

Comments 11/24/2021:

1) Trip generation/distribution/assignment all looks sound, as well as traffic analysis of the COVID adjustment.

2) SB Abilene will need to utilize/repaint the painted median to accommodate a SB left-turn lane into the west access.

Due to proximity of West access onto Abilene street and the Florida/Abilene SB left turn lane, the Florida/Abilene SB left turn lane may also need to be modified to accommodate a SB left turn lane at Abilene/West access driveway.

Right now, Florida/Abilene SB left turn storage exceeds projected need, so that length may be reduced to accommodate a left turn lane into the west access.

3) See any other comments throughout, but they are minimal.

HKS Response:

Comments noted. Text states to re-stripe SB Abilene at west site access for new SB L turn lane. No modifications are required for the SB left turn lane at Florida & Abilene as the location of the proposed west site access intersection does not infringe on this SB turn lane and no queue related issues are projected.

er 1, 2021

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Harris Kocher Smith Project No. 210424

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HKS Response:
TIS revised for 259 units.

Site Plan as
submitted showing
259 units. Please
update as needed.

I. INTRODUCTION

A. Project Overview

MAA is proposing to redevelop a property containing approximately 4.1 acres located within the jurisdictional boundaries of Aurora, Colorado. The subject property currently consists of a vacant 24-Hour Fitness Center and a surface parking lot. The subject property is bound on the south by E. Florida Ave., on the east by residential properties along the frontage of E. Arkansas Dr., on the north by Colorado Early Colleges Aurora High School, and on the west by Abilene St. The proposed development will raze the existing property and construct a 247-unit multi-family (mid-rise) residential housing complex with associated amenities. The proposed development will be known as 1450 Abilene Street. Figure 1 provides a site location map of the proposed development and the surrounding transportation system.

The proposed 1450 Abilene Street development will be served by multiple points of access. The proposed west site access driveway will be a full movement "T" intersection with S. Abilene St. at the northwest corner of the site. The proposed south site access driveway will be a full movement "T" intersection with E. Florida Ave. at the southeast corner of the site. Modifications to E. Florida Ave. will conform to the recent striping modifications made within the study area. In addition, the two existing access driveways on the north edge of the site will be maintained to allow connection to and from the Colorado Early Colleges Aurora High School property north of the proposed development. The existing south and west site access driveways will be closed with the redevelopment of this site. Figure 2 graphically illustrates the conceptual site plan and proposed access points for the proposed 1450 Abilene Street development.

B. Purpose of Study

The purpose of this study is to evaluate the impact of the vehicular trips projected to be generated by the proposed 1450 Abilene Street development on the study area intersections and roadway system. The study includes 2023 (year of anticipated project build-out), and 2040 (long-term) analysis horizons.

C. Study Area

The study area encompasses the existing roadway system in the vicinity of the project site. Specifically, the following intersections are included in the study:

- S. Abilene St./North School Access Driveway
- S. Abilene St./South School Access Driveway
- ✓ • E. Florida Ave./S. Abilene St.
- E. Florida Ave./Commercial Driveway
- E. Florida Ave./South Site Access (Proposed)
- S. Abilene St./West Site Access (Proposed)

II. EXISTING CONDITIONS

A. Existing Traffic Volumes

Existing peak hour intersection turning movement traffic volume counts were collected for this study at the following intersections on Tuesday, August 10, 2021:

- ✓ E. Florida Ave./S. Abilene St.
- E. Florida Ave./Commercial Driveway

72-hour directional traffic volume counts were collected for this study at the following locations Tuesday, August 10 – Thursday August 12, 2021:

- ✓ E. Florida Ave. east of S. Abilene St.
- S. Abilene St. north of E. Florida Ave.

In order to account for the ongoing COVID-19 pandemic and its impact on current traffic volumes, the 2021 existing traffic volume counts collected in August 2021 for this study were adjusted based on the following methodology.

- Determine Average Annual Traffic Volume Growth Rate for Study Area Roadways - The Denver Regional Council of Governments (DRCOG) 2020 and 2050 travel models were utilized to forecast the average annual traffic volume growth rate (AGR) for S. Abilene St. and E. Florida Ave. within the study area. Utilizing this data, it was found that the average forecast AGR for E. Florida Ave. is forecast to be 0% and S. Abilene St. is forecast to be 0.32%. In order to be conservative and account for densification in this area, an AGR of 1.0% was utilized for all movements at the E. Florida Ave./S. Abilene St. and E. Florida Ave./Commercial Driveway intersections. This AGR was also used for the through traffic volumes on E. Florida Ave. and S. Abilene St. at the school access driveways and proposed site access driveways.
- ✓ • Determine COVID Adjustment Factor – In order to determine the COVID Adjustment Factor for the traffic volumes collected in August 2021, the AGR established for the study area roadways was applied to available 2018 pre-COVID traffic volume count data provided by the city of Aurora for the S. Abilene St./E. Florida Ave. intersection to forecast the equivalent 2021 traffic volumes. The forecast 2021 traffic volumes using available pre-COVID count data were then compared to the actual August 2021 existing traffic volumes collected for the same intersection. The ratio of these two volumes establishes the COVID Adjustment Factor for the study. For the purposes of this study the 2018 a.m. and p.m. peak hour entering volumes at the S. Abilene St./E. Florida Ave. intersection provided by the city were adjusted utilizing the established AGR to project their equivalent 2021 volumes. These projected 2021 peak hour volumes were then compared to the actual August 2021 peak hour volumes collected to determine the COVID Adjustment Factor. The resultant COVID Adjustment Factor was determined to be 1.74 for the a.m. peak hour and 1.17 for the p.m. peak hour. To further determine the COVID Adjustment Factor for the traffic volumes collected in August 2021, the same process was applied to available 2019 pre-COVID traffic volume count data provided in the study entitled *Traffic Impact Study Update, Colorado Early Colleges Aurora High School, Aurora, Colorado, May 2021, Kimley-Horn and Associates, Inc. (Kimley-Horn Study)*. The resultant COVID Adjustment Factor was determined to be 1.58 for the a.m. peak hour and 1.11 for the p.m. peak hour. The average of these a.m. and p.m. values was determined to be 1.66 in the a.m. and 1.14 in the p.m. These were then ultimately used as the COVID Adjustment Factors for this study. These factors were applied to the actual August 2021 traffic volumes collected for this study to project their equivalent non-COVID 2021 values.

A summary of the unadjusted 2021 (existing) peak hour intersection turning movement and daily directional traffic volume counts collected for this study are illustrated in Figure 3. A summary of

the 2021 (existing) COVID adjusted peak hour intersection turning movement and daily directional traffic volume counts are illustrated in Figure 4. Detailed traffic volume count data collected for this study is provided in Appendix “A”.

B. Existing Roadway System

The existing transportation network in the vicinity of the proposed 1450 Abilene Street development is graphically illustrated in Figure 1. The following narrative provides a description of the study area roadways and associated intersections:

Study Area Roadways:

- **E. Florida Ave.** – Within the study area (S. Abilene St. to E. Arkansas Dr.) E. Florida Ave. is classified as a collector roadway under the jurisdiction of the City of Aurora. The roadway section consists of one travel lane in each direction with a two-way bike track along the north side of the roadway. There is curb and gutter and attached sidewalks on both sides of the roadway. The posted speed limit is 30 mph.
- **S. Abilene St.** – Within the study area (E. Florida Ave. to E. Mississippi Ave.) S. Abilene St. is classified as a collector roadway under the jurisdiction of the City of Aurora. The roadway section consists of two travel lanes in the northbound direction and one travel lane in the southbound direction. There is a painted center median. There is curb and gutter on both sides of the roadway. There is attached sidewalk along the east side of the roadway. The posted speed limit is 40 mph.

Study Area Intersections:

- **S. Abilene St./North School Access Driveway** - The S. Abilene St./North School Access Driveway intersection is a “T” intersection operating under two-way stop sign control on the westbound approach. The east leg of the intersection has one shared left/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection has one left turn lane with approximately 50 feet of storage and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection has one through lane and one shared through/right turn lane on the northbound approach, and one southbound departure lane.
- **S. Abilene St./South School Access Driveway** - The S. Abilene St./South School Access Driveway intersection is a “T” intersection operating under two-way stop sign control on the westbound approach. The east leg of the intersection has one shared left/right turn lane on the westbound approach and one eastbound departure lane. The north leg of the intersection has one left turn lane with approximately 150 feet of storage and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection has one through lane and one shared through/right turn lane on the northbound approach, and one southbound departure lane.
- **E. Florida Ave./S. Abilene St.** - The E. Florida Ave./S. Abilene St. intersection is a “T” intersection operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on the southbound approach. The east leg of the intersection has one shared left/right turn lane on the westbound approach and one eastbound departure lane. The east leg also has a two-way shared bicycle track along the north side of E. Florida Ave. The north leg of the intersection has one left turn lane

with approximately 150 feet of storage and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection has one through lane and one shared through/right turn lane on the northbound approach, and one southbound departure lane.

- **E. Florida Ave./Commercial Driveway** - The E. Florida Ave./Commercial Driveway intersection is a “T” intersection operating under two-way stop sign control on the northbound approach. The east leg of the intersection has one shared left turn/through lane on the westbound approach, and one eastbound departure lane. The west leg of the intersection has one shared through/right turn lane on the eastbound approach, and one westbound departure lane. The south leg of the intersection serves as the access driveway for a hotel and a shopping plaza and has one shared left/right turn lane on the northbound approach and one southbound departure lane.

Traffic signal timing plans were obtained for the signalized study area intersections from the city of Aurora.

III. BACKGROUND TRAFFIC

A. Background Traffic Volumes

The development of the background traffic models for the 2023 (build-out) and 2040 (long-term) analysis horizons were developed for this study employing the following strategy:

- The Denver Regional Council of Governments (DRCOG) 2020 and 2050 travel models were utilized to forecast the average annual traffic volume growth rate (AGR) for S. Abilene St. and E. Florida Ave. within the study area. Utilizing this data, it was found that the average forecast AGR for E. Florida Ave. is forecast to be 0% and S. Abilene St. is forecast to be 0.32%. In order to be conservative and account for densification in this area, an AGR of 1.0% was utilized for all movements at the E. Florida Ave./S. Abilene St. and E. Florida Ave./Commercial Driveway intersections. This AGR was also used for the through traffic volumes on E. Florida Ave. and S. Abilene St. at the school access driveways and proposed site access driveways. An AGR of 1.0% equates to a 2-year (2021 to 2023) growth factor of 1.02 and a 19-year (2021 to 2040) growth factor of 1.208.
- These factors were applied to the COVID adjusted 2021 (existing) traffic volumes collected for this study to forecast the 2023 (build-out) and 2040 (long-term) background traffic volumes.
- Since the traffic volume counts for this study were collected prior to the start of the school year, the following methodology was used to account for site traffic from the Colorado Early Colleges Aurora High School (CEC) site adjacent to the project site:
 - Site generated traffic volumes for the CEC School were taken directly from Figure 7 and Appendix C in the *Kimley-Horn Study* in order to project peak hour traffic volumes at the school access driveways, and additional background traffic volumes at the other study area intersections. The site generated traffic volumes for the CEC school were added directly to the 2023 (build-out) and 2040 (long-term) background traffic models to project the total a.m. and p.m. peak hour background traffic volumes at the relevant study area intersections.



- For the purposes of this study, it was assumed that the distribution of intersection approach traffic (left turn, through, right turn) will remain static through the 2040 (long-term) analysis horizon.

Figures 5 and 6 graphically illustrate the forecast 2023 (build-out) and 2040 (long-term) analysis horizons background traffic volumes on the study area roadways and intersections, respectively.

B. Background Traffic Operational Analysis

The following study area intersections were analyzed for the 2023 (build-out) and 2040 (long-term) background traffic analysis horizons in order to provide a basis for comparison of their operational characteristics with and without the proposed 1450 Abilene Street development:

- S. Abilene St./North School Access Driveway
- S. Abilene St./South School Access Driveway
- E. Florida Ave./S. Abilene St.
- E. Florida Ave./Commercial Driveway

The results of the background traffic operational analyses are summarized graphically for the 2023 (build-out) and 2040 (long-term) background traffic analysis horizons in Figures 7, and 8, respectively. A summary of the results of the intersection capacity analyses are provided in Table 1 and detailed *Synchro 11* software intersection capacity analysis reports in Appendix “B”.

As shown in Table 1, all the existing study area intersections are projected to operate at acceptable levels of service (LOS “D” or better), overall, along with all impeded lane groups, during the 2023 (build-out) and 2040 (long-term) analysis horizon background traffic scenarios.

TABLE 1
2023 (BUILD-OUT) & 2040 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2023 BACKGROUND TRAFFIC				2040 BACKGROUND TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. North School Access/S. Abilene St.	TWSC								
a. WB LR		C	16.8	C	17.9	C	20.0	C	22.5
b. SB L		A	8.4	A	8.3	A	8.7	A	8.6
c. INTERSECTION		A	2.4	A	0.8	A	2.4	A	0.9
2. South School Access/S. Abilene St.	TWSC								
a. WB LR		A	0.0	A	0.0	A	0.0	A	0.0
b. SB L		A	8.5	A	8.4	A	8.8	A	8.7
c. INTERSECTION		A	0.4	A	0.2	A	0.3	A	0.2
3. E. Florida Ave./S. Abilene St.	Signal								
a. WB LR		C	32.0	D	36.1	C	32.4	D	35.4
b. NB TR		B	11.8	A	9.6	B	13.0	B	11.4
c. SB L (Prot+Perm)		A	8.1	A	6.2	A	9.0	A	7.3
d. SB T		A	8.1	A	6.5	A	9.3	A	8.0
e. INTERSECTION		B	15.2	B	11.2	B	16.1	B	12.4
4. E. Florida Ave./Commercial Driveway	TWSC								
a. WB LT		A	7.6	A	7.9	A	7.7	A	8.1
b. NB LR	Stop	B	10.8	B	11.3	B	11.3	B	12.1
c. INTERSECTION		A	1.2	A	1.4	A	1.4	A	1.5

C. Background Traffic Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the existing study area intersections were computed for the 2023 (build-out) and 2040 (long-term) analysis horizon background traffic scenarios. Queue lengths are reported in total cumulative feet and based on a 25-foot vehicle length. Table 2 provides a summary of this analysis and comparison to the actual vehicle storage lengths provided for each of the existing study area intersections.

As shown in Table 2, all auxiliary lanes (turn bays) at the study area intersections have adequate capacity and are not projected to experience any queue related issues in the 2023 (build-out) and 2040 (long-term) analysis horizon background traffic analysis scenarios.

TABLE 2
2023 (BUILD-OUT) & 2040 (LONG-TERM) BACKGROUND TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2023 BACKGROUND TRAFFIC		2040 BACKGROUND TRAFFIC	
		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. North School Access/S. Abilene St.					
a. WB LR (1)	*	28	15	35	18
b. SB L (1)	50	3	0	3	0
2. South School Access/S. Abilene St.					
a. WB LR (1)	*	0	0	0	0
b. SB L (1)	150	3	3	3	3
3. E. Florida Ave./S. Abilene St.					
a. WB LR (1)	200	119	78	145	87
b. NB TR (2)	*	78	88	101	114
c. SB L (1)	150	35	47	44	59
d. SB T (1)	*	92	134	122	177
4. E. Florida Ave./Commercial Driveway					
a. WB LT (1)	*	3	3	3	3
b. NB LR (1)	*	3	8	3	8

* = Extension of approach laneage.

IV. PROJECT DEVELOPMENT

A. Trip Generation

The trip generation projections for the proposed 1450 Abilene Street development were forecast using the publication *Trip Generation, 10th Edition*, by the Institute of Transportation Engineers (ITE). Estimates of total daily traffic volumes and a.m. and p.m. peak hour traffic volumes were calculated. A 10% trip generation reduction to account for multimodal trips was applied to the proposed 1450 Abilene Street development site generated trips. A 10% reduction was used due to the project site being adjacent the RTD R-Line Florida Station. ✓

Update for consistency with site plan

For the purposes of this study, it was assumed that the subject property will be developed by 2023 and consist of a 247-unit multi-family (mid-rise) residential development with associated amenities. Based on these parameters, at build-out, the proposed 1450 Abilene Street development is projected to generate 1,210 daily vehicle trips of which 75 are projected to be generated during the a.m. peak hour and 95 are projected to be generated during the p.m. peak hour. A summary of the trip generation projections is provided in Table 5.

HKS Response:
TIS revised for 259 units.

**TABLE 3
1450 ABILENE STREET – TRIP GENERATION SUMMARY**

Land Use	Intensity	ITE Code	Daily (vpd)	AM Peak Hour (vph)				PM Peak Hour (vph)			
				Total	% In	% Out	In	Out	Total	% In	% Out
Multi-Family Housing (Mid-Rise) (3-10 Stories)	247 DU	221	1344	83	26%	74%	22	61	106	61%	39%
	10% TDM Reduction		134	8			2	6	11		
			Subtotal	1210	75		20	55	95		
			Total	1,210	75		20	55	95		

B. Trip Distribution

The distribution of the projected vehicular trips generated by the proposed 1450 Abilene Street development was established based on the following:

- Current and projected future traffic patterns on the surrounding transportation system
- Efficiency of access to principal transportation corridors such as I-225, S. Sable Blvd., E. Mississippi Ave., etc.
- Potential trip origins/destinations for the proposed land uses such as surrounding shopping centers, schools and employment centers.

Figure 9 graphically illustrates the projected trip distribution patterns for the proposed 1450 Abilene Street development.

Trip distribution reviewed as presented in Figure 9.

C. Trip Assignment

The vehicular traffic volumes projected to be generated by the proposed 1450 Abilene Street development, shown in Table 3, were assigned to the study area roadways and intersections utilizing the trip distribution methodology described above. Figure 10 graphically illustrates the site generated trip assignment for the proposed 1450 Abilene Street development.

Trip assignment reviewed and calculations verified as presented in Figure 10.

V. TOTAL TRAFFIC

Total traffic forecasts for the 2023 (build-out) and 2040 (long-term) analysis horizons were computed by combining the associated 2023 (build-out) and 2040 (long-term) background traffic volumes with the projected site generated traffic volumes. Figures 11 & 12 graphically illustrate the total traffic projections for the study area intersections for the 2023 (build-out) and 2040 (long-term) analysis horizons, respectively.

Total traffic reviewed and calculations verified as presented in Figure 11/12.

VI. PROJECT ANALYSIS

A. Operational Analysis

In order to evaluate the impact of the proposed 1450 Abilene Street development on the study area roadway system, peak hour intersection capacity analyses for the total traffic conditions were performed for the 2023 (build-out) and 2040 (long-term) analysis horizon total traffic scenarios at each of the study area intersections listed below.

- S. Abilene St./North School Access Driveway
- S. Abilene St./South School Access Driveway
- E. Florida Ave./S. Abilene St.
- E. Florida Ave./Commercial Driveway
- E. Florida Ave./South Site Access (Proposed)
- S. Abilene St./West Site Access (Proposed)

The results of the total traffic operational analyses are summarized in Table 4, below. Figures 13 and 14 graphically illustrate the 2023 (build-out) and 2040 (long-term) analysis horizon total traffic scenarios operational analyses, respectively. Detailed *Synchro 11* software intersection capacity analysis reports are provided in Appendix “B”.

As shown in Table 4, all the existing study area intersections, overall, as well as all impeded lane groups, are projected to operate at acceptable levels of service (LOS “D” or better), during the 2023 (build-out) and 2040 (long Term) analysis horizon total traffic scenarios.

A comparison of the 2023 (build-out) and 2040 (long-term) analysis horizons background and total traffic operational analyses indicates that the addition of the projected site generated vehicle trips from the proposed 1450 Abilene Street development will have a minimal impact on the overall operational characteristics of all the study area intersections, based on level of service. None of the study area intersections are projected to deteriorate from an overall acceptable level of service (LOS “D” or better) to a poor or failing level of service (LOS “E” or “F”) with the addition of the traffic projected to be generated by the proposed 1450 Abilene Street development.

Table 5 provides a side-by-side comparative summary of the 2023 (build-out) and 2040 (long-term) analysis horizons background and total traffic operational analyses.

TABLE 4
2023 (BUILD-OUT) & 2040 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2023 TOTAL TRAFFIC				2040 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
1. North School Access/S. Abilene St.	TWSC								
a. WB LR		C	17.5	C	18.6	C	20.9	C	23.6
b. SB L		A	8.5	A	8.4	A	8.8	A	8.6
c. INTERSECTION		A	2.4	A	0.8	A	2.4	A	0.9
2. South School Access/S. Abilene St.	TWSC								
a. WB LR		A	0.0	A	0.0	A	0.0	A	0.0
b. SB L		A	8.6	A	8.5	A	8.9	A	8.8
c. INTERSECTION		A	0.4	A	0.2	A	0.3	A	0.1

TABLE 4 (CONTINUED)
2023 (BUILD-OUT) & 2040 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF OPERATIONAL ANALYSIS

INTERSECTION	CONTROL	2023 TOTAL TRAFFIC				2040 TOTAL TRAFFIC			
		AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY	AM PEAK LOS	AM PEAK DELAY	PM PEAK LOS	PM PEAK DELAY
3. E. Florida Ave./S. Abilene St. a. WB LR b. NB TR c. SB L (Prot+Perm) d. SB T e. INTERSECTION	Signal								
		C	32.1	D	36.1	C	32.6	D	35.4
		B	11.9	A	9.8	B	13.2	B	11.6
		A	8.2	A	6.3	A	9.1	A	7.5
		A	8.3	A	6.7	A	9.5	A	8.1
		B	15.3	B	11.4	B	16.2	B	12.6
4. E. Florida Ave./Commercial Driveway a. WB LT b. NB LR c. INTERSECTION	TWSC								
		A	7.6	A	7.9	A	7.7	A	8.1
	Stop	B	10.8	B	11.4	B	11.4	B	12.3
		A	1.2	A	1.4	A	1.3	A	1.4
5. E. Florida Ave./South Site Access a. EB LT b. SB LR c. INTERSECTION	TWSC								
		A	7.9	A	7.6	A	8.0	A	7.6
	Stop	B	11.2	B	11.0	B	11.7	B	11.5
		A	0.4	A	0.4	A	0.4	A	0.3
6. S. Abilene. St./West Site Access a. WB LR b. SB L c. INTERSECTION	TWSC								
	Stop	B	14.2	C	17.5	C	15.9	C	21.4
		A	8.4	A	8.5	A	8.7	A	8.8
		A	0.7	A	0.6	A	0.7	A	0.6

TABLE 5
BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON

INTERSECTION	CONTROL	2023 (BUILD-OUT)				2040 (LONG-RANGE)			
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS
1. North School Access/S. Abilene St. a. WB LR b. SB L c. INTERSECTION	TWSC								
		C	C	C	C	C	C	C	C
		A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A
2. South School Access/S. Abilene St. a. WB LR b. SB L c. INTERSECTION	TWSC								
		A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A
3. E. Florida Ave./S. Abilene St. a. WB LR b. NB TR c. SB L (Prot+Perm) d. SB T e. INTERSECTION	Signal								
		C	D	C	D	C	D	C	D
		B	A	B	A	B	B	B	B
		A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A
		B	A	B	A	B	B	B	B
4. E. Florida Ave./Commercial Driveway a. WB LT b. NB LR c. INTERSECTION	TWSC								
		A	A	A	A	A	A	A	A
	Stop	B	B	B	B	B	B	B	B
		A	A	A	A	A	A	A	A

TABLE 5 (CONTINUED)
BACKGROUND & TOTAL TRAFFIC
OPERATIONAL ANALYSIS COMPARISON

INTERSECTION	CONTROL	2023 (BUILD-OUT)				2040 (LONG-RANGE)			
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS
5. E. Florida Ave./South Site Access	TWSC								
a. EB LT	Stop	-	-	A	A	-	-	A	A
b. SB LR		-	-	B	B	-	-	B	B
c. INTERSECTION		-	-	A	A	-	-	A	A
6. S. Abilene St./West Site Access	TWSC								
a. WB LR	Stop	-	-	B	C	-	-	C	C
b. SB L		-	-	A	A	-	-	A	A
c. INTERSECTION		-	-	A	A	-	-	A	A

B. Queuing Analysis

Queue lengths and associated storage requirements for auxiliary lanes (turn bays) at the study area intersections were computed for the 2023 (build-out) and 2040 (long-term) analysis horizon total traffic scenarios. Table 6 provides a summary of this analysis and comparison to the actual vehicle storage lengths provided for each of the existing study area intersections.

As shown in Table 6, the addition of the projected site generated vehicle trips from the proposed 1450 Abilene Street development does not create any additional queuing issues beyond those identified in the background traffic analysis scenarios. All auxiliary lanes (turn bays) at the study area intersections have adequate capacity and are not projected to experience in queue related issues in the 2023 (build-out) and 2040 (long-term) analysis horizon total traffic analysis scenarios.

TABLE 6
2023 (BUILD-OUT) & 2040 (LONG-TERM) TOTAL TRAFFIC
SUMMARY OF QUEUING ANALYSIS

INTERSECTION (# OF LANES IN LANE GROUP)	EXISTING STORAGE (FT)	2023 TOTAL TRAFFIC		2040 TOTAL TRAFFIC	
		QUEUE LENGTH (FT) 95TH%		QUEUE LENGTH (FT) 95TH%	
		AM PEAK	PM PEAK	AM PEAK	PM PEAK
1. North School Access/S. Abilene St.					
a. WB LR (1)	*	30	15	38	20
b. SB L (1)	50	3	0	3	0
2. South School Access/S. Abilene St.					
a. WB LR (1)	*	0	0	0	0
b. SB L (1)	150	3	3	3	3
3. E. Florida Ave./S. Abilene St.					
a. WB LR (1)	200	129	82	153	90
b. NB TR (2)	*	82	95	105	121
c. SB L (1)	150	37	49	46	60
d. SB T (1)	*	102	141	134	185
4. E. Florida Ave./Commercial Driveway					
a. WB LT (1)	*	3	3	3	3
b. NB LR (1)	50	3	8	3	8
5. E. Florida Ave./South Site Access					
a. EB LT (1)	*	0	0	0	0
b. SB LR (1)	*	3	3	3	3
6. S. Abilene. St./West Site Access					
a. WB LR (1)	*	8	8	10	10
b. SB LT (1)	*	0	3	0	3

* = Extension of approach laneage.

C. Pedestrian Connection Analysis

There is currently existing sidewalk along S. Abilene St. and E. Florida Ave. that is adjacent to the 1450 Abilene Street project site. With the redevelopment of this site, it is projected that along S. Abilene St., new sidewalk at a maximum width with site restraints will be installed. In addition, curb ramps adjacent to the site will be improved as necessary to meet current ADA standards. Appropriate signage and striping will be included to promote pedestrian safety.

The pedestrian crossings at the E. Florida Ave./S. Abilene St. intersection have been recently modified. The crossing at this intersection provides pedestrian connectivity to the RTD R-Line Florida Station on the west side of S. Abilene St.

In order to evaluate the pedestrian crosswalk operational analysis, peak hour pedestrian crosswalk analysis for the background and total traffic conditions were performed for the 2023 (build-out) and 2040 (long-term) analysis horizons at the study area intersection listed below.

- E. Florida Ave./S. Abilene St.

The results of the pedestrian crosswalk peak hour background and total traffic operational analyses are summarized in Table 7, below. Detailed *Synchro 11* software pedestrian crosswalk analysis reports are provided in Appendix “B”.

As shown in Table 7, all pedestrian crosswalks at the E. Florida Ave./S. Abilene St. intersection are projected to operate at acceptable levels of service (LOS “D” or better), during the 2023 (build-out) and 2040 (long-term) analysis horizon background and total traffic scenarios.

**TABLE 7
PEDESTRIAN CROSSING ANALYSIS SUMMARY**

INTERSECTION	CONTROL	2023 (BUILD-OUT)				2040 (LONG-RANGE)			
		BACKGROUND		TOTAL		BACKGROUND		TOTAL	
		AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS	AM PEAK LOS	PM PEAK LOS
3. E. Florida Ave./S. Abilene St.	Signal								
a. WB (East leg Crosswalk)		B	B	B	B	B	B	B	B
b. NB (South Leg Crosswalk)		B	B	B	B	B	B	B	B
c. SB (North Leg Crosswalk)		B	B	B	B	B	B	B	B

D. Multimodal Considerations

An important element of the proposed 1450 Abilene Street development will be the incorporation of multimodal and travel demand management (TDM) strategies and amenities that encourage and promote non-vehicle travel options. As the development process advances, the development team will be collaborating with the City, other stakeholders and adjacent property owners to develop a comprehensive multimodal and TDM strategy that will be incorporated into the final development plans. Some of the options being explored and may be potentially incorporated include the following:

- Off-Site Multimodal Enhancements
 - Enhancing pedestrian facilities (crosswalk markings, ADA compliant sidewalks and curb ramps, etc.) within the study area
- On-Site Multimodal Enhancements
 - Resident communications system (kiosks, electronic, etc.)
 - Electric vehicle charging stations
 - Bicycle amenities (storage, repair/maintenance, wash areas)
 - Multimodal encouragement programs (parking buy-back, RTD Eco Pass, etc.)
 - On site/near-by bike, scooter, car share station(s)

E. Summary of Operational Analysis & Recommended Improvements

Based on the analyses contained in this study, the following improvements are recommended for the study area roadways and intersections in order to mitigate the traffic impacts of the proposed 1450 Abilene Street development.

Study Area Roadways:

- **E. Florida Ave.** – There are no geometric or operational modifications recommended for E. Florida Ave. within the study area (S. Abilene St. to E. Arkansas Dr.) as a result of the proposed 1450 Abilene Street development.

- **S. Abilene St.** – There are no geometric or operational modifications recommended for S. Abilene St. within the study area (E. Florida Ave. to E. Mississippi Ave.) as a result of the proposed 1450 Abilene Street development.

Study Area Intersections:

- **S. Abilene St./North School Access Driveway** - The S. Abilene St./North School Access Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the westbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario. No operational or geometric modifications are recommended for this intersection as a result of the proposed 1450 Abilene Street development.

- **S. Abilene St./South School Access Driveway** - The S. Abilene St./South School Access Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the westbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario. No operational or geometric modifications are recommended for this intersection as a result of the proposed 1450 Abilene Street development.

Right now, Florida/Abilene SB left turn storage exceeds projected need. This length may need to be reduced to accommodate a left turn lane into the west site access. Confirm if this adjustment may be necessary to accommodate appropriate design.

E. Florida Ave./S. Abilene St. - The E. Florida Ave./S. Abilene St. intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain operating under actuated/coordinated traffic signal control with protected/permitted left turn phasing on the southbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario. No operational or geometric modifications are recommended for this intersection as a result of the proposed 1450 Abilene Street development.

- **E. Florida Ave./Commercial Driveway** – The E. Florida Ave./Commercial Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the northbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario.

HKS Response:

No modifications are required for the SB left turn lane at Florida & Abilene as the location of the proposed west site access intersection does not infringe on this SB turn lane and no queue related issues are projected. On Abilene the striped median through the proposed west site access intersection will need to be removed.

Access (Proposed) – The E. Florida Ave./South Site Access Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the northbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario.

Access (Proposed) – The E. Florida Ave./South Site Access Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the northbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario.

Access (Proposed) – The E. Florida Ave./South Site Access Driveway intersection is not anticipated to undergo any significant geometric or operational modifications through the 2040 (long-term) analysis horizon. Therefore, the intersection is anticipated to remain as a “T” intersection under stop sign control on the northbound approach. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS “D” or better) through the 2040 (long-term) analysis horizon total traffic scenario.

the southbound approach, and one northbound departure lane. Modifications to E. Florida Ave. will conform to the recent striping modifications and bike track installed within the study area. Based on these parameters, it is projected that the intersection, overall, as well as all lane groups will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long-term) analysis horizon total traffic scenario.

- **S. Abilene St./ West Site Access (Proposed)** – The S. Abilene St./West Site Access driveway will be constructed concurrently with the proposed 1450 Abilene Street development as a full movement "T" intersection. The intersection will operate under stop sign control on the westbound approach. The east leg of the intersection will be constructed to have one shared left/right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will be restriped to have one left turn lane with a minimum of approximately 50 feet of storage, and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will be modified to have one through lane and one shared through/right turn lane on the northbound approach, and two southbound departure lanes. Based on these parameters, it is projected that the intersection, overall, as well as all impeded lane groups will operate at acceptable levels of service (LOS "D" or better) through the 2040 (long-term) analysis horizon total traffic scenario.

VII. CONCLUSIONS

MAA is proposing to redevelop a property containing approximately 4.1 acres located within the jurisdictional boundaries of Aurora, Colorado. The subject property currently consists of a vacant 24-Hour Fitness Center and a surface parking lot. The subject property is bound on the south by E. Florida Ave., on the east by residential properties along the frontage of E. Arkansas Dr., on the north by Colorado Early Colleges Aurora High School, and on the west by Abilene St. The proposed development will raze the existing property and construct a 247-unit multi-family (mid-rise) residential housing complex with associated amenities. The proposed development will be known as 1450 Abilene Street. Based on these parameters, at buildout, the proposed 1450 Abilene Street development is projected to generate 1,210 daily vehicle trips of which 75 are projected to be generated during the a.m. peak hour and 95 during the p.m. peak hour.

The proposed 1450 Abilene Street development will be served by multiple points of access. The proposed west site access driveway will be a full movement "T" intersection with S. Abilene St. at the northwest corner of the site. The proposed south site access driveway will be a full movement "T" intersection with E. Florida Ave. at the southeast corner of the site. Modifications to E. Florida Ave. will conform to the recent striping modifications made within the study area. In addition, the two existing access driveways on the north edge of the site will be maintained to allow connection to and from the Colorado Early Colleges Aurora High School property north of the proposed development. The existing south and west site access driveways will be closed with the redevelopment of this site.

Based on the analyses contained herein, the recommendations for geometric and operational, improvements/modifications for the study area roadways and intersections will sufficiently mitigate and/or off-set the impacts created by the traffic generated by the proposed 1450 Abilene Street development. A summary of the recommended improvements/modifications for the study area roadways and intersections are provided in Table 8.

**TABLE 8
SUMMARY OF RECOMMENDATIONS**

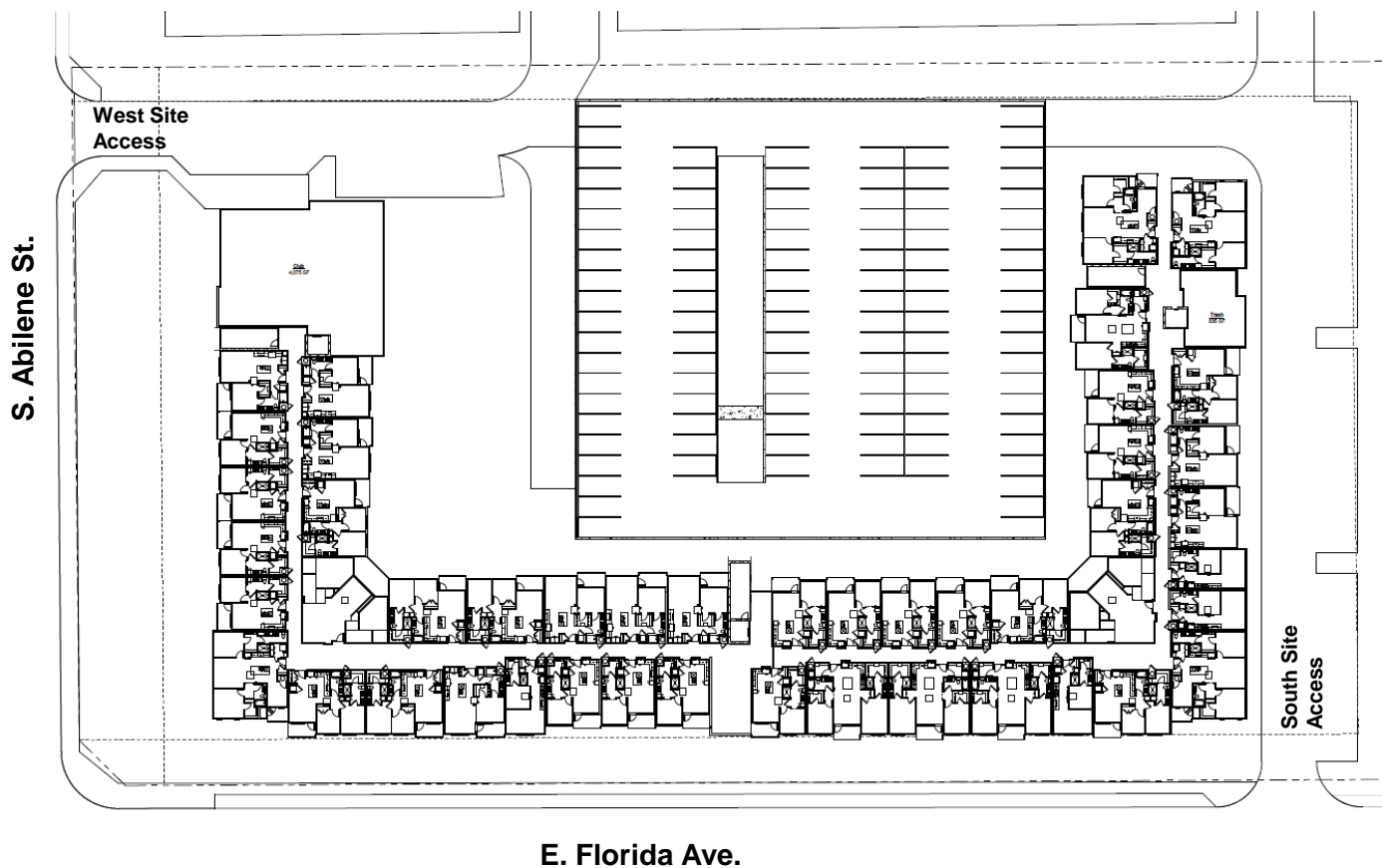
Roadway	Recommendations	Responsibility	Timing
E. Florida Ave.	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
S. Abilene St.	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
Intersection	Recommendations	Responsibility	Timing
S. Abilene St./North School Access Driveway	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
S. Abilene St./South School Access Driveway	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
E. Florida Ave./S. Abilene St.	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
E. Florida Ave./Commercial Driveway	No geometric or operational modifications are recommended as a result of the proposed 1450 Abilene Street development.	N/A	N/A
E. Florida Ave./South Site Access Driveway	Construct concurrently with the proposed 1450 Abilene Street development as a full movement "T" intersection. The intersection will operate under stop sign control on the southbound approach. The east leg of the intersection will be modified to have one shared through/right turn lane on westbound approach, and one eastbound departure lane. The west leg of the intersection will have one shared left turn/through lane on the eastbound approach, and one westbound departure lane. The north leg of the intersection will be constructed to have one shared left/turn lane on the southbound approach, and one northbound departure lane. Modifications to E. Florida Ave. will conform to the recent striping modifications and bike track installed within the study area.	N/A	N/A

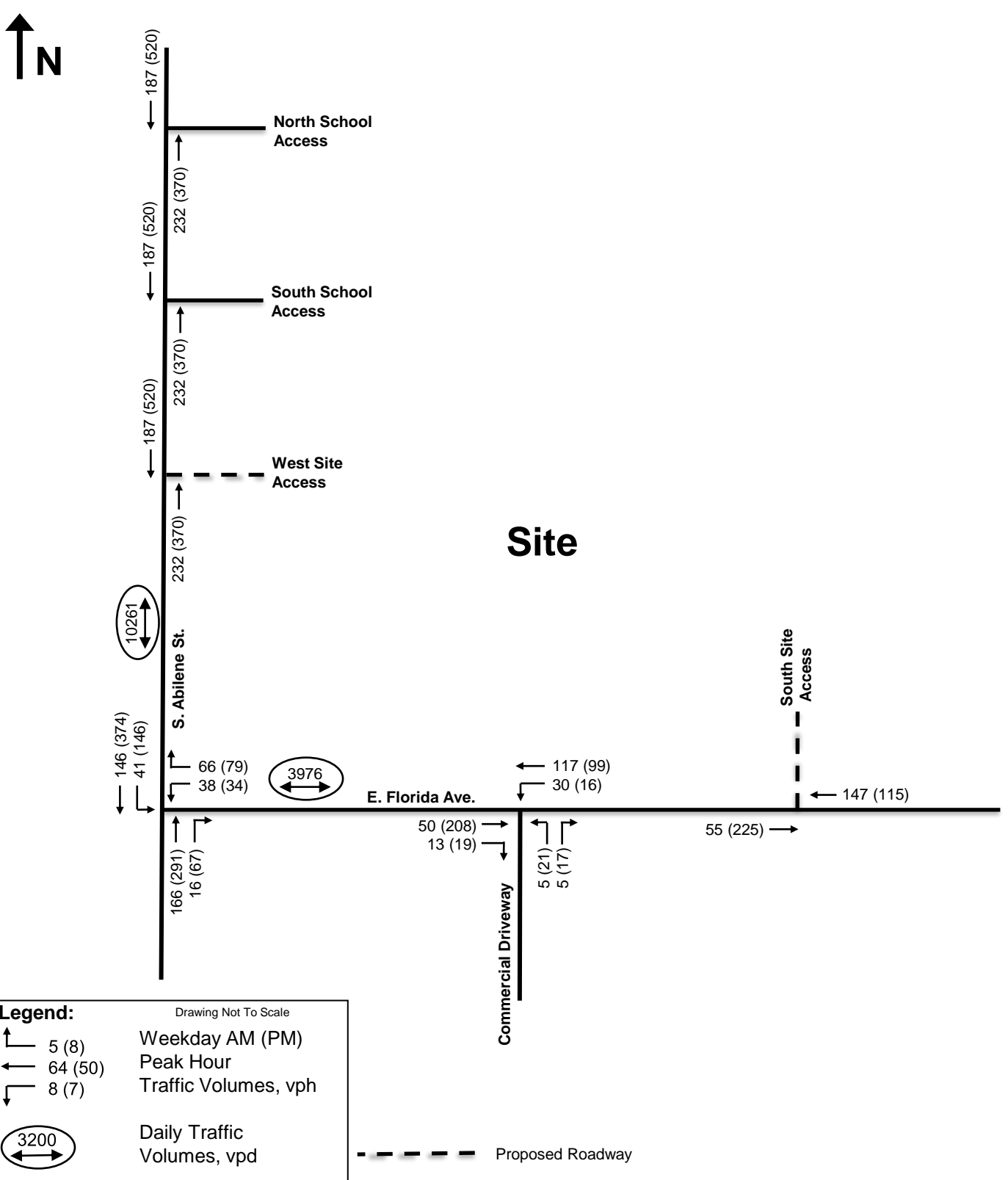
See note above and adjust text if necessary.

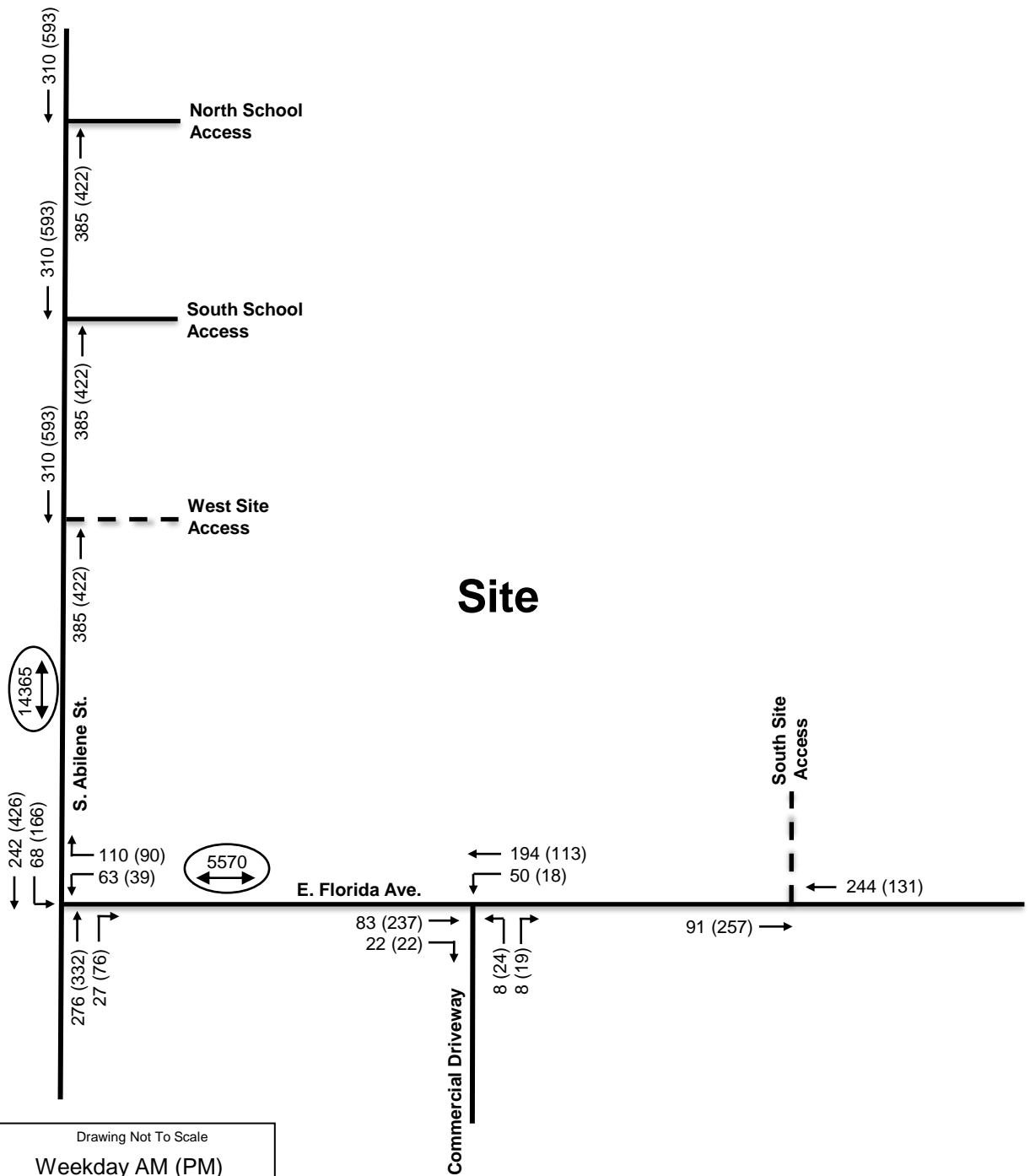
HKS Response:
Noted. No modifications to the SB left turn lane are necessary. The only modifications will be removing the striped median through the proposed west site access intersection.

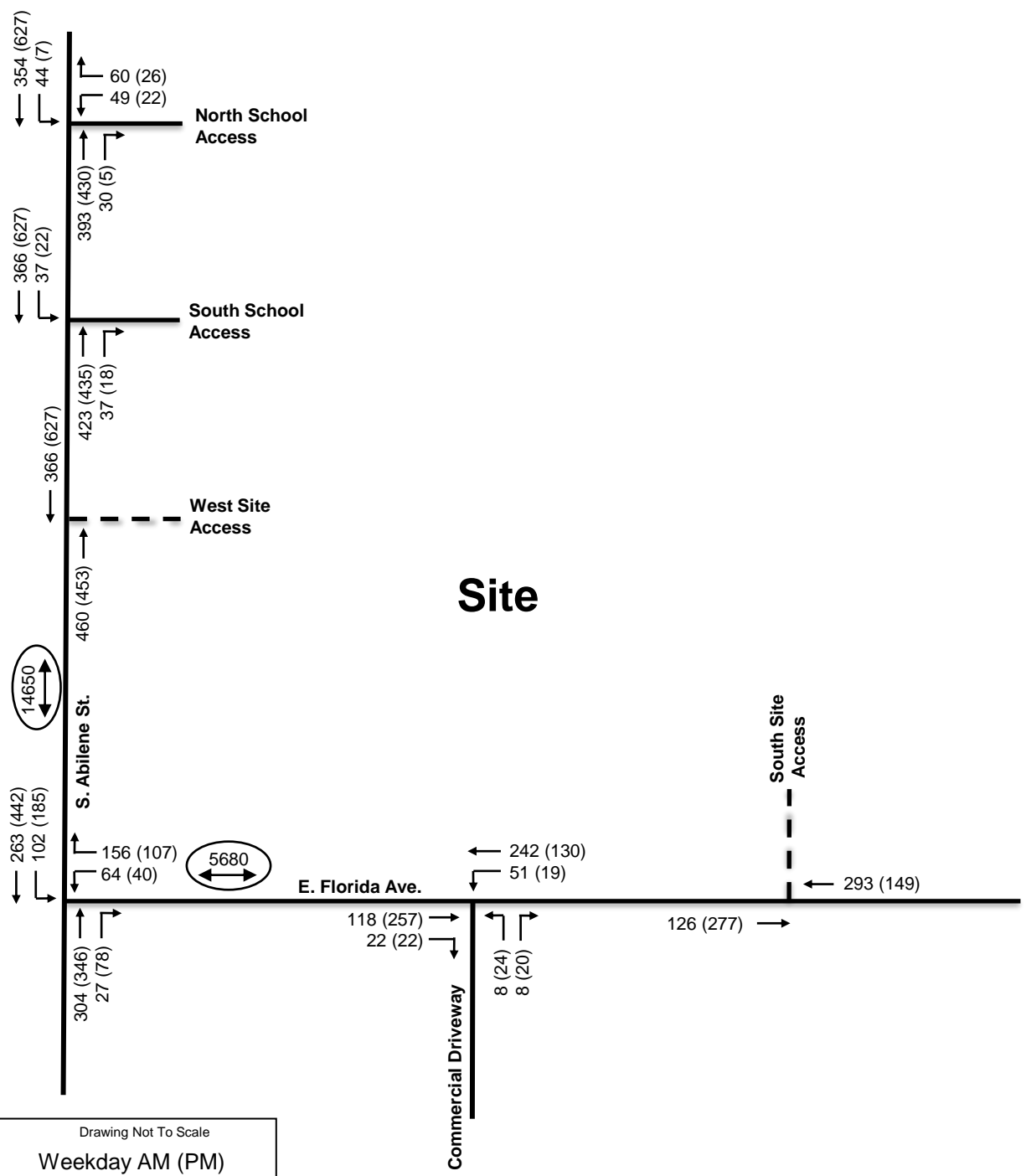
**TABLE 10 (CONTINUED)
SUMMARY OF RECOMMENDATIONS**

Intersection	Recommendations	Responsibility	Timing
S. Abilene St./West Site Access Driveway	Construct concurrently with the proposed 1450 Abilene Street development as a full movement "T" intersection. The intersection will operate under stop sign control on the westbound approach. The east leg of the intersection will be constructed to have one shared left/right turn lane on the westbound approach, and one eastbound departure lane. The north leg of the intersection will be restriped to have one left turn lane with a minimum of approximately 50 feet of storage, and one through lane on the southbound approach, and two northbound departure lanes. The south leg of the intersection will be modified to have one through lane and one shared through/right turn lane on the northbound approach, and two southbound departure lanes.	Developer	Concurrent with development









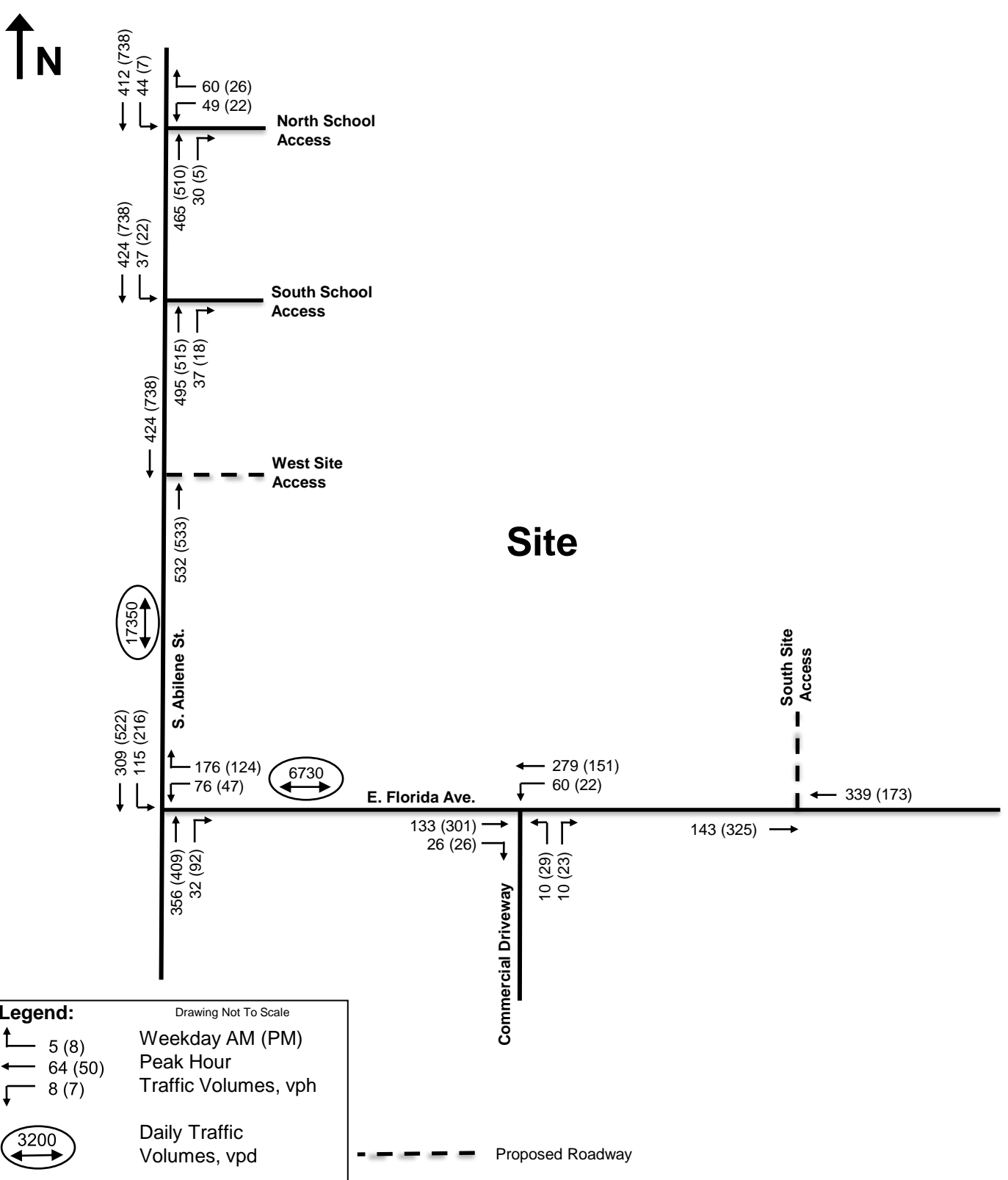
2023 Background Traffic Volumes

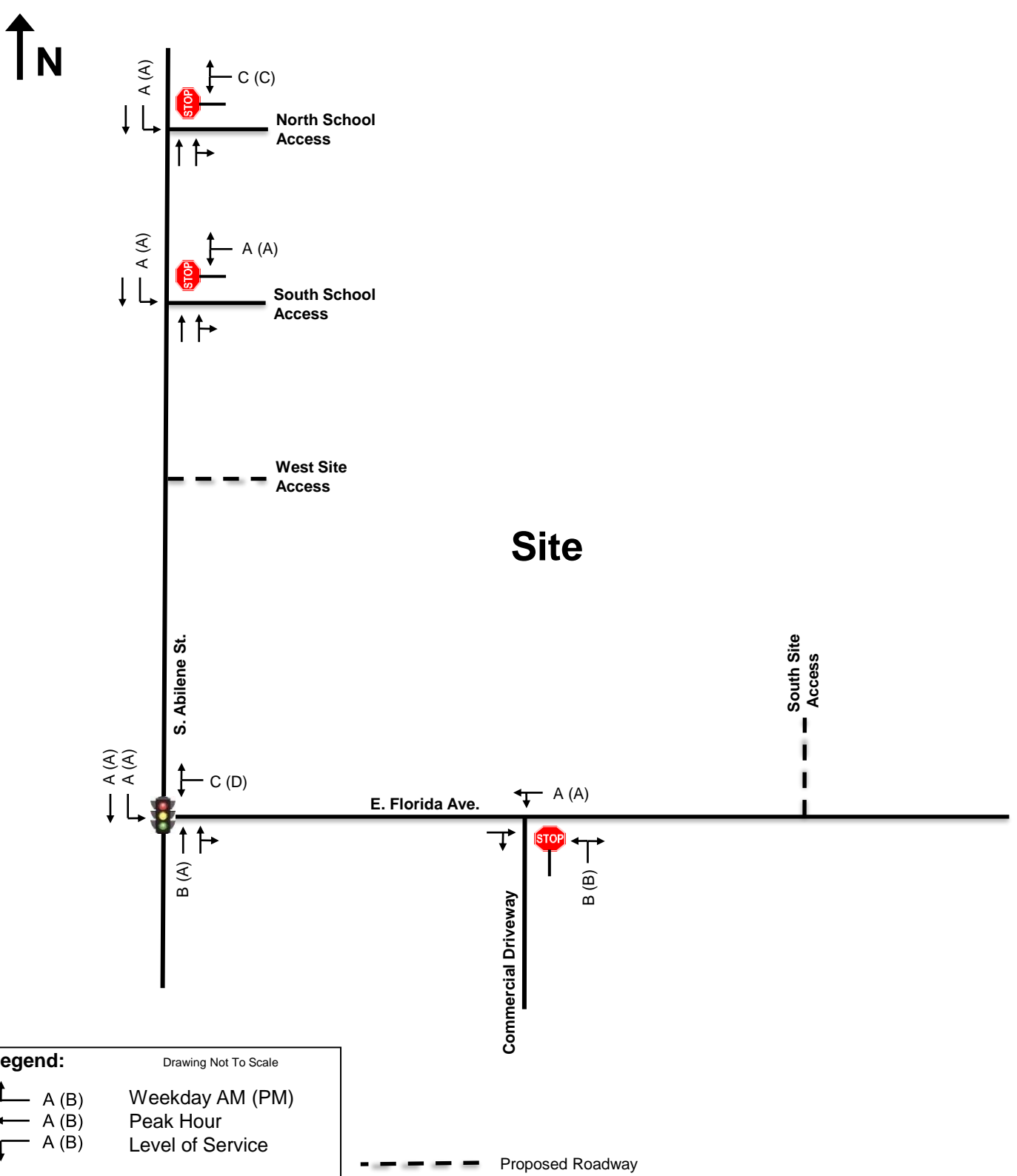
1450 Abilene Street

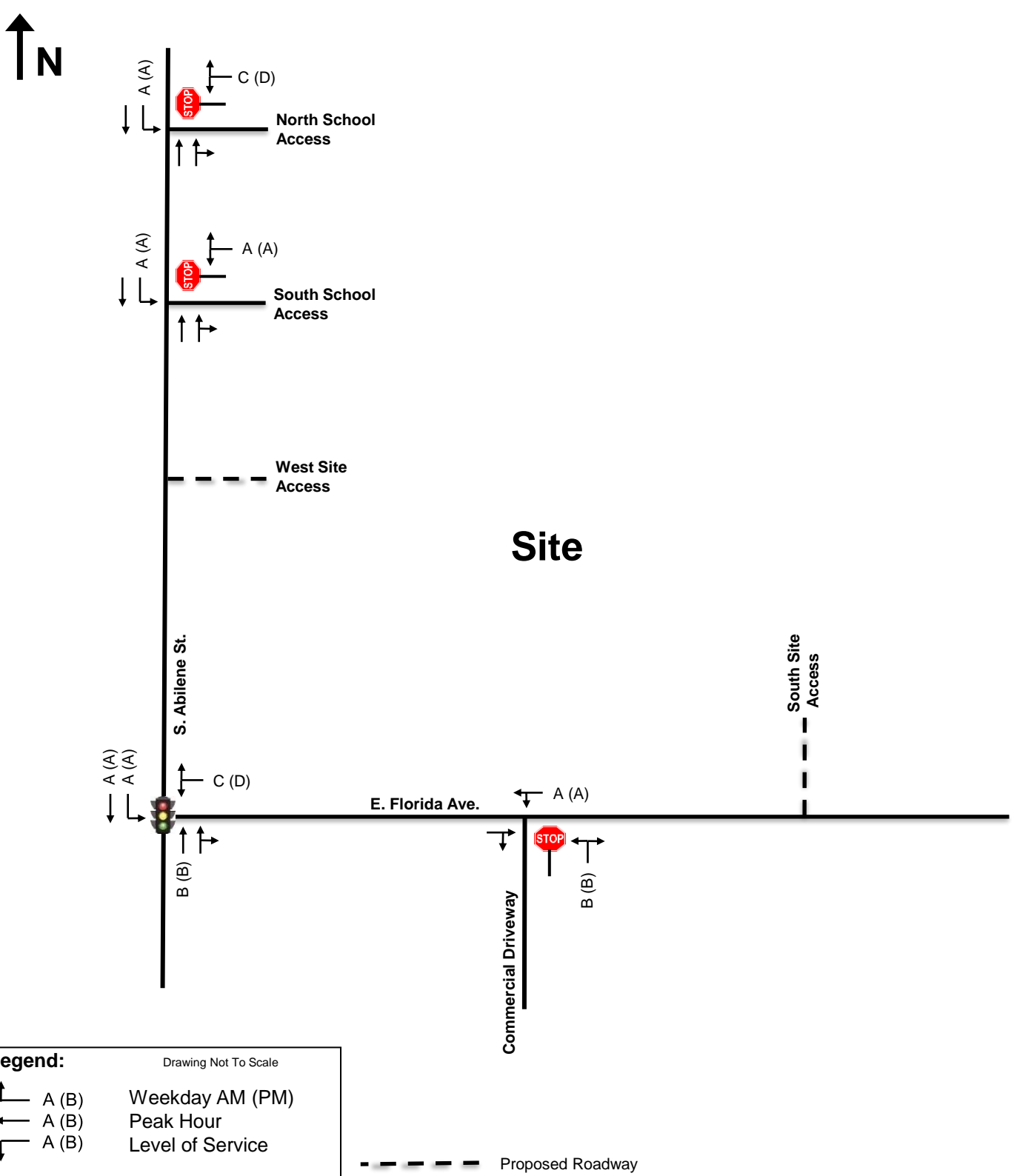
MAA

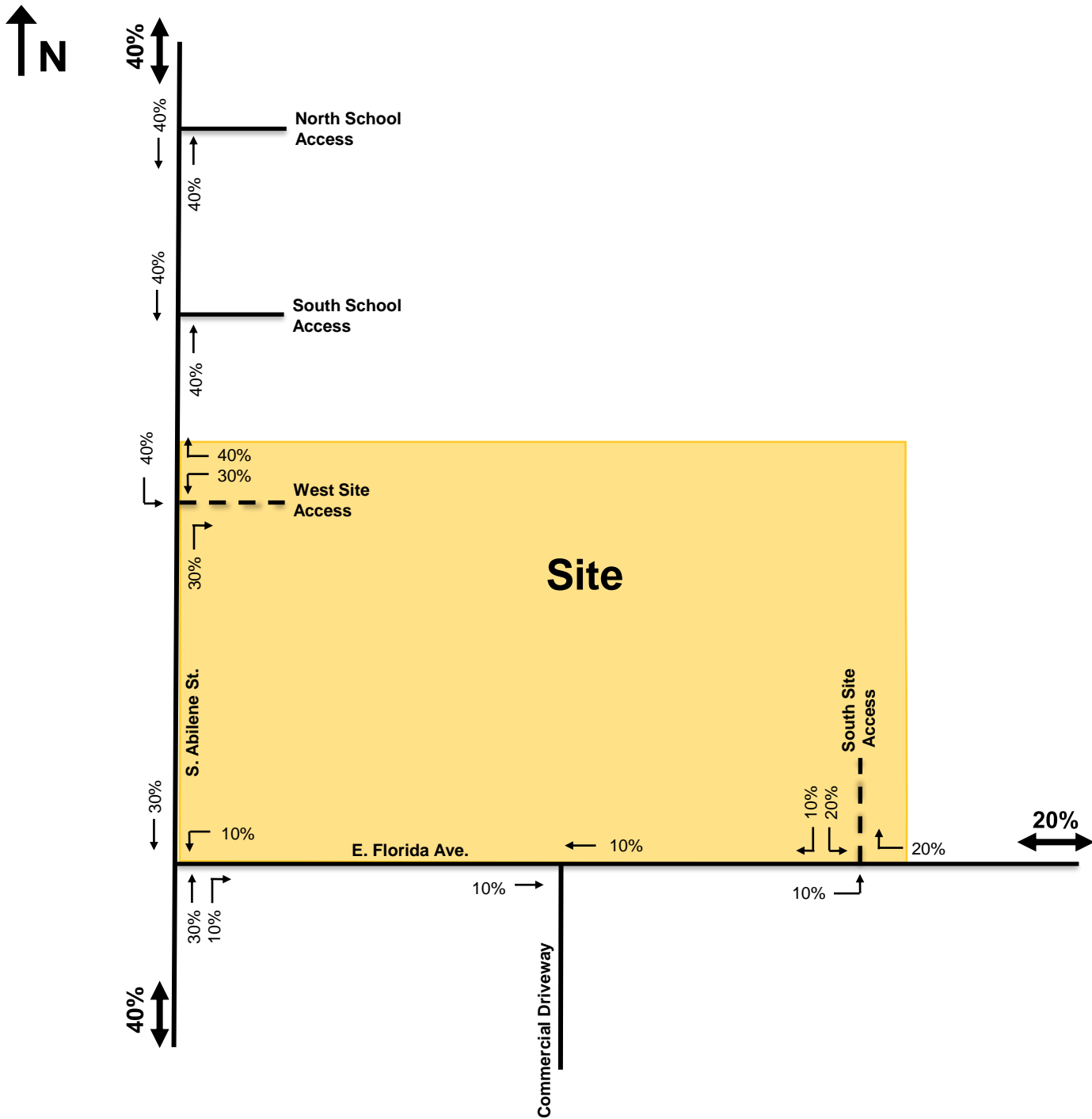
HKS #210424

Figure 5





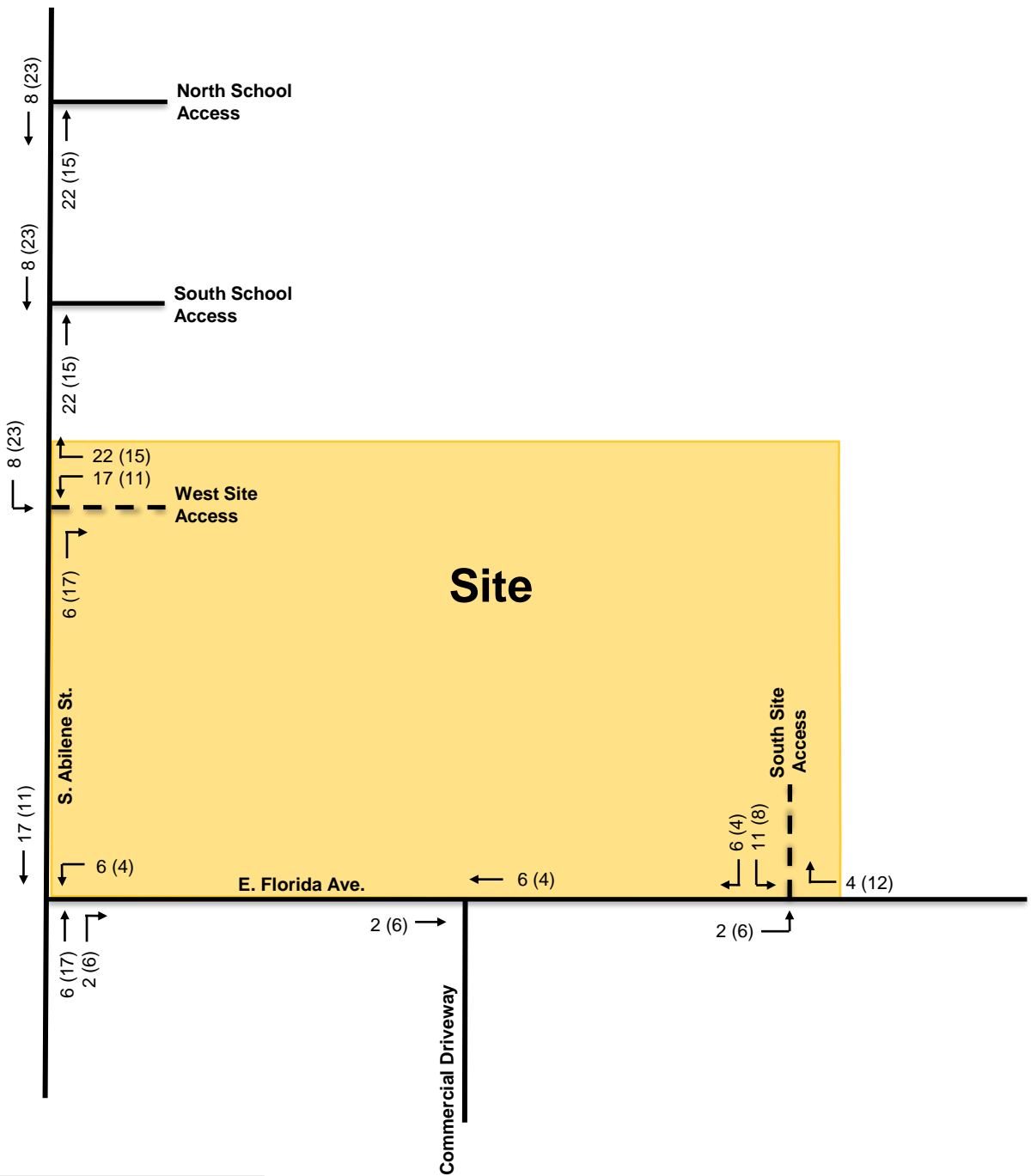




Legend: Drawing Not To Scale

XX% Site-Generated Trip Distribution

Proposed Roadway



Legend:

Drawing Not To Scale

↑ 5 (8) Weekday AM (PM)
← 64 (50) Peak Hour
↓ 8 (7) Traffic Volumes, vph

- - - - - Proposed Roadway



Site Generated Trip Assignment

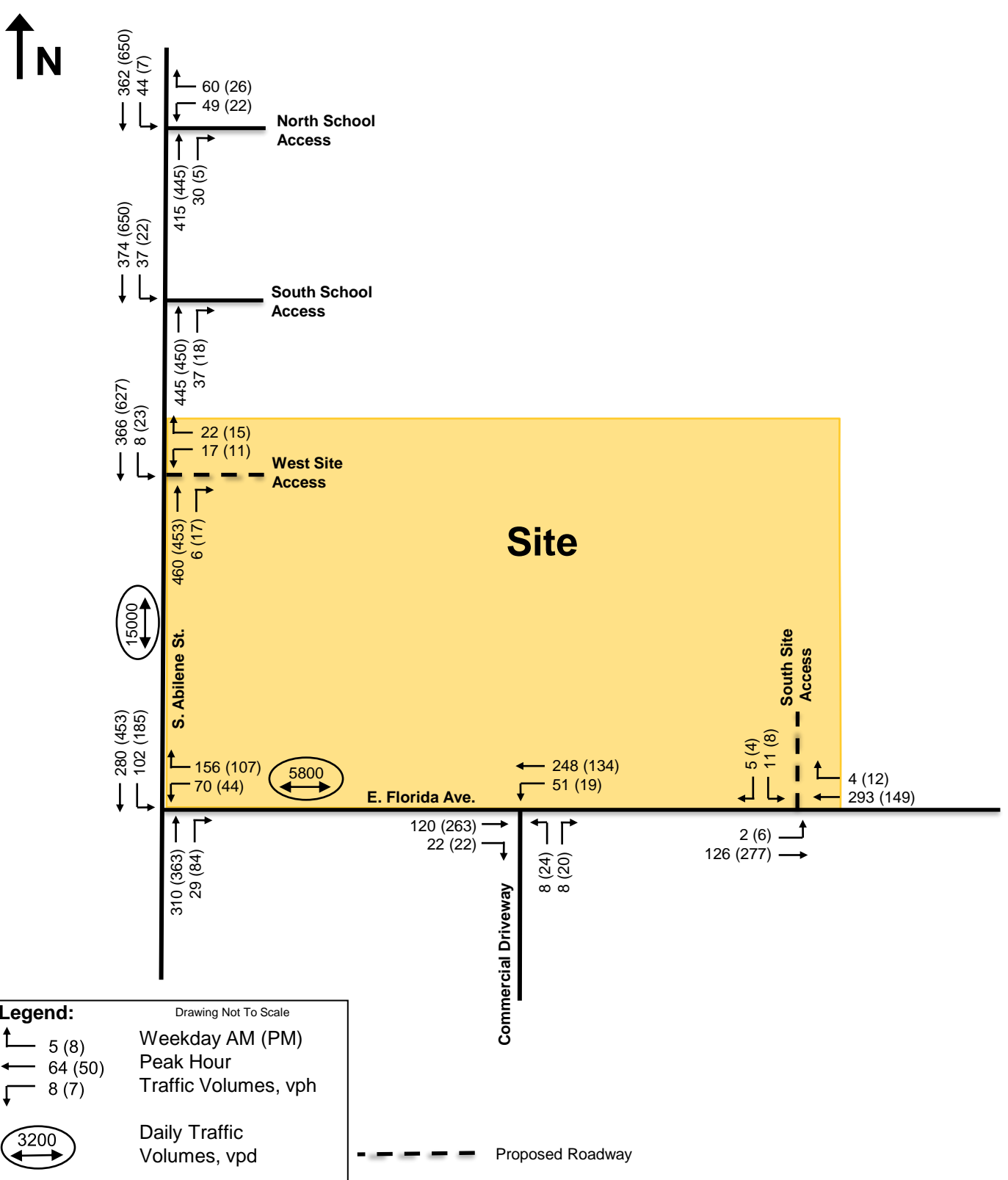


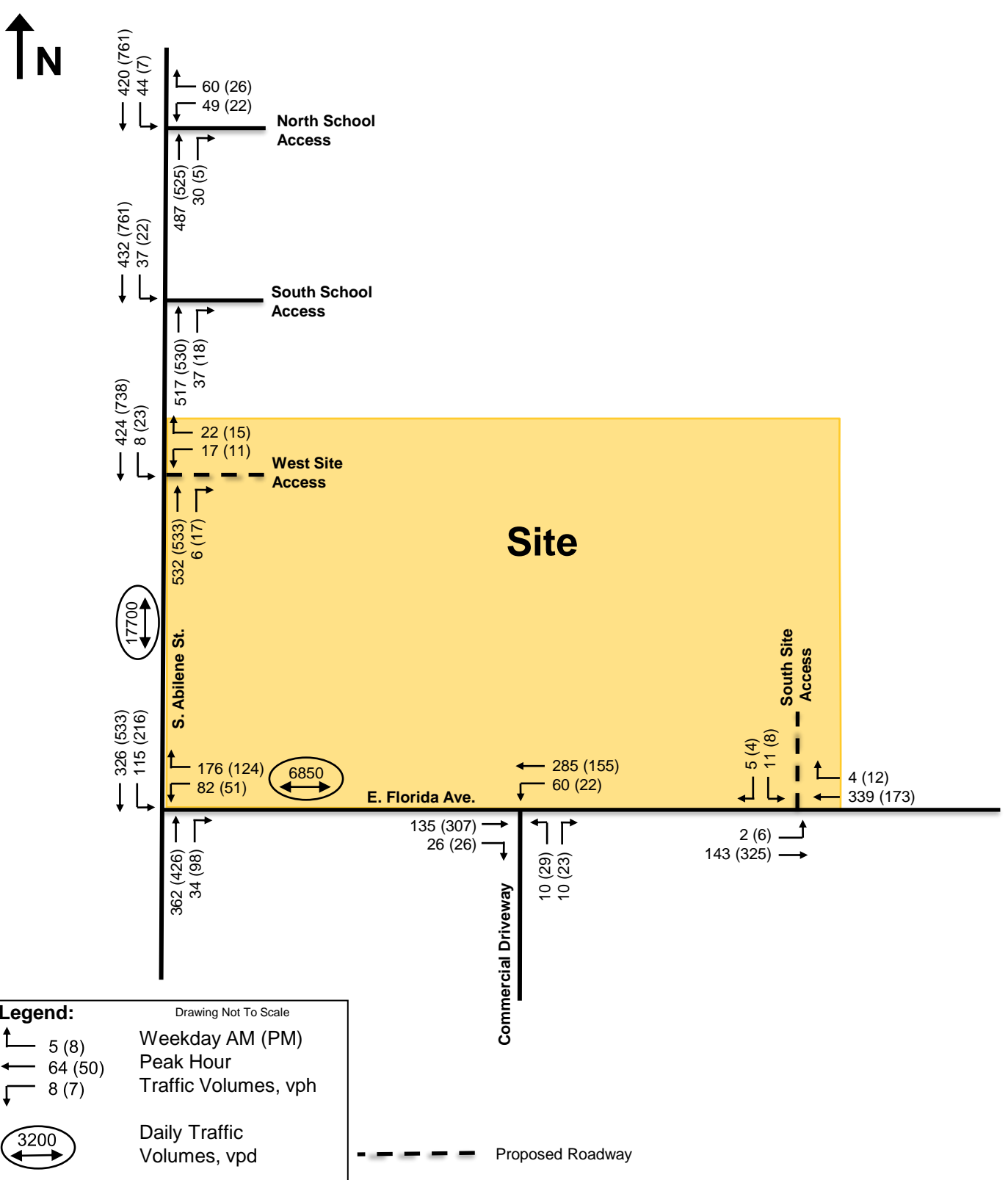
1450 Abilene Street

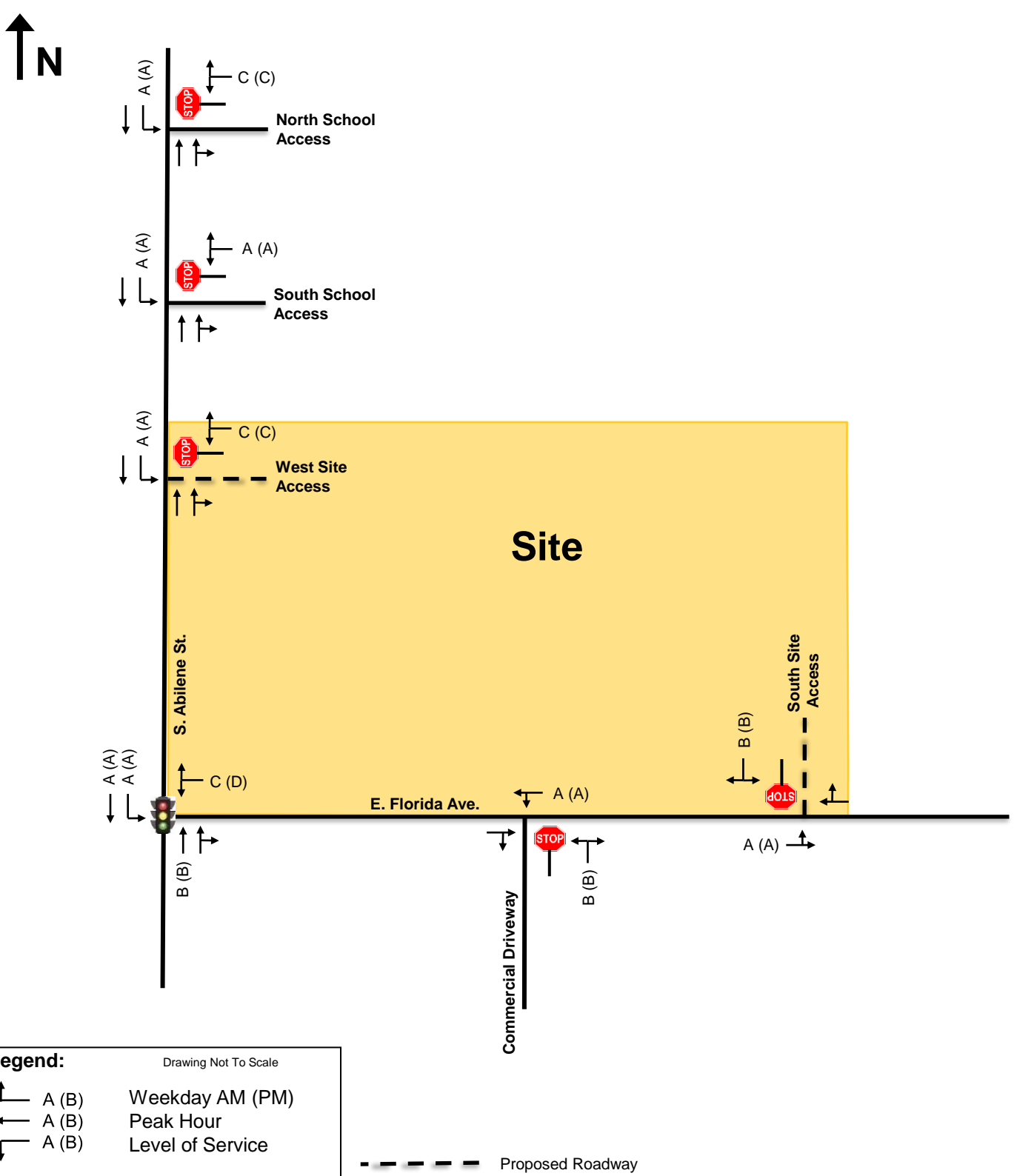
MAA

HKS #210424

Figure 10







APPENDIX “A”

**2021 EXISTING
TRAFFIC VOLUME COUNTS**



(303) 216-2439
www.alltrafficdata.net

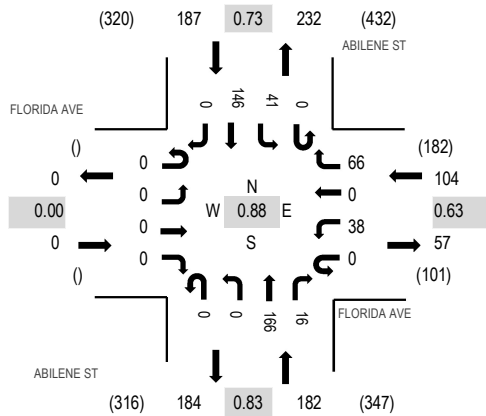
Location: 1 ABILENE ST & FLORIDA AVE AM

Date: Tuesday, August 10, 2021

Peak Hour: 07:15 AM - 08:15 AM

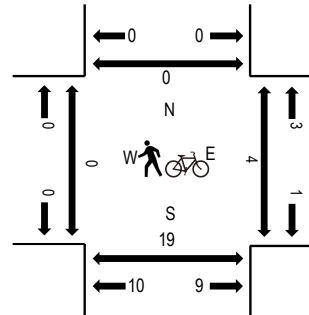
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	FLORIDA AVE Eastbound				FLORIDA AVE Westbound				ABILENE ST Northbound				ABILENE ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	0	0	8	0	9	0	0	34	3	0	3	16	0	73	454	0	0	7	0
7:15 AM	0	0	0	0	0	10	0	20	0	0	43	3	0	4	43	0	123	473	0	1	3	0
7:30 AM	0	0	0	0	0	13	0	28	0	0	45	2	0	12	24	0	124	449	0	3	8	0
7:45 AM	0	0	0	0	0	6	0	8	0	0	51	5	0	18	46	0	134	420	0	0	3	0
8:00 AM	0	0	0	0	0	9	0	10	0	0	27	6	0	7	33	0	92	395	0	0	5	0
8:15 AM	0	0	0	0	0	8	0	14	0	0	29	5	0	7	36	0	99		0	1	4	0
8:30 AM	0	0	0	0	0	7	0	13	0	0	39	3	0	7	26	0	95		0	1	2	0
8:45 AM	0	0	0	0	0	3	0	16	0	0	46	6	0	10	28	0	109		0	2	5	0
Count Total	0	0	0	0	0	64	0	118	0	0	314	33	0	68	252	0	849		0	8	37	0
Peak Hour	0	0	0	0	0	38	0	66	0	0	166	16	0	41	146	0	473		0	4	19	0



ALL TRAFFIC DATA SERVICES

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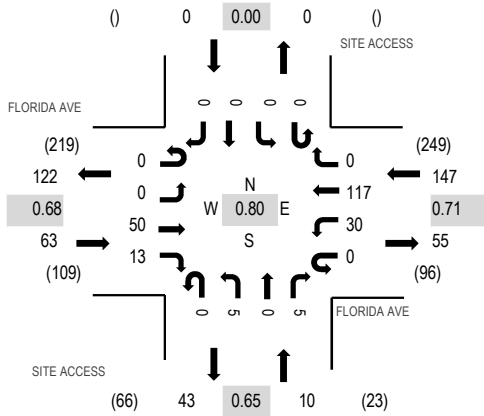
Location: 2 SITE ACCESS & FLORIDA AVE AM

Date: Tuesday, August 10, 2021

Peak Hour: 07:15 AM - 08:15 AM

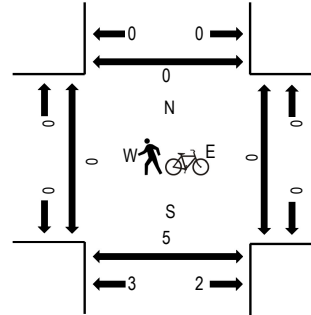
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	FLORIDA AVE Eastbound				FLORIDA AVE Westbound				SITE ACCESS Northbound				SITE ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	5	1	0	3	18	0	0	1	0	0	0	0	0	0	28	203	0	0	4	0
7:15 AM	0	0	9	3	0	10	42	0	0	2	0	3	0	0	0	0	69	220	0	0	2	0
7:30 AM	0	0	10	3	0	1	42	0	0	2	0	0	0	0	0	0	58	198	0	0	2	0
7:45 AM	0	0	20	4	0	8	14	0	0	1	0	1	0	0	0	0	48	180	0	0	0	0
8:00 AM	0	0	11	3	0	11	19	0	0	0	0	1	0	0	0	0	45	178	0	0	1	0
8:15 AM	0	0	11	3	0	4	24	0	0	4	0	1	0	0	0	0	47		0	0	2	0
8:30 AM	0	0	5	3	0	6	21	0	0	3	0	2	0	0	0	0	40		0	0	0	0
8:45 AM	0	0	17	1	0	2	24	0	0	2	0	0	0	0	0	0	46		0	0	1	0
Count Total	0	0	88	21	0	45	204	0	0	15	0	8	0	0	0	0	381		0	0	12	0
Peak Hour	0	0	50	13	0	30	117	0	0	5	0	5	0	0	0	0	220		0	0	5	0



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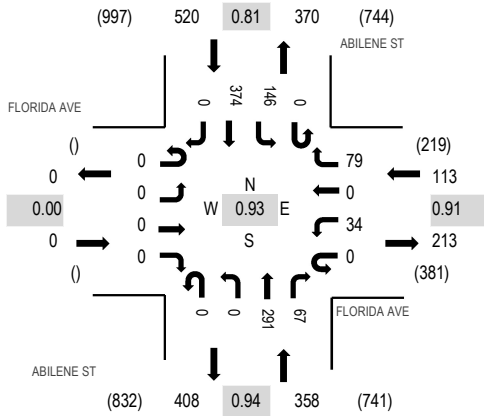
Location: 1 ABILENE ST & FLORIDA AVE PM

Date: Tuesday, August 10, 2021

Peak Hour: 04:45 PM - 05:45 PM

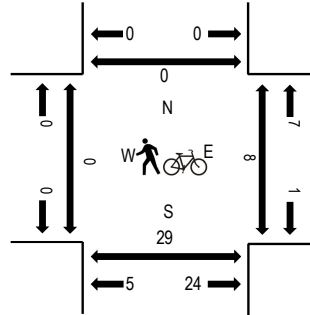
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	FLORIDA AVE Eastbound				FLORIDA AVE Westbound				ABILENE ST Northbound				ABILENE ST Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	12	0	9	0	0	84	18	0	24	99	0	246	971	0	0	7	0
4:15 PM	0	0	0	0	0	8	0	19	0	0	76	12	0	27	114	0	256	969	0	0	0	0
4:30 PM	0	0	0	0	0	9	0	18	0	0	72	24	0	22	87	0	232	979	0	5	12	0
4:45 PM	0	0	0	0	0	6	0	22	0	0	81	17	0	23	88	0	237	991	0	4	7	0
5:00 PM	0	0	0	0	0	17	0	15	0	0	70	19	0	31	92	0	244	986	0	1	7	0
5:15 PM	0	0	0	0	0	7	0	20	0	0	65	14	0	51	109	0	266		0	1	3	0
5:30 PM	0	0	0	0	0	4	0	22	0	0	75	17	0	41	85	0	244		0	0	8	0
5:45 PM	0	0	0	0	0	15	0	16	0	0	80	17	0	24	80	0	232		0	0	8	0
Count Total	0	0	0	0	0	78	0	141	0	0	603	138	0	243	754	0	1,957		0	11	52	0
Peak Hour	0	0	0	0	0	34	0	79	0	0	291	67	0	146	374	0	991		0	6	25	0



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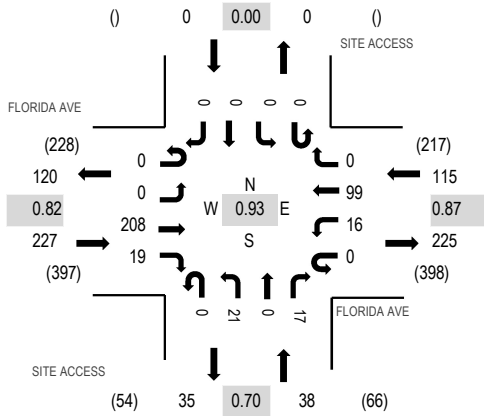
Location: 2 SITE ACCESS & FLORIDA AVE PM

Date: Tuesday, August 10, 2021

Peak Hour: 04:45 PM - 05:45 PM

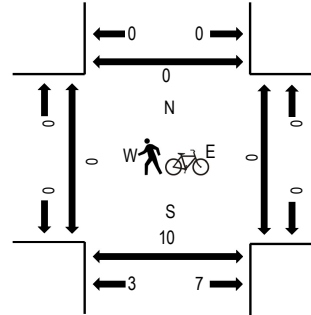
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	FLORIDA AVE Eastbound				FLORIDA AVE Westbound				SITE ACCESS Northbound				SITE ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	42	5	0	1	20	0	0	2	0	5	0	0	0	0	75	305	0	0	2	0
4:15 PM	0	0	38	1	0	2	25	0	0	2	0	2	0	0	0	0	70	324	0	0	1	0
4:30 PM	0	0	41	4	0	2	21	0	0	4	0	2	0	0	0	0	74	356	0	1	4	1
4:45 PM	0	0	39	4	0	5	28	0	0	4	0	6	0	0	0	0	86	380	0	0	2	0
5:00 PM	0	0	52	4	0	2	28	0	0	4	0	4	0	0	0	0	94	375	0	0	3	0
5:15 PM	0	0	62	7	0	5	22	0	0	4	0	2	0	0	0	0	102		0	0	0	0
5:30 PM	0	0	55	4	0	4	21	0	0	9	0	5	0	0	0	0	98		0	0	4	0
5:45 PM	0	0	39	0	0	4	27	0	0	7	0	4	0	0	0	0	81		0	0	4	0
Count Total	0	0	368	29	0	25	192	0	0	36	0	30	0	0	0	0	680		0	1	20	1
Peak Hour	0	0	208	19	0	16	99	0	0	21	0	17	0	0	0	0	380		0	0	9	0

Date Start: 10-Aug-21
Site Code: 3
Station ID: 3
FLORIDA AVE E.O. ABILENE ST

Start Time	10-Aug-21 Tue	EB	WB							Total
12:00 AM		16	8							24
01:00		11	6							17
02:00		13	12							25
03:00		3	8							11
04:00		7	22							29
05:00		9	68							77
06:00		31	99							130
07:00		41	100							141
08:00		50	77							127
09:00		59	74							133
10:00		75	73							148
11:00		80	93							173
12:00 PM		82	94							176
01:00		109	129							238
02:00		121	95							216
03:00		187	139							326
04:00		171	104							275
05:00		221	111							332
06:00		195	123							318
07:00		155	73							228
08:00		118	64							182
09:00		107	42							149
10:00		65	28							93
11:00		47	29							76
Total		1973	1671							3644
Percent		54.1%	45.9%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	11:00
Vol.	-	80	100	-	-	-	-	-	-	173
PM Peak	-	17:00	15:00	-	-	-	-	-	-	17:00
Vol.	-	221	139	-	-	-	-	-	-	332

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Date Start: 10-Aug-21
Site Code: 3
Station ID: 3
FLORIDA AVE E.O. ABILENE ST

Start Time	11-Aug-21 Wed	EB	WB							Total
12:00 AM		24	14							38
01:00		13	8							21
02:00		6	7							13
03:00		8	13							21
04:00		6	21							27
05:00		14	71							85
06:00		37	126							163
07:00		66	176							242
08:00		61	120							181
09:00		58	96							154
10:00		72	108							180
11:00		97	122							219
12:00 PM		110	92							202
01:00		104	125							229
02:00		143	99							242
03:00		156	115							271
04:00		173	117							290
05:00		187	111							298
06:00		185	114							299
07:00		326	95							421
08:00		253	85							338
09:00		175	43							218
10:00		100	29							129
11:00		57	19							76
Total		2431	1926							4357
Percent		55.8%	44.2%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	97	176	-	-	-	-	-	-	242
PM Peak	-	19:00	13:00	-	-	-	-	-	-	19:00
Vol.	-	326	125	-	-	-	-	-	-	421

Date Start: 10-Aug-21
Site Code: 3
Station ID: 3
FLORIDA AVE E.O. ABILENE ST

Start Time	12-Aug-21 Thu	EB	WB							Total
12:00 AM		30	6							36
01:00		8	3							11
02:00		23	11							34
03:00		13	14							27
04:00		9	27							36
05:00		32	61							93
06:00		35	105							140
07:00		66	179							245
08:00		66	138							204
09:00		57	104							161
10:00		68	79							147
11:00		79	94							173
12:00 PM		101	111							212
01:00		110	102							212
02:00		115	121							236
03:00		170	125							295
04:00		191	122							313
05:00		200	129							329
06:00		191	100							291
07:00		130	92							222
08:00		141	67							208
09:00		98	53							151
10:00		67	26							93
11:00		36	21							57
Total		2036	1890							3926
Percent		51.9%	48.1%							
AM Peak	-	11:00	07:00	-	-	-	-	-	-	07:00
Vol.	-	79	179	-	-	-	-	-	-	245
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	200	129	-	-	-	-	-	-	329
Grand Total		6440	5487							11927
Percent		54.0%	46.0%							
ADT		ADT 3,976	AADT 3,976							

Date Start: 10-Aug-21
Site Code: 4
Station ID: 4
ABELINE ST N.O. FLORIDA AVE

Start Time	10-Aug-21 Tue	NB	SB							Total
12:00 AM		40	22							62
01:00		22	13							35
02:00		42	13							55
03:00		31	6							37
04:00		39	10							49
05:00		62	28							90
06:00		163	83							246
07:00		240	174							414
08:00		195	146							341
09:00		272	216							488
10:00		307	277							584
11:00		348	279							627
12:00 PM		373	365							738
01:00		447	382							829
02:00		362	372							734
03:00		397	469							866
04:00		376	479							855
05:00		364	523							887
06:00		313	398							711
07:00		253	299							552
08:00		163	240							403
09:00		120	141							261
10:00		98	95							193
11:00		54	57							111
Total		5081	5087							10168
Percent		50.0%	50.0%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	348	279	-	-	-	-	-	-	627
PM Peak	-	13:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	447	523	-	-	-	-	-	-	887

Date Start: 10-Aug-21
Site Code: 4
Station ID: 4
ABELINE ST N.O. FLORIDA AVE

Start Time	11-Aug-21 Wed	NB	SB								Total
12:00 AM		42	31								73
01:00		28	30								58
02:00		37	11								48
03:00		39	15								54
04:00		36	14								50
05:00		84	36								120
06:00		138	82								220
07:00		246	178								424
08:00		224	201								425
09:00		294	232								526
10:00		315	267								582
11:00		356	342								698
12:00 PM		397	421								818
01:00		367	366								733
02:00		386	423								809
03:00		410	417								827
04:00		422	476								898
05:00		373	467								840
06:00		326	375								701
07:00		246	295								541
08:00		234	235								469
09:00		139	140								279
10:00		103	76								179
11:00		61	52								113
Total		5303	5182								10485
Percent		50.6%	49.4%								
AM Peak	-	11:00	11:00	-	-	-	-	-	-	-	11:00
Vol.	-	356	342	-	-	-	-	-	-	-	698
PM Peak	-	16:00	16:00	-	-	-	-	-	-	-	16:00
Vol.	-	422	476	-	-	-	-	-	-	-	898

Date Start: 10-Aug-21
Site Code: 4
Station ID: 4
ABELINE ST N.O. FLORIDA AVE











Start Time	12-Aug-21 Thu	NB	SB							Total
12:00 AM		30	29							59
01:00		28	11							39
02:00		31	17							48
03:00		48	14							62
04:00		44	10							54
05:00		86	27							113
06:00		141	76							217
07:00		262	180							442
08:00		226	211							437
09:00		331	213							544
10:00		335	260							595
11:00		340	309							649
12:00 PM		391	371							762
01:00		376	319							695
02:00		408	339							747
03:00		366	431							797
04:00		392	471							863
05:00		392	456							848
06:00		303	397							700
07:00		246	287							533
08:00		177	227							404
09:00		110	155							265
10:00		82	80							162
11:00		41	53							94
Total		5186	4943							10129
Percent		51.2%	48.8%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	340	309	-	-	-	-	-	-	649
PM Peak	-	14:00	16:00	-	-	-	-	-	-	16:00
Vol.	-	408	471	-	-	-	-	-	-	863
Grand Total		15570	15212							30782
Percent		50.6%	49.4%							
ADT		ADT 10,261	AADT 10,261							





APPENDIX “B”

**INTERSECTION
CAPACITY ANALYSIS
WORKSHEETS**

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway











1450 Abilene Street
08/31/2021





						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.926		0.989			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1687	0	3500	0	1770	1863
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1687	0	3500	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	60	393	30	44	354
Future Vol, veh/h	49	60	393	30	44	354
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	-	-	-	50	-
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	53	65	427	33	48	385
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	925	230	0	0	460	0
Stage 1	444	-	-	-	-	-
Stage 2	481	-	-	-	-	-
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	283	773	-	-	1099	-
Stage 1	614	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	271	773	-	-	1099	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	614	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.8	0	0.9			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	422	1099	-	
HCM Lane V/C Ratio	-	-	0.281	0.044	-	
HCM Control Delay (s)	-	-	16.8	8.4	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	1.1	0.1	-	

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.988			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3497	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3497	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		547			446
Travel Time (s)	4.4		12.4			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	423	37	37	366
Future Vol, veh/h	0	0	423	37	37	366
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	-	-	-	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	0	0	460	40	40	398
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	958	250	0	0	500	0
Stage 1	480	-	-	-	-	-
Stage 2	478	-	-	-	-	-
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	270	751	-	-	1062	-
Stage 1	589	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	260	751	-	-	1062	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0.8		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1062	-	
HCM Lane V/C Ratio	-	-	-	0.038	-	
HCM Control Delay (s)	-	-	0	8.5	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0.1	-	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.97		1.00		0.99	
Frt	0.904		0.988			
Flt Protected	0.986				0.950	
Satd. Flow (prot)	1644	0	3484	0	1770	1863
Flt Permitted	0.986				0.502	
Satd. Flow (perm)	1605	0	3484	0	922	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	143		12			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			547
Travel Time (s)	10.2		14.6			12.4

Intersection Summary

Area Type: Other

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗↗	↑↑
Traffic Volume (vph)	64	304	102	263
Future Volume (vph)	64	304	102	263
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	11.5	57.3	68.5	66.5
Actuated g/C Ratio	0.13	0.64	0.76	0.74
v/c Ratio	0.72	0.16	0.14	0.21
Control Delay	27.4	8.1	4.0	4.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.4	8.1	4.0	4.8
LOS	C	A	A	A
Approach Delay	27.4	8.1		4.6
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 11.3

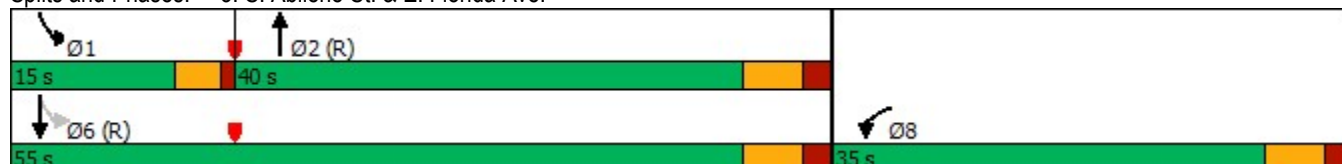
Intersection LOS: B

Intersection Capacity Utilization 50.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.





Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	240	359	111	286
v/c Ratio	0.72	0.16	0.14	0.21
Control Delay	27.4	8.1	4.0	4.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.4	8.1	4.0	4.8
Queue Length 50th (ft)	52	39	13	40
Queue Length 95th (ft)	119	78	35	92
Internal Link Dist (ft)	370	562		467
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	626	2222	804	1375
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.16	0.14	0.21
Intersection Summary				

HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.











1450 Abilene Street
08/31/2021




Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		W		W	W
Traffic Volume (veh/h)	64	156	304	27	102	263
Future Volume (veh/h)	64	156	304	27	102	263
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.93		0.99	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	70	170	330	29	111	286
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	111	270	1733	151	653	1162
Arrive On Green	0.25	0.25	0.52	0.52	0.05	0.62
Sat Flow, veh/h	452	1098	3396	288	1781	1870
Grp Volume(v), veh/h	241	0	177	182	111	286
Grp Sat Flow(s),veh/h/ln	1557	0	1777	1815	1781	1870
Q Serve(g_s), s	12.4	0.0	4.7	4.8	2.4	6.2
Cycle Q Clear(g_c), s	12.4	0.0	4.7	4.8	2.4	6.2
Prop In Lane	0.29	0.71		0.16	1.00	
Lane Grp Cap(c), veh/h	382	0	932	952	653	1162
V/C Ratio(X)	0.63	0.00	0.19	0.19	0.17	0.25
Avail Cap(c_a), veh/h	502	0	932	952	778	1162
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	11.3	11.3	8.0	7.6
Incr Delay (d2), s/veh	1.7	0.0	0.5	0.4	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	1.9	1.9	0.9	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.0	0.0	11.7	11.8	8.1	8.1
LnGrp LOS	C	A	B	B	A	A
Approach Vol, veh/h	241		359			397
Approach Delay, s/veh	32.0		11.7			8.1
Approach LOS	C		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.7	53.2			61.9	28.1
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	4.4	6.8			8.2	14.4
Green Ext Time (p_c), s	0.1	2.2			1.8	0.7
Intersection Summary						
HCM 6th Ctrl Delay			15.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.91	2.18	2.36
Pedestrian Crosswalk LOS	B	B	B

Lanes and Geometrics
4: South Commercial Access & E. Florida Ave.

1450 Abilene Street
08/31/2021











						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.932	
Flt Protected				0.991	0.976	
Satd. Flow (prot)	1824	0	0	1846	1694	0
Flt Permitted				0.991	0.976	
Satd. Flow (perm)	1824	0	0	1846	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			861	168	
Travel Time (s)	10.2			19.6	3.8	
Intersection Summary						
Area Type:	Other					





Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	22	51	242	8	8
Future Vol, veh/h	118	22	51	242	8	8
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	128	24	55	263	9	9
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	152	0	513	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	373	-
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	-	-	1429	-	521	908
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	696	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1429	-	498	908
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	665	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	1.3		10.8		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	643	-	-	1429	-	
HCM Lane V/C Ratio	0.027	-	-	0.039	-	
HCM Control Delay (s)	10.8	-	-	7.6	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street











08/31/2021





						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.927		0.998			
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1687	0	3532	0	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1687	0	3532	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	26	430	5	7	627
Future Vol, veh/h	22	26	430	5	7	627
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	-	-	-	50	-
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	24	28	467	5	8	682
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1168	236	0	0	472	0
Stage 1	470	-	-	-	-	-
Stage 2	698	-	-	-	-	-
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	200	766	-	-	1088	-
Stage 1	596	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	766	-	-	1088	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	596	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	17.9	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	332	1088	-	
HCM Lane V/C Ratio	-	-	0.157	0.007	-	
HCM Control Delay (s)	-	-	17.9	8.3	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.6	0	-	

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.994			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3518	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3518	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		547			446
Travel Time (s)	4.4		12.4			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	435	18	22	627
Future Vol, veh/h	0	0	435	18	22	627
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	-	-	-	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	0	0	473	20	24	682

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1213	247	0	0	493
Stage 1	483	-	-	-	-
Stage 2	730	-	-	-	-
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	187	754	-	-	1069
Stage 1	587	-	-	-	-
Stage 2	476	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	183	754	-	-	1069
Mov Cap-2 Maneuver	183	-	-	-	-
Stage 1	587	-	-	-	-
Stage 2	466	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1069
HCM Lane V/C Ratio	-	-	-	0.022
HCM Control Delay (s)	-	-	0	8.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.98		0.98		0.96	
Frt	0.902		0.972			
Flt Protected	0.987				0.950	
Satd. Flow (prot)	1642	0	3369	0	1770	1863
Flt Permitted	0.987				0.455	
Satd. Flow (perm)	1625	0	3369	0	812	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	116		35			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			547
Travel Time (s)	10.2		14.6			12.4
Intersection Summary						
Area Type:	Other					

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	40	346	185	442
Future Volume (vph)	40	346	185	442
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	8.6	57.3	71.4	69.4
Actuated g/C Ratio	0.10	0.64	0.79	0.77
v/c Ratio	0.61	0.21	0.28	0.33
Control Delay	22.6	7.3	3.6	4.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	22.6	7.3	3.6	4.3
LOS	C	A	A	A
Approach Delay	22.6	7.3		4.1
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 7.5

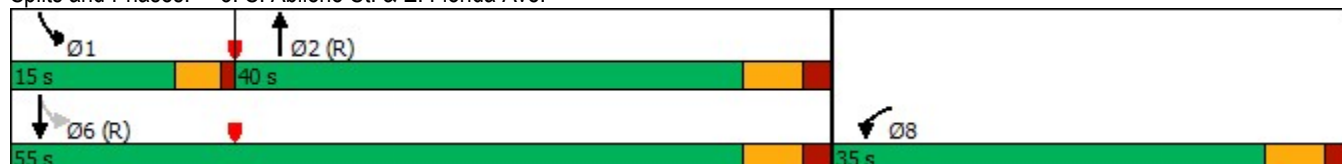
Intersection LOS: A

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.

























Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	159	461	201	480
v/c Ratio	0.61	0.21	0.28	0.33
Control Delay	22.6	7.3	3.6	4.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	22.6	7.3	3.6	4.3
Queue Length 50th (ft)	23	45	19	63
Queue Length 95th (ft)	78	88	47	134
Internal Link Dist (ft)	370	562		467
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	607	2158	761	1435
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.26	0.21	0.26	0.33
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	40	107	346	78	185	442
Future Volume (veh/h)	40	107	346	78	185	442
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.96	0.99	
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	43	116	376	85	201	480
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	74	199	1667	372	675	1296
Arrive On Green	0.17	0.17	0.58	0.58	0.07	0.69
Sat Flow, veh/h	425	1147	2957	639	1781	1870
Grp Volume(v), veh/h	160	0	231	230	201	480
Grp Sat Flow(s),veh/h/ln	1582	0	1777	1726	1781	1870
Q Serve(g_s), s	8.4	0.0	5.6	5.8	3.8	9.5
Cycle Q Clear(g_c), s	8.4	0.0	5.6	5.8	3.8	9.5
Prop In Lane	0.27	0.72		0.37	1.00	
Lane Grp Cap(c), veh/h	275	0	1034	1005	675	1296
V/C Ratio(X)	0.58	0.00	0.22	0.23	0.30	0.37
Avail Cap(c_a), veh/h	510	0	1034	1005	774	1296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	9.0	9.1	5.9	5.7
Incr Delay (d2), s/veh	2.0	0.0	0.5	0.5	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	2.2	2.2	1.3	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.1	0.0	9.5	9.6	6.2	6.5
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h	160		461			681
Approach Delay, s/veh	36.1		9.6			6.4
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.0	58.4			68.4	21.6
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+l1), s	5.8	7.8			11.5	10.4
Green Ext Time (p_c), s	0.2	2.9			3.4	0.4
Intersection Summary						
HCM 6th Ctrl Delay			11.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.94	2.27	2.43
Pedestrian Crosswalk LOS	B	B	B











						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.989				0.938	
Flt Protected				0.994	0.974	
Satd. Flow (prot)	1842	0	0	1852	1702	0
Flt Permitted				0.994	0.974	
Satd. Flow (perm)	1842	0	0	1852	1702	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			861	168	
Travel Time (s)	10.2			19.6	3.8	
Intersection Summary						
Area Type:	Other					





Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	257	22	19	130	24	20
Future Vol, veh/h	257	22	19	130	24	20
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	279	24	21	141	26	22
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	303	0	474	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	183	-
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	-	-	1258	-	549	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	539	748
Mov Cap-2 Maneuver	-	-	-	-	539	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	833	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		11.3	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	617	-	-	1258	-	
HCM Lane V/C Ratio	0.078	-	-	0.016	-	
HCM Control Delay (s)	11.3	-	-	7.9	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street











08/31/2021





						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.926		0.990			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1687	0	3504	0	1770	1863
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1687	0	3504	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	60	415	30	44	362
Future Vol, veh/h	49	60	415	30	44	362
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	-	-	-	50	-
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	53	65	451	33	48	393
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	957	242	0	0	484	0
Stage 1	468	-	-	-	-	-
Stage 2	489	-	-	-	-	-
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	270	759	-	-	1077	-
Stage 1	597	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	258	759	-	-	1077	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	17.5	0	0.9			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	405	1077	-	
HCM Lane V/C Ratio	-	-	0.293	0.044	-	
HCM Control Delay (s)	-	-	17.5	8.5	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-	

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.989			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3500	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3500	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		207			446
Travel Time (s)	4.4		4.7			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	445	37	37	374
Future Vol, veh/h	0	0	445	37	37	374
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	-	-	-	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	0	0	484	40	40	407
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	991	262	0	0	524	0
Stage 1	504	-	-	-	-	-
Stage 2	487	-	-	-	-	-
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	257	737	-	-	1041	-
Stage 1	573	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	247	737	-	-	1041	-
Mov Cap-2 Maneuver	247	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0.8			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1041	-	
HCM Lane V/C Ratio	-	-	-	0.039	-	
HCM Control Delay (s)	-	-	0	8.6	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0.1	-	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.96		1.00		0.99	
Frt	0.907		0.987			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1640	0	3480	0	1770	1863
Flt Permitted	0.985				0.496	
Satd. Flow (perm)	1598	0	3480	0	911	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	132		13			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			340
Travel Time (s)	10.2		14.6			7.7

Intersection Summary

Area Type: Other

Timings
3: S. Abilene St. & E. Florida Ave.

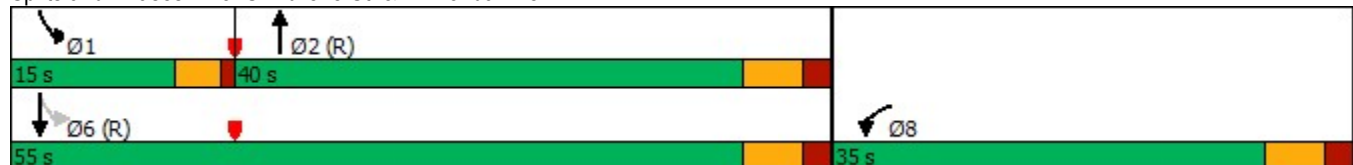
1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	70	310	102	280
Future Volume (vph)	70	310	102	280
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	12.3	56.5	67.7	65.7
Actuated g/C Ratio	0.14	0.63	0.75	0.73
v/c Ratio	0.73	0.17	0.15	0.22
Control Delay	29.3	8.6	4.3	5.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	29.3	8.6	4.3	5.2
LOS	C	A	A	A
Approach Delay	29.3	8.6		4.9
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 12.1
 Intersection LOS: B
 Intersection Capacity Utilization 53.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.

























Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	246	369	111	304
v/c Ratio	0.73	0.17	0.15	0.22
Control Delay	29.3	8.6	4.3	5.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	29.3	8.6	4.3	5.2
Queue Length 50th (ft)	61	42	13	46
Queue Length 95th (ft)	129	82	37	102
Internal Link Dist (ft)	370	562		260
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	617	2188	790	1359
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.40	0.17	0.14	0.22
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	156	310	29	102	280
Future Volume (veh/h)	70	156	310	29	102	280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.93		0.99	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	76	170	337	32	111	304
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	119	266	1714	162	645	1159
Arrive On Green	0.25	0.25	0.52	0.52	0.05	0.62
Sat Flow, veh/h	481	1075	3372	309	1781	1870
Grp Volume(v), veh/h	247	0	182	187	111	304
Grp Sat Flow(s),veh/h/ln	1562	0	1777	1810	1781	1870
Q Serve(g_s), s	12.7	0.0	4.9	5.0	2.4	6.6
Cycle Q Clear(g_c), s	12.7	0.0	4.9	5.0	2.4	6.6
Prop In Lane	0.31	0.69		0.17	1.00	
Lane Grp Cap(c), veh/h	386	0	929	947	645	1159
V/C Ratio(X)	0.64	0.00	0.20	0.20	0.17	0.26
Avail Cap(c_a), veh/h	503	0	929	947	770	1159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	0.0	11.4	11.4	8.1	7.8
Incr Delay (d2), s/veh	1.8	0.0	0.5	0.5	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	2.0	2.0	0.9	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.1	0.0	11.9	11.9	8.2	8.3
LnGrp LOS	C	A	B	B	A	A
Approach Vol, veh/h	247		369			415
Approach Delay, s/veh	32.1		11.9			8.3
Approach LOS	C		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.7	53.1			61.8	28.2
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	4.4	7.0			8.6	14.7
Green Ext Time (p_c), s	0.1	2.2			2.0	0.7
Intersection Summary						
HCM 6th Ctrl Delay			15.3			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.91	2.19	2.37
Pedestrian Crosswalk LOS	B	B	B

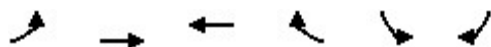
						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.979				0.932	
Flt Protected				0.992	0.976	
Satd. Flow (prot)	1824	0	0	1848	1694	0
Flt Permitted				0.992	0.976	
Satd. Flow (perm)	1824	0	0	1848	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			310	168	
Travel Time (s)	10.2			7.0	3.8	
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	22	51	248	8	8
Future Vol, veh/h	120	22	51	248	8	8
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	130	24	55	270	9	9

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	154
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1426
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1426
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	10.8
HCM LOS			B




Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	638	-	-	1426	-
HCM Lane V/C Ratio	0.027	-	-	0.039	-
HCM Control Delay (s)	10.8	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

















Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.998		0.960	
Flt Protected		0.999			0.966	
Satd. Flow (prot)	0	1861	1859	0	1727	0
Flt Permitted		0.999			0.966	
Satd. Flow (perm)	0	1861	1859	0	1727	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		310	551		179	
Travel Time (s)		7.0	12.5		4.1	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	126	293	4	11	5
Future Vol, veh/h	2	126	293	4	11	5
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	2	137	318	4	12	5
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	322	0	-	0	461	320
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	141	-
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	1238	-	-	-	559	721
Stage 1	-	-	-	-	736	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1238	-	-	-	558	721
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	735	-
Stage 2	-	-	-	-	886	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		11.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1238	-	-	-	600	
HCM Lane V/C Ratio	0.002	-	-	-	0.029	
HCM Control Delay (s)	7.9	0	-	-	11.2	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.923		0.998			
Flt Protected	0.979				0.950	
Satd. Flow (prot)	1683	0	3532	0	1770	1863
Flt Permitted	0.979				0.950	
Satd. Flow (perm)	1683	0	3532	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	217		340			207
Travel Time (s)	4.9		7.7			4.7
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	460	6	8	366
Future Vol, veh/h	17	22	460	6	8	366
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	-	-	-	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	18	24	500	7	9	398

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	920	254	0	0	507
Stage 1	504	-	-	-	-
Stage 2	416	-	-	-	-
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	285	746	-	-	1056
Stage 1	573	-	-	-	-
Stage 2	665	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	282	746	-	-	1056
Mov Cap-2 Maneuver	282	-	-	-	-
Stage 1	573	-	-	-	-
Stage 2	659	-	-	-	-











Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0.2
HCM LOS	B		





Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	434	1056
HCM Lane V/C Ratio	-	-	0.098	0.008
HCM Control Delay (s)	-	-	14.2	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street

08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.927		0.998			
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1687	0	3532	0	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1687	0	3532	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	26	445	5	7	650
Future Vol, veh/h	22	26	445	5	7	650
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	-	-	-	50	-
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	24	28	484	5	8	707











Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1210	245	0	0	489
Stage 1	487	-	-	-	-
Stage 2	723	-	-	-	-
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	188	756	-	-	1072
Stage 1	584	-	-	-	-
Stage 2	479	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	187	756	-	-	1072
Mov Cap-2 Maneuver	187	-	-	-	-
Stage 1	584	-	-	-	-
Stage 2	476	-	-	-	-





Approach	WB	NB	SB
HCM Control Delay, s	18.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	316	1072
HCM Lane V/C Ratio	-	-	0.165	0.007
HCM Control Delay (s)	-	-	18.6	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.6	0

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021











						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.994			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3518	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3518	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		207			446
Travel Time (s)	4.4		4.7			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	450	18	22	650
Future Vol, veh/h	0	0	450	18	22	650
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	-	-	-	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	0	0	489	20	24	707

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1254	255	0	0	509
Stage 1	499	-	-	-	-
Stage 2	755	-	-	-	-
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	176	745	-	-	1054
Stage 1	576	-	-	-	-
Stage 2	463	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	172	745	-	-	1054
Mov Cap-2 Maneuver	172	-	-	-	-
Stage 1	576	-	-	-	-
Stage 2	452	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1054
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s)	-	-	0	8.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.97		0.98		0.96	
Frt	0.905		0.972			
Flt Protected	0.986				0.950	
Satd. Flow (prot)	1635	0	3368	0	1770	1863
Flt Permitted	0.986				0.444	
Satd. Flow (perm)	1617	0	3368	0	794	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	116		35			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			340
Travel Time (s)	10.2		14.6			7.7
Intersection Summary						
Area Type:	Other					

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	44	363	185	453
Future Volume (vph)	44	363	185	453
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	8.9	57.0	71.1	69.1
Actuated g/C Ratio	0.10	0.63	0.79	0.77
v/c Ratio	0.62	0.23	0.28	0.34
Control Delay	23.5	7.6	3.7	4.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.5	7.6	3.7	4.5
LOS	C	A	A	A
Approach Delay	23.5	7.6		4.3
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 7.8

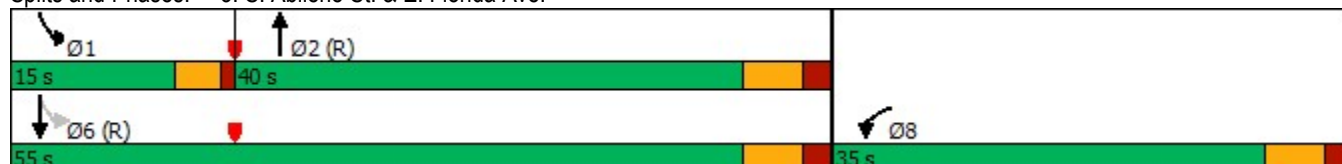
Intersection LOS: A

Intersection Capacity Utilization 56.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.














Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	164	486	201	492
v/c Ratio	0.62	0.23	0.28	0.34
Control Delay	23.5	7.6	3.7	4.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.5	7.6	3.7	4.5
Queue Length 50th (ft)	26	49	19	66
Queue Length 95th (ft)	82	95	49	141
Internal Link Dist (ft)	370	562		260
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	605	2147	746	1430
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.23	0.27	0.34
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

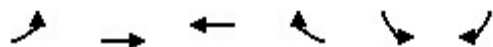
1450 Abilene Street
08/31/2021

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	L	L	T
Traffic Volume (veh/h)	44	107	363	84	185	453
Future Volume (veh/h)	44	107	363	84	185	453
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.96	0.99	
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	48	116	395	91	201	492
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	81	196	1653	376	659	1292
Arrive On Green	0.18	0.18	0.58	0.58	0.07	0.69
Sat Flow, veh/h	462	1116	2945	649	1781	1870
Grp Volume(v), veh/h	165	0	244	242	201	492
Grp Sat Flow(s),veh/h/ln	1588	0	1777	1723	1781	1870
Q Serve(g_s), s	8.6	0.0	6.0	6.2	3.8	9.9
Cycle Q Clear(g_c), s	8.6	0.0	6.0	6.2	3.8	9.9
Prop In Lane	0.29	0.70		0.38	1.00	
Lane Grp Cap(c), veh/h	279	0	1030	999	659	1292
V/C Ratio(X)	0.59	0.00	0.24	0.24	0.31	0.38
Avail Cap(c_a), veh/h	512	0	1030	999	758	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	9.2	9.2	6.0	5.8
Incr Delay (d2), s/veh	2.0	0.0	0.5	0.6	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	2.3	2.3	1.3	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.1	0.0	9.8	9.8	6.3	6.7
LnGrp LOS	D	A	A	A	A	A
Approach Vol, veh/h	165		486			693
Approach Delay, s/veh	36.1		9.8			6.6
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.0	58.2			68.2	21.8
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+l1), s	5.8	8.2			11.9	10.6
Green Ext Time (p_c), s	0.2	3.1			3.5	0.5
Intersection Summary						
HCM 6th Ctrl Delay			11.4			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.95	2.28	2.43
Pedestrian Crosswalk LOS	B	B	B

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.938	
Flt Protected				0.994	0.974	
Satd. Flow (prot)	1844	0	0	1852	1702	0
Flt Permitted				0.994	0.974	
Satd. Flow (perm)	1844	0	0	1852	1702	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			310	168	
Travel Time (s)	10.2			7.0	3.8	
Intersection Summary						
Area Type:	Other					




Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	263	22	19	134	24	20
Future Vol, veh/h	263	22	19	134	24	20
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	286	24	21	146	26	22
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	486	298
Stage 1	-	-	-	-	298	-
Stage 2	-	-	-	-	188	-
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	-	-	1250	-	540	741
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	530	741
Mov Cap-2 Maneuver	-	-	-	-	530	-
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	829	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		11.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	609	-	-	1250	-	
HCM Lane V/C Ratio	0.079	-	-	0.017	-	
HCM Control Delay (s)	11.4	-	-	7.9	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	

















Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.990		0.958	
Flt Protected		0.999			0.967	
Satd. Flow (prot)	0	1861	1844	0	1726	0
Flt Permitted		0.999			0.967	
Satd. Flow (perm)	0	1861	1844	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		310	551		179	
Travel Time (s)		7.0	12.5		4.1	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	277	149	12	8	4
Future Vol, veh/h	6	277	149	12	8	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	-	-	-	-	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	7	301	162	13	9	4
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	175	0	-	0	484	169
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	315	-
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	1401	-	-	-	542	875
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	740	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1401	-	-	-	539	875
Mov Cap-2 Maneuver	-	-	-	-	539	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	740	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.2	0		11		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1401	-	-	-	618	
HCM Lane V/C Ratio	0.005	-	-	-	0.021	
HCM Control Delay (s)	7.6	0	-	-	11	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.923		0.995			
Flt Protected	0.979				0.950	
Satd. Flow (prot)	1683	0	3522	0	1770	1863
Flt Permitted	0.979				0.950	
Satd. Flow (perm)	1683	0	3522	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	217		340			207
Travel Time (s)	4.9		7.7			4.7
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	15	453	17	23	627
Future Vol, veh/h	11	15	453	17	23	627
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	-	-	-	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	12	16	492	18	25	682

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1233	255	0	0	510
Stage 1	501	-	-	-	-
Stage 2	732	-	-	-	-
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	182	745	-	-	1053
Stage 1	575	-	-	-	-
Stage 2	475	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	178	745	-	-	1053
Mov Cap-2 Maneuver	178	-	-	-	-
Stage 1	575	-	-	-	-
Stage 2	464	-	-	-	-











Approach	WB	NB	SB
HCM Control Delay, s	17.5	0	0.3
HCM LOS	C		





Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	317	1053
HCM Lane V/C Ratio	-	-	0.089	0.024
HCM Control Delay (s)	-	-	17.5	8.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1











Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway





1450 Abilene Street

08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.926		0.991			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1687	0	3507	0	1770	1863
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1687	0	3507	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	60	465	30	44	412
Future Vol, veh/h	49	60	465	30	44	412
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	-	-	-	50	-
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	53	65	505	33	48	448
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1066	269	0	0	538	0
Stage 1	522	-	-	-	-	-
Stage 2	544	-	-	-	-	-
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	231	730	-	-	1028	-
Stage 1	561	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	220	730	-	-	1028	-
Mov Cap-2 Maneuver	220	-	-	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20	0	0.8			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	357	1028	-	
HCM Lane V/C Ratio	-	-	0.332	0.047	-	
HCM Control Delay (s)	-	-	20	8.7	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-	






						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.990			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3504	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3504	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		547			446
Travel Time (s)	4.4		12.4			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	495	37	37	424
Future Vol, veh/h	0	0	495	37	37	424
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	-	-	-	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	0	0	538	40	40	461

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1099	289	0	0	578
Stage 1	558	-	-	-	-
Stage 2	541	-	-	-	-
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	221	708	-	-	994
Stage 1	538	-	-	-	-
Stage 2	582	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	212	708	-	-	994
Mov Cap-2 Maneuver	212	-	-	-	-
Stage 1	538	-	-	-	-
Stage 2	559	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	994
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s)	-	-	0	8.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.96		1.00		0.99	
Frt	0.906		0.988			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1644	0	3482	0	1770	1863
Flt Permitted	0.985				0.470	
Satd. Flow (perm)	1597	0	3482	0	863	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	136		12			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			547
Travel Time (s)	10.2		14.6			12.4

Intersection Summary

Area Type: Other

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	76	356	115	309
Future Volume (vph)	76	356	115	309
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	13.6	52.9	66.4	64.4
Actuated g/C Ratio	0.15	0.59	0.74	0.72
v/c Ratio	0.75	0.21	0.18	0.25
Control Delay	30.6	10.0	4.9	5.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.6	10.0	4.9	5.9
LOS	C	B	A	A
Approach Delay	30.6	10.0		5.6
Approach LOS	C	B		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 13.1

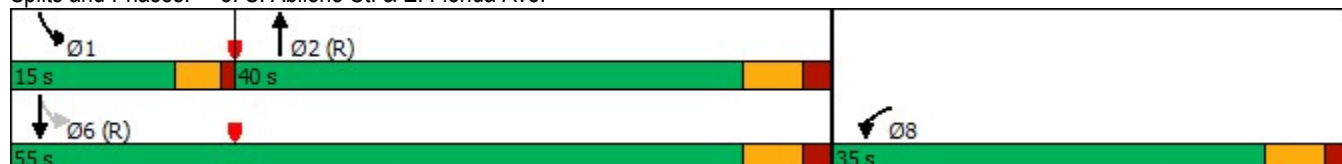
Intersection LOS: B

Intersection Capacity Utilization 53.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.





Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	274	422	125	336
v/c Ratio	0.75	0.21	0.18	0.25
Control Delay	30.6	10.0	4.9	5.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	30.6	10.0	4.9	5.9
Queue Length 50th (ft)	74	52	16	56
Queue Length 95th (ft)	145	101	44	122
Internal Link Dist (ft)	370	562		467
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	621	2051	747	1333
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.44	0.21	0.17	0.25
Intersection Summary				

HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	L	L
Traffic Volume (veh/h)	76	176	356	32	115	309
Future Volume (veh/h)	76	176	356	32	115	309
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.93		0.99	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	83	191	387	35	125	336
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	123	283	1668	150	598	1130
Arrive On Green	0.26	0.26	0.51	0.51	0.05	0.60
Sat Flow, veh/h	469	1079	3386	296	1781	1870
Grp Volume(v), veh/h	275	0	208	214	125	336
Grp Sat Flow(s),veh/h/ln	1554	0	1777	1812	1781	1870
Q Serve(g_s), s	14.3	0.0	5.9	6.0	2.8	7.8
Cycle Q Clear(g_c), s	14.3	0.0	5.9	6.0	2.8	7.8
Prop In Lane	0.30	0.69		0.16	1.00	
Lane Grp Cap(c), veh/h	408	0	900	918	598	1130
V/C Ratio(X)	0.67	0.00	0.23	0.23	0.21	0.30
Avail Cap(c_a), veh/h	501	0	900	918	721	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	12.4	12.4	8.9	8.6
Incr Delay (d2), s/veh	2.6	0.0	0.6	0.6	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	2.4	2.4	1.0	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.4	0.0	13.0	13.0	9.0	9.3
LnGrp LOS	C	A	B	B	A	A
Approach Vol, veh/h	275		422			461
Approach Delay, s/veh	32.4		13.0			9.2
Approach LOS	C		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	51.6			60.4	29.6
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	4.8	8.0			9.8	16.3
Green Ext Time (p_c), s	0.1	2.6			2.2	0.8











Intersection Summary




HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.94	2.22	2.39
Pedestrian Crosswalk LOS	B	B	B











						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.978				0.932	
Flt Protected				0.991	0.976	
Satd. Flow (prot)	1822	0	0	1846	1694	0
Flt Permitted				0.991	0.976	
Satd. Flow (perm)	1822	0	0	1846	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			861	168	
Travel Time (s)	10.2			19.6	3.8	
Intersection Summary						
Area Type:	Other					





Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	133	26	60	279	10	10
Future Vol, veh/h	133	26	60	279	10	10
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	145	28	65	303	11	11
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	173	0	592	159
Stage 1	-	-	-	-	159	-
Stage 2	-	-	-	-	433	-
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	-	-	1404	-	469	886
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	654	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1404	-	443	886
Mov Cap-2 Maneuver	-	-	-	-	443	-
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	617	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		11.3	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	591	-	-	1404	-	
HCM Lane V/C Ratio	0.037	-	-	0.046	-	
HCM Control Delay (s)	11.3	-	-	7.7	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street

08/31/2021











						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.927		0.999			
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1687	0	3536	0	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1687	0	3536	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					





Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	26	510	5	7	738
Future Vol, veh/h	22	26	510	5	7	738
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	-	-	-	50	-
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	24	28	554	5	8	802

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1375	280	0	0	559
Stage 1	557	-	-	-	-
Stage 2	818	-	-	-	-
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	148	718	-	-	1010
Stage 1	538	-	-	-	-
Stage 2	433	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	147	718	-	-	1010
Mov Cap-2 Maneuver	147	-	-	-	-
Stage 1	538	-	-	-	-
Stage 2	430	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.5	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	258	1010
HCM Lane V/C Ratio	-	-	0.202	0.008
HCM Control Delay (s)	-	-	22.5	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.7	0

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.995			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3522	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3522	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		547			446
Travel Time (s)	4.4		12.4			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	515	18	22	738
Future Vol, veh/h	0	0	515	18	22	738
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	-	-	-	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	0	0	560	20	24	802

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1420	290	0
Stage 1	570	-	-
Stage 2	850	-	-
Critical Hdwy	6.63	6.93	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	3.319	-
Pot Cap-1 Maneuver	138	707	-
Stage 1	530	-	-
Stage 2	418	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	135	707	-
Mov Cap-2 Maneuver	135	-	-
Stage 1	530	-	-
Stage 2	408	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	992
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	0	8.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.98		0.98		0.96	
Frt	0.902		0.972			
Flt Protected	0.986				0.950	
Satd. Flow (prot)	1639	0	3357	0	1770	1863
Flt Permitted	0.986				0.416	
Satd. Flow (perm)	1620	0	3357	0	742	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	135		34			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			547
Travel Time (s)	10.2		14.6			12.4

Intersection Summary

Area Type: Other

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	47	409	216	522
Future Volume (vph)	47	409	216	522
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	9.2	56.2	70.8	68.8
Actuated g/C Ratio	0.10	0.62	0.79	0.76
v/c Ratio	0.65	0.26	0.34	0.40
Control Delay	23.0	8.3	4.2	5.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.0	8.3	4.2	5.1
LOS	C	A	A	A
Approach Delay	23.0	8.3		4.8
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 8.3

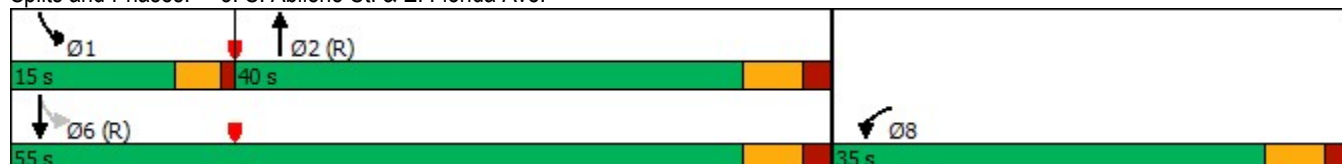
Intersection LOS: A

Intersection Capacity Utilization 54.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.















Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	186	545	235	567
v/c Ratio	0.65	0.26	0.34	0.40
Control Delay	23.0	8.3	4.2	5.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.0	8.3	4.2	5.1
Queue Length 50th (ft)	28	58	23	82
Queue Length 95th (ft)	87	114	59	177
Internal Link Dist (ft)	370	562		467
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	619	2107	711	1424
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.26	0.33	0.40
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WT		TT		LT	TT
Traffic Volume (veh/h)	47	124	409	92	216	522
Future Volume (veh/h)	47	124	409	92	216	522
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.95	0.99	
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	51	135	445	100	235	567
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	83	218	1582	352	619	1263
Arrive On Green	0.19	0.19	0.55	0.55	0.08	0.68
Sat Flow, veh/h	431	1142	2952	636	1781	1870
Grp Volume(v), veh/h	187	0	275	270	235	567
Grp Sat Flow(s),veh/h/ln	1581	0	1777	1718	1781	1870
Q Serve(g_s), s	9.8	0.0	7.4	7.5	4.7	12.7
Cycle Q Clear(g_c), s	9.8	0.0	7.4	7.5	4.7	12.7
Prop In Lane	0.27	0.72		0.37	1.00	
Lane Grp Cap(c), veh/h	303	0	983	950	619	1263
V/C Ratio(X)	0.62	0.00	0.28	0.28	0.38	0.45
Avail Cap(c_a), veh/h	510	0	983	950	698	1263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	10.6	10.7	6.9	6.8
Incr Delay (d2), s/veh	2.1	0.0	0.7	0.7	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	2.9	2.9	1.6	4.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.4	0.0	11.3	11.4	7.3	8.0
LnGrp LOS	D	A	B	B	A	A
Approach Vol, veh/h	187		545			802
Approach Delay, s/veh	35.4		11.4			7.8
Approach LOS	D		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.0	55.8			66.8	23.2
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+I1), s	6.7	9.5			14.7	11.8
Green Ext Time (p_c), s	0.3	3.5			4.2	0.5
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						











Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.98	2.33	2.48
Pedestrian Crosswalk LOS	B	B	B





						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.989				0.941	
Flt Protected				0.994	0.973	
Satd. Flow (prot)	1842	0	0	1852	1706	0
Flt Permitted				0.994	0.973	
Satd. Flow (perm)	1842	0	0	1852	1706	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			861	168	
Travel Time (s)	10.2			19.6	3.8	
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	301	26	22	151	29	23
Future Vol, veh/h	301	26	22	151	29	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	-	-	-	-	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	327	28	24	164	32	25
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	355	0	553	341
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	212	-
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	-	-	1204	-	494	701
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1204	-	483	701
Mov Cap-2 Maneuver	-	-	-	-	483	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	805	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		12.1	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	560	-	-	1204	-	
HCM Lane V/C Ratio	0.101	-	-	0.02	-	
HCM Control Delay (s)	12.1	-	-	8.1	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street
08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.926		0.991			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1687	0	3507	0	1770	1863
Flt Permitted	0.978				0.950	
Satd. Flow (perm)	1687	0	3507	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	60	487	30	44	420
Future Vol, veh/h	49	60	487	30	44	420
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	-	-	-	50	-
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	53	65	529	33	48	457











Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1099	281	0	0	562
Stage 1	546	-	-	-	-
Stage 2	553	-	-	-	-
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	221	717	-	-	1007
Stage 1	545	-	-	-	-
Stage 2	575	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	210	717	-	-	1007
Mov Cap-2 Maneuver	210	-	-	-	-
Stage 1	545	-	-	-	-
Stage 2	547	-	-	-	-





Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	344	1007
HCM Lane V/C Ratio	-	-	0.344	0.047
HCM Control Delay (s)	-	-	20.9	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.5	0.1

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021






						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.990			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3504	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3504	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		207			446
Travel Time (s)	4.4		4.7			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	517	37	37	432
Future Vol, veh/h	0	0	517	37	37	432
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	-	-	-	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	0	0	562	40	40	470

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1132	301	0	0	602
Stage 1	582	-	-	-	-
Stage 2	550	-	-	-	-
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	210	696	-	-	973
Stage 1	523	-	-	-	-
Stage 2	577	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	201	696	-	-	973
Mov Cap-2 Maneuver	201	-	-	-	-
Stage 1	523	-	-	-	-
Stage 2	553	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	973
HCM Lane V/C Ratio	-	-	-	0.041
HCM Control Delay (s)	-	-	0	8.9
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.96		1.00		0.99	
Frt	0.908		0.987			
Flt Protected	0.984				0.950	
Satd. Flow (prot)	1639	0	3478	0	1770	1863
Flt Permitted	0.984				0.466	
Satd. Flow (perm)	1589	0	3478	0	856	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	127		13			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			340
Travel Time (s)	10.2		14.6			7.7
Intersection Summary						
Area Type:	Other					

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	82	362	115	326
Future Volume (vph)	82	362	115	326
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	14.4	52.0	65.6	63.6
Actuated g/C Ratio	0.16	0.58	0.73	0.71
v/c Ratio	0.76	0.21	0.18	0.27
Control Delay	32.0	10.5	5.3	6.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	32.0	10.5	5.3	6.4
LOS	C	B	A	A
Approach Delay	32.0	10.5		6.1
Approach LOS	C	B		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 13.8

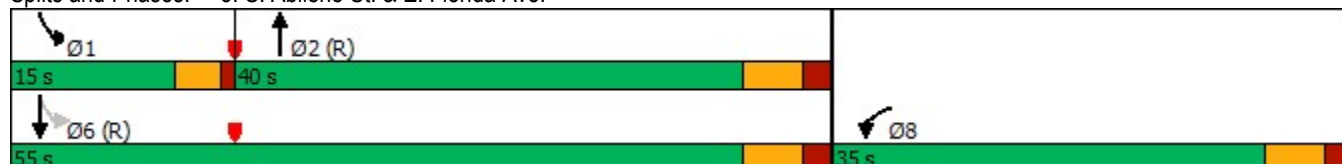
Intersection LOS: B

Intersection Capacity Utilization 56.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.














Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	280	430	125	354
v/c Ratio	0.76	0.21	0.18	0.27
Control Delay	32.0	10.5	5.3	6.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	32.0	10.5	5.3	6.4
Queue Length 50th (ft)	83	54	17	62
Queue Length 95th (ft)	153	105	46	134
Internal Link Dist (ft)	370	562		260
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	614	2013	735	1315
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.46	0.21	0.17	0.27
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

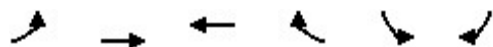
1450 Abilene Street
08/31/2021

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T	L	L	T
Traffic Volume (veh/h)	82	176	362	34	115	326
Future Volume (veh/h)	82	176	362	34	115	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.93		0.99	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	89	191	393	37	125	354
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	130	280	1656	155	592	1127
Arrive On Green	0.26	0.26	0.50	0.50	0.05	0.60
Sat Flow, veh/h	494	1059	3373	307	1781	1870
Grp Volume(v), veh/h	281	0	212	218	125	354
Grp Sat Flow(s),veh/h/ln	1559	0	1777	1810	1781	1870
Q Serve(g_s), s	14.6	0.0	6.0	6.1	2.9	8.4
Cycle Q Clear(g_c), s	14.6	0.0	6.0	6.1	2.9	8.4
Prop In Lane	0.32	0.68		0.17	1.00	
Lane Grp Cap(c), veh/h	412	0	897	914	592	1127
V/C Ratio(X)	0.68	0.00	0.24	0.24	0.21	0.31
Avail Cap(c_a), veh/h	502	0	897	914	715	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	12.5	12.5	8.9	8.8
Incr Delay (d2), s/veh	2.9	0.0	0.6	0.6	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	2.4	2.5	1.0	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.6	0.0	13.1	13.2	9.1	9.5
LnGrp LOS	C	A	B	B	A	A
Approach Vol, veh/h	281		430			479
Approach Delay, s/veh	32.6		13.1			9.4
Approach LOS	C		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	51.4			60.2	29.8
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+l1), s	4.9	8.1			10.4	16.6
Green Ext Time (p_c), s	0.1	2.6			2.4	0.8
Intersection Summary						
HCM 6th Ctrl Delay			16.2			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.94	2.23	2.40
Pedestrian Crosswalk LOS	B	B	B

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.978				0.932	
Flt Protected				0.991	0.976	
Satd. Flow (prot)	1822	0	0	1846	1694	0
Flt Permitted				0.991	0.976	
Satd. Flow (perm)	1822	0	0	1846	1694	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			310	168	
Travel Time (s)	10.2			7.0	3.8	
Intersection Summary						
Area Type:	Other					




Intersection						
Int Delay, s/veh	1.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	26	60	285	10	10
Future Vol, veh/h	135	26	60	285	10	10
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	147	28	65	310	11	11
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	175	0	601	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	440	-
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	-	-	1401	-	463	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	649	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1401	-	437	884
Mov Cap-2 Maneuver	-	-	-	-	437	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	613	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.3		11.4	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	585	-	-	1401	-	
HCM Lane V/C Ratio	0.037	-	-	0.047	-	
HCM Control Delay (s)	11.4	-	-	7.7	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

















Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.999		0.960	
Flt Protected		0.999			0.966	
Satd. Flow (prot)	0	1861	1861	0	1727	0
Flt Permitted		0.999			0.966	
Satd. Flow (perm)	0	1861	1861	0	1727	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		310	551		179	
Travel Time (s)		7.0	12.5		4.1	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	143	339	4	11	5
Future Vol, veh/h	2	143	339	4	11	5
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	2	155	368	4	12	5
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	372	0	-	0	529	370
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	159	-
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	1186	-	-	-	510	676
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	870	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1186	-	-	-	509	676
Mov Cap-2 Maneuver	-	-	-	-	509	-
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	870	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		11.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1186	-	-	-	552	
HCM Lane V/C Ratio	0.002	-	-	-	0.032	
HCM Control Delay (s)	8	0	-	-	11.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.923		0.998			
Flt Protected	0.979				0.950	
Satd. Flow (prot)	1683	0	3532	0	1770	1863
Flt Permitted	0.979				0.950	
Satd. Flow (perm)	1683	0	3532	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	217		340			207
Travel Time (s)	4.9		7.7			4.7
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	532	6	8	424
Future Vol, veh/h	17	22	532	6	8	424
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	-	-	-	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	18	24	578	7	9	461

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1061	293	0	0	585
Stage 1	582	-	-	-	-
Stage 2	479	-	-	-	-
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	233	704	-	-	988
Stage 1	523	-	-	-	-
Stage 2	622	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	231	704	-	-	988
Mov Cap-2 Maneuver	231	-	-	-	-
Stage 1	523	-	-	-	-
Stage 2	616	-	-	-	-











Approach	WB	NB	SB
HCM Control Delay, s	15.9	0	0.2
HCM LOS	C		





Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	372	988
HCM Lane V/C Ratio	-	-	0.114	0.009
HCM Control Delay (s)	-	-	15.9	8.7
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Lanes and Geometrics
1: S. Abilene St. & North School Access Driveway

1450 Abilene Street











08/31/2021





						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	50	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.927		0.999			
Flt Protected	0.977				0.950	
Satd. Flow (prot)	1687	0	3536	0	1770	1863
Flt Permitted	0.977				0.950	
Satd. Flow (perm)	1687	0	3536	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	241		446			351
Travel Time (s)	5.5		10.1			8.0
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	26	525	5	7	761
Future Vol, veh/h	22	26	525	5	7	761
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	-	-	-	50	-
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	24	28	571	5	8	827
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1417	288	0	0	576	0
Stage 1	574	-	-	-	-	-
Stage 2	843	-	-	-	-	-
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	139	709	-	-	995	-
Stage 1	528	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	709	-	-	995	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	23.6	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	245	995	-	
HCM Lane V/C Ratio	-	-	0.213	0.008	-	
HCM Control Delay (s)	-	-	23.6	8.6	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.8	0	-	

Lanes and Geometrics
2: S. Abilene St. & South School Access Driveway

1450 Abilene Street
08/31/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt			0.995			
Flt Protected					0.950	
Satd. Flow (prot)	1863	0	3522	0	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	1863	0	3522	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	195		207			446
Travel Time (s)	4.4		4.7			10.1
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	530	18	22	761
Future Vol, veh/h	0	0	530	18	22	761
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	-	-	-	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	0	0	576	20	24	827

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1461	298	0
Stage 1	586	-	-
Stage 2	875	-	-
Critical Hdwy	6.63	6.93	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	3.319	-
Pot Cap-1 Maneuver	130	699	-
Stage 1	520	-	-
Stage 2	407	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	127	699	-
Mov Cap-2 Maneuver	127	-	-
Stage 1	520	-	-
Stage 2	397	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	978
HCM Lane V/C Ratio	-	-	-	0.024
HCM Control Delay (s)	-	-	0	8.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	L	T
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	100	0		0	175	
Storage Lanes	0	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor	0.97		0.98		0.96	
Frt	0.904		0.972			
Flt Protected	0.986				0.950	
Satd. Flow (prot)	1632	0	3355	0	1770	1863
Flt Permitted	0.986				0.403	
Satd. Flow (perm)	1612	0	3355	0	721	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	135		36			
Link Speed (mph)	30		30			30
Link Distance (ft)	450		642			340
Travel Time (s)	10.2		14.6			7.7

Intersection Summary

Area Type: Other

Timings
3: S. Abilene St. & E. Florida Ave.

1450 Abilene Street
08/31/2021

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖↖	↑↑	↗	↑
Traffic Volume (vph)	51	426	216	533
Future Volume (vph)	51	426	216	533
Turn Type	Prot	NA	pm+pt	NA
Protected Phases	8	2	1	6
Permitted Phases			6	
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	34.5	9.5	31.5
Total Split (s)	35.0	40.0	15.0	55.0
Total Split (%)	38.9%	44.4%	16.7%	61.1%
Yellow Time (s)	4.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	9.4	55.9	70.6	68.6
Actuated g/C Ratio	0.10	0.62	0.78	0.76
v/c Ratio	0.65	0.27	0.35	0.41
Control Delay	23.5	8.5	4.4	5.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.5	8.5	4.4	5.2
LOS	C	A	A	A
Approach Delay	23.5	8.5		5.0
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 8.5

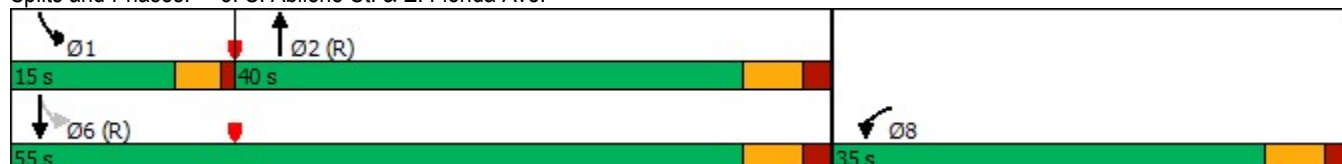
Intersection LOS: A

Intersection Capacity Utilization 59.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: S. Abilene St. & E. Florida Ave.














Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	190	570	235	579
v/c Ratio	0.65	0.27	0.35	0.41
Control Delay	23.5	8.5	4.4	5.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	23.5	8.5	4.4	5.2
Queue Length 50th (ft)	30	62	24	86
Queue Length 95th (ft)	90	121	60	185
Internal Link Dist (ft)	370	562		260
Turn Bay Length (ft)	100		175	
Base Capacity (vph)	617	2096	696	1419
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.27	0.34	0.41
Intersection Summary				




HCM 6th Signalized Intersection Summary
3: S. Abilene St. & E. Florida Ave.

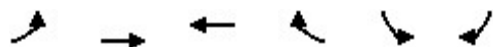
1450 Abilene Street
08/31/2021

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WT		WT		WT	WT
Traffic Volume (veh/h)	51	124	426	98	216	533
Future Volume (veh/h)	51	124	426	98	216	533
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.95	0.99	
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	55	135	463	107	235	579
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	88	216	1566	359	604	1260
Arrive On Green	0.19	0.19	0.55	0.55	0.08	0.67
Sat Flow, veh/h	457	1121	2934	651	1781	1870
Grp Volume(v), veh/h	191	0	288	282	235	579
Grp Sat Flow(s),veh/h/ln	1586	0	1777	1714	1781	1870
Q Serve(g_s), s	9.9	0.0	7.8	7.9	4.8	13.2
Cycle Q Clear(g_c), s	9.9	0.0	7.8	7.9	4.8	13.2
Prop In Lane	0.29	0.71		0.38	1.00	
Lane Grp Cap(c), veh/h	306	0	980	945	604	1260
V/C Ratio(X)	0.62	0.00	0.29	0.30	0.39	0.46
Avail Cap(c_a), veh/h	511	0	980	945	683	1260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	0.0	10.8	10.8	7.1	6.9
Incr Delay (d2), s/veh	2.1	0.0	0.8	0.8	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	3.1	3.0	1.6	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.4	0.0	11.6	11.6	7.5	8.1
LnGrp LOS	D	A	B	B	A	A
Approach Vol, veh/h	191		570			814
Approach Delay, s/veh	35.4		11.6			8.0
Approach LOS	D		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.0	55.6			66.6	23.4
Change Period (Y+Rc), s	4.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	11.0	34.0			49.0	29.0
Max Q Clear Time (g_c+l1), s	6.8	9.9			15.2	11.9
Green Ext Time (p_c), s	0.3	3.7			4.3	0.5
Intersection Summary						
HCM 6th Ctrl Delay			12.6			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
User approved volume balancing among the lanes for turning movement.						

Approach	WB	NB	SB
Crosswalk Length (ft)	36.0	47.4	48.0
Crosswalk Width (ft)	12.0	12.0	12.0
Total Number of Lanes Crossed	2	3	4
Number of Right-Turn Islands	0	0	0
Type of Control	None	None	None
Corresponding Signal Phase	2	6	8
Effective Walk Time (s)	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0
85th percentile speed (mph)	30	30	30
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-
Pedestrian Delay (s/p)	45.0	45.0	45.0
Pedestrian Compliance Code	Poor	Poor	Poor
Pedestrian Crosswalk Score	1.98	2.34	2.49
Pedestrian Crosswalk LOS	B	B	B

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.990				0.941	
Flt Protected				0.994	0.973	
Satd. Flow (prot)	1844	0	0	1852	1706	0
Flt Permitted				0.994	0.973	
Satd. Flow (perm)	1844	0	0	1852	1706	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	450			310	168	
Travel Time (s)	10.2			7.0	3.8	
Intersection Summary						
Area Type:	Other					




Intersection						
Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	307	26	22	155	29	23
Future Vol, veh/h	307	26	22	155	29	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	-	-	-	-	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	334	28	24	168	32	25
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	362	0	564	348
Stage 1	-	-	-	-	348	-
Stage 2	-	-	-	-	216	-
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	-	-	1197	-	487	695
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	820	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	476	695
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	802	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1		12.3	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	553	-	-	1197	-	
HCM Lane V/C Ratio	0.102	-	-	0.02	-	
HCM Control Delay (s)	12.3	-	-	8.1	0	
HCM Lane LOS	B	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	

















Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.991		0.958	
Flt Protected		0.999			0.967	
Satd. Flow (prot)	0	1861	1846	0	1726	0
Flt Permitted		0.999			0.967	
Satd. Flow (perm)	0	1861	1846	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		310	551		179	
Travel Time (s)		7.0	12.5		4.1	

Intersection Summary

Area Type: Other

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	325	173	12	8	4
Future Vol, veh/h	6	325	173	12	8	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	-	-	-	-	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	7	353	188	13	9	4
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	201	0	-	0	562	195
Stage 1	-	-	-	-	195	-
Stage 2	-	-	-	-	367	-
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	1371	-	-	-	488	846
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1371	-	-	-	485	846
Mov Cap-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	701	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		11.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1371	-	-	-	565	
HCM Lane V/C Ratio	0.005	-	-	-	0.023	
HCM Control Delay (s)	7.6	0	-	-	11.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.923		0.995			
Flt Protected	0.979				0.950	
Satd. Flow (prot)	1683	0	3522	0	1770	1863
Flt Permitted	0.979				0.950	
Satd. Flow (perm)	1683	0	3522	0	1770	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	217		340			207
Travel Time (s)	4.9		7.7			4.7
Intersection Summary						
Area Type:	Other					

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	15	533	17	23	738
Future Vol, veh/h	11	15	533	17	23	738
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	-	-	-	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	12	16	579	18	25	802

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1440	299	0	0	597
Stage 1	588	-	-	-	-
Stage 2	852	-	-	-	-
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	134	698	-	-	978
Stage 1	519	-	-	-	-
Stage 2	417	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	131	698	-	-	978
Mov Cap-2 Maneuver	131	-	-	-	-
Stage 1	519	-	-	-	-
Stage 2	406	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.4	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	247	978
HCM Lane V/C Ratio	-	-	0.114	0.026
HCM Control Delay (s)	-	-	21.4	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1