APPENDIX G

Traffic Impact Analysis

TRAFFIC IMPACT ANALYSIS

FOR

THE CAMPUS 257 NEQSP
Dixon, CA

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5500-01

0 The Campus NEQSP

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Dixon, CA

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THE CAMPUS 257 NEQSP
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EXECUTIVE SUMMARY

- **Project Description.** The project is located in a portion of the Northeast Quadrant Specific Plan area of Dixon. The project is bounded by Pedrick Road to the east, industrial designated land to the north and south and regional commercial and industrial and to the west. The project will construct a portion of a new roadway, Professional Drive which will connect Vaughn Road in the south to Pedrick Road northeast of the project. Professional Drive will be constructed between the project and the adjacent lands to the north and west. A new roadway, Commercial Drive, will be constructed between Professional Drive and Pedrick Drive on the south edge of the Campus 257 site. Commercial Drive will be constructed to eliminate an existing railroad crossing near Vaughn Road and will maintain an east-west connection between First Street and Pedrick Road. The site will consist of two types of residential uses, 813 single family homes and 225 multifamily units, a 619,685 square foot 'Tech Campus' and 27,120 square feet of retail uses.

- **Existing Setting.** As part of the Dixon Streets Master Plan prepared in October 2021 by DKS Associates (DKS) traffic counts were conducted at various intersections throughout the City. A new traffic count was conducted at the N. First Street / Dorset Drive intersection and provided to the City and DKS. DKS used this data and approved / pending project data to develop 2025 and 2040 baseline conditions for the City's Travel Demand Model (TDM). Existing (2023) conditions were developed through interpolation of the baseline 2018 model and the 2025 model results. This accounts for the projected Vaughn Road realignment anticipated by 2025 which will realign Vaughn Road north to a new tee intersection north of the UPRR railroad crossing.

  All intersections operate at acceptable levels of service.

  The queue in the northbound left turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection exceeds the available storage. Storage length for this movement is constrained as Pedrick Road is a two-lane roadway. The queue exceeds the available storage by three feet, which is likely unnoticeable during the peak hour.

- **2025 Conditions.** All intersections will operate at acceptable levels of service.

  The queue in the northbound left turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection will exceed the available storage. Storage length for this movement is constrained as Pedrick Road is a two-lane roadway. The queue exceeds the available storage by three feet, which is likely unnoticeable during the peak hour.

The queue in the eastbound right turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection will exceed the available storage by 20 feet. Additional right turning vehicles will queue in the shared through-left lane.

- **2025 Plus Project Conditions.** All intersections except the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection will operate within acceptable City of Dixon LOS thresholds. The following improvements are noted:

  - The project shall contribute its fair share to the cost of regional circulation improvements via the existing Citywide traffic impact mitigation (TIM) fee program.

  - Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS E conditions with the project. Installation of a traffic signal at the location will result in the intersection operating at LOS C conditions (27.5 spv). The project would be responsible for installing the signal and should pay their fair share of signalization as the intersection will operate unacceptably and continue to meet the peak hour warrant in the 2040 No Project scenario. The fair share contribution (22.6%) is based on the project traffic divided by the future traffic at the intersection.

    Queues will continue to be exceeded in the northbound left turn lane and eastbound right turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection. Additionally, queues will lengthen along the southbound approach to the intersection, lengthening to about 400 feet. With signalization the queues along each approach should allow clearing during the green phase.

- **2040 Conditions**. Two intersections will operate below the City LOS D threshold. These include the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection and the Pedrick Road / Professional Drive intersection, Both are projected to operate at LOS F conditions. The following recommendations are noted:

  - Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal, the addition of a shared 210-foot southbound through-right lane, extending the eastbound right turn lane to about 100 feet and the lengthening of the northbound left turn lane to about 300 feet will result in the intersection operating at LOS C conditions in the p.m. peak hour (23.6 spv); the added southbound lane would not reach the structure over I-80. After implementation of the identified improvements the queues in the northbound left turn lane and eastbound right turn lane can be contained in each turn lane while the southbound queues will be about 150 feet.

  - Pedrick Road / Professional Drive: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal will result in the intersection operating at LOS B conditions (14.5 spv). The queue along Professional Drive is projected to be about 548 feet with only a single lane approach. Signalization of the Professional Drive intersection and addition of an eastbound left turn lane will result in a queue of about 165 feet in the eastbound left turn lane.

- **2040 plus Project Conditions.** Three intersections will operate below the City LOS D threshold under 2040 plus Project conditions. These include the Pedrick Road / I-80 Westbound Ramps – Sievers Road intersection, Pedrick Road at I-80 Eastbound Ramps – Sparling Lane and the Pedrick Road at Professional Drive intersection. All are projected to operate at LOS E or F conditions. In addition, the westbound queues in the left and right turn lanes along Dorset Drive at N. First Street will exceed the available storage. The following improvements are noted:

  - Pedrick Road / I-80 Westbound Ramps – Sievers Road: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal at the location will result in the intersection operating at LOS C conditions (31.8 spv). The project would be responsible for installing the traffic signal. With signalization the westbound shared left-through lane queue will shorten to about 353 feet.

  - Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal, the addition of a shared 210-foot southbound through-right lane, the lengthening of the eastbound right turn lane to about 150 feet and the lengthening of the northbound left turn lane to about 300 feet will result in the intersection operating at LOS C conditions in the a.m. peak hour (21.0 spv) and p.m. peak hour (23.3 spv); the added southbound lane would not reach the structure over I-80. The project would be responsible for their fair share of the improvements. The fair share contribution is (22.6%) and was previously identified in the 2025 plus Project scenario. After implementation of the identified improvements the queues in the northbound left turn lane and eastbound right turn lane can be contained in each turn lane while the southbound queues will be about 205 feet.

  - Pedrick Road / Professional Drive: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal will result in the intersection operating at LOS B condition in the a.m. peak hour (12.7 spv) and LOS C condition in the p.m. peak hour (22.0 spv). The project would be responsible for their fair share of the improvements. The fair share contribution is (31.8%). After the improvements at this intersection are completed the eastbound left turn queue will be 70 feet in the a.m. peak hour and 340 feet in the p.m. peak hour. The left turn lane should be 350 feet.

  - N. First Street / Dorset Drive: Retiming of the N. 1st Street / Dorset Drive signal will allow queues in the westbound right and left turn lanes to be accommodated without blocking the adjacent through lanes.

Table i presents the mitigated intersections and resulting levels of service.

TABLE i
PEAK HOUR LEVELS OF SERVICE AFTER RECOMMENDATIONS AND IMPROVEMENTS

Location	2025 plus Project Peak Hour	2040 Peak Hour	2040 plus Project Peak Hour	
	PM	PM	AM	PM
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd				C / 31.8[4]
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	C / 27.5[1]	C / 23.6[2]	C / 21.0[5]	C / 23.2[5]
4. N. 1st St / Dorset Dr		---		C / 24.6[7]
6. Pedrick Rd / Professional Dr		B / 14.5[3]	B / 12.7[6]	C / 22.0[6]

Note –LOS results shown for worst case peak hour
[1]install traffic signal
[2] previously installed traffic signal; install 210 ft SB shared through-right lane, extend eastbound right turn lane 100 ft, lengthen NB left lane to 300 ft
[3] install traffic signal, install EB left turn lane (165 ft)
[4] install traffic signal
[5] previously installed traffic signal, SB shared through-right lane and NB left turn lane; lengthen EB right turn lane to 150 ft
[6] previously installed traffic signal; extend EB left turn lane to 350 ft
[7] retime signal

TRAFFIC IMPACT ANALYSIS FOR
THE CAMPUS 257 NEQSP
Dixon, CA

INTRODUCTION

Study Purpose and Objectives

This study evaluates the traffic impacts associated with the construction of The Campus 257 project located in the Northeast Quadrant Specific Plan area of Dixon. The project is located south of the I-80 / Pedrick Road interchange, between the proposed Professional Drive to the north and west, Vaughn Road to the south and Pedrick Road to the east (Figure 1). The project consists of a variety of uses including:

- 813 single family residences
- 225 high density residential living
- 47.42 acres Tech Park
- 2.00 acres commercial development

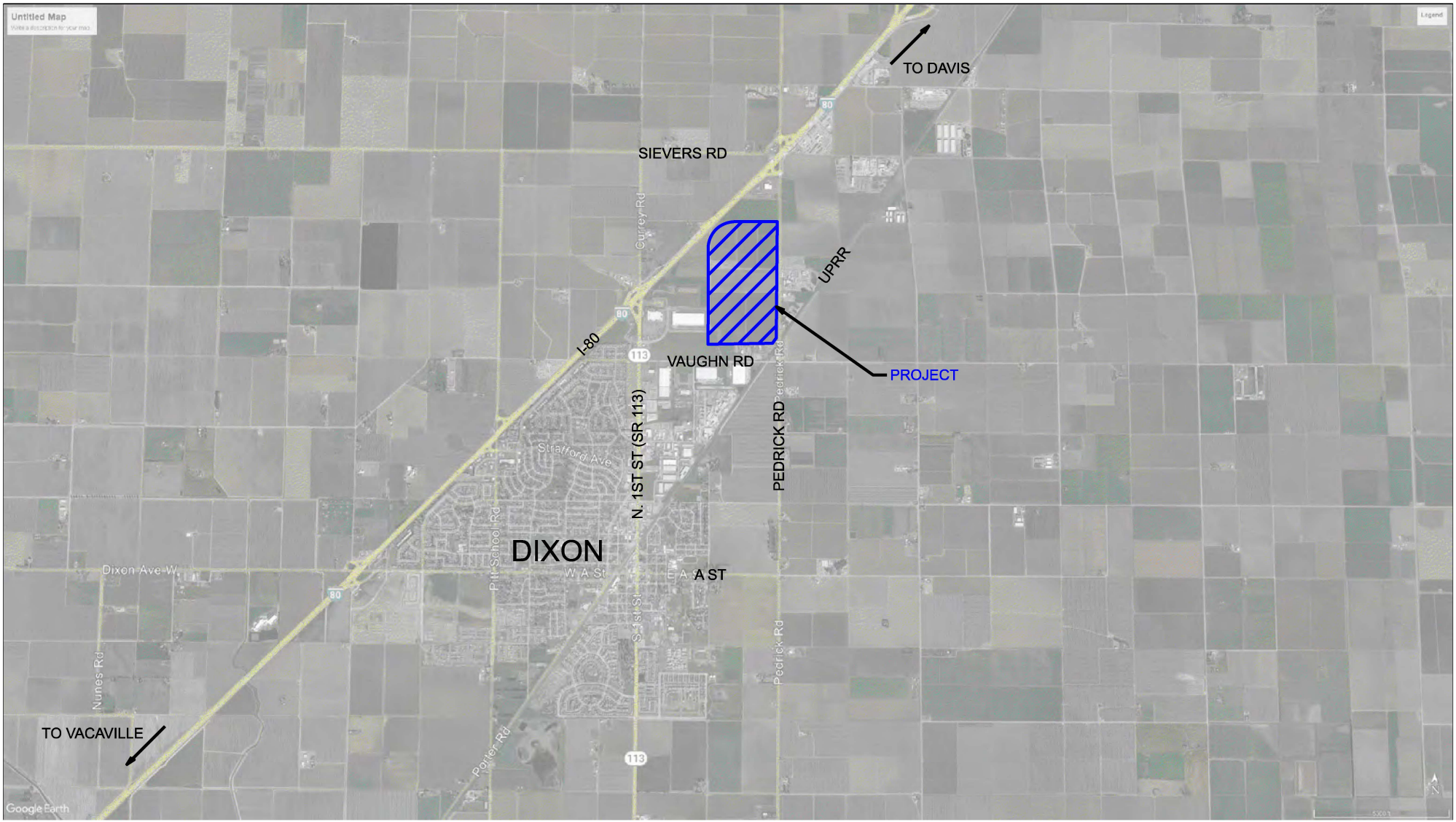
The scope of this traffic analysis has been identified through consideration of City of Dixon traffic study guidelines in consultation with the City of Dixon Public Works staff. This study addresses the following scenarios:

1. Existing Traffic Conditions
2. Opening Day (2025) Background Conditions
3. Opening Day Background (2025) Plus Project Conditions
4. Cumulative (2040) Traffic Conditions
5. Cumulative (2040) Plus Project Conditions

The objective of this study is to identify those roads and street intersections that may be impacted by development of this project based on City of Dixon significance criteria.

Project Description

The project is located in a portion of the Northeast Quadrant Specific Plan area of Dixon. The project is bounded by Pedrick Road to the east, industrial designated land to the north and south and regional commercial and industrial and to the west. The project will construct a portion of a new roadway, Professional Drive which will connect Vaughn Road in the south to Pedrick Road northeast of the project. Professional Drive will be constructed between the project and the adjacent lands to the north and west. A new roadway, Commercial Drive, will be constructed between Professional Drive and Pedrick Drive on the south edge of Campus 257. Commercial Drive will be constructed to eliminate an existing railroad crossing near Vaughn Road and will maintain an east-west connection between First Street and Pedrick Road. Figure 2 illustrates the master plan of the site with the proposed new exterior roadways and internal street network.



VICINITY MAP

FIGURE 1

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SITE PLAN

FIGURE 2

EXISTING SETTING

Study Area

This study addresses traffic conditions at five (5) existing intersections in Dixon. Three intersections are located along Pedrick Road while two are located along N. First Street (SR 113). The limits of the study area were based on discussion with City of Dixon staff. The quality of traffic flow is typically governed by the operation of major intersections and the daily volume of traffic along the roadways. The physical characteristics of the study intersections are described in the text which follows.

Study Area Intersections

The **Pedrick Road / I-80 Westbound Ramps – Sievers Road intersection** is an all-way stop controlled intersection. The southbound Pedrick Road approach includes a dedicated left turn lane and a shared through-right lane. The northbound Pedrick Road approach includes a dedicated left turn lane and a through lane. A short free right turn lane (≈50') into a loop ramp is present for motorists entering westbound I-80. The Westbound I-80 Off-Ramp includes a shared through-left lane and a short (50') stop controlled right turn lane. The eastbound Sievers Road approach includes a shared through-left lane and a free right turn lane with yield control. There are no bike lanes or sidewalks in the vicinity.

The **Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection** is an all-way stop controlled intersection. The southbound Pedrick Road approach includes a dedicated left turn lane, a through lane and a free right turn lane for motorists entering eastbound I-80. The free right turn lane is about 75' long. The northbound Pedrick Road approach includes a dedicated left turn lane and a shared through-right lane. The through lane is wide enough to allow a right turning vehicle to queue side-by-side. The Eastbound I-80 Off-Ramp includes a single shared lane for left, through and right movements. The lane is wide enough to allow a right turning vehicle to queue side-by-side. The westbound Sparling Lane approach includes a single shared lane for left, through and right turn movements. The lane is wide enough to allow a right turning vehicle to queue side-by-side. There are no sidewalks in the vicinity.

The **Pedrick Road / Vaughn Road intersection** is an all-way stop controlled intersection. All approaches are single shared left-through-right lanes. The Vaughn Road approaches include bike lanes. There are no bike lanes or sidewalks in the vicinity.

The **North 1st Street (State Route 113) / Dorset Drive intersection** is a traffic signal controlled intersection. The northbound approach includes a left turn lane, two through lanes and a right turn lane. A second left turn lane can be added with restriping if needed in the future. The southbound approach includes dual left turn lanes, two through lanes and a right turn lane. The eastbound and westbound approaches include dual left turn lanes, a through lane and a right turn lane. Bike lanes and crosswalks are present along all approaches.

The **North 1st Street (State Route 113) / Vaughn Road intersection** is a traffic signal controlled intersection. The northbound and southbound approaches include a left turn lane, a through lane and a shared through-right lane. The eastbound and westbound approaches include a left turn lane, a through lane and a right turn lane. Bike lanes and sidewalks are present along all approaches.

Analysis Criteria

Circulation systems are typically evaluated based on a comparison of the system's capacity and the projected level of traffic volumes. The operating conditions experienced by motorists are described in terms of LOS. LOS is a qualitative measure, reflecting a number of quantitative factors, including speed and travel time, traffic interruptions, freedom to maneuver, and driving comfort and convenience. LOS is designated on a scale from LOS A to LOS F, with LOS A representing the best performance and LOS F the worst. LOS is quantified using the average delay per vehicle approaching the intersection. Table 1 presents the ranges of vehicle delay associated with each LOS.

The most recent version (7th Edition) of the Highway Capacity Manual (HCM) was used to analyze intersection operations. *Synchro* software was used to calculate LOS conditions. The intersection Levels of Service presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole at signalized intersections and at locations controlled by all-way stops. The average delay experienced by motorists yielding the right of way is the basis for identification of Level of Service at locations controlled by side street stop signs. Applicable Level of Service thresholds based on average delay are shown in Table 1.

Signal Warrants. Traffic signal warrants are a series of standards which provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously uncontrolled major street, resulting in an undesirable increase in overall vehicle delay at the intersection. Signalization may also increase the occurrence of particular types of accidents. Therefore, if signals are installed where signal warrants are not met, the detriment of increased accidents and overall delay may be greater than the benefit in traffic operating conditions on the single worst movement at the intersection. Signal warrants, then, provide an industry-standard basis for identifying when the adverse effect on the worst movement is substantial enough to warrant signalization.

For the traffic analysis conducted for this traffic study, available data are limited to a.m. and p.m. peak hour volumes. Thus, unsignalized intersections were evaluated using the Peak Hour Warrant (Warrant Number 3) from the California Department of Transportation document *California Manual on Uniform Traffic Control Devices* (California Department of Transportation 2014).

Even if the Peak Hour Warrant is met, a more detailed signal warrant study is recommended before a signal is installed. The more detailed study should consider volumes during the highest eight hours of the day, volumes during the highest four hours of the day, pedestrian traffic, and accident histories.

Intersection Queuing Analysis. The quality of traffic flow can also be affected by queuing at signalized intersections. For this study, the lengths of peak period queues have been identified and compared to available storage in order to determine whether spillover from turn lanes can affect adjoining travel or extend through adjacent intersections. 95th percentile queue lengths have been calculated as a byproduct of the *Synchro* analysis. Those locations where the 95th percentile queue exceeds the available storage have also been noted.

TABLE 1
LEVEL OF SERVICE DEFINITIONS

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Sources: 7th Edition Highway Capacity Manual, Transportation Research Board (TRB).

Level of Service Impact Criteria

The City's Engineering Design Standards define the minimum acceptable operation level for intersections to be LOS D. The City uses the following thresholds to determine if a transportation impact is significant and requires improvements to address adverse impacts:

Signalized Intersections: A project is considered to have a significant effect if it would:

- Result in a signalized intersection operating at an acceptable LOS (LOS D or better) to deteriorate to an unacceptable LOS; or
- Increase the average delay by more than 2 seconds at a signalized intersection that is operating at an unacceptable LOS without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- Result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, or
- Result in an increase in average delay of more than 2 seconds, at a movement/approach that is operating at an unacceptable LOS without the project, or
- Result in an unsignalized intersection meeting a traffic signal warrant.

Freeway Ramps: A project is considered to have a significant effect if it would:

- Result in or ramp queues exceeding storage capacity; or result in a decrease in safety.

Bicycle and Pedestrian Facilities: A project is considered to have a significant effect if it would:

- Eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use;
- Interfere with the implementation of a planned bikeway as shown in the General Plan or • Fail to provide adequate access for bicyclists and pedestrians, resulting in unsafe conditions, including unsafe bicycle/pedestrian, bicycle/motor vehicle, or pedestrian/motor vehicle conflicts.

Safety: A project is considered to have a significant effect if it would:

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

Improvements to Address Significant Adverse Impacts

If a project is found to cause significant adverse transportation effects, a recommended improvement to address these should be identified. If a project causes a level of service deficiency, potential intersection improvements shall be proposed. At a minimum, the study shall consider improvements identified in the City of Dixon Capital Improvement Program (CIP). If an unsignalized study area intersection is proposed to be signalized, a signal warrant analysis based on the California Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) should be conducted.

If a project causes an LOS deficiency to a facility that is operating satisfactorily under the existing condition, the project is generally 100% responsible for implementing the improvement. If a project is found to cause a significant transportation effect at a facility that is already operating below the standard

under existing conditions, a fair share project contribution should be calculated based on the project's share of traffic in excess of the acceptable standard. Similarly, project fair share contributions should be calculated for any improvements needed under background or cumulative conditions without the project.

Public Transit

The City of Dixon provides the "Readi-Ride" Transit service, a public dial-a-ride service within the city limits. Service is scheduled on a reservation, space available basis. The system operates Monday, Tuesday, Thursday and Friday from 7 a.m. to 12:00 p.m. and from 1:00 p.m. to 4:00 p.m. and on Wednesday from 7 a.m. to 11 a.m. and 12:00 p.m. to 4:00 p.m.

Additional bus service is provided by Solano Transit SolTrans buses. Route B is the only route with stops in Dixon. The 'B' makes a single stop at the Dixon Park and Ride located along Pitt School Road. Southbound, there are 12 runs Monday through Friday with service at Dixon Park and Ride beginning at 6:05 a.m. and ending at 6:18 p.m. Northbound, there are 12 runs to the Dixon Park and Ride beginning at 6:49 a.m. and ending at 6:38 p.m. SolTrans provides Saturday service between Dixon and Walnut Creek. Six runs are provided in each direction with southbound service operating between 6:15 a.m. and 4:45 p.m. and northbound service operating between 9:33 a.m. and 8:03 p.m.

Pedestrian and Bicycle Facilities

Pedestrian facilities are present throughout Dixon, with sidewalk present along most City streets. Marked bicycle facilities are prevalent throughout the City, and the City encourages bicycle ridership. New developments are generally constructed to include bicycle lanes. In addition, the City has been installing bicycle lanes along existing roadways through a combination of lane narrowing and parking removal.

Bike lanes are present along North 1st Street, Dorset Drive and Vaughn Road. Sidewalk is generally present along developed frontage of North 1st Street, Dorset Drive and Vaughn Road. In the project vicinity there are no sidewalk facilities.

Existing Traffic Operating Conditions

Traffic Volume Counts. As part of the Dixon Streets Master Plan prepared in October 2021 by DKS Associates (DKS) traffic counts were conducted at various intersections throughout the City. A new traffic count was conducted at the N. First Street / Dorset Drive intersection and provided to the City and DKS. DKS used this data and approved / pending project data to develop 2025 and 2040 baseline conditions for the City's Travel Demand Model (TDM). Existing (2023) conditions were developed through interpolation of the baseline 2018 model and the 2025 model results. This accounts for the projected Vaughn Road realignment anticipated by 2025 which will realign Vaughn Road north to a new tee intersection north of the UPRR railroad crossing. 2023 intersection turning movements are presented in Figure 3.

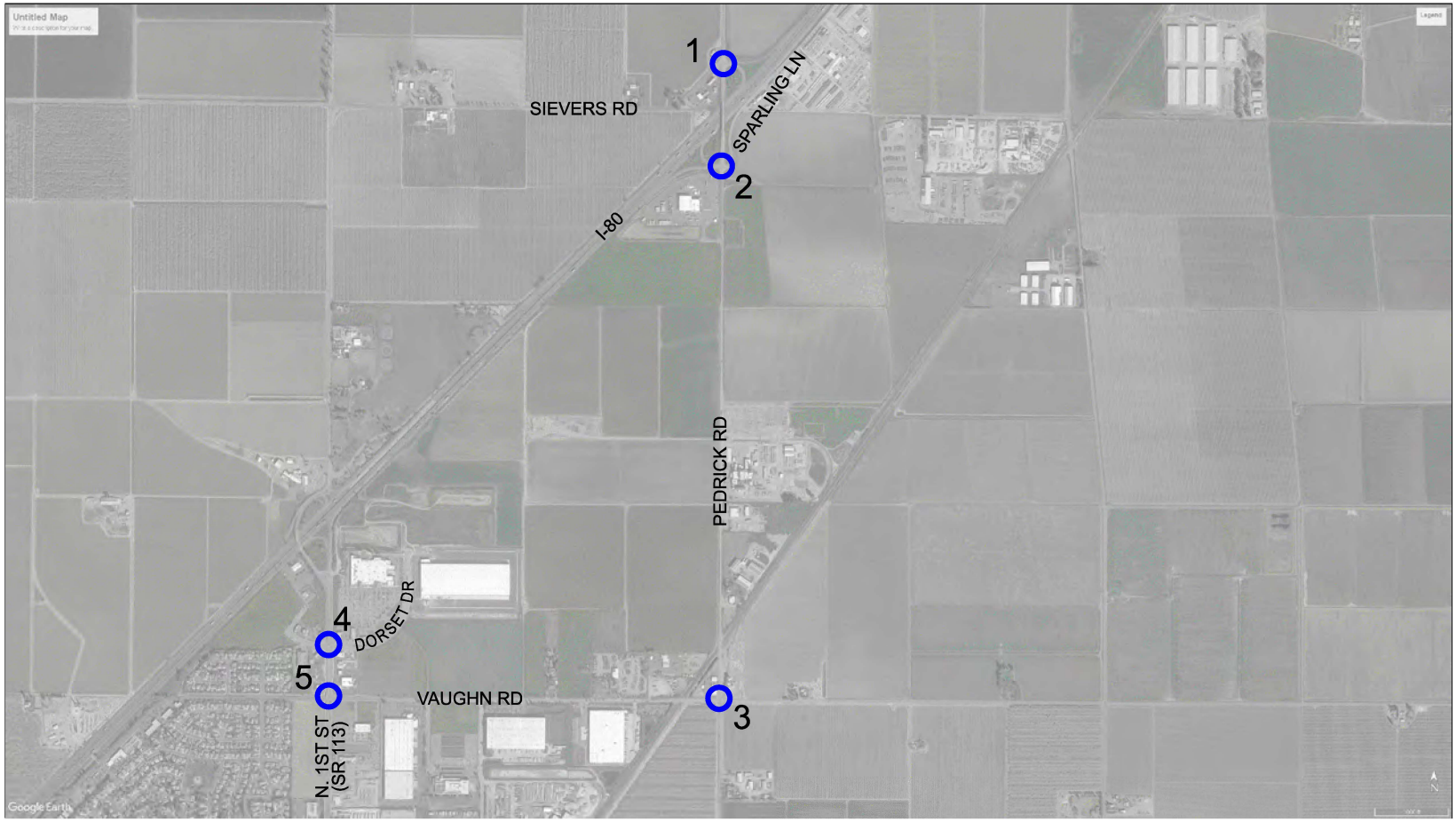
LEGEND

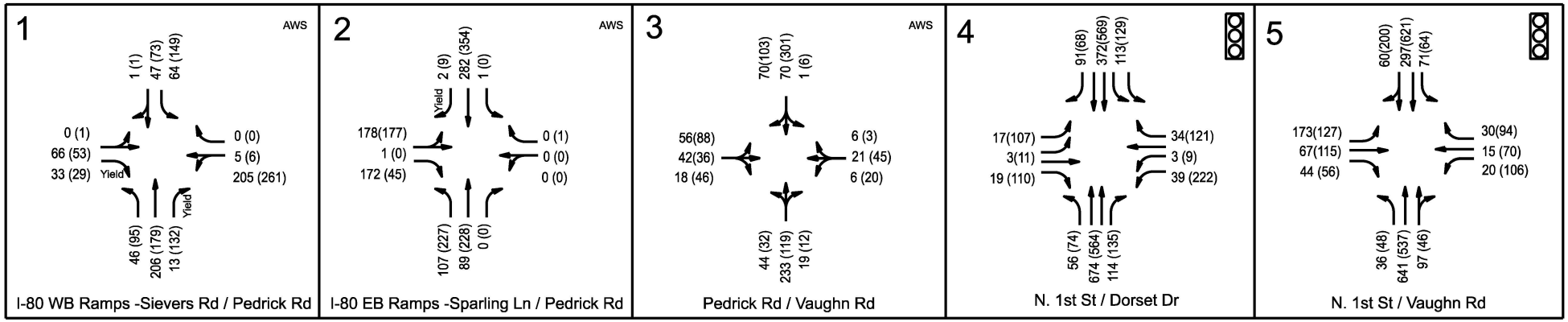
XX - AM PEAK HOUR
(XX) - PM PEAK HOUR

SIGNAL

R1-1 STOP SIGN

AWS ALL WAY STOP





EXISTING (2023) TRAFFIC VOLUMES

FIGURE 3

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Intersection Levels of Service. Table 2 summarizes current operating Levels of Service at the study area intersections. Traffic signal timing plans were obtained from Caltrans District 4 for the N. 1st Street / Dorset Drive and N. 1st Street / Vaughn Road intersections. All study intersections operate within the City's acceptable Levels of Service thresholds during the a.m. and p.m. peak hours.

Traffic Signal Warrants. The Pedrick Road / I-80 WB Ramps – Sievers Road intersection and the Pedrick Road / I-80 EB Ramps – Sparling Lane intersection meet the peak hour warrant in either the a.m. or p.m. peak hours.

TABLE 2
EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

Location	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warranted?
		LOS	Average Delay	LOS	Average Delay	
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd	AWS	B	12.1	C	15.2	Yes[1]
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	AWS	B	13.4	C	18.9	Yes[2]
3. Pedrick Rd / Vaughn Rd	AWS	A	9.7	B	12.6	No
4. N. First St / Dorset Dr	Signal	B	14.9	B	19.4	N/A
5. N/ First St / Vaughn Rd	Signal	C	22.5	C	23.6	N/A

AWS – all way stop
[1]meets rural warrant in p.m. peak hour
[2] meets rural warrant in a.m. and p.m. peak hour

Intersection Queues. Table 3 presents information regarding current peak period queuing in lanes at signalized study intersections and at unsignalized intersection with turn lanes. The available storage is presented with the 95th percentile queue length. On multiple lane approaches the longest queue is identified. The northbound left turn lane along Pedrick Road at the Eastbound I-80 ramps intersection exceeds the available storage.

TABLE 3 EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS			
Location	**Storage Length* (feet)**	**AM Peak Hour Queue (feet)**	**PM Peak Hour Queue (feet)**
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd			
NB left	120	<25	<25
NB	---	45	43
SB left	65	<25	40
SB	---	<25	<25
EB right	100	<25	<25
EB through-left	---	<25	<25
WB through-left	---	53	100
WB right	70	<25	<25
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln			
NB left	65	<25	68
NB	---	<25	60
SB left	100	<25	<25
SB	---	80	148
EB through-left	---	43	53
EB right	30	30	<25
WB through-left		<25	<25
WB right	30	<25	<25
4. N. 1st St / Dorset Dr			
NB left turn	200	28	43
NB right turn	320	40	63
SB left turn	235 (2)	28	35
SB right turn	140	30	28
EB left turn	155 (2)	<25	30
EB right turn	165	<25	63
WB left turn	195 (2)	<25	65
WB right turn	195	<25	68
5. N. 1st St / Vaughn Rd			
NB left turn	290	40	50
SB left turn	285	80	70
EB left turn	275	183	130
WB left turn	180[1]	<25	130
WB right turn	300	28	90
* includes portion of taper without blocking adjacent lane [1]Length of left turn lane prior to two-way-left-turn-lane			

Collision History. A review of the latest three-year collision history was completed at the study intersections and in the project vicinity. Data was obtained from the Statewide Integrated Traffic Records System (SWITRS). This system summarizes collision reports filed by the California Highway Patrol (CHP),

the Solano County Sheriff's department and the City of Dixon police department. SWITRS reports between 2020 and 2022 were reviewed. Over this five-year period, 24 crashes were reported. Table 4 presents the crash history along N. 1st Street between Dorset Drive and Vaughn Road and along Pedrick Road between Vaughn Road and Sievers Road – I-80 WB Ramps. The primary crash factor is speed which comprises 33% of the identified crashes. t

TABLE 4
2020-2022 COLLISION HISTORY

N. 1ST Street Dorset Dr Intersection to Vaughn Rd intersection				
Crash Type	**2020**	**2021**	**2022**	**Total**
Speed	1*		3† / 1*	5
Unsafe Starting / Backing			1†	1
Improper Turn	1†	1*	1†	2
Right-of-Way	1†		1†	3
Signal Violation		1†		1
Improper Passing	1†			1
			Total Crashes	13
† N. 1st St / Dorset Dr * N. 1st St / Vaughn Rd				
N. 1ST Street Dorset Dr Intersection to Vaughn Rd intersection				
Following too Closely	1 Δ			1
DUI	1‡			1
Speed	1◊ / 1‡	1◊		3
Unsafe Starting / Backing			1 Δ / 1‡	2
Improper Turn	1◊	1◊	1‡	3
Right-of-Way			1‡	1
			Total Crashes	11
Δ Pedrick Rd / Sparling Ln – I-80 EB Ramps ‡ Pedrick Rd / Sievers Rd – I-80 WB Ramps ◊ Pedrick Rd (midblock)				

2025 OPENING DAY SCENARIO

The analysis of the short range 2025 opening day traffic conditions is intended to consider the impact of this project within the context of short-term development. DKS identified the following projects in Table 5 to include in the TDM to develop the project Opening Day 2025 traffic conditions without the project. Adjustments to the model volumes were made to reflect project intersection and driveway locations.

TABLE 5
2025 BACKGROUND LAND USE PROJECTS*

Project Name	Description
Gateway Plaza Expansion	3 retail buildings proposed, 21ksf
Homestead Phase 2A	10 acres commercial + 391 DU
Homestead Phase 3	189 LD, 69 MDL
Homestead Phase 1	152 LD residential (TAZs 59-60)
Valley Glen Phases 3-1 and 3-2	Add 132 lots under construction
Parklane	Units 4 and 5 (Sutton) 121 units
Valley Glen Phase 4-1	Buildout (84 units)
Various Projects	Senior Care Facility, Hotel/Drive Thru, Popeye's, Fueling Station expansion
Lewis Development (Independence)	Residential + commercial
Buzz Oates Dixon Innovation Center	Industrial Park/Warehousing
*per DKS	

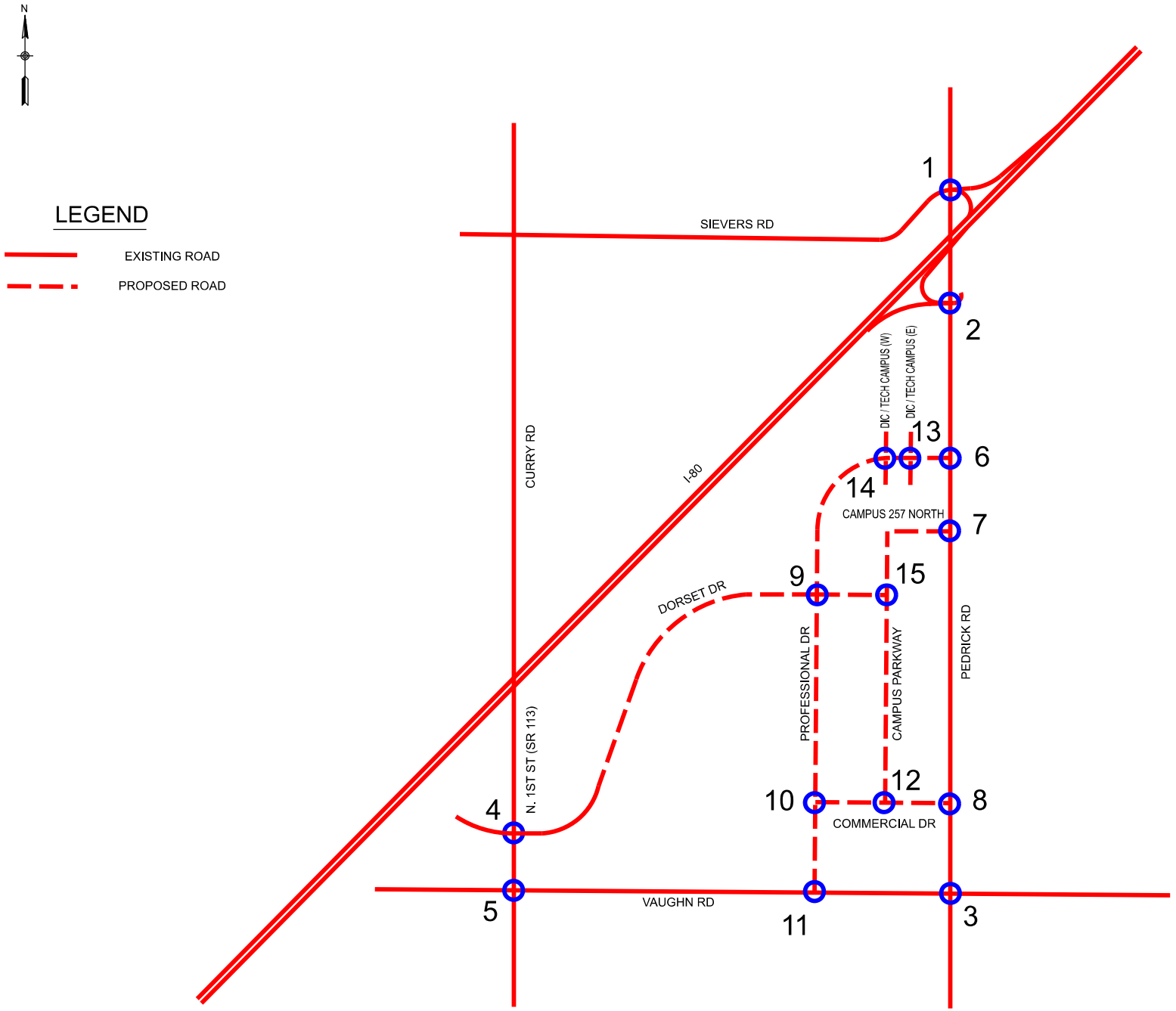
The following roadway improvements that would affect the study intersections were assumed completed by 2025 as a result of these projects:

- Widening of southbound Pedrick Road to two lanes along the Dixon Innovation Center DIC frontage;
- Construction of Professional Drive (2 lanes) along the DIC frontage.

Figure 4 presents the study intersections while Figure 5 presents the 2025 No Project traffic volumes at the study intersections.

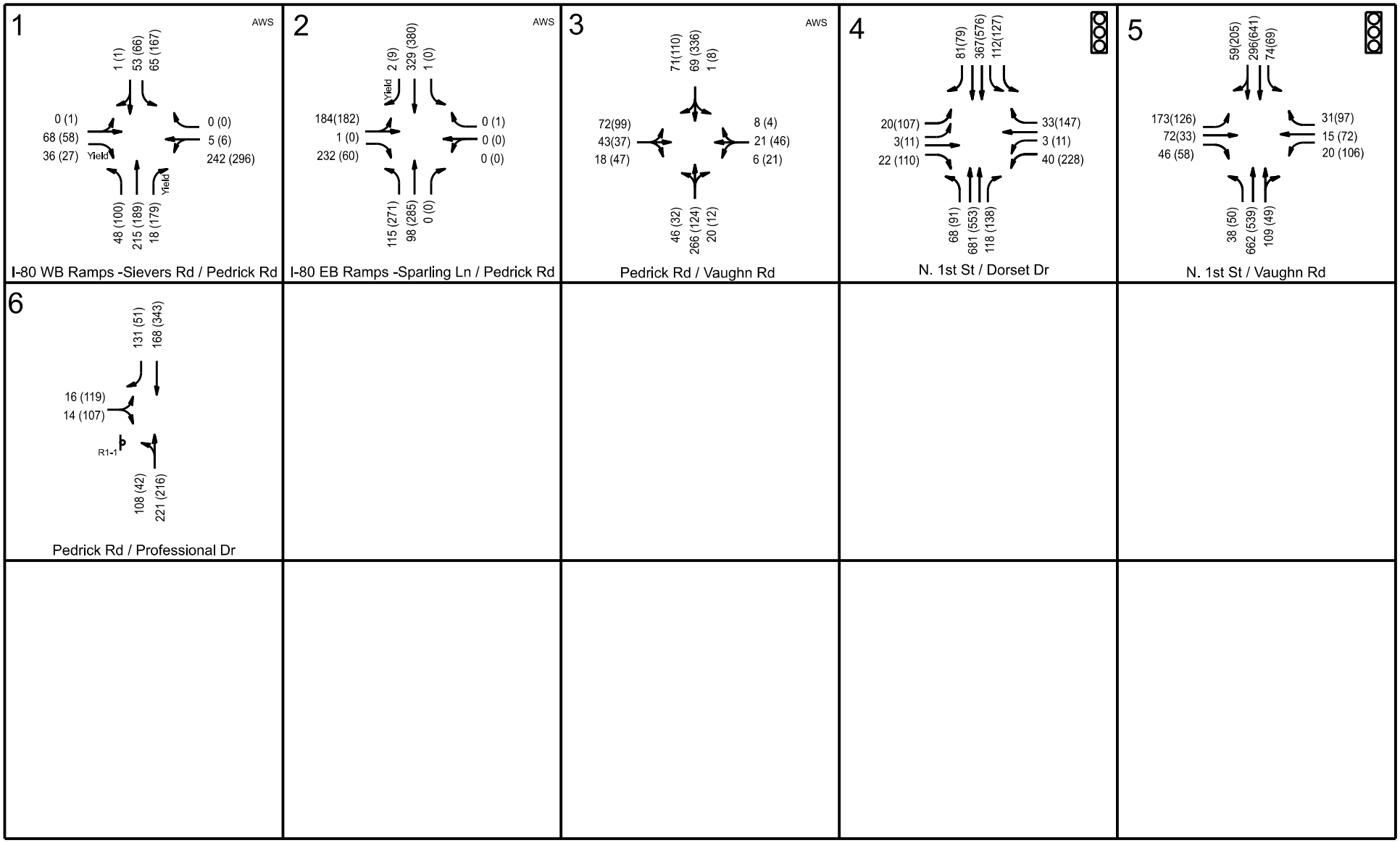
2025 Opening Day Operating Conditions

Intersection Levels of Service. Table 6 summarizes operating Levels of Service at the study area intersections. All study intersections operate within the City's acceptable Levels of Service thresholds during the a.m. and p.m. peak hours.



STUDY INTERSECTIONS

FIGURE 4



LEGEND

XX - AM PEAK HOUR

(XX) - PM PEAK HOUR

SIGNAL

R1-1 STOP SIGN

AWS ALL WAY STOP

2025 (OPENING DAY) TRAFFIC VOLUMES

FLECKER ASSOCIATES

R2/14/24

FIGURE 5

5500-01

Traffic Signal Warrants. The peak hour traffic signal warrant will be met at the Pedrick Road / I-80 Westbound Road – Sievers Road intersection, the Pedrick Road / I-80 Eastbound Road – Sparling Lane intersection, the Pedrick Road / Vaughn Road intersection and the Pedrick Road / Professional Drive intersection.

TABLE 6
2025 OPENING DAY PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

Location	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warranted?
		LOS	Average Delay	LOS	Average Delay	
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd	AWS	B	13.3	C	18.3	Yes[2]
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	AWS	C	16.1	D	25.1	Yes[3]
3. Pedrick Rd / Vaughn Rd	AWS	B	10.3	B	14.3	Yes[4]
4. N. First St / Dorset Dr	Signal	B	15.2	B	19.7	N/A
5. N/ First St / Vaughn Rd	Signal	C	22.7	C	23.2	N/A
6. Pedrick Rd / Professional Dr	EB Stop[1]	B	12.4	C	19.8	Yes[4]

AWS – all way stop
[1]LOS for worst approach shown
[2] meets rural warrant in a.m. peak hour
[3] meets rural warrant in a.m. and p.m. peak hours
[4] meets rural warrant in p.m. peak hour

Intersection Queues. Table 7 presents information regarding current peak period queuing in turn lanes at signalized study intersections and at unsignalized intersection. The available storage is presented with the 95th percentile queue length. On multiple lane approaches the longest queue is identified. All intersections, except the eastbound right turn lane and northbound left turn lane at the Pedrick Road / I-80 Eastbound Ramps-Sparling Lane have lane storage capacity that can accommodate peak period queues. The queues in both turn lanes exceed the available storage and vehicles will store within the adjacent through lanes.

TABLE 7 2025 OPENING DAY PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS			
Location	**Storage Length* (feet)**	**AM Peak Hour Queue (feet)**	**PM Peak Hour Queue (feet)**
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd			
NB left	120	<25	<25
NB	---	50	50
SB left	65	<25	50
SB	---	<25	<25
EB right	100	<25	<25
EB through-left	---	<25	<25
WB through-left	---	70	145
WB right	70	<25	<25
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln			
NB left	65	25	**103**
NB	---	<25	98
SB left	100	<25	<25
SB	---	120	208
EB through-left	---	48	60
EB right	30	**50**	<25
WB through-left		<25	<25
WB right	30	<25	<25
4. N. 1st St / Dorset Dr			
NB left turn	200	35	43
NB right turn	320	43	63
SB left turn	235 (2)	28	35
SB right turn	140	28	28
EB left turn	155 (2)	<25	30
EB right turn	165	<25	63
WB left turn	195 (2)	<25	65
WB right turn	195	<25	68
5. N. 1st St / Vaughn Rd			
NB left turn	290	43	43
SB left turn	285	85	35
EB left turn	275	183	30
WB left turn	180[1]	<25	65
WB right turn	300	28	68

* includes portion of taper without blocking adjacent lane
[1]Length of left turn lane prior to two-way-left-turn-lane
Highlighted values indicate queue length in excess of available storage

PROJECT CHARACTERISTICS

The development of this project will create origin and destination traffic. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- Trip Generation, the number of new trips generated by the project, and
- Trip Distribution and Assignment, the specific routes that the new traffic takes.

Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day to day operation of the businesses in the project.

The project includes the development of about 257 acres in the City's Northeast Quadrant Specific Plan. The project will consist of the following:

- 813 single family residences
- 225 high density residential living
- 47.42 acres Tech Park
- 2.00 acres commercial development

The Tech Park is assumed to have a Floor to Area Ratio (FAR) of 0.30 while the commercial development is assumed to have an FAR of 0.25.

This analysis considered trip generation rates derived from the Institute of Transportation Engineers (ITE) publication *"Trip Generation, 11th Edition"* for the various uses. Land Use (LU) Code 210, Single Family Residential, LU 220, Multifamily Residential, LU 822, Strip Retail and LU 760, Research and Development Center (R&D) were used to establish project trips. Table 8 presents the projected trip generation for the project which is expected to generate 17,526 daily trips, 1,361 a.m. peak hour trips and 1,665 p.m. peak hour trips.

Trips generated by retail commercial projects fit into two categories. Some trips will be made by patrons who would not otherwise be on the local street system and who go out of their way to reach the site. These are "new" trips. Other trips will be made by patrons who are already in the roadway network and stop by the site as part of a trip made for another purpose. These "pass-by" trips do not add traffic to the overall system. ITE research has suggested typical "pass-by" percentages for various retail land uses and has data for shopping centers, supermarkets, convenience markets and fast-food restaurants, all of which could be situated in the commercial site. However, as the exact uses are unknown, the pass-by rates for shopping centers was used.

After considering pass-by trips the net new traffic projected as a result of the project is expected to be 17,083 net primary daily trips, 1,345 net primary a.m. peak hour trips and 1,604 net primary p.m. peak hour trips.

The projected project trips were provided to DKS who used this data to update the TDM to create a 'Plus Project' condition. Trip distribution was accomplished within the model runs for 2025 and 2040 time periods. Phase 1 of Campus 257 will construct 495 housing units, and this was assumed to be completed for the 2025 Opening Day scenario. The full buildout of the project was accounted for in the 2040 scenario.

TABLE 8
TRIP GENERATION

Land Use	Unit Quantity	Size	Trips Per Unit						
				AM Peak Hour			PM Peak Hour		
			Daily	In	Out	Total	In	Out	Total
Single Family Residential (LU 210)	DU	813	9.43	26%	74%	0.70	63%	37%	0.94
Multifamily Residential (LU 220)	DU	225	6.74	24%	76%	0.40	63%	37%	0.51
Retail Shopping Center (LU 822)	KSF	27.12	54.45	60%	40%	2.36	50%	50%	6.59
R&D Center (LU 760)	KSF	619.68	11.08	82%	18%	1.03	16%	84%	0.98
Single Family Residential (LU 210)			**7,666**	148	421	**569**	482	283	**764**
Multifamily Residential (LU 220)			**1,517**	22	68	**90**	72	42	**115**
Retail Shopping Center (LU 822)			**1,477**	38	26	**64**	89	89	**179**
R&D Center (LU 760)			**6,866**	523	115	**638**	97	510	**607**
Sub-Total Trips			**17.526**	731	630	**1,361**	740	925	**1,665**
Pass-By Trips									
Retail – Shopping Center *(30% Daily, 26% AM, 34% PM)*[1]			(443)	(10)	(7)	(17)	(30)	(30)	(61)
Sub-Total Pass-By Trips			**(443)**	(10)	(7)	**(17)**	(30)	(30)	**(61)**
Net New Trips			**17,083**	**721**	**623**	**1,345**	**710**	**894**	**1,604**

DU – dwelling unit
KSF – thousand square feet
[1]daily pass-by is average of a.m. and p.m. rates (ITE Trip Generation Handbook, 3rd Ed)
Numbers may not equal due to rounding

PROJECT TRAFFIC IMPACTS

2025 Opening Day Plus Project Conditions

Traffic Volumes The impacts of developing the project uses on the project site have been identified by superimposing project traffic onto existing background conditions. Figure 6 displays the "2025 Opening Day Plus Project" traffic volumes at the study intersections in both a.m. and p.m. peak hours.

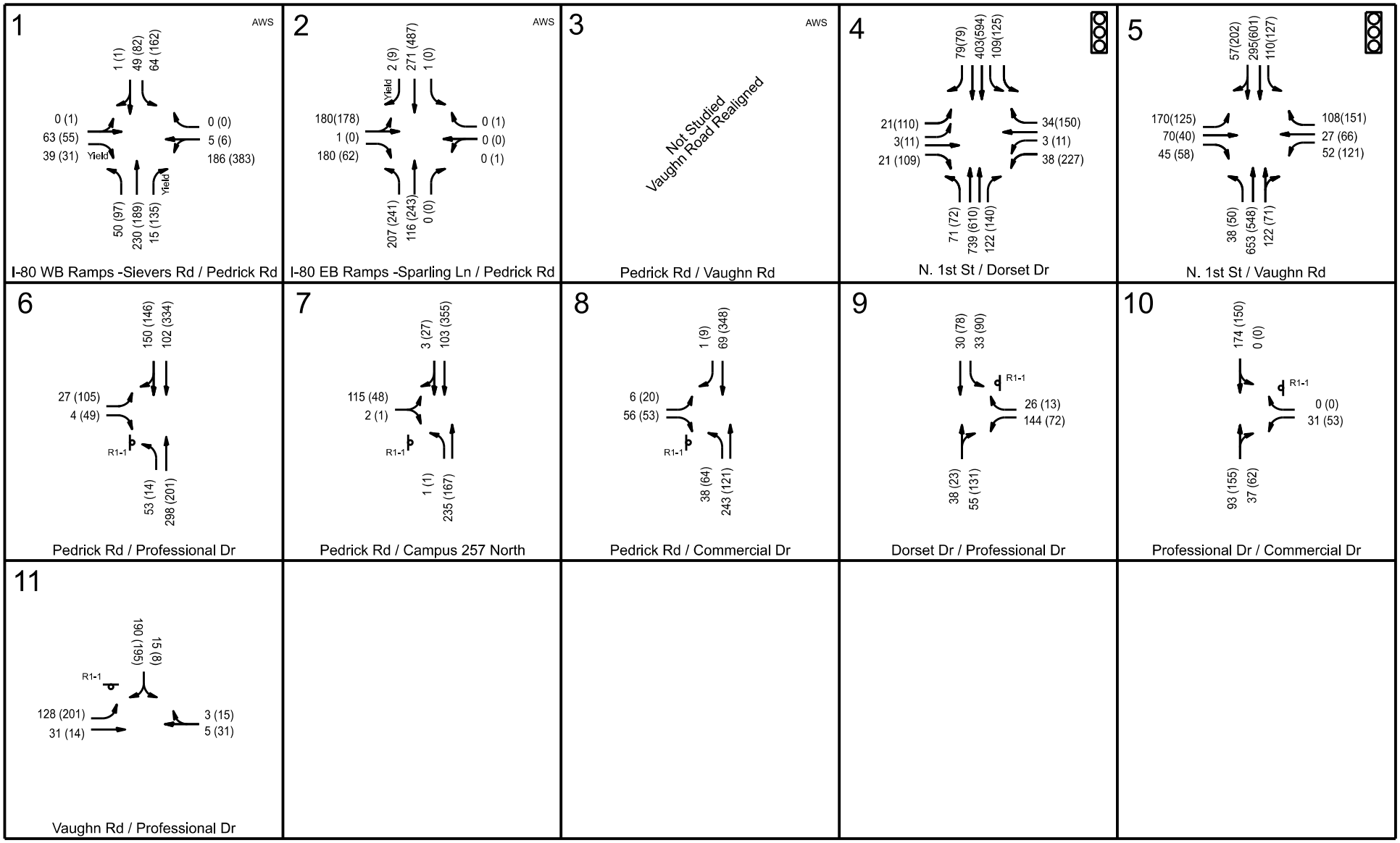
Circulation System Improvements. Figure 6 also presents the intersection geometry and traffic controls resulting from implementation of the project's planned improvements. The following improvements are assumed to be completed with the project:

- Widening of southbound Pedrick Road to two lanes along the Campus 257 frontage with one lane becoming a mandatory right turn lane at Commercial Drive;
- Construction of Professional Drive (2 lanes) along the Campus 257 frontage;
- Construction of Commercial Drive (2 lane collector roadway with left turn lanes) between Professional Drive and Pedrick Road; this roadway will serve as the realignment of Vaughn Road to the north of the UPRR railroad crossing along Pedrick Road.
- Installation of left turn lanes along northbound Pedrick Road and eastbound Vaughn Road

Intersection Levels of Service. Intersection Levels of Service were calculated and used as the basis for evaluating project impacts. Existing traffic signal timing plans were continued at signalized intersections. Table 9 displays the peak hour Levels of Service at each study intersection and compares existing Levels of Service with those accompanying the project. All intersections except the I-80 Eastbound Ramps – Sparling Lane / Pedrick Road intersection will continue to operate above the minimum City of Dixon LOS D standard. The I-80 Eastbound Ramps – Sparling Lane / Pedrick Road intersection will decline to LOS E (43.6 seconds per vehicle [spv]) during the p.m. peak hour.

Traffic Signal Warrants. 2025 Opening Day Plus Project traffic volumes at unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals may be needed. Three intersections along Pedrick Road will meet the peak hour signal warrant. These include the I-80 Westbound Ramps – Seivers Road intersection, the I-80 Eastbound Ramps – Sparling Lane intersection and the Professional Drive intersection.

Intersection Queues. Table 10 identifies peak period queues within turn lanes assuming the addition of project trips. Those 95th percentile queues with lengths exceeding the available storage have been highlighted. As previously noted, queues in the northbound left turn lane and eastbound right turn lane at the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection will exceed the available storage. These two locations will continue to exceed the available storage under 'plus Project' conditions. While the westbound left turn lane along Vaughn Road at N. 1st Street will exceed the available storage the left turn lane changes into a two-way-left-turn-lane (TWLTL) which allows vehicles to queue without blocking the through lane.



LEGEND

XX - AM PEAK HOUR

(XX) - PM PEAK HOUR

SIGNAL

R1-1 STOP SIGN

AWS ALL WAY STOP

2025 (OPENING DAY) PLUS PROJECT TRAFFIC VOLUMES

FIGURE 6

FLECKER ASSOCIATES

R2/14/24

5500-01

TABLE 9
PEAK HOUR INTERSECTION LEVELS OF SERVICE
2025 OPENING DAY PLUS PROJECT CONDITIONS

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warranted?
		2025		2025 Plus Project		2025		2025 Plus Project		
		LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd	AWS	B	13.3	B	12.1	C	18.3[3]	D	29.5[3]	Yes
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	AWS	C	16.1[4]	B	15.0	D	25.1[4]	E	43.6[4]	Yes
3. Pedrick Rd / Vaughn Rd	AWS	B	10.3	[2]		B	14.3	[2]		N/A
4. N. First St / Dorset Dr	Signal	B	15.2	B	15.2	B	19.7	B	19.6	N/A
5. N/ First St / Vaughn Rd	Signal	C	22.7	C	26.3	C	23.2	C	28.4	N/A
6. Pedrick Rd / Professional Dr	EB Stop[1]	B	12.4	B	13.8	C	19.8[5]	C	15.6[5]	Yes
7. Pedrick Rd / Campus 257 North	EB Stop[1]	---	---	B	12.3	---	---	B	13.8	No
8. Pedrick Rd / Commercial Dr	EB Stop[1]	---	---	B	11.4	---	---	B	11.8	No
9. Professional Dr / Dorset Dr	WB Stop[1]	---	---	B	10.4	---	---	B	11.6	No
10. Professional Dr / Commercial Dr	WB Stop[1]	---	---	B	10.6	---	---	B	11.2	No
11. Vaughn Rd / Professional Dr	SB Stop[1]	---	---	A	9.5	---	---	A	9.7	No

AWS – all way stop
[1] LOS for worst approach shown
[2] Intersection 3 not studied after Commercial Drive 'bypass' constructed
[3] meets rural warrant in p.m. peak hour
[4] meets rural warrant in a.m. and p.m. peak hour
[5] meets rural warrant in p.m. peak hour
Red indicated threshold exceeded

TABLE 10 2025 OPENING DAY PLUS PROJECT PEAK HOUR QUEUES					
Location	Storage Length* (feet)	AM Peak Hour Queue (feet)		PM Peak Hour Queue (feet)	
		2025	2025 plus Project	2025	2025 plus Project
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd					
NB left	120	<25	<25	<25	<25
NB	---	50	53	50	58
SB left	65	<25	<25	50	<25
SB	---	<25	<25	<25	53
EB right	100	<25	<25	<25	<25
EB through-left	---	<25	<25	<25	<25
WB through-left	---	70	45	145	275
WB right	70	<25	<25	<25	<25
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln					
NB left	65	25	58	**103**	**85**
NB	---	<25	<25	98	75
SB left	100	<25	<25	<25	<25
SB	---	120	85	208	398
EB through-left	---	48	48	60	60
EB right	30	**50**	**35**	<25	<25
WB through-left		<25	<25	<25	<25
WB right	30	<25	<25	<25	<25
4. N. 1st St / Dorset Dr					
NB left turn	200	35	38	43	43
NB right turn	320	43	45	63	65
SB left turn	235 (2)	28	28	35	35
SB right turn	140	28	28	28	33
EB left turn	155 (2)	<25	<25	30	33
EB right turn	165	<25	<25	63	63
WB left turn	195 (2)	<25	<25	65	70
WB right turn	195	<25	<25	68	88
5. N. 1st St / Vaughn Rd					
NB left turn	290	43	43	43	60
SB left turn	285	85	125	35	145
EB left turn	275	183	188	30	145
WB left turn	180[1]	<25	63	65	195[2]
WB right turn	300	28	118	68	165
6. Pedrick Rd / Professional Dr					
NB Left	150	---	<25	---	<25
7. Pedrick Rd / Campus 257 North					
NB Left	150	---	<25	---	<25

* includes portion of taper without blocking adjacent lane

[1]Length of left turn lane prior to TWLTL

[2] Queue extends into TWLTL

Highlighted values indicate queue length in excess of available storage

TABLE 10 2025 OPENING DAY PLUS PROJECT PEAK HOUR QUEUES (con't)					
	Storage Length* (feet)	AM Peak Hour Queue (feet)		PM Peak Hour Queue (feet)	
Location		2025	2025 plus Project	2025	2025 plus Project
8. Pedrick Rd / Commercial Dr					
NB Left	NB Left	NB Left	NB Left	NB Left	NB Left
EB Left	EB Left	EB Left	EB Left	EB Left	EB Left
EB Right	EB Right	EB Right	EB Right	EB Right	EB Right
9. Professional Dr / Dorset Dr					
WB Left	150	---	<25	---	<25
WB Right	---	---	<25	---	<25
10. Professional Dr / Commercial Dr					
WB Left	150	---	<25	---	<25
WB Right	---	---	<25	---	<25
11. Vaughn Rd / Professional Dr					
SB Right		---	<25	---	<25
* includes portion of taper without blocking adjacent lane					

CUMULATIVE IMPACTS (2040)

The analysis of the long range 2040 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2040.

Year 2040 Forecasts / Conditions

2040 Traffic Forecasts

Year 2040 traffic forecasts were developed by DKS who provide intersection turning movements for the study intersections. The Traffic Analysis Zones (TAZ) in the model reflect general areas of development, not necessarily individual projects thereby requiring manual adjustments to the model results. Traffic volumes at project access intersections and driveways were updated for project intersection and driveway locations.

Roadway Conditions

Roadways in 2040 are generally projected to remain with their current lane configurations along First Street but will change along Vaughn Road and Pedrick Road. The following changes to the roadway network are identified based on the City of Dixon General Plan, the Northeast Quadrant Specific Plan (NEQSP) and the City of Dixon model:

- Pedrick Road. In the 2021 General Plan Pedrick Road from I-80 south to Midway Road is identified as a four-lane facility. The NEQSP, originally adopted in 1995 and most recently corrected in 2009, notes that Pedrick Road will also be a four-lane facility. The NEQSP also notes that the roads will be constructed based on specific applications in the PUD review process or equivalent mechanism. The City's zoning map identifies Pedrick Road as the city limit, aside from an area along Sparling Lane. This would appear to negate development of a four-lane roadway as the City does not control the east side of the roadway. The City of Dixon model results also indicate the one lane facility for northbound traffic with a two-lane facility for southbound traffic as a result of the NEQSP development. The 2040 No Project condition assumes that Pedrick Road will have two lanes in the southbound direction except along the project frontage which is consistent with the NEQSP review process. The two lanes along the project frontage are assumed constructed with development of the project. Based on the 55 mph speed limit along Pedrick Road it was also assumed that northbound left turn lanes will be installed as part of any two-lane southbound Pedrick Road widening.

- Professional Drive. Professional Drive is projected to ultimately be a 4-lane facility. Based on the NEQSP it is assumed that under the "No Project" conditions Professional Drive will be a two-lane facility until the Campus 257 project is constructed along the east side of the roadway. Left turn lanes were also assumed to be constructed at intersections.

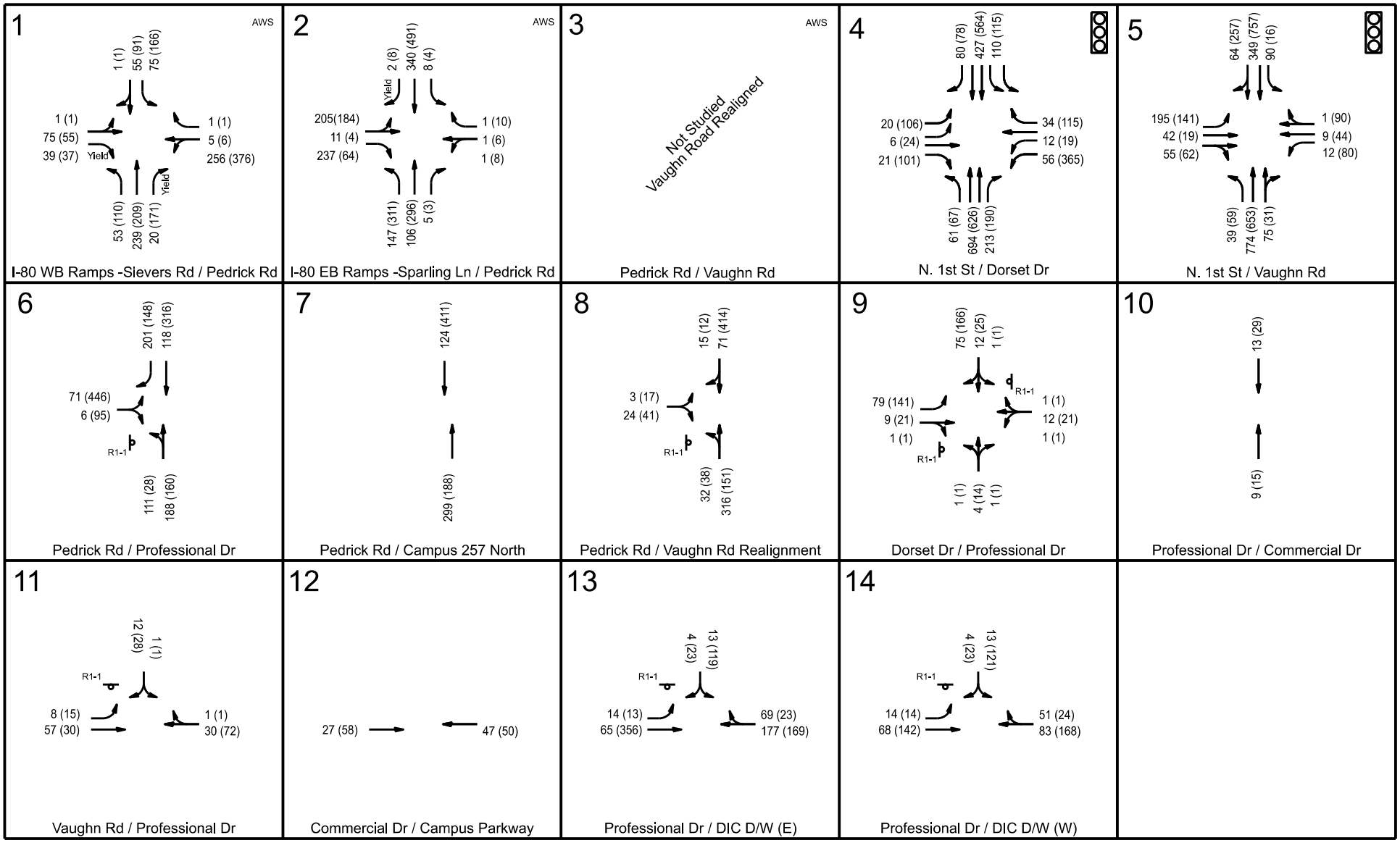
- Vaughn Road. Under the 2040 No Project scenario Vaughn Road is assumed to be realigned to Pedrick Road north of the UPRR crossing. Under the "Plus Project" scenario Commercial

Drive is constructed as part of the Campus 257 project in lieu of the Vaughn Road realignment. Vaughn Road assumed to be widened to 4 lanes to Professional Drive with it continuing as a two-lane road to its terminus west of the UPRR tracks.

- Dorset Drive. – Dorset Drive will be extended as a four-lane roadway from its existing terminus to Professional Drive. The intersection is assumed to be all-way stop controlled with left turn lanes on all approaches. East of Professional Drive it will be a two-lane roadway within the Campus 257 project.

- Two internal intersections were also evaluated. These include Commercial Drive at Campus Parkway and Campus Drive at Dorset Drive. The Commercial Drive / Campus Parkway intersection is assumed to have single lanes on all approaches with a left turn lane added along Commercial Drive. The Campus Drive / Dorset Drive intersection is assumed to be a one-lane roundabout.

Figure 7 presents the projected 2040 intersection turning movements and lane configurations.



LEGEND

XX - AM PEAK HOUR

(XX) - PM PEAK HOUR

SIGNAL

R1-1 STOP SIGN

AWS ALL WAY STOP

2040 TRAFFIC VOLUMES

FLECKER ASSOCIATES

R2/14/24

FIGURE 7

5500-01

2040 Intersection Levels of Service. The identified Year 2040 volumes were used to recalculate operating Levels of Service at the study intersections. Table 11 displays the a.m. and p.m. peak hour Levels of Service at each study intersection in the 2040 condition. One future driveway was analyzed along Professional Drive with development of the proposed Tech Campus. While there will likely be multiple driveways no plans currently exist. The analysis of the single driveway assumes it is opposite the easternmost Dixon Innovation Center driveway, providing a worst case assessment as most traffic to both sites is projected from Pedrick Road.

Two intersections, Pedrick Road at I-80 Eastbound Ramps – Sparling Lane and Pedrick Road at Professional Drive will operate at LOS F conditions in the p.m. peak.

Traffic Signal Warrants. 2040 traffic volumes at unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals could be needed. Three intersections meet the peak hour warrant. These include Pedrick Road at I-80 Westbound Ramps – Sievers Road, Pedrick Road at I-80 Eastbound Ramps – Sparling Way and Pedrick Road at Professional Drive.

2040 Intersection Queues. Table 12 identifies peak period queues within turn lanes during the Year 2040 base condition. Those 95th percentile queues with lengths exceeding the available storage have been highlighted. Queues in the northbound left turn lane at the Pedrick Road at I-80 Eastbound Ramps – Sparling Way are projected to reach 148 feet in the p.m. peak hour while the eastbound right turn lane is projected to reach 95 feet.

TABLE 11
PEAK HOUR INTERSECTION LEVELS OF SERVICE
2040 PLUS PROJECT CONDITIONS

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warranted?
		2040		2040 Plus Project		2040		2040 Plus Project		
		LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	LOS	Average Delay	
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd	AWS	B	14.4[3]	C	24.8[3]	D	30.8[3]	F	68.7[3]	Yes
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	AWS	C	18.1[3]	F	63.1[3]	F	55.1[3]	F	128.2[3]	Yes
3. Pedrick Rd / Vaughn Rd	[2]									
4. N. First St / Dorset Dr	Signal	B	15.8	C	24.0	C	23.4	C	29.7	N/A
5. N/ First St / Vaughn Rd	Signal	C	23.7	C	25.2	C	22.2	C	26.6	N/A
6. Pedrick Rd / Professional Dr	EB Stop[1]	B	15.0	F	77.7[3]	F	133.1[6]	F	566.0[3]	Yes
7. Pedrick Rd / Campus 257 North	EB Stop[1]	---	---	C	21.7	---	---	C	16.5[5]	No
8. Pedrick Rd / Commercial Dr	EB Stop[1]	A	9.2	B	9.3	B	12.9	B	11.8	No
9. Professional Dr / Dorset Dr	WB Stop[1]	A	9.5	B	14.7	B	10.6	C	17.4	No
10. Professional Dr / Commercial Dr[4]	WB Stop[1]	---	---	A	9.4	---	---	A	9.9	No
11. Vaughn Rd / Professional Dr	SB Stop[1]	A	8.6	A	9.0	A	8.8	A	9.4	No
12. Commercial Dr / Campus Parkway	SB Stop[1]	---	---	A	9.4	---	---	A	9.5	No
13. Professional Dr / Tech Campus (E)	NB / SB Stop[1]	B	10.4	C	15.1	C	15.7	C	23.9	No
14. Professional Dr / Tech Campus (W)	NB / SB Stop[1]	A	9.6	B	13.5	B	12.4	C	17.5	No
15. Campus Parkway / Dorset Dr	Roundabout	---	---	A	4.0	---	---	A	4.8	N/A

AWS – all way stop
[1] LOS for worst approach shown
[2] Intersection 3 not studied after Vaughn Road realignment or Commercial Drive 'bypass' constructed
[3] meets rural warrant in a.m. and p.m. peak hour
[4] Vaughn Rd realignment under No Project scenarios
[5] at cusp of rural warrant in p.m. peak hour with 3 lanes on major road
[6] meets rural warrant in p.m. peak hour
Red indicated threshold exceeded

TABLE 12 2040 PLUS PROJECT PEAK HOUR QUEUES					
	Storage Length* (feet)	AM Peak Hour Queue (feet)		PM Peak Hour Queue (feet)	
Location		2040	2040 plus Project	2040	2040 plus Project
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd					
NB left	120	<25	<25	30	33
NB	---	63	85	70	80
SB left	65	<25	<25	58	63
SB	---	<25	<25	<25	25
EB right	100	<25	<25	<25	<25
EB through-left	---	<25	<25	<25	<25
WB through-left	---	83	220	283	563
WB right	70	<25	<25	<25	<25
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln					
NB left	65	38	170	**148**	**413**
NB	---	<25	35	115	148
SB left	100	<25	<25	<25	<25
SB	---	148	523	470	835
EB through-left	---	63	68	68	68
EB right	30	**55**	**95**	<25	28
WB through-left		<25	<25	<25	<25
WB right	30	<25	<25	<25	<25
4. N. 1st St / Dorset Dr					
NB left turn	200	33	35	43	45
NB right turn	320	90	140	98	150
SB left turn	235 (2)	30	148	35	103
SB right turn	140	28	30	35	35
EB left turn	155 (2)	<25	<25	33	35
EB right turn	165	<25	<25	63	60
WB left turn	195 (2)	<25	33	173	210
WB right turn	195	<25	88	65	208
5. N. 1st St / Vaughn Rd					
NB left turn	290	45	43	63	60
SB left turn	285	103	110	<25	25
EB left turn	275	210	223	143	153
WB left turn	180[1]	<25	45	88	238[2]
6. Pedrick Rd / Professional Dr					
NB Left	150	<25	<25	<25	<25
EB Left	---	<25	48	550	1298
EB Right	---[1]	---	<25	---	<25

* includes portion of taper without blocking adjacent lane

[1]Length of left turn lane prior to TWLTL

[2] Queue extends into TWLTL

Highlighted values indicate queue length in excess of available storage

TABLE 12 (con't) 2040 PLUS PROJECT PEAK HOUR QUEUES					
	Storage Length* (feet)	AM Peak Hour Queue (feet)		PM Peak Hour Queue (feet)	
Location		2040	2040 plus Project	2040	2040 plus Project
7. Pedrick Rd / Campus 257 North					
NB Left	150[1]	---	<25	---	<25
8. Pedrick Rd / Commercial Dr[3]					
NB Left	150	<25	<25	<25	<25
EB Left	---	<25	<25	<25	<25
9. Professional Dr / Dorset Dr					
WB Left	150	---	<25	---	<25
EB Left	---	<25	78	<25	118
NB Left	200[1]	---	<25		<25
SB Left	200[1]	---	<25		<25
10. Professional Dr / Commercial Dr					
WB Left	150[1]	---	<25	---	<25
WB Right	---	---	<25	---	<25
SB Left	200[1]	---	<25		<25
11. Vaughn Rd / Professional Dr					
EB Left	200[1]	<25	<25	<25	<25
SB Right	---	<25	<25	<25	<25
12. Commercial Dr / Campus Parkway					
EB Left	150[1]	---	<25	---	<25
13. Professional Dr / Tech Campus D/W (E)					
EB Left	200	<25	<25	<25	<25
WB Left	200[1]	---	<25	---	<25
14. Professional Dr / Tech Campus D/W (W)					
EB Left	200	<25	<25	<25	<25
WB Left	200[1]	---	<25	---	<25
15. Campus Parkway / Dorset Dr					
NB	---[1]	---	<25	---	<25
SB	---[1]	---	<25	---	25
EB	---[1]	---	<25	---	<25
WB	---[1]	---	25	---	<25

* includes portion of taper without blocking adjacent lane

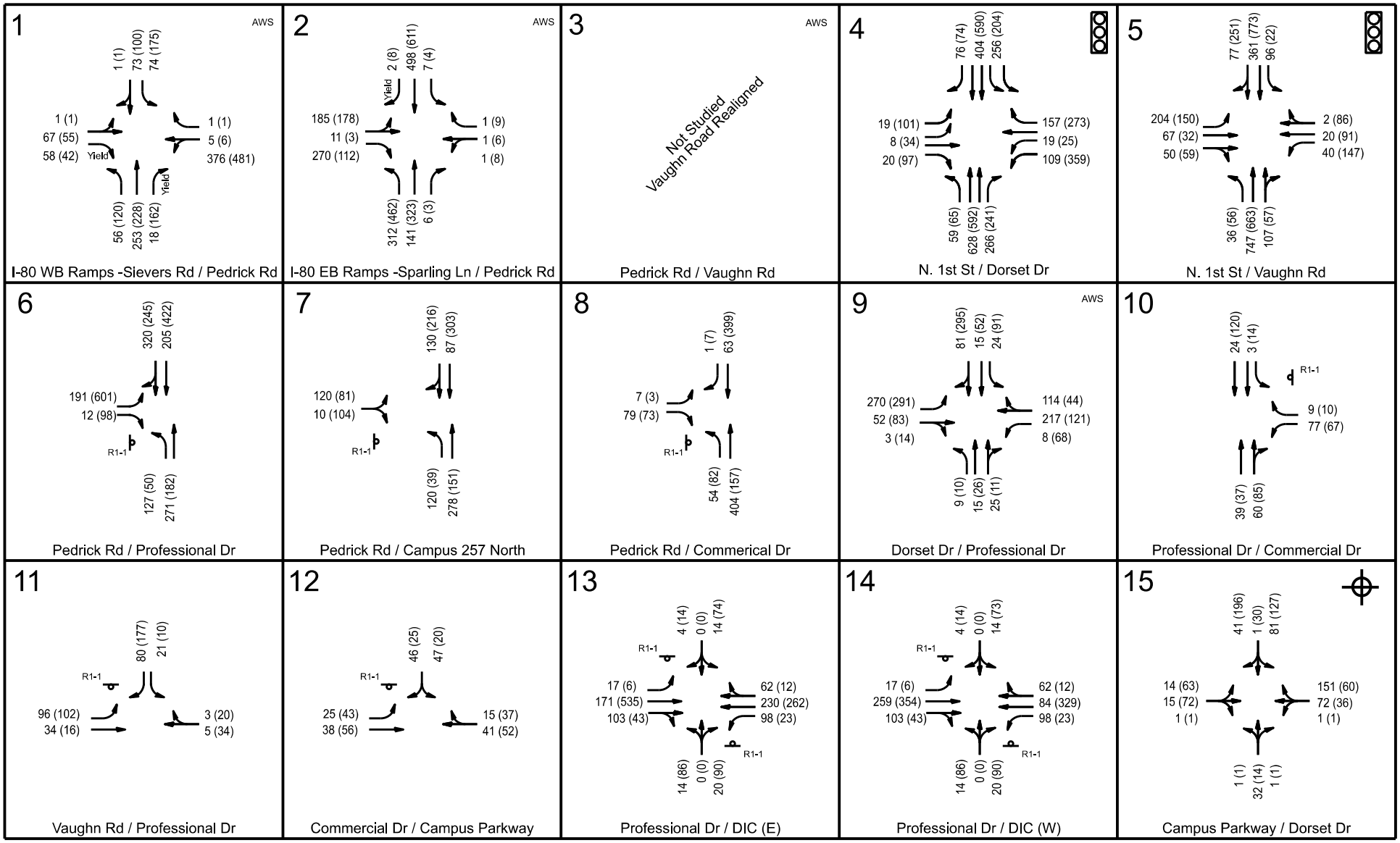
[1]added in 'plus Project' scenario

2040 Plus Project

Intersection Levels of Service. The Year 2040 plus Project volumes were used to recalculate operating Levels of Service at the study intersections. Figure 8 presents the "2040 Plus Project traffic" traffic volumes at each study intersection in both a.m. and p.m. peak hours. Table 11 displays the a.m. and p.m. peak hour Levels of Service at each study intersection. Three intersections are projected to operate at LOS E or F conditions. These include Pedrick Road at I-80 Westbound Ramps – Sievers Road, Pedrick Road at I-80 Eastbound Ramps – Sparling Lane and Pedrick Road at Professional Drive.

Traffic Signal Warrants. 2040 Plus Project traffic volumes at the unsignalized intersections were compared to peak hour warrant requirements to determine whether traffic signals could be needed under 'Plus Project' conditions. Three intersections will continue to meet the peak hour warrant. These include Pedrick Road at I-80 Westbound Ramps – Sievers Road, Pedrick Road at I-80 Eastbound Ramps – Sparling Way and Pedrick Road at Professional Drive.

Intersection Queues. Table 12 identifies peak period queues for the Year 2040 plus Project condition assuming the addition of project trips**.** Project trips will result in additional queuing throughout the study area with four locations projected to exceed the available storage. These include the northbound left turn lane and eastbound right turn lane at the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection. Additionally, the westbound left and right turn lanes at the N. 1st Street / Dorset Drive intersection are projected to exceed the available storage. Queues along the shared through-left lane on the Westbound I-80 Off-Ramp are projected to exceed 550 feet. Adequate storage (1,100 feet) is available along the ramp before reaching the I-80 mainline while the queue in the eastbound left turn lane along Professional Drive at Pedrick Road is projected to extend over ¼ mile (1298 feet). The westbound left turn lane along Vaughn Road at N. 1st Street will exceed the available storage, but the queue will be able to extend into the TWLTL without blocking the adjacent through lane.



LEGEND

XX - AM PEAK HOUR

(XX) - PM PEAK HOUR

SIGNAL

R1-1 STOP SIGN

AWS ALL WAY STOP

ROUNDABOUT

2040 PLUS PROJECT TRAFFIC VOLUMES

FIGURE 8

FLECKER ASSOCIATES

R2/14/24

5500-01

SITE OVERVIEW

The Campus 257 project is a Mixed-Use designated project to "foster new mixed employment districts with with a range of job generated uses, housing, and easy access to the regional transportation network." Preliminary concepts for the project place approximately 50-acres of a "Tech Campus" on the north side of the site providing direct access to Professional Drive with direct access along Pedrick Road to I-80. A high-density residential site is proposed in the northeast area of the residential portion of the project. The remaining residential development is planned for various sized medium and low density parcels residential to the south and west. The project proposes a north-south spine (Campus Parkway) about midway between Professional Drive and Pedrick Road. Four direct connections to major streets will be available along Campus Parkway. These include Commercial Drive, Pedrick Road and two intersections along Professional Drive. Campus Parkway is planned to include linear parks, each about 2-acres in size on both sides of the roadway from about midway between Commercial Drive and the south side of the Tech Campus with a 5-acre park site identified along the west side of Campus Parkway towards the southern side of the site.

The project proposes three roundabouts along Campus Parkway, one at Dorset Drive, a second one at "Campus 257 North" adjacent to the Tech Campus and a third on the south side of the proposed 5-acre park. The roundabout at the Dorset Drive intersection was studied as part of the 2040 plus Project scenario as full buildout of the site will occur. The roundabout adjacent to the Tech Campus is surrounded by parks and provides access to the south and east.

The Tech Campus will comprise the north side of the project site between Professional Drive and Pedrick Drive. It is expected that there will be a minimum of two driveways along Professional Drive. The LOS analysis assumed one of the intersection would be opposite at least one of the Dixon Innovation Center (DIC) driveways. It is also assumed that a minor driveway access to the south side of the site will be available from the Campus 257 North Driveway. This will allow residents of the project as well as employees approaching from the south along Pedrick Drive to enter the site without having to travel out of direction to enter the site via Professional Drive.

During development of the site further analyses should be completed to confirm the road designs meet City and current roadway standards. These may include assuring intersections meet minimum sight distance criteria, development of traffic calming measures integrated as part of the project and vehicle circulation to confirm design vehicles can be accommodated.

Alternative Transportation Modes – The City's General Plan identifies existing and proposed pedestrian and bicycle facilities. Future development of the NEQSP area includes extension of the City's bicycle and pedestrian facilities. The General Plan identifies a Class I Multi-Use Path paralleling I-80 between N. First Street to just east of Pedrick Road. Pedrick Road is also identified to include a similar facility from I-80 south to the Vaughn Road realignment; however, with Commercial Drive being installed the facility could either continue as a Class I, Class II bike lane or Class IV Separated Bikeway facility along Commercial Drive to its intersection with Professional Drive; Professional Drive is identified as an arterial roadway with a Class IV separated bikeway. In addition, Dorset Drive is shown to include Class II Bicycle Lanes to Professional Drive. All of the mentioned public streets should include sidewalk or pathways connecting

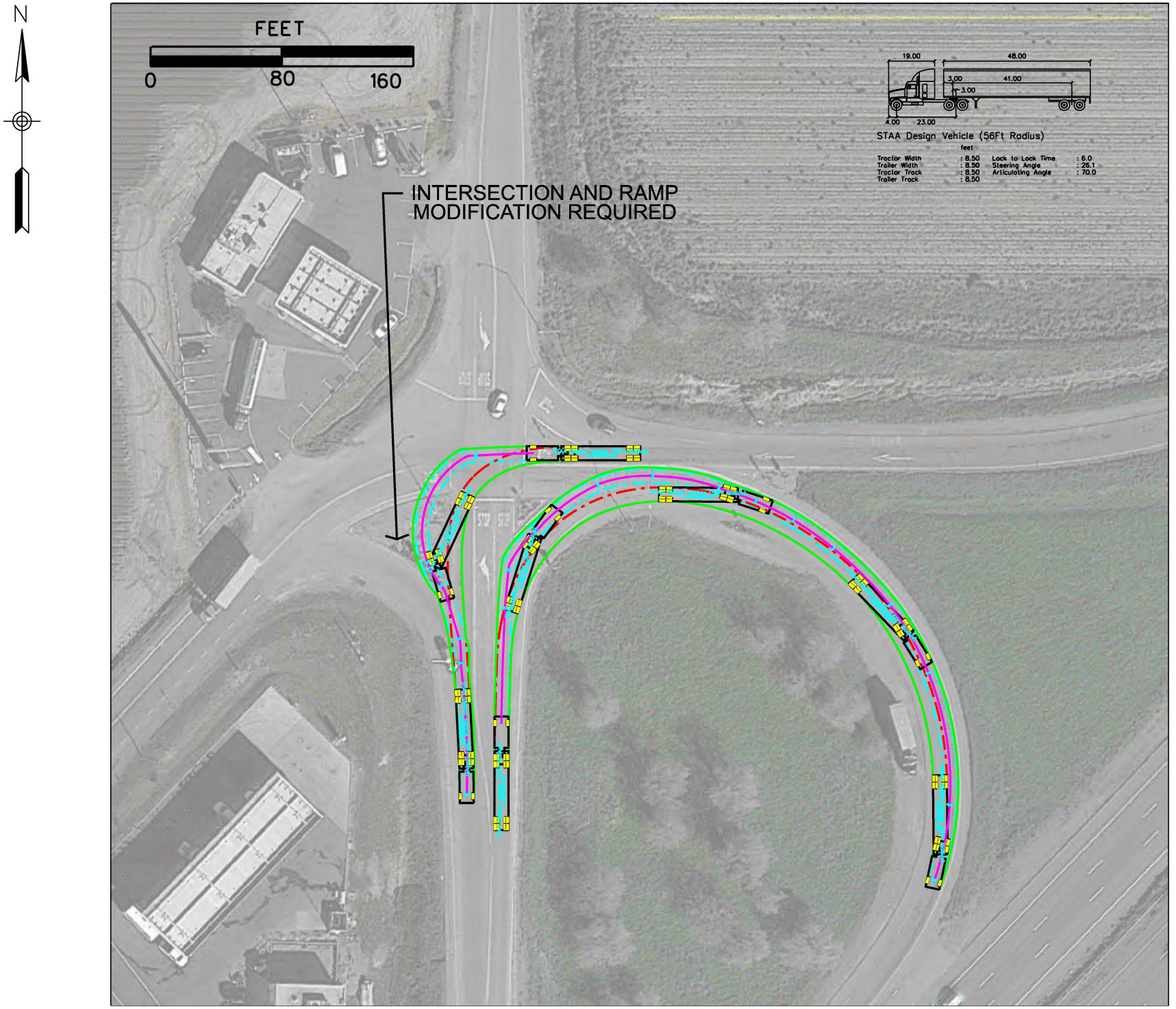
throughout the area.

Truck Access - The future DIC will be located on the north side of Professional Drive in the northwest quadrant of the Pedrick Road / Professional Drive intersection. The proposed Campus 257 Tech Campus will be located on the south side of Professional Drive opposite the DIC. Both sites are expected to have truck traffic. Access to the project's Tech Campus should be limited to Professional Drive with only local truck traffic allowed within the residential sections of the Campus 257 project.

A review of truck routes shows that Pedrick Road is identified by the City as a truck route between I-80 to the UPRR crossing north of Vaughn Road. There is no identified STAA signage along I-80 that identifies Pedrick Road as a Terminal Route or Service Route.

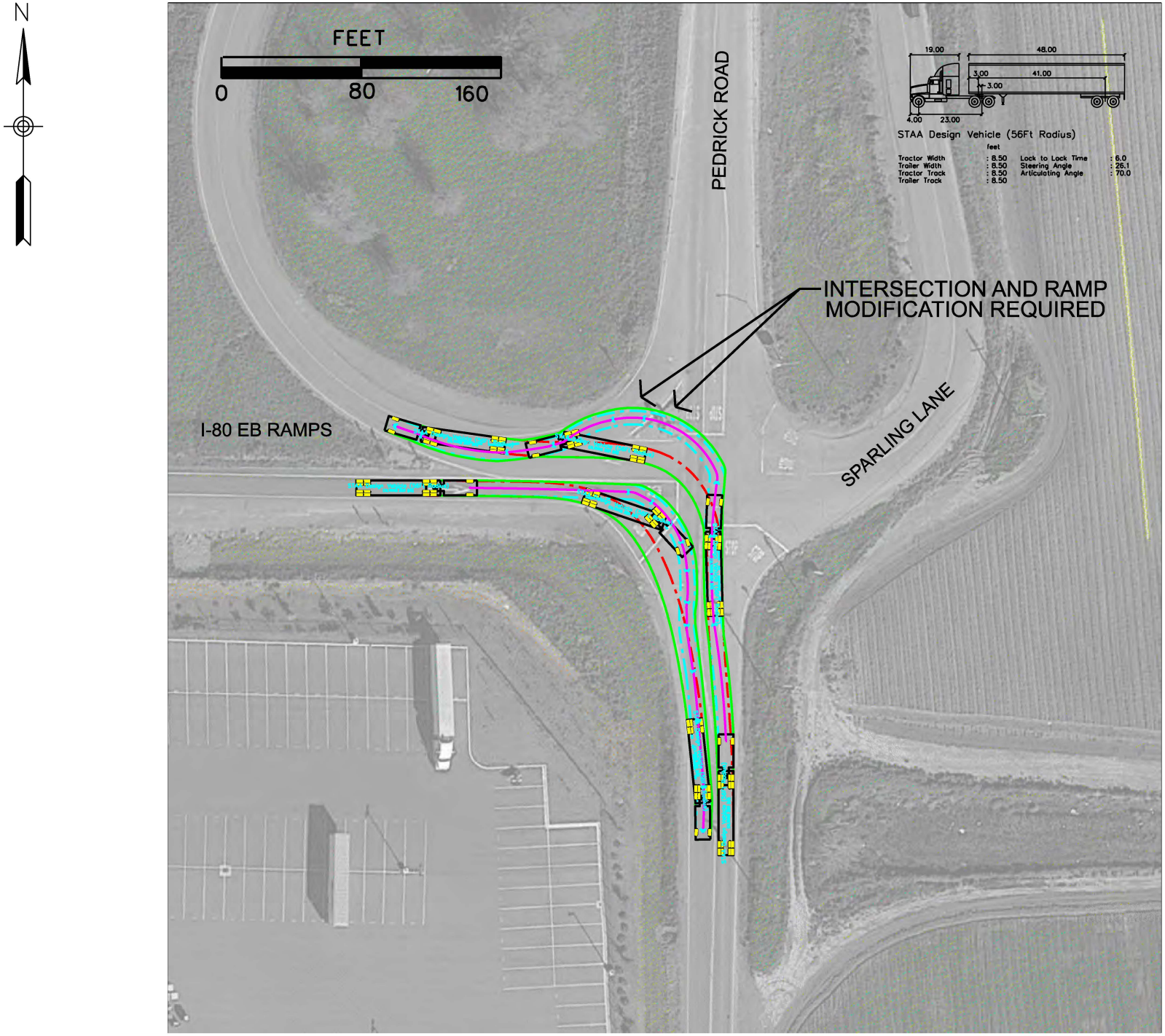
AutoTurn software was used to assess whether STAA vehicles can utilize the Pedrick Road interchange. The *Google Earth* spatial database was used as the base to simulate truck paths. Figures 9 and 10 show the STAA routes to and from the westbound and eastbound on- and off-ramps at I-80 at Pedrick Road. The *AutoTurn* assessment indicates that the eastbound I-80 off-ramp and westbound I-80 on-ramp can currently accommodate STAA vehicles. Westbound off-ramp and eastbound on-ramp turning movements departing the intersections will overtop outside curbs or require the vehicle to cut across the opposing approach lane. Should the Pedrick Road interchange be used for truck access both intersections will need to be upgraded to accommodate an STAA vehicle.

First Street, State Route (SR) 113, through Dixon is identified by Caltrans as a Terminal Access Route between I-80 and SR 12. Additionally, the City has an identified local truck route along Vaughn Road, between N. First Street and the UPRR crossing west of Pedrick Road. During development of Campus 257 Professional Drive should be designed to accommodate STAA vehicles. Should the Tech Campus expect to receive STAA trucks the project applicant will have to complete a Terminal Access Application with Caltrans.



STAA - AUTOTURN I-80 WB RAMPS / PEDRICK ROAD

FIGURE 9



STAA - AUTOTURN I-80 EB RAMPS / PEDRICK ROAD

FIGURE 10

FINDINGS / RECOMMENDATIONS / IMPROVEMENTS

The preceding analysis has identified project effects that may occur without recommendations or improvements to the roadway network. The text that follows identifies a strategy for recommendations to the 'No Project' conditions or improvements to the 'Plus Project' conditions.

Existing Conditions

All intersections operate at acceptable levels of service.

The queue in the northbound left turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection exceeds the available storage. Storage length for this movement is constrained as Pedrick Road is a two-lane roadway. The queue exceeds the available storage by three feet, which is likely unnoticeable during the peak hour.

2025 Conditions

All intersections will operate at acceptable levels of service.

The queue in the northbound left turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection will exceed the available storage. Storage length for this movement is constrained as Pedrick Road is a two-lane roadway. The queue exceeds the available storage by three feet, which is likely unnoticeable during the peak hour.

The queue in the eastbound right turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection will exceed the available storage by 20 feet. Additional right turning vehicles will queue in the shared through-left lane.

2025 Plus Project Conditions

All intersections except the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection will operate within acceptable City of Dixon LOS thresholds. The following improvements are noted:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing Citywide traffic impact mitigation (TIM) fee program.

- Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS E conditions with the project. Installation of a traffic signal at the location will result in the intersection operating at LOS C conditions (27.5 spv). The project would be responsible for installing the signal and should pay their fair share of signalization as the intersection will operate unacceptably and continue to meet the peak hour warrant in the 2040 No Project scenario. The fair share contribution (22.6%) is based on the project traffic divided by the future traffic at the intersection.

Queues will continue to be exceeded in the northbound left turn lane and eastbound right turn lane at the Pedrick Road at I-80 EB Ramps – Sparling Lane intersection. Additionally, queues will lengthen along the southbound approach to the intersection, lengthening to about 400 feet. With signalization the queues along each approach should allow clearing during the green phase.

2040 Conditions

Two intersections will operate below the City LOS D threshold. These include the Pedrick Road / I-80 Eastbound Ramps – Sparling Lane intersection and the Pedrick Road / Professional Drive intersection, Both are projected to operate at LOS F conditions. The following recommendations are noted:

Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal, the addition of a shared 210-foot southbound through-right lane, extending the eastbound right turn lane to about 100 feet and the lengthening of the northbound left turn lane to about 300 feet will result in the intersection operating at LOS C conditions in the p.m. peak hour (23.6 spv); the added southbound lane would not reach the structure over I-80. After implementation of the identified improvements the queues in the northbound left turn lane and eastbound right turn lane can be contained in each turn lane while the southbound queues will be about 150 feet.

- Pedrick Road / Professional Drive: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal will result in the intersection operating at LOS B conditions (14.5 spv). The queue along Professional Drive is projected to be about 548 feet with only a single lane approach. Signalization of the Professional Drive intersection and addition of an eastbound left turn lane will result in a queue of about 165 feet in the eastbound left turn lane.

2040 plus Project Conditions

Three intersections will operate below the City LOS D threshold under 2040 plus Project conditions. These include the Pedrick Road / I-80 Westbound Ramps – Sievers Road intersection, Pedrick Road at I-80 Eastbound Ramps – Sparling Lane and the Pedrick Road at Professional Drive intersection. All are projected to operate at LOS E or F conditions. In addition, the westbound queues in the left and right turn lanes along Dorset Drive at N. First Street will exceed the available storage. The following improvements are noted:

- Pedrick Road / I-80 Westbound Ramps – Sievers Road: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal at the location will result in the intersection operating at LOS C conditions (31.8 spv). The project would be responsible for installing the traffic signal. With signalization the westbound shared left-through lane queue will shorten to about 353 feet.

- Pedrick Road / I-80 Eastbound Ramps – Sparling Lane: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal, the addition of a shared 210-foot southbound through-right lane, the lengthening of the eastbound right turn lane to about 150 feet and the lengthening of the northbound left turn lane to about 300 feet will result in the intersection operating at LOS C conditions in the a.m. peak hour (21.0 spv) and p.m. peak hour (23.2 spv); the added southbound lane would not reach the structure over I-80. The project would be responsible for their fair share of the improvements. The fair share contribution is (22.6%) and was previously identified in the 2025 plus Project scenario. After implementation of the identified improvements the queues in the northbound left turn lane and eastbound right turn lane can be contained in each turn lane while the southbound queues will be about 205 feet.

- Pedrick Road / Professional Drive: The overall intersection LOS will decline to LOS F conditions. Installation of a traffic signal will result in the intersection operating at LOS B condition in the a.m. peak hour (12.7 spv) and LOS C condition in the p.m. peak hour (22.0 spv). The project would be responsible for their fair share of the improvements. The fair share contribution is (31.8%). After the improvements at this intersection are completed the eastbound left turn queue will be 70 feet in the a.m. peak hour and 340 feet in the p.m. peak hour. The left turn lane should be 350 feet.

- N. First Street / Dorset Drive: Retiming of the N. 1st Street / Dorset Drive signal will allow queues in the westbound right and left turn lanes to be accommodated without blocking the adjacent through lanes.

Table 13 presents the mitigated intersections and resulting levels of service for those intersections and time periods that operate below acceptable levels of service prior to recommendations or improvements.

TABLE 13
PEAK HOUR LEVELS OF SERVICE AFTER RECOMMENDATIONS AND IMPROVEMENTS

	2025 plus Project Peak Hour	2040 Peak Hour	2040 plus Project Peak Hour	
Location	**PM**	**PM**	**AM**	**PM**
1. Pedrick Rd / I-80 WB Ramps – Sievers Rd				C / 31.8[4]
2. Pedrick Rd / I-80 EB Ramps – Sparling Ln	C / 27.5[1]	C / 23.6[2]	C / 21.0[5]	C / 23.2[5]
4. N. 1st St / Dorset Dr		---		C / 24.6[7]
6. Pedrick Rd / Professional Dr		B / 14.5[3]	B / 12.7[6]	C / 22.0[6]

Note –LOS results shown for worst case peak hour
[1]install traffic signal
[2] previously installed traffic signal; install 210 ft SB shared through-right lane, extend eastbound right turn lane 100 ft, lengthen NB left lane to 300 ft
[3] install traffic signal, install EB left turn lane (165 ft)
[4] install traffic signal
[5] previously installed traffic signal, SB shared through-right lane and NB left turn lane; lengthen EB right turn lane to 150 ft
[6] previously installed traffic signal
[7] retime signal

REFERENCES

1. Transportation Research Board, *Highway Capacity Manual*, 7th Edition
2. Caltrans *Highway Design Manual*, 2020
3. California *Manual of Uniform Traffic Control Devices*, 2014
4. Institute of Transportation Engineers. 2021. *Trip Generation*, 11th Edition. Washington, D.C.]
5. *Trip Generation Handbook*, Institute of Transportation Engineers, 3rd Edition, 2017
6. *General Plan 2040,* City of Dixon, Adopted May 2021
7. *Dixon Streets Master Plan*, DKS Associates. October 2021
8. *City of Dixon Northeast Quadrant Specific Plan,* April 1995, Corrected, June 2009
9. *Solano County Active Transportation Plan*, Solano Transportation Agency, 2020
10. Statewide Integrated Traffic Records System, California Highway Patrol, State of California, https://iswitrs.chp.ca.gov

APPENDICES

(under separate cover)

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	66	33	205	5	0	46	206	13	64	47	1
Future Vol, veh/h	0	66	33	205	5	0	46	206	13	64	47	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	72	36	223	5	0	50	224	14	70	51	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	9.8	14.2	11.9	10.5
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	100%	0%	2%	100%	0%	98%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	206	13	66	33	210	0	64	48
LT Vol	46	0	0	0	0	205	0	64	0
Through Vol	0	206	0	66	0	5	0	0	47
RT Vol	0	0	13	0	33	0	0	0	1
Lane Flow Rate	50	224	14	72	36	228	0	70	52
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.092	0.38	0.021	0.13	0.058	0.421	0	0.135	0.094
Departure Headway (Hd)	6.614	6.108	5.399	6.537	5.83	6.646	6.155	7.009	6.486
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	542	589	662	547	613	541	0	511	551
Service Time	4.355	3.849	3.14	4.287	3.579	4.387	3.896	4.76	4.237
HCM Lane V/C Ratio	0.092	0.38	0.021	0.132	0.059	0.421	0	0.137	0.094
HCM Control Delay, s/veh	10	12.6	8.3	10.3	8.9	14.2	8.9	10.9	9.9
HCM Lane LOS	A	B	A	B	A	B	N	B	A
HCM 95th-tile Q	0.3	1.8	0.1	0.4	0.2	2.1	0	0.5	0.3

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	1	172	0	0	0	107	89	0	1	282	2
Future Vol, veh/h	178	1	172	0	0	0	107	89	0	1	282	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	193	1	187	0	0	0	116	97	0	1	307	2
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	12.1	0	11.5	16.3
HCM LOS	B	-	B	C

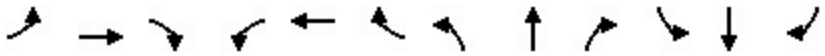
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	99%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	100%	1%	0%	100%	100%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	107	89	0	179	172	0	0	1	282	2
LT Vol	107	0	0	178	0	0	0	1	0	0
Through Vol	0	89	0	1	0	0	0	0	282	0
RT Vol	0	0	0	0	172	0	0	0	0	2
Lane Flow Rate	116	97	0	195	187	0	0	1	307	2
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.23	0.177	0	0.367	0.29	0	0	0.002	0.541	0.003
Departure Headway (Hd)	7.114	6.605	6.605	6.794	5.591	7.266	7.266	6.863	6.356	5.646
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	504	542	0	529	641	0	0	521	567	632
Service Time	4.87	4.361	4.361	4.544	3.34	5.043	5.043	4.611	4.103	3.393
HCM Lane V/C Ratio	0.23	0.179	0	0.369	0.292	0	0	0.002	0.541	0.003
HCM Control Delay, s/veh	12	10.8	9.4	13.5	10.6	10	10	9.6	16.4	8.4
HCM Lane LOS	B	B	N	B	B	N	N	A	C	A
HCM 95th-tile Q	0.9	0.6	0	1.7	1.2	0	0	0	3.2	0

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	42	18	6	21	6	44	233	19	1	70	70
Future Vol, veh/h	56	42	18	6	21	6	44	233	19	1	70	70
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	46	20	7	23	7	48	253	21	1	76	76
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.2	8.5	10.6	8.5
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	48%	18%	1%
Vol Thru, %	79%	36%	64%	50%
Vol Right, %	6%	16%	18%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	296	116	33	141
LT Vol	44	56	6	1
Through Vol	233	42	21	70
RT Vol	19	18	6	70
Lane Flow Rate	322	126	36	153
Geometry Grp	1	1	1	1
Degree of Util (X)	0.403	0.177	0.051	0.188
Departure Headway (Hd)	4.507	5.053	5.112	4.413
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	798	707	697	811
Service Time	2.543	3.103	3.173	2.455
HCM Lane V/C Ratio	0.404	0.178	0.052	0.189
HCM Control Delay, s/veh	10.6	9.2	8.5	8.5
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2	0.6	0.2	0.7



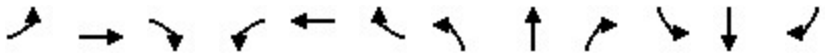
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	3	19	39	3	34	56	674	114	113	372	91
Future Volume (veh/h)	17	3	19	39	3	34	56	674	114	113	372	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	3	21	42	3	37	61	733	124	123	404	99
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	205	174	184	255	216	123	1156	516	212	1317	587
Arrive On Green	0.03	0.11	0.11	0.05	0.14	0.14	0.07	0.33	0.33	0.06	0.37	0.37
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	18	3	21	42	3	37	61	733	124	123	404	99
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	0.1	0.6	0.6	0.1	1.0	1.6	8.6	2.8	1.7	4.0	2.1
Cycle Q Clear(g_c), s	0.3	0.1	0.6	0.6	0.1	1.0	1.6	8.6	2.8	1.7	4.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	205	174	184	255	216	123	1156	516	212	1317	587
V/C Ratio(X)	0.20	0.01	0.12	0.23	0.01	0.17	0.50	0.63	0.24	0.58	0.31	0.17
Avail Cap(c_a), veh/h	519	596	505	519	748	634	268	2777	1239	337	2777	1239
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	23.5	19.6	19.8	22.4	18.4	18.8	22.1	14.1	12.2	22.5	11.0	10.4
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.2	0.0	0.1	1.2	0.6	0.2	0.9	0.1	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(95%),veh/ln	0.2	0.1	0.4	0.4	0.1	0.6	1.1	4.9	1.6	1.1	2.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	19.6	19.9	22.6	18.4	19.0	23.3	14.7	12.4	23.4	11.1	10.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		42			82			918			626	
Approach Delay, s/veh		21.6			20.8			15.0			13.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	21.8	7.2	10.0	8.0	24.1	5.9	11.3
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	3.3	10.6	2.6	2.6	3.6	6.0	2.3	3.0
Green Ext Time (p_c), s	0.0	5.4	0.0	0.0	0.0	2.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.9
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	67	44	20	15	30	36	641	97	71	297	60
Future Volume (veh/h)	173	67	44	20	15	30	36	641	97	71	297	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	73	48	22	16	33	39	697	105	77	323	65
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	369	313	47	177	150	70	1484	223	100	1466	291
Arrive On Green	0.13	0.20	0.20	0.03	0.09	0.09	0.04	0.48	0.48	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3097	466	1781	2954	587
Grp Volume(v), veh/h	188	73	48	22	16	33	39	400	402	77	193	195
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1786	1781	1777	1765
Q Serve(g_s), s	8.6	2.7	2.1	1.0	0.7	1.6	1.8	12.6	12.6	3.6	5.1	5.2
Cycle Q Clear(g_c), s	8.6	2.7	2.1	1.0	0.7	1.6	1.8	12.6	12.6	3.6	5.1	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.33
Lane Grp Cap(c), veh/h	230	369	313	47	177	150	70	852	856	100	882	876
V/C Ratio(X)	0.82	0.20	0.15	0.47	0.09	0.22	0.56	0.47	0.47	0.77	0.22	0.22
Avail Cap(c_a), veh/h	416	560	475	160	560	475	160	852	856	288	882	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(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	28.0	27.7	40.1	34.5	34.9	39.4	14.6	14.6	38.8	11.9	11.9
Incr Delay (d2), s/veh	7.0	0.3	0.2	7.1	0.2	0.7	6.8	1.9	1.8	11.6	0.6	0.6
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(95%),veh/ln	7.3	2.2	1.4	0.9	0.5	1.1	1.6	8.4	8.5	3.2	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.4	28.2	27.9	47.2	34.7	35.7	46.2	16.5	16.5	50.5	12.4	12.5
LnGrp LOS	D	C	C	D	C	D	D	B	B	D	B	B
Approach Vol, veh/h		309			71			841			465	
Approach Delay, s/veh		36.8			39.0			17.8			18.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	45.8	6.8	21.6	7.9	47.2	15.4	13.0
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	5.6	14.6	3.0	4.7	3.8	7.2	10.6	3.6
Green Ext Time (p_c), s	0.1	4.8	0.0	0.4	0.0	2.1	0.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	53	29	261	6	0	95	179	132	149	73	1
Future Vol, veh/h	1	53	29	261	6	0	95	179	132	149	73	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	58	32	284	7	0	103	195	143	162	79	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	11.3	21.7	12.5	13.7
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	98%	0%	2%	100%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	179	132	54	29	267	0	149	74
LT Vol	95	0	0	1	0	261	0	149	0
Through Vol	0	179	0	53	0	6	0	0	73
RT Vol	0	0	132	0	29	0	0	0	1
Lane Flow Rate	103	195	143	59	32	290	0	162	80
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.214	0.375	0.248	0.128	0.063	0.613	0	0.353	0.164
Departure Headway (Hd)	7.456	6.946	6.232	7.881	7.156	7.608	7.113	7.852	7.33
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	482	519	577	455	500	476	0	458	490
Service Time	5.192	4.681	3.967	5.628	4.902	5.345	4.85	5.594	5.071
HCM Lane V/C Ratio	0.214	0.376	0.248	0.13	0.064	0.609	0	0.354	0.163
HCM Control Delay, s/veh	12.2	13.8	11	11.8	10.4	21.7	9.9	14.8	11.5
HCM Lane LOS	B	B	B	B	B	C	N	B	B
HCM 95th-tile Q	0.8	1.7	1	0.4	0.2	4	0	1.6	0.6

Intersection	
Intersection Delay, s/veh	18.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	177	0	45	0	0	1	227	228	0	0	354	9
Future Vol, veh/h	177	0	45	0	0	1	227	228	0	0	354	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	192	0	49	0	0	1	247	248	0	0	385	10
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	15.1	10.4	15.8	25.2
HCM LOS	C	B	C	D

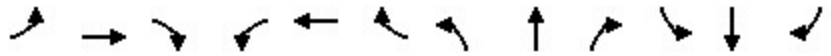
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	227	228	0	177	45	0	1	0	354	9
LT Vol	227	0	0	177	0	0	0	0	0	0
Through Vol	0	228	0	0	0	0	0	0	354	0
RT Vol	0	0	0	0	45	0	1	0	0	9
Lane Flow Rate	247	248	0	192	49	0	1	0	385	10
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.49	0.457	0	0.423	0.091	0	0.002	0	0.725	0.017
Departure Headway (Hd)	7.151	6.643	6.643	7.906	6.683	8.425	7.703	6.786	6.786	6.075
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	501	538	0	452	532	0	467	0	531	584
Service Time	4.942	4.434	4.434	5.704	4.48	6.125	5.403	4.575	4.575	3.863
HCM Lane V/C Ratio	0.493	0.461	0	0.425	0.092	0	0.002	0	0.725	0.017
HCM Control Delay, s/veh	16.7	15	9.4	16.4	10.2	11.1	10.4	9.6	25.6	9
HCM Lane LOS	C	B	N	C	B	N	B	N	D	A
HCM 95th-tile Q	2.7	2.4	0	2.1	0.3	0	0	0	5.9	0.1

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	36	46	20	45	3	32	119	12	6	301	103
Future Vol, veh/h	88	36	46	20	45	3	32	119	12	6	301	103
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	39	50	22	49	3	35	129	13	7	327	112
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.8	9.7	10.2	14.8
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	52%	29%	1%
Vol Thru, %	73%	21%	66%	73%
Vol Right, %	7%	27%	4%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	170	68	410
LT Vol	32	88	20	6
Through Vol	119	36	45	301
RT Vol	12	46	3	103
Lane Flow Rate	177	185	74	446
Geometry Grp	1	1	1	1
Degree of Util (X)	0.26	0.286	0.121	0.598
Departure Headway (Hd)	5.293	5.575	5.885	4.83
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	645	608	753
Service Time	3.327	3.613	3.93	2.83
HCM Lane V/C Ratio	0.261	0.287	0.122	0.592
HCM Control Delay, s/veh	10.2	10.8	9.7	14.8
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	1	1.2	0.4	4



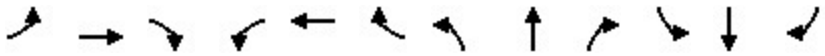
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	11	110	222	9	121	74	564	135	129	569	68
Future Volume (veh/h)	107	11	110	222	9	121	74	564	135	129	569	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	12	120	241	10	132	80	613	147	140	618	74
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	274	232	371	304	258	138	965	430	232	1098	490
Arrive On Green	0.09	0.15	0.15	0.11	0.16	0.16	0.08	0.27	0.27	0.07	0.31	0.31
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	116	12	120	241	10	132	80	613	147	140	618	74
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.7	0.3	3.8	3.6	0.2	4.1	2.4	8.3	4.1	2.1	7.9	1.8
Cycle Q Clear(g_c), s	1.7	0.3	3.8	3.6	0.2	4.1	2.4	8.3	4.1	2.1	7.9	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	274	232	371	304	258	138	965	430	232	1098	490
V/C Ratio(X)	0.37	0.04	0.52	0.65	0.03	0.51	0.58	0.64	0.34	0.60	0.56	0.15
Avail Cap(c_a), veh/h	470	539	457	470	677	573	242	2513	1121	305	2513	1121
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	23.3	20.0	21.5	23.3	19.2	20.8	24.3	17.5	15.9	24.7	15.7	13.6
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.9	0.0	0.6	1.4	0.7	0.5	0.9	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(95%),veh/ln	1.2	0.2	2.5	2.6	0.2	2.7	1.7	5.1	2.5	1.4	4.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	20.0	22.1	24.3	19.2	21.4	25.7	18.2	16.4	25.6	16.2	13.8
LnGrp LOS	C	B	C	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		248			383			840			832	
Approach Delay, s/veh		22.7			23.1			18.6			17.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	20.6	10.4	12.6	8.8	22.6	9.6	13.5
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	4.1	10.3	5.6	5.8	4.4	9.9	3.7	6.1
Green Ext Time (p_c), s	0.0	4.5	0.0	0.1	0.0	4.3	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.4
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	115	56	106	70	94	48	537	46	64	621	200
Future Volume (veh/h)	127	115	56	106	70	94	48	537	46	64	621	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	125	61	115	76	102	52	584	50	70	675	217
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	218	185	145	186	158	84	1648	141	96	1334	429
Arrive On Green	0.10	0.12	0.12	0.08	0.10	0.10	0.05	0.50	0.50	0.05	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3313	283	1781	2644	850
Grp Volume(v), veh/h	138	125	61	115	76	102	52	313	321	70	453	439
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1819	1781	1777	1717
Q Serve(g_s), s	6.1	5.1	2.8	5.1	3.1	5.0	2.3	8.6	8.7	3.1	13.6	13.7
Cycle Q Clear(g_c), s	6.1	5.1	2.8	5.1	3.1	5.0	2.3	8.6	8.7	3.1	13.6	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.49
Lane Grp Cap(c), veh/h	176	218	185	145	186	158	84	884	905	96	897	867
V/C Ratio(X)	0.78	0.57	0.33	0.79	0.41	0.65	0.62	0.35	0.35	0.73	0.51	0.51
Avail Cap(c_a), veh/h	432	582	493	166	582	493	166	884	905	299	897	867
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	33.6	32.6	36.2	34.0	34.8	37.6	12.3	12.3	37.4	13.2	13.2
Incr Delay (d2), s/veh	7.4	2.4	1.0	20.0	1.4	4.4	7.3	1.1	1.1	9.9	2.0	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(95%),veh/ln	5.2	4.3	1.9	5.2	2.5	3.6	2.0	5.7	5.9	2.8	8.8	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	36.0	33.6	56.2	35.4	39.2	44.9	13.4	13.4	47.4	15.3	15.4
LnGrp LOS	D	D	C	E	D	D	D	B	B	D	B	B
Approach Vol, veh/h		324			293			686			962	
Approach Delay, s/veh		38.4			44.9			15.8			17.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	45.8	11.2	14.5	8.4	46.4	12.5	13.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	15.1	10.7	7.1	7.1	4.3	15.7	8.1	7.0
Green Ext Time (p_c), s	0.1	3.7	0.0	0.7	0.0	5.5	0.2	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	68	36	242	5	0	48	215	18	65	53	1
Future Vol, veh/h	0	68	36	242	5	0	48	215	18	65	53	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	74	39	263	5	0	52	234	20	71	58	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	10.2	16.3	12.7	10.9
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	100%	0%	2%	100%	0%	98%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	215	18	68	36	247	0	65	54
LT Vol	48	0	0	0	0	242	0	65	0
Through Vol	0	215	0	68	0	5	0	0	53
RT Vol	0	0	18	0	36	0	0	0	1
Lane Flow Rate	52	234	20	74	39	268	0	71	59
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.099	0.411	0.031	0.139	0.066	0.506	0	0.143	0.11
Departure Headway (Hd)	6.841	6.334	5.624	6.782	6.073	6.78	6.287	7.272	6.749
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	522	566	634	526	587	532	0	491	529
Service Time	4.601	4.093	3.383	4.554	3.844	4.538	4.044	5.045	4.521
HCM Lane V/C Ratio	0.1	0.413	0.032	0.141	0.066	0.504	0	0.145	0.112
HCM Control Delay, s/veh	10.4	13.5	8.6	10.7	9.3	16.3	9	11.3	10.4
HCM Lane LOS	B	B	A	B	A	C	N	B	B
HCM 95th-tile Q	0.3	2	0.1	0.5	0.2	2.8	0	0.5	0.4

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	1	232	0	0	0	115	98	0	1	329	2
Future Vol, veh/h	184	1	232	0	0	0	115	98	0	1	329	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	200	1	252	0	0	0	125	107	0	1	358	2
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	13.6	0	12.4	21.5
HCM LOS	B	-	B	C

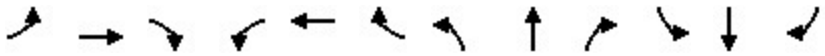
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	99%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	100%	1%	0%	100%	100%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	98	0	185	232	0	0	1	329	2
LT Vol	115	0	0	184	0	0	0	1	0	0
Through Vol	0	98	0	1	0	0	0	0	329	0
RT Vol	0	0	0	0	232	0	0	0	0	2
Lane Flow Rate	125	107	0	201	252	0	0	1	358	2
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.261	0.208	0	0.396	0.413	0	0	0.002	0.662	0.004
Departure Headway (Hd)	7.524	7.013	7.013	7.095	5.89	7.898	7.898	7.17	6.661	5.95
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	475	508	0	505	608	0	0	497	540	598
Service Time	5.312	4.8	4.8	4.871	3.665	5.598	5.598	4.944	4.435	3.723
HCM Lane V/C Ratio	0.263	0.211	0	0.398	0.414	0	0	0.002	0.663	0.003
HCM Control Delay, s/veh	13	11.7	9.8	14.5	12.8	10.6	10.6	10	21.6	8.7
HCM Lane LOS	B	B	N	B	B	N	N	A	C	A
HCM 95th-tile Q	1	0.8	0	1.9	2	0	0	0	4.8	0

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	43	18	6	21	8	46	266	20	1	69	71
Future Vol, veh/h	72	43	18	6	21	8	46	266	20	1	69	71
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	47	20	7	23	9	50	289	22	1	75	77
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.6	8.6	11.5	8.7
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	54%	17%	1%
Vol Thru, %	80%	32%	60%	49%
Vol Right, %	6%	14%	23%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	332	133	35	141
LT Vol	46	72	6	1
Through Vol	266	43	21	69
RT Vol	20	18	8	71
Lane Flow Rate	361	145	38	153
Geometry Grp	1	1	1	1
Degree of Util (X)	0.458	0.208	0.055	0.193
Departure Headway (Hd)	4.573	5.18	5.219	4.522
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	787	688	681	789
Service Time	2.618	3.243	3.295	2.577
HCM Lane V/C Ratio	0.459	0.211	0.056	0.194
HCM Control Delay, s/veh	11.5	9.6	8.6	8.7
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.4	0.8	0.2	0.7



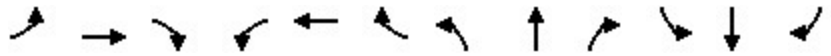
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	3	22	40	3	33	68	681	118	112	367	81
Future Volume (veh/h)	20	3	22	40	3	33	68	681	118	112	367	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	3	24	43	3	36	74	740	128	122	399	88
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	212	180	187	254	215	137	1160	518	210	1288	574
Arrive On Green	0.03	0.11	0.11	0.05	0.14	0.14	0.08	0.33	0.33	0.06	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	22	3	24	43	3	36	74	740	128	122	399	88
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	0.1	0.7	0.6	0.1	1.0	2.0	8.8	3.0	1.7	4.0	1.9
Cycle Q Clear(g_c), s	0.3	0.1	0.7	0.6	0.1	1.0	2.0	8.8	3.0	1.7	4.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	212	180	187	254	215	137	1160	518	210	1288	574
V/C Ratio(X)	0.20	0.01	0.13	0.23	0.01	0.17	0.54	0.64	0.25	0.58	0.31	0.15
Avail Cap(c_a), veh/h	513	589	499	513	739	626	264	2743	1224	333	2743	1224
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	23.5	19.6	19.9	22.6	18.7	19.1	22.2	14.3	12.3	22.8	11.4	10.7
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.2	0.0	0.1	1.2	0.6	0.2	0.9	0.1	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(95%),veh/ln	0.2	0.1	0.4	0.4	0.1	0.6	1.4	5.0	1.7	1.1	2.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.9	19.6	20.0	22.8	18.7	19.2	23.4	14.9	12.6	23.7	11.6	10.9
LnGrp LOS	C	B	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		49			82			942			609	
Approach Delay, s/veh		21.7			21.1			15.2			13.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	22.1	7.3	10.3	8.4	23.9	6.2	11.4
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	3.7	10.8	2.6	2.7	4.0	6.0	2.3	3.0
Green Ext Time (p_c), s	0.0	5.5	0.0	0.0	0.0	2.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	72	46	20	15	31	38	662	109	74	296	59
Future Volume (veh/h)	173	72	46	20	15	31	38	662	109	74	296	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	78	50	22	16	34	41	720	118	80	322	64
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	369	313	47	177	150	72	1461	239	104	1469	288
Arrive On Green	0.13	0.20	0.20	0.03	0.09	0.09	0.04	0.48	0.48	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3056	501	1781	2961	581
Grp Volume(v), veh/h	188	78	50	22	16	34	41	418	420	80	192	194
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1780	1781	1777	1766
Q Serve(g_s), s	8.6	2.9	2.2	1.0	0.7	1.7	1.9	13.5	13.5	3.7	5.1	5.2
Cycle Q Clear(g_c), s	8.6	2.9	2.2	1.0	0.7	1.7	1.9	13.5	13.5	3.7	5.1	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.33
Lane Grp Cap(c), veh/h	230	369	313	47	177	150	72	849	851	104	881	876
V/C Ratio(X)	0.82	0.21	0.16	0.47	0.09	0.23	0.57	0.49	0.49	0.77	0.22	0.22
Avail Cap(c_a), veh/h	415	559	473	160	559	473	160	849	851	287	881	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(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	35.5	28.1	27.8	40.2	34.6	35.1	39.4	14.9	14.9	38.8	11.9	11.9
Incr Delay (d2), s/veh	7.1	0.3	0.2	7.1	0.2	0.8	6.9	2.0	2.0	11.2	0.6	0.6
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(95%),veh/ln	7.3	2.3	1.4	0.9	0.5	1.1	1.7	8.9	8.9	3.4	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.6	28.4	28.1	47.3	34.8	35.8	46.4	17.0	17.0	50.1	12.5	12.5
LnGrp LOS	D	C	C	D	C	D	D	B	B	D	B	B
Approach Vol, veh/h		316			72			879			466	
Approach Delay, s/veh		36.8			39.1			18.3			19.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	45.8	6.8	21.6	8.0	47.3	15.4	13.0
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	5.7	15.5	3.0	4.9	3.9	7.2	10.6	3.7
Green Ext Time (p_c), s	0.1	5.1	0.0	0.5	0.0	2.1	0.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	14	108	221	168	131
Future Vol, veh/h	16	14	108	221	168	131
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	-	-	-	-	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	2	2	2	2
Mvmt Flow	17	15	117	240	183	142

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	658	183	325	0	-	0
Stage 1	183	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	429	860	1235	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	382	860	1235	-	-	-
Mov Cap-2 Maneuver	382	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	626	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.45	2.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	591	-	516	-	-
HCM Lane V/C Ratio	0.095	-	0.063	-	-
HCM Control Delay (s/veh)	8.2	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	18.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	58	27	296	6	0	100	189	179	167	66	1
Future Vol, veh/h	1	58	27	296	6	0	100	189	179	167	66	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	63	29	322	7	0	109	205	195	182	72	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	12.2	29.1	13.9	15.6
HCM LOS	B	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	98%	0%	2%	100%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	189	179	59	27	302	0	167	67
LT Vol	100	0	0	1	0	296	0	167	0
Through Vol	0	189	0	58	0	6	0	0	66
RT Vol	0	0	179	0	27	0	0	0	1
Lane Flow Rate	109	205	195	64	29	328	0	182	73
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.236	0.416	0.356	0.15	0.063	0.725	0	0.419	0.158
Departure Headway (Hd)	7.807	7.295	6.579	8.403	7.675	7.948	7.451	8.318	7.792
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	493	545	426	465	456	0	432	460
Service Time	5.562	5.051	4.334	6.176	5.448	5.703	5.205	6.083	5.556
HCM Lane V/C Ratio	0.237	0.416	0.358	0.15	0.062	0.719	0	0.421	0.159
HCM Control Delay, s/veh	13	15.2	13	12.7	11	29.1	10.2	17	12
HCM Lane LOS	B	C	B	B	B	D	N	C	B
HCM 95th-tile Q	0.9	2	1.6	0.5	0.2	5.8	0	2	0.6

Intersection	
Intersection Delay, s/veh	25.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	182	0	60	0	0	1	271	285	0	0	380	9
Future Vol, veh/h	182	0	60	0	0	1	271	285	0	0	380	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	198	0	65	0	0	1	295	310	0	0	413	10
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	16.6	11.1	20.7	36.6
HCM LOS	C	B	C	E

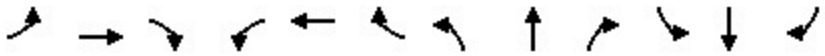
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	271	285	0	182	60	0	1	0	380	9
LT Vol	271	0	0	182	0	0	0	0	0	0
Through Vol	0	285	0	0	0	0	0	0	380	0
RT Vol	0	0	0	0	60	0	1	0	0	9
Lane Flow Rate	295	310	0	198	65	0	1	0	413	10
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.615	0.603	0	0.465	0.131	0	0.003	0	0.835	0.018
Departure Headway (Hd)	7.522	7.013	7.013	8.457	7.228	9.059	8.333	7.281	7.281	6.567
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	514	0	427	496	0	429	0	500	545
Service Time	5.262	4.752	4.752	6.2	4.971	6.824	6.097	5.02	5.02	4.306
HCM Lane V/C Ratio	0.615	0.603	0	0.464	0.131	0	0.002	0	0.826	0.018
HCM Control Delay, s/veh	21.6	19.9	9.8	18.4	11.1	11.8	11.1	10	37.2	9.4
HCM Lane LOS	C	C	N	C	B	N	B	N	E	A
HCM 95th-tile Q	4.1	3.9	0	2.4	0.4	0	0	0	8.3	0.1

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	99	37	47	21	46	4	32	124	12	8	336	110
Future Vol, veh/h	99	37	47	21	46	4	32	124	12	8	336	110
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	108	40	51	23	50	4	35	135	13	9	365	120
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.5	10.1	10.6	17.5
HCM LOS	B	B	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	54%	30%	2%
Vol Thru, %	74%	20%	65%	74%
Vol Right, %	7%	26%	6%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	183	71	454
LT Vol	32	99	21	8
Through Vol	124	37	46	336
RT Vol	12	47	4	110
Lane Flow Rate	183	199	77	493
Geometry Grp	1	1	1	1
Degree of Util (X)	0.277	0.318	0.131	0.673
Departure Headway (Hd)	5.457	5.761	6.091	4.906
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	657	623	587	735
Service Time	3.5	3.808	4.147	2.938
HCM Lane V/C Ratio	0.279	0.319	0.131	0.671
HCM Control Delay, s/veh	10.6	11.5	10.1	17.5
HCM Lane LOS	B	B	B	C
HCM 95th-tile Q	1.1	1.4	0.4	5.2



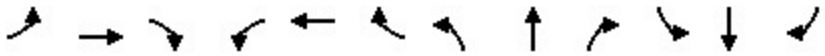
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	11	110	228	11	147	91	553	138	127	576	79
Future Volume (veh/h)	107	11	110	228	11	147	91	553	138	127	576	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	12	120	248	12	160	99	601	150	138	626	86
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	276	234	374	307	260	153	952	425	229	1053	470
Arrive On Green	0.09	0.15	0.15	0.11	0.16	0.16	0.09	0.27	0.27	0.07	0.30	0.30
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	116	12	120	248	12	160	99	601	150	138	626	86
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.7	0.3	3.8	3.7	0.3	5.1	2.9	8.1	4.1	2.1	8.1	2.2
Cycle Q Clear(g_c), s	1.7	0.3	3.8	3.7	0.3	5.1	2.9	8.1	4.1	2.1	8.1	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	276	234	374	307	260	153	952	425	229	1053	470
V/C Ratio(X)	0.37	0.04	0.51	0.66	0.04	0.61	0.65	0.63	0.35	0.60	0.59	0.18
Avail Cap(c_a), veh/h	472	542	460	472	681	577	243	2527	1127	306	2527	1127
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	23.1	19.8	21.3	23.2	19.0	21.0	24.0	17.5	16.0	24.6	16.3	14.2
Incr Delay (d2), s/veh	0.3	0.0	0.6	1.2	0.0	0.9	1.7	0.7	0.5	0.9	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(95%),veh/ln	1.2	0.2	2.4	2.7	0.2	3.3	2.0	5.0	2.6	1.4	4.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	19.8	21.9	24.4	19.0	21.9	25.7	18.2	16.5	25.5	16.8	14.4
LnGrp LOS	C	B	C	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		248			420			850			850	
Approach Delay, s/veh		22.5			23.3			18.7			18.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	20.3	10.5	12.6	9.2	21.8	9.6	13.5
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	4.1	10.1	5.7	5.8	4.9	10.1	3.7	7.1
Green Ext Time (p_c), s	0.0	4.4	0.0	0.1	0.0	4.4	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	33	58	106	72	97	50	539	49	69	641	205
Future Volume (veh/h)	126	33	58	106	72	97	50	539	49	69	641	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	36	63	115	78	105	54	586	53	75	697	223
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	217	184	145	186	158	85	1638	148	99	1336	428
Arrive On Green	0.10	0.12	0.12	0.08	0.10	0.10	0.05	0.50	0.50	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3296	298	1781	2648	847
Grp Volume(v), veh/h	137	36	63	115	78	105	54	315	324	75	468	452
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1817	1781	1777	1718
Q Serve(g_s), s	6.0	1.4	2.9	5.1	3.2	5.1	2.4	8.7	8.8	3.3	14.2	14.2
Cycle Q Clear(g_c), s	6.0	1.4	2.9	5.1	3.2	5.1	2.4	8.7	8.8	3.3	14.2	14.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.49
Lane Grp Cap(c), veh/h	175	217	184	145	186	158	85	883	903	99	897	867
V/C Ratio(X)	0.78	0.17	0.34	0.79	0.42	0.67	0.63	0.36	0.36	0.76	0.52	0.52
Avail Cap(c_a), veh/h	432	581	492	166	581	492	166	883	903	299	897	867
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	32.1	32.7	36.3	34.1	34.9	37.6	12.4	12.4	37.5	13.4	13.4
Incr Delay (d2), s/veh	7.5	0.4	1.1	20.0	1.5	4.8	7.5	1.1	1.1	11.2	2.2	2.2
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(95%),veh/ln	5.2	1.1	2.0	5.2	2.6	3.7	2.1	5.8	5.9	3.0	9.1	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	32.4	33.8	56.3	35.6	39.7	45.1	13.5	13.5	48.6	15.6	15.6
LnGrp LOS	D	C	C	E	D	D	D	B	B	D	B	B
Approach Vol, veh/h		236			298			693			995	
Approach Delay, s/veh		38.9			45.0			16.0			18.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	45.8	11.2	14.4	8.5	46.4	12.5	13.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	5.3	10.8	7.1	4.9	4.4	16.2	8.0	7.1
Green Ext Time (p_c), s	0.1	3.7	0.0	0.3	0.0	5.7	0.2	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	119	107	42	216	343	51
Future Vol, veh/h	119	107	42	216	343	51
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	-	-	-	-	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	2	2	2	2
Mvmt Flow	129	116	46	235	373	55

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	699	373	428	0	-	0
Stage 1	373	-	-	-	-	-
Stage 2	326	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	406	673	1131	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	673	1131	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	19.81	1.35	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	293	-	485	-	-
HCM Lane V/C Ratio	0.04	-	0.507	-	-
HCM Control Delay (s/veh)	8.3	0	19.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	2.8	-	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	63	39	186	5	0	50	230	15	64	49	1
Future Vol, veh/h	0	63	39	186	5	0	50	230	15	64	49	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	68	42	202	5	0	54	250	16	70	53	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	9.8	13.8	12.4	10.5
HCM LOS	A	B	B	B

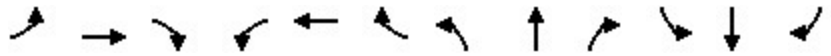
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	97%	0%	100%	0%
Vol Thru, %	0%	100%	0%	100%	0%	3%	100%	0%	98%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	230	15	63	39	191	0	64	50
LT Vol	50	0	0	0	0	186	0	64	0
Through Vol	0	230	0	63	0	5	0	0	49
RT Vol	0	0	15	0	39	0	0	0	1
Lane Flow Rate	54	250	16	68	42	208	0	70	54
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.099	0.421	0.024	0.125	0.069	0.389	0	0.136	0.098
Departure Headway (Hd)	6.564	6.058	5.349	6.582	5.875	6.749	6.258	7.022	6.499
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	546	595	668	544	608	534	0	510	551
Service Time	4.306	3.8	3.092	4.335	3.627	4.493	4.003	4.774	4.251
HCM Lane V/C Ratio	0.099	0.42	0.024	0.125	0.069	0.39	0	0.137	0.098
HCM Control Delay, s/veh	10	13.2	8.2	10.3	9.1	13.8	9	10.9	10
HCM Lane LOS	A	B	A	B	A	B	N	B	A
HCM 95th-tile Q	0.3	2.1	0.1	0.4	0.2	1.8	0	0.5	0.3

Intersection	
Intersection Delay, s/veh	15
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	1	180	0	0	0	207	116	0	1	271	2
Future Vol, veh/h	180	1	180	0	0	0	207	116	0	1	271	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	196	1	196	0	0	0	225	126	0	1	295	2
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	13.3	0	14.4	17.8
HCM LOS	B	-	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	99%	0%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	100%	1%	0%	100%	100%	0%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	207	116	0	181	180	0	0	1	271	2
LT Vol	207	0	0	180	0	0	0	1	0	0
Through Vol	0	116	0	1	0	0	0	0	271	0
RT Vol	0	0	0	0	180	0	0	0	0	2
Lane Flow Rate	225	126	0	197	196	0	0	1	295	2
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.452	0.235	0	0.396	0.328	0	0	0.002	0.558	0.004
Departure Headway (Hd)	7.232	6.722	6.722	7.237	6.031	7.944	7.944	7.324	6.815	6.102
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	495	531	0	496	593	0	0	486	527	582
Service Time	5.012	4.502	4.502	5.014	3.807	5.644	5.644	5.104	4.595	3.882
HCM Lane V/C Ratio	0.455	0.237	0	0.397	0.331	0	0	0.002	0.56	0.003
HCM Control Delay, s/veh	15.9	11.6	9.5	14.7	11.8	10.6	10.6	10.1	17.9	8.9
HCM Lane LOS	C	B	N	B	B	N	N	B	C	A
HCM 95th-tile Q	2.3	0.9	0	1.9	1.4	0	0	0	3.4	0



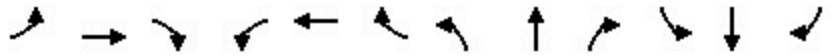
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	3	21	38	3	34	71	739	122	109	403	79
Future Volume (veh/h)	21	3	21	38	3	34	71	739	122	109	403	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	3	23	41	3	37	77	803	133	118	438	86
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	212	180	179	247	210	138	1228	548	203	1340	598
Arrive On Green	0.03	0.11	0.11	0.05	0.13	0.13	0.08	0.35	0.35	0.06	0.38	0.38
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	23	3	23	41	3	37	77	803	133	118	438	86
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	0.1	0.7	0.6	0.1	1.1	2.1	9.8	3.1	1.7	4.5	1.8
Cycle Q Clear(g_c), s	0.3	0.1	0.7	0.6	0.1	1.1	2.1	9.8	3.1	1.7	4.5	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	212	180	179	247	210	138	1228	548	203	1340	598
V/C Ratio(X)	0.20	0.01	0.13	0.23	0.01	0.18	0.56	0.65	0.24	0.58	0.33	0.14
Avail Cap(c_a), veh/h	496	570	483	496	715	606	256	2654	1184	322	2654	1184
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	24.3	20.3	20.6	23.5	19.4	19.9	22.9	14.3	12.1	23.6	11.4	10.6
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.2	0.0	0.1	1.3	0.6	0.2	1.0	0.1	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(95%),veh/ln	0.2	0.1	0.4	0.4	0.1	0.7	1.5	5.6	1.8	1.1	2.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.6	20.3	20.7	23.7	19.4	20.0	24.2	14.9	12.3	24.6	11.5	10.7
LnGrp LOS	C	C	C	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		49			81			1013			642	
Approach Delay, s/veh		22.5			21.9			15.2			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	10.2	23.6	7.3	10.4	8.6	25.2	6.3	11.4
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	3.7	11.8	2.6	2.7	4.1	6.5	2.3	3.1
Green Ext Time (p_c), s	0.0	6.0	0.0	0.0	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	70	45	52	27	108	38	653	122	110	295	57
Future Volume (veh/h)	170	70	45	52	27	108	38	653	122	110	295	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	76	49	57	29	117	41	710	133	120	321	62
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	333	282	84	185	157	71	1370	257	152	1502	287
Arrive On Green	0.13	0.18	0.18	0.05	0.10	0.10	0.04	0.46	0.46	0.09	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	2987	559	1781	2977	568
Grp Volume(v), veh/h	185	76	49	57	29	117	41	422	421	120	190	193
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1770	1781	1777	1768
Q Serve(g_s), s	8.8	3.0	2.3	2.7	1.2	6.3	2.0	14.7	14.7	5.8	5.2	5.3
Cycle Q Clear(g_c), s	8.8	3.0	2.3	2.7	1.2	6.3	2.0	14.7	14.7	5.8	5.2	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.32	1.00		0.32
Lane Grp Cap(c), veh/h	225	333	282	84	185	157	71	815	812	152	896	892
V/C Ratio(X)	0.82	0.23	0.17	0.68	0.16	0.74	0.58	0.52	0.52	0.79	0.21	0.22
Avail Cap(c_a), veh/h	398	536	454	153	536	454	153	815	812	276	896	892
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	37.1	30.7	30.4	40.9	35.9	38.2	41.2	16.8	16.8	39.1	12.0	12.0
Incr Delay (d2), s/veh	7.3	0.3	0.3	9.1	0.4	6.8	7.3	2.3	2.4	8.7	0.5	0.6
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(95%),veh/ln	7.5	2.5	1.5	2.5	1.0	4.7	1.7	9.8	9.8	5.0	3.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	31.0	30.7	50.0	36.3	45.0	48.5	19.1	19.1	47.8	12.5	12.6
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		310			203			884			503	
Approach Delay, s/veh		39.0			45.2			20.5			21.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	45.8	8.7	20.6	8.1	49.8	15.6	13.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	7.8	16.7	4.7	5.0	4.0	7.3	10.8	8.3
Green Ext Time (p_c), s	0.1	5.0	0.0	0.4	0.0	2.1	0.3	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	26.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	4	53	298	102	150
Future Vol, veh/h	27	4	53	298	102	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	-	150	-	-	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	2	2	2	2
Mvmt Flow	29	4	58	324	111	163

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	632	137	274	0	-	0
Stage 1	192	-	-	-	-	-
Stage 2	439	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	428	887	1288	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	409	887	1288	-	-	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.78	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1288	-	409	887	-	-
HCM Lane V/C Ratio	0.045	-	0.072	0.005	-	-
HCM Control Delay (s/veh)	7.9	-	14.5	9.1	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	115	2	1	235	103	3
Future Vol, veh/h	115	2	1	235	103	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	125	2	1	255	112	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	371	58	115	0	-	0
Stage 1	114	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	616	997	1473	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	615	997	1473	-	-	-
Mov Cap-2 Maneuver	615	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.31	0.03	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1473	-	619	-	-
HCM Lane V/C Ratio	0.001	-	0.205	-	-
HCM Control Delay (s/veh)	7.4	-	12.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	56	38	243	69	1
Future Vol, veh/h	6	56	38	243	69	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	61	41	264	75	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	422	75	76	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	347	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	589	986	1523	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	573	986	1523	-	-	-
Mov Cap-2 Maneuver	573	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	716	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.13	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1523	-	573	986	-	-
HCM Lane V/C Ratio	0.027	-	0.011	0.062	-	-
HCM Control Delay (s/veh)	7.4	-	11.4	8.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.2	-	-

Intersection	
Int Delay, s/veh	6.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	144	26	38	55	33	30
Future Vol, veh/h	144	26	38	55	33	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	157	28	41	60	36	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	176	71	0	0	101	0
Stage 1	71	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	814	991	-	-	1491	-
Stage 1	952	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	991	-	-	1491	-
Mov Cap-2 Maneuver	795	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.35	0	3.91
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	795	991	1491	-
HCM Lane V/C Ratio	-	-	0.197	0.029	0.024	-
HCM Control Delay (s/veh)	-	-	10.6	8.7	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	0.1	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	0	93	37	0	174
Future Vol, veh/h	31	0	93	37	0	174
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	0	101	40	0	189

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	310	121	0	0	141	0
Stage 1	121	-	-	-	-	-
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	682	930	-	-	1442	-
Stage 1	904	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	682	930	-	-	1442	-
Mov Cap-2 Maneuver	682	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	843	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.55	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	682	-	1442	-
HCM Lane V/C Ratio	-	-	0.049	-	-	-
HCM Control Delay (s/veh)	-	-	10.6	0	0	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	-	0	-

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	128	31	5	3	15	190
Future Vol, veh/h	128	31	5	3	15	190
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	34	5	3	16	207

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	9	0	-	0	319	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	312	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1611	-	-	-	674	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1611	-	-	-	616	1075
Mov Cap-2 Maneuver	-	-	-	-	616	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	SB
HCM Control Delay, s/v	5.99	0	9.51
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1611	-	-	-	1020
HCM Lane V/C Ratio	0.086	-	-	-	0.219
HCM Control Delay (s/veh)	7.4	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.8

Intersection	
Intersection Delay, s/veh	29.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	55	31	383	6	0	97	189	135	162	82	1
Future Vol, veh/h	1	55	31	383	6	0	97	189	135	162	82	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	60	34	416	7	0	105	205	147	176	89	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	12.6	57.3	14.8	16.4
HCM LOS	B	F	B	C

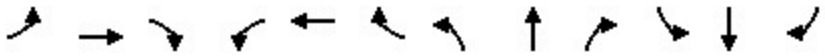
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	98%	0%	2%	100%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	0%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	189	135	56	31	389	0	162	83
LT Vol	97	0	0	1	0	383	0	162	0
Through Vol	0	189	0	55	0	6	0	0	82
RT Vol	0	0	135	0	31	0	0	0	1
Lane Flow Rate	105	205	147	61	34	423	0	176	90
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.244	0.447	0.29	0.149	0.076	0.94	0	0.429	0.206
Departure Headway (Hd)	8.342	7.827	7.107	8.833	8.1	8.007	7.508	8.765	8.238
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	429	458	503	404	439	452	0	409	434
Service Time	6.117	5.603	4.882	6.633	5.9	5.777	5.277	6.551	6.023
HCM Lane V/C Ratio	0.245	0.448	0.292	0.151	0.077	0.936	0	0.43	0.207
HCM Control Delay, s/veh	13.8	16.8	12.8	13.2	11.6	57.3	10.3	18	13.2
HCM Lane LOS	B	C	B	B	B	F	N	C	B
HCM 95th-tile Q	0.9	2.3	1.2	0.5	0.2	11	0	2.1	0.8

Intersection	
Intersection Delay, s/veh	43.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	0	62	1	0	1	241	243	0	0	487	9
Future Vol, veh/h	178	0	62	1	0	1	241	243	0	0	487	9
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	193	0	67	1	0	1	262	264	0	0	529	10
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	16.8	12	19.1	80.6
HCM LOS	C	B	C	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	0%	0%	100%	100%	0%
Vol Right, %	0%	0%	0%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	241	243	0	178	62	1	1	0	487	9
LT Vol	241	0	0	178	0	1	0	0	0	0
Through Vol	0	243	0	0	0	0	0	0	487	0
RT Vol	0	0	0	0	62	0	1	0	0	9
Lane Flow Rate	262	264	0	193	67	1	1	0	529	10
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.562	0.529	0	0.46	0.137	0.003	0.003	0	1.055	0.018
Departure Headway (Hd)	7.889	7.379	7.379	8.739	7.505	9.91	8.661	7.172	7.172	6.46
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	461	491	0	414	480	363	416	0	508	557
Service Time	5.589	5.079	5.079	6.439	5.205	7.61	6.361	4.872	4.872	4.16
HCM Lane V/C Ratio	0.568	0.538	0	0.466	0.14	0.003	0.002	0	1.041	0.018
HCM Control Delay, s/veh	20.2	18.1	10.1	18.7	11.4	12.6	11.4	9.9	81.9	9.3
HCM Lane LOS	C	C	N	C	B	B	B	N	F	A
HCM 95th-tile Q	3.4	3	0	2.4	0.5	0	0	0	15.9	0.1



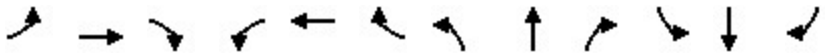
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	11	109	227	11	150	72	610	140	125	594	79
Future Volume (veh/h)	110	11	109	227	11	150	72	610	140	125	594	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	12	118	247	12	163	78	663	152	136	646	86
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	268	227	364	295	250	134	1021	456	225	1151	513
Arrive On Green	0.09	0.14	0.14	0.11	0.16	0.16	0.08	0.29	0.29	0.07	0.32	0.32
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	120	12	118	247	12	163	78	663	152	136	646	86
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.8	0.3	3.8	3.8	0.3	5.4	2.4	9.1	4.2	2.1	8.4	2.2
Cycle Q Clear(g_c), s	1.8	0.3	3.8	3.8	0.3	5.4	2.4	9.1	4.2	2.1	8.4	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	268	227	364	295	250	134	1021	456	225	1151	513
V/C Ratio(X)	0.38	0.04	0.52	0.68	0.04	0.65	0.58	0.65	0.33	0.60	0.56	0.17
Avail Cap(c_a), veh/h	459	527	447	459	662	561	237	2456	1096	298	2456	1096
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	23.8	20.6	22.1	24.0	19.9	22.0	24.9	17.4	15.6	25.3	15.6	13.5
Incr Delay (d2), s/veh	0.3	0.0	0.7	1.5	0.0	1.1	1.5	0.7	0.4	1.0	0.4	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(95%),veh/ln	1.3	0.2	2.5	2.8	0.2	3.5	1.7	5.6	2.6	1.4	5.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	20.6	22.8	25.6	19.9	23.1	26.4	18.1	16.1	26.3	16.0	13.6
LnGrp LOS	C	C	C	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		250			422			893			868	
Approach Delay, s/veh		23.3			24.4			18.5			17.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	21.8	10.5	12.6	8.8	23.8	9.7	13.4
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	4.1	11.1	5.8	5.8	4.4	10.4	3.8	7.4
Green Ext Time (p_c), s	0.0	4.9	0.0	0.1	0.0	4.5	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.6
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	40	58	121	66	151	50	548	71	127	601	202
Future Volume (veh/h)	125	40	58	121	66	151	50	548	71	127	601	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	43	63	132	72	164	54	596	77	138	653	220
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	266	226	150	244	207	81	1426	184	172	1308	441
Arrive On Green	0.10	0.14	0.14	0.08	0.13	0.13	0.05	0.45	0.45	0.10	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3166	408	1781	2610	879
Grp Volume(v), veh/h	136	43	63	132	72	164	54	334	339	138	444	429
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1797	1781	1777	1712
Q Serve(g_s), s	6.6	1.8	3.2	6.5	3.1	8.9	2.7	11.3	11.4	6.7	14.8	14.8
Cycle Q Clear(g_c), s	6.6	1.8	3.2	6.5	3.1	8.9	2.7	11.3	11.4	6.7	14.8	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.51
Lane Grp Cap(c), veh/h	172	266	226	150	244	207	81	800	809	172	891	858
V/C Ratio(X)	0.79	0.16	0.28	0.88	0.29	0.79	0.67	0.42	0.42	0.80	0.50	0.50
Avail Cap(c_a), veh/h	391	526	446	150	526	446	150	800	809	271	891	858
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	39.3	33.4	34.0	40.2	34.9	37.4	41.7	16.5	16.5	39.3	14.7	14.7
Incr Delay (d2), s/veh	8.0	0.3	0.7	40.1	0.7	6.7	9.0	1.6	1.6	9.0	2.0	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(95%),veh/ln	5.8	1.5	2.2	7.8	2.5	6.6	2.4	7.9	8.0	5.8	9.6	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.2	33.7	34.7	80.3	35.6	44.1	50.7	18.1	18.1	48.3	16.7	16.8
LnGrp LOS	D	C	C	F	D	D	D	B	B	D	B	B
Approach Vol, veh/h		242			368			727			1011	
Approach Delay, s/veh		41.6			55.4			20.5			21.1	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	45.8	12.1	17.8	8.6	50.3	13.2	16.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	8.7	13.4	8.5	5.2	4.7	16.8	8.6	10.9
Green Ext Time (p_c), s	0.1	3.9	0.0	0.3	0.0	5.3	0.2	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	28.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	105	49	14	201	334	146
Future Vol, veh/h	105	49	14	201	334	146
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	500	-	150	-	-	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	2	2	2	2
Mvmt Flow	114	53	15	218	363	159

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	691	261	522	0	-	0
Stage 1	442	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	394	739	1043	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	388	739	1043	-	-	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.6	0.55	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1043	-	388	739	-	-
HCM Lane V/C Ratio	0.015	-	0.294	0.072	-	-
HCM Control Delay (s/veh)	8.5	-	18.1	10.3	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	0.2	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	1	1	167	355	27
Future Vol, veh/h	48	1	1	167	355	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	1	1	182	386	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	584	208	415	0	-	0
Stage 1	401	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	458	799	1142	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	457	799	1142	-	-	-
Mov Cap-2 Maneuver	457	-	-	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.82	0.05	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1142	-	461	-	-
HCM Lane V/C Ratio	0.001	-	0.115	-	-
HCM Control Delay (s/veh)	8.2	-	13.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	53	64	121	348	9
Future Vol, veh/h	20	53	64	121	348	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	58	70	132	378	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	649	378	388	0	-	0
Stage 1	378	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	434	668	1170	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	409	668	1170	-	-	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.83	2.86	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1170	-	409	668	-	-
HCM Lane V/C Ratio	0.059	-	0.053	0.086	-	-
HCM Control Delay (s/veh)	8.3	-	14.3	10.9	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	0.3	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	72	13	23	131	90	78
Future Vol, veh/h	72	13	23	131	90	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	14	25	142	98	85

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	377	96	0	0	167	0
Stage 1	96	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	625	960	-	-	1410	-
Stage 1	928	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	582	960	-	-	1410	-
Mov Cap-2 Maneuver	582	-	-	-	-	-
Stage 1	928	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.64	0	4.15
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	582	960	1410	-
HCM Lane V/C Ratio	-	-	0.135	0.015	0.069	-
HCM Control Delay (s/veh)	-	-	12.2	8.8	7.7	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0.2	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	53	0	155	62	0	150
Future Vol, veh/h	53	0	155	62	0	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	0	168	67	0	163

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	365	202	0	0	236	0
Stage 1	202	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	634	839	-	-	1331	-
Stage 1	832	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	634	839	-	-	1331	-
Mov Cap-2 Maneuver	634	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	866	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.24	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	634	-	1331	-
HCM Lane V/C Ratio	-	-	0.091	-	-	-
HCM Control Delay (s/veh)	-	-	11.2	0	0	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	-	0	-

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	201	14	31	15	8	195
Future Vol, veh/h	201	14	31	15	8	195
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	218	15	34	16	9	212

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	50	0	-	0	494	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	452	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1557	-	-	-	535	1029
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	641	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1557	-	-	-	460	1029
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	641	-

Approach	EB	WB	SB
HCM Control Delay, s/v	7.19	0	9.73
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1557	-	-	-	981
HCM Lane V/C Ratio	0.14	-	-	-	0.225
HCM Control Delay (s/veh)	7.7	-	-	-	9.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.5	-	-	-	0.9

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	75	39	256	5	1	53	239	20	75	55	1
Future Vol, veh/h	1	75	39	256	5	1	53	239	20	75	55	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	82	42	278	5	1	58	260	22	82	60	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	10.7	18.1	13.9	11.3
HCM LOS	B	C	B	B

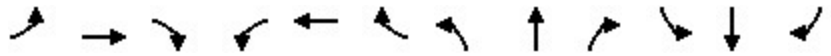
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	1%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	99%	0%	2%	0%	0%	98%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	239	20	76	39	261	1	75	56
LT Vol	53	0	0	1	0	256	0	75	0
Through Vol	0	239	0	75	0	5	0	0	55
RT Vol	0	0	20	0	39	0	1	0	1
Lane Flow Rate	58	260	22	83	42	284	1	82	61
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.112	0.469	0.035	0.161	0.074	0.552	0.002	0.17	0.118
Departure Headway (Hd)	7.013	6.506	5.796	7.027	6.311	7.002	5.802	7.486	6.964
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	509	551	614	507	563	513	613	477	511
Service Time	4.786	4.279	3.569	4.818	4.101	4.774	3.573	5.274	4.752
HCM Lane V/C Ratio	0.114	0.472	0.036	0.164	0.075	0.554	0.002	0.172	0.119
HCM Control Delay, s/veh	10.7	15	8.8	11.2	9.6	18.1	8.6	11.8	10.7
HCM Lane LOS	B	B	A	B	A	C	A	B	B
HCM 95th-tile Q	0.4	2.5	0.1	0.6	0.2	3.3	0	0.6	0.4

Intersection	
Intersection Delay, s/veh	18.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	205	11	237	1	1	1	147	106	5	8	340	2
Future Vol, veh/h	205	11	237	1	1	1	147	106	5	8	340	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	223	12	258	1	1	1	160	115	5	9	370	2
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	15	10.9	13.5	25.5
HCM LOS	B	B	B	D

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	95%	0%	50%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	5%	0%	50%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	106	5	216	237	2	1	8	340	2
LT Vol	147	0	0	205	0	1	0	8	0	0
Through Vol	0	106	0	11	0	1	0	0	340	0
RT Vol	0	0	5	0	237	0	1	0	0	2
Lane Flow Rate	160	115	5	235	258	2	1	9	370	2
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.347	0.234	0.01	0.474	0.436	0.005	0.002	0.018	0.723	0.004
Departure Headway (Hd)	7.82	7.31	6.596	7.379	6.203	8.47	7.507	7.548	7.039	6.327
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	462	493	545	491	585	423	478	477	517	569
Service Time	5.537	5.026	4.312	5.079	3.903	6.203	5.239	5.248	4.739	4.027
HCM Lane V/C Ratio	0.346	0.233	0.009	0.479	0.441	0.005	0.002	0.019	0.716	0.004
HCM Control Delay, s/veh	14.6	12.2	9.4	16.6	13.6	11.2	10.3	10.4	26	9.1
HCM Lane LOS	B	B	A	C	B	B	B	B	D	A
HCM 95th-tile Q	1.5	0.9	0	2.5	2.2	0	0	0.1	5.9	0



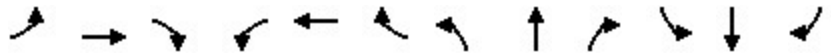
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	6	21	56	12	34	61	694	213	110	427	80
Future Volume (veh/h)	20	6	21	56	12	34	61	694	213	110	427	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	7	23	61	13	37	66	754	232	120	464	87
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	221	187	233	288	244	126	1180	526	206	1316	587
Arrive On Green	0.03	0.12	0.12	0.07	0.15	0.15	0.07	0.33	0.33	0.06	0.37	0.37
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	22	7	23	61	13	37	66	754	232	120	464	87
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	0.2	0.7	0.9	0.3	1.1	1.9	9.4	6.0	1.8	5.0	1.9
Cycle Q Clear(g_c), s	0.3	0.2	0.7	0.9	0.3	1.1	1.9	9.4	6.0	1.8	5.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	221	187	233	288	244	126	1180	526	206	1316	587
V/C Ratio(X)	0.20	0.03	0.12	0.26	0.05	0.15	0.52	0.64	0.44	0.58	0.35	0.15
Avail Cap(c_a), veh/h	487	560	474	487	702	595	251	2608	1163	316	2608	1163
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	24.8	20.5	20.7	23.2	18.9	19.2	23.5	14.9	13.7	24.0	12.0	11.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.2	0.0	0.1	1.3	0.6	0.6	1.0	0.2	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(95%),veh/ln	0.2	0.1	0.4	0.6	0.2	0.7	1.3	5.5	3.6	1.2	2.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.1	20.5	20.8	23.4	18.9	19.3	24.8	15.4	14.3	25.0	12.1	11.1
LnGrp LOS	C	C	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		52			111			1052			671	
Approach Delay, s/veh		22.6			21.5			15.8			14.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	23.2	8.1	10.8	8.3	25.2	6.2	12.7
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	3.8	11.4	2.9	2.7	3.9	7.0	2.3	3.1
Green Ext Time (p_c), s	0.0	6.0	0.0	0.0	0.0	3.2	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	15.8
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	42	55	12	9	1	39	774	75	90	349	64
Future Volume (veh/h)	195	42	55	12	9	1	39	774	75	90	349	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	46	60	13	10	1	42	841	82	98	379	70
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	380	339	30	290	29	72	1520	148	126	1485	272
Arrive On Green	0.14	0.21	0.21	0.02	0.09	0.09	0.04	0.46	0.46	0.07	0.50	0.50
Sat Flow, veh/h	1781	1777	1585	1781	3268	321	1781	3271	319	1781	2999	549
Grp Volume(v), veh/h	212	46	60	13	5	6	42	457	466	98	223	226
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1813	1781	1777	1813	1781	1777	1772
Q Serve(g_s), s	10.0	1.8	2.7	0.6	0.2	0.2	2.0	16.0	16.0	4.7	6.2	6.4
Cycle Q Clear(g_c), s	10.0	1.8	2.7	0.6	0.2	0.2	2.0	16.0	16.0	4.7	6.2	6.4
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.18	1.00		0.31
Lane Grp Cap(c), veh/h	253	380	339	30	158	161	72	826	842	126	880	877
V/C Ratio(X)	0.84	0.12	0.18	0.43	0.03	0.04	0.58	0.55	0.55	0.78	0.25	0.26
Avail Cap(c_a), veh/h	403	516	460	155	516	526	155	826	842	279	880	877
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	36.0	27.3	27.6	41.9	35.8	35.9	40.6	16.6	16.6	39.3	12.5	12.6
Incr Delay (d2), s/veh	8.4	0.1	0.2	9.2	0.1	0.1	7.2	2.7	2.6	9.7	0.7	0.7
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(95%),veh/ln	8.4	1.4	1.8	0.6	0.2	0.2	1.8	10.4	10.6	4.1	4.2	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.4	27.4	27.9	51.1	35.9	35.9	47.8	19.3	19.2	49.0	13.2	13.3
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		318			24			965			547	
Approach Delay, s/veh		38.8			44.2			20.5			19.7	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	45.8	6.1	23.5	8.1	48.4	16.8	12.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	6.7	18.0	2.6	4.7	4.0	8.4	12.0	2.2
Green Ext Time (p_c), s	0.1	5.5	0.0	0.5	0.0	2.5	0.3	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	71	6	111	188	118	201
Future Vol, veh/h	71	6	111	188	118	201
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	-	-	-	-	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	2	2	2	2
Mvmt Flow	77	7	121	204	128	218

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	574	128	347	0	-	0
Stage 1	128	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	480	922	1212	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	426	922	1212	-	-	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	645	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	14.95	3.08	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	668	-	445	-	-
HCM Lane V/C Ratio	0.1	-	0.188	-	-
HCM Control Delay (s/veh)	8.3	0	15	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.7	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	24	32	316	71	15
Future Vol, veh/h	3	24	32	316	71	15
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	2	2	2	2
Mvmt Flow	3	26	35	343	77	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	498	85	93	0	-	0
Stage 1	85	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	531	974	1501	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	516	974	1501	-	-	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.2	0.69	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	166	-	886	-	-
HCM Lane V/C Ratio	0.023	-	0.033	-	-
HCM Control Delay (s/veh)	7.5	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	9	1	1	12	1	1	4	1	1	12	75
Future Vol, veh/h	79	9	1	1	12	1	1	4	1	1	12	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	86	10	1	1	13	1	1	4	1	1	13	82

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	69	64	54	27	104	5	95	0	0	5	0	0
Stage 1	56	56	-	7	7	-	-	-	-	-	-	-
Stage 2	13	8	-	20	97	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	923	827	1013	983	786	1078	1499	-	-	1616	-	-
Stage 1	956	848	-	1015	890	-	-	-	-	-	-	-
Stage 2	1007	889	-	999	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	906	826	1013	969	785	1078	1499	-	-	1616	-	-
Mov Cap-2 Maneuver	906	826	-	969	785	-	-	-	-	-	-	-
Stage 1	955	848	-	1014	889	-	-	-	-	-	-	-
Stage 2	991	889	-	985	814	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.38	9.52	1.23	0.08
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	288	-	-	906	842	812	17	-	-
HCM Lane V/C Ratio	0.001	-	-	0.095	0.013	0.019	0.001	-	-
HCM Control Delay (s/veh)	7.4	0	-	9.4	9.3	9.5	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	57	30	1	1	12
Future Vol, veh/h	8	57	30	1	1	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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	2	2	2	2
Mvmt Flow	9	62	33	1	1	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	113	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1578	-	-	-	884	1040
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	879	1040
Mov Cap-2 Maneuver	-	-	-	-	879	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	8.56
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	1026
HCM Lane V/C Ratio	0.006	-	-	-	0.014
HCM Control Delay (s/veh)	7.3	-	-	-	8.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	65	177	69	13	4
Future Vol, veh/h	14	65	177	69	13	4
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, %	2	2	2	2	2	2
Mvmt Flow	15	71	192	75	14	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	267	0	-	0	331	230
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1296	-	-	-	664	809
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1296	-	-	-	656	809
Mov Cap-2 Maneuver	-	-	-	-	656	-
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	923	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.38	0	10.39
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1296	-	-	-	687
HCM Lane V/C Ratio	0.012	-	-	-	0.027
HCM Control Delay (s/veh)	7.8	-	-	-	10.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	68	83	51	13	4
Future Vol, veh/h	14	68	83	51	13	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	2	2	2	2
Mvmt Flow	15	74	90	55	14	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	146	0	-	0	222	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	104	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1436	-	-	-	766	934
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	920	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1436	-	-	-	758	934
Mov Cap-2 Maneuver	-	-	-	-	758	-
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	920	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.29	0	9.65
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1436	-	-	-	793
HCM Lane V/C Ratio	0.011	-	-	-	0.023
HCM Control Delay (s/veh)	7.5	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Intersection Delay, s/veh	30.8
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	55	37	376	6	1	110	209	171	166	91	1
Future Vol, veh/h	1	55	37	376	6	1	110	209	171	166	91	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	60	40	409	7	1	120	227	186	180	99	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	13.1	62.8	16.3	17.2
HCM LOS	B	F	C	C

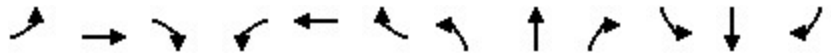
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	0%	98%	0%	100%	0%
Vol Thru, %	0%	100%	0%	98%	0%	2%	0%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	209	171	56	37	382	1	166	92
LT Vol	110	0	0	1	0	376	0	166	0
Through Vol	0	209	0	55	0	6	0	0	91
RT Vol	0	0	171	0	37	0	1	0	1
Lane Flow Rate	120	227	186	61	40	415	1	180	100
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.284	0.507	0.378	0.156	0.095	0.959	0.002	0.454	0.237
Departure Headway (Hd)	8.549	8.035	7.316	9.233	8.499	8.429	7.216	9.065	8.54
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	423	452	494	390	422	432	499	399	422
Service Time	6.249	5.735	5.016	6.969	6.235	6.129	4.916	6.789	6.264
HCM Lane V/C Ratio	0.284	0.502	0.377	0.156	0.095	0.961	0.002	0.451	0.237
HCM Control Delay, s/veh	14.6	18.7	14.4	13.7	12.1	62.9	9.9	19.1	13.9
HCM Lane LOS	B	C	B	B	B	F	A	C	B
HCM 95th-tile Q	1.2	2.8	1.7	0.5	0.3	11.3	0	2.3	0.9

Intersection	
Intersection Delay, s/veh	55.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	184	4	64	8	6	10	311	296	3	4	491	8
Future Vol, veh/h	184	4	64	8	6	10	311	296	3	4	491	8
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	200	4	70	9	7	11	338	322	3	4	534	9
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	18.2	12.7	27.2	109.4
HCM LOS	C	B	D	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	98%	0%	57%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	2%	0%	43%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	311	296	3	188	64	14	10	4	491	8
LT Vol	311	0	0	184	0	8	0	4	0	0
Through Vol	0	296	0	4	0	6	0	0	491	0
RT Vol	0	0	3	0	64	0	10	0	0	8
Lane Flow Rate	338	322	3	204	70	15	11	4	534	9
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.736	0.656	0.006	0.496	0.146	0.041	0.026	0.01	1.139	0.017
Departure Headway (Hd)	8.213	7.702	6.986	9.083	7.877	10.053	9.042	8.192	7.682	6.967
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	473	515	398	458	358	398	439	475	517
Service Time	5.913	5.402	4.686	6.783	5.577	7.753	6.742	5.894	5.384	4.67
HCM Lane V/C Ratio	0.763	0.681	0.006	0.513	0.153	0.042	0.028	0.009	1.124	0.017
HCM Control Delay, s/veh	30.6	23.9	9.7	20.4	11.9	13.2	12	11	111.8	9.8
HCM Lane LOS	D	C	A	C	B	B	B	B	F	A
HCM 95th-tile Q	5.9	4.6	0	2.7	0.5	0.1	0.1	0	18.8	0.1



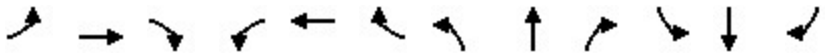
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	24	101	365	19	115	67	626	190	115	564	78
Future Volume (veh/h)	106	24	101	365	19	115	67	626	190	115	564	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	26	110	397	21	125	73	680	207	125	613	85
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	257	218	440	333	282	127	1038	463	209	1158	517
Arrive On Green	0.09	0.14	0.14	0.13	0.18	0.18	0.07	0.29	0.29	0.06	0.33	0.33
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	115	26	110	397	21	125	73	680	207	125	613	85
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.8	0.7	3.7	6.6	0.5	4.1	2.3	9.7	6.2	2.0	8.2	2.2
Cycle Q Clear(g_c), s	1.8	0.7	3.7	6.6	0.5	4.1	2.3	9.7	6.2	2.0	8.2	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	257	218	440	333	282	127	1038	463	209	1158	517
V/C Ratio(X)	0.38	0.10	0.50	0.90	0.06	0.44	0.57	0.65	0.45	0.60	0.53	0.16
Avail Cap(c_a), veh/h	440	506	429	440	635	538	227	2356	1051	286	2356	1051
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	25.0	21.9	23.2	25.0	19.8	21.3	26.1	18.0	16.7	26.6	15.9	13.9
Incr Delay (d2), s/veh	0.3	0.1	0.7	20.8	0.0	0.4	1.5	0.7	0.7	1.0	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(95%),veh/ln	1.3	0.5	2.5	6.9	0.4	2.6	1.7	6.1	3.9	1.4	5.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.3	22.0	23.9	45.8	19.9	21.7	27.6	18.7	17.4	27.6	16.3	14.1
LnGrp LOS	C	C	C	D	B	C	C	B	B	C	B	B
Approach Vol, veh/h		251			543			960			823	
Approach Delay, s/veh		24.3			39.2			19.1			17.8	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	22.8	12.0	12.6	8.8	24.7	9.7	14.9
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	4.0	11.7	8.6	5.7	4.3	10.2	3.8	6.1
Green Ext Time (p_c), s	0.0	5.2	0.0	0.2	0.0	4.3	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.4
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	19	62	80	44	90	59	653	31	16	757	257
Future Volume (veh/h)	141	19	62	80	44	90	59	653	31	16	757	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	21	67	87	48	98	64	710	34	17	823	279
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	259	231	112	178	159	93	1790	86	39	1271	431
Arrive On Green	0.11	0.15	0.15	0.06	0.10	0.10	0.05	0.52	0.52	0.02	0.49	0.49
Sat Flow, veh/h	1781	1777	1585	1781	1777	1585	1781	3452	165	1781	2606	882
Grp Volume(v), veh/h	153	21	67	87	48	98	64	365	379	17	561	541
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1841	1781	1777	1712
Q Serve(g_s), s	6.7	0.8	3.0	3.8	2.0	4.7	2.8	10.0	10.0	0.8	18.9	18.9
Cycle Q Clear(g_c), s	6.7	0.8	3.0	3.8	2.0	4.7	2.8	10.0	10.0	0.8	18.9	18.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.52
Lane Grp Cap(c), veh/h	193	259	231	112	178	159	93	921	954	39	867	835
V/C Ratio(X)	0.79	0.08	0.29	0.78	0.27	0.62	0.69	0.40	0.40	0.44	0.65	0.65
Avail Cap(c_a), veh/h	435	556	496	167	556	496	167	921	954	301	867	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(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	34.8	29.5	30.5	36.9	33.3	34.5	37.2	11.7	11.7	38.6	15.3	15.3
Incr Delay (d2), s/veh	7.1	0.1	0.7	12.4	0.8	3.9	8.7	1.3	1.2	7.7	3.7	3.9
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(95%),veh/ln	5.7	0.6	2.1	3.5	1.5	3.4	2.5	6.5	6.7	0.7	11.7	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.9	29.7	31.1	49.3	34.1	38.4	45.9	12.9	12.9	46.4	19.0	19.2
LnGrp LOS	D	C	C	D	C	D	D	B	B	D	B	B
Approach Vol, veh/h		241			233			808			1119	
Approach Delay, s/veh		37.8			41.6			15.5			19.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	47.2	9.6	16.7	8.8	44.8	13.3	13.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	12.8	12.0	5.8	5.0	4.8	20.9	8.7	6.7
Green Ext Time (p_c), s	0.0	4.4	0.0	0.4	0.0	6.5	0.3	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	60.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	446	95	28	160	316	148
Future Vol, veh/h	446	95	28	160	316	148
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	-	-	-	-	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	2	2	2	2
Mvmt Flow	485	103	30	174	343	161

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	578	343	504	0	-	0
Stage 1	343	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 478	699	1060	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 462	699	1060	-	-	-
Mov Cap-2 Maneuver	~ 462	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/veh	133.12	1.27	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	268	-	492	-	-
HCM Lane V/C Ratio	0.029	-	1.196	-	-
HCM Control Delay (s/veh)	8.5	0	133.1	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.1	-	22	-	-

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	41	38	151	414	12
Future Vol, veh/h	17	41	38	151	414	12
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	2	2	2	2
Mvmt Flow	18	45	41	164	450	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	703	457	463	0	-	0
Stage 1	457	-	-	-	-	-
Stage 2	247	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	404	604	1098	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	387	604	1098	-	-	-
Mov Cap-2 Maneuver	387	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	794	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.9	1.69	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	362	-	519	-	-
HCM Lane V/C Ratio	0.038	-	0.122	-	-
HCM Control Delay (s/veh)	8.4	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	141	21	1	1	21	1	1	14	1	1	25	166
Future Vol, veh/h	141	21	1	1	21	1	1	14	1	1	25	166
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	153	23	1	1	23	1	1	15	1	1	27	180

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	138	117	59	228	16	208	0	0	16	0	0
Stage 1	120	120	-	18	18	-	-	-	-	-	-	-
Stage 2	29	18	-	41	210	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	820	753	935	938	672	1064	1363	-	-	1601	-	-
Stage 1	885	797	-	1001	880	-	-	-	-	-	-	-
Stage 2	988	880	-	974	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	790	752	935	907	671	1064	1363	-	-	1601	-	-
Mov Cap-2 Maneuver	790	752	-	907	671	-	-	-	-	-	-	-
Stage 1	884	796	-	1000	880	-	-	-	-	-	-	-
Stage 2	961	879	-	944	728	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.55	10.42	0.48	0.04
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	111	-	-	790	758	690	8	-	-
HCM Lane V/C Ratio	0.001	-	-	0.194	0.032	0.036	0.001	-	-
HCM Control Delay (s/veh)	7.6	0	-	10.7	9.9	10.4	7.2	0	-
HCM Lane LOS	A	A	-	B	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	30	72	1	1	28
Future Vol, veh/h	15	30	72	1	1	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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	2	2	2	2
Mvmt Flow	16	33	78	1	1	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	79	0	-	0	144	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	65	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1519	-	-	-	849	982
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	957	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1519	-	-	-	839	982
Mov Cap-2 Maneuver	-	-	-	-	839	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	957	-

Approach	EB	WB	SB
HCM Control Delay, s/v	2.47	0	8.81
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1519	-	-	-	976
HCM Lane V/C Ratio	0.011	-	-	-	0.032
HCM Control Delay (s/veh)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	356	169	23	119	23
Future Vol, veh/h	13	356	169	23	119	23
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, %	2	2	2	2	2	2
Mvmt Flow	14	387	184	25	129	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	209	0	-	0	611	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	415	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1362	-	-	-	457	845
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	666	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1362	-	-	-	452	845
Mov Cap-2 Maneuver	-	-	-	-	452	-
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	15.72
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1362	-	-	-	489
HCM Lane V/C Ratio	0.01	-	-	-	0.316
HCM Control Delay (s/veh)	7.7	-	-	-	15.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.3

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	142	168	24	121	23
Future Vol, veh/h	14	142	168	24	121	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	2	2	2	2
Mvmt Flow	15	154	183	26	132	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	209	0	-	0	380	196
Stage 1	-	-	-	-	196	-
Stage 2	-	-	-	-	185	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1362	-	-	-	622	846
Stage 1	-	-	-	-	837	-
Stage 2	-	-	-	-	847	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1362	-	-	-	615	846
Mov Cap-2 Maneuver	-	-	-	-	615	-
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	847	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.69	0	12.39
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1362	-	-	-	643
HCM Lane V/C Ratio	0.011	-	-	-	0.243
HCM Control Delay (s/veh)	7.7	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1

Intersection	
Intersection Delay, s/veh	24.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	67	58	376	5	1	56	253	18	74	73	1
Future Vol, veh/h	1	67	58	376	5	1	56	253	18	74	73	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	73	63	409	5	1	61	275	20	80	79	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	11.6	40.2	17.4	12.7
HCM LOS	B	E	C	B

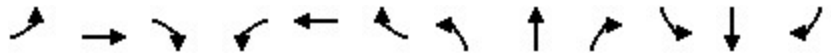
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	1%	0%	99%	0%	100%	0%
Vol Thru, %	0%	100%	0%	99%	0%	1%	0%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	253	18	68	58	381	1	74	74
LT Vol	56	0	0	1	0	376	0	74	0
Through Vol	0	253	0	67	0	5	0	0	73
RT Vol	0	0	18	0	58	0	1	0	1
Lane Flow Rate	61	275	20	74	63	414	1	80	80
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.133	0.562	0.036	0.162	0.126	0.855	0.002	0.188	0.176
Departure Headway (Hd)	7.862	7.352	6.637	7.899	7.176	7.435	6.227	8.417	7.893
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	456	490	539	453	499	489	574	425	454
Service Time	5.612	5.101	4.386	5.66	4.936	5.179	3.971	6.178	5.653
HCM Lane V/C Ratio	0.134	0.561	0.037	0.163	0.126	0.847	0.002	0.188	0.176
HCM Control Delay, s/veh	11.8	19.2	9.6	12.2	11	40.3	9	13.1	12.3
HCM Lane LOS	B	C	A	B	B	E	A	B	B
HCM 95th-tile Q	0.5	3.4	0.1	0.6	0.4	8.8	0	0.7	0.6

Intersection	
Intersection Delay, s/veh	63.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	185	11	270	1	1	1	312	141	6	7	498	2
Future Vol, veh/h	185	11	270	1	1	1	312	141	6	7	498	2
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	201	12	293	1	1	1	339	153	7	8	541	2
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	20.5	13	29.9	132.7
HCM LOS	C	B	D	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	94%	0%	50%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	6%	0%	50%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	312	141	6	196	270	2	1	7	498	2
LT Vol	312	0	0	185	0	1	0	7	0	0
Through Vol	0	141	0	11	0	1	0	0	498	0
RT Vol	0	0	6	0	270	0	1	0	0	2
Lane Flow Rate	339	153	7	213	293	2	1	8	541	2
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.785	0.334	0.013	0.498	0.592	0.006	0.003	0.018	1.199	0.004
Departure Headway (Hd)	8.813	8.298	7.578	8.823	7.637	10.518	9.538	8.487	7.975	7.257
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	414	437	475	411	475	342	377	424	460	496
Service Time	6.513	5.998	5.278	6.523	5.337	8.218	7.238	6.187	5.675	4.957
HCM Lane V/C Ratio	0.819	0.35	0.015	0.518	0.617	0.006	0.003	0.019	1.176	0.004
HCM Control Delay, s/veh	37	15.1	10.4	20	20.8	13.3	12.3	11.3	134.9	10
HCM Lane LOS	E	C	B	C	C	B	B	B	F	A
HCM 95th-tile Q	6.8	1.4	0	2.7	3.8	0	0	0.1	20.9	0



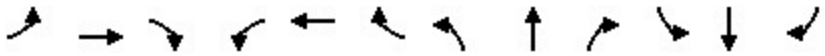
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	8	20	109	19	157	59	628	266	256	404	76
Future Volume (veh/h)	19	8	20	109	19	157	59	628	266	256	404	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	9	22	118	21	171	64	683	289	278	439	83
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	257	218	307	368	312	119	1067	476	291	1290	575
Arrive On Green	0.03	0.14	0.14	0.09	0.20	0.20	0.07	0.30	0.30	0.08	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	21	9	22	118	21	171	64	683	289	278	439	83
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.3	0.2	0.7	1.8	0.5	5.5	2.0	9.5	8.9	4.6	5.1	2.0
Cycle Q Clear(g_c), s	0.3	0.2	0.7	1.8	0.5	5.5	2.0	9.5	8.9	4.6	5.1	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	103	257	218	307	368	312	119	1067	476	291	1290	575
V/C Ratio(X)	0.20	0.04	0.10	0.38	0.06	0.55	0.54	0.64	0.61	0.96	0.34	0.14
Avail Cap(c_a), veh/h	448	515	436	448	646	547	231	2399	1070	291	2399	1070
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	27.0	21.3	21.5	24.5	18.6	20.6	25.7	17.3	17.1	26.0	13.2	12.2
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.3	0.0	0.6	1.4	0.6	1.3	40.5	0.2	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(95%),veh/ln	0.3	0.2	0.4	1.3	0.4	3.5	1.4	5.9	5.6	5.9	3.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.4	21.3	21.6	24.8	18.6	21.2	27.1	17.9	18.3	66.5	13.4	12.3
LnGrp LOS	C	C	C	C	B	C	C	B	B	E	B	B
Approach Vol, veh/h		52			310			1036			800	
Approach Delay, s/veh		23.9			22.4			18.6			31.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	22.9	9.7	12.4	8.4	26.5	6.3	15.8
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	6.6	11.5	3.8	2.7	4.0	7.1	2.3	7.5
Green Ext Time (p_c), s	0.0	5.6	0.0	0.0	0.0	3.0	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	24.0
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	67	50	40	20	2	36	747	107	96	361	77
Future Volume (veh/h)	204	67	50	40	20	2	36	747	107	96	361	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	73	54	43	22	2	39	812	116	104	392	84
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	401	270	73	299	27	69	1427	204	133	1440	306
Arrive On Green	0.15	0.20	0.20	0.04	0.09	0.09	0.04	0.46	0.46	0.07	0.49	0.49
Sat Flow, veh/h	1781	2030	1371	1781	3298	296	1781	3121	446	1781	2917	619
Grp Volume(v), veh/h	222	63	64	43	12	12	39	462	466	104	237	239
Grp Sat Flow(s),veh/h/ln	1781	1777	1624	1781	1777	1817	1781	1777	1790	1781	1777	1759
Q Serve(g_s), s	10.6	2.6	2.9	2.1	0.5	0.5	1.9	16.7	16.7	5.0	6.8	7.0
Cycle Q Clear(g_c), s	10.6	2.6	2.9	2.1	0.5	0.5	1.9	16.7	16.7	5.0	6.8	7.0
Prop In Lane	1.00		0.84	1.00		0.16	1.00		0.25	1.00		0.35
Lane Grp Cap(c), veh/h	263	351	320	73	161	165	69	812	819	133	877	868
V/C Ratio(X)	0.85	0.18	0.20	0.59	0.07	0.07	0.57	0.57	0.57	0.78	0.27	0.27
Avail Cap(c_a), veh/h	397	508	464	153	508	519	153	812	819	275	877	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(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	36.3	29.2	29.3	41.2	36.4	36.4	41.3	17.4	17.4	39.8	12.9	13.0
Incr Delay (d2), s/veh	10.1	0.2	0.3	7.5	0.2	0.2	7.2	2.9	2.9	9.4	0.8	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(95%),veh/ln	8.9	2.0	2.0	1.8	0.4	0.4	1.7	10.9	11.0	4.4	4.6	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.4	29.5	29.6	48.7	36.6	36.6	48.6	20.3	20.3	49.2	13.7	13.8
LnGrp LOS	D	C	C	D	D	D	D	C	C	D	B	B
Approach Vol, veh/h		349			67			967			580	
Approach Delay, s/veh		40.3			44.4			21.4			20.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	45.8	8.2	22.4	8.0	49.0	17.5	13.0
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	17.0	18.7	4.1	4.9	3.9	9.0	12.6	2.5
Green Ext Time (p_c), s	0.1	5.5	0.0	0.6	0.0	2.7	0.3	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	25.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	15

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	191	12	127	271	205	320
Future Vol, veh/h	191	12	127	271	205	320
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	-	200	-	-	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	2	2	2	2
Mvmt Flow	208	13	138	295	223	348

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	967	285	571	0	-	0
Stage 1	397	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	266	712	1000	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	564	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	230	712	1000	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	560	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	77.66	2.93	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1000	-	230	712	-	-
HCM Lane V/C Ratio	0.138	-	0.904	0.018	-	-
HCM Control Delay (s/veh)	9.2	-	81.9	10.1	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.5	-	7.6	0.1	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	120	10	120	278	87	130
Future Vol, veh/h	120	10	120	278	87	130
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	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	11	130	302	95	141

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	728	118	236	0	-	0
Stage 1	165	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	374	912	1330	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	337	912	1330	-	-	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	569	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	21.73	2.41	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1330	-	354	-	-
HCM Lane V/C Ratio	0.098	-	0.399	-	-
HCM Control Delay (s/veh)	8	-	21.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	79	54	404	63	1
Future Vol, veh/h	7	79	54	404	63	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	200	-	-	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	2	2	2	2
Mvmt Flow	8	86	59	439	68	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	625	68	70	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	449	995	1531	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	431	995	1531	-	-	-
Mov Cap-2 Maneuver	431	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.33	0.88	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1531	-	431	995	-	-
HCM Lane V/C Ratio	0.038	-	0.018	0.086	-	-
HCM Control Delay (s/veh)	7.4	-	13.5	9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	270	52	3	8	217	114	9	15	25	24	15	81
Future Vol, veh/h	270	52	3	8	217	114	9	15	25	24	15	81
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	293	57	3	9	236	124	10	16	27	26	16	88
Number of Lanes	1	1	0	1	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	15.4	16.2	10	10.3
HCM LOS	C	C	A	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	17%	0%	95%	0%	66%	0%	100%	6%
Vol Right, %	0%	0%	83%	0%	5%	0%	34%	0%	0%	94%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	10	30	270	55	8	331	24	10	86
LT Vol	9	0	0	270	0	8	0	24	0	0
Through Vol	0	10	5	0	52	0	217	0	10	5
RT Vol	0	0	25	0	3	0	114	0	0	81
Lane Flow Rate	10	11	33	293	60	9	360	26	11	93
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.021	0.022	0.06	0.534	0.1	0.016	0.582	0.054	0.021	0.164
Departure Headway (Hd)	7.738	7.226	6.629	6.551	6.01	6.572	5.828	7.518	7.008	6.335
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	461	494	538	549	595	544	619	475	509	565
Service Time	5.507	4.995	4.398	4.295	3.754	4.316	3.572	5.281	4.771	4.097
HCM Lane V/C Ratio	0.022	0.022	0.061	0.534	0.101	0.017	0.582	0.055	0.022	0.165
HCM Control Delay, s/veh	10.7	10.2	9.8	16.6	9.4	9.4	16.4	10.7	9.9	10.3
HCM Lane LOS	B	B	A	C	A	A	C	B	A	B
HCM 95th-tile Q	0.1	0.1	0.2	3.1	0.3	0	3.7	0.2	0.1	0.6

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	77	9	39	60	3	24
Future Vol, veh/h	77	9	39	60	3	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	10	42	65	3	26

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	54	0	0	108	0
Stage 1	75	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	895	1002	-	-	1481	-
Stage 1	939	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	893	1002	-	-	1481	-
Mov Cap-2 Maneuver	893	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.36	0	0.83
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	893	1002	1481	-
HCM Lane V/C Ratio	-	-	0.094	0.01	0.002	-
HCM Control Delay (s/veh)	-	-	9.4	8.6	7.4	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	96	34	5	3	21	80
Future Vol, veh/h	96	34	5	3	21	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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	2	2	2	2
Mvmt Flow	104	37	5	3	23	87

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	9	0	-	0	253	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	246	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1611	-	-	-	736	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1611	-	-	-	688	1075
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	795	-

Approach	EB	WB	SB
HCM Control Delay, s/v	5.46	0	9.01
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1611	-	-	-	688	1075
HCM Lane V/C Ratio	0.065	-	-	-	0.033	0.081
HCM Control Delay (s/veh)	7.4	-	-	-	10.4	8.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.3

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	38	41	15	47	46
Future Vol, veh/h	25	38	41	15	47	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	2	2	2	2
Mvmt Flow	27	41	45	16	51	50

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	61	0	-	0	148	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1542	-	-	-	844	1015
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	928	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1542	-	-	-	829	1015
Mov Cap-2 Maneuver	-	-	-	-	829	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	928	-

Approach	EB	WB	SB
HCM Control Delay, s/v	2.93	0	9.44
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1542	-	-	-	911
HCM Lane V/C Ratio	0.018	-	-	-	0.111
HCM Control Delay (s/veh)	7.4	-	-	-	9.4
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	171	103	98	230	62	14	0	20	14	0	4
Future Vol, veh/h	17	171	103	98	230	62	14	0	20	14	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	186	112	107	250	67	15	0	22	15	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	317	0	0	298	0	0	617	809	149	627	832	159
Stage 1	-	-	-	-	-	-	279	279	-	497	497	-
Stage 2	-	-	-	-	-	-	338	530	-	130	335	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1239	-	-	1260	-	-	374	313	871	368	304	858
Stage 1	-	-	-	-	-	-	704	679	-	524	543	-
Stage 2	-	-	-	-	-	-	650	525	-	860	641	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1239	-	-	1260	-	-	336	282	871	324	274	858
Mov Cap-2 Maneuver	-	-	-	-	-	-	336	282	-	324	274	-
Stage 1	-	-	-	-	-	-	694	668	-	479	497	-
Stage 2	-	-	-	-	-	-	592	480	-	826	632	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.46	2.04	12.36	15.11
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	526	1239	-	-	1260	-	-	376
HCM Lane V/C Ratio	0.07	0.015	-	-	0.085	-	-	0.052
HCM Control Delay (s/veh)	12.4	7.9	-	-	8.1	-	-	15.1
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0.3	-	-	0.2

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	259	103	98	84	62	14	0	20	14	0	4
Future Vol, veh/h	17	259	103	98	84	62	14	0	20	14	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	282	112	107	91	67	15	0	22	15	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	159	0	0	393	0	0	633	746	197	516	768	79
Stage 1	-	-	-	-	-	-	374	374	-	338	338	-
Stage 2	-	-	-	-	-	-	259	372	-	178	430	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1418	-	-	1162	-	-	364	340	811	442	330	965
Stage 1	-	-	-	-	-	-	619	616	-	650	639	-
Stage 2	-	-	-	-	-	-	723	618	-	807	582	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1418	-	-	1162	-	-	325	305	811	386	296	965
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	305	-	386	296	-
Stage 1	-	-	-	-	-	-	611	608	-	590	580	-
Stage 2	-	-	-	-	-	-	654	561	-	775	574	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.34	3.38	12.74	13.46
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	502	1418	-	-	1162	-	-	445
HCM Lane V/C Ratio	0.074	0.013	-	-	0.092	-	-	0.044
HCM Control Delay (s/veh)	12.7	7.6	-	-	8.4	-	-	13.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.3	-	-	0.1

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	32	243	37	134
Demand Flow Rate, veh/h	32	248	38	137
Vehicles Circulating, veh/h	92	52	121	82
Vehicles Exiting, veh/h	127	107	3	218
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.1	4.4	3.3	3.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	32	248	38	137
Cap Entry Lane, veh/h	1256	1309	1220	1269
Entry HV Adj Factor	0.990	0.982	0.981	0.978
Flow Entry, veh/h	32	243	37	134
Cap Entry, veh/h	1244	1284	1197	1241
V/C Ratio	0.025	0.190	0.031	0.108
Control Delay, s/veh	3.1	4.4	3.3	3.8
LOS	A	A	A	A
95th %tile Queue, veh	0	1	0	0

Intersection	
Intersection Delay, s/veh	68.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	55	42	481	6	1	120	228	162	175	100	1
Future Vol, veh/h	1	55	42	481	6	1	120	228	162	175	100	1
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	60	46	523	7	1	130	248	176	190	109	1
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	2
HCM Control Delay, s/veh	13.9	160.5	18.3	18.9
HCM LOS	B	F	C	C

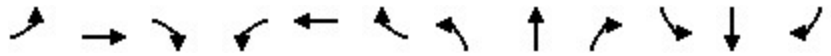
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	0%	99%	0%	100%	0%
Vol Thru, %	0%	100%	0%	98%	0%	1%	0%	0%	99%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	228	162	56	42	487	1	175	101
LT Vol	120	0	0	1	0	481	0	175	0
Through Vol	0	228	0	55	0	6	0	0	100
RT Vol	0	0	162	0	42	0	1	0	1
Lane Flow Rate	130	248	176	61	46	529	1	190	110
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.308	0.551	0.357	0.156	0.108	1.26	0.002	0.474	0.258
Departure Headway (Hd)	9.261	8.743	8.019	9.965	9.226	8.571	7.354	9.817	9.287
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	391	416	451	362	391	429	490	369	390
Service Time	6.961	6.443	5.719	7.665	6.926	6.271	5.054	7.517	6.987
HCM Lane V/C Ratio	0.332	0.596	0.39	0.169	0.118	1.233	0.002	0.515	0.282
HCM Control Delay, s/veh	16	21.7	15.1	14.5	13	160.8	10.1	21.1	15.2
HCM Lane LOS	C	C	C	B	B	F	B	C	C
HCM 95th-tile Q	1.3	3.2	1.6	0.5	0.4	22.5	0	2.5	1

Intersection	
Intersection Delay, s/veh	128.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	3	112	8	6	9	462	323	3	4	611	8
Future Vol, veh/h	178	3	112	8	6	9	462	323	3	4	611	8
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	193	3	122	9	7	10	502	351	3	4	664	9
Number of Lanes	0	1	1	0	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	19.4	14.1	78.2	246.8
HCM LOS	C	B	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	98%	0%	57%	0%	100%	0%	0%
Vol Thru, %	0%	100%	0%	2%	0%	43%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	462	323	3	181	112	14	9	4	611	8
LT Vol	462	0	0	178	0	8	0	4	0	0
Through Vol	0	323	0	3	0	6	0	0	611	0
RT Vol	0	0	3	0	112	0	9	0	0	8
Lane Flow Rate	502	351	3	197	122	15	10	4	664	9
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	1.122	0.735	0.006	0.5	0.269	0.043	0.025	0.01	1.483	0.018
Departure Headway (Hd)	8.923	8.409	7.689	9.994	8.775	11.414	10.391	8.819	8.307	7.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	412	432	468	364	411	316	347	408	445	474
Service Time	6.623	6.109	5.389	7.694	6.475	9.114	8.091	6.519	6.007	5.29
HCM Lane V/C Ratio	1.218	0.813	0.006	0.541	0.297	0.047	0.029	0.01	1.492	0.019
HCM Control Delay, s/veh	111.6	31.1	10.4	22.3	14.7	14.6	13.4	11.6	251.4	10.4
HCM Lane LOS	F	D	B	C	B	B	B	B	F	B
HCM 95th-tile Q	16.5	5.9	0	2.7	1.1	0.1	0.1	0	33.4	0.1



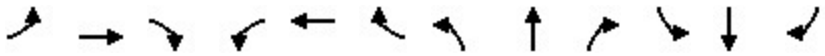
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	34	97	359	25	273	65	592	241	204	590	74
Future Volume (veh/h)	101	34	97	359	25	273	65	592	241	204	590	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	110	37	105	390	27	297	71	643	262	222	641	80
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	341	289	405	408	346	120	973	434	262	1148	512
Arrive On Green	0.08	0.18	0.18	0.12	0.22	0.22	0.07	0.27	0.27	0.08	0.32	0.32
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	110	37	105	390	27	297	71	643	262	222	641	80
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.9	1.0	3.7	7.1	0.7	11.4	2.4	10.1	9.1	4.0	9.4	2.3
Cycle Q Clear(g_c), s	1.9	1.0	3.7	7.1	0.7	11.4	2.4	10.1	9.1	4.0	9.4	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	341	289	405	408	346	120	973	434	262	1148	512
V/C Ratio(X)	0.39	0.11	0.36	0.96	0.07	0.86	0.59	0.66	0.60	0.85	0.56	0.16
Avail Cap(c_a), veh/h	405	465	394	405	583	494	209	2165	965	262	2165	965
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	27.6	21.6	22.6	27.8	19.6	23.8	28.6	20.4	20.0	28.8	17.7	15.2
Incr Delay (d2), s/veh	0.3	0.1	0.3	35.1	0.0	7.6	1.7	0.8	1.4	20.8	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(95%),veh/ln	1.4	0.8	2.4	8.4	0.6	8.3	1.8	6.7	6.0	4.1	6.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.9	21.6	22.9	62.9	19.6	31.4	30.3	21.1	21.3	49.6	18.1	15.4
LnGrp LOS	C	C	C	E	B	C	C	C	C	D	B	B
Approach Vol, veh/h		252			714			976			943	
Approach Delay, s/veh		24.9			48.1			21.9			25.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.1	12.0	16.1	8.9	26.2	9.7	18.4
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	38.5	7.4	15.7	7.4	38.5	7.4	19.7
Max Q Clear Time (g_c+I1), s	6.0	12.1	9.1	5.7	4.4	11.4	3.9	13.4
Green Ext Time (p_c), s	0.0	5.2	0.0	0.2	0.0	4.4	0.0	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	32	59	147	91	86	56	663	57	22	773	251
Future Volume (veh/h)	150	32	59	147	91	86	56	663	57	22	773	251
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	35	64	160	99	93	61	721	62	24	840	273
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	215	191	166	181	154	91	1681	144	51	1279	415
Arrive On Green	0.11	0.12	0.12	0.09	0.10	0.10	0.05	0.51	0.51	0.03	0.49	0.49
Sat Flow, veh/h	1781	1777	1585	1781	1819	1549	1781	3311	285	1781	2637	856
Grp Volume(v), veh/h	163	35	64	160	96	96	61	387	396	24	566	547
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1592	1781	1777	1819	1781	1777	1716
Q Serve(g_s), s	7.2	1.4	3.0	7.2	4.2	4.6	2.7	11.0	11.0	1.1	19.3	19.4
Cycle Q Clear(g_c), s	7.2	1.4	3.0	7.2	4.2	4.6	2.7	11.0	11.0	1.1	19.3	19.4
Prop In Lane	1.00		1.00	1.00		0.97	1.00		0.16	1.00		0.50
Lane Grp Cap(c), veh/h	204	215	191	166	177	158	91	902	923	51	862	832
V/C Ratio(X)	0.80	0.16	0.33	0.96	0.55	0.60	0.67	0.43	0.43	0.47	0.66	0.66
Avail Cap(c_a), veh/h	432	552	493	166	552	495	166	902	923	299	862	832
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	34.7	31.7	32.4	36.3	34.5	34.7	37.5	12.5	12.5	38.5	15.6	15.7
Incr Delay (d2), s/veh	7.0	0.4	1.0	58.7	2.6	3.7	8.4	1.5	1.5	6.8	3.9	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(95%),veh/ln	6.1	1.1	2.1	9.5	3.3	3.3	2.4	7.3	7.4	1.0	12.0	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.7	32.1	33.4	95.0	37.1	38.3	45.8	13.9	13.9	45.2	19.5	19.7
LnGrp LOS	D	C	C	F	D	D	D	B	B	D	B	B
Approach Vol, veh/h		262			352			844			1137	
Approach Delay, s/veh		38.4			63.7			16.2			20.2	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	46.6	12.1	14.8	8.7	44.8	13.8	13.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.1	4.6	5.8	4.6	5.1
Max Green Setting (Gmax), s	13.5	40.0	7.5	25.0	7.5	39.0	19.5	25.0
Max Q Clear Time (g_c+I1), s	13.1	13.0	9.2	5.0	4.7	21.4	9.2	6.6
Green Ext Time (p_c), s	0.0	4.7	0.0	0.4	0.0	6.5	0.3	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	247.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	601	98	50	182	422	245
Future Vol, veh/h	601	98	50	182	422	245
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	-	200	-	-	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	2	2	2	2
Mvmt Flow	653	107	54	198	459	266

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	898	363	725	0	-	0
Stage 1	592	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	~ 294	635	876	-	-	-
Stage 1	~ 517	-	-	-	-	-
Stage 2	746	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 276	635	876	-	-	-
Mov Cap-2 Maneuver	~ 276	-	-	-	-	-
Stage 1	~ 485	-	-	-	-	-
Stage 2	746	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/s	566.01	2.02	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	876	-	276	635	-	-
HCM Lane V/C Ratio	0.062	-	2.37	0.168	-	-
HCM Control Delay (s/veh)	9.4	-	$ 656.4	11.8	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	51.9	0.6	-	-

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

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	104	39	151	303	216
Future Vol, veh/h	81	104	39	151	303	216
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	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	113	42	164	329	235

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	696	282	564	0	-	0
Stage 1	447	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	392	716	1006	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	375	716	1006	-	-	-
Mov Cap-2 Maneuver	375	-	-	-	-	-
Stage 1	587	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	16.5	1.79	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1006	-	512	-	-
HCM Lane V/C Ratio	0.042	-	0.393	-	-
HCM Control Delay (s/veh)	8.7	-	16.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.9	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	73	82	157	399	7
Future Vol, veh/h	3	73	82	157	399	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	200	-	-	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	2	2	2	2
Mvmt Flow	3	79	89	171	434	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	783	434	441	0	-	0
Stage 1	434	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	363	622	1119	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	334	622	1119	-	-	-
Mov Cap-2 Maneuver	334	-	-	-	-	-
Stage 1	601	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.8	2.92	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1119	-	334	622	-	-
HCM Lane V/C Ratio	0.08	-	0.01	0.128	-	-
HCM Control Delay (s/veh)	8.5	-	15.9	11.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0	0.4	-	-

Intersection	
Intersection Delay, s/veh	17.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	291	83	14	68	121	44	10	26	11	91	52	295
Future Vol, veh/h	291	83	14	68	121	44	10	26	11	91	52	295
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	316	90	15	74	132	48	11	28	12	99	57	321
Number of Lanes	1	1	0	1	1	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	2	2
HCM Control Delay, s/veh	20.7	13.6	11.4	17.1
HCM LOS	C	B	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	44%	0%	86%	0%	73%	0%	100%	6%
Vol Right, %	0%	0%	56%	0%	14%	0%	27%	0%	0%	94%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	17	20	291	97	68	165	91	35	312
LT Vol	10	0	0	291	0	68	0	91	0	0
Through Vol	0	17	9	0	83	0	121	0	35	17
RT Vol	0	0	11	0	14	0	44	0	0	295
Lane Flow Rate	11	19	21	316	105	74	179	99	38	339
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.027	0.044	0.047	0.661	0.203	0.164	0.363	0.212	0.075	0.616
Departure Headway (Hd)	8.901	8.385	7.98	7.524	6.921	7.984	7.292	7.72	7.209	6.533
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	402	427	448	481	519	449	493	466	497	553
Service Time	6.657	6.14	5.735	5.263	4.659	5.726	5.034	5.457	4.946	4.27
HCM Lane V/C Ratio	0.027	0.044	0.047	0.657	0.202	0.165	0.363	0.212	0.076	0.613
HCM Control Delay, s/veh	11.9	11.5	11.1	23.8	11.4	12.3	14.2	12.5	10.5	19.2
HCM Lane LOS	B	B	B	C	B	B	B	B	B	C
HCM 95th-tile Q	0.1	0.1	0.1	4.7	0.8	0.6	1.6	0.8	0.2	4.2

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	10	37	85	14	120
Future Vol, veh/h	67	10	37	85	14	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	73	11	40	92	15	130

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	182	66	0	0	133	0
Stage 1	86	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	790	984	-	-	1450	-
Stage 1	927	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	782	984	-	-	1450	-
Mov Cap-2 Maneuver	782	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.9	0	0.78
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	782	984	1450	-
HCM Lane V/C Ratio	-	-	0.093	0.011	0.01	-
HCM Control Delay (s/veh)	-	-	10.1	8.7	7.5	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	102	16	34	20	10	177
Future Vol, veh/h	102	16	34	20	10	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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	2	2	2	2
Mvmt Flow	111	17	37	22	11	192

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	59	0	-	0	287	48
Stage 1	-	-	-	-	48	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1545	-	-	-	703	1021
Stage 1	-	-	-	-	975	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1545	-	-	-	653	1021
Mov Cap-2 Maneuver	-	-	-	-	653	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	SB
HCM Control Delay, s/v	6.49	0	9.41
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1545	-	-	-	653	1021
HCM Lane V/C Ratio	0.072	-	-	-	0.017	0.188
HCM Control Delay (s/veh)	7.5	-	-	-	10.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.7

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	56	52	37	20	25
Future Vol, veh/h	43	56	52	37	20	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	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	2	2	2	2
Mvmt Flow	47	61	57	40	22	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	97	0	-	0	231	77
Stage 1	-	-	-	-	77	-
Stage 2	-	-	-	-	154	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1497	-	-	-	757	984
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	874	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1497	-	-	-	734	984
Mov Cap-2 Maneuver	-	-	-	-	734	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	SB
HCM Control Delay, s/v	3.25	0	9.47
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1497	-	-	-	855
HCM Lane V/C Ratio	0.031	-	-	-	0.057
HCM Control Delay (s/veh)	7.5	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	535	43	23	262	12	86	0	90	74	0	14
Future Vol, veh/h	6	535	43	23	262	12	86	0	90	74	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	582	47	25	285	13	93	0	98	80	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	298	0	0	628	0	0	810	966	314	645	983	149
Stage 1	-	-	-	-	-	-	618	618	-	341	341	-
Stage 2	-	-	-	-	-	-	192	348	-	304	641	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1260	-	-	950	-	-	271	253	682	357	247	871
Stage 1	-	-	-	-	-	-	443	479	-	647	637	-
Stage 2	-	-	-	-	-	-	791	633	-	681	467	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1260	-	-	950	-	-	258	245	682	296	240	871
Mov Cap-2 Maneuver	-	-	-	-	-	-	258	245	-	296	240	-
Stage 1	-	-	-	-	-	-	441	477	-	630	620	-
Stage 2	-	-	-	-	-	-	757	616	-	580	465	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.08	0.69	23.85	20.24
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	378	1260	-	-	950	-	-	331
HCM Lane V/C Ratio	0.506	0.005	-	-	0.026	-	-	0.289
HCM Control Delay (s/veh)	23.9	7.9	-	-	8.9	-	-	20.2
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.7	0	-	-	0.1	-	-	1.2

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	354	43	23	329	12	86	0	90	73	0	14
Future Vol, veh/h	6	354	43	23	329	12	86	0	90	73	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	385	47	25	358	13	93	0	98	79	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	432	0	0	650	842	216	620	859	185
Stage 1	-	-	-	-	-	-	421	421	-	414	414	-
Stage 2	-	-	-	-	-	-	229	421	-	205	445	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1184	-	-	1124	-	-	354	299	789	372	293	825
Stage 1	-	-	-	-	-	-	581	587	-	586	591	-
Stage 2	-	-	-	-	-	-	753	587	-	777	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1184	-	-	1124	-	-	338	291	789	317	285	825
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	291	-	317	285	-
Stage 1	-	-	-	-	-	-	577	584	-	573	578	-
Stage 2	-	-	-	-	-	-	723	574	-	677	570	-

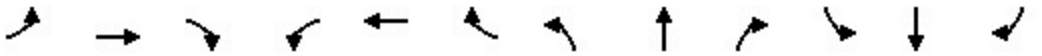
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.12	0.52	17.48	18.93
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	478	1184	-	-	1124	-	-	352
HCM Lane V/C Ratio	0.401	0.006	-	-	0.022	-	-	0.269
HCM Control Delay (s/veh)	17.5	8.1	-	-	8.3	-	-	18.9
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	1.9	0	-	-	0.1	-	-	1.1

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	147	105	17	384
Demand Flow Rate, veh/h	150	107	17	392
Vehicles Circulating, veh/h	176	85	290	42
Vehicles Exiting, veh/h	258	222	36	150
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.3	3.6	3.7	5.4
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
A (Intercept)	1380	1380	1380	1380
B (Slope)	1.02e-3	1.02e-3	1.02e-3	1.02e-3
Entry Flow, veh/h	150	107	17	392
Cap Entry Lane, veh/h	1153	1265	1027	1322
Entry HV Adj Factor	0.983	0.983	0.983	0.980
Flow Entry, veh/h	147	105	17	384
Cap Entry, veh/h	1133	1244	1009	1296
V/C Ratio	0.130	0.085	0.017	0.297
Control Delay, s/veh	4.3	3.6	3.7	5.4
LOS	A	A	A	A
95th %tile Queue, veh	0	0	0	1



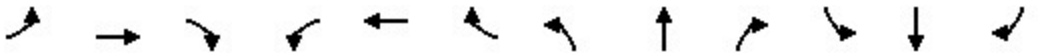
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	0	62	1	0	1	241	243	0	0	487	9
Future Volume (veh/h)	178	0	62	1	0	1	241	243	0	0	487	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	0	67	1	0	1	262	264	0	0	529	0
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	0	225	3	0	3	360	378	321	587	616	
Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.33	0.00
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	193	0	67	1	0	1	262	264	0	0	529	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.6	0.0	2.4	0.0	0.0	0.0	8.7	8.3	0.0	0.0	16.7	0.0
Cycle Q Clear(g_c), s	6.6	0.0	2.4	0.0	0.0	0.0	8.7	8.3	0.0	0.0	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	0	225	3	0	3	360	378	321	587	616	
V/C Ratio(X)	0.76	0.00	0.30	0.29	0.00	0.33	0.73	0.70	0.00	0.00	0.86	
Avail Cap(c_a), veh/h	364	0	323	152	0	135	693	728	617	750	787	
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	0.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	24.3	31.5	0.0	31.5	23.6	23.4	0.0	0.0	19.8	0.0
Incr Delay (d2), s/veh	5.7	0.0	0.7	42.0	0.0	53.7	2.8	2.3	0.0	0.0	7.7	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(95%),veh/ln	5.5	0.0	1.6	0.1	0.0	0.1	6.8	6.7	0.0	0.0	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	0.0	25.0	73.5	0.0	85.2	26.4	25.7	0.0	0.0	27.5	0.0
LnGrp LOS	C		C	E		F	C	C			C	
Approach Vol, veh/h		260			2			526			529	
Approach Delay, s/veh		30.1			79.4			26.1			27.5	
Approach LOS		C			E			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.2		14.1		26.2		4.7				
Change Period (Y+Rc), s		5.4		5.1		5.4		4.6				
Max Green Setting (Gmax), s		24.6		12.9		26.6		5.4				
Max Q Clear Time (g_c+I1), s		10.7		8.6		18.7		2.0				
Green Ext Time (p_c), s		2.1		0.5		2.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	4	64	8	6	10	311	296	3	4	491	8
Future Volume (veh/h)	184	4	64	8	6	10	311	296	3	4	491	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	4	70	9	7	11	338	322	3	4	534	9
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	5	243	25	19	38	447	470	398	403	809	14
Arrive On Green	0.15	0.15	0.15	0.02	0.02	0.02	0.25	0.25	0.25	0.23	0.23	0.23
Sat Flow, veh/h	1748	35	1585	1023	796	1585	1781	1870	1585	1781	3576	60
Grp Volume(v), veh/h	204	0	70	16	0	11	338	322	3	4	265	278
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1819	0	1585	1781	1870	1585	1781	1777	1860
Q Serve(g_s), s	6.5	0.0	2.3	0.5	0.0	0.4	10.5	9.3	0.1	0.1	8.1	8.1
Cycle Q Clear(g_c), s	6.5	0.0	2.3	0.5	0.0	0.4	10.5	9.3	0.1	0.1	8.1	8.1
Prop In Lane	0.98		1.00	0.56		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	273	0	243	44	0	38	447	470	398	403	402	421
V/C Ratio(X)	0.75	0.00	0.29	0.36	0.00	0.29	0.76	0.69	0.01	0.01	0.66	0.66
Avail Cap(c_a), veh/h	445	0	396	317	0	276	722	759	643	1042	1039	1088
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	24.2	0.0	22.4	28.7	0.0	28.6	20.7	20.2	16.8	17.9	21.0	21.0
Incr Delay (d2), s/veh	4.1	0.0	0.6	5.0	0.0	4.0	2.6	1.8	0.0	0.0	1.9	1.8
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(95%),veh/ln	5.2	0.0	1.5	0.5	0.0	0.3	7.8	7.2	0.1	0.1	5.9	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	23.0	33.6	0.0	32.6	23.3	22.0	16.8	17.9	22.8	22.8
LnGrp LOS	C		C	C		C	C	C	B	B	C	C
Approach Vol, veh/h		274			27			663			547	
Approach Delay, s/veh		26.9			33.2			22.6			22.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.8	14.2	18.6	6.0
Change Period (Y+Rc), s	5.8	5.1	5.1	4.6
Max Green Setting (Gmax), s	24.2	14.9	34.9	10.4
Max Q Clear Time (g_c+I1), s	12.5	8.5	10.1	2.5
Green Ext Time (p_c), s	2.5	0.7	3.4	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C

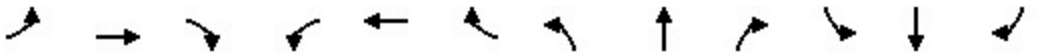
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	446	95	28	160	316	99
Future Volume (veh/h)	446	95	28	160	316	99
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	485	103	30	174	343	108
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	589	525	50	750	485	411
Arrive On Green	0.33	0.33	0.03	0.40	0.26	0.26
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	485	103	30	174	343	108
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	10.2	1.9	0.7	2.5	6.8	2.2
Cycle Q Clear(g_c), s	10.2	1.9	0.7	2.5	6.8	2.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	589	525	50	750	485	411
V/C Ratio(X)	0.82	0.20	0.60	0.23	0.71	0.26
Avail Cap(c_a), veh/h	872	776	237	750	1114	944
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	12.5	9.7	19.5	8.0	13.6	12.0
Incr Delay (d2), s/veh	4.1	0.2	10.7	0.2	1.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.5	0.0	0.7	1.0	3.7	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.6	9.9	30.3	8.2	15.6	12.3
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	588			204	451	
Approach Delay, s/veh	15.4			11.4	14.8	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	22.1		18.5	5.7	16.3
Change Period (Y+Rc), s	5.8		5.1	4.6	5.8
Max Green Setting (Gmax), s	14.2		19.9	5.4	24.2
Max Q Clear Time (g_c+I1), s	4.5		12.2	2.7	8.8
Green Ext Time (p_c), s	0.5		1.3	0.0	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	14.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	11	270	1	1	1	312	141	6	7	498	2
Future Volume (veh/h)	185	11	270	1	1	1	312	141	6	7	498	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	12	293	1	1	1	339	153	7	8	541	2
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	384	23	361	3	3	5	401	668	566	126	738	3
Arrive On Green	0.23	0.23	0.23	0.00	0.00	0.00	0.23	0.36	0.36	0.07	0.20	0.20
Sat Flow, veh/h	1685	101	1585	912	912	1585	1781	1870	1585	1781	3631	13
Grp Volume(v), veh/h	213	0	293	2	0	1	339	153	7	8	265	278
Grp Sat Flow(s),veh/h/ln	1786	0	1585	1825	0	1585	1781	1870	1585	1781	1777	1868
Q Serve(g_s), s	5.9	0.0	9.9	0.1	0.0	0.0	10.3	3.2	0.2	0.2	7.9	7.9
Cycle Q Clear(g_c), s	5.9	0.0	9.9	0.1	0.0	0.0	10.3	3.2	0.2	0.2	7.9	7.9
Prop In Lane	0.94		1.00	0.50		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	407	0	361	6	0	5	401	668	566	126	361	380
V/C Ratio(X)	0.52	0.00	0.81	0.34	0.00	0.19	0.85	0.23	0.01	0.06	0.73	0.73
Avail Cap(c_a), veh/h	663	0	588	146	0	127	961	1707	1446	126	789	829
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	19.1	0.0	20.6	28.0	0.0	28.0	20.9	12.7	11.7	24.4	21.0	21.0
Incr Delay (d2), s/veh	0.4	0.0	1.7	11.8	0.0	6.6	1.9	0.1	0.0	0.1	1.1	1.0
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(95%),veh/ln	4.0	0.0	6.3	0.1	0.0	0.0	6.8	2.0	0.1	0.2	5.2	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	0.0	22.3	39.8	0.0	34.6	22.8	12.7	11.7	24.5	22.1	22.1
LnGrp LOS	B		C	D		C	C	B	B	C	C	C
Approach Vol, veh/h		506			3			499			551	
Approach Delay, s/veh		21.1			38.1			19.6			22.1	
Approach LOS		C			D			B			C	

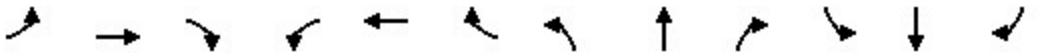
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	25.5		17.9	17.3	16.8		4.3				
Change Period (Y+Rc), s	4.6	5.4		5.1	4.6	5.4		4.1				
Max Green Setting (Gmax), s	4.0	51.4		20.9	30.4	25.0		4.5				
Max Q Clear Time (g_c+I1), s	2.2	5.2		11.9	12.3	9.9		2.1				
Green Ext Time (p_c), s	0.0	0.5		1.0	0.4	1.6		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		21.0
HCM 7th LOS		C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	191	12	127	271	205	320
Future Volume (veh/h)	191	12	127	271	205	320
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
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	1870	1870	1870
Adj Flow Rate, veh/h	208	13	138	295	223	348
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	292	180	1010	573	511
Arrive On Green	0.18	0.18	0.10	0.54	0.32	0.32
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	208	13	138	295	223	348
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1777	1585
Q Serve(g_s), s	4.3	0.3	3.0	3.4	3.8	7.5
Cycle Q Clear(g_c), s	4.3	0.3	3.0	3.4	3.8	7.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	329	292	180	1010	573	511
V/C Ratio(X)	0.63	0.04	0.77	0.29	0.39	0.68
Avail Cap(c_a), veh/h	1347	1199	469	1010	1312	1170
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	14.9	13.3	17.3	5.0	10.4	11.6
Incr Delay (d2), s/veh	2.0	0.1	6.7	0.2	0.4	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	2.3	1.0	1.9	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.9	13.3	24.0	5.1	10.8	13.2
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	221			433	571	
Approach Delay, s/veh	16.7			11.1	12.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.1		12.4	8.6	18.5
Change Period (Y+Rc), s	5.8		5.1	4.6	5.8
Max Green Setting (Gmax), s	14.2		29.9	10.4	29.2
Max Q Clear Time (g_c+I1), s	5.4		6.3	5.0	9.5
Green Ext Time (p_c), s	1.0		0.6	0.1	3.2

Intersection Summary		
HCM 7th Control Delay, s/veh	12.7	
HCM 7th LOS	B	



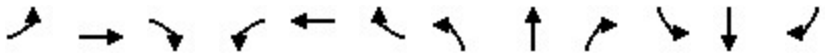
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	55	42	481	6	1	120	228	162	175	100	1
Future Volume (veh/h)	1	55	42	481	6	1	120	228	162	175	100	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	60	0	523	7	1	130	248	0	190	109	1
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	106		602	8	542	307	323		248	258	2
Arrive On Green	0.06	0.06	0.00	0.34	0.34	0.34	0.17	0.17	0.00	0.14	0.14	0.14
Sat Flow, veh/h	31	1838	1585	1759	24	1585	1781	1870	1585	1781	1850	17
Grp Volume(v), veh/h	61	0	0	530	0	1	130	248	0	190	0	110
Grp Sat Flow(s),veh/h/ln	1869	0	1585	1782	0	1585	1781	1870	1585	1781	0	1867
Q Serve(g_s), s	2.4	0.0	0.0	20.7	0.0	0.0	4.8	9.4	0.0	7.6	0.0	4.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	20.7	0.0	0.0	4.8	9.4	0.0	7.6	0.0	4.0
Prop In Lane	0.02		1.00	0.99		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	108	0		610	0	542	307	323		248	0	260
V/C Ratio(X)	0.56	0.00		0.87	0.00	0.00	0.42	0.77		0.77	0.00	0.42
Avail Cap(c_a), veh/h	249	0		838	0	745	590	620		461	0	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	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	0.0	0.0	22.9	0.0	16.1	27.4	29.3	0.0	30.8	0.0	29.2
Incr Delay (d2), s/veh	4.5	0.0	0.0	7.4	0.0	0.0	0.9	3.9	0.0	4.9	0.0	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(95%),veh/ln	2.1	0.0	0.0	14.1	0.0	0.0	3.7	7.7	0.0	6.0	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.6	0.0	0.0	30.3	0.0	16.1	28.3	33.1	0.0	35.7	0.0	30.3
LnGrp LOS	D			C		B	C	C		D		C
Approach Vol, veh/h		61			531			378			300	
Approach Delay, s/veh		38.6			30.2			31.5			33.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.2		9.4		16.1		30.5				
Change Period (Y+Rc), s		5.4		5.1		5.8		5.1				
Max Green Setting (Gmax), s		24.6		9.9		19.2		34.9				
Max Q Clear Time (g_c+I1), s		11.4		4.4		9.6		22.7				
Green Ext Time (p_c), s		1.4		0.1		0.7		2.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			31.8									
HCM 7th LOS			C									

Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	3	112	8	6	9	462	323	3	4	611	8
Future Volume (veh/h)	178	3	112	8	6	9	462	323	3	4	611	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	3	122	9	7	10	502	351	3	4	664	9
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	4	227	23	18	36	553	907	768	107	841	11
Arrive On Green	0.14	0.14	0.14	0.02	0.02	0.02	0.31	0.48	0.48	0.06	0.23	0.23
Sat Flow, veh/h	1755	27	1585	1023	796	1585	1781	1870	1585	1781	3590	49
Grp Volume(v), veh/h	196	0	122	16	0	10	502	351	3	4	329	344
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1819	0	1585	1781	1870	1585	1781	1777	1862
Q Serve(g_s), s	7.0	0.0	4.8	0.6	0.0	0.4	18.0	7.9	0.1	0.1	11.6	11.6
Cycle Q Clear(g_c), s	7.0	0.0	4.8	0.6	0.0	0.4	18.0	7.9	0.1	0.1	11.6	11.6
Prop In Lane	0.98		1.00	0.56		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	256	0	227	42	0	36	553	907	768	107	416	436
V/C Ratio(X)	0.77	0.00	0.54	0.38	0.00	0.28	0.91	0.39	0.00	0.04	0.79	0.79
Avail Cap(c_a), veh/h	426	0	379	109	0	95	975	1600	1356	107	655	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(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	27.4	0.0	26.4	32.0	0.0	31.9	22.0	10.9	8.8	29.4	23.9	23.9
Incr Delay (d2), s/veh	1.8	0.0	0.7	2.1	0.0	1.5	3.2	0.1	0.0	0.1	1.3	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(95%),veh/ln	5.3	0.0	3.2	0.5	0.0	0.3	11.2	4.7	0.0	0.1	8.1	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	0.0	27.2	34.2	0.0	33.4	25.2	11.0	8.8	29.5	25.3	25.2
LnGrp LOS	C		C	C		C	C	B	A	C	C	C
Approach Vol, veh/h		318			26			856			677	
Approach Delay, s/veh		28.4			33.9			19.3			25.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	37.6		14.6	25.3	21.0		5.6				
Change Period (Y+Rc), s	4.6	5.4		5.1	4.6	5.4		4.1				
Max Green Setting (Gmax), s	4.0	56.9		15.9	36.4	24.5		4.0				
Max Q Clear Time (g_c+I1), s	2.1	9.9		9.0	20.0	13.6		2.6				
Green Ext Time (p_c), s	0.0	1.2		0.5	0.7	2.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	34	97	359	25	273	65	592	241	204	590	74
Future Volume (veh/h)	101	34	97	359	25	273	65	592	241	204	590	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	110	37	105	390	27	297	71	643	262	222	641	80
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	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	295	250	496	412	349	120	969	432	262	1144	510
Arrive On Green	0.08	0.16	0.16	0.14	0.22	0.22	0.07	0.27	0.27	0.08	0.32	0.32
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	110	37	105	390	27	297	71	643	262	222	641	80
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.9	1.1	3.8	6.9	0.7	11.4	2.5	10.2	9.1	4.0	9.5	2.3
Cycle Q Clear(g_c), s	1.9	1.1	3.8	6.9	0.7	11.4	2.5	10.2	9.1	4.0	9.5	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	295	250	496	412	349	120	969	432	262	1144	510
V/C Ratio(X)	0.39	0.13	0.42	0.79	0.07	0.85	0.59	0.66	0.61	0.85	0.56	0.16
Avail Cap(c_a), veh/h	403	463	393	840	835	708	208	2086	930	262	2086	930
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	27.6	22.9	24.1	26.2	19.5	23.7	28.7	20.5	20.1	28.9	17.8	15.3
Incr Delay (d2), s/veh	0.3	0.1	0.4	1.1	0.0	2.3	1.7	0.8	1.4	21.2	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(95%),veh/ln	1.4	0.8	2.5	5.0	0.6	7.6	1.8	6.7	6.0	4.1	6.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	23.0	24.5	27.2	19.6	26.0	30.4	21.3	21.5	50.1	18.2	15.5
LnGrp LOS	C	C	C	C	B	C	C	C	C	D	B	B
Approach Vol, veh/h		252			714			976			943	
Approach Delay, s/veh		25.8			26.4			22.0			25.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.1	13.7	14.6	8.9	26.2	9.7	18.6
Change Period (Y+Rc), s	7.2	5.8	4.6	4.6	4.6	5.8	4.6	4.6
Max Green Setting (Gmax), s	4.8	37.2	15.4	15.7	7.4	37.2	7.4	28.3
Max Q Clear Time (g_c+I1), s	6.0	12.2	8.9	5.8	4.5	11.5	3.9	13.4
Green Ext Time (p_c), s	0.0	5.1	0.2	0.2	0.0	4.4	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C

Notes

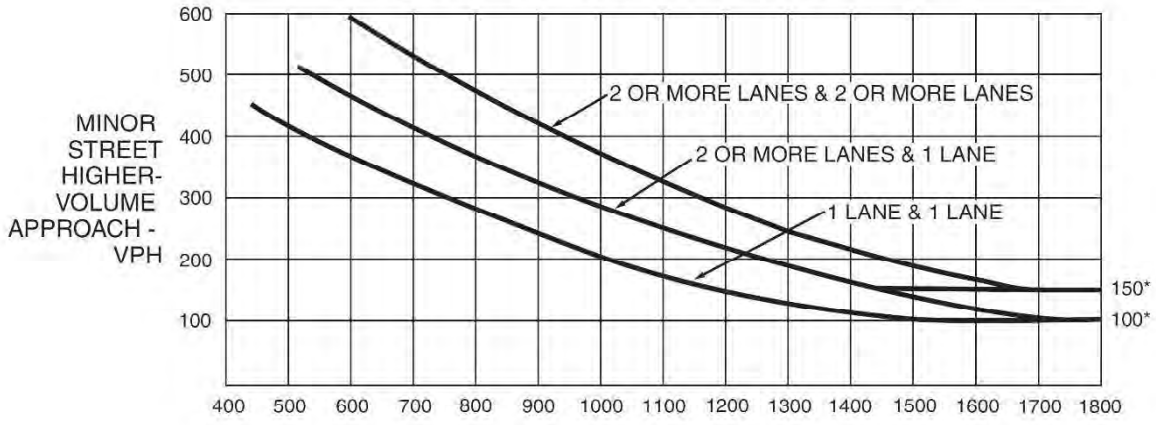
User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	601	98	50	182	422	245
Future Volume (veh/h)	601	98	50	182	422	245
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
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	1870	1870	1870
Adj Flow Rate, veh/h	653	107	54	198	459	266
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	726	646	71	759	624	359
Arrive On Green	0.41	0.41	0.04	0.41	0.29	0.29
Sat Flow, veh/h	1781	1585	1781	1870	2265	1250
Grp Volume(v), veh/h	653	107	54	198	375	350
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1777	1645
Q Serve(g_s), s	20.1	2.5	1.8	4.1	11.2	11.3
Cycle Q Clear(g_c), s	20.1	2.5	1.8	4.1	11.2	11.3
Prop In Lane	1.00	1.00	1.00			0.76
Lane Grp Cap(c), veh/h	726	646	71	759	511	473
V/C Ratio(X)	0.90	0.17	0.76	0.26	0.73	0.74
Avail Cap(c_a), veh/h	910	810	164	759	887	821
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	16.2	11.0	27.8	11.5	18.8	18.9
Incr Delay (d2), s/veh	10.0	0.1	15.1	0.2	2.1	2.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.6	0.0	1.7	2.3	7.0	6.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.2	11.1	42.9	11.7	20.9	21.2
LnGrp LOS	C	B	D	B	C	C
Approach Vol, veh/h	760			252	725	
Approach Delay, s/veh	24.1			18.4	21.0	
Approach LOS	C			B	C	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	29.6		29.0	6.9	22.6
Change Period (Y+Rc), s	5.8		5.1	4.6	5.8
Max Green Setting (Gmax), s	14.2		29.9	5.4	29.2
Max Q Clear Time (g_c+I1), s	6.1		22.1	3.8	13.3
Green Ext Time (p_c), s	0.5		1.8	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.0
HCM 7th LOS	C

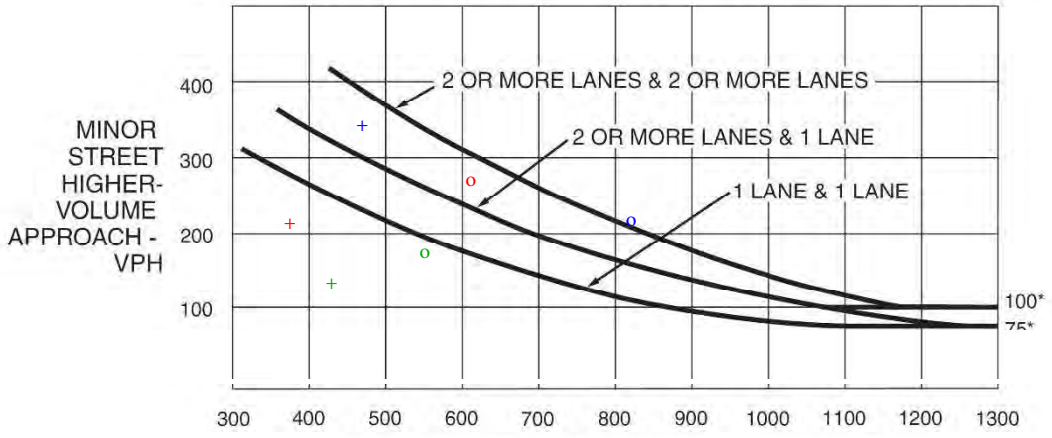
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

I-80 WB Ramps / Pedrick Rd

+ - AM

o - PM

I-80 EB Ramps / Pedrick Rd

+ - AM

o - PM

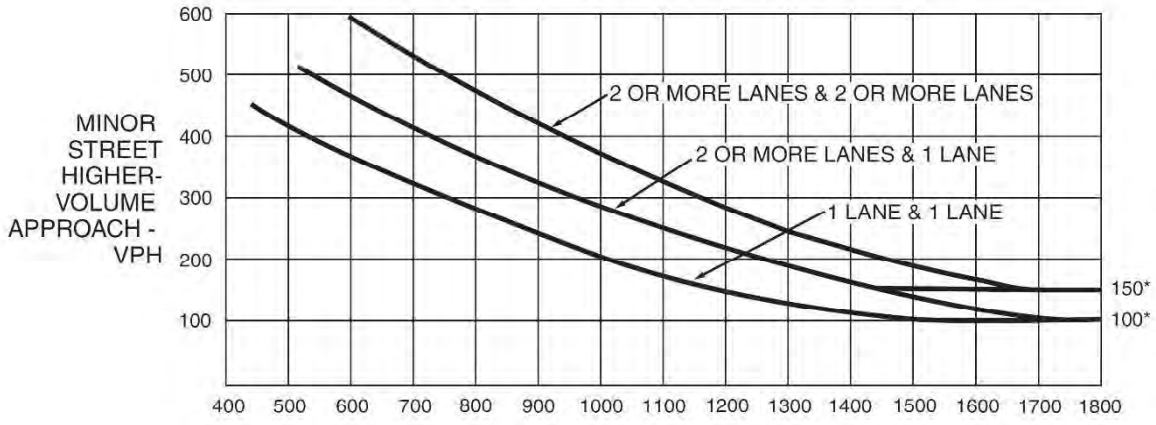
Pedrick Rd / Vaughn Rd

+ - AM

o - PM

EXISTING

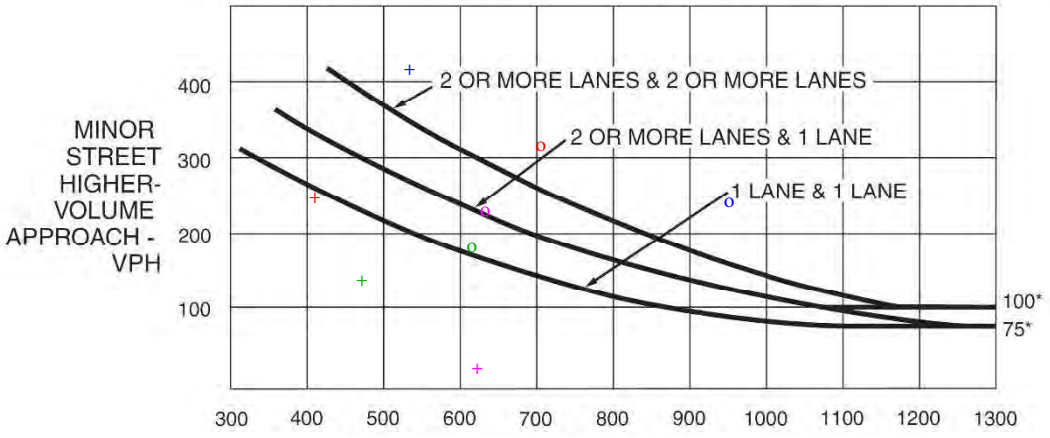
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

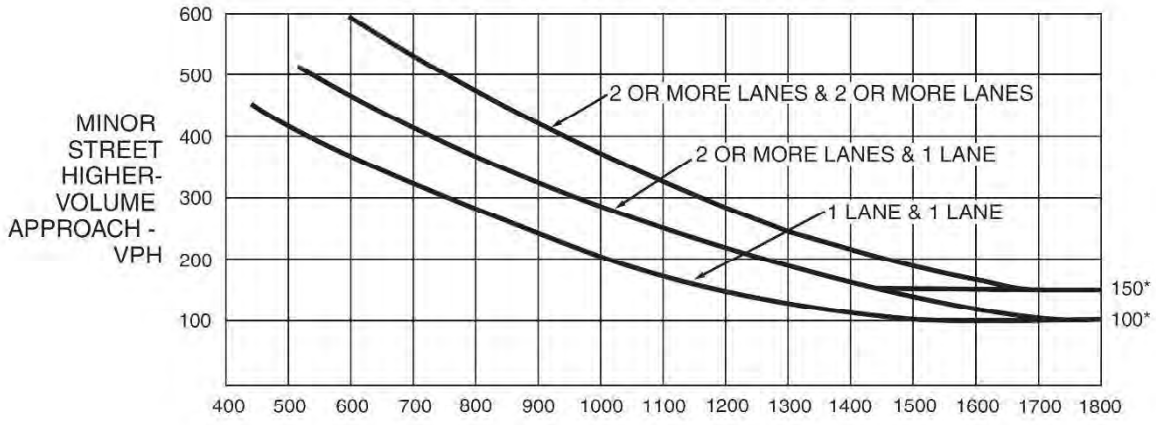


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

I-80 WB Ramps / Pedrick Rd	I-80 EB Ramps / Pedrick Rd	Pedrick Rd / Vaughn Rd	Pedrick Rd / Professional Dr
+ - AM	+ - AM	+ - AM	+ - AM
o - PM	o - PM	o - PM	o - PM

2025

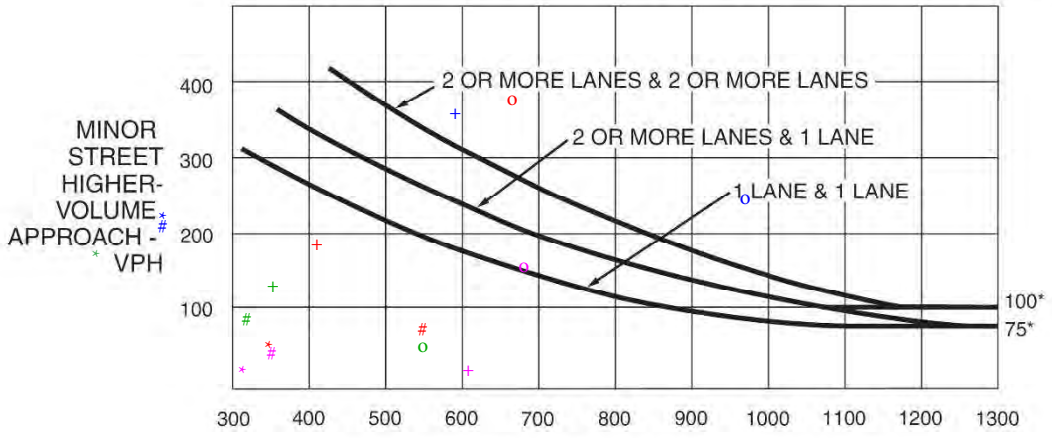
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



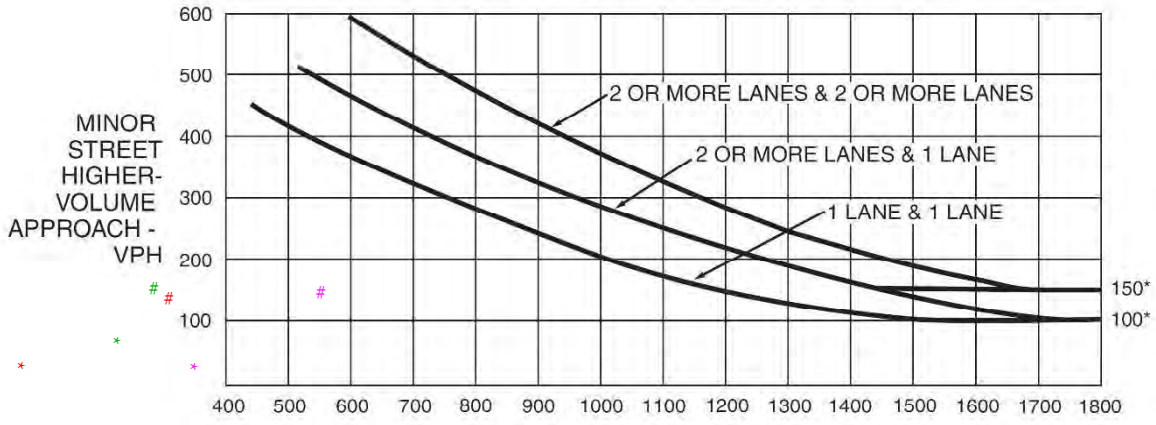
*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

I-80 WB Ramps / Pedrick Rd	I-80 EB Ramps / Pedrick Rd	Pedrick Rd / Professional Dr	Pedrick Rd / 257 North	Pedrick Rd / Commercial
+ - AM o - PM	+ - AM o - PM	+ - AM o - PM	+ - AM o - PM	* - AM # - PM

Vaughn Rd / Professional Dr	Professional Dr / Commercial Dr	Professional Dr / Dorset Dr
* - AM # - PM	* - AM # - PM	* - AM # - PM

2025 PLUS PROJECT

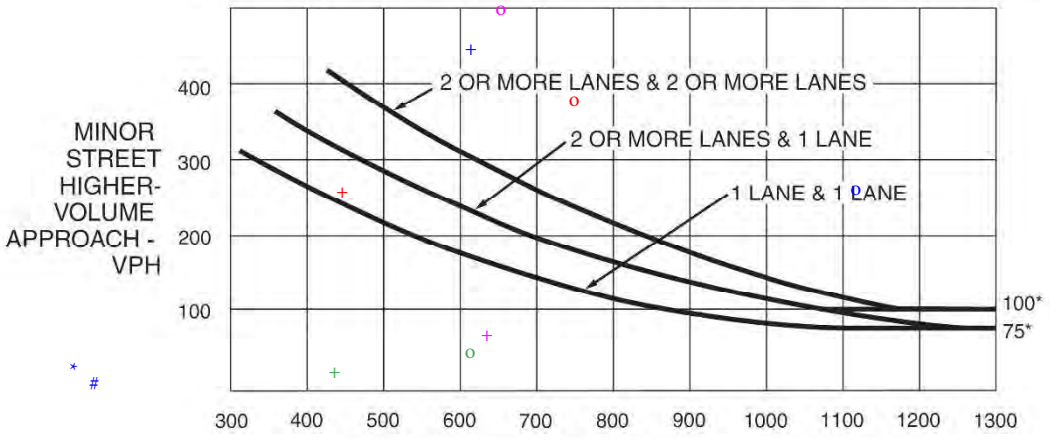
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)

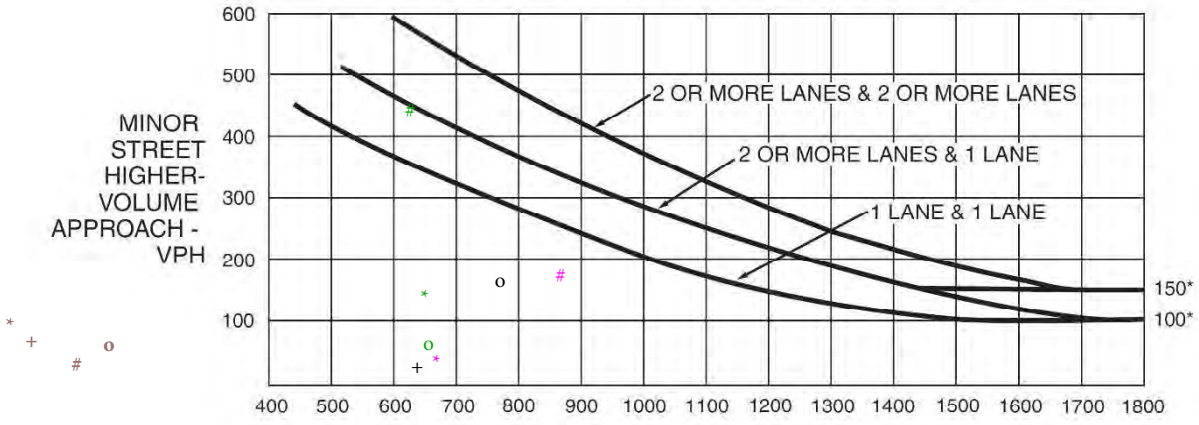


*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

I-80 WB Ramps / Pedrick Rd	I-80 EB Ramps / Pedrick Rd	Pedrick Rd / Professional Dr	Pedrick Rd / Vaughn Rd Realign	Professional Dr / Dorset Dr
+ - AM o - PM	+ - AM o - PM	+ - AM o - PM	+ - AM o - PM	* - AM # - PM

Vaughn Rd / Professional Dr	Professional Dr / Tech Center (E)	Professional Dr / Tech Center (W)
* - AM # - PM	* - AM # - PM	* - AM # - PM

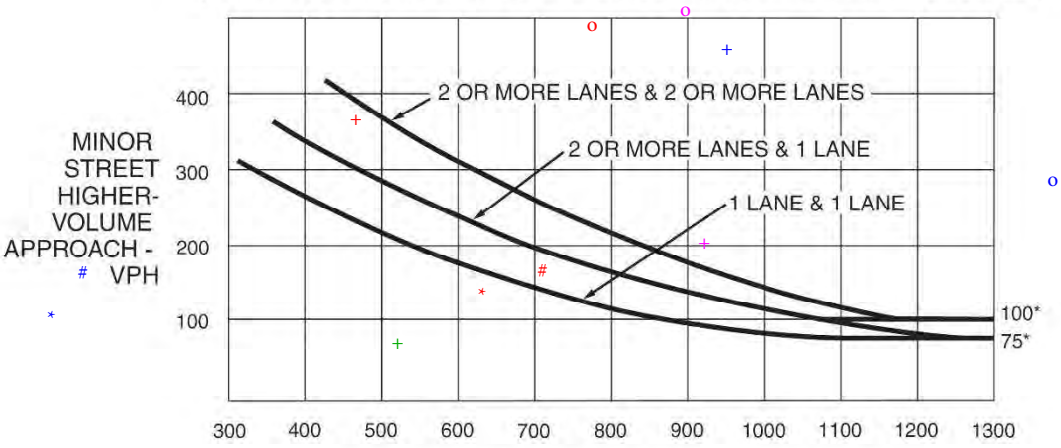
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

I-80 WB Ramps / Pedrick Rd
+ - AM
o - PM

I-80 EB Ramps / Pedrick Rd
+ - AM
o - PM

Pedrick Rd / Professional Dr
+ - AM
o - PM

Pedrick Rd / Commercial Dr
+ - AM
o - PM

Professional Dr / Dorset Dr
* - AM
# - PM

Vaughn Rd / Professional Dr
* - AM
# - PM

Professional Dr / Tech Center (E)
* - AM
# - PM

Pedrick / Campus 257 North
* - AM
# - PM

Professional Dr / Commercial Dr
+ - AM
o - PM

Commercial Dr / Campus Parkway
* - AM
# - PM

Professional Dr / Tech Center (W)
+ - AM
o - PM

	FAIR SHARE CAMPUS 257													
		#2	Pedrick / EB I-80 Ramps							#6	Pedrick / Professional			
			AM		PM						AM		PM	
			(1435-1066)/(1435)		(1727-1389)/(1727)						(1126-695)/(1126)		(1598-1193)/(1598)	
			25.7%		19.6%						38.3%		25.3%	
				22.6%								31.8%		