EFFIE ESTATES
TRAFFIC IMPACT ANALYSIS

City of Sequim, WA



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TRAFFIC IMPACT ANALYSIS

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1. INTRODUCTION

The main goals of this study focus on the assessment of existing roadway conditions and forecasts of newly generated project traffic. The first task includes the review of general roadway information on the roadways serving the site, existing vehicular volumes, and entering sight distance data. Forecasts of future traffic and dispersion patterns on the street system are then determined using established trip generation and distribution techniques. As a final step, appropriate conclusions and mitigation measures are defined if needed.

2. PROJECT DESCRIPTION

Effie Estates proposes for the construction of 15 new single-family dwelling units in the city of Sequim. The subject property is bordered to the south by W Hemlock Street and to the west by S 7th Avenue. The subject site comprises 2.61-acres of undeveloped land within tax parcel #: 033019349180. The subject site is located in the R4-8 Single Family Residential zoning district. Access to the site is proposed via two new entrances. One new driveway is to extend north from W Hemlock Street and one new driveway is to extend east from S 7th Avenue. Figure 1 below identifies the general vicinity and adjacent street network. A site plan illustrating the overall configuration of the project and proposed access locations is provided in Figure 2.

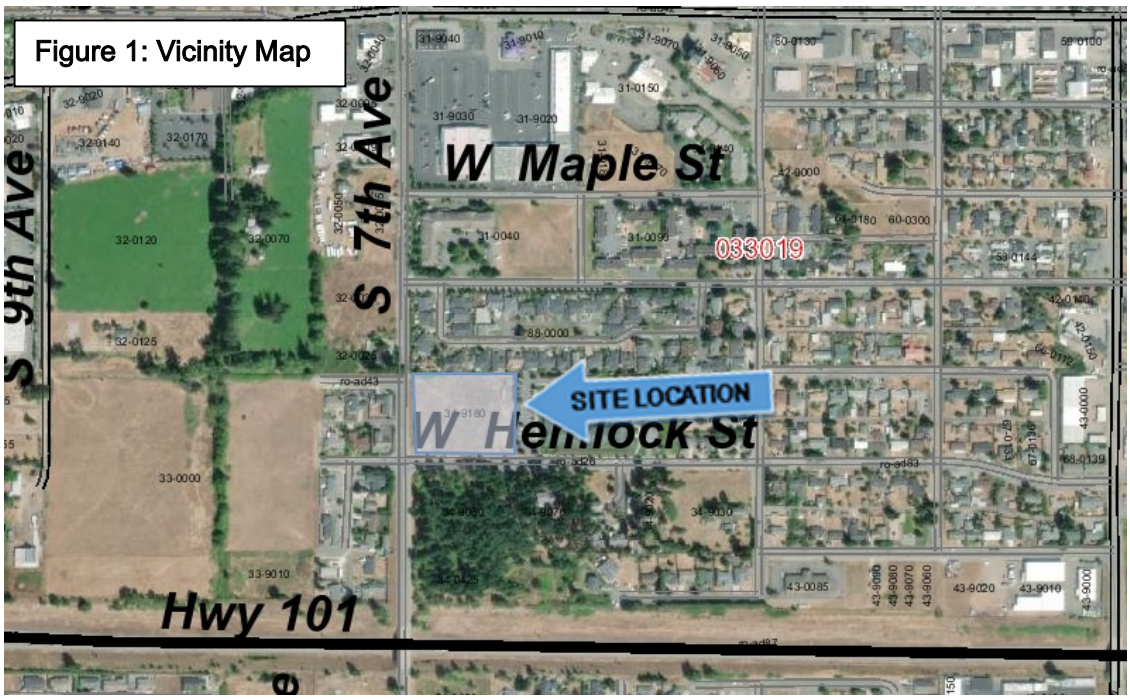


Figure 1: Vicinity Map



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SITE PLAN
FIGURE 2

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3. EXISTING CONDITIONS

3.1 Existing Street System

The street network serving the proposed project consists of a variety of roadways. The major roadways and arterials serving the subject site are listed and described below.

S 7th Avenue: is a north-south, two-lane collector roadway bordering the subject site to the west. Travel lanes are approximately 12- to 15-feet in width. Shoulder composition varies between segments of curb/gutter/sidewalk and no formal treatment. The posted speed limit is 25-mph.

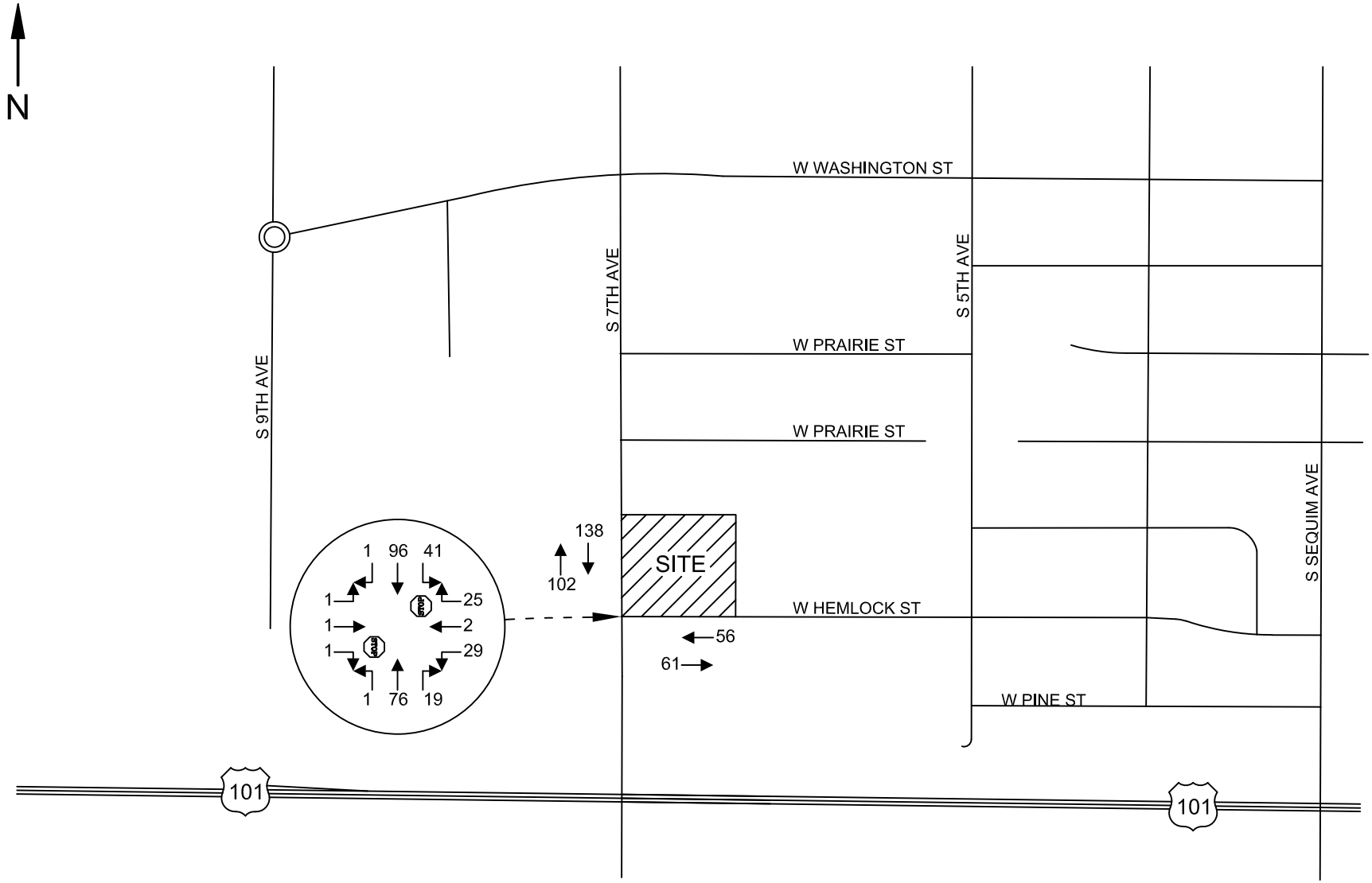
W Hemlock Avenue: is an east-west, two-lane local roadway that borders the subject site to the south. Shoulders are comprised of curb, gutter and sidewalk along the northern side of the roadway between S 7th Avenue and S 5th Avenue. The southern side of the roadway comprises curb/gutter.

3.2 Non-Motorist Traffic

Non-motorist PM peak hour volumes were observed at the study intersection of S 7th Avenue & W Hemlock Street. Four pedestrians were observed crossing W Hemlock Street along the east side of S 7th Avenue, subsequently traveling along the project frontage. No bicyclists were noted at S 7th Avenue & W Hemlock Street during the PM peak hour. The City has planned non-motorist infrastructure infill that would further improve pedestrian conditions along S 7th Avenue and other nearby corridors.

3.3 Existing Peak Hour Volumes

Traffic counts were performed at intersection of W Hemlock Street & S 7th Avenue to identify baseline vehicular through-volume activity at each proposed access point. Field data was collected in October of 2021 between the evening peak period of 4:00-6:00 PM. The one-hour reflecting highest overall volumes (peak hour) for the intersection was then used to analyze worst-case conditions for the PM peak period. The study intersection of S 7th Avenue & W Hemlock Street was not analyzed for level of service as no project generated trips were found entering or exiting the intersection. PM peak hour intersection volumes at S 7th Avenue & W Hemlock Street and through-volumes traveling along the proposed project accesses are illustrated in Figure 3 on the following page. Full count sheets are included in the appendix.



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EXISTING PM PEAK HOUR VOLUMES
FIGURE 3

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3.4 Roadway Improvements

A review of the City of Sequim's 2022-2027 Transportation Improvement Program indicates that the following improvement projects are currently planned in the vicinity.

Table 1: Transportation Improvement Projects

Name	Location	Improvement	Cost
US 101/East Sequim Corridor Improvements (#1)	Corridor and Interchanges	Complete the Simdars Road interchange; Construct frontage roads connecting Palo Alto and Happy Valley Rd to the Simdars interchange	$20,000,000
Pavement Rehabilitation (#3)	N Sequim Ave	Rehabilitation of pavement and improved ADA accessibility	$2,866,000
Pavement Rehabilitation (#4)	Washington St: River Rd to Simdars Rd	Pavement rehabilitation, improved ADA accessibility and pedestrian mobility	$4,500,000
S 7th Ave Sidewalk Improvements (#9)	Comfort Rd to McCurdy Rd	Provide pedestrian and bicycle facilities	$3,472,000
S Sequim Ave Complete Street (#10)	Corridor	Create safe and encouraging multi-modal transportation options	$3,600,000
S 5th Ave Extension (#14)	McCurdy Rd to Driveway	Construct a southerly roadway extension from McCurdy to Driveway	$150,000
E Washington St Bicycle Facilities (#23)	Sequim Ave to Simdars Rd	Construct bicycle facilities	$170,000
N Sequim Ave Bicycle Facilities (#24)	Washington St to Fir St	Construct bicycle facilities	$30,000
W Washington St Bicycle Facilities (#26)	Priest Rd to 5th Ave	Construct bicycle facilities	$70,000
S 3rd Ave Pedestrian Sidewalk/Pathways (#28)	Corridor	Construct pedestrian facilities	$300,000
US-101 Ramps & S Sequim Ave New Signals (#34)	US-101 Ramps & S Sequim Ave	Construct new signals at the US-101 ramps on S Sequim Ave	$610,000
E Washington St Bus Turn-out (#39)	Sequim Ave to Rhodefer Rd	Construct bus turn-outs on E Washington St	$149,000
S 7th Avenue new construction (#41)	McCurdy Rd to Reservoir Rd	Construct a new S 7th Ave roadway from McCurdy Rd to Reservoir Rd	$3,700,00
W Norman St New Construction (#42)	S 7th Ave to S 3rd Ave	Construct a W Norman St roadway from S 7th Ave to S 3rd Ave	$1,000,000
E Silberhorn Rd & S 7th Ave Intersection Improvements	Intersection	Intersection improvements, sidewalk, curb ramps, aligned lanes and traffic control	TBD
Washington St Traffic Signals	Sequim Ave to S 3rd Ave	Replace traffic signal with updated controllers	TBD
S 5th Ave Intersection & Traffic Signal Improvements	Corridor	Intersection improvements; turn lane realignments/additions; updated traffic signal equipment	TBD

Moreover, an improvement project is planned by WSDOT in the vicinity of the subject site. A description of the project is provided below.

U.S.101 East Sequim Corridor Project – Simdars Rd. Interchange/Palo Alto Rd (STIP ID: WA-12917): This project intends to construct on and off ramps to complete the Simdars Road interchange and a frontage road connecting Palo Alto and Happy Valley Road to the Simdars interchange. Preliminary engineering is to commence in 2023 and the total estimated cost is $25,000,000.

3.5 Transit Service

A review of the Clallam Transit and Jefferson Transit regional bus schedules indicates that transit service is provided near the site. The nearest stops in relation to the subject site are provided at S 7th Avenue & W Hemlock Street. This transit line provides weekday service from approximately 8:35 AM to 4:40 PM with stops at major attractions in the City. Route 40 also offers a "Dial-A-Ride" service Monday through Saturday from 7:30 AM to 5:30 PM which allows users to arrange a pre-scheduled service stop. Route 30 is also provided in the vicinity as the nearest stop is located along the W Washington Street Corridor, approximately 0.5 miles walking distance from the proposed Effie Estates. Route 30 provides eastbound and westbound service through Sequim. Weekday service is provided from 5:30 AM to 10:05 PM. Saturday service is provided from 7:25 AM to 8:30 PM. Given the proximity and flexible scheduling, future project residents may utilize public transit service provided in the subject site's vicinity. Refer to the Clallam Transit Schedules & Information for more information.

3.6 Sight Distance at Access Driveways

Access to the site is proposed via two new entrances. One new driveway is to extend north from W Hemlock Street and one new driveway is to extend east from S 7th Avenue (see Figure 2). Any new driveway shall be designed so as to allow for sufficient entering sight distance as prescribed in AASHTO's Green Book (2018). The posted speed limit on S 7th Avenue at the proposed site access is 25-mph. Moreover, the assumed speed limit for W Hemlock Street is also 25-mph. AASHTO standards[1] would therefore require unobstructed sight lines measuring 280 feet for outbound movements at all project accesses. Preliminary measurements indicate sight distance requirements are met at all driveway locations. No safety issues are identified with the proposed access configurations.

[1] *American Association of State Highway and Transportation Officials* (AASHTO).

4. FUTURE TRAFFIC CONDITIONS

4.1 Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit the respective project site during a designated time period such as the PM peak hour or an entire day. The magnitude of the anticipated vehicle trip generation for the proposed project was derived from the Institute of Transportation Engineers (ITE) publication, *Trip Generation,* 11th Edition. The designated land use is defined as Single-Family Detached Housing (LUC 210). Dwelling units was used as the input variable and average rates were used to determine trip ends. Table 2 summarizes anticipated vehicular movements for the average weekday daily trips (AWDT), AM peak hour and PM peak hour.

Table 2: Project Trip Generation

Land Use	Dwelling Units	AWDT	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Single-Family	15	**141**	3	8	**11**	9	5	**14**

Based on the data presented in Table 2, the project can be expected to generate 141 average weekday daily trips with 11 (3 in / 8 out) AM peak hour trips and 14 (9 in / 5 out) PM peak hour trips.

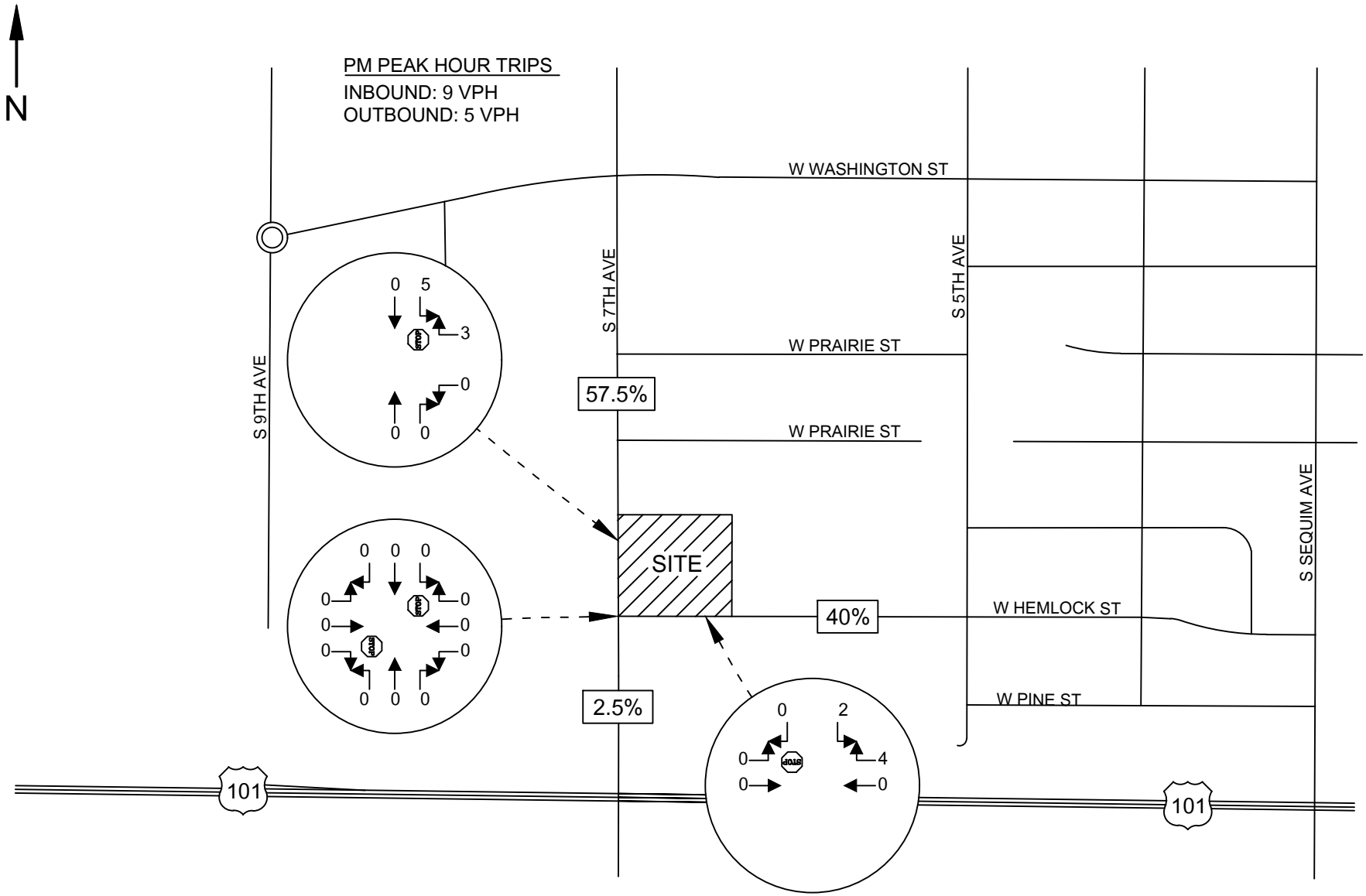
4.2 Trip Distribution and Assignment

Trip distribution describes the process by which project generated trips are dispersed on the street network surrounding the site. The trips generated by the project are expected to follow the general trip pattern as shown on Figure 4 on the following page. Site-generated traffic was disseminated between two the proposed accesses.

4.3 Future Peak Hour Volumes

A 5-year horizon of 2026 was used for future traffic delay analysis. Forecast 2026 background traffic volumes were derived by applying a 2.0 percent compound annual growth rate to the existing volumes of Figure 3. This growth rate was derived from the 2015-2035 City of Sequim Comprehensive Plan[2]. Moreover, pipeline volumes associated with the proposed LittleJohn Plat, Legacy Ridge Development and Home A/Home B projects are included in forecast analysis. Pipeline volumes are illustrated in Figure 5. Forecast 2026 PM peak hour background volumes and volumes with the addition of project-generated traffic are presented in Figures 6 and 7, respectively.

[2] City of Sequim 2015-2035 Comprehensive Plan, Chapter 2 – Urban Growth



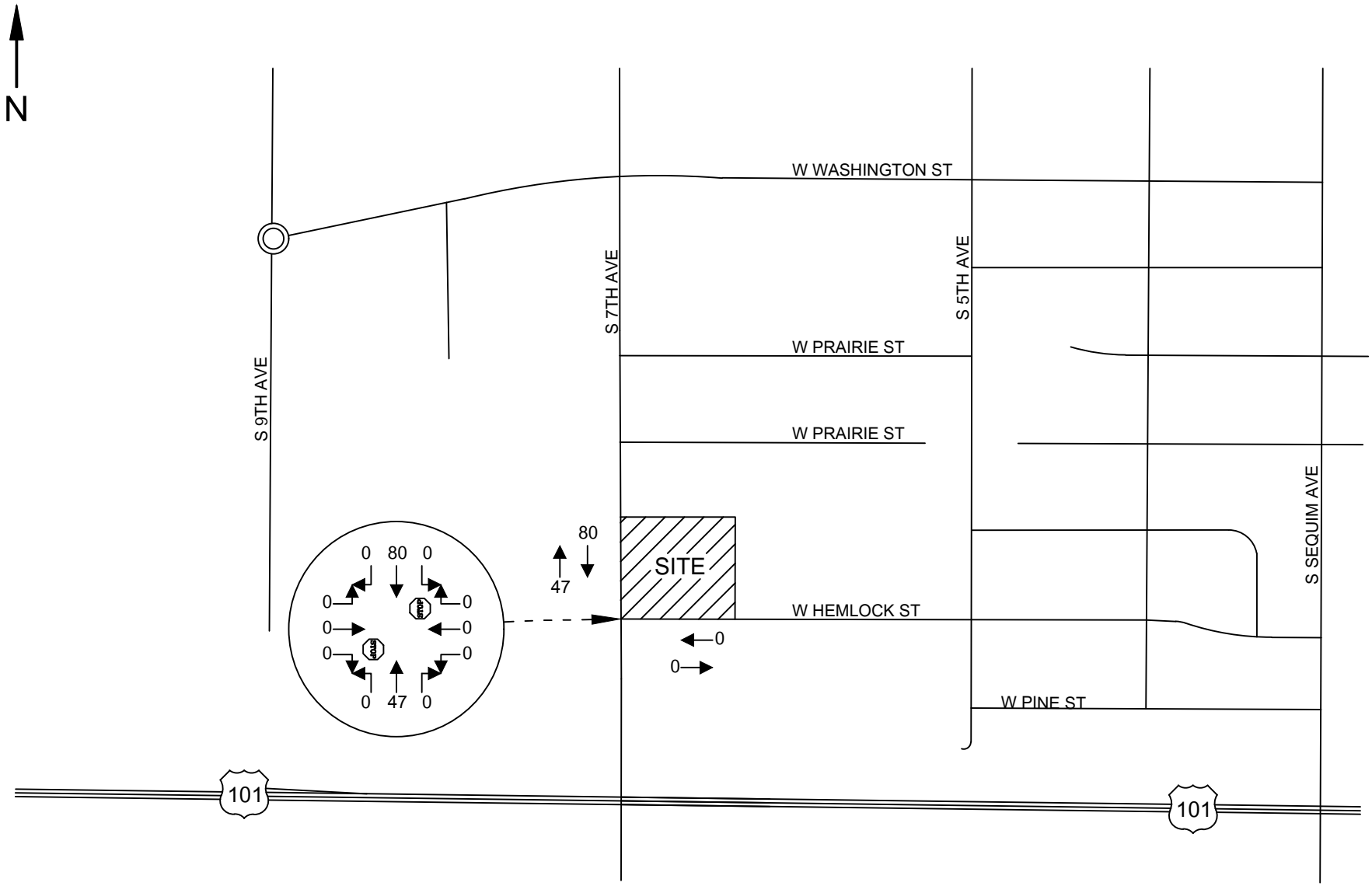
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PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE 4

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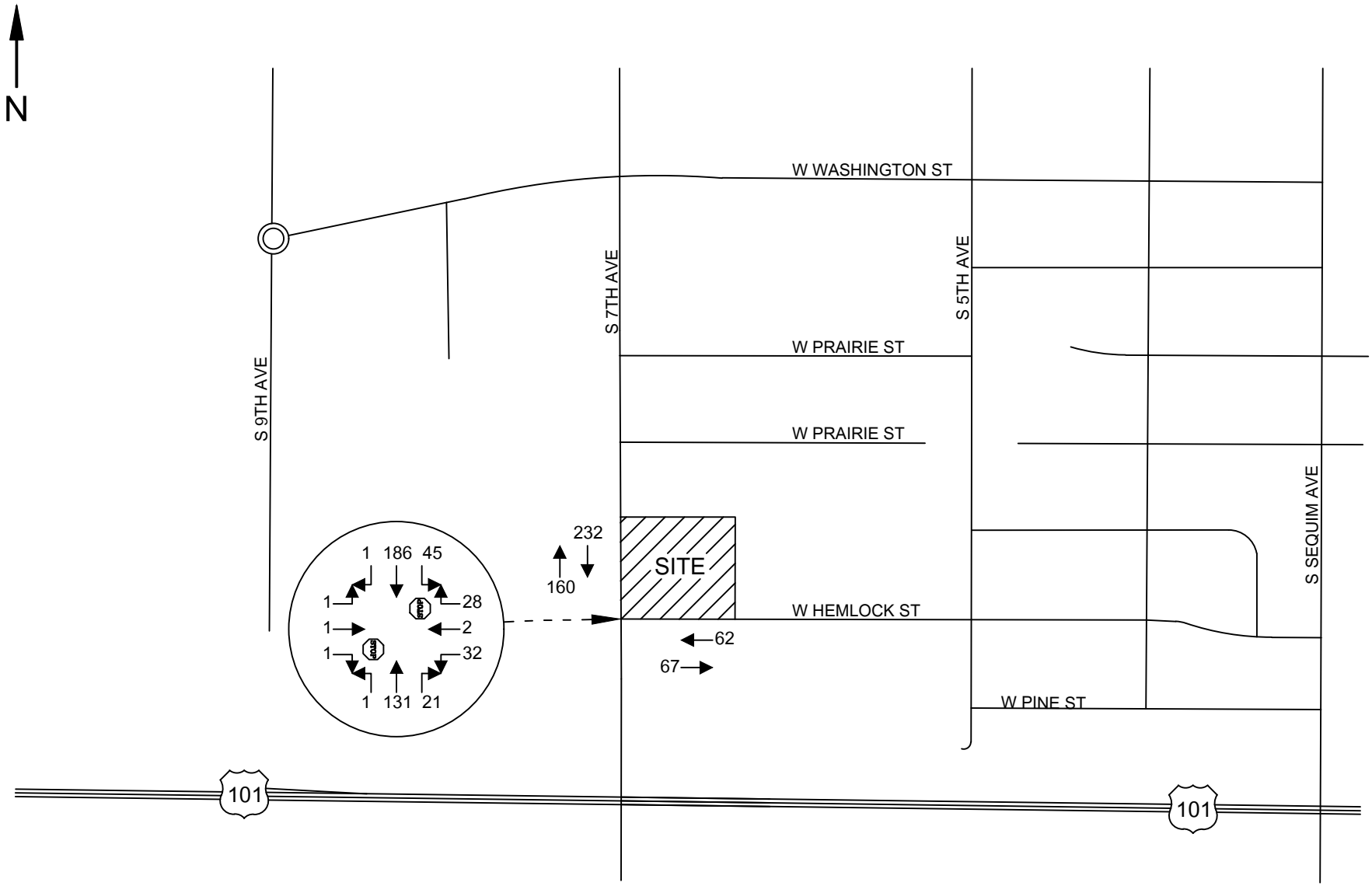
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PM PEAK HOUR PIPELINE VOLUMES
FIGURE 5

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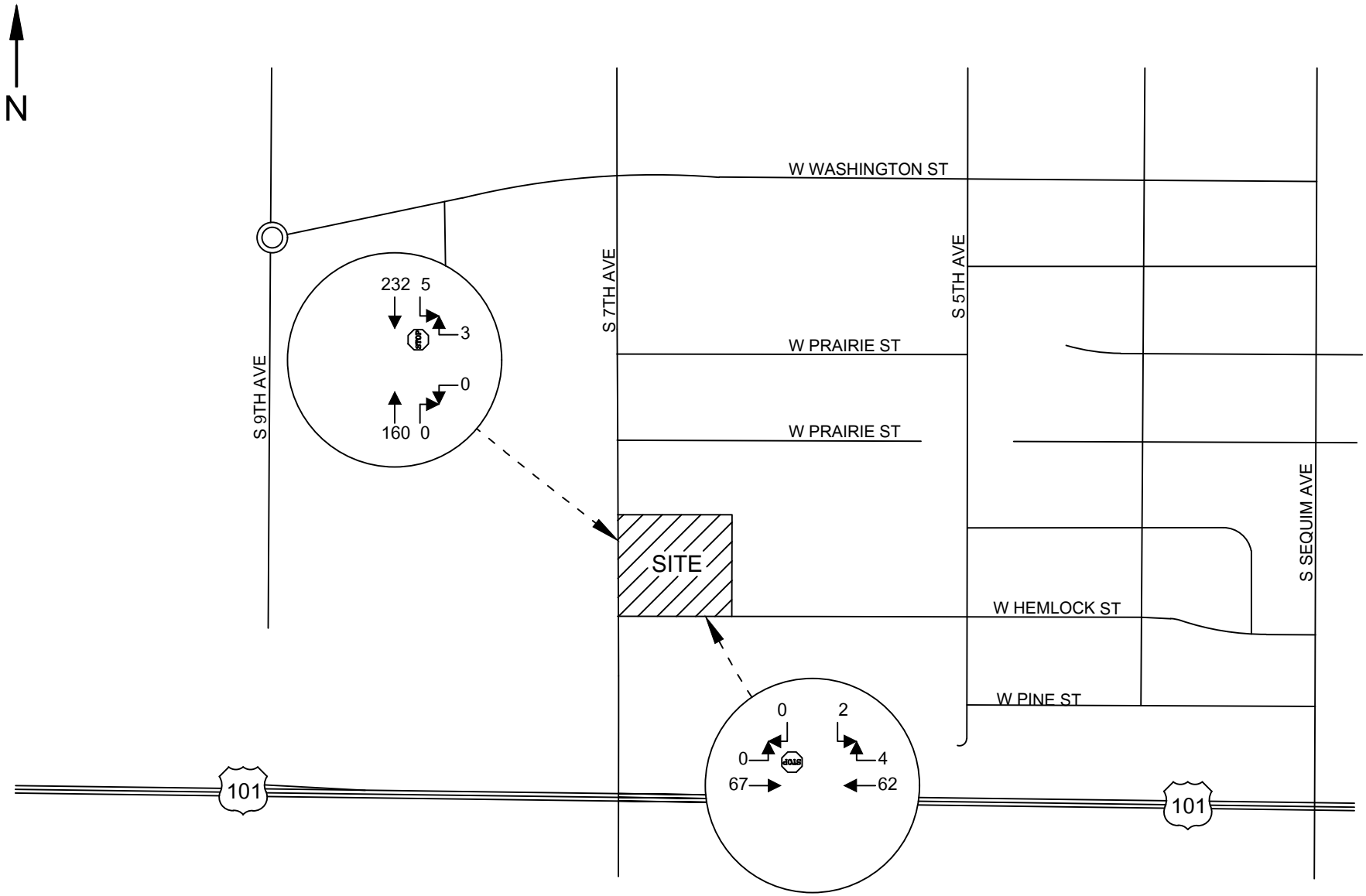
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FORECAST 2026 PM PEAK HOUR VOLUMES WITHOUT PROJECT
FIGURE 6

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FORECAST 2026 PM PEAK HOUR VOLUMES WITH PROJECT
FIGURE 7

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4.4 Forecast Level of Service

Peak hour delays were determined through the use of the *Highway Capacity Manual* 6th Edition. Capacity analysis is used to determine level of service (LOS) which is an established measure of congestion for transportation facilities. The range[3] for intersection level of service is LOS A to LOS F with the former indicating the best operating conditions with low control delays and the latter indicating the worst conditions with heavy control delays. Detailed descriptions of intersection LOS are given in the 2016 Highway Capacity Manual. Level of service calculations were made through the use of the *Synchro 11* analysis program. For side-street stop-controlled intersections, LOS is determined by the approach with the highest delay. Table 3 below portrays forecast LOS delays at the proposed accesses.

Table 3: Forecast 2026 PM Peak Hour Level of Service With Project

Delays given in seconds per vehicle

Intersection	Control	LOS	Delay
Project Access & S 7th Ave	Stop	A	9.2
W Hemlock St & Project Access	Stop	A	9.2

Both proposed project accesses are shown to operate with LOS A conditions under forecast conditions. No capacity deficiencies are identified with the development proposal.

4.5 Turn Lane Warrants

A left turn warrant was analyzed at the proposed project access on S 7th Avenue to determine if storage capacity is needed for left turning vehicles. Procedures prescribed in WSDOT's Design Manual were used to ascertain left (Exhibit 1310-7a) turn requirements under forecast 2026 PM peak hour conditions with full project build-out as illustrated in Figure 7. Based on the assessment criteria, a left turn lane *would not be warranted* at the proposed S 7th Avenue access. The WSDOT left turn warrant sheet has been attached to the appendix for reference.

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[3] *Signalized Intersections - Level of Service*

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤20
C	> 20 and ≤35
D	> 35 and ≤55
E	> 55 and ≤80
F	> 80

Stop Controlled Intersections – Level of Service

Level of Service	Control Delay per Vehicle (sec)
A	≤10
B	> 10 and ≤15
C	> 15 and ≤25
D	> 25 and ≤35
E	> 35 and ≤50
F	> 50

Highway Capacity Manual, 6th Edition

5. SUMMARY

Effie Estates proposes for 15 new single-family dwelling units in the city of Sequim. The subject site is located on the northeastern corner of S 7th Avenue & W Hemlock Street within undeveloped, 2.61-acre tax parcel #: 033019349180. Access to the subject site is proposed via one new roadway extending north from W Hemlock Street and one new roadway extending east from S 7th Avenue. A conceptual site plan illustrating the proposed lot layout is presented in Figure 2.

Based on ITE data, the project can be expected to generate approximately 141 average weekday daily trips, 11 (3 inbound/ 8 outbound) AM peak hour trips and 14 (9 inbound/ 5 outbound) PM peak hour trips. Forecast 2026 PM peak hour service levels were calculated at the access points and are summarized in Table 3. Both proposed access points are shown to operate with LOS A conditions. Moreover, a left turn lane would not be required at the site access on S 7th Avenue according to WSDOT nomograph criteria.

Based on the above analysis, mitigation is as follows:

1. The proposed development would be subject to Traffic Impact Fees (TIF) as imposed by the city of Sequim. Fees are based on new dwelling unit, assessed at $2,491.00 per net new dwelling unit. Therefore, an estimated fee calculation is as follows:

   15 dwelling units x $2,491.00 per dwelling unit = $37,365.00

   Actual traffic impact fees will be calculated and determined by the City at the time of building permit issuance.

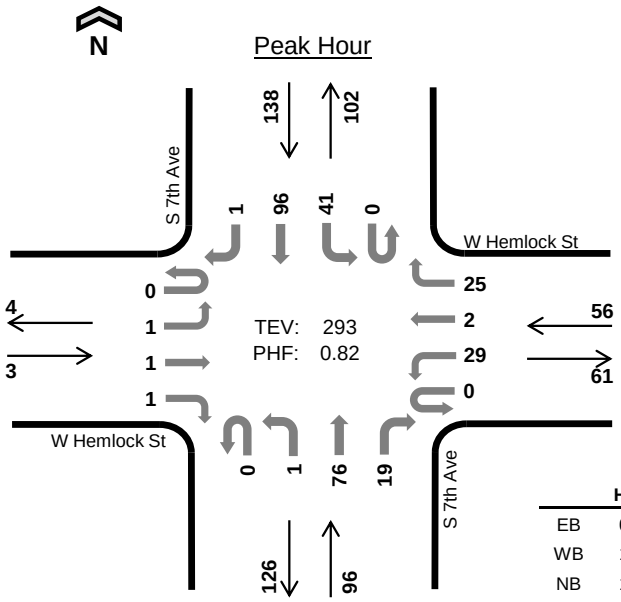
No other mitigation is identified at this time.

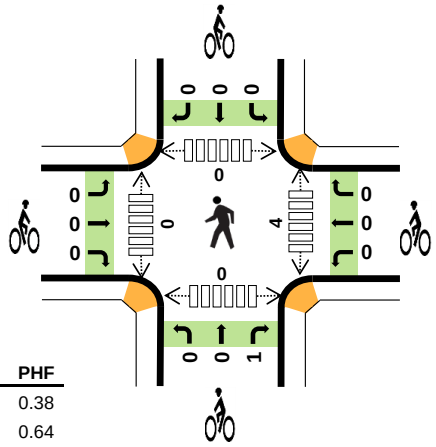
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APPENDIX

S 7th Ave
W Hemlock St

Date: 10/14/2021
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	0.0%	0.38
WB	1.8%	0.64
NB	1.0%	0.77
SB	2.2%	0.75
TOTAL	1.7%	0.82

Two-Hour Count Summaries

Interval Start	W Hemlock St Eastbound				W Hemlock St Westbound				S 7th Ave Northbound				S 7th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**8**	**1**	**1**	**0**	**0**	**17**	**7**	**0**	**11**	**35**	**0**	**80**	0
4:15 PM	**0**	**0**	**0**	**1**	**0**	**10**	**1**	**11**	**0**	**0**	**16**	**5**	**0**	**1**	**17**	**1**	**63**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**8**	**0**	**1**	**15**	**4**	**0**	**12**	**15**	**0**	**61**	0
4:45 PM	**0**	**1**	**1**	**0**	**0**	**5**	**0**	**5**	**0**	**0**	**28**	**3**	**0**	**17**	**29**	**0**	**89**	**293**
5:00 PM	0	0	0	0	0	8	0	3	0	0	22	6	0	8	32	0	79	292
5:15 PM	0	0	0	0	0	6	0	3	0	0	12	1	0	9	17	1	49	278
5:30 PM	0	0	0	0	0	6	0	5	0	0	15	2	0	2	23	0	53	270
5:45 PM	0	1	0	0	0	5	0	3	0	0	13	1	0	11	29	1	64	245
Count Total	0	2	1	1	0	54	2	39	0	1	138	29	0	71	197	3	538	0
Peak Hour All	**0**	**1**	**1**	**1**	**0**	**29**	**2**	**25**	**0**	**1**	**76**	**19**	**0**	**41**	**96**	**1**	**293**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**5**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**3%**	**0%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**3%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:15 PM	**0**	**1**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
4:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	2	0	0	0	*2*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	1	1	3	*5*	0	0	3	0	*3*	8	0	0	0	*8*
Peak Hour	**0**	**1**	**1**	**3**	***5***	**0**	**0**	**1**	**0**	***1***	**4**	**0**	**0**	**0**	***4***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Hemlock St Eastbound				W Hemlock St Westbound				S 7th Ave Northbound				S 7th Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**5**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	W Hemlock St Eastbound			W Hemlock St Westbound			S 7th Ave Northbound			S 7th Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Count Total	0	0	0	0	0	0	0	2	1	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Single-Family Detached Housing
(210)

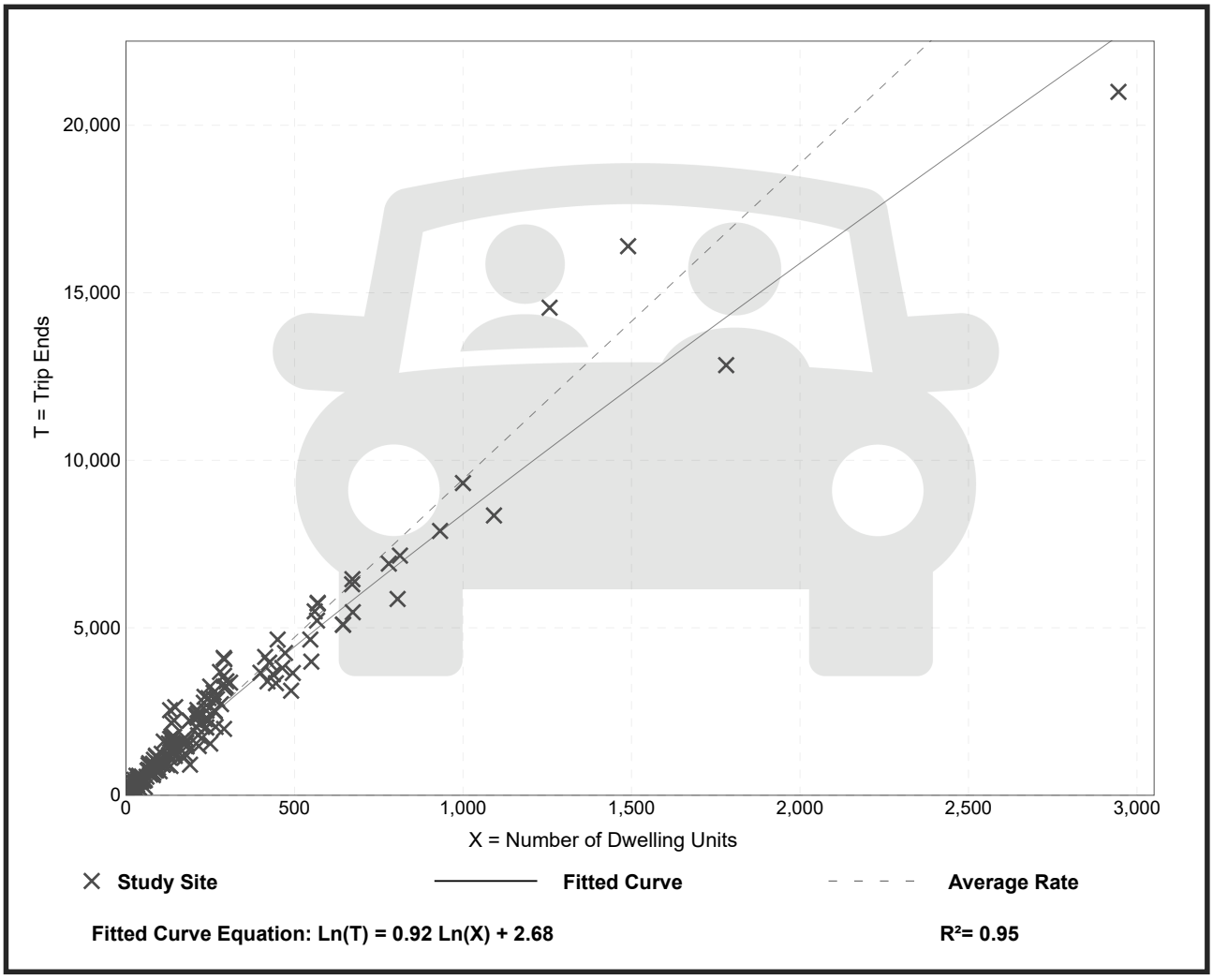
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



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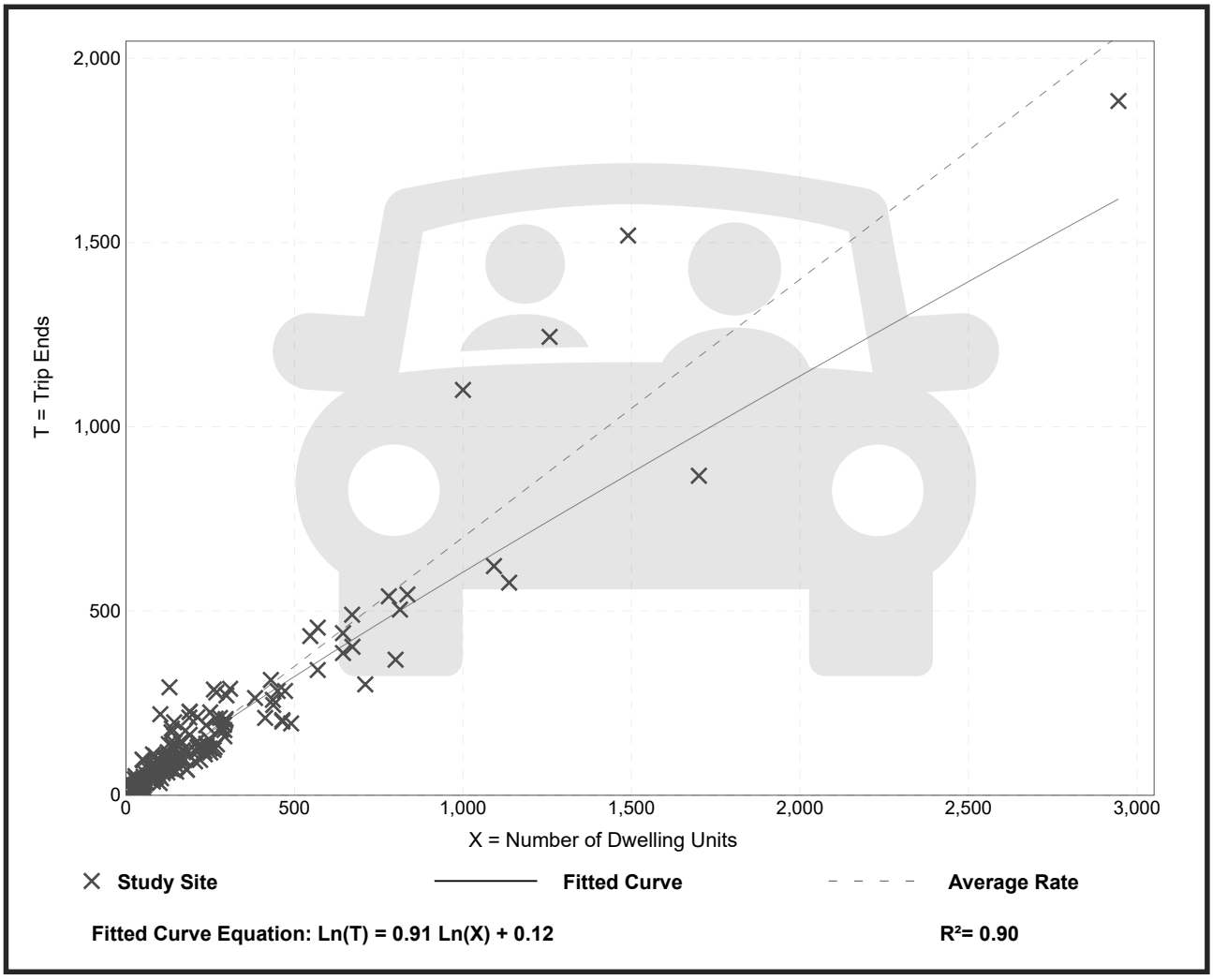
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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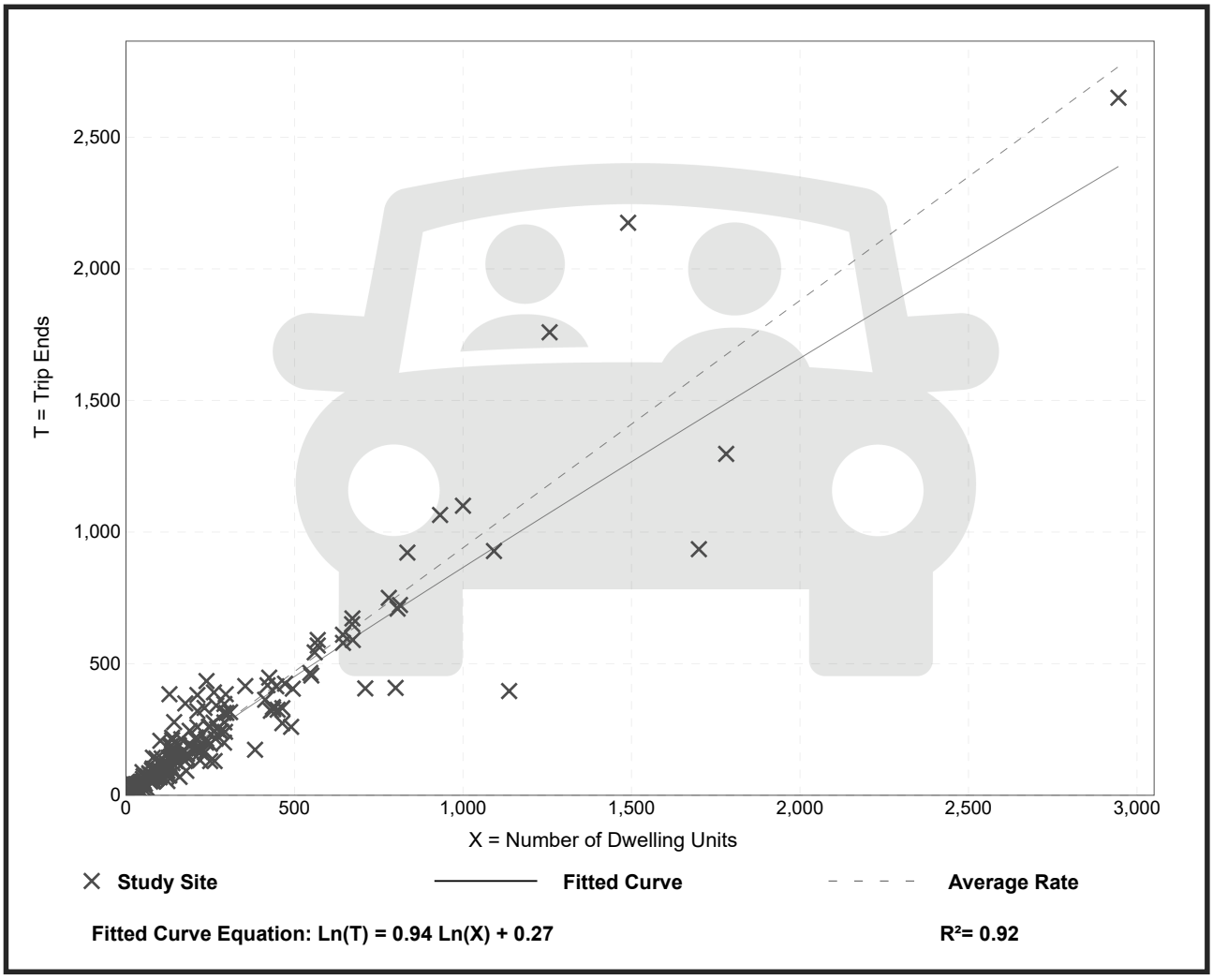
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



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1. S 7th Ave & W Hemlock St

PM Peak Hour
Pipeline Volume Summations

1. Littlejohn Plat	0	17	0	0	0	0	0	10	0	0	0	0
2. Legacy Ridge	0	26	0	0	0	0	0	14	0	0	0	0
3. Home A & B	0	37	0	0	0	0	0	23	0	0	0	0
Totals	0	80	0	0	0	0	0	47	0	0	0	0

PM Peak Hour Forecast Intersection Volumes

Annual Growth Rate: 2 %
# of Years to Horizon: 5

2026

1. S 7th Avenue & W Hemlock Street

	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL
Existing	1	96	41	25	2	29	19	76	1	1	1	1
Project Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pipeline	0	80	0	0	0	0	0	47	0	0	0	0
Without	1	186	45	28	2	32	21	131	1	1	1	1
With	1	186	45	28	2	32	21	131	1	1	1	1

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	160	0	5	232
Future Vol, veh/h	0	3	160	0	5	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	174	0	5	252

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	436	174	0	0	174	0
Stage 1	174	-	-	-	-	-
Stage 2	262	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	578	869	-	-	1403	-
Stage 1	856	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	576	869	-	-	1403	-
Mov Cap-2 Maneuver	576	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	779	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	869	1403	-
HCM Lane V/C Ratio	-	-	0.004	0.004	-
HCM Control Delay (s)	-	-	9.2	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

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Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	67	62	4	2	0
Future Vol, veh/h	0	67	62	4	2	0
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	0	73	67	4	2	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	71	0	-	0	142	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	73	-
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	1529	-	-	-	851	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1529	-	-	-	851	994
Mov Cap-2 Maneuver	-	-	-	-	851	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1529	-	-	-	851
HCM Lane V/C Ratio	-	-	-	-	0.003
HCM Control Delay (s)	0	-	-	-	9.2
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

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Exhibit 1310-7a Left-Turn Storage Guidelines: Two-Lane, Unsignalized

