycle Q Clear(g_c), s	0.4	5.7	5.3	5.9	0.0	9.0	2.1	17.8	17.8	3.1	9.5	0.1
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	25	278	232	225	0	443	98	624	621	119	1288	584
V/C Ratio(X)	0.44	0.68	0.63	0.81	0.00	0.65	0.66	0.89	0.89	0.78	0.55	0.01
Avail Cap(c_a), veh/h	149	564	470	227	0	585	149	624	621	152	1288	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	24.1	23.9	25.4	0.0	19.6	27.7	18.1	18.1	27.4	14.9	11.9
Incr Delay (d2), s/veh	11.8	2.9	2.8	19.1	0.0	1.6	7.3	17.1	17.3	17.9	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.5	2.0	3.5	0.0	3.4	1.1	9.3	9.3	1.8	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	26.9	26.7	44.4	0.0	21.2	35.0	35.2	35.3	45.4	16.6	12.0
LnGrp LOS	D	C	C	D	A	C	C	D	D	D	B	B
Approach Vol, veh/h		346			469			1171				800
Approach Delay, s/veh		27.3			30.2			35.3				19.9
Approach LOS		C			C			D				B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	25.8	12.0	13.4	7.8	26.5	5.3	20.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	21.3	7.6	18.0	5.0	21.4	5.0	20.6				
Max Q Clear Time (g_c+I1), s	5.1	19.8	7.9	7.7	4.1	11.5	2.4	11.0				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.0	0.0	3.4	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			29.0									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary

2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	26	4	164	72	66	17	918	61	32	828	24
Future Volume (veh/h)	9	26	4	164	72	66	17	918	61	32	828	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	10	29	4	184	81	74	19	1031	69	36	930	27
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	228	121	17	373	307	260	40	1770	783	66	1821	805
Arrive On Green	0.01	0.08	0.08	0.10	0.16	0.16	0.02	0.51	0.51	0.04	0.52	0.52
Sat Flow, veh/h	1781	1605	221	1781	1870	1585	1781	3497	1546	1781	3497	1547
Grp Volume(v), veh/h	10	0	33	184	81	74	19	1031	69	36	930	27
Grp Sat Flow(s),veh/h/ln	1781	0	1826	1781	1870	1585	1781	1749	1546	1781	1749	1547
Q Serve(g_s), s	0.3	0.0	1.1	5.9	2.4	2.6	0.7	13.3	1.5	1.3	11.2	0.5
Cycle Q Clear(g_c), s	0.3	0.0	1.1	5.9	2.4	2.6	0.7	13.3	1.5	1.3	11.2	0.5
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	0	138	373	307	260	40	1770	783	66	1821	805
V/C Ratio(X)	0.04	0.00	0.24	0.49	0.26	0.28	0.48	0.58	0.09	0.55	0.51	0.03
Avail Cap(c_a), veh/h	344	0	512	373	568	481	139	1770	783	139	1821	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	27.9	22.6	23.5	23.5	31.0	11.1	8.2	30.4	10.1	7.5
Incr Delay (d2), s/veh	0.1	0.0	0.9	1.0	0.5	0.6	8.6	1.4	0.2	6.9	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.1	0.0	0.5	2.4	1.1	1.0	0.4	4.2	0.5	0.6	3.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	28.8	23.6	23.9	24.1	39.6	12.5	8.4	37.3	11.1	7.6
LnGrp LOS	C	A	C	C	C	C	D	B	A	D	B	A
Approach Vol, veh/h		43			339			1119			993	
Approach Delay, s/veh		28.4			23.8			12.7			11.9	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	37.0	11.0	9.4	5.9	37.9	5.3	15.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	32.5	6.5	18.0	5.0	32.5	5.0	19.5				
Max Q Clear Time (g_c+1/3), s	13.3	15.3	7.9	3.1	2.7	13.2	2.3	4.6				
Green Ext Time (p_c), s	0.0	6.6	0.0	0.1	0.0	6.0	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				14.2								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	503	77	503	802	139	117	735	703	106	739	162
Future Volume (veh/h)	141	503	77	503	802	139	117	735	703	106	739	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	160	572	88	572	911	158	133	835	799	120	840	184
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	183	535	82	532	1117	194	152	1084	942	140	861	189
Arrive On Green	0.10	0.18	0.18	0.30	0.38	0.38	0.09	0.31	0.31	0.08	0.30	0.30
Sat Flow, veh/h	1753	3009	461	1753	2965	514	1753	3497	1512	1753	2838	622
Grp Volume(v), veh/h	160	331	329	572	537	532	133	835	799	120	518	506
Grp Sat Flow(s),veh/h/ln	1753	1749	1722	1753	1749	1730	1753	1749	1512	1753	1749	1711
Q Serve(g_s), s	12.6	24.9	24.9	42.5	38.7	38.7	10.5	30.3	43.4	9.5	41.0	41.0
Cycle Q Clear(g_c), s	12.6	24.9	24.9	42.5	38.7	38.7	10.5	30.3	43.4	9.5	41.0	41.0
Prop In Lane	1.00		0.27	1.00		0.30	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	183	311	306	532	659	652	152	1084	942	140	531	519
V/C Ratio(X)	0.87	1.07	1.07	1.07	0.82	0.82	0.88	0.77	0.85	0.86	0.98	0.98
Avail Cap(c_a), veh/h	215	311	306	532	659	652	152	1084	942	140	531	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	57.6	57.6	48.8	39.2	39.3	63.2	43.8	22.1	63.6	48.2	48.2
Incr Delay (d2), s/veh	27.1	69.5	72.1	60.6	7.8	7.9	40.0	5.3	9.4	37.4	33.4	33.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	16.7	16.6	26.9	17.5	17.3	6.3	13.6	21.8	5.6	22.2	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.9	127.1	129.7	109.4	47.1	47.2	103.2	49.1	31.5	101.0	81.6	82.1
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		820			1641			1767			1144	
Approach Delay, s/veh		120.7			68.8			45.2			83.8	
Approach LOS		F			E			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	47.9	47.0	29.4	16.6	47.0	19.2	57.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	1.2	43.4	42.5	24.9	12.1	42.5	17.2	50.2				
Max Q Clear Time (g_c+fl), s	1.5	45.4	44.5	26.9	12.5	43.0	14.6	40.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.4				

Intersection Summary

HCM 6th Ctrl Delay	72.2
HCM 6th LOS	E

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	79	69	45	1502	1214	97
Future Volume (veh/h)	79	69	45	1502	1214	97
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	112	57	52	1726	1395	111
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	205	91	353	3001	2725	1201
Arrive On Green	0.06	0.06	0.04	0.86	0.78	0.78
Sat Flow, veh/h	3563	1585	1781	3589	3589	1541
Grp Volume(v), veh/h	112	57	52	1726	1395	111
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1541
Q Serve(g_s), s	3.3	3.7	0.5	14.7	15.6	1.8
Cycle Q Clear(g_c), s	3.3	3.7	0.5	14.7	15.6	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	205	91	353	3001	2725	1201
V/C Ratio(X)	0.55	0.63	0.15	0.58	0.51	0.09
Avail Cap(c_a), veh/h	651	290	413	3001	2725	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	49.1	3.2	2.1	4.3	2.8
Incr Delay (d2), s/veh	2.3	6.8	0.2	0.8	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.2	0.1	1.4	3.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.2	56.0	3.4	2.9	5.0	3.0
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	169			1778	1506	
Approach Delay, s/veh	52.8			2.9	4.9	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		96.0		10.6	8.4	87.6
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		91.5		19.5	7.5	79.5
Max Q Clear Time (g_c+I1), s		16.7		5.7	2.5	17.6
Green Ext Time (p_c), s		22.3		0.4	0.0	15.0

Intersection Summary

HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↕	↕		↕	↕
Traffic Volume (veh/h)	198	6	49	16	9	77	52	1248	14	33	1147	94
Future Volume (veh/h)	198	6	49	16	9	77	52	1248	14	33	1147	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	233	7	58	19	11	91	61	1468	16	39	1349	111
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	287	9	260	98	57	133	81	1758	19	64	1588	130
Arrive On Green	0.17	0.17	0.17	0.09	0.09	0.09	0.05	0.50	0.50	0.04	0.49	0.49
Sat Flow, veh/h	1732	52	1574	1148	665	1563	1781	3543	39	1781	3265	268
Grp Volume(v), veh/h	240	0	58	30	0	91	61	724	760	39	720	740
Grp Sat Flow(s),veh/h/ln	1784	0	1574	1813	0	1563	1781	1749	1833	1781	1749	1784
Q Serve(g_s), s	10.7	0.0	2.6	1.3	0.0	4.7	2.8	29.5	29.6	1.8	29.8	30.2
Cycle Q Clear(g_c), s	10.7	0.0	2.6	1.3	0.0	4.7	2.8	29.5	29.6	1.8	29.8	30.2
Prop In Lane	0.97		1.00	0.63		1.00	1.00		0.02	1.00		0.15
Lane Grp Cap(c), veh/h	295	0	260	155	0	133	81	868	909	64	851	868
V/C Ratio(X)	0.81	0.00	0.22	0.19	0.00	0.68	0.75	0.83	0.84	0.61	0.85	0.85
Avail Cap(c_a), veh/h	394	0	348	396	0	341	114	868	909	110	851	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	0.0	30.0	35.2	0.0	36.8	39.1	17.9	18.0	39.4	18.6	18.7
Incr Delay (d2), s/veh	9.3	0.0	0.4	0.6	0.0	6.0	16.0	9.3	9.0	9.2	10.2	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	5.3	0.0	1.0	0.6	0.0	2.0	1.5	12.2	12.7	0.9	12.5	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	0.0	30.4	35.8	0.0	42.8	55.1	27.2	26.9	48.5	28.7	29.1
LnGrp LOS	D	A	C	D	A	D	E	C	C	D	C	C
Approach Vol, veh/h		298			121			1545			1499	
Approach Delay, s/veh		40.2			41.1			28.2			29.4	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	45.6		18.2	8.3	44.8		11.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	40.5		18.3	5.3	40.3		18.1				
Max Q Clear Time (g_c+1/3), s	13.8	31.6		12.7	4.8	32.2		6.7				
Green Ext Time (p_c), s	0.0	5.7		0.8	0.0	5.3		0.3				
Intersection Summary												
HCM 6th Ctrl Delay											30.2	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	439	0	216	21	25	31	216	843	4	14	758	433
Future Volume (veh/h)	439	0	216	21	25	31	216	843	4	14	758	433
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	542	0	267	26	31	38	267	1041	5	17	1003	490
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	722	0	301	79	94	135	325	1806	797	268	1598	686
Arrive On Green	0.20	0.00	0.20	0.09	0.09	0.09	0.10	0.52	0.52	0.02	0.43	0.43
Sat Flow, veh/h	3563	0	1484	834	995	1420	1781	3497	1544	1781	3681	1581
Grp Volume(v), veh/h	542	0	267	57	0	38	267	1041	5	17	1003	490
Grp Sat Flow(s),veh/h/ln	1781	0	1484	1829	0	1420	1781	1749	1544	1781	1841	1581
Q Serve(g_s), s	15.4	0.0	18.8	3.1	0.0	2.7	8.5	22.0	0.2	0.6	22.8	27.3
Cycle Q Clear(g_c), s	15.4	0.0	18.8	3.1	0.0	2.7	8.5	22.0	0.2	0.6	22.8	27.3
Prop In Lane	1.00		1.00	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	722	0	301	173	0	135	325	1806	797	268	1598	686
V/C Ratio(X)	0.75	0.00	0.89	0.33	0.00	0.28	0.82	0.58	0.01	0.06	0.63	0.71
Avail Cap(c_a), veh/h	779	0	325	306	0	238	419	1806	797	318	1598	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	41.7	45.4	0.0	45.2	20.1	17.9	12.6	17.1	23.6	24.9
Incr Delay (d2), s/veh	3.8	0.0	23.4	1.1	0.0	1.1	9.8	1.3	0.0	0.1	1.9	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	8.8	1.5	0.0	1.0	3.9	8.4	0.1	0.2	9.6	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	65.1	46.5	0.0	46.4	29.9	19.2	12.6	17.2	25.5	31.2
LnGrp LOS	D	A	E	D	A	D	C	B	B	B	C	C
Approach Vol, veh/h		809			95			1313			1510	
Approach Delay, s/veh		51.0			46.5			21.4			27.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	60.0		26.3	15.3	51.2		14.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	55.5		23.5	16.5	44.0		18.0				
Max Q Clear Time (g_c+1), s	12.6	24.0		20.8	10.5	29.3		5.1				
Green Ext Time (p_c), s	0.0	8.0		1.0	0.4	7.3		0.3				

Intersection Summary

HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	218	28	322	273	25	69	166	421	19	138	34
Future Volume (veh/h)	34	218	28	322	273	25	69	166	421	19	138	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	237	30	350	297	27	75	180	458	21	150	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	67	378	47	414	582	501	577	820	687	410	820	695
Arrive On Green	0.04	0.12	0.12	0.23	0.32	0.32	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	3128	391	1781	1841	1585	1196	1870	1565	790	1870	1585
Grp Volume(v), veh/h	37	131	136	350	297	27	75	180	458	21	150	37
Grp Sat Flow(s),veh/h/ln	1781	1749	1770	1781	1841	1585	1196	1870	1565	790	1870	1585
Q Serve(g_s), s	1.3	4.6	4.7	12.2	8.5	0.8	2.7	3.9	15.1	1.1	3.2	0.9
Cycle Q Clear(g_c), s	1.3	4.6	4.7	12.2	8.5	0.8	5.8	3.9	15.1	5.0	3.2	0.9
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	211	214	414	582	501	577	820	687	410	820	695
V/C Ratio(X)	0.55	0.62	0.63	0.84	0.51	0.05	0.13	0.22	0.67	0.05	0.18	0.05
Avail Cap(c_a), veh/h	178	498	504	809	1176	1012	577	820	687	410	820	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	27.1	27.2	23.8	18.1	15.5	12.9	11.3	14.5	12.9	11.1	10.5
Incr Delay (d2), s/veh	7.0	3.0	3.1	4.8	0.7	0.0	0.5	0.6	5.1	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.7	2.0	2.1	5.3	3.5	0.3	0.7	1.6	5.6	0.2	1.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	30.1	30.3	28.6	18.8	15.5	13.4	11.9	19.5	13.1	11.6	10.6
LnGrp LOS	D	C	C	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		304			674			713			208	
Approach Delay, s/veh		31.1			23.8			17.0			11.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		33.0	19.6	12.4		33.0	6.9	25.0				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		28.5	29.5	18.5		28.5	6.5	41.5				
Max Q Clear Time (g_c+I1), s		17.1	14.2	6.7		7.0	3.3	10.5				
Green Ext Time (p_c), s		2.5	1.0	1.1		1.0	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay				21.1								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	1027	56	9	1084	87	87	57	18	73	27	270
Future Volume (veh/h)	226	1027	56	9	1084	87	87	57	18	73	27	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	1194	65	10	1260	101	101	66	21	85	31	314
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	271	1677	91	23	1174	94	389	755	230	454	527	439
Arrive On Green	0.15	0.50	0.50	0.01	0.36	0.36	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	3367	183	1781	3274	262	1034	2682	816	1307	1870	1560
Grp Volume(v), veh/h	263	620	639	10	672	689	101	43	44	85	31	314
Grp Sat Flow(s),veh/h/ln	1781	1749	1801	1781	1749	1787	1034	1777	1720	1307	1870	1560
Q Serve(g_s), s	9.5	17.9	18.0	0.4	23.3	23.3	5.1	1.2	1.2	3.3	0.8	11.8
Cycle Q Clear(g_c), s	9.5	17.9	18.0	0.4	23.3	23.3	5.9	1.2	1.2	4.6	0.8	11.8
Prop In Lane	1.00		0.10	1.00		0.15	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	271	871	897	23	627	641	389	500	484	454	527	439
V/C Ratio(X)	0.97	0.71	0.71	0.44	1.07	1.08	0.26	0.09	0.09	0.19	0.06	0.72
Avail Cap(c_a), veh/h	271	871	897	137	627	641	389	500	484	454	527	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	12.7	12.7	31.9	20.9	20.9	19.2	17.2	17.2	18.9	17.1	21.0
Incr Delay (d2), s/veh	46.1	2.7	2.7	12.9	56.6	57.9	1.6	0.3	0.4	0.9	0.2	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	6.0	6.1	0.2	17.7	18.3	1.4	0.5	0.5	1.0	0.3	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.5	15.4	15.4	44.8	77.4	78.7	20.8	17.5	17.6	19.8	17.3	30.6
LnGrp LOS	E	B	B	D	F	F	C	B	B	B	B	C
Approach Vol, veh/h		1522			1371			188			430	
Approach Delay, s/veh		25.4			77.8			19.3			27.5	
Approach LOS		C			E			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.8	5.3	36.9		22.8	14.4	27.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		18.3	5.0	28.2		18.3	9.9	23.3				
Max Q Clear Time (g_c+I1), s		7.9	2.4	20.0		13.8	11.5	25.3				
Green Ext Time (p_c), s		0.6	0.0	4.6		0.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				45.8								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	959	89	18	907	45	166	37	17	36	35	111
Future Volume (veh/h)	67	959	89	18	907	45	166	37	17	36	35	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	1078	100	20	1019	51	187	42	19	40	39	125
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	150	1233	114	124	1290	65	401	421	357	74	72	230
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	527	3233	300	476	3383	169	1781	1870	1585	327	319	1023
Grp Volume(v), veh/h	75	583	595	20	527	543	187	42	19	204	0	0
Grp Sat Flow(s),veh/h/ln	527	1749	1784	476	1749	1804	1781	1870	1585	1670	0	0
Q Serve(g_s), s	9.2	24.7	24.8	3.3	21.3	21.3	7.3	1.4	0.8	8.6	0.0	0.0
Cycle Q Clear(g_c), s	30.5	24.7	24.8	28.0	21.3	21.3	7.3	1.4	0.8	8.6	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.09	1.00		1.00	0.20		0.61
Lane Grp Cap(c), veh/h	150	667	680	124	667	688	401	421	357	376	0	0
V/C Ratio(X)	0.50	0.87	0.88	0.16	0.79	0.79	0.47	0.10	0.05	0.54	0.00	0.00
Avail Cap(c_a), veh/h	150	667	680	124	667	688	401	421	357	376	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.3	23.0	23.0	36.0	21.9	21.9	26.8	24.6	24.3	27.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	12.3	12.3	0.6	6.4	6.2	3.9	0.5	0.3	5.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	11.2	11.4	0.4	8.9	9.1	3.3	0.7	0.3	4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	35.3	35.2	36.6	28.3	28.1	30.7	25.1	24.6	32.9	0.0	0.0
LnGrp LOS	D	D	D	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1253			1090			248			204	
Approach Delay, s/veh		35.5			28.4			29.3			32.9	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		35.0		22.5		35.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		30.5		18.0		30.5				
Max Q Clear Time (g_c+I1), s		9.3		32.5		10.6		30.0				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.3				
Intersection Summary												
HCM 6th Ctrl Delay					32.0							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020

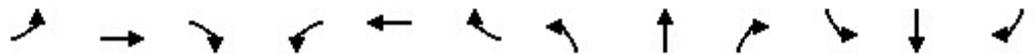


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	88	787	72	28	776	33	59	60	32	30	56	107
Future Volume (veh/h)	88	787	72	28	776	33	59	60	32	30	56	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	874	80	31	862	37	66	67	36	33	62	119
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	125	1050	96	59	980	42	98	362	195	62	168	323
Arrive On Green	0.07	0.32	0.32	0.03	0.29	0.29	0.05	0.32	0.32	0.03	0.30	0.30
Sat Flow, veh/h	1781	3237	296	1781	3410	146	1781	1144	615	1781	567	1088
Grp Volume(v), veh/h	98	472	482	31	442	457	66	0	103	33	0	181
Grp Sat Flow(s),veh/h/ln	1781	1749	1785	1781	1749	1808	1781	0	1758	1781	0	1654
Q Serve(g_s), s	3.4	15.5	15.5	1.1	14.9	14.9	2.3	0.0	2.6	1.1	0.0	5.4
Cycle Q Clear(g_c), s	3.4	15.5	15.5	1.1	14.9	14.9	2.3	0.0	2.6	1.1	0.0	5.4
Prop In Lane	1.00		0.17	1.00		0.08	1.00		0.35	1.00		0.66
Lane Grp Cap(c), veh/h	125	567	579	59	502	519	98	0	557	62	0	491
V/C Ratio(X)	0.78	0.83	0.83	0.52	0.88	0.88	0.68	0.00	0.18	0.53	0.00	0.37
Avail Cap(c_a), veh/h	147	567	579	147	522	540	144	0	557	144	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	19.4	19.4	29.5	21.1	21.1	28.7	0.0	15.4	29.4	0.0	17.2
Incr Delay (d2), s/veh	20.4	10.2	10.1	6.9	15.5	15.1	7.9	0.0	0.7	6.8	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.8	6.9	0.5	7.4	7.6	1.1	0.0	1.1	0.6	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	29.6	29.4	36.4	36.5	36.1	36.6	0.0	16.1	36.2	0.0	19.3
LnGrp LOS	D	C	C	D	D	D	D	A	B	D	A	B
Approach Vol, veh/h		1052			930			169			214	
Approach Delay, s/veh		31.3			36.3			24.1			21.9	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	24.1	6.6	24.6	7.9	22.9	8.9	22.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.4	18.4	5.1	18.5	5.0	18.4	5.1	18.5				
Max Q Clear Time (g_c+1), s	4.6	4.6	3.1	17.5	4.3	7.4	5.4	16.9				
Green Ext Time (p_c), s	0.0	0.4	0.0	0.6	0.0	0.7	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay												31.9
HCM 6th LOS												C

HCM 6th Signalized Intersection Summary

1: Sanderson Avenue & Acacia Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	215	194	240	228	210	125	1003	139	185	1013	15
Future Volume (veh/h)	16	215	194	240	228	210	125	1003	139	185	1013	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	17	226	204	253	240	221	132	1056	146	195	1066	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	35	302	255	263	258	237	160	1118	154	212	1369	619
Arrive On Green	0.02	0.16	0.16	0.15	0.29	0.29	0.09	0.36	0.36	0.12	0.39	0.39
Sat Flow, veh/h	1781	1870	1579	1781	889	819	1781	3085	426	1781	3497	1581
Grp Volume(v), veh/h	17	226	204	253	0	461	132	598	604	195	1066	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	0	1708	1781	1749	1763	1781	1749	1581
Q Serve(g_s), s	0.8	9.9	10.7	12.1	0.0	22.5	6.3	28.4	28.6	9.3	22.9	0.5
Cycle Q Clear(g_c), s	0.8	9.9	10.7	12.1	0.0	22.5	6.3	28.4	28.6	9.3	22.9	0.5
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	35	302	255	263	0	495	160	633	638	212	1369	619
V/C Ratio(X)	0.49	0.75	0.80	0.96	0.00	0.93	0.83	0.94	0.95	0.92	0.78	0.03
Avail Cap(c_a), veh/h	104	392	331	263	0	511	160	633	638	212	1369	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	34.3	34.7	36.3	0.0	29.6	38.4	26.5	26.6	37.4	22.9	16.1
Incr Delay (d2), s/veh	10.4	5.7	10.1	44.4	0.0	23.5	28.6	24.3	24.6	40.7	4.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.8	4.7	8.3	0.0	12.0	4.0	15.5	15.7	6.4	9.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	40.0	44.8	80.7	0.0	53.2	67.0	50.9	51.1	78.1	27.3	16.1
LnGrp LOS	D	D	D	F	A	D	E	D	D	E	C	B
Approach Vol, veh/h		447			714			1334			1277	
Approach Delay, s/veh		42.7			62.9			52.6			34.9	
Approach LOS		D			E			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	35.6	17.2	18.4	12.2	38.1	6.2	29.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.2	31.1	12.7	18.0	7.7	33.6	5.0	25.7				
Max Q Clear Time (g_c+I1), s	11.3	30.6	14.1	12.7	8.3	24.9	2.8	24.5				
Green Ext Time (p_c), s	0.0	0.4	0.0	0.9	0.0	4.7	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			47.4									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary
 2: Sanderson Avenue & Tanya Avenue/Johnston Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Volume (veh/h)	32	55	25	92	27	77	10	1032	113	114	1154	12
Future Volume (veh/h)	32	55	25	92	27	77	10	1032	113	114	1154	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	34	59	27	99	29	83	11	1110	122	123	1241	13
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	323	123	56	326	252	209	25	1463	646	157	1722	761
Arrive On Green	0.04	0.10	0.10	0.07	0.13	0.13	0.01	0.42	0.42	0.09	0.49	0.49
Sat Flow, veh/h	1781	1209	553	1781	1870	1550	1781	3497	1545	1781	3497	1545
Grp Volume(v), veh/h	34	0	86	99	29	83	11	1110	122	123	1241	13
Grp Sat Flow(s),veh/h/ln	1781	0	1763	1781	1870	1550	1781	1749	1545	1781	1749	1545
Q Serve(g_s), s	0.9	0.0	2.6	2.7	0.8	2.7	0.3	15.1	2.8	3.8	15.6	0.2
Cycle Q Clear(g_c), s	0.9	0.0	2.6	2.7	0.8	2.7	0.3	15.1	2.8	3.8	15.6	0.2
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	179	326	252	209	25	1463	646	157	1722	761
V/C Ratio(X)	0.11	0.00	0.48	0.30	0.11	0.40	0.44	0.76	0.19	0.78	0.72	0.02
Avail Cap(c_a), veh/h	417	0	567	360	602	499	159	1463	646	178	1722	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	23.7	20.4	21.3	22.1	27.4	13.9	10.3	25.0	11.2	7.3
Incr Delay (d2), s/veh	0.1	0.0	2.0	0.5	0.2	1.2	11.7	3.7	0.6	18.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.4	0.0	1.1	1.1	0.3	1.0	0.2	5.2	0.9	2.2	4.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	25.7	20.9	21.5	23.3	39.0	17.6	10.9	43.0	13.8	7.3
LnGrp LOS	C	A	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		120			211			1243			1377	
Approach Delay, s/veh		24.5			21.9			17.1			16.3	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	27.9	8.4	10.2	5.3	32.0	6.6	12.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.6	23.4	5.0	18.0	5.0	24.0	5.0	18.0				
Max Q Clear Time (g_c+1/3), s	15.8	17.1	4.7	4.6	2.3	17.6	2.9	4.7				
Green Ext Time (p_c), s	0.0	3.7	0.0	0.3	0.0	4.0	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	691	104	505	665	211	97	659	541	241	863	203
Future Volume (veh/h)	320	691	104	505	665	211	97	659	541	241	863	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	333	720	108	526	693	220	101	686	564	251	899	211
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	347	641	96	465	722	229	115	823	770	262	892	209
Arrive On Green	0.20	0.21	0.21	0.27	0.28	0.28	0.07	0.24	0.24	0.15	0.32	0.32
Sat Flow, veh/h	1753	3028	454	1753	2587	821	1753	3497	1512	1753	2796	656
Grp Volume(v), veh/h	333	416	412	526	468	445	101	686	564	251	562	548
Grp Sat Flow(s),veh/h/ln	1753	1749	1733	1753	1749	1659	1753	1749	1512	1753	1749	1703
Q Serve(g_s), s	24.5	27.5	27.5	34.5	34.3	34.3	7.4	24.3	30.6	18.5	41.5	41.5
Cycle Q Clear(g_c), s	24.5	27.5	27.5	34.5	34.3	34.3	7.4	24.3	30.6	18.5	41.5	41.5
Prop In Lane	1.00		0.26	1.00		0.49	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	347	370	367	465	488	463	115	823	770	262	558	544
V/C Ratio(X)	0.96	1.12	1.12	1.13	0.96	0.96	0.88	0.83	0.73	0.96	1.01	1.01
Avail Cap(c_a), veh/h	347	370	367	465	488	463	115	823	770	262	558	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	51.3	51.3	47.7	46.1	46.1	60.2	47.3	25.8	54.9	44.3	44.3
Incr Delay (d2), s/veh	37.9	84.6	85.3	82.6	30.5	31.6	49.3	9.7	6.1	44.4	39.8	40.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	20.3	20.2	25.2	18.5	17.7	4.8	11.4	14.3	11.2	23.4	22.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.6	135.9	136.6	130.4	76.6	77.7	109.5	57.0	31.9	99.3	84.0	84.9
LnGrp LOS	F	F	F	F	E	E	F	E	C	F	F	F
Approach Vol, veh/h		1161			1439			1351			1361	
Approach Delay, s/veh		122.8			96.6			50.4			87.2	
Approach LOS		F			F			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.9	35.1	39.0	32.0	13.0	46.0	30.2	40.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	19.4	30.6	34.5	27.5	8.5	41.5	25.7	36.3				
Max Q Clear Time (g_c+20), s	20.5	32.6	36.5	29.5	9.4	43.5	26.5	36.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				88.2								
HCM 6th LOS				F								
Notes												
User approved ignoring U-Turning movement.												

HCM 6th Signalized Intersection Summary

4: Sanderson Avenue & Page Plaza Place

09/18/2020



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	217	72	78	1108	1197	238
Future Volume (veh/h)	217	72	78	1108	1197	238
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1870
Adj Flow Rate, veh/h	219	73	79	1119	1209	240
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	4	4	2
Cap, veh/h	308	137	367	2900	2604	1152
Arrive On Green	0.09	0.09	0.04	0.83	0.74	0.74
Sat Flow, veh/h	3563	1585	1781	3589	3589	1547
Grp Volume(v), veh/h	219	73	79	1119	1209	240
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1749	1749	1547
Q Serve(g_s), s	6.4	4.7	1.0	8.6	14.4	5.0
Cycle Q Clear(g_c), s	6.4	4.7	1.0	8.6	14.4	5.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	308	137	367	2900	2604	1152
V/C Ratio(X)	0.71	0.53	0.22	0.39	0.46	0.21
Avail Cap(c_a), veh/h	751	334	450	2900	2604	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	46.7	3.7	2.3	5.3	4.1
Incr Delay (d2), s/veh	3.0	3.2	0.3	0.4	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.1	0.2	1.4	3.9	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.5	49.9	4.0	2.7	5.9	4.5
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	292			1198	1449	
Approach Delay, s/veh	50.3			2.8	5.7	
Approach LOS	D			A	A	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		93.0		13.7	9.0	84.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		88.5		22.5	9.5	74.5
Max Q Clear Time (g_c+l1), s		10.6		8.4	3.0	16.4
Green Ext Time (p_c), s		9.8		0.8	0.1	12.6

Intersection Summary

HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

5: Sanderson Avenue & Thornton Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕	↗	↖	↕		↖	↕	↗
Traffic Volume (veh/h)	129	13	64	10	16	60	51	997	14	51	1135	145
Future Volume (veh/h)	129	13	64	10	16	60	51	997	14	51	1135	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	130	13	65	10	16	61	52	1007	14	52	1146	146
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	206	21	194	54	86	117	83	1676	23	83	1478	188
Arrive On Green	0.13	0.13	0.13	0.08	0.08	0.08	0.05	0.47	0.47	0.05	0.47	0.47
Sat Flow, veh/h	1626	163	1534	706	1129	1535	1781	3530	49	1781	3112	395
Grp Volume(v), veh/h	143	0	65	26	0	61	52	499	522	52	643	649
Grp Sat Flow(s),veh/h/ln	1789	0	1534	1835	0	1535	1781	1749	1830	1781	1749	1758
Q Serve(g_s), s	5.0	0.0	2.5	0.9	0.0	2.5	1.9	13.7	13.7	1.9	19.9	20.1
Cycle Q Clear(g_c), s	5.0	0.0	2.5	0.9	0.0	2.5	1.9	13.7	13.7	1.9	19.9	20.1
Prop In Lane	0.91		1.00	0.38		1.00	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	226	0	194	140	0	117	83	830	869	83	830	835
V/C Ratio(X)	0.63	0.00	0.34	0.19	0.00	0.52	0.62	0.60	0.60	0.62	0.77	0.78
Avail Cap(c_a), veh/h	493	0	423	506	0	423	136	830	869	139	830	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	26.0	28.3	0.0	29.0	30.5	12.6	12.6	30.5	14.2	14.3
Incr Delay (d2), s/veh	2.9	0.0	1.0	0.6	0.0	3.6	7.4	3.2	3.1	7.4	6.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.9	0.4	0.0	1.0	0.9	4.9	5.1	0.9	7.6	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	27.0	28.9	0.0	32.6	38.0	15.8	15.7	38.0	21.2	21.3
LnGrp LOS	C	A	C	C	A	C	D	B	B	D	C	C
Approach Vol, veh/h		208			87			1073			1344	
Approach Delay, s/veh		29.0			31.5			16.8			21.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	35.5		12.8	7.6	35.5		9.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	30.9		18.0	5.0	31.0		18.0				
Max Q Clear Time (g_c+1/3), s	13.9	15.7		7.0	3.9	22.1		4.5				
Green Ext Time (p_c), s	0.0	5.3		0.7	0.0	5.1		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				20.7								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary

6: Sanderson Avenue & Mustang Way

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	0	97	4	8	22	129	818	0	18	968	230
Future Volume (veh/h)	221	0	97	4	8	22	129	818	0	18	968	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1841	1870	1870	1841	1870
Adj Flow Rate, veh/h	230	0	101	4	8	23	134	852	0	19	1008	240
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	2	2	4	2
Cap, veh/h	437	0	193	29	58	74	363	1615	732	366	1483	630
Arrive On Green	0.12	0.00	0.12	0.05	0.05	0.05	0.08	0.46	0.00	0.02	0.40	0.40
Sat Flow, veh/h	3563	0	1570	613	1226	1565	1781	3497	1585	1781	3681	1564
Grp Volume(v), veh/h	230	0	101	12	0	23	134	852	0	19	1008	240
Grp Sat Flow(s),veh/h/ln	1781	0	1570	1840	0	1565	1781	1749	1585	1781	1841	1564
Q Serve(g_s), s	3.2	0.0	3.1	0.3	0.0	0.7	2.1	9.0	0.0	0.3	11.7	5.6
Cycle Q Clear(g_c), s	3.2	0.0	3.1	0.3	0.0	0.7	2.1	9.0	0.0	0.3	11.7	5.6
Prop In Lane	1.00		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	193	87	0	74	363	1615	732	366	1483	630
V/C Ratio(X)	0.53	0.00	0.52	0.14	0.00	0.31	0.37	0.53	0.00	0.05	0.68	0.38
Avail Cap(c_a), veh/h	1230	0	542	635	0	540	388	1615	732	496	1483	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	0.0	21.4	23.8	0.0	24.0	9.2	10.0	0.0	9.0	12.8	11.0
Incr Delay (d2), s/veh	1.0	0.0	2.2	0.7	0.0	2.4	0.6	1.2	0.0	0.1	2.5	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	0.2	0.0	0.3	0.6	2.7	0.0	0.1	4.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	23.6	24.5	0.0	26.4	9.9	11.2	0.0	9.1	15.3	12.7
LnGrp LOS	C	A	C	C	A	C	A	B	A	A	B	B
Approach Vol, veh/h		331			35			986			1267	
Approach Delay, s/veh		22.8			25.8			11.0			14.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	28.6		10.9	8.8	25.5		7.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	21.0		18.0	5.0	21.0		18.0				
Max Q Clear Time (g_c+1/3), s	11.3	11.0		5.2	4.1	13.7		2.7				
Green Ext Time (p_c), s	0.0	3.8		0.9	0.0	4.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

7: Cawston Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	334	48	363	273	16	65	132	316	15	194	54
Future Volume (veh/h)	18	334	48	363	273	16	65	132	316	15	194	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	344	49	374	281	16	67	136	326	15	200	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	38	483	68	429	693	596	502	816	691	453	816	691
Arrive On Green	0.02	0.16	0.16	0.24	0.38	0.38	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	3066	432	1781	1841	1583	1124	1870	1585	930	1870	1585
Grp Volume(v), veh/h	19	195	198	374	281	16	67	136	326	15	200	56
Grp Sat Flow(s),veh/h/ln	1781	1749	1750	1781	1841	1583	1124	1870	1585	930	1870	1585
Q Serve(g_s), s	0.9	8.6	8.8	16.4	9.1	0.5	3.3	3.6	11.9	0.8	5.5	1.7
Cycle Q Clear(g_c), s	0.9	8.6	8.8	16.4	9.1	0.5	8.8	3.6	11.9	4.4	5.5	1.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	275	275	429	693	596	502	816	691	453	816	691
V/C Ratio(X)	0.50	0.71	0.72	0.87	0.41	0.03	0.13	0.17	0.47	0.03	0.25	0.08
Avail Cap(c_a), veh/h	164	526	527	1017	1436	1235	502	816	691	453	816	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	32.5	32.6	29.7	18.7	16.0	17.3	14.0	16.3	15.3	14.5	13.4
Incr Delay (d2), s/veh	9.7	3.3	3.5	5.6	0.4	0.0	0.6	0.4	2.3	0.1	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	0.5	3.8	3.9	7.4	3.8	0.2	0.9	1.5	4.5	0.2	2.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	35.8	36.1	35.3	19.0	16.0	17.8	14.4	18.6	15.4	15.2	13.6
LnGrp LOS	D	D	D	D	B	B	B	B	B	B	B	B
Approach Vol, veh/h		412			671			529			271	
Approach Delay, s/veh		36.6			28.1			17.4			14.9	
Approach LOS		D			C			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		40.0	24.1	17.3		40.0	6.2	35.2				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		35.5	46.5	24.5		35.5	7.5	63.5				
Max Q Clear Time (g_c+I1), s		13.9	18.4	10.8		7.5	2.9	11.1				
Green Ext Time (p_c), s		2.2	1.2	1.9		1.4	0.0	1.9				
Intersection Summary												
HCM 6th Ctrl Delay											25.0	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 8: Seven Hills Drive/Kirby Street & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	1098	121	24	957	98	82	69	25	118	64	303
Future Volume (veh/h)	271	1098	121	24	957	98	82	69	25	118	64	303
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	279	1132	125	25	987	101	85	71	26	122	66	312
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	282	1360	150	51	960	98	413	818	285	504	592	501
Arrive On Green	0.16	0.43	0.43	0.03	0.30	0.30	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	3164	349	1781	3200	327	1004	2584	900	1297	1870	1584
Grp Volume(v), veh/h	279	625	632	25	539	549	85	48	49	122	66	312
Grp Sat Flow(s),veh/h/ln	1781	1749	1764	1781	1749	1779	1004	1777	1707	1297	1870	1584
Q Serve(g_s), s	9.4	19.0	19.1	0.8	18.0	18.0	3.9	1.1	1.2	4.4	1.5	10.1
Cycle Q Clear(g_c), s	9.4	19.0	19.1	0.8	18.0	18.0	5.4	1.1	1.2	5.6	1.5	10.1
Prop In Lane	1.00		0.20	1.00		0.18	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	282	752	758	51	525	534	413	563	541	504	592	501
V/C Ratio(X)	0.99	0.83	0.83	0.49	1.03	1.03	0.21	0.08	0.09	0.24	0.11	0.62
Avail Cap(c_a), veh/h	282	752	758	148	525	534	413	563	541	504	592	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	15.2	15.2	28.7	21.0	21.0	16.4	14.4	14.4	16.4	14.5	17.4
Incr Delay (d2), s/veh	50.5	7.8	8.0	7.3	46.6	46.4	1.1	0.3	0.3	1.1	0.4	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.4	7.5	0.4	12.8	13.0	1.0	0.5	0.5	1.3	0.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	23.0	23.2	36.0	67.6	67.4	17.6	14.7	14.8	17.5	14.9	23.2
LnGrp LOS	E	C	C	D	F	F	B	B	B	B	B	C
Approach Vol, veh/h		1536			1113			182			500	
Approach Delay, s/veh		32.6			66.8			16.1			20.7	
Approach LOS		C			E			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		23.5	6.2	30.3		23.5	14.0	22.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		19.0	5.0	22.5		19.0	9.5	18.0				
Max Q Clear Time (g_c+I1), s		7.4	2.8	21.1		12.1	11.4	20.0				
Green Ext Time (p_c), s		0.7	0.0	1.0		1.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				41.3								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary
 9: Lyon Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	1048	99	20	857	52	117	46	35	50	37	105
Future Volume (veh/h)	95	1048	99	20	857	52	117	46	35	50	37	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	1115	105	21	912	55	124	49	37	53	39	112
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	177	1227	115	114	1277	77	401	421	352	98	72	208
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	581	3219	303	457	3348	202	1781	1870	1564	437	322	924
Grp Volume(v), veh/h	101	605	615	21	476	491	124	49	37	204	0	0
Grp Sat Flow(s),veh/h/ln	581	1749	1773	457	1749	1802	1781	1870	1564	1682	0	0
Q Serve(g_s), s	12.0	26.2	26.3	3.6	18.5	18.5	4.6	1.7	1.5	8.6	0.0	0.0
Cycle Q Clear(g_c), s	30.5	26.2	26.3	29.9	18.5	18.5	4.6	1.7	1.5	8.6	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.11	1.00		1.00	0.26		0.55
Lane Grp Cap(c), veh/h	177	667	676	114	667	687	401	421	352	379	0	0
V/C Ratio(X)	0.57	0.91	0.91	0.18	0.71	0.71	0.31	0.12	0.11	0.54	0.00	0.00
Avail Cap(c_a), veh/h	177	667	676	114	667	687	401	421	352	379	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.8	23.4	23.4	37.6	21.0	21.0	25.8	24.7	24.6	27.3	0.0	0.0
Incr Delay (d2), s/veh	4.3	16.3	16.4	0.8	3.6	3.5	2.0	0.6	0.6	5.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	12.4	12.7	0.4	7.3	7.5	2.1	0.8	0.6	3.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	39.7	39.8	38.4	24.7	24.6	27.8	25.2	25.2	32.8	0.0	0.0
LnGrp LOS	D	D	D	D	C	C	C	C	C	C	A	A
Approach Vol, veh/h		1321			988			210			204	
Approach Delay, s/veh		39.7			24.9			26.8			32.8	
Approach LOS		D			C			C			C	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		35.0		22.5		35.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		30.5		18.0		30.5				
Max Q Clear Time (g_c+I1), s		6.6		32.5		10.6		31.9				
Green Ext Time (p_c), s		0.5		0.0		0.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay											32.8	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

10: Palm Avenue & Stetson Avenue

09/18/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Volume (veh/h)	63	882	75	31	785	42	52	28	21	43	56	79
Future Volume (veh/h)	63	882	75	31	785	42	52	28	21	43	56	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No										
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	909	77	32	809	43	54	29	22	44	58	81
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	4	2	2	4	2	2	2	2	2	2	2
Cap, veh/h	98	998	85	61	966	51	88	308	234	77	216	301
Arrive On Green	0.06	0.31	0.31	0.03	0.29	0.29	0.05	0.31	0.31	0.04	0.31	0.31
Sat Flow, veh/h	1781	3256	276	1781	3377	179	1781	980	743	1781	700	978
Grp Volume(v), veh/h	65	488	498	32	419	433	54	0	51	44	0	139
Grp Sat Flow(s),veh/h/ln	1781	1749	1783	1781	1749	1808	1781	0	1723	1781	0	1678
Q Serve(g_s), s	2.1	16.0	16.0	1.1	13.4	13.4	1.8	0.0	1.2	1.4	0.0	3.7
Cycle Q Clear(g_c), s	2.1	16.0	16.0	1.1	13.4	13.4	1.8	0.0	1.2	1.4	0.0	3.7
Prop In Lane	1.00		0.15	1.00		0.10	1.00		0.43	1.00		0.58
Lane Grp Cap(c), veh/h	98	536	547	61	500	517	88	0	541	77	0	517
V/C Ratio(X)	0.66	0.91	0.91	0.52	0.84	0.84	0.61	0.00	0.09	0.57	0.00	0.27
Avail Cap(c_a), veh/h	152	542	552	152	542	560	149	0	541	149	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.7	19.9	19.9	28.4	20.0	20.0	27.8	0.0	14.5	28.0	0.0	15.6
Incr Delay (d2), s/veh	7.3	19.5	19.2	6.7	10.5	10.2	6.7	0.0	0.3	6.4	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.3	8.4	0.5	6.1	6.3	0.9	0.0	0.5	0.7	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	39.4	39.1	35.0	30.5	30.2	34.5	0.0	14.8	34.5	0.0	16.9
LnGrp LOS	D	D	D	D	C	C	C	A	B	C	A	B
Approach Vol, veh/h		1051			884			105				183
Approach Delay, s/veh		39.0			30.5			25.0				21.1
Approach LOS		D			C			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	23.3	6.6	22.8	7.5	22.9	7.8	21.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.4	5.1	18.5	5.0	18.4	5.1	18.5				
Max Q Clear Time (g_c+1), s	13.4	3.2	3.1	18.0	3.8	5.7	4.1	15.4				
Green Ext Time (p_c), s	0.0	0.2	0.0	0.3	0.0	0.5	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay					33.5							
HCM 6th LOS					C							

Appendix E

Cumulative Projects Data

Cumulative Projects List for Stetson Project

No.	Project Name/ Project Number(s)	Project Location	Description	Units	No. of Units	Acres	Status
1	Cordero (TTM 33858)	South side of Eaton Ave between Sanderson Ave. and Kirby St. APN 444190001.	Single family home subdivision	DU	35	9.58	Approved by PC 9/5/2006; extensions to 9/5/2017. EOT17-003 requesting one- year extension scheduled for 10/17/2017 PC meeting.
2	BNR Income & Opportunity (TTM36929)	907 N. Kirby St. APN 444190009.	Single family home subdivision	DU	20	5.33	Approved by CC on March 13, 2018
3	Shop N Go (ZC16-005, TPM37564 CUP16- 008)	Southwest corner of Sanderson and Fruitvale Avenues APN 444-100-007	New commercial center with gas station, convenience store and fast food restaurant	TSF	5.107	4.34	PC Approved on March 19, 2019
4	Zanderson Plaza (TTM37196) (CUP16-006)	North east corner of Sanderson Ave and Menlo Ave. APN 444100016.	Neighborhood commercial center with a gas station, convenience store, restaurants, retail uses	TSF	63.580	8.67	Approved by CC 8/22/2017.
5	Copenhagen Village (SDR14-001) (EOT16-003)	East side of Copenhagen St, south of Sydney St, north of Anchorage Ave. APNs 448210005 thru -014, -016, -017, -018.	New multifamily residential on vacant land.	DU	40	3.29	Approved by PC on 9/16/2014; 3- year extension of time approved by PC on 9/6/2016 to 9/16/2019.
6	The Shops at the Crossroads (CUP17-002)	North east corner of Sanderson Ave and Florida Ave. APNs 448310007 -012.	Demolition and new construction of commercial use	TSF	10.087	7.03	Approved by PC 6/6/2017.
7	Holiday Inn Express & Suites (CUP19-015 / SDR 19- 012)	East of Cawston Avenue and north of SR-79 APN 448-250-006	4-story, 80 room hotel on approximately 1.59 acres with 88 parking spaces, outdoor pool and lounge area.	Rms	80	1.59	
8	Cawston Plaza (CUP07-026) (Ord. No. 1934 EOT)	Southside of Florida Ave, east of Acacia Ave. APNs 448140009, -010.	Shopping center	TSF	21.013	2.24	Approved by PC 9/16/2008; extensions to 11/25/2019
9	Sanderson Square (SP05-003)	East side of Sanderson Ave between Acacia Ave and Stetson Ave. APNs 456030036, -038, -039, -042.	Commercial and business park center. (Proposed in SP: 995,153 sf commercial; 734,984 sf manufacturing)	TSF	1,730.137	26.0	Currently undeveloped.
10	Rally's Hamburgers (PR19-017)	North west corner of Tanya & Sanderson	Fast-Food Restaurant with Drive-Through Window and no indoor seating Drive-thru only facility (2000 sf assumed)	TSF	2.0	0.75	Complete 8/26/19
11	Stetson Plaza (SP07-004)	North west corner Sanderson Ave and Stetson Ave. APN 456050044.	Shopping center	TSF	190.000	18.16	SP and TPM approved. City- owned property. Currently undeveloped.
12	Page Plaza-Starbucks (CUP18-006)	North west corner Sanderson Ave and Thorton Ave	A 2,500 square foot Starbucks coffee shop with a drive-through and a 4,600+ square foot drive-through restaurant	TSF	7.100		Approved by PC on June 18, 2019
13	Airway Warehouse (PR19-022)	East of Cawston Avenue APN 456-040-051	Warehouse in the M-2 zone.	TSF	10.000		Complete 1/9/2020
14	Office Development (SDR18-006)	814 Airway Place APN 456-040-049	A 2,132 square foot office and nine (9) space parking lot for a heavy equipment storage operation	TSF	2.132	4.47	DRC scheduled for July 19, 2018. Project incomplete.
15	Hemet Industrial (SDR18-003)	On the northwest corner of Wentworth Drive and Airway Place. APN 456-040-054	Two buildings totaling 27,500 sq ft of prefabricated warehouse buildings in 2 phases.	TSF	27.5	2.0	Project is under plan check through Building and Safety
16	Rancho Diamante (EOT20-002 TTM 35393)	West of Cawston Avenue and north of Thorton Avenue	A 103.6 and 48.4 acre site previously City-approved for 440 and 155 single family lots, one park, and 12 lettered lots for drainage and open space improvements.	DU	595		DRC 3/19/2020
17	Brethren Square (PR 17-013)	South east corner of Cawston and Stetson Avenues APN 460-250-017 and 460-250-018	Multi-tenant retail center, with gas station, convenience store and car wash	TSF	15.485	2.01	Complete on February 15, 2018
18	Page Ranch Senior Apartments (PR18-014)	East side of Cawston Ave, south of Stetson St. APN 460242037.	Senior apartment complex	DU	33	2.5	DRC held on June 14, 2018
19	Hemet Medical Excellence (CUP07-024) (TPM35701)	3853 W. Stetson Ave. APN 460-250-021	Phase 2 of Medical office	TSF	63.296	4.6	Approved by PC 1/15/2008. Phase 1 completed. Phase 2 pending.
20	River Oak Ridge (EOT19-004 for TTM 36892 and 36891)	East of Lyon Avenue and south of Stetson Avenue	Single family residential subdivision with 83 and 75-units with a minimum lot size of 6,000 sf.	DU	158		Approved by PC on September 17, 2019, EOT requested
21	AutoZone Inc. (SDR Minor No 18- 002)	North side of Stetson approximately 730 feet west of State Street and Stetson Ave Intersection APN 446-290-015	AutoZone building to be utilized for retail sales including 37 parking spaces and associated landscaping.	TSF	7.381		Approved by CDD on 03/15/18
22	KPC Stetson (TPM37348, CUP18- 003 & CUP18-004)	Northwest corner of State Street and Stetson Avenue APN 446-290-006	Retail and/or office space and McDonald's fast food restaurant located at northwest corner of State Street and Stetson Avenue	TSF	91.377	7.64	Approved by the PC on September 18, 2018
23	Gas Station (PR18-022)	Gas Station west side of S. State St, N north of Thorton Ave & S/Jade Drive	2,500 square foot convenience store, a gas station with 12 fuel pumps, fuel canopy, and two (2) 2,500 square foot retail tenant spaces	TSF	7.5	0.9	Complete on October 23, 2018
24	Downtown Specific Plan	Downtown Hemet	The project proposes to update land use of 12 different areas throughout the downtown core.				Not available

Cumulative Projects Trip Generation											
	Landuse/Location/Description	ITE Code	No. of units	Daily	In	Out	Total	In	Out	Total	
1	Cordero (TTM 33858) - Single Family subdivision located South side of Eaton Ave between Sanderson Ave. and Kirby St	210	35 DU	330	6	19	26	22	13	35	
2	BNR Income & Opportunity (TTM36929) - located at 907 N. Kirby St.	210	20 DU	189	4	11	15	12	7	20	
3	Shop N Go (ZC16-005,TPM37564 CUP16- 008) - Gas station, convenience store and fast food restaurant located at southwest corner of Sanderson and Fruitvale Avenues	945	5,107 TSF	3,893	160	160	319	128	123	251	
				Pass-by Reduction1	-2,414	-99	-99	-198	-72	-69	-140
				Sub-total	1,479	61	61	121	56	54	110
4	Zanderson Plaza (TTM37196) (CUP16-006) located at north east corner of Sanderson Ave and Menlo Ave.	From TIA	63,580 TSF	6,261	204	181	385	202	200	402	
5	Copenhagen Village (SDR14-001) (EOT16-003) - Multi-family residential located east of Copenhagen St, south of Sydney St, north of Anchorage Ave	220	40 DU	293	4	14	18	14	8	22	
6	The Shops at the Crossroads (CUP17-002) located at north east corner Sanderson Ave and Florida Ave	820	10,087 TSF	381	6	4	9	18	20	38	
				Pass-by Reduction2	-88	-1	-1	-2	-8	-9	-18
				Sub-total	293	5	3	7	10	11	21
7	Holiday Inn Express & Suites (CUP19-015 / SDR 19-012) - 80 room hotel	310	80 Rooms	669	22	15	38	24	24	48	
8	Cawston Plaza (CUP07-026)	820	21,013 TSF	793	12	8	20	38	42	80	
				Pass-by Reduction2	-182	-3	-2	-5	-18	-19	-37
				Sub-total	611	9	6	15	21	22	43
9	Sanderson Square (SP05-003)- A total of 1730.137 TSF commercial and business park center located east of Sanderson Ave between Acacia Ave and Stetson Ave.	770	1730.137 TSF	21,523	422	270	692	334	392	727	
10	Rally'sHamburgers (PR19-017) - Fast-Food Restaurant with Drive-Through Window and no indoor seating located on 0.75 acres lot at north-west corner of Tanya & Sanderson (square footage assumed to be 2.0 TSF)	935	2,000 TSF	918	32	35	68	44	42	85	
11	Stetson Plaza (SP07-004)- Shopping center located at the northwest corner of Sanderson Ave and Stetson Ave	820	190 TSF	7,173	111	68	179	347	376	724	
				Pass-by Reduction2	-1,506	-23	-14	-38	-146	-158	-304
				Sub-total	5,666	87	54	141	202	218	420
12	Page Plaza (CUP18-006): Starbucks coffee shop with a drive-thru and drive-thru restaurant	937	2,500 TSF	2,051	113	109	222	54	54	108	
		934	4,600 TSF	2,166	94	91	185	78	72	150	
				Pass-by Reduction ³	-2,066	-102	-98	-200	-66	-63	-129
				Sub-total	2,151	106	102	208	66	63	129
				Sub-total	1,907	71	67	138	45	47	92
13	Airway Warehouse (PR19-022)	151	10,000 TSF	15	1	0	1	1	1	2	
14	Office Development (SDR18-006) located at 814 Airway Place	710	2,132 TSF	21	2	0	2	0	2	2	
15	Hemet Industrial (SDR18-003) - Two warehouse buildings located at northwest corner of Wentworth Drive and Airway Place	150	27,500 TSF	48	4	1	5	1	4	5	
16	Rancho Diamante (EOT20-002 TTM 35393) - Residential development on 103.6 acres	210	595 DU	5,617	110	330	440	371	218	589	
17	Brethren Square (PR 17-013) - gas station, convenience store and car wash located at south east corner of Cawston and Stetson Avenue	945	15,485 TSF	11,804	644	644	1,287	536	536	1,073	
				Pass-by Reduction ¹	-7,318	-399	-399	-798	-300	-300	-601
				Sub-total	4,485	245	245	489	236	236	472
18	Page Ranch Senior Apartments (PR18-014) - located at East side of Cawston Ave, south of Stetson St.	252	33 DU	122	2	4	7	5	4	9	
19	Hemet Medical Excellence (CUP07-024) (TPM35701) - Phase 2 located at 3853 W. Stetson Ave.	720	63,296 TSF	2,203	137	39	176	61	158	219	
20	River Oak Ridge (EOT19-004 for TTM 36892 and 36891)	210	158 DU	1,492	29	88	117	99	58	156	
21	AutoZone Inc. (SDR Minor No 18- 002) - located west of the State Street and Stetson Ave intersection and north of Stetson Ave	943	7,381 TSF	120	11	4	14	7	10	17	
22	KPC Stetson (TPM37348, CUP18- 003 & CUP18-004) - Retail and/or office space and McDonald's fast food restaurant located at northwest corner of State Street and Stetson Avenue	820	86,963 TSF	3,283	51	31	82	159	172	331	
				Pass-by Reduction2	-755	-12	-7	-19	-73	-79	-152
		934	4,414 TSF	2,027	72	77	149	96	92	188	
				Pass-by Reduction ³	-993	-35	-38	-73	-48	-46	-94
				Sub-total	3,562	76	63	139	134	139	273
23	Gas Station with 2.5 TSF convenience store and two retail tenant spaces of 2.5 TSF each (PR18-022) located west of S. State St, north of Thornton Ave & south of Jade Drive	945	7,500 TSF	5,717	235	235	469	188	180	368	
				Pass-by Reduction ³	-2,801	-115	-115	-230	-94	-90	-184
				Sub-total	2,916	120	120	239	94	90	184
24	Downtown Specific Plan				5,297	254	51	305	210	481	691
				Total Cumulative Projects Trip Generation	66,036	1,918	1,681	3,599	2,205	2,439	4,644

Notes: TSF = Thousand Square Feet, VFP = vehicle fueling pumps, DU = Dwelling Units, Rms- Rooms

Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

1 Pass-by trip rates derived from the average of pass-by trip percentages provided for all Gasoline/Service Station with Convenience Market (945), from the ITE Trip Generation Handbook, 3rd Edition - Table E.37, Pass-by and Non-Pass-By Weekday, AM Peak Period (62%) and E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (56%) Trips (Weekday, PM Peak Hour), ITE 945 - Gasoline/Service Station with Convenience Market

2 Pass-by trip rates derived from the average of pass-by trip percentages provided for all shopping centers less than 100 TSF and less than 200 TSF in size, from the ITE Trip Generation Handbook, 3rd Edition - Table E.9, Pass-by Trips (Weekday, PM Peak Hour), ITE 820 - Shopping Center.

3 Pass-by trip rates derived from the average of pass-by trip percentages provided for all fast-Food Restaurant with Drive-Through Window (934), from the ITE Trip Generation Handbook, 3rd Edition - Table E.31, Pass-by and Non-Pass-By Weekday, AM Peak Period (49%) and E.32 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (50%) Trips (Weekday, PM Peak Hour), ITE 934 - Fast-Food Restaurant with Drive-Through Window



ACTIVE PROJECT LIST

City of Hemet Planning Division

Last Updated: February 12, 2020

DISCLAIMER: While considered to be accurate, the information contained in this list is subject to change and should not be relied upon for property purchases, leases, or other financial transactions. For more information, contact the City of Hemet Planning Division at 951-765-2375 or visit City Hall at 445 E. Florida Avenue, Hemet, CA 92543.

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
COMMERCIAL & INDUSTRIAL PROJECTS						
SDR20-003 Hemet Historic Theater	214 E Florida	Major building rehabilitation facade restoration, new marquee and blade sign resembling originals and ADA and MEP improvements				DRC 4/2/2020
PR20-001 Raising Cane's	315 W Florida	For the demo of an existing building to build a 2,798 sf Raising Cane's with outdoor seating and drive thru at Cross Roads shopping center.		2798 sf		DRC to be scheduled
SDR19-011 Super 8 Gas Station	202 N State	conversion of existing service bays to retail spaces existing 1,682 square foot total conversion spaces		1682 sf		Approved by CDDR 12/23/19
SDR19-008 Harvard Plaza	251 Harvard	Applicant is requesting to construct 4,900 square foot commercial building with six (6) units with 31 onsite parking spaces.		4900 sf		DRC 11/7/19



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
PR19-022 Airway Warehouse	456-040-051	For the construction of a 10,000 sf warehouse in the M-2 zone.		10000 sf		Complete 1/9/2020
PR19-020 Peregrine Towers	25817 Columbia St	For an 80' monopine of a vacant lot with related equipment and 85' x 40' tubular fencing enclosure.				Complete 10/3/19
PR19-019 AT&T Wireless @ Menlo	2160 W Menlo	Proosig a new 75' monoecalyptus cellsite facility, 12 panel antennas, 36 RRU's, 1 MW, 960 SF lease space, 8 ft CMU enclosure, W.I.C. shelter for cabinets, utiity cabinets, 30KW diesal generator, 1 GPS antenna, surge suppressor.				Complete 8/29/19
PR19-017 Rally's Hamburgers	NWC Tanya & Sanderson	Proposed Rally's burger drive-thru only facility. Smaller building with no in-store dining; would require a re-zone but given the small size of the parcel .75 acres and the proximity to Sanderson and Tanya a retail food use to support the industrial park seems reasonable.				Complete 8/26/19
PR19-015 Santiago Hemet Valley RV park	571 N Gilbert	Expanding the park adding 21 additional spaces and making site improvements to existing RV park.				DRC 6/13/19
PR19-014 EcoGen	115 Stetson Ave	Recycling collection site				DRC 6/13/19
PR19-013 Sage Investments	3255 W Stetson	Preliminary Review to subdivide 2.46 acres into three (3) parcels, and construct and operate a 3,062 sq. ft. gas station with a convenience store including a Type 20 ABC				Complete 5/28/19



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		license, a 12 pump fueling station and canopy, a 2,200 sq. ft. drive-thru fast food restaurant, and a 3,590 sq. ft. express carwash with 20 vacuum stalls located on the southeast corner of Stetson and Sanderson Avenues.				
PR19-012 McCrometer Parking Lot	3145 W Stetson	Preliminary Review to develop 2.27 acres as a parking lot with 202 standard stalls and 6 motorcycle stalls for the use of McCrometer located on the south side of Stetson Avenue, east of Sanderson Avenue.				Complete 5/28/19
PR19-011 Hemet Center for Medical Excellence	460-250-054	For the construction of a new building on an existing pad with modifications to the approved facade (CUP07-024).				Complete 5/9/19
PR19-010 Go Fresh Gas Station	325 Sanderson Ave	Proposal of 4250 sq ft C-store, 16 pump fuel station, 2241 sq ft car wash facility and associated parking and landscaping on approximately 4 acres				Complete 5/8/19
CUP19-015 / SDR 19-012 Holiday Inn Express & Suites	448-250-006	For the construction and operation of a 4-story, 80 room Hotel on approximately 1.59 acres with 88 parking spaces, outdoor pool and lounge area.			1.59	
CUP 19-014 / VAR20-001 AT&T Wireless at Menlo	2160 W Menlo	Proposing a 75' wireless facility camouflaged as a three trunk Eucalyptus tree with 12 panel				Scheduled for PC 3/3/2020



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		antennas with 36 radio units within a 24'x40' enclosure for equipment. The property is vacant and is in the C-1 zone.				
CUP19-013	25817 Columbia St	Proposing the installation of an 80', multi-carrier (4) wireless telecommunications facility disguised as a faux monopine with ancillary equipment located at-grade behind a tube-steel fence enclosure. The equipment will consist of 12 panel antennas, 36 remote radio units, one three-foot microwave dish on the tower. At grade, one radio cabinet, one generator cabinet along with utility rack for meters. This property is zoned C-2 with CC general plan designation.				Approved by PC on February 4, 2020
CUP 19-012 Just for Fun	1111 S Sanderson Ave	Existing gas station with c-store with type 20 ABC license (Beer and Wine) asking to upgrade to Type 21 ABC license (Beer, Wine, and Spirits).				Denied by PC per staff recommendation on January 21, 2020
CUP 19-010 / VAR19-001 Santiago Hemet RV Park	571 N Gilbert St	The owner is proposing one (1) acre expansion to an existing 3.5 acre RV Par to accommodate 21 additional RV spaces with RV's and parking. The proposal includes childrens play area and landscaping in the right-				



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		of-way and interior and of the expansion area.				
CUP 19-009 / SDR19-010 Stetson Corner / MAP 19-003 (TPM37779)	3255 W Stetson Ave	The proposed application is for a tentative parcel map to subdivide the existing two (2) parcels of land totaling approximately 17 acres with 3.95 and 2.31 acres already occupied by McCrometer Corp into five (5) parcels of various sizes and two (2) lettered lots. The remaining portions are currently vacant land. The parcels would yield 0.73 ac, 0.88 ac, 0.67 ac, 3.95 ac, 2.31 ac, and Lot A (5,689 sf) and Lot B (3,798 sf) and to construct and operate a 12 bay gas station with approximately 3,000 sq ft 7-Eleven store, approximately 2,800 sq ft drive-thru fast food restaurant, and a 3,500 sq ft car wash with 20 self-serve vacuum stations. The project site is located at 3255 and 3145 Stetson Avenue on the south side of Stetson Avenue in the City of Hemet.				
CUP 19-008 N1 Premium Cars	230 W Florida Ave	Operate a used car sales lot including internet, walk-in and wholesale at an existing 774 sq. ft. existing building on approximately 7800 sq. ft lot				Approved by PC on October 1, 2019
AUP 19-004 Downtown Farmer's Market	135 E Florida Ave	This AUP application is requesting several on-going events taking place on various days and times,				Approved by CDDR on February 3, 2020



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		including: Farmer's Market on Saturday mornings.				
AUP 19-003 Blue Bubble Express Carwash	401 W Florida Ave	Façade improvements, equipment upgrade, site modification and expansion and landscape improvements to an existing self-service carwash				Approved by CDDR on October 16, 2019
AUP 19-002 So Cal Fitness	1970 W Florida Ave	For the operation of a 7,000 square foot Fitness/Health gym. Proposed at an existing building located at 1970 W. Florida Avenue and is in the C-2 zone. The proposed hours of operation are Monday thru Friday 4 AM to 11 PM and Saturday and Sunday from 7 Am to 7 PM.		7000		Approved by CDDR on July 30, 2019
AUP19-001 Live Décor	2325 E Florida Ave	For the operation of laminating pre-glued melamine paper onto particle board using short cycle press. The applicant is also proposing a showroom with home related products and cabinets. The building is approximately 27,000 square feet and one third is proposed for showroom area, one third for the laminating process and one third for storage. The building is existing and is located in the shopping center located on the southeast corner of Florida Avenue and Yale Street.		27000		Approved by CDDR on July 30, 2019



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
CUP 19-007 Chappies Cocktail	229 Florida Ave	For the addition of 329 square feet of floor area to an existing cocktail lounge in the Downtown Village Zone of the Downtown Specific Plan. The expansion will consist of six (6) foot tall enclosure with wood base and with glass in between to enclose outdoor area. Alcohol Beverage Control requires City approval of the expansion to allow serving and consumption of alcoholic beverages in that area.		329		Approved by PC on August 6, 2019
CUP 19-006 AT&T Mono-Pine Wireless Tower	3126 Johnston Ave	75 ft monopine wireless facility including 12 (8ft high) antennas with 36 RRUs, 2 (2ft dia.) microwave, 4 DC-9 surge suppressors, 1 dc power plant, 2 FIF racks, 1 GPA antennas and associated equipments. The lease space is 40 x 24 ft with 8ft CMU walls with 8 ft wide double swing gate.		960	4.81	DRC scheduled for June 27, 2019
CUP 19-005 Hertz Rent A Car	4672 Florida Ave	For the operation of Hertz car rental in a 1,200 square foot existing suite at Florida Promenade. Only 10 vehicles available on site with 10 vehicles being prepared at the rear of the suite. No car wash only waterless wash proposed.		1200		Approved by PC on July 16, 2019
CUP 19-004 S2A Modular	1321 N. State St	The proposal is to build and operate a TESLA powered modular smart home factory with a showroom and model display area of 7 buildings		250,000 sf	32.1	DRC completed on May 23, 2019. Waiting for Environmental



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		totaling approximately 250,000 sq ft building on approximately 32.1 acres				Consultant to start IS.
CUP 19-003 Hemet Pawn	234 N. San Jacinto	Relocation of an existing pawn shop to a new location (existing building along San Jacinto St)		3,000 sq ft		Approved by PC on May 7, 2019
PR 19-005 S2A Modular (Tesla Homes)	1321 and 1255 N. State Street	The proposal is to build and operate a TESLA powered modular smart home factory with a showroom and model display area of approximately 210,000 sq ft building on approximately 26 acres		210,000 sq ft	26	DRC completed on February 21, 2019 Project was presented to PC on March 5, 2019 as an informational item.
PR 19-004 Hemet Pawn	234 N. San Jacinto	For the operation of a pawn shop in an existing building		3,000 sq ft		Complete April 22, 2019
PR 19-003 Harvard Plaza	251 S. Harvard St.	Proposal is to construct approximately 4,900 sq ft commercial building (6 units) with 26 parking spaces for retail uses on a current vacant lot in the Hemet Downtown SP No. 16-001 (Office Professional Mixed Use)		4,900 sq ft		Complete February 12, 2019
AUP 18-001 Crossfit HOKA HEY	320 E. Florida Ave	Proposal is to operate a 3,240 sq ft crossfit gym at an existing building within the Downtown SP (DV zone). This proposal is for operation and the interior modification only.		3,240 Sq Ft		Approved by CDDR on January 23, 2019



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
CUP 18-005 Bacerra Vehicle Sales (DBA Blue Line Enterprise)	1455 N. State Street	Proposal to convert existing 2,560 sq ft building into a used car sales office with display area on two parcels totaling 42,900 sq ft (0.98 Ac). The existing building also has five (5) open bays to the rear of the property.		2,560 sq ft		Approved by PC on January 15, 2019
CUP 19-001 AT&T Smartlink 70ft mono- eucalyptus Wireless cell tower	150 Auto Mall Dr Auto Plaza	Request to construct and operate a 70 ft high mono-eucalyptus wireless pole with 12 panel antennas, Helical Piers, Power generator, DC Power rack, GPS antenna, utility cabinets, Telco Board, 2 ft microwave antenna, and DC surge suppressors within an 8ft x8ft W.I.C. equipment closet.		64 sq ft		Approved by PC on March 5, 2019
CUP 18-008 Mega Bites Upgrade	1153 S. State St	Request to add live entertainment, add spirits to existing beer & wine license and extent the hours of operation (from 10PM to 2AM on weekends and holidays) for an existing restaurant/game center.		15,360 sq ft	2.67 ac	Approved by PC on April 16, 2019
PR18-027 Santiago Hemet Valley RV	571 N. Gilbert	Proposal to add a .9 acre parcel and 36 spaces to the existing 3.71 acre 96 space Hemet Valley RV Park resulting in a 132 space recreation vehicle park on 4.61 acres.			.9 acre addition to existing 3.71 RV park	Complete on May 9, 2019
PR18-025	AT&T at Auto Mall	Preliminary Review for the construction and operation of a 70' wireless			.013	Complete on November 29, 2019



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		communication facility designed as a mono-eucalyptus with an associated equipment shelter				
CUP18-007	Dream Spa 247 N. Devonshire	Operation of a 1,923 square foot massage business located in the Winston Plaza shopping center on the southwest corner of Sanderson and Devonshire Avenues.		1,923		Approved by PC on December 4, 2018
PR18-023	Historic Hemet Theatre 214 E. Florida	560 sq. ft. addition of a green room to the Historic Hemet Theatre, and modifications to the rear access and parking area and a new trash enclosure located on City owned property.		560		Complete on October 25, 2018
PR18-022	Gas Station W/side of S. State St, N/Thornton Ave & S/Jade Drive	2,500 sq. ft. convenience store, a gas station with 12 fuel pumps, fuel canopy, and two (2) 2,500 retail tenant spaces	3	7,500	0.90 Acres	Complete on October 23, 2018
PR18-021	Zipline Carwash					
CUP18-006	Page Plaza	Construction and operation of a 2,500+ square foot Starbucks coffee shop with a drive-thru and a 4,600+ square foot drive-thru restaurant		10,100		Approved by PC on June 18, 2019
CUP18-005	1455 N. State Street	Auto Sales with outdoor display		2,560	1	Approved on 1/15/19



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
PR18-020	2890 W. Florida Avenue KFC Exterior and Interior updates					Complete on August 30, 2018
PR18-019	1000 N. Buena Vista Ever Green Apts					Complete on September 24, 2018
PR18-018	West Florida Avenue Hotel					Complete on August 23, 2018
CUP18-002 PCN 18-001	645 N. San Jacinto APN 445-020-039	For the approval of Type 21 (off-sale general) ABC license, to sell beer, wine and distilled spirits at an existing convenience store		2,400		Denied by PC per staff recommendation August 21, 2018
PR18-017	247 N. Sanderson Winston Plaza APN 448-240-020	For the operation of foot and body massage.				Complete on August 30, 2018
TPM37348, CUP18- 003 & CUP18-004 KPC Stetson	446-290-006 Northwest corner of State Street and Stetson Avenue	A request for a tentative parcel map subdividing 7.64 acres into three (3) commercial parcels ranging in size from 0.46 to 6.68 acres. A request for a Conditional Use Permit to convert an existing 83,020 square foot building (former Kmart) into a multiple tenant space with up seven (7) spaces ranging from 1,280 to 55,000 sq. ft. for future retail and/or office space, a future drive- thru pad (Pad B) and upgrades to shopping center parking and		91,377	7.64	Approved by the PC on September 18, 2018



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		landscaping. A request for a Conditional Use Permit for the construction and operation of a 4,414 sq. ft. McDonald's fast food restaurant with a dual drive-thru.				
CUP18-001	2524 E. Florida Avenue Between Columbia and Cornell Streets APN 438-240-033 & 011	For the addition of live entertainment, dancing and private events Thursday thru Monday from 9 pm to 2 am				PC approved on July 17, 2018
SDR18-006	814 Airway Place APN 456-040-049	Site Development Review application for the design and review of a 2,132 sq. ft. office and nine (9) space parking lot for a heavy equipment storage operation and per Administrative Use Permit No. 15-003 Condition No. 11.		2,132	4.47	DRC scheduled for July 19, 2018. Project incomplete.
PR18-016	1097 N. State Desert Palm MH Park	For the addition of carports with solar panel				Complete on August 20, 2018
PR18-015	Palm Mobile Gas Station 903 W. Florida APN 442-092-021	For the enclosure and conversion of 3 auto repair bays into convenience store and for exterior façade improvements				Complete on July 12, 2018
PR18-014	Page Ranch Senior Apts Los Olivos					DRC June 14, 2014
PR18-013 McDonalds	2321 W. Florida Avenue APN 448-450-003	Preliminary Review to modify the existing drive thru lane to a dual drive				Complete on June 19, 2018



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		thru lane, including replacing pavement, landscaping area and exterior ADA upgrades				
PR18-012 San Jacinto Town Plaza	Northeast corner of San Jacinto Street and Oakland Avenue 540 N. San Jacinto St APN 445-080-027	Preliminary Review to utilize three (3) suites in a strip center zoned C-2 (general commercial) as a church use	3			Complete August 30, 2018
SDR18-003 Hemet Industrial	On the northwest corner of Wentworth Drive and Airway Place. APN 456-040-054	Construction of two (2) buildings totaling 27,500 sq ft of prefabricated warehouse buildings in 2 phases. (Phase 1 – 15,400 sq ft and Phase 2 – 12,100 sq ft) with 30 parking spaces (including 2 accessible – 20 spaces for Phase 1 and 10 spaces for Phase 2) and associated landscaping on approximately 2 acres of vacant lot.		27,500 SF	2AC	The project was heard at the Administrative Hearing of CDDR on June 14, 2018 and was approved by the Community Development Director. Additionally the project was heard by the Riverside County Airport Land Use Commission on July 12, 2018 under ZAP1056HR18 – Bryan Clendenen. Project is under plan check through Building and Safety



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
PR18-004 Jack in the Box	1595 E Florida Ave	Exterior and interior remodel of an existing 1,751 sq ft Jack in the Box restaurant with addition of 556 sq ft of dining area (Total sq ft 2,307).		2307		Approved on April 26, 2018 Waiting for plan submittal to Building and Safety
Starbucks (PR18-002)	4552 W. Florida Avenue (448-140-053)	Preliminary Review for the construction and operation of a 2,300+ square foot Starbucks coffee shop with a drive-thru located within the Florida Promenade.		2,300	0.335	DRC 2/22/2018. Comment letter emailed on 2/26/2018. In Plan Check A1806-033
PR18-003 M&H Dollar Store	645 N. San Jacinto 445-020-039	For the addition of a Type 21 ABC License at an existing convenience store		2,400		Complete on May 9, 2019
PR18-001	401 S. Santa Fe	Change zone from institutional to multi-family (R3) and to construct and operate a 33 unit apartment, one story complex in nine buildings and a 1,280 sf recreating building on the swc or Central and Santa Fe			2.47	Complete on March 28, 2018
Shop N Go (ZC16-005, TPM37564 CUP16-008)	SWC Sanderson and Fruitvale Avenues APN 444-100-007	New commercial center with gas station, convenience store and fast food restaurant		5,107	4.34	PC Approved on March 19, 2019
Crossfit Renuus (CUP17-005)	475 N. Buena Vista Street APN 443-140-021-9	Addition to a proposed health and fitness building		2,785	0.34	Withdrawn.
AutoZone Inc. (SDR Minor No 18-002)	North side of Stetson approximately 730 feet	Construction of a 7,381 sq ft AutoZone building to be utilized for retail sales		7,381		Approved by CDD on 03/15/18



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
	west of State Street and Stetson Ave Intersection APN 446-290-015	including 37 parking spaces and associated landscaping.				
Get Air Trampoline Park (CUP17-006)	869 W. Florida Avenue APNTEMP3 TEMP 443-250-019	Streamline CUP for park with tenant improvement				Approved 2/06/18
Waba Grill Restaurant	275 Sanderson Ave.	Tenant improvement for new restaurant		1,615		In plan check
Gosch Ford/ Hyundai Auto Dealership Remodel	450 Carriage Dr. Hemet Auto Mall	Remodel and addition to existing dealership		19,059		In plan check.
Brethren Square (PR 17-013)	SEC of Cawston and Stetson Avenues APN 460-250-017 460-250-018	Multi- tenant retail center, with gas station, convenience store and car wash		15,485	2.01	Complete on February 15, 2018
McHolland Center (CUP 17-004 & TPM 37421)	SEC of Sanderson & Stetson Avenues. APN 460-150-014 460-150-015	New commercial center with 7-Eleven store and gas station, separate car wash facility		6,530	2.44	Approved by Planning Commission on May 15, 2018. On Appeal (APL18-001) to City Council on June 26, 2018. Appeal denied by City Council.
Chrysler, Dodge, Jeep Dealership (SDR 17-005)	SEC of Warren Rd and Auto Boulevard in the Hemet Auto Mall APN 456-010-034	New car dealership		31,176	4.35	Approved by PC on 10/17/17
First Certified Collision Center (SDR 17-004)	3800 Wentworth Drive APN 4560-040-052	Expansion and remodel of the existing industrial facility		10,080	1.00	Approved on 8/17/17 by the Community



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
						Development Director
Bank (PR 17-007)	NEC of Florida Ave. and Myers – Winco Center APN 448-140-052	New bank building		3,956	0.52	Complete on August 3, 2017
Zanderson Plaza (TTM37196) (CUP16-006)	NEC Sanderson Ave and Menlo Ave. APN 444100016.	Neighborhood commercial center with a gas station, convenience store, restaurants, retail uses		63,580	8.67	Approved by CC 8/22/2017.
The Shops at the Crossroads (CUP17-002)	NEC Sanderson Ave and Florida Ave. APNs 448310007 thru -012.	Demolition and new construction of commercial use		10,087	7.03	Approved by PC 6/6/2017.
Taco Bell (CUP16-004)	2097 E. Florida Ave. APN 445-280-042-5	Restaurant with drive through.		2,090	0.36	Approved by PC 9/20/16.
KPC Towne Center (SDR15-004)	2171 W. Florida Ave. APN 448-450-005	Remodel of existing 124,877 vacant building and new construction of 39,223 sf for commercial shopping center. Completed: 110,100 sf.		54,000	12.45	Approved by PC 12/15/15
Hemet Gas Mart (CUP17-001)	1005 W. Florida Ave. APN 442-091-008	Replacement gas station and convenience store.		3,200	1.61	Approved by PC on 10/17/2017.
Paso Robles Tank (SDR17-007)	3883 Wentworth Dr. APN 441-130-008	Two new modular office buildings at existing industrial site.		810		Approved by CDD 6-19-2017
Circle K Store & Gas Station (CUP 16-005)	4852 Florida (NEC of Florida and Meyers)- Winco Center APN 448-140-051-1	Gas station, convenience store and car wash		13,654		Construction complete, Grand Opening May 31, 2018
All For Show (CUP16-002)	267 Harvard St. APN 443-201-026-2	Automotive shop for aftermarket installations.		2,683	7,670	Approved by PC 3/21/2017.
AAL Management (CUP16-007)	720 W. Florida Ave. APN 443-172-055-9	Construction of new commercial/office center.		3,495	0.27	Approved by PC 11-1-2016.



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
Roadbuilders (AUP15-003)	814 Airway Place. APN 456-040-049	Heavy equipment storage.			2.13	Approved by CDD on 2/11/2016. Awaiting SDR submittal for Phase 2.
Hemet Medical Excellence (CUP07-024) (TPM35701)	3853 W. Stetson Ave. APN 460-250-021	Medical office. Phase 2.		63,296	4.6	Approved by PC 1/15/2008. Phase 1 completed. Phase 2 pending.
Scripps West (CUP08-014) (Ord. No. 1934 EOT)	NWC Florida Ave and Yale St. APN 445232022.	Shopping center.		5,218	0.45	Approved by CC 9/23/2008; extensions to 9/23/2019.
Cawston Plaza (CUP07-026) (Ord. No. 1934 EOT)	Southside of Florida Ave, east of Acacia Ave. APNs 448140009, -010.	Shopping center.		21,013	2.24	Approved by PC 9/16/2008; extensions to 11/25/2019.
Saint Demiana Plaza (CUP05-001) (Ord. No. 1934 EOT)	NEC Florida Ave and Soboba St. APNs 551321008, -009.	Shopping center.		33,481	3.42	Approved by PC 7/1/2008; extensions to 7/1/2019.
The Boardwalk (CUP06-004)	1900 W Florida Ave. APNs 448-440-024 thru - 027.	Shopping center. Phase 2.		51,000	4.5	Approved by PC 11/7/06. Phase 1 completed. Phase 2 pending.
AT&T at HUSD (CUP17-003)	435 South Lyon Avenue APN 456-140-009	60' monopine wireless tower		810	810 sq. ft.	Approved by PC o February 20, 2018
Sanderson Car Wash (CUPA17-001)	330 N. Sanderson Avenue APN 442-091-008	Construction of new detailing bay, remodel of existing carwash		930	1.50	Approved by PC 9/19/17.
RESIDENTIAL PROJECTS						



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
TTM 37558 Girard Subdivision	800 N Girard; 439-230-005	51 proposed single family residential homes. residential development South of Menlo Ave, a Mobile Home Park West of Girard St, single family homes located Southwest and adjacent to the subject site on the East of Girard	51			DRC 4/9/2020
TPM Diaz Map	885 N Girard; 439-170-005	subdivide an existing 2 acre residential lot into 2			2	DRC 3/12/2020
SDR20-002 The Latham	442-060-046	120 unit , 3 story apartment complex for seniors, age restricted 62+ on 3.3 acres	120		3.3	DRC 2/27/2020
PR20-002 D.R. Horton	NEC Florida & Lake	80 lot SFR construction for Citrus Pointe	80			DRC 4/9/2020
EOT10-003 TTM 36926 BNR Income	444-190-009/ 907 Kirby Rd	An EOT for TTM 36929 to subdivide 5.33 acres into 20 SFR on 6,000 sf lots.	20		5.33	DRC 4/9/2020
EOT20-002 TTM 35393 Rancho Diamante	454-020-013 thru -016	Request for EOT for TTM 35393. A 103.6 acre site previously City-approved for 440 single family lots, one park, and 12 lettered lots for drainage and open space improvements.	440		103.8	DRC 3/19/2020
EOT20-001 TTM 35392 Rancho Diamante	464-010-008 thru -011, 460-020-005,-006	Request for EOT for TTM 35392 previously approved by the City for 155 single family lots and lettered lots for drainage and open space improvements.	155		48.4	DRC 3/19/2020
SDR20-002 The Latham	442-060-046	120 unit , 3 story apartment complex for seniors, age restricted 62+ on 3.3 acres				DRC 2/27/2020
SDR20-001 Seasons at McSweeny	SEC Gibbel & State	77 single family homes on Tract 33824-1	77			DRC 2/27/2020



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
SDR19-007 Hideaway Site Plan modification	660 Britannia Rd	Applicant is requesting a replotting of lots 11/15 and 34-36 for T31796 totaling 8 lots from the previously approved architecture plans per SDR No. 18-001				Approved by CDDR on 11/20/19
SDR19-006 Stoney Mountain Ranch	448-060-007	Final build out of remaining 92 lots of 395 lot residential subdivision called Stoney Mountains Ranch consisting of 3 new plans 2 single story and 1-2 story plan raging in size from 1,779 sq ft to 2,405 sq ft				Approved by PC on 11/5/19
SDR19-005 Evergreen Apartments	1000 N Buena Vista St	Forthe construction of a multi-famuly apartment complex proposing 80 units in six buildings on 4.88 acres.				
PR19-021 DVL North TTM37810	NWC State & Domenigoni	TPM 37810 is to subdivide 733 acres into 3 lots (lot 1 34.28 ac lot 2 130.41ac, and lot 3 569I96ac) that is compliant with the subdivision Map act for the disposition of surplus land				Scheduled 1/8/2020
PR19-018 Diaz Map 37794	885 N Girard St	To divide the existing property into three residential lots. The site has multiple existing structures and would be more desireable for sale as individual parcels.				Complete 8/26/19
EOT 19-007 for TPM 37196 Zanderson Plaza	444-100-016					Approved by PC on January 7, 2020
EOT19-006 Citadel Community Development	2499 W Acacia Ave	EOT for CUP 06-005				Approved by PC on October 15, 2019



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
EOT19-004 for TTM 36892 River Oak Ridge		project is an 83 lot, single family residential subdivision with a minimum lot size of 6,000 sf. We are requesting an Extension of Time for TTM 36892				Approved by PC on September 17, 2019
EOT19-003 for TTM 36891 River Oak Ridge		project is a 75-lot single family residential subdivision with a minimum lot size of 6,000 sf. We are requesting an Extension of Time for TTM 36891				Approved by PC on September 17, 2019
EOT19-002 for TTM 37087 (MAP 16-001)	444-370-023 Coramdeo					Approved by PC on August 20, 2019
EOT19-001 Santa Fe Pointe (SDR15-001)	439-100-026 NWC Menlo & Santa Fe	Request for three year Extension of Time for Site Development Review No. 15-001 for the construction and use of a multiple-family residential project with up to 241 units in 42 buildings on 17.7 acres, located on the west side of Santa Fe Street, between Menlo and Fruitvale Avenues.				Approved by PC May 21, 2019
PR19-002 Girard Subdivision of 13 acres into 51 SFR lots	800 N. Girard St	Preliminary Review for a proposed zone change from R-2 to R-1-6 and to subdivide 13.0 acres into 51 single family residential lots and three (3) lettered lots located on the north side of Menlo Avenue, east side of Girard Street and west side of Park Avenue.	51 SFR		13	Complete on March 6, 2019
SDR19-002 Eaton Metal Bldg	1730 Easton Avenue APN 444-250-013	Construction of a 4,800 sf metal building on a residential lot with a SFR		3,000 sf enclosed (2) 900 sf	2 ac	Approved by CDDR March 7, 2019



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
				covered bays		
TPM37636 Mayberry NSP (MAP 18-003)	107 E. Mayberry Avenue - SEC Mayberry Avenue and State Street	A request to subdivide 0.34 acres into two (2) single family residential lots with a minimum lot size of 6,000 sq. ft.	2		0.34	Approved by PC on December 4, 2018
EOT18-004 for TTM29129 Stoney Mountain	South side of Esplanade Ave, east of Warren Rd, West of Cawston Ave. APNS 448-060-007,-009 & -013	A request for a two (2) year extension of time for previously approved Tentative Tract Map No. 29129 (-7, -8 & -9) for the subdivision of 31.99 acres into 92 single family residential lots with a minimum lot size of 7,200 square feet	92		31.99	Planning Commission approved on June 19, 2018.
PR18-014 Page Ranch Senior Apartments	East side of Cawston Ave, south of Stetson St. APN 460242037.	Preliminary Review to construct and operate 33 unit senior apartment complex	33		2.5	DRC held on June 14, 2018
PR18-005 Peppertree Gran Via	Peppertree Specific Plan APN 444-420-001 TR29843 Lots 1-58	The applicant is proposing to construct SFR for the remaining lots (43) in the Gran Via (Plan Area 3) for rental purposes and modify the requirements from the previously approved SDR 06-003	43			Completed on August 20, 2018
PR18-006 Peppertree Ventana	Peppertree Specific Plan APN 444-420-025 TR29843 Lots 59-120	The applicant is proposing to construct SFR for the remaining lots (48) in the Ventana (Plan Area 2) for rental purposes and modify	48			Completed on August 20, 2018



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
		the requirements from the previously approved SDR 06-002				
PR18-007 Peppertree La Ronda	Peppertree Specific Plan APN 444-020-021 TR29843 Lot 122 (8.4 acres)	The applicant is proposing to construct 60 MFR units in the La Ronda (Plan Area 4) for rental purposes and modify the requirements from the previously approved SDR 06-005	60		8.4 AC	Complete on August 20, 2018
PR18-008 Peppertree Monte Verde	Peppertree Specific Plan APN 444-021-017 TR29843 Lots 123 and 124 (4.8 acres)	The applicant is proposing to construct 36 MFR units in the Monte Verde (Plan Area 5) for rental purposes and modify the requirements from the previously approved SDR 06-006	36		4.8 AC	Complete on August 20, 2018
PR18-009 Peppertree Entrada	Peppertree Specific Plan APN 444-022-015 TR29843 Lot 125 (7.1 acres)	The applicant is proposing to construct 48 MFR units in the Entrada (Plan Area 6) for rental purposes and modify the requirements from the previously approved SDR 06-004	48		7.1 AC	Complete on August 20, 2018
The Gardens (PR18-001)	401 S. Santa Fe Street APN 446-092-027	Preliminary Review for zone change from Institutional to Multiple Family Residential and construct and operate 33 unit senior apartment complex	33		2.47	DRC 2/01/2018. Property to be discussed during consistency zoning Planning Commission work study on 2/20/2018.



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
SDR (Minor) No. 18-004 Montero (11-SFR)	Northwest corner of Devonshire Ave and Old Warren Rd APN 455-571-006 and 455-572-001, -006, -007, -011 thru -017	Development of 11 remaining vacant lots of TR31146 lots 4, 9, 10, 27, and 76-82 (proposed 2 plans of single story at 2,350 sq ft to 2,379 sq ft)	11			DRC scheduled for June 7, 2018 (Applicant's request) Approved on 7/17/18 by CDDR
Hideaway Tract RSI Communities SDR 18-001	Fruitvale and State Street APN 443-283-019	SFR Development of 193 units in TR 24147 and 31796	193		44.22	Approved by PC on March 6, 2018
Peppertree SP Golden Harbor TR 29843	NWC of Cawston and Menlo Ave.	Completion of 13 SFR homes	13			Issued permits for previous unfinished construction of 13 homes.
BNR Income & Opportunity (TTM36929)	907 N. Kirby St. APN 444190009.	SFR subdivision.	20		5.33	Approved by CC on March 13, 2018
River Oaks Ranch (TTM36891) (TTM36892)	SWC and SEC of Elk St and Thornton Ave. APNs 464-300-001; 464-312-001 though 009 464-300-002; 464-311-001 through 009	SFR subdivisions.	158		40.28	Approved by CC 8/22/2017.
Coramdeo Court (TTM37087)	North side of Fruitvale Ave, west of Palm Ave, east of Lyon Ave. APNs 444370023, -026	SFR subdivision into 20,000 custom lots.	20		13.03	Approved by PC 8/1/2017.
Rancho Diamante Page/Strata BP, LLC TTM 35393	SEC of Warren Road and Mustang Way APN 454-020-013 though 016 and 460-060-007	SFR subdivision of 440 single family lots and 1.17 acre park	440		103.0	Substantial Conformance Map approved 8/01/17
Montero Estates TR 31146	NWC Devonshire Ave/Old Warren Rd.	Remaining 11 SRF lots in Tract 31146.	11			Previous 14 lots approved by PC



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
(SDR 18-004) (SDR15-005 Old)	APNs 455-571-006 though 009 and 455-572- 001,006,007,0011-0017					3/1/2016; 3 models pulled permits in 2017. Under new application for remaining 11 lots. Scheduled for CDDR Administrative Hearing for July 17, 2018.
Stoney Mountain/ Sundance III (SDR16-001)	South side of Esplanade Ave, east of Warren Rd, West of Cawston Ave. APNS 448-060-007,-009 & -013	Remaining SFR lots in Tract 29129.	92			Approved by PC 3/1/16. Model Home Complex approved on 4/20/17.
Santa Fe Pointe (TTM 34751) (SDR15-001)	West side of Santa Fe St. APNS 439-100- 026,027,029,035 &036	Condominium complex.	241		17.66	TTM34751 approved by PC 2/20/2007; extensions to 2/20/2018. SDR15-001 approved by PC on 4/18/2017.
Copenhagen Village (SDR14-001) (EOT16-003)	East side of Copenhagen St, south of Sydney St, north of Anchorage Ave. APNs 448210005 thru - 014, -016, -017,-018.	New multifamily residential on vacant land.	40		3.29	Approved by PC on 9/16/2014; 3- year extension of time approved by PC on 9/6/2016 to 9/16/2019.
Pension del Sol (SDR 14-002) (EOT16-005)	South side of Latham Ave, east of Lyon Ave, west of Elk St. APN 422060046.	Senior apartment.	120		3.31	Approved by PC on 11/4/2014; 3- year extension of time approved by



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
						PC on 9/6/2016 to 11/4/2019.
Corwin Ranch (TTM35990)	NWC Hemet St and Annisa Ave. APNs 551423015, -018.	SFR subdivision.	12		2.54	Approved by PC 6/21/2010; extensions to 6/21/2019.
Acacia Gardens (CUP06-005) (Ord. No. 1934 EOT)	SEC Acacia Ave and Kirby St. APN 456141053.	Townhome condominiums. Phase 2 of Tract 13982.	50		2.15	Approved by PC 9/16/2008; extensions to 9/16/2019.
Palmas Del Vista (SDR17-002)	San Jacinto & Olive Tree Lane APNS 447-172-006 through 008	3 SFR on 3 existing lots	3	1,766	On three existing 7,000 sf lots	Approved 12/11/2017 Plans in plan check
Los Olivos (SDR06-017) (Ord. No. 1934 EOT)	East side of Cawston Ave, south of Stetson St. APN 460242037.	Multifamily residential within TTM 34712.	40		2.5	Approved by PC 11/7/2006; extensions to 11/7/2019.
Cordero (TTM 33858)	South side of Eaton Ave between Sanderson Ave. and Kirby St. APN 444190001.	SFR subdivision.	35		9.58	Approved by PC 9/5/2006; extensions to 9/5/2017. EOT17-003 requesting one-year extension scheduled for 10/17/2017 PC meeting.
SPECIFIC PLANS						
Page Ranch PCD80-002. Rancho Diamante	Near Warren Rd and Fisher St.	The Rancho Diamante tracts represent the only remaining areas to be	1301 (remaining)		397.32	381 units built. TTMs 35392 and 35393 are



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
(TTM35392)(EOT18-002) (TTM35393) (EOT18-003 (TTM36841)	APN's: 460-010-008 through -011, 460-020-005, -006) 454-020-013 through -016 and 460-060-007	developed in the specific plan.				approved tentative maps that have not recorded and no SDR proposed. TTM 36841 (603 lots, 245 acres) is currently under environmental review, and pending Planning Commission hearing. Approved by PC on March 20, 2018.
Hemet Auto Mall (SP87-28) (SPA13-001)						SEC Florida Ave and Warren Rd. APN 456-010-009-1; 456-010-021
Tres Cerritos (SP90-009) (SPA06-001) (TTM36759)	NWC Cawston Ave and Devonshire Ave. APNs448-100-001 thru -018, 448-110-001 thru -015, -017 thru -022, and 444-020-024 thru -025).	Residential community	931			SP and TTM 36759 (conveyance map for East Tres Cerritos) approved by PC on 2/15/15 and recorded on 12/6/2016.
McSweeny Farms (SP01-002) (SPA14-001) (TTM33824)	NEC State St and Newport Rd. APNs 454-170-002&003 and 454-180-003	Master planned residential community served by neighborhood commercial. Approved for 1640 dwelling	1330 (remaining)			310 units built. In 2006, PC approved TTM 33824 (238 units)



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
(TTM33825) (TTM34660) (TTM34661) (TTM34662)	454-100-018; 454-170-006, 454-180-003 and 004	units and 12 acres of commercial.				and TTM 33825 (259) units. On 11/2/2016, 135 lots in TTM 33824 and 148 in TTM 33825 were recorded. An additional 835 lots were approved by PC in 2007 (TTMS 34660, 34661, and 34662). The expiration date on all TTMs was extended to 12/17/2021 per DA14-001. No commercial has been proposed for the 12 acre Commercial site to date.
Peppertree (SP01-003) (TTM29843) (SDR06-002 -006)	West side of Cawston Ave between Menlo Ave and Fruitvale Ave. APNS 441-030-007, 008 & 009	Senior Residential community.	358			456 units approved. 98 units under construction.
Sanderson Square (SP05-003)	East side of Sanderson Ave between Acacia Ave and Stetson Ave. APNs 456030036, -038, -039, -042.	Commercial and business park center.		1,730,137	26	Proposed in SP: 995,153 sf commercial; 734,984 sf manufacturing.



City Hemet Planning Division

ACTIVE PROJECT LIST: PROJECTS THAT ARE APPROVED OR PENDING APPROVAL						
Project Name Project Number(s)	Project Location	Description	Units	Square Footage	Acres	Status
						Currently undeveloped.
Florida Promenade (SP06-004) (SPA09-001)	NEC Florida Ave and Myers St. APNS 460-250-001 THRU 008, 011, 013 THRU 016, 023, 026 AND 028)	Commercial Center. Approved for 200,000 sf of retail space.		74,252		Completed: 125,748 sf. Several retail uses are in plan check.
Stetson Plaza (SP07-004)	NWC Sanderson Ave and Stetson Ave. APN 456050044.	Shopping center.		190,000	18.16	SP and TPM approved. City-owned property. Currently undeveloped.
Ramona Creek (SP12-001) (TTM36510)	NWC Florida Ave and Myers St. APN 448-090-003	Mixed use Residential & Commercial master planned community.	1,077	535,788	203	SP adopted on 6/10/14. EOT16-004 extended the expiration date for TTM 36510 (conveyance map) to 7/24/2018.

Appendix F

Project Access and SimTraffic Queuing Worksheets

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	27	1369	24	0	1171
Future Vol, veh/h	0	27	1369	24	0	1171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	0	29	1488	26	0	1273

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	757	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	350	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	350	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	350
HCM Lane V/C Ratio	-	-	0.084
HCM Control Delay (s)	-	-	16.2
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1034	55	63	1137	65	61
Future Vol, veh/h	1034	55	63	1137	65	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1124	60	68	1236	71	66

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1184	0	1908
Stage 1	-	-	-	-	1154
Stage 2	-	-	-	-	754
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	586	-	~ 60
Stage 1	-	-	-	-	262
Stage 2	-	-	-	-	425
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	586	-	~ 53
Mov Cap-2 Maneuver	-	-	-	-	164
Stage 1	-	-	-	-	262
Stage 2	-	-	-	-	376

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	39.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	237	-	-	586	-
HCM Lane V/C Ratio	0.578	-	-	0.117	-
HCM Control Delay (s)	39.1	-	-	12	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	3.3	-	-	0.4	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	33	1114	29	0	1292
Future Vol, veh/h	0	33	1114	29	0	1292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	36	1211	32	0	1404

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	622	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	430	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	430	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	430
HCM Lane V/C Ratio	-	-	0.083
HCM Control Delay (s)	-	-	14.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
 12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	4.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↗	
Traffic Vol, veh/h	1124	68	77	1044	79	74
Future Vol, veh/h	1124	68	77	1044	79	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1222	74	84	1135	86	80

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1296	0	1995
Stage 1	-	-	-	-	1259
Stage 2	-	-	-	-	736
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	531	-	~ 53
Stage 1	-	-	-	-	231
Stage 2	-	-	-	-	435
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	531	-	~ 45
Mov Cap-2 Maneuver	-	-	-	-	149
Stage 1	-	-	-	-	231
Stage 2	-	-	-	-	366

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	61.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	216	-	-	531	-
HCM Lane V/C Ratio	0.77	-	-	0.158	-
HCM Control Delay (s)	61.8	-	-	13	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	5.4	-	-	0.6	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	27	1423	24	0	1216
Future Vol, veh/h	0	27	1423	24	0	1216
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	0	29	1547	26	0	1322

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	787	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	334	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	334	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	334
HCM Lane V/C Ratio	-	-	0.088
HCM Control Delay (s)	-	-	16.8
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
 12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1075	55	63	1182	65	61
Future Vol, veh/h	1075	55	63	1182	65	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1168	60	68	1285	71	66

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1228	0	1977
Stage 1	-	-	-	-	1198
Stage 2	-	-	-	-	779
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	563	-	~ 54
Stage 1	-	-	-	-	249
Stage 2	-	-	-	-	413
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	563	-	~ 47
Mov Cap-2 Maneuver	-	-	-	-	155
Stage 1	-	-	-	-	249
Stage 2	-	-	-	-	363

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	43.1
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	225	-	-	563	-
HCM Lane V/C Ratio	0.609	-	-	0.122	-
HCM Control Delay (s)	43.1	-	-	12.3	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	3.5	-	-	0.4	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	33	1158	29	0	1342
Future Vol, veh/h	0	33	1158	29	0	1342
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	36	1259	32	0	1459

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	646	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	414	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	414	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	414
HCM Lane V/C Ratio	-	-	0.087
HCM Control Delay (s)	-	-	14.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
 12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	4.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↗	
Traffic Vol, veh/h	1169	68	77	1086	79	74
Future Vol, veh/h	1169	68	77	1086	79	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1271	74	84	1180	86	80

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1345	0	2066
Stage 1	-	-	-	-	1308
Stage 2	-	-	-	-	758
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	508	-	~ 47
Stage 1	-	-	-	-	217
Stage 2	-	-	-	-	423
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	508	-	~ 39
Mov Cap-2 Maneuver	-	-	-	-	139
Stage 1	-	-	-	-	217
Stage 2	-	-	-	-	353

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	72.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	203	-	-	508	-
HCM Lane V/C Ratio	0.819	-	-	0.165	-
HCM Control Delay (s)	72.6	-	-	13.5	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	5.9	-	-	0.6	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	27	1557	24	0	1336
Future Vol, veh/h	0	27	1557	24	0	1336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	5	2	2	5
Mvmt Flow	0	29	1692	26	0	1452

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	859	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	300	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	300	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	300
HCM Lane V/C Ratio	-	-	0.098
HCM Control Delay (s)	-	-	18.3
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
 12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	3.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1284	55	63	1409	65	61
Future Vol, veh/h	1284	55	63	1409	65	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1396	60	68	1532	71	66

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1456	0	2328
Stage 1	-	-	-	-	1426
Stage 2	-	-	-	-	902
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	461	-	~ 31
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	356
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	461	-	~ 26
Mov Cap-2 Maneuver	-	-	-	-	117
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	303

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	75.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	174	-	-	461	-
HCM Lane V/C Ratio	0.787	-	-	0.149	-
HCM Control Delay (s)	75.9	-	-	14.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	5.2	-	-	0.5	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 11: Sanderson Avenue & Project Access

09/18/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	33	1296	29	0	1490
Future Vol, veh/h	0	33	1296	29	0	1490
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	2	2	4
Mvmt Flow	0	36	1409	32	0	1620

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	721	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	370	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	370	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	370
HCM Lane V/C Ratio	-	-	0.097
HCM Control Delay (s)	-	-	15.8
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.3

HCM 6th TWSC
 12: Project Access & Stetson Avenue

09/18/2020

Intersection						
Int Delay, s/veh	9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↗	
Traffic Vol, veh/h	1431	68	77	1331	79	74
Future Vol, veh/h	1431	68	77	1331	79	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	1555	74	84	1447	86	80

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1629	0	2484
Stage 1	-	-	-	-	1592
Stage 2	-	-	-	-	892
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	395	-	~ 24
Stage 1	-	-	-	-	152
Stage 2	-	-	-	-	361
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	395	-	~ 19
Mov Cap-2 Maneuver	-	-	-	-	98
Stage 1	-	-	-	-	152
Stage 2	-	-	-	-	284

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	171.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	148	-	-	395	-
HCM Lane V/C Ratio	1.124	-	-	0.212	-
HCM Control Delay (s)	171.5	-	-	16.5	-
HCM Lane LOS	F	-	-	C	-
HCM 95th %tile Q(veh)	9.1	-	-	0.8	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection: 3: Sanderson Avenue & Stetson Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	225	565	553	158	228	223	87	147	161	96	235	472
Average Queue (ft)	178	319	305	154	195	177	68	116	121	85	146	298
95th Queue (ft)	280	547	505	162	226	212	88	143	155	96	280	448
Link Distance (ft)		1727	1727		158	158		87	87			1048
Upstream Blk Time (%)				48	65	38	13	63	49	7		
Queuing Penalty (veh)				0	480	279	0	450	353	0		
Storage Bay Dist (ft)	200			100			200			180	210	
Storage Blk Time (%)	4	39		70	19		13	63	49	7	0	26
Queuing Penalty (veh)	11	57		282	92		45	74	346	27	0	28

Intersection: 3: Sanderson Avenue & Stetson Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	488
Average Queue (ft)	330
95th Queue (ft)	470
Link Distance (ft)	1048
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Sanderson Avenue & Stetson Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	225	1095	1056	158	234	192	84	143	146	86	235	954
Average Queue (ft)	223	871	832	155	204	164	65	111	113	81	221	695
95th Queue (ft)	239	1203	1182	162	231	205	94	138	142	100	273	1069
Link Distance (ft)		1727	1727		158	158		85	85			1048
Upstream Blk Time (%)				43	69	38	11	69	58	7		3
Queuing Penalty (veh)				0	486	272	0	407	337	0		20
Storage Bay Dist (ft)	200			100			200			180	210	
Storage Blk Time (%)	43	52		70	28		11	69	58	7	35	39
Queuing Penalty (veh)	147	167		231	144		37	68	311	23	150	95

Intersection: 3: Sanderson Avenue & Stetson Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	953
Average Queue (ft)	710
95th Queue (ft)	1080
Link Distance (ft)	1048
Upstream Blk Time (%)	4
Queuing Penalty (veh)	24
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Appendix G

Mitigation Worksheets

HCM 6th Signalized Intersection Summary
 3: Sanderson Avenue & Stetson Avenue

09/24/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	503	77	503	802	139	117	735	703	106	739	162
Future Volume (veh/h)	141	503	77	503	802	139	117	735	703	106	739	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	160	572	88	572	911	158	133	835	799	120	840	184
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	213	672	103	659	1050	182	182	1361	893	171	1096	240
Arrive On Green	0.06	0.22	0.22	0.19	0.35	0.35	0.05	0.39	0.39	0.05	0.39	0.39
Sat Flow, veh/h	3401	3014	462	3401	2964	514	3401	3497	1518	3401	2839	622
Grp Volume(v), veh/h	160	331	329	572	537	532	133	835	799	120	517	507
Grp Sat Flow(s),veh/h/ln	1700	1749	1728	1700	1749	1729	1700	1749	1518	1700	1749	1712
Q Serve(g_s), s	5.8	22.7	22.9	20.4	35.9	35.9	4.8	24.0	48.7	4.3	32.3	32.3
Cycle Q Clear(g_c), s	5.8	22.7	22.9	20.4	35.9	35.9	4.8	24.0	48.7	4.3	32.3	32.3
Prop In Lane	1.00		0.27	1.00		0.30	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	213	390	385	659	619	612	182	1361	893	171	675	661
V/C Ratio(X)	0.75	0.85	0.85	0.87	0.87	0.87	0.73	0.61	0.89	0.70	0.77	0.77
Avail Cap(c_a), veh/h	264	398	393	1046	801	792	182	1361	893	204	675	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	46.6	46.7	48.9	37.7	37.7	58.3	30.7	22.9	58.5	33.5	33.5
Incr Delay (d2), s/veh	9.0	15.5	16.3	4.8	8.1	8.2	13.9	2.1	13.3	8.3	8.1	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	11.2	11.2	8.9	16.1	15.9	2.4	10.1	21.7	2.0	14.6	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	62.1	63.0	53.7	45.8	45.9	72.2	32.7	36.3	66.9	41.7	41.8
LnGrp LOS	E	E	E	D	D	D	E	C	D	E	D	D
Approach Vol, veh/h		820			1641			1767			1144	
Approach Delay, s/veh		63.4			48.6			37.3			44.4	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	53.2	28.8	32.4	11.2	52.8	12.3	48.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	47.5	38.5	28.5	6.7	48.3	9.7	57.3				
Max Q Clear Time (g_c+I1), s	6.3	50.7	22.4	24.9	6.8	34.3	7.8	37.9				
Green Ext Time (p_c), s	0.0	0.0	1.9	1.3	0.0	5.3	0.1	6.4				
Intersection Summary												
HCM 6th Ctrl Delay			46.2									
HCM 6th LOS			D									
Notes												
User approved ignoring U-Turning movement.												

HCM 6th Signalized Intersection Summary

3: Sanderson Avenue & Stetson Avenue

09/24/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	691	104	505	665	211	97	659	541	241	863	203
Future Volume (veh/h)	320	691	104	505	665	211	97	659	541	241	863	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	333	720	108	526	693	220	101	686	564	251	899	211
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	387	774	116	582	809	257	147	1196	787	307	1088	255
Arrive On Green	0.11	0.26	0.26	0.17	0.31	0.31	0.04	0.34	0.34	0.09	0.39	0.39
Sat Flow, veh/h	3401	3031	454	3401	2588	822	3401	3497	1521	3401	2797	656
Grp Volume(v), veh/h	333	415	413	526	468	445	101	686	564	251	562	548
Grp Sat Flow(s),veh/h/ln	1700	1749	1737	1700	1749	1661	1700	1749	1521	1700	1749	1704
Q Serve(g_s), s	12.2	29.5	29.6	19.3	32.0	32.0	3.7	20.4	36.5	9.2	36.8	36.9
Cycle Q Clear(g_c), s	12.2	29.5	29.6	19.3	32.0	32.0	3.7	20.4	36.5	9.2	36.8	36.9
Prop In Lane	1.00		0.26	1.00		0.49	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	387	446	443	582	546	519	147	1196	787	307	680	663
V/C Ratio(X)	0.86	0.93	0.93	0.90	0.86	0.86	0.69	0.57	0.72	0.82	0.83	0.83
Avail Cap(c_a), veh/h	436	460	457	628	559	531	147	1196	787	385	680	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	46.3	46.3	51.7	41.1	41.1	60.0	34.3	24.0	56.9	35.0	35.0
Incr Delay (d2), s/veh	14.6	25.2	25.6	15.8	12.3	12.9	12.6	2.0	5.5	10.7	11.0	11.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	15.4	15.4	9.3	15.1	14.5	1.8	8.7	13.4	4.3	17.0	16.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	71.5	71.9	67.5	53.4	54.0	72.6	36.3	29.5	67.5	46.0	46.4
LnGrp LOS	E	E	E	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		1161			1439			1351			1361	
Approach Delay, s/veh		71.2			58.7			36.2			50.1	
Approach LOS		E			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	48.0	26.3	37.0	10.0	54.0	19.0	44.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.4	40.6	23.5	33.5	5.5	49.5	16.3	40.7				
Max Q Clear Time (g_c+I1), s	11.2	38.5	21.3	31.6	5.7	38.9	14.2	34.0				
Green Ext Time (p_c), s	0.2	1.3	0.5	0.9	0.0	4.9	0.2	2.9				

Intersection Summary

HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

Appendix H

Trip Generation for Project Alternatives

Table A
Alternative Trip Generation

Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Gasoline/Service Station w Convenience Market (atleast 3000 sf and atleast 10 VFS)	945	per VFP	205.36	6.36	6.11	12.47	7.13	6.86	13.99
Car Wash (self serve)	²	per Wash Stall	100	50%	50%	4%	50%	50%	8%
Coffee Shop with Drive-through	938	per TSF	2000.00	168.52	168.52	337.04	41.67	41.67	83.33
Medical Dental Office	720	per TSF	34.80	2.17	0.61	2.78	0.97	2.49	3.46
Trip Generation									
Gas Station with Convenience Market	945	12 VFP	2,464	76	73	150	86	82	168
		Pass-by Reduction ³	-1,528	-47	-45	-93	-48	-46	-94
Car Wash (self serve)	²	20.00 Wash Stall	2,000	40	40	80	80	80	160
Coffee Shop with Drive-through	938	0.887 TSF	1,774	149	149	299	37	37	74
		Pass-by Reduction ⁴	-1,579	-133	-133	-266	-33	-33	-66
Medical	720	3.00 TSF	104	7	2	9	3	7	10
		Subtotal without Pass-by Reduction	6,343	272	265	538	205	207	412
		Subtotal with Pass-by Reduction	3,236	92	86	178	125	128	252
		Internal Capture ⁵	-624	-27	-26	-53	-20	-20	-40
		Total Trip Generation (with Internal Capture)	5,719	246	238	485	185	187	372
		Total Trip Generation (with Pass-by Reduction and Internal Capture)	2,612	65	60	125	104	108	212

Notes:

Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017

Trip rates from SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

Pass-by trip rates derived from the average of pass-by trip percentages provided for all Gasoline/Service Station with Convenience Market (945), from the ITE Trip Generation Handbook, 3rd Edition - Table E.37, Pass-by and Non-Pass-By Weekday, AM Peak Period (62%) and E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (56%) Trips (Weekday, PM Peak Hour), ITE 945 -

Gasoline/Service Station with Convenience Market

Pass-by trip rates derived from the average of pass-by trip percentages provided for Coffee/Donut Shop with Drive-through window and no indoor seating (938), from the ITE Trip Generation

Handbook, 3rd Edition - Table E.33, Pass-by and Non-Pass-By Weekday, Weekday All Time Periods (89%) Trips

10% Internal Capture assumed for the site

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project (Net Trips)	3,038	81	79	160	121	117	238
Alternative Project (Net Trips)	2,612	65	60	125	104	108	212
Difference (Proposed-Alternative)	426	16	19	35	17	9	26

Table B

Trip Generation

Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Gasoline/Service Station w Convenience Market (atleast 3000 sf and atleast 10 VFS)		per VFP	205.36	6.36	6.11	12.47	7.13	6.86	13.99
Car Wash (self serve)	²	per Wash Stall	100	50%	50%	4%	50%	50%	8%
Fast Food Restaurants with Drive-through	934	per TSF	470.95	20.50	19.69	40.19	16.99	15.68	32.67
Trip Generation									
Gas Station with Convenience Market	945	12 VFP	2,464	76	73	150	86	82	168
		Pass-by Reduction ³	-1,528	-47	-45	-93	-48	-46	-94
Car Wash (self serve)	²	20.00 Wash Stall	2,000	40	40	80	80	80	160
Fast Food Restaurants with Drive-through	934	2.84 TSF	1,337	58	56	114	48	45	93
		Pass-by Reduction ⁴	-655	-29	-27	-56	-24	-22	-46
		Subtotal without Pass-by Reduction	5,802	175	169	344	214	207	421
		Subtotal with Pass-by Reduction	3,619	99	96	195	142	138	280
		Internal Capture ⁵	-580	-17	-17	-34	-21	-21	-42
		Total Trip Generation (with Internal Capture)	5,222	157	152	309	193	186	379
		Total Trip Generation (with Pass-by Reduction and Internal Capture)	3,038	81	79	160	121	117	238

Notes:

Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017

Trip rates from SANDAG's Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

Pass-by trip rates derived from the average of pass-by trip percentages provided for all Gasoline/Service Station with Convenience Market (945), from the ITE Trip Generation Handbook, 3rd Edition - Table E.37, Pass-by and Non-Pass-By Weekday, AM Peak Period (62%) and E.38 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (56%) Trips (Weekday, PM Peak Hour), ITE 945 - Gasoline/Service Station with Convenience Market

Pass-by trip rates derived from the average of pass-by trip percentages provided for all fast-Food Restaurant with Drive-Through Window (934), from the ITE Trip Generation Handbook, 3rd Edition - Table E.31, Pass-by and Non-Pass-By Weekday, AM Peak Period (49%) and E.32 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period (50%) Trips (Weekday, PM Peak Hour), ITE 934 - Fast-Food Restaurant with Drive-Through Window

10% Internal Capture assumed for the site

Alternative Trip Generation

Land Use	ITE ¹ Code	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
General Light Industrial	110	per TSF	4.96	0.62	0.08	0.70	0.08	0.55	0.63
Trip Generation									
Industrial	110	49.01 TSF	243	30	4	34	4	27	31

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Project (Net Trips)	3,038	81	79	160	121	117	238
Alternative Project (Industrial)	243	30	4	34	4	27	31
Difference (Proposed-Alternative)	2,795	51	75	126	117	90	207