REPORT

Camas Meadows Subdivision
Traffic Impact Study

March 22, 2023

H. Lee & Associates, PLLC

CAMAS MEADOWS SUBDIVISION
TRAFFIC IMPACT STUDY

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March 22, 2023

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STUDY SUMMARY

INTRODUCTION

This traffic impact analysis has been prepared to assess transportation impacts related to the proposed Camas Meadows Subdivision. The project site is located at 4615 NW Camas Meadows in Camas, Washington and is comprised of tax lots 172970000, 986035733, 986035734, 986026906, 172963000, 172973000 and 175980000. Figure 1 shows the project vicinity.

Project Description

The proposed project is a mixed-use development comprised of following uses:

- Single-Family Detached Housing – 47 units
- Single-Family Attached Housing – 36 units
- Brewpub – 6,500 square feet

Access to the proposed project will be from NW Camas Meadows Drive. Figure 2 shows the project site plan.

Scope of Traffic Impact Study

The scope of the traffic impact study was developed from known City of Camas traffic study requirements. From these requirements, the following intersections were analyzed:

- NW Lake Road/NW Friberg-Strunk Street/SE 1st Street
- NW Lake Road/NW Parker Street/NW Larkspur Street
- NW Camas Meadows Drive/NE Goodwin Road
- NW Camas Meadows Drive/NW Payne Street
- NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)
- NW Lake Road/NW Payne Street
- NW Camas Meadows Drive/Business Park Driveway/Project Access (West)
- NW Camas Meadows Drive/Project Access (East)

The remainder of this report presents the following analysis:

- Existing traffic conditions in the project study area.

- 2028 "Without Project" condition to establish the baseline condition by which the project impacts are determined.

- Trip generation estimates for the proposed development.
- 2028 "With Project" condition to determine project traffic impacts.

SUMMARY OF FINDINGS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 955 daily, 50 A.M. peak hour (14 in, 36 out), and 107 P.M. peak hour (70 in, 37 out) net new trips.
- All of the study area intersections are projected to meet the City of Camas' level of service standards in the 2028 "Without Project" and 2028 "With Project" condition.
- Based on field measurements conducted by H. Lee & Associates, PLLC, the project access intersections should be able to meet the sight distance requirements as long as any vegetation within the sight distance triangles are properly maintained after construction and no obstructions are placed within the sight distance triangles that could impede a driver's vision. Because the accesses into the project site are not built, the corner sight distance should be re-verified in the final engineering/construction stages of development.
- Turn lane warrants at the proposed project access intersections were not conducted due to a two-way center turn lane already existing along NW Camas Meadows Drive.

Recommendations

- Based on the traffic impact analysis documented in this report, the following proportionate share fees are required at a City of Vancouver intersections impacted by the proposed project:
  - NE 192nd Avenue/NE 13th Street – $13,600.00
  - SE 192nd Avenue/SE 34th Street – $750.00
  - SE 192nd Avenue/SR-14 Westbound Ramps– $6,000.00

Camas Meadows Subdivision TIA
Camas, WA

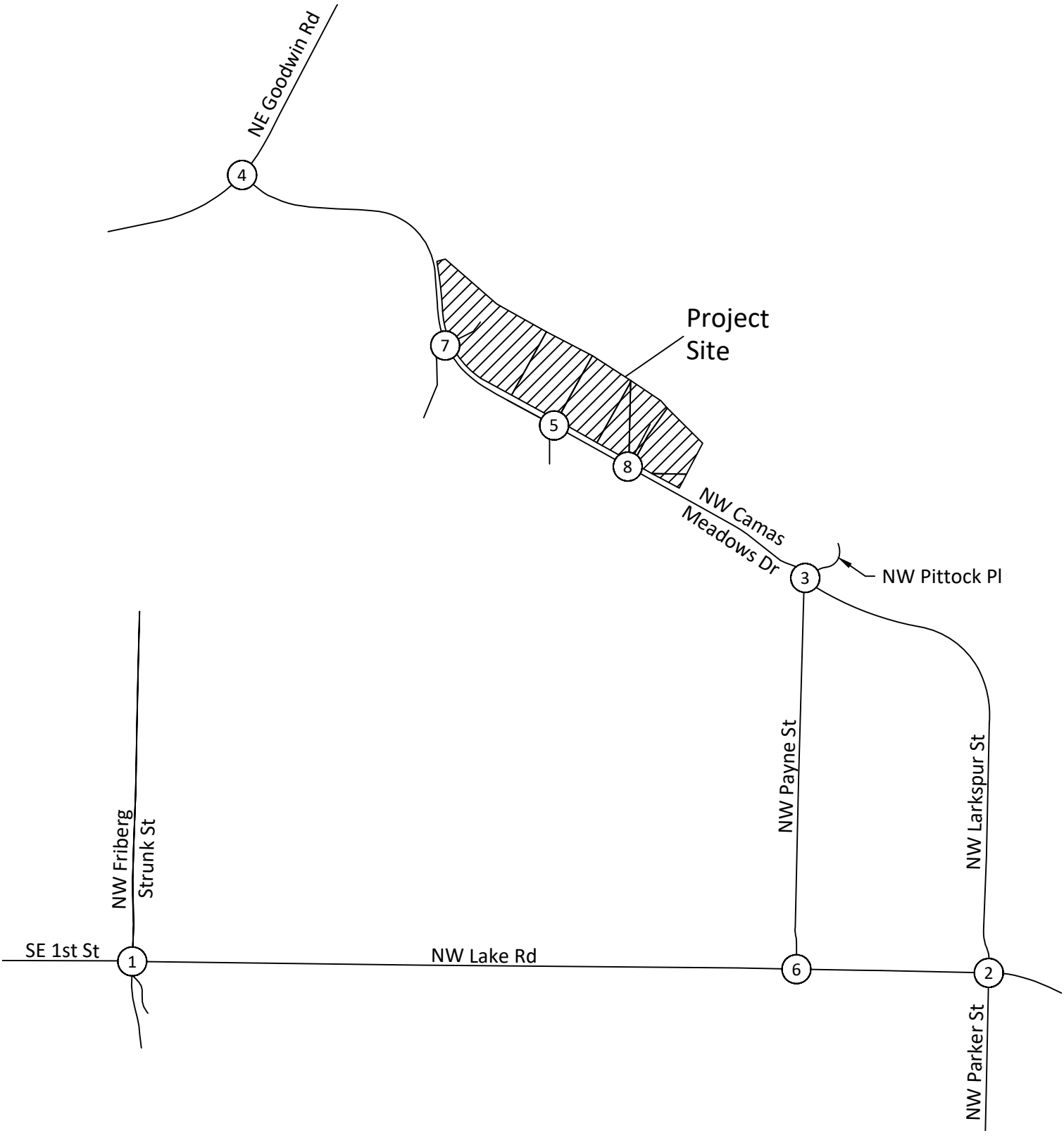

FIGURE 1
Site Vicinity Map

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Camas Meadows Subdivision TIA
Camas, WA

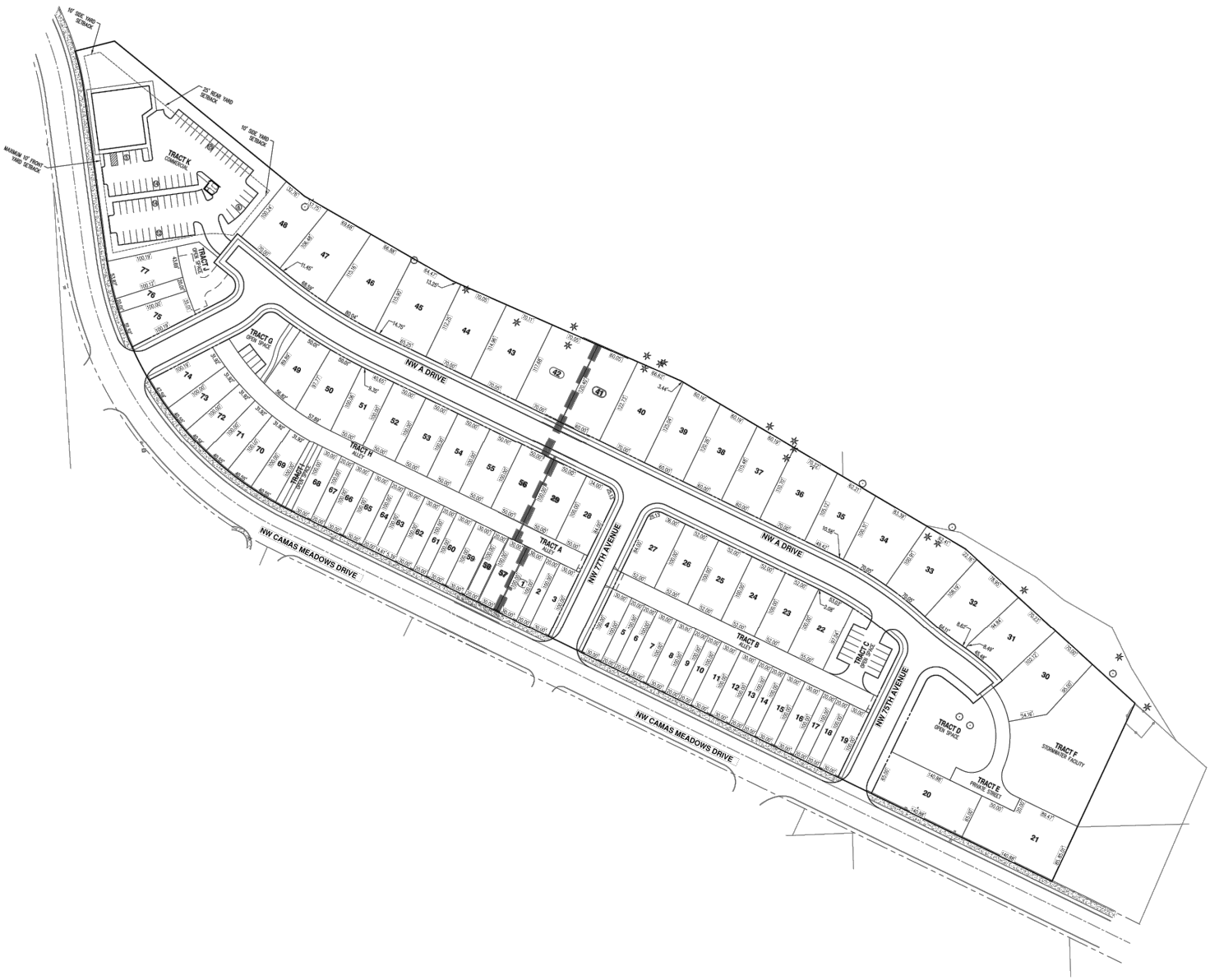

FIGURE 2
Site Plan

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SECTION II
EXISTING CONDITIONS

SITE CONDITION AND ADJACENT LAND USE

The project site is vacant. Camas Meadows Golf Course exists to the north, east, and west. Commercial uses exist to the south. Vacant land exists to the west.

TRANSPORTATION FACILITIES

The following provides a description of the existing street system in the study area.

SE 1st Street: SE 1st Street is a principal arterial east of SE 164th Avenue. West of SE 164th Avenue, SE 1st Street is a collector. Between SE 192nd Avenue and SE 202nd Avenue, the roadway is comprised of four lanes with a center median, additional turn lanes at major intersections, bike lanes and sidewalks. West of SE 192nd Avenue, the roadway is comprised of two-lanes with additional turn lanes at major intersections. Intermittent sidewalks exist along both sides of the roadway. The posted speed limit is 40 mph.

NW Camas Meadows Drive: NW Camas Meadows Drive is two-to-three lane arterial roadway. Sidewalks exist on both sides of the roadway. The posted speed limit is 35 mph.

NW Friberg-Strunk Street: NW Friberg-Strunk Street is a two-to-three lane arterial roadway with an intermittent center median and additional turn pockets at major intersections. Sidewalks and bike lanes exist along both sides of the roadway. The posted speed limit is 40 mph.

NE Goodwin Road: NE Goodwin Road is classified as an arterial roadway. The roadway is comprised of two lanes with additional turn lanes at major intersections. The posted speed limit is 50 mph.

NW Lake Road: NW Lake Road is a four-to-five lane arterial roadway with a center median in the project vicinity. Sidewalks and bike lanes exist along both sides of the roadway. The posted speed limit is 40 mph.

NW Larkspur Street: NW Larkspur Street is a two-to-three lane arterial roadway. Sidewalks exist along both sides of the roadway. Bike lanes exist along the west side of the roadway. The posted speed limit is 25 mph.

NW Parker Street: NW Parker Street is classified as an arterial roadway. Between NW 24th Avenue and NW 38th Avenue the roadway is comprised of four lanes and a center median with additional turn lanes at major intersections. Other sections of the roadway are comprised of two-to-three lanes with a center median and additional turn pockets at major intersections. Sidewalks and bike lanes exist on both sides of the roadway. The posted speed limit is 35 mph.

NW Payne Street: NW Payne Street is a two-lane collector roadway. Sidewalks exist along the east side of the roadway in developed areas. The posted speed limit is 25 mph.

As part of this study, levels of service analyses were performed for the following intersections:

- NW Lake Road/NW Friberg-Strunk Street/SE 1st Street
- NW Lake Road/NW Parker Street/NW Larkspur Street
- NW Camas Meadows Drive/NE Goodwin Road
- NW Camas Meadows Drive/NW Payne Street
- NW Camas Meadows Drive/Business Park Driveway/Project Access (West)
- NW Lake Road/NW Payne Street
- NW Camas Meadows Drive/Project Access (East)

The following intersections are signalized:

- NW Lake Road/NW Friberg-Strunk Street/SE 1st Street
- NW Lake Road/NW Parker Street/NW Larkspur Street

The following intersection is a roundabout:

- NW Camas Meadows Drive/NW Payne Street

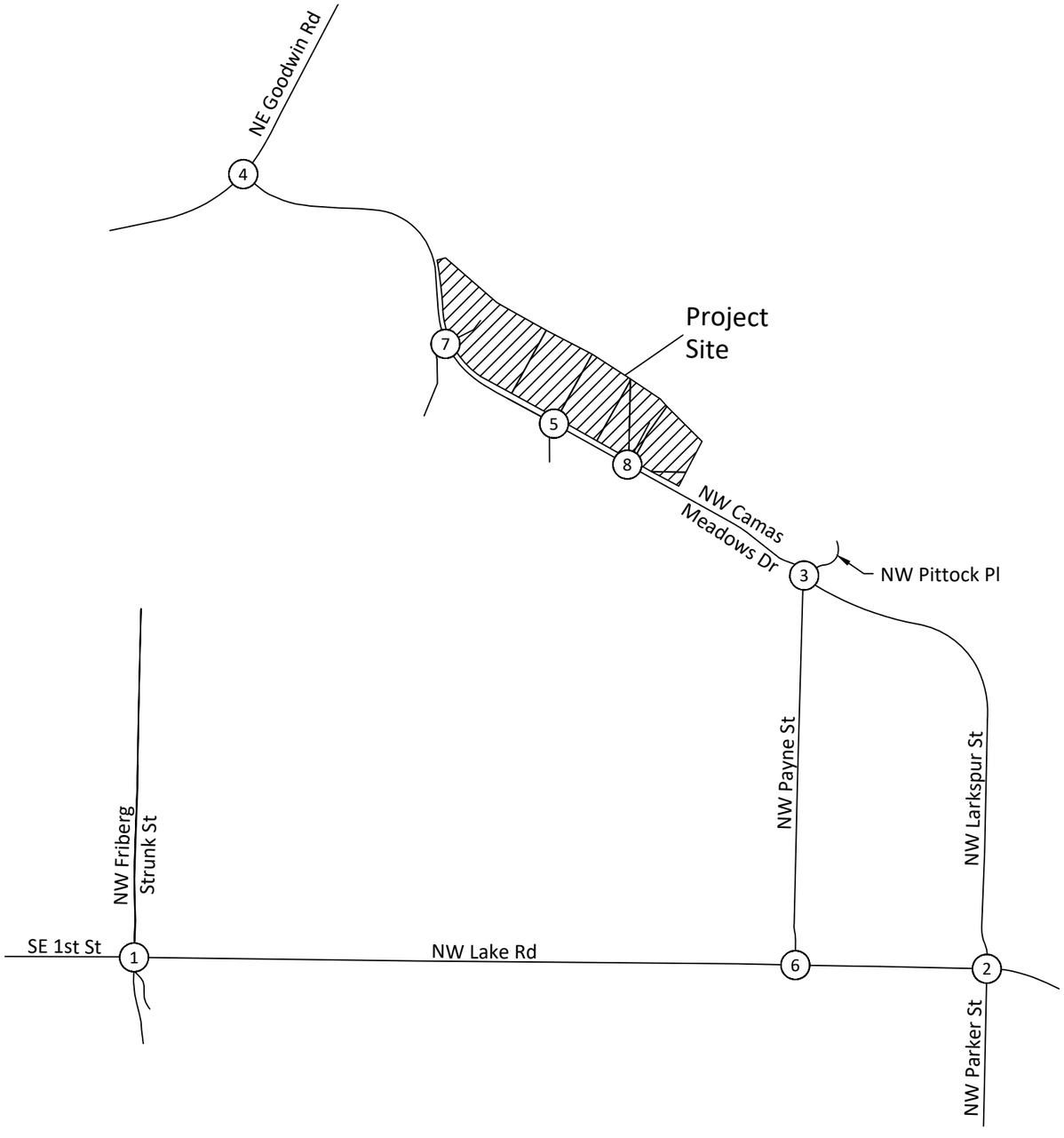
The remaining study area intersections are unsignalized and stop sign controlled. Figure 3 shows the existing lane configurations and traffic control at these intersections.

EXISTING TRAFFIC VOLUMES

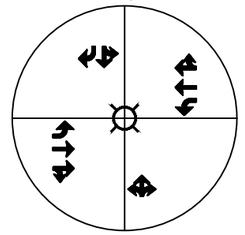
A.M. and P.M. peak hour traffic counts were obtained at the study area intersections by HLA in March 2023. Per the HCM, peak 15-minute traffic volumes were multiplied by four (4) to arrive at the peak hour traffic volumes. With this methodology of developing peak hour traffic volumes, the peak hour factor (PHF) is set to 1.00 because the peaking has already occurred by multiplying the peak 15-minute traffic volume by four (4). The existing condition traffic volumes are presented in Figure 4. The existing traffic counts can be referenced in Appendix A.

A speed study along NW Camas Meadows Drive was conducted between 12:00 A.M. on March 15, 2022 and 12:00 P.M. on March 17, 2022. The 85th percentile speed westbound was 40 mph. The 85th percentile eastbound was 40 mph. The speed study data can be referenced in Appendix A.

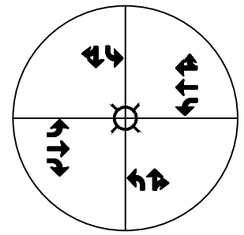
Camas Meadows Subdivision TIA
Camas, WA



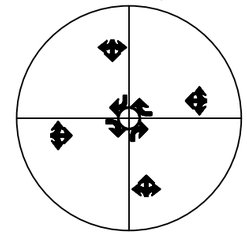
1. NW Lake Road/NW Friberg-Strunk Street/SE 1st Street



2. NW Lake Road/NW Parker Street/NW Larkspur Street



3. NW Camas Meadows Drive/NW Payne Street/NW Pittock Place



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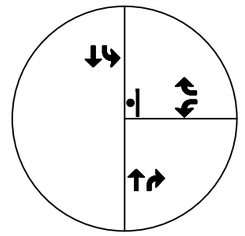
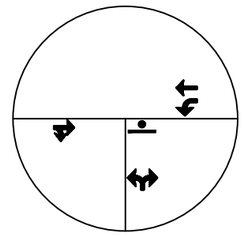
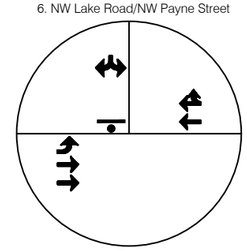


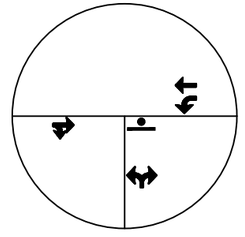
5. NW Camas Meadows Drive/Business Park Driveway (West)



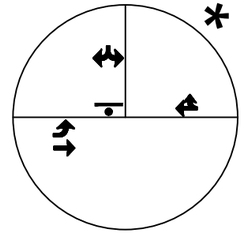
6. NW Lake Road/NW Payne Street



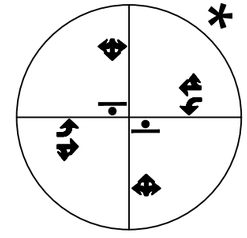
7. NW Camas Meadows Drive/Business Park Driveway (West)



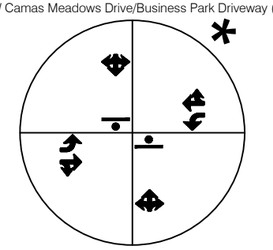
8. NW Camas Meadows Drive/Project Access (East)



5. NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)



7. NW Camas Meadows Drive/Business Park Driveway (West)



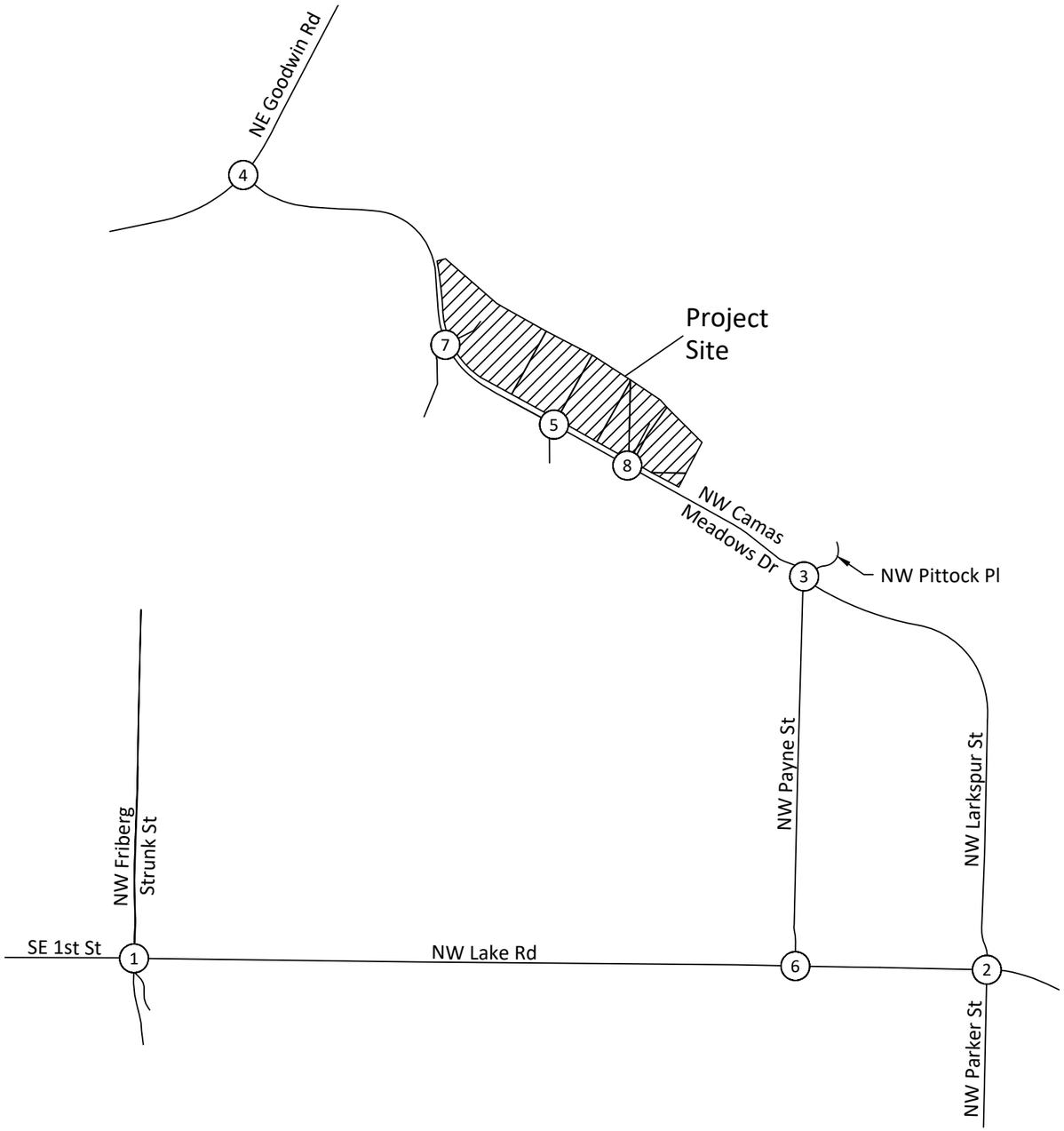
LEGEND

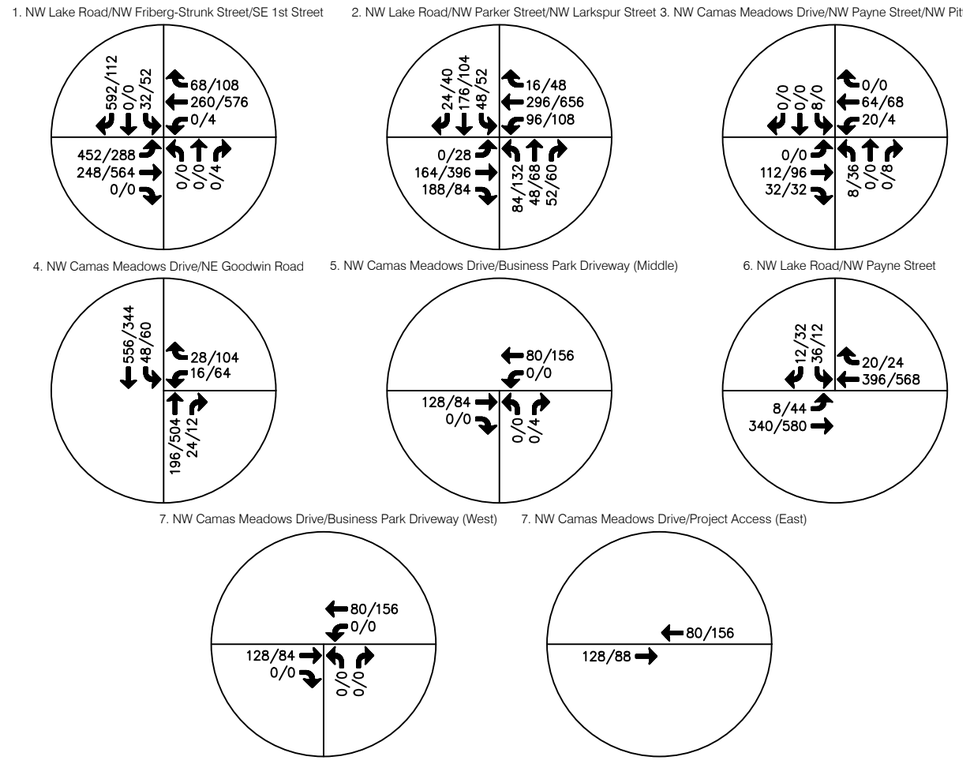
NOT TO SCALE

- Lane Usage
- Traffic Signal
- Stop Sign
- Roundabout
- * 2027 "With Project" Lane Configuration

FIGURE 3
Existing Lane Configuration and Traffic Control

Camas Meadows Subdivision TIA
Camas, WA





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 4
Existing A.M. and P.M.
Peak Hour Traffic Volumes

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EXISTING LEVEL OF SERVICE

Based on the traffic volumes in Figure 4 and the existing lane configurations presented in Figure 3, peak hour traffic operations were analyzed at the study area intersections using the methodologies outlined in the Highway Capacity Manual (HCM) 7th Edition. According to the HCM, there are six levels of service (LOS) by which the operational performance of an intersection may be described. These levels of service range between LOS "A" which indicates a relatively free-flowing condition and LOS "F" which indicates operational breakdown.

LOS D is the City of Camas' adopted level of service standard for arterial/collector intersections. For non-arterial/collector intersections, LOS C is the adopted level of service standard. It should be noted that all of the study area intersections are on an arterial, so the level of service standard that needs to be met is LOS D or better.

Existing A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 1. As shown in Table 1, all of the study area intersections are operating within the acceptable levels of service standards or better in the existing condition. Appendix B contains the levels of service worksheets for the existing condition.

Table 1. Existing Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW Lake Road/NW Friberg-Strunk Street/SE 1st Street	B	13.0	A	11.8
NW Lake Road/NW Parker Street/NW Larkspur Street	B	11.4	B	13.5
Roundabout Intersection				
NW Camas Meadows Drive/NW Payne Street	A	3.4	A	3.3
Unsignalized Intersection				
NW Camas Meadows Drive/NE Goodwin Road				
Westbound Left	C	17.2	C	22.6
Westbound Right	A	9.5	B	12.7
Southbound Left	A	7.9	A	8.6
NW Camas Meadows Drive/Business Park Driveway (Middle)				
Westbound Left	A	0.0	A	0.0
Northbound Approach	A	0.0	A	9.8
NW Lake Road/NW Payne Street				
Eastbound Left	A	8.2	A	8.8
Southbound Approach	B	13.1	C	14.0
NW Camas Meadows Drive/Business Park Driveway (West)				
Westbound Left	A	0.0	A	0.0
Northbound Approach	A	0.0	A	0.0

ACCIDENT HISTORY

Accident data was obtained from the Washington State Department of Transportation (WSDOT) for the five-year, two-month, and twenty-one day period between January 1, 2017 and March 21, 2022. The data includes total accidents and accidents by severity (i.e. fatal, injury or property damage only). This accident data is summarized in Table 2. Appendix C contains the accident data.

As shown in Table 2, none of the study area intersections have accident rates above 1.00 accidents per million entering vehicles. Accident rates above 1.00 accident per million entering vehicles do not necessarily indicate there is a safety problem, but it is an indicator that further analysis should be conducted. Intersections with accident rates of less than 1.00 accidents per million entering vehicles are considered acceptable and therefore no further analysis is required.

Table 2. Summary of Traffic Accident History in Study Area

Intersection	Average Annual Accidents				acc/mev[2]
	PDO[1]	Injury	Fatal	Total	
NW Lake Road/NW Friberg-Strunk Street/SE 1st Street	0.4	0.6	0.0	1.0	0.13
NW Lake Road/NW Parker Street/NW Larkspur Street	0.2	0.2	0.0	0.4	0.05
NW Camas Meadows Drive/NW Payne Street	0.0	0.0	0.0	0.0	0.00
NW Camas Meadows Drive/NE Goodwin Road	0.2	0.4	0.0	1.6	0.12
NW Camas Meadows Drive/Project Access (West)	0.0	0.0	0.0	0.0	0.00
NW Lake Road/NW Payne Street	0.2	0.0	0.0	0.2	0.03
NW Camas Meadows Drive/Project Access (East)	0.0	0.0	0.0	0.0	0.00

[1] PDO = property damage only
[2] acc/mev = accidents per million entering vehicles

EXISTING PUBLIC TRANSIT SERVICE

C-Tran provides public transit service in the City of Camas. Currently there are no routes that provide service adjacent to the project site. The closest route to the project site is Route #37 – Mill Plain/Fisher's, which is approximately 1.24 miles southwest of the project site at the SE 192nd Avenue/Mill Plain Boulevard intersection.

NON-MOTORIZED TRANSPORTATION

Sidewalks exist immediately adjacent to the project site along both sides of NW Camas Meadows Drive.

PLANNED TRANSPORTATION IMPROVEMENTS

There are four known transportation improvement projects planned by the City of Camas in the project vicinity based on the City of Camas' 2023-2028 Six Year Transportation Program. These projects are listed below:

NW 38th Avenue – NW Parker Street to Grass Valley Park
This project includes widening the existing roadway to accommodate for bike lanes and pedestrian access. The right-of-way phase of this project is currently underway and construction is anticipated for 2024. The estimated total project cost is $7,413,000. This project has a priority number of 1.

NW Payne Street – NW Lake Road to NW Camas Meadows Drive
This project includes widening the existing roadway to accommodate for bike lanes and pedestrian access. Preliminary engineering is anticipated to begin in 2027. This project has a priority number of 17.

NW Camas Meadows Drive – NE 13th Street to NE 18th Street
This project includes the construction of a new roadway. Preliminary engineering is anticipated to begin in 2027. This project has a priority number of 34.

NE Goodwin Road @ NW Camas Meadows Drive
This project includes upgrading the existing unsignalized intersection to a signalized intersection. Preliminary engineering is anticipated to begin in 2027. The estimated total project cost is $350,000. This project has a priority number of 39.

SECTION III
TRAFFIC IMPACT ANALYSIS

ANALYSIS METHODOLOGY

The A.M. and P.M. peak hour traffic impacts generated by the proposed Camas Meadows Subdivision were analyzed as follows:

- The 2028 "Without Project" traffic volumes were established as the future baseline condition for the traffic analysis and to define a baseline by which project impacts are determined. The 2028 "Without Project" condition traffic volumes were derived by using a 2.0 percent annual, compounded growth factor and adding traffic generated by "in process" developments. The "in-process" traffic volumes were obtained from the City of Camas staff.

- A.M., P.M., and daily trip generation were estimated for the proposed development using the rates in "Trip Generation, 11th Edition," (Institute of Transportation Engineers, 2021).

- Trip distribution of site-generated traffic was developed from existing count information, previous traffic studies, locations of major employment centers, and logical travel paths to and from major travel corridors.

- Predicted A.M. and P.M. peak hour site-generated traffic from the proposed development was assigned to the roadway network and added to the 2028 "Without Project" traffic volumes to develop the 2028 "With Project" traffic volumes.

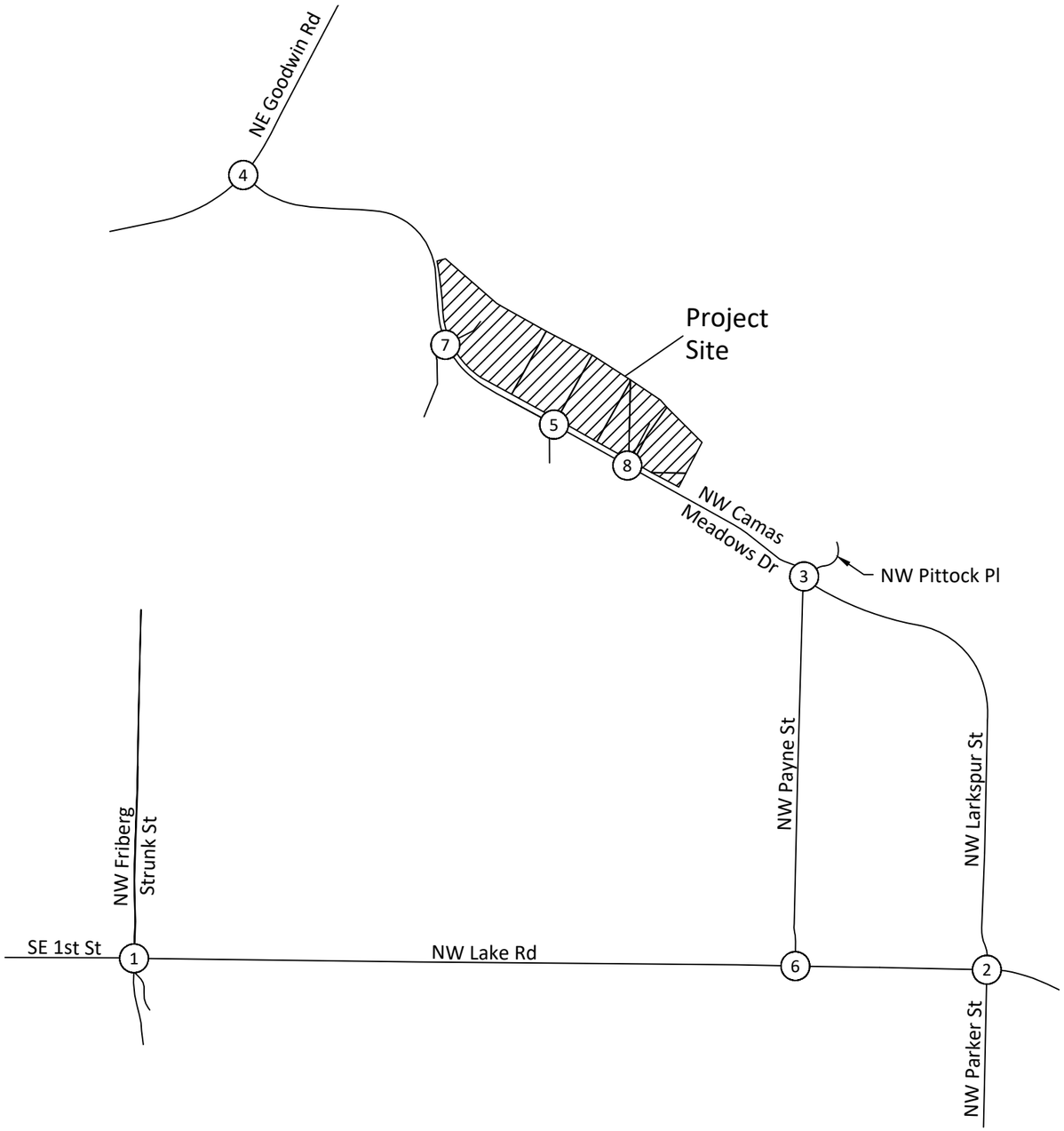
A detailed discussion of the methodology summarized above and the analysis results are contained in the remainder of this section.

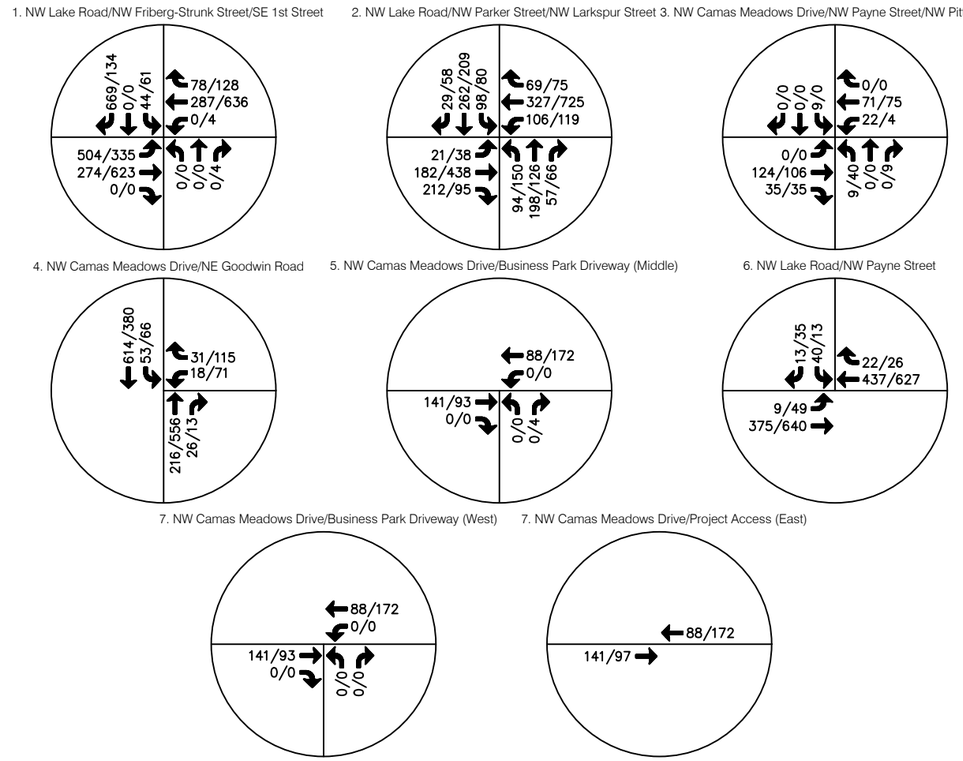
2028 "WITHOUT PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

The 2028 "Without Project" condition was analyzed as the future baseline condition for the traffic analysis and to define a baseline by which project impacts are determined. The 2028 "Without Project" condition traffic volumes were derived by using a 2.0 percent annual, compounded growth factor and adding traffic generated by "in process" developments. The "in-process" traffic volumes were obtained from the City of Camas staff and can be referenced in Appendix D. Figure 5 shows the 2028 "Without Project" traffic volumes.

Levels of service were calculated at the study area intersections with the 2028 "Without Project" traffic volumes shown in Figure 5 and the lane configurations shown earlier in Figure 3. Appendix E contains the level of service worksheets for the 2028 "Without Project" condition.

Camas Meadows Subdivision TIA
Camas, WA





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 5
2028 "Without Project"
A.M. and P.M. Peak Hour Traffic Volumes

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The 2028 "Without Project" A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 3. As shown in Table 3, all of the study area intersections are projected to operate within the acceptable levels of service standards or better in the 2028 "Without Project" condition.

Table 3. 2028 "Without Project" Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW Lake Road/NW Friberg-Strunk Street/SE 1st Street	B	15.0	A	12.8
NW Lake Road/NW Parker Street/NW Larkspur Street	B	13.2	B	15.5
Roundabout Intersection				
NW Camas Meadows Drive/NW Payne Street	A	3.4	A	3.3
Unsignalized Intersection				
NW Camas Meadows Drive/NE Goodwin Road				
Westbound Left	C	19.1	C	27.3
Westbound Right	A	9.6	B	13.6
Southbound Left	A	7.9	A	8.8
NW Camas Meadows Drive/Business Park Driveway (Middle)				
Westbound Left	A	0.0	A	0.0
Northbound Approach	A	0.0	A	9.8
NW Lake Road/NW Payne Street				
Eastbound Left	A	8.3	A	9.0
Southbound Approach	B	14.0	C	15.2
NW Camas Meadows Drive/Business Park Driveway (West)				
Westbound Left	A	0.0	A	0.0
Northbound Approach	A	0.0	A	0.0

DEVELOPMENT PLANS

As previously stated, the proposed project is a mixed-use development comprised of following uses:

- Single-Family Detached Housing – 47 units
- Single-Family Attached Housing – 36 units
- Brewpub – 6,500 square feet

Access to the proposed project will be from three newly constructed roadways onto NW Camas Meadows Drive. As previously shown, Figure 2 shows the project site plan.

TRIP GENERATION

Estimates of daily, A.M. peak hour, and P.M. peak hour trips generated by the proposed project were developed from rates published in "Trip Generation, 11th Edition" (Institute of Transportation Engineers, 2021). The proposed development is expected to generate 955 daily, 50 A.M. peak hour (14 in, 36 out), and 107 P.M. peak hour (70 in, 37 out) net new trips. It should be noted that there is no average daily or A.M. peak hour rate available in the *ITE Trip Generation Manual* for the proposed drinking place (ITE Code 975) use. The anticipated hours of operation for the proposed drinking place establishment will be approximately 11:00 A.M. to 11:00 P.M. So, there is no A.M. peak hour rate. As for the daily rate, it was estimated to be six (6) times the P.M. peak hour rate.

Since the proposed drinking place use is a variation of a restaurant use, it has similar trip making characteristics as a restaurant use which all have pass-by trips. HLA conservatively assumed a 43% pass-by trip rate for the drinking place use which was taken from ITE LUC 932 for high-turnover (sit-down) restaurant and is the lowest pass-by rate of all similar ITE restaurant uses. The pass-by trip rate used is from the 2021 Pass-By Table for ITETripGen Appendices spreadsheet provided in the ITETripGen Web-based App and can be referenced in Appendix F. Table 4 summarizes the project's trip generation.

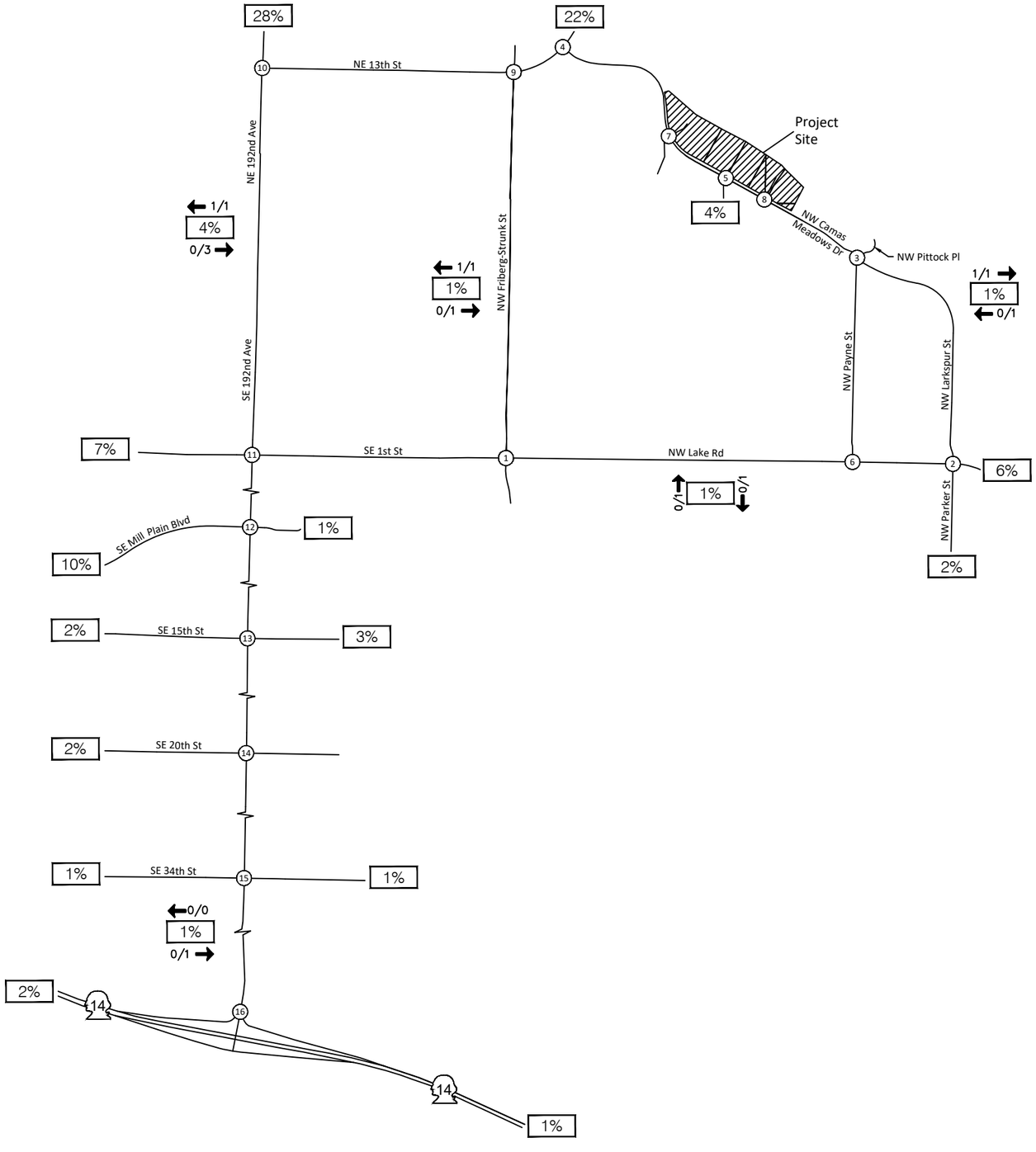
Table 4. Trip Generation Summary for Camas Meadows Subdivision

	Amount	Average Daily	A.M. Peak			P.M. Peak		
			In	Out	Total	In	Out	Total
Single-Family Detached Housing (ITE Code 210)								
Rate per dwelling unit		9.43	0.18	0.52	0.70	0.59	0.35	0.94
Trips	47 units	443	9	24	33	28	16	44
Single-Family Attached Housing (ITE Code 215)								
Rate per dwelling unit		7.20	0.15	0.33	0.48	0.25	0.32	0.57
Trips	36 units	259	5	12	17	9	12	21
Drinking Place (ITE Code 975)								
Rate per 1,000 square feet (ksf)		68.16	-	-	-	7.50	3.86	11.36
Trips	6.500 ksf	443	-	-	-	49	25	74
Pass-By Trips – 43%		(190)	-	-	-	(16)	(16)	(32)
Net Total for ITE LUC 938		253	-	-	-	33	-	42
Net Total Site Trips		**955**	**14**	**36**	**50**	**70**	**37**	**107**

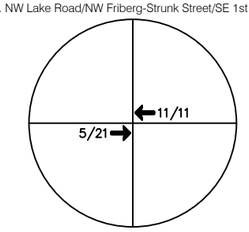
TRIP DISTRIBUTION AND ASSIGNMENT

A generalized peak hour trip distribution was developed from a select zone assignment from RTC's regional model. Appendix G contains the select zone assignment model run traffic volume plot. Figure 6a shows the resulting trip distribution pattern and assignment of net new project-generated trips. Figure 6b shows the resulting trip distribution pattern and assignment of the net pass-by trips.

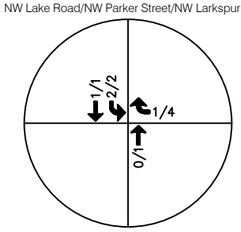
Camas Meadows Subdivision TIA
Camas, WA



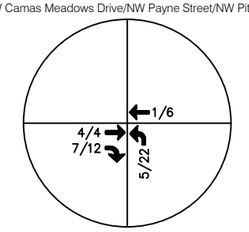
1. NW Lake Road/NW Friberg-Strunk Street/SE 1st Street



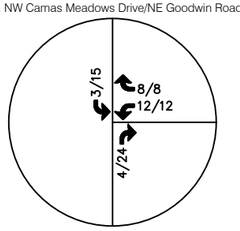
2. NW Lake Road/NW Parker Street/NW Larkspur Street



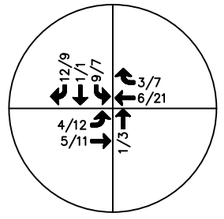
3. NW Camas Meadows Drive/NW Payne Street/NW Pittock Place



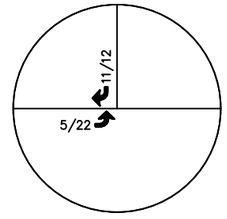
4. NW Camas Meadows Drive/NE Goodwin Road



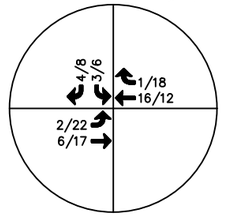
5. NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)



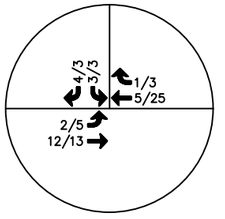
6. NW Lake Road/NW Payne Street



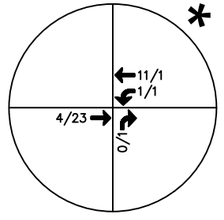
7. NW Camas Meadows Drive/Business Park Driveway/Project Access (West)



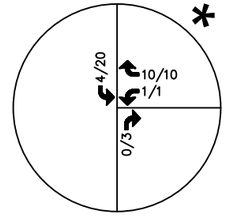
8. NW Camas Meadows Drive/Project Access (East)



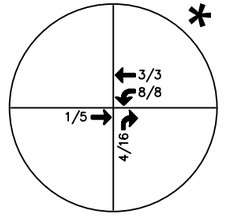
9. NE Goodwin Road/NW Friberg-Strunk Street/NE 13th Street *



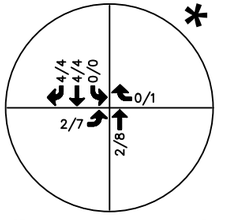
10. NE 192nd Avenue/NE 13th Street *



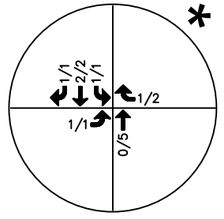
11. SE 192nd Avenue/SE 1st Street *



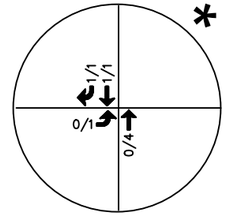
12. SE 192nd Avenue/SE Mill Plain Boulevard *



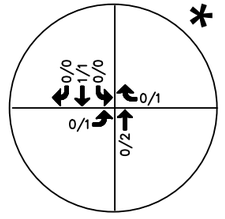
13. SE 192nd Avenue/SE 15th Street *



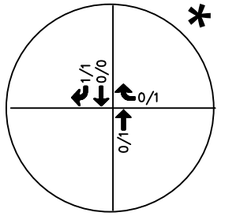
14. SE 192nd Avenue/SE 20th Street *



15. SE 192nd Avenue/SE 34th Street *



16. SE 192nd Avenue/SR 14 Westbound Ramps *



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

10% Peak Hour Trip Distribution

* Not Study Area Intersections. Shown for Trip Distribution and Assignment Purposes Only

NOT TO SCALE

FIGURE 6a
Trip Distribution and Assignment
Net Traffic Volumes

22008_Figures.Dwg

Camas Meadows Subdivision TIA
Camas, WA

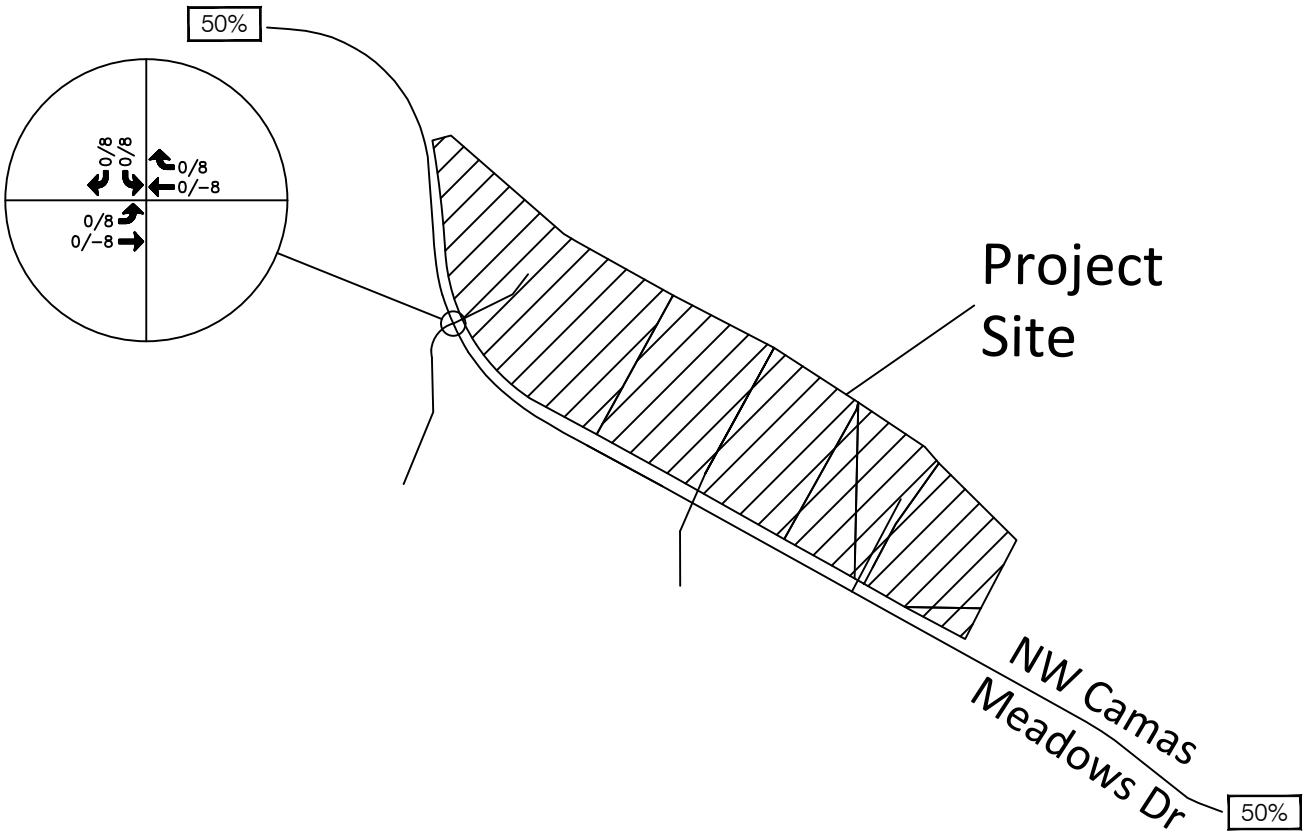


FIGURE 6b
Trip Distribution and Assignment
Pass-By Traffic Volumes

NOT TO SCALE

22008_Figures.Dwg

2028 "WITH PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

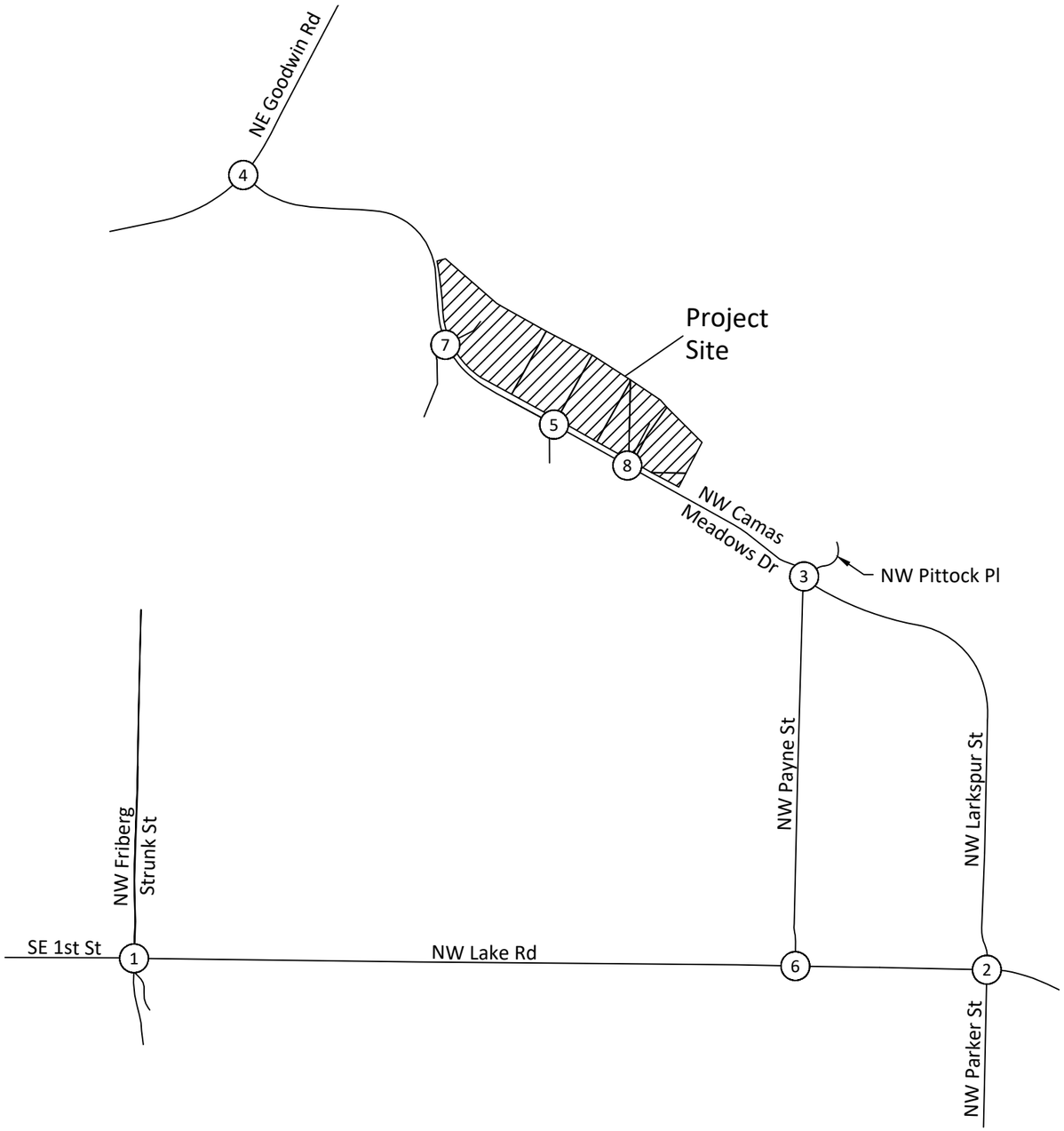
The traffic volumes shown in Figures 5, 6a, and 6b were combined to arrive at the 2028 "With Project" A.M. and P.M. peak hour traffic volumes. Figure 7 shows these traffic volumes. Levels of service were calculated for the 2028 "With Project" condition based on the traffic volumes shown in Figure 7 and the lane configurations previously shown in Figure 3. Appendix H contains the level of service worksheets for the 2028 "With Project" condition.

The 2028 "With Project" A.M. and P.M. peak hour levels of service at the study area intersections are summarized in Table 5. As shown in Table 5, all of the study area intersections are projected to operate within the acceptable levels of service standards in the 2028 "With Project" condition.

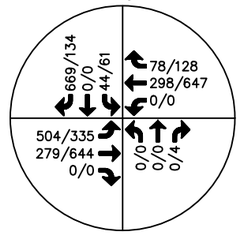
Table 5. 2028 "With Project" Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
NW Lake Road/NW Friberg-Strunk Street/SE 1st Street	B	15.1	A	12.8
NW Lake Road/NW Parker Street/NW Larkspur Street	B	13.3	B	15.6
Roundabout Intersection				
NW Camas Meadows Drive/NW Payne Street	A	3.5	A	3.4
Unsignalized Intersection				
NW Camas Meadows Drive/NE Goodwin Road				
Westbound Left	C	19.9	C	31.3
Westbound Right	A	9.7	B	13.7
Southbound Left	A	7.9	A	9.0
NW Camas Meadows Drive/Business Park Driveway (Middle)				
Eastbound Left	A	7.4	A	7.6
Westbound Left	A	0.0	A	0.0
Northbound Approach	A	9.5	B	10.1
Southbound Approach	B	10.5	B	11.2
NW Lake Road/NW Payne Street				
Eastbound Left	A	8.3	A	9.1
Southbound Approach	B	13.6	C	15.1
NW Camas Meadows Drive/Business Park Driveway (West)				
Eastbound Left	A	9.9	B	10.1
Westbound Left	A	9.6	B	10.4
Northbound Approach	A	0.0	A	7.2
Southbound Approach	A	7.2	A	0.0
NW Camas Meadows Drive/Project Access (East)				
Eastbound Left	A	7.4	A	7.6
Southbound Approach	A	9.2	A	9.9

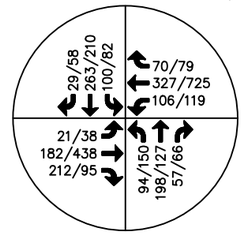
Camas Meadows Subdivision TIA
Camas, WA



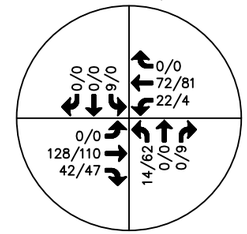
1. NW Lake Road/NW Friberg-Strunk Street/SE 1st Street



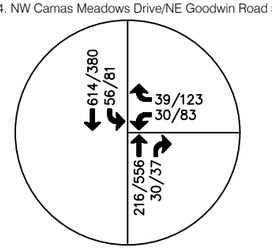
2. NW Lake Road/NW Parker Street/NW Larkspur Street



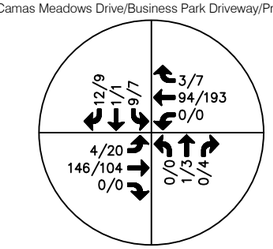
3. NW Camas Meadows Drive/NW Payne Street/NW Pittock Place



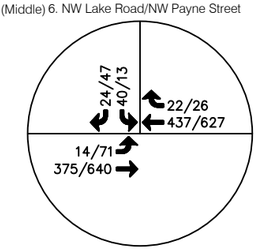
4. NW Camas Meadows Drive/NE Goodwin Road



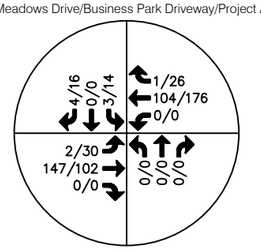
5. NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)



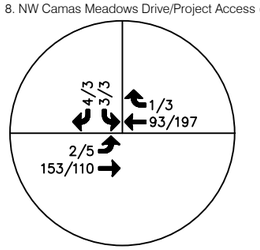
6. NW Lake Road/NW Payne Street



7. NW Camas Meadows Drive/Business Park Driveway/Project Access (West)



8. NW Camas Meadows Drive/Project Access (East)



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 7
2028 "With Project"
A.M. and P.M. Peak Hour Traffic Volumes

CORNER SIGHT DISTANCE

The minimum corner sight distance was analyzed for the project access intersections along NW Camas Meadows Drive. The minimum corner sight distance required for the proposed project access intersections along NW Camas Meadows Drive is based on the City of Camas' Design Standard Manual. Per the City of Camas' Design Standard Manual, public and private streets must comply with the sight distance requirements contained in the current "A Policy on Geometric Design on Highways and Streets," published by AASHTO (American Association of State Highway and Transportation Officials." The most recent edition of this reference is the 2018 – 7th Edition.

From AASHTO, the following intersection sight distances are relevant to the project's site access intersections:

- Case B1 – left turn from minor road
- Case B2 – right turn from minor road
- Case F – left from major road

The required sight distance for Case B1 based on a posted speed limit of 35 mph along NW Camas Meadows Drive is 390 feet. This requirement can be found in Table 9-7 of the "A Policy on Geometric Design on Highways and Streets," page 9-46.

The required sight distance for Case B2 based on a posted speed limit of 35 mph along NW Camas Meadows Drive is 335 feet. This requirement can be found in Table 9-9 of the "A Policy on Geometric Design on Highways and Streets," page 9-48.

The required sight distance for Case F based on a posted speed limit of 35 mph along NW Camas Meadows Drive is 285 feet. This requirement can be found in Table 9-17 of the "A Policy on Geometric Design on Highways and Streets," page 9-57.

The corner sight distance at the proposed project access intersections along NW Camas Meadows Drive were field measured and compared to the minimum acceptable AASHTO standards described above. Based on field measurements conducted by H. Lee & Associates, PLLC, all of the AASHTO sight distance requirements can be met at the proposed project access intersections along NW Camas Meadows Drive as long as any vegetation within the sight distance triangles is properly maintained and no obstructions that obscure the driver's sight distance are located within the sight distance triangles. Since the intersection is not yet built, the intersection corner sight distance should be re-verified at the final engineering stage of the project.

LANE WARRANT ANALYSIS

Turn lane warrants at the proposed project access intersections were not conducted due to a two-way center turn lane already existing along NW Camas Meadows Drive.

PROPORTIONATE SHARE FEES

The City of Vancouver is currently collecting proportionate share fees at the following City of Vancouver intersections:

- NE 192nd Avenue/NE 13th Street
- SE 192nd Avenue/SE 34th Street
- SE 192nd Avenue/SR-14 Westbound Ramps

The proportionate share fees are based on a cost per P.M. peak hour trip and P.M. peak hour project trip impact. The cost per P.M. peak hour trip of the proportionate share fees was obtained from City of Vancouver staff. Table 6 summarizes the required proportionate share fees for the Camas Meadows Subdivision based on the cost per P.M. peak hour trip and P.M. peak hour project trip impact.

It should be noted that the pro-rata share contributions identified is for the entire Camas Meadows Subdivision project. If the project is to be constructed by phase, the City of Vancouver should allow the pro-rata share contributions to be paid by phase based on the identified portion trip generation for each proposed use.

Table 6. Pro-Rata Share Contributions

Intersection	P.M. Peak Hour Impact		
	Project P.M. Peak Hour Trip Impact	Cost Per P.M. Peak Hour Trip Impact	Pro-rata Share Contribution Required
NE 192nd Avenue/NE 13th Street	34 P.M.	$400.00	$13,600.00
SE 192nd Avenue/SE 34th Street	5 P.M.	$150.00	$750.00
SE 192nd Avenue/SR-14 Westbound Ramps	3 P.M.	$2,000.00	$6,000.00

CONCLUSIONS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 955 daily, 50 A.M. peak hour (14 in, 36 out), and 107 P.M. peak hour (70 in, 37 out) net new trips.

- All of the study area intersections are projected to meet the City of Camas' level of service standards in the 2028 "Without Project" and 2028 "With Project" condition.

- Based on field measurements conducted by H. Lee & Associates, PLLC, the project access intersections should be able to meet the sight distance requirements as long as any vegetation within the sight distance triangles are properly maintained after construction and no obstructions are placed within the sight distance triangles that could impede a driver's vision. Because the accesses into the project site are not built, the corner sight distance should be re-verified in the final engineering/construction stages of development.

- Turn lane warrants at the proposed project access intersections were not conducted due to a two-way center turn lane already existing along NW Camas Meadows Drive.

Recommendations

- Based on the traffic impact analysis documented in this report, the following proportionate share fees are required at a City of Vancouver intersection impacted by the proposed project:

  - NE 192nd Avenue/NE 13th Street – $13,600.00
  - SE 192nd Avenue/SE 34th Street – $750.00
  - SE 192nd Avenue/SR-14 Westbound Ramps– $6,000.00

APPENDIX A

TRAFFIC COUNTS & SPEED STUDY

Intersection: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	23	0	10	3	10	56	0	4	0	1	2	0	0	38	15	1	155
7:15 - 7:30 AM	12	0	11	0	9	55	0	3	0	0	0	0	1	36	21	2	145
7:30 - 7:45 AM	23	0	25	4	13	71	0	2	1	0	0	0	0	54	21	2	208
7:45 - 8:00 AM	31	0	20	1	15	86	1	0	0	0	0	0	1	87	44	4	285
8:00 - 8:15 AM	32	0	16	3	12	80	0	2	0	0	0	0	0	74	50	3	264
8:15 - 8:30 AM	97	0	18	17	14	84	0	0	0	0	0	0	0	48	143	12	404
8:30 - 8:45 AM	148	0	8	9	17	65	0	2	0	0	0	0	0	62	113	6	413
8:45 - 9:00 AM	30	0	15	4	14	83	0	6	0	0	0	0	0	45	24	4	211
															Peak 15 Total		413
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	89	0	66	8	47	268	1	9	1	1	2	0	2	215	101	9	793
7:15 - 8:15 AM	98	0	72	8	49	292	1	7	1	0	0	0	2	251	136	11	902
7:30 - 8:30 AM	183	0	79	25	54	321	1	4	1	0	0	0	1	263	258	21	1,161
7:45 - 8:45 AM	308	0	62	30	58	315	1	4	0	0	0	0	1	271	350	25	1,366
8:00 - 9:00 AM	307	0	57	33	57	312	0	10	0	0	0	0	0	229	330	25	1,292
Peak Hour 7:45 - 8:45 AM	308	0	62	30	58	315	1	4	0	0	0	0	1	271	350	25	1,366
Peak Hour Factor		0.59				0.92				0.00				0.81			0.83
Peak Hour % Trucks		8%				1%				0%				4%			
Peak 15 Min % Trucks		6%				2%				0%				3%			

Intersection: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	24	0	6	1	15	110	0	2	1	0	0	0	1	123	45	2	325
4:15 - 4:30 PM	22	0	10	2	12	72	0	4	0	0	0	0	0	131	45	3	292
4:30 - 4:45 PM	21	0	15	0	29	83	0	2	0	0	0	0	0	119	47	1	314
4:45 - 5:00 PM	27	0	15	0	25	99	0	0	0	0	0	0	0	136	50	2	352
5:00 - 5:15 PM	28	0	13	0	27	144	1	1	1	0	0	0	0	141	72	0	427
5:15 - 5:30 PM	34	0	16	0	21	91	0	2	0	0	0	0	0	187	75	1	424
5:30 - 5:45 PM	41	0	18	0	21	72	1	1	0	0	0	0	0	154	81	0	388
5:45 - 6:00 PM	20	0	7	0	17	109	0	0	0	0	0	0	0	145	90	0	388
															Peak 15 Total		427
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	94	0	46	3	81	364	0	8	1	0	0	0	1	509	187	8	1,283
4:15 - 5:15 PM	98	0	53	2	93	398	1	7	1	0	0	0	0	527	214	6	1,385
4:30 - 5:30 PM	110	0	59	0	102	417	1	5	1	0	0	0	0	583	244	4	1,517
4:45 - 5:45 PM	130	0	62	0	94	406	2	4	1	0	0	0	0	618	278	3	1,591
5:00 - 6:00 PM	123	0	54	0	86	416	2	4	1	0	0	0	0	627	318	1	1,627
Peak Hour 5:00 - 6:00 PM	123	0	54	0	86	416	2	4	1	0	0	0	0	627	318	1	1,627
Peak Hour Factor		0.75				0.73				0.25				0.90			0.95
Peak Hour % Trucks		0%				1%				0%				0%			
Peak 15 Min % Trucks		0%				1%				0%				0%			

Intersection: NW Lake Road/NW Parker Street/NW Larkspur Street Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	5	10	1	0	3	44	4	3	8	4	12	1	14	32	0	3	137
7:15 - 7:30 AM	2	6	1	0	2	45	5	2	6	3	13	0	17	25	0	1	125
7:30 - 7:45 AM	8	12	8	2	1	67	15	0	7	7	6	1	34	25	7	3	197
7:45 - 8:00 AM	6	44	12	2	4	74	24	0	13	12	21	1	47	41	0	2	298
8:00 - 8:15 AM	4	15	9	3	8	74	16	2	20	7	22	0	30	60	5	1	270
8:15 - 8:30 AM	5	14	10	2	6	75	25	3	15	4	24	5	18	47	3	4	246
8:30 - 8:45 AM	4	28	14	0	8	57	25	2	33	11	33	1	32	48	3	6	296
8:45 - 9:00 AM	3	14	3	2	11	72	23	2	40	18	35	5	28	33	2	6	282
															Peak 15 Total		298
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	21	72	22	4	10	230	48	5	34	26	52	3	112	123	7	9	757
7:15 - 8:15 AM	20	77	30	7	15	260	60	4	46	29	62	2	128	151	12	7	890
7:30 - 8:30 AM	23	85	39	9	19	290	80	5	55	30	73	7	129	173	15	10	1,011
7:45 - 8:45 AM	19	101	45	7	26	280	90	7	81	34	100	7	127	196	11	13	1,110
8:00 - 9:00 AM	16	71	36	7	33	278	89	9	108	40	114	11	108	188	13	17	1,094
Peak Hour 7:45 - 8:45 AM	19	101	45	7	26	280	90	7	81	34	100	7	127	196	11	13	1,110
Peak Hour Factor		0.67				0.93				0.70				0.88			0.93
Peak Hour % Trucks		4%				2%				3%				4%			
Peak 15 Min % Trucks		3%				0%				2%				2%			

Intersection: NW Lake Road/NW Parker Street/NW Larkspur Street Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	4	13	3	0	4	89	22	1	17	13	28	2	26	83	6	1	308
4:15 - 4:30 PM	6	14	8	1	2	58	6	1	17	22	23	2	32	101	7	2	296
4:30 - 4:45 PM	10	26	13	1	12	164	27	2	15	17	33	1	21	99	7	0	444
4:45 - 5:00 PM	9	16	6	1	7	88	14	0	26	30	57	1	43	107	8	4	411
5:00 - 5:15 PM	4	13	8	0	4	92	9	0	26	25	57	1	39	102	9	2	388
5:15 - 5:30 PM	5	9	12	0	3	65	10	2	22	21	44	0	45	130	7	0	373
5:30 - 5:45 PM	5	24	8	0	15	63	7	0	20	22	34	0	64	111	7	0	380
5:45 - 6:00 PM	6	13	11	1	8	76	25	0	11	17	38	1	38	86	5	0	334
															Peak 15 Total		444
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	29	69	30	3	25	399	69	4	75	82	141	6	122	390	28	7	1,459
4:15 - 5:15 PM	29	69	35	3	25	402	56	3	84	94	170	5	135	409	31	8	1,539
4:30 - 5:30 PM	28	64	39	2	26	409	60	4	89	93	191	3	148	438	31	6	1,616
4:45 - 5:45 PM	23	62	34	1	29	308	40	2	94	98	192	2	191	450	31	6	1,552
5:00 - 6:00 PM	20	59	39	1	30	296	51	2	79	85	173	2	186	429	28	2	1,475
Peak Hour 4:30 - 5:30 PM	28	64	39	2	26	409	60	4	89	93	191	3	148	438	31	6	1,616
Peak Hour Factor		0.67				0.61				0.83				0.85			0.91
Peak Hour % Trucks		2%				1%				1%				1%			
Peak 15 Min % Trucks		2%				1%				2%				0%			

Intersection: NW Camas Meadows Drive/NW Payne Street Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	3	9	0	0	0	0	0	0	0	6	1	2	0	0	1	0	20
7:15 - 7:30 AM	5	5	0	0	0	0	0	0	0	4	7	1	0	0	8	0	29
7:30 - 7:45 AM	9	16	0	3	0	0	0	0	0	10	2	1	2	0	4	1	43
7:45 - 8:00 AM	8	28	0	2	0	0	2	0	0	16	5	0	0	0	2	0	61
8:00 - 8:15 AM	6	9	1	1	0	0	0	0	0	10	1	0	3	0	5	1	35
8:15 - 8:30 AM	5	9	0	0	0	0	0	0	0	9	1	1	0	0	5	0	29
8:30 - 8:45 AM	4	12	1	0	0	0	1	0	0	5	0	0	0	0	6	1	29
8:45 - 9:00 AM	3	13	1	4	0	1	0	1	1	14	1	1	0	1	7	1	42
															Peak 15 Total		61
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	25	58	0	5	0	0	2	0	0	36	15	4	2	0	15	1	153
7:15 - 8:15 AM	28	58	1	6	0	0	2	0	0	40	15	2	5	0	19	2	168
7:30 - 8:30 AM	28	62	1	6	0	0	2	0	0	45	9	2	5	0	16	2	168
7:45 - 8:45 AM	23	58	2	3	0	0	3	0	0	40	7	1	3	0	18	2	154
8:00 - 9:00 AM	18	43	3	5	0	1	1	1	1	38	3	2	3	1	23	3	135
Peak Hour 7:15 - 8:15 AM	28	58	1	6	0	0	2	0	0	40	15	2	5	0	19	2	168
Peak Hour Factor		0.60				0.25				0.65				0.75			0.69
Peak Hour % Trucks		7%				0%				4%				8%			
Peak 15 Min % Trucks		6%				0%				0%				0%			

Intersection: NW Camas Meadows Drive/NW Payne Street Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	7	9	0	0	2	0	0	0	1	14	1	1	1	0	3	0	38
4:15 - 4:30 PM	10	16	0	1	1	0	0	1	1	13	3	0	2	1	8	0	55
4:30 - 4:45 PM	8	11	0	1	0	0	0	0	0	11	0	0	1	0	4	0	35
4:45 - 5:00 PM	9	16	0	2	0	1	1	0	0	18	1	0	1	0	6	1	53
5:00 - 5:15 PM	8	16	0	0	0	0	0	0	0	23	2	1	0	0	11	0	60
5:15 - 5:30 PM	9	15	0	0	0	1	0	0	0	17	0	0	4	0	7	0	53
5:30 - 5:45 PM	8	24	0	0	0	0	0	0	0	17	1	0	2	0	9	0	61
5:45 - 6:00 PM	6	18	0	0	0	0	0	0	0	11	1	2	0	0	7	0	43
															Peak 15 Total		61
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	34	52	0	4	3	1	1	1	2	56	5	1	5	1	21	1	181
4:15 - 5:15 PM	35	59	0	4	1	1	1	1	1	65	6	1	4	1	29	1	203
4:30 - 5:30 PM	34	58	0	3	0	2	1	0	0	69	3	1	6	0	28	1	201
4:45 - 5:45 PM	34	71	0	2	0	2	1	0	0	75	4	1	7	0	33	1	227
5:00 - 6:00 PM	31	73	0	0	0	1	0	0	0	68	4	3	6	0	34	0	217
Peak Hour 4:45 - 5:45 PM	34	71	0	2	0	2	1	0	0	75	4	1	7	0	33	1	227
Peak Hour Factor		0.82				0.38				0.79				0.91			0.93
Peak Hour % Trucks		2%				0%				1%				3%			
Peak 15 Min % Trucks		0%				0%				0%				0%			

Intersection: NW Camas Meadows Drive/NE Goodwin Road Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	77	13	0	3	0	3	0	5	41	0	3	0	0	0	0	142
7:15 - 7:30 AM	0	78	14	3	12	0	1	1	6	23	0	3	0	0	0	0	134
7:30 - 7:45 AM	0	109	31	3	3	0	4	0	5	26	0	1	0	0	0	0	178
7:45 - 8:00 AM	0	103	34	5	12	0	4	0	11	37	0	4	0	0	0	0	201
8:00 - 8:15 AM	0	87	16	4	10	0	4	0	11	38	0	0	0	0	0	0	166
8:15 - 8:30 AM	0	139	12	14	7	0	4	1	6	49	0	10	0	0	0	0	217
8:30 - 8:45 AM	0	124	15	3	8	0	2	0	10	43	0	6	0	0	0	0	202
8:45 - 9:00 AM	0	88	10	6	11	0	7	0	7	37	0	4	0	0	0	0	160
															Peak 15 Total		217
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	367	92	11	30	0	12	1	27	127	0	11	0	0	0	0	655
7:15 - 8:15 AM	0	377	95	15	37	0	13	1	33	124	0	8	0	0	0	0	679
7:30 - 8:30 AM	0	438	93	26	32	0	16	1	33	150	0	15	0	0	0	0	762
7:45 - 8:45 AM	0	453	77	26	37	0	14	1	38	167	0	20	0	0	0	0	786
8:00 - 9:00 AM	0	438	53	27	36	0	17	1	34	167	0	20	0	0	0	0	745
Peak Hour 7:45 - 8:45 AM	0	453	77	26	37	0	14	1	38	167	0	20	0	0	0	0	786
Peak Hour Factor		0.88				0.80				0.93				0.00			0.91
Peak Hour % Trucks		5%				2%				10%				0%			
Peak 15 Min % Trucks		9%				9%				18%				0%			

Intersection: NW Camas Meadows Drive/NE Goodwin Road Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	71	8	0	18	0	11	2	8	87	0	0	0	0	0	0	203
4:15 - 4:30 PM	0	73	21	1	15	0	5	1	4	103	0	0	0	0	0	0	221
4:30 - 4:45 PM	0	77	11	2	12	0	7	0	8	84	0	1	0	0	0	0	199
4:45 - 5:00 PM	0	68	16	1	15	0	15	0	10	101	0	0	0	0	0	0	225
5:00 - 5:15 PM	0	63	13	0	33	0	14	0	9	107	0	0	0	0	0	0	239
5:15 - 5:30 PM	0	86	15	0	26	0	16	0	3	126	0	3	0	0	0	0	272
5:30 - 5:45 PM	0	81	18	1	22	0	10	0	8	116	0	1	0	0	0	0	255
5:45 - 6:00 PM	0	106	19	2	15	0	5	2	2	85	0	0	0	0	0	0	232
															Peak 15 Total		272
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	289	56	4	60	0	38	3	30	375	0	1	0	0	0	0	848
4:15 - 5:15 PM	0	281	61	4	75	0	41	1	31	395	0	1	0	0	0	0	884
4:30 - 5:30 PM	0	294	55	3	86	0	52	0	30	418	0	4	0	0	0	0	935
4:45 - 5:45 PM	0	298	62	2	96	0	55	0	30	450	0	4	0	0	0	0	991
5:00 - 6:00 PM	0	336	65	3	96	0	45	2	22	434	0	4	0	0	0	0	998
Peak Hour 5:00 - 6:00 PM	0	336	65	3	96	0	45	2	22	434	0	4	0	0	0	0	998
Peak Hour Factor		0.80				0.75				0.88				0.00			0.92
Peak Hour % Trucks		1%				1%				1%				0%			
Peak 15 Min % Trucks		0%				0%				2%				0%			

Intersection: NW Camas Meadows/Project Access (West) Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	0	0	0	0	7	0	1	0	0	0	0	0	13	0	0	20
7:15 - 7:30 AM	0	0	0	0	0	12	0	0	0	0	0	0	2	12	0	2	26
7:30 - 7:45 AM	0	0	0	0	0	8	1	0	0	0	0	0	1	31	0	2	41
7:45 - 8:00 AM	0	0	0	0	0	20	0	0	0	0	0	0	0	32	0	2	52
8:00 - 8:15 AM	0	0	0	0	0	13	0	0	1	0	0	0	0	16	0	1	30
8:15 - 8:30 AM	0	0	0	0	0	11	3	1	0	0	0	0	0	13	0	0	27
8:30 - 8:45 AM	0	0	0	0	0	9	0	0	0	0	0	0	0	18	0	1	27
8:45 - 9:00 AM	0	0	0	0	0	16	0	0	0	0	0	0	0	15	0	3	31
															Peak 15 Total		52
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	0	0	0	0	47	1	1	0	0	0	0	3	88	0	6	139
7:15 - 8:15 AM	0	0	0	0	0	53	1	0	1	0	0	0	3	91	0	7	149
7:30 - 8:30 AM	0	0	0	0	0	52	4	1	1	0	0	0	1	92	0	5	150
7:45 - 8:45 AM	0	0	0	0	0	53	3	1	1	0	0	0	0	79	0	4	136
8:00 - 9:00 AM	0	0	0	0	0	49	3	1	1	0	0	0	0	62	0	5	115
Peak Hour 7:30 - 8:30 AM	0	0	0	0	0	52	4	1	1	0	0	0	1	92	0	5	150
Peak Hour Factor		0.00				0.70				0.25				0.73			0.72
Peak Hour % Trucks		0%				2%				0%				5%			
Peak 15 Min % Trucks		0%				0%				0%				6%			

Intersection: NW Camas Meadows/Project Access (West) Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	0	0	0	0	21	0	0	0	0	1	0	0	17	0	0	39
4:15 - 4:30 PM	0	0	0	0	0	15	0	1	1	0	0	0	0	24	0	1	40
4:30 - 4:45 PM	0	0	0	0	0	14	0	0	1	0	0	1	0	19	0	0	34
4:45 - 5:00 PM	0	0	0	0	0	25	0	0	2	0	0	0	0	29	0	1	56
5:00 - 5:15 PM	0	0	0	0	0	39	0	0	1	0	0	1	0	21	0	0	61
5:15 - 5:30 PM	0	0	0	0	0	32	0	0	2	0	0	0	0	22	0	1	56
5:30 - 5:45 PM	0	0	0	0	0	22	0	0	0	0	0	0	0	27	0	1	49
5:45 - 6:00 PM	0	0	0	0	0	13	0	2	1	0	0	0	1	23	0	0	38
															Peak 15 Total		61
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	0	0	0	0	75	0	1	4	0	1	1	0	89	0	2	169
4:15 - 5:15 PM	0	0	0	0	0	93	0	1	5	0	0	2	0	93	0	2	191
4:30 - 5:30 PM	0	0	0	0	0	110	0	0	6	0	0	2	0	91	0	2	207
4:45 - 5:45 PM	0	0	0	0	0	118	0	0	5	0	0	1	0	99	0	3	222
5:00 - 6:00 PM	0	0	0	0	0	106	0	2	4	0	0	1	1	93	0	2	204
Peak Hour 4:45 - 5:45 PM	0	0	0	0	0	118	0	0	5	0	0	1	0	99	0	3	222
Peak Hour Factor		0.00				0.76				0.63				0.85			0.91
Peak Hour % Trucks		0%				0%				20%				3%			
Peak 15 Min % Trucks		0%				0%				100%				0%			

Intersection: NW Lake Road/NW Payne Street Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	5	0	6	1	5	60	0	2	0	0	0	0	0	39	1	2	116
7:15 - 7:30 AM	2	0	5	0	6	60	0	1	0	0	0	0	0	40	3	0	116
7:30 - 7:45 AM	5	0	12	0	0	87	0	1	0	0	0	0	0	69	1	4	174
7:45 - 8:00 AM	5	0	7	1	5	95	0	1	0	0	0	0	0	79	5	1	196
8:00 - 8:15 AM	3	0	9	0	5	99	0	1	0	0	0	0	0	85	2	1	203
8:15 - 8:30 AM	2	0	11	0	4	88	0	1	0	0	0	0	0	65	0	5	170
8:30 - 8:45 AM	5	0	6	0	6	100	0	1	0	0	0	0	0	67	7	6	191
8:45 - 9:00 AM	5	0	3	3	5	83	0	5	0	0	0	0	0	57	1	6	154
															Peak 15 Total		203
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	17	0	30	2	16	302	0	5	0	0	0	0	0	227	10	7	602
7:15 - 8:15 AM	15	0	33	1	16	341	0	4	0	0	0	0	0	273	11	6	689
7:30 - 8:30 AM	15	0	39	1	14	369	0	4	0	0	0	0	0	298	8	11	743
7:45 - 8:45 AM	15	0	33	1	20	382	0	4	0	0	0	0	0	296	14	13	760
8:00 - 9:00 AM	15	0	29	3	20	370	0	8	0	0	0	0	0	274	10	18	718
Peak Hour 7:45 - 8:45 AM	15	0	33	1	20	382	0	4	0	0	0	0	0	296	14	13	760
Peak Hour Factor		0.92				0.95				0.00				0.89			0.94
Peak Hour % Trucks		2%				1%				0%				4%			
Peak 15 Min % Trucks		0%				1%				0%				1%			

Intersection: NW Lake Road/NW Payne Street Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	7	0	8	0	5	95	0	1	0	0	0	0	0	113	9	1	237
4:15 - 4:30 PM	7	0	5	1	6	82	0	0	0	0	0	0	0	122	5	2	227
4:30 - 4:45 PM	5	0	4	1	3	128	0	2	0	0	0	0	0	125	9	1	274
4:45 - 5:00 PM	8	0	3	0	11	136	0	0	0	0	0	0	0	148	8	2	314
5:00 - 5:15 PM	8	0	3	1	6	142	0	0	0	0	0	0	0	145	11	0	315
5:15 - 5:30 PM	7	0	8	0	5	94	0	2	0	0	0	0	0	183	12	0	309
5:30 - 5:45 PM	5	0	4	0	7	114	0	0	0	0	0	0	0	159	3	0	292
5:45 - 6:00 PM	6	0	4	0	6	115	0	0	0	0	0	0	0	116	6	0	253
															Peak 15 Total		315
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	27	0	20	2	25	441	0	3	0	0	0	0	0	508	31	6	1,052
4:15 - 5:15 PM	28	0	15	3	26	488	0	2	0	0	0	0	0	540	33	5	1,130
4:30 - 5:30 PM	28	0	18	2	25	500	0	4	0	0	0	0	0	601	40	3	1,212
4:45 - 5:45 PM	28	0	18	1	29	486	0	2	0	0	0	0	0	635	34	2	1,230
5:00 - 6:00 PM	26	0	19	1	24	465	0	2	0	0	0	0	0	603	32	0	1,169
Peak Hour 4:45 - 5:45 PM	28	0	18	1	29	486	0	2	0	0	0	0	0	635	34	2	1,230
Peak Hour Factor		0.77				0.87				0.00				0.86			0.98
Peak Hour % Trucks		2%				0%				0%				0%			
Peak 15 Min % Trucks		9%				0%				0%				0%			

Intersection: NW Camas Meadows/Project Access (East) Date: 03/01/23

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	0	0	0	0	7	0	1	0	0	0	0	0	13	0	0	20
7:15 - 7:30 AM	0	0	0	0	0	12	0	0	0	0	0	0	0	12	0	2	24
7:30 - 7:45 AM	0	0	0	0	0	9	0	0	0	0	0	0	0	31	0	2	40
7:45 - 8:00 AM	0	0	0	0	0	20	0	0	0	0	0	0	0	32	0	2	52
8:00 - 8:15 AM	0	0	0	0	0	13	0	0	0	0	0	0	0	17	0	1	30
8:15 - 8:30 AM	0	0	0	0	0	14	0	1	0	0	0	0	0	13	0	0	27
8:30 - 8:45 AM	0	0	0	0	0	9	0	0	0	0	0	0	0	18	0	1	27
8:45 - 9:00 AM	0	0	0	0	0	16	0	0	0	0	0	0	0	15	0	3	31
															Peak 15 Total		52
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	0	0	0	0	48	0	1	0	0	0	0	0	88	0	6	136
7:15 - 8:15 AM	0	0	0	0	0	54	0	0	0	0	0	0	0	92	0	7	146
7:30 - 8:30 AM	0	0	0	0	0	56	0	1	0	0	0	0	0	93	0	5	149
7:45 - 8:45 AM	0	0	0	0	0	56	0	1	0	0	0	0	0	80	0	4	136
8:00 - 9:00 AM	0	0	0	0	0	52	0	1	0	0	0	0	0	63	0	5	115
Peak Hour 7:30 - 8:30 AM	0	0	0	0	0	56	0	1	0	0	0	0	0	93	0	5	149
Peak Hour Factor		0.00				0.70				0.00				0.73			0.72
Peak Hour % Trucks		0%				2%				0%				5%			
Peak 15 Min % Trucks		0%				0%				0%				6%			

Intersection: NW Camas Meadows/Project Access (East) Date: 03/01/23

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	0	0	0	0	21	0	0	0	0	0	0	0	17	0	0	38
4:15 - 4:30 PM	0	0	0	0	0	15	0	1	0	0	0	0	0	25	0	1	40
4:30 - 4:45 PM	0	0	0	0	0	14	0	0	0	0	0	0	0	20	0	0	34
4:45 - 5:00 PM	0	0	0	0	0	25	0	0	0	0	0	0	0	31	0	1	56
5:00 - 5:15 PM	0	0	0	0	0	39	0	0	0	0	0	0	0	22	0	0	61
5:15 - 5:30 PM	0	0	0	0	0	32	0	0	0	0	0	0	0	24	0	1	56
5:30 - 5:45 PM	0	0	0	0	0	22	0	0	0	0	0	0	0	27	0	1	49
5:45 - 6:00 PM	0	0	0	0	0	13	0	2	0	0	0	0	0	24	0	0	37
															Peak 15 Total		61
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	0	0	0	0	75	0	1	0	0	0	0	0	93	0	2	168
4:15 - 5:15 PM	0	0	0	0	0	93	0	1	0	0	0	0	0	98	0	2	191
4:30 - 5:30 PM	0	0	0	0	0	110	0	0	0	0	0	0	0	97	0	2	207
4:45 - 5:45 PM	0	0	0	0	0	118	0	0	0	0	0	0	0	104	0	3	222
5:00 - 6:00 PM	0	0	0	0	0	106	0	2	0	0	0	0	0	97	0	2	203
Peak Hour 4:45 - 5:45 PM	0	0	0	0	0	118	0	0	0	0	0	0	0	104	0	3	222
Peak Hour Factor		0.00				0.76				0.00				0.84			0.91
Peak Hour % Trucks		0%				0%				0%				3%			
Peak 15 Min % Trucks		0%				0%				0%				0%			

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Camas Meadows Subdivision

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NE Goodwin Road & NW Payne Street
Latitude: 0' 0.0000 Undefined

Westbound

Start	1	36	41	46	51	56	61	66	71	76	81	86	91	96		85th	95th
Time	35	40	45	50	55	60	65	70	75	80	85	90	95	999	Total	Percent	Percent
03/15/22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	29	33
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	44	44
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	39	39
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3	47	49
05:00	7	6	6	3	0	0	0	0	0	0	0	0	0	0	22	44	48
06:00	10	20	5	**4**	**1**	0	0	0	0	0	0	0	0	0	40	44	48
07:00	31	20	**10**	1	0	0	0	0	0	0	0	0	0	0	62	40	43
08:00	27	21	4	0	0	0	0	0	0	0	0	0	0	0	52	39	41
09:00	21	8	5	0	0	0	0	0	0	0	0	0	0	0	34	39	43
10:00	22	14	6	0	0	0	0	0	0	0	0	0	0	0	42	39	43
11:00	**48**	**25**	9	0	1	0	0	0	0	0	0	0	0	0	**83**	39	43
12 PM	24	12	5	0	0	0	0	0	0	0	0	0	0	0	41	39	42
13:00	34	19	5	1	0	0	0	0	0	0	0	0	0	0	59	39	43
14:00	41	34	5	2	0	0	0	0	0	0	0	0	0	0	82	39	42
15:00	40	30	10	0	**1**	0	0	0	0	0	0	0	0	0	81	39	43
16:00	**64**	**47**	**16**	1	1	0	0	0	0	0	0	0	0	0	**129**	39	43
17:00	41	32	11	**3**	0	0	0	0	0	0	0	0	0	0	87	40	44
18:00	34	24	2	0	0	0	0	0	0	0	0	0	0	0	60	38	39
19:00	9	9	2	0	0	0	0	0	0	0	0	0	0	0	20	39	42
20:00	8	7	2	0	0	0	0	0	0	0	0	0	0	0	17	39	42
21:00	5	2	1	1	1	0	0	0	0	0	0	0	0	0	10	47	52
22:00	2	2	1	0	0	0	0	0	0	0	0	0	0	0	5	41	43
23:00	3	0	2	0	0	0	0	0	0	0	0	0	0	0	5	43	44
Total	474	333	108	17	5	0	0	0	0	0	0	0	0	0	937		
Percent	50.6%	35.5%	11.5%	1.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	07:00	06:00	06:00										11:00		
Vol.	48	25	10	4	1										83		
PM Peak	16:00	16:00	16:00	17:00	15:00										16:00		
Vol.	64	47	16	3	1										129		

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Westbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	85th Percent	95th Percent
03/16/22	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	38	39
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	39	39
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	29	33
04:00	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3	47	49
05:00	6	8	5	2	**1**	0	0	0	0	0	0	0	0	0	22	44	49
06:00	14	13	6	3	1	0	0	0	0	0	0	0	0	0	37	43	48
07:00	29	20	**8**	**5**	0	0	0	0	0	0	0	0	0	0	62	42	46
08:00	28	**21**	6	1	0	0	0	0	0	0	0	0	0	0	56	39	43
09:00	24	5	0	0	0	0	0	0	0	0	0	0	0	**1**	30	35	38
10:00	26	19	4	1	0	0	0	0	0	0	0	0	0	0	50	39	43
11:00	**37**	21	7	3	0	0	0	0	0	0	0	0	0	0	**68**	39	44
12 PM	30	28	4	3	**1**	0	0	0	0	0	0	0	0	0	66	39	46
13:00	30	19	4	0	0	0	0	0	0	0	0	0	0	0	53	38	41
14:00	**40**	36	15	3	0	0	0	0	0	0	0	0	0	0	94	41	44
15:00	36	**37**	13	**5**	1	0	0	0	0	0	0	0	0	0	92	41	46
16:00	35	35	**31**	3	0	0	0	0	0	0	0	0	0	0	**104**	42	44
17:00	26	33	18	3	0	0	0	0	0	0	0	0	0	0	80	42	44
18:00	35	19	6	1	0	0	0	0	0	0	0	0	0	0	61	39	43
19:00	16	9	2	0	0	0	0	0	0	0	0	0	0	0	27	38	41
20:00	8	8	2	1	0	0	0	0	0	0	0	0	0	0	19	40	45
21:00	3	4	1	0	0	0	0	0	0	0	0	0	0	0	8	39	42
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3	42	44
23:00	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5	46	48
Total	427	343	134	36	4	0	0	0	0	0	0	0	0	1	945		
Percent	45.2%	36.3%	14.2%	3.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%			
AM Peak	11:00	08:00	07:00	07:00	05:00									09:00	11:00		
Vol.	37	21	8	5	1									1	68		
PM Peak	14:00	15:00	16:00	15:00	12:00										16:00		
Vol.	40	37	31	5	1										104		

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Latitude: 0' 0.0000 Undefined

Westbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	85th Percent	95th Percent
03/17/22	0	1	0	0	**1**	0	0	0	0	0	0	0	0	0	2	53	54
01:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	43	44
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	44	44
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	29	33
04:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	38	39
05:00	7	11	3	2	0	0	0	0	0	0	0	0	0	0	23	42	47
06:00	8	14	5	**3**	1	0	0	0	0	0	0	0	0	0	31	44	49
07:00	**35**	**26**	**6**	2	0	0	0	0	0	0	0	0	0	0	**69**	39	43
08:00	24	16	5	1	0	0	0	0	0	0	0	0	0	0	46	39	43
09:00	29	6	2	0	0	0	0	0	0	0	0	0	0	0	37	37	40
10:00	28	16	2	0	0	0	0	0	0	0	0	0	0	0	46	38	39
11:00	35	16	4	1	0	0	0	0	0	0	0	0	0	0	56	38	42
12 PM	33	20	3	0	0	0	0	0	0	0	0	0	0	0	56	38	40
13:00	32	16	3	4	0	0	0	0	0	0	0	0	0	0	55	39	46
14:00	35	22	6	**5**	0	0	0	0	0	0	0	0	0	0	68	40	46
15:00	**42**	40	15	2	**1**	0	0	0	0	0	0	0	0	0	100	40	44
16:00	39	**49**	12	5	0	0	0	0	0	0	0	0	0	0	**105**	40	44
17:00	34	38	**16**	3	0	0	0	0	0	0	0	0	0	0	91	41	44
18:00	15	24	3	0	0	**1**	0	0	0	**1**	0	0	0	0	44	39	44
19:00	23	15	5	0	0	0	0	0	0	0	0	0	0	0	43	39	42
20:00	11	3	2	0	0	0	0	0	0	0	0	0	0	0	16	39	42
21:00	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7	39	43
22:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5	38	39
23:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5	38	39
Total	442	342	95	28	3	1	0	0	0	1	0	0	0	0	912		
Percent	48.5%	37.5%	10.4%	3.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	06:00	00:00										07:00		
Vol.	35	26	6	3	1										69		
PM Peak	15:00	16:00	17:00	14:00	15:00	18:00				18:00					16:00		
Vol.	42	49	16	5	1	1				1					105		
Grand Total	1343	1018	337	81	12	1	0	0	0	1	0	0	0	1	2794		
Percent	48.1%	36.4%	12.1%	2.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	10 MPH
50th Percentile :	35 MPH
85th Percentile :	40 MPH
95th Percentile :	44 MPH

Statistics

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	1355
Percent in Pace :	48.5%
Number of Vehicles > 55 MPH :	3
Percent of Vehicles > 55 MPH :	0.1%
Mean Speed(Average) :	29 MPH

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NE Goodwin Road & NW Payne Street
Latitude: 0' 0.0000 Undefined

Eastbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	85th Percent	95th Percent
03/15/22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	29	33
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	38	39
03:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4	42	43
04:00	2	9	5	2	**1**	**1**	0	0	0	0	0	0	0	0	20	47	55
05:00	5	12	3	**5**	1	0	0	0	0	0	0	0	0	0	26	47	49
06:00	20	33	12	3	1	0	**1**	0	0	0	0	0	0	0	70	42	47
07:00	**37**	**42**	**13**	1	0	0	0	0	0	0	0	0	0	0	**93**	40	43
08:00	24	12	10	0	0	0	0	0	0	0	0	0	0	0	46	41	43
09:00	22	10	7	0	0	0	0	0	0	0	0	0	0	0	39	40	43
10:00	35	16	4	0	0	0	0	0	0	0	0	0	0	0	55	38	41
11:00	32	20	7	0	0	0	0	0	0	0	0	0	0	0	59	39	42
12 PM	36	21	9	2	0	0	0	0	0	0	0	0	0	0	68	40	44
13:00	25	19	5	0	0	0	0	0	0	0	0	0	0	0	49	39	42
14:00	39	33	6	**4**	0	0	0	0	0	0	0	0	0	0	82	39	44
15:00	38	30	**20**	2	0	0	0	0	0	0	0	0	0	0	90	42	44
16:00	**51**	**46**	15	2	0	0	0	0	0	0	0	0	0	0	**114**	39	43
17:00	29	35	7	0	0	0	0	0	0	0	0	0	0	0	71	39	42
18:00	16	14	9	1	0	0	0	0	0	0	0	0	0	0	40	42	44
19:00	7	12	3	0	0	0	0	0	0	0	0	0	0	0	22	39	43
20:00	4	10	3	0	**1**	0	0	0	0	0	0	0	0	0	18	42	50
21:00	10	2	1	0	0	0	0	0	0	0	0	0	0	0	13	37	41
22:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	38	39
23:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	48	49
Total	436	383	140	23	4	1	1	0	0	0	0	0	0	0	988		
Percent	44.1%	38.8%	14.2%	2.3%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	05:00	04:00	04:00	06:00								07:00		
Vol.	37	42	13	5	1	1	1								93		
PM Peak	16:00	16:00	15:00	14:00	20:00										16:00		
Vol.	51	46	20	4	1										114		

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Eastbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	85th Percent	95th Percent
03/16/22	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	38	39
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	39	39
03:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	48	49
04:00	3	9	3	2	**1**	0	**1**	0	0	0	0	0	0	0	19	47	60
05:00	7	10	**15**	3	1	0	0	0	0	0	0	0	0	0	36	44	48
06:00	15	28	12	3	0	0	0	0	0	0	0	0	0	0	58	42	45
07:00	**48**	**33**	11	**4**	0	0	0	0	0	0	0	0	0	0	**96**	40	44
08:00	25	21	7	1	0	0	0	0	0	0	0	0	0	0	54	39	43
09:00	26	11	0	1	1	0	0	0	0	0	0	0	0	0	39	38	45
10:00	27	17	4	0	0	0	0	0	0	0	0	0	0	0	48	39	42
11:00	39	26	14	2	0	0	0	0	0	0	0	0	0	0	81	41	44
12 PM	33	32	10	0	0	0	0	0	0	0	0	0	0	0	75	39	43
13:00	26	21	6	0	**1**	0	0	0	0	0	0	0	0	0	54	39	43
14:00	32	39	7	1	0	**1**	0	0	0	0	0	0	0	0	80	39	43
15:00	**40**	26	17	1	0	0	0	0	0	0	0	0	0	0	84	41	44
16:00	28	**44**	**20**	**3**	0	0	0	0	0	0	0	0	0	0	**95**	42	44
17:00	31	30	12	2	0	0	0	0	0	0	0	0	0	0	75	41	44
18:00	24	16	5	0	0	0	0	0	0	0	0	0	0	0	45	39	42
19:00	14	8	2	0	0	0	0	0	0	0	0	0	0	0	24	39	41
20:00	8	8	3	0	0	0	0	0	0	0	0	0	0	0	19	40	43
21:00	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6	38	39
22:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	38	39
23:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	43	44
Total	432	385	150	24	4	1	1	0	0	0	0	0	0	0	997		
Percent	43.3%	38.6%	15.0%	2.4%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	05:00	07:00	04:00		04:00								07:00		
Vol.	48	33	15	4	1		1								96		
PM Peak	15:00	16:00	16:00	16:00	13:00	14:00									16:00		
Vol.	40	44	20	3	1	1									95		

H. Lee & Associates, PLLC
P.O. Box 1849
Vancouver, WA 98668
(360) 727-3119

Camas Meadows Subdivision

Site Code:
Station ID:
NW Camas Meadows Drive between
NE Goodwin Road & NW Payne Street
Latitude: 0' 0.0000 Undefined

Eastbound

Start Time	1 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 999	Total	85th Percent	95th Percent
03/17/22	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	44	44
01:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	38	39
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	47	49
04:00	7	14	8	**3**	**1**	**1**	0	0	0	0	0	0	0	0	34	44	51
05:00	6	16	5	3	0	0	0	0	**1**	0	0	0	0	0	31	44	49
06:00	18	27	**15**	1	1	0	0	0	0	0	0	0	0	0	62	42	44
07:00	41	**36**	13	0	0	0	0	0	0	0	0	0	0	0	**90**	39	43
08:00	32	19	1	0	0	0	0	0	0	0	0	0	0	0	52	38	39
09:00	31	11	4	1	1	0	0	0	0	0	0	0	0	0	48	39	44
10:00	**48**	15	6	0	0	0	0	0	0	0	0	0	0	0	69	38	42
11:00	36	18	5	1	0	0	0	0	0	0	0	0	0	0	60	39	43
12 PM	**43**	15	3	0	0	0	0	0	0	0	0	0	0	0	61	37	39
13:00	32	15	3	2	0	0	0	0	0	0	0	0	0	0	52	39	44
14:00	31	**39**	9	1	**1**	0	0	0	0	0	0	0	0	0	81	39	43
15:00	36	38	**16**	**3**	0	0	0	0	0	0	0	0	0	**1**	**94**	41	44
16:00	32	34	10	1	1	0	0	0	0	0	0	0	0	0	78	40	44
17:00	21	25	10	1	0	0	0	0	0	0	0	0	0	0	57	41	44
18:00	18	12	3	3	0	0	0	0	0	0	0	0	0	0	36	40	46
19:00	17	10	2	0	0	0	0	0	0	0	0	0	0	0	29	38	41
20:00	7	6	3	1	0	0	0	0	0	0	0	0	0	0	17	42	45
21:00	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5	38	39
22:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	42	44
23:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	38	39
Total	462	356	120	22	5	1	0	0	1	0	0	0	0	1	968		
Percent	47.7%	36.8%	12.4%	2.3%	0.5%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%			
AM Peak	10:00	07:00	06:00	04:00	04:00	04:00			05:00						07:00		
Vol.	48	36	15	3	1	1			1						90		
PM Peak	12:00	14:00	15:00	15:00	14:00									15:00	15:00		
Vol.	43	39	16	3	1									1	94		
Grand Total	1330	1124	410	69	13	3	2	0	1	0	0	0	0	1	2953		
Percent	45.0%	38.1%	13.9%	2.3%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	11 MPH
50th Percentile :	35 MPH
85th Percentile :	40 MPH
95th Percentile :	44 MPH

Statistics

10 MPH Pace Speed :	36-45 MPH
Number in Pace :	1534
Percent in Pace :	51.9%
Number of Vehicles > 55 MPH :	7
Percent of Vehicles > 55 MPH :	0.2%
Mean Speed(Average) :	30 MPH

APPENDIX B

EXISTING LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.835

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	0	32	0	592	452	248	0	0	260	68
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	3.00	3.00	3.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	32	0	592	452	248	0	0	260	68
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	8	0	148	113	62	0	0	65	17
Total Analysis Volume [veh/h]	0	0	0	32	0	592	452	248	0	0	260	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	55	55	55	55	55	55	55	55	55
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	37	18	28	28	0	10	10
g / C, Green / Cycle	0.28	0.28	0.67	0.33	0.51	0.51	0.00	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.00	0.02	0.38	0.26	0.07	0.07	0.00	0.09	0.09
s, saturation flow rate [veh/h]	1900	1414	1538	1767	1855	1855	1781	1870	1740
c, Capacity [veh/h]	588	519	1039	579	941	941	0	337	313
d1, Uniform Delay [s]	0.00	14.80	4.74	16.78	7.18	7.18	0.00	20.42	20.48
k, delay calibration	0.11	0.11	0.24	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.05	1.08	2.33	0.06	0.06	0.00	1.14	1.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.06	0.57	0.78	0.13	0.13	0.00	0.50	0.51
d, Delay for Lane Group [s/veh]	0.00	14.85	5.82	19.12	7.25	7.25	0.00	21.56	21.78
Lane Group LOS	A	B	A	B	A	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.26	1.90	4.61	0.58	0.58	0.00	1.80	1.75
50th-Percentile Queue Length [ft/ln]	0.00	6.51	47.42	115.27	14.41	14.41	0.00	45.05	43.65
95th-Percentile Queue Length [veh/ln]	0.00	0.47	3.41	8.13	1.04	1.04	0.00	3.24	3.14
95th-Percentile Queue Length [ft/ln]	0.00	11.72	85.35	203.31	25.93	25.93	0.00	81.10	78.56

Movement, Approach, & Intersection Results

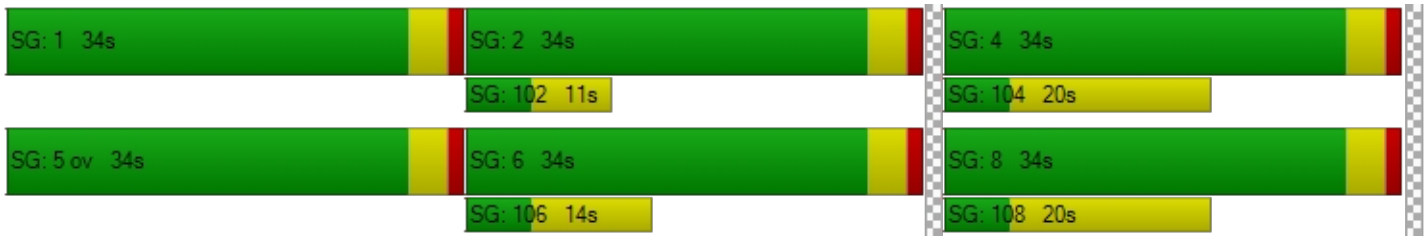
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	14.85	14.85	5.82	19.12	7.25	7.25	0.00	21.64	21.78
Movement LOS	A	A	A	B	B	A	B	A	A	A	C	C
d_A, Approach Delay [s/veh]	0.00			6.28			14.91			21.67		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	12.99											
Intersection LOS	B											
Intersection V/C	0.835											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.32	19.32	19.32	19.32
l_p,int, Pedestrian LOS Score for Intersection	1.691	2.412	2.679	2.480
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1088	1088	1088	1088
d_b, Bicycle Delay [s]	5.74	5.74	5.74	5.74
l_b,int, Bicycle LOS Score for Intersection	1.560	2.589	2.137	1.830
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.458

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	84	48	52	48	176	24	0	164	188	96	296	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	84	48	52	48	176	24	0	164	188	96	296	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	12	13	12	44	6	0	41	47	24	74	4
Total Analysis Volume [veh/h]	84	48	52	48	176	24	0	164	188	96	296	16
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	42	42	42	42	42	42	42	42	42	42
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	17	11	17	9	17	10	18	17	13	13
g / C, Green / Cycle	0.40	0.26	0.40	0.22	0.41	0.23	0.42	0.41	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.06	0.06	0.03	0.11	0.00	0.09	0.12	0.07	0.08	0.08
s, saturation flow rate [veh/h]	1391	1713	1404	1817	1151	1870	1589	1287	1900	1866
c, Capacity [veh/h]	700	439	768	391	659	435	668	703	596	586
d1, Uniform Delay [s]	8.16	12.49	7.82	14.70	0.00	13.72	8.10	7.98	10.91	10.91
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	0.26	0.03	1.03	0.00	0.54	0.23	0.09	0.23	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.23	0.06	0.51	0.00	0.38	0.28	0.14	0.26	0.26
d, Delay for Lane Group [s/veh]	8.23	12.75	7.85	15.73	0.00	14.26	8.33	8.06	11.14	11.15
Lane Group LOS	A	B	A	B	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.36	0.63	0.22	1.59	0.00	1.08	0.78	0.41	0.88	0.88
50th-Percentile Queue Length [ft/ln]	9.00	15.77	5.57	39.67	0.00	27.12	19.60	10.14	22.12	21.89
95th-Percentile Queue Length [veh/ln]	0.65	1.14	0.40	2.86	0.00	1.95	1.41	0.73	1.59	1.58
95th-Percentile Queue Length [ft/ln]	16.20	28.39	10.03	71.41	0.00	48.81	35.28	18.25	39.82	39.40

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.23	12.75	12.75	7.85	15.73	15.73	0.00	14.26	8.33	8.06	11.15	11.15
Movement LOS	A	B	B	A	B	B	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	10.69			14.21			11.09			10.42		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	11.45											
Intersection LOS	B											
Intersection V/C	0.458											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	13.10	13.10	13.10	13.10
l_p,int, Pedestrian LOS Score for Intersection	2.183	1.985	2.488	2.303
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1419	1419	1419	1419
d_b, Bicycle Delay [s]	1.79	1.79	1.79	1.79
l_b,int, Bicycle LOS Score for Intersection	1.863	1.969	2.140	1.896
Bicycle LOS	A	A	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	8	0	0	8	0	0	0	112	32	20	64	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	0	0	8	0	0	0	112	32	20	64	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	0	2	0	0	0	28	8	5	16	0
Total Analysis Volume [veh/h]	8	0	0	8	0	0	0	112	32	20	64	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	120			92			28			8		
Exiting Flow Rate [veh/h]	52			0			72			120		
Demand Flow Rate [veh/h]	8	0	0	8	0	0	0	112	32	20	64	0
Adjusted Demand Flow Rate [veh/h]	8	0	0	8	0	0	0	112	32	20	64	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	0.94	1.00	1.00
Entry Flow Rate [veh/h]	8	9	144	84
Capacity of Entry and Bypass Lanes [veh/h]	1221	1257	1341	1369
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1221	1186	1341	1369
X, volume / capacity	0.01	0.01	0.11	0.06

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.02	0.02	0.36	0.20
95th-Percentile Queue Length [ft]	0.49	0.51	9.00	4.90
Approach Delay [s/veh]	3.00	3.09	3.55	3.11
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.36			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	17.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.051

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	196	24	48	556	16	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	18.00	18.00	9.00	9.00	9.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	196	24	48	556	16	28
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	6	12	139	4	7
Total Analysis Volume [veh/h]	196	24	48	556	16	28
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.01	0.05	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	7.86	0.00	17.21	9.50
Movement LOS	A	A	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.11	0.00	0.16	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.85	0.00	4.05	2.62
d_A, Approach Delay [s/veh]	0.00		0.62		12.30	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.06					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	128	0	0	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	6.00	6.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	128	0	0	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	32	0	0	20
Total Analysis Volume [veh/h]	0	0	128	0	0	80
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.59	8.88	0.00	0.00	7.45	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.23		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	36	12	8	340	396	20
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	1.00	1.00	1.00	1.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	12	8	340	396	20
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	3	2	85	99	5
Total Analysis Volume [veh/h]	36	12	8	340	396	20
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.98	10.25	8.16	0.00	0.00	0.00
Movement LOS	B	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.32	0.32	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.00	8.00	0.53	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.05		0.19		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.85					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: NW Camas Meadows Drive/Business Park Driveway/Project Access (West)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	128	0	0	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	128	0	0	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	32	0	0	20
Total Analysis Volume [veh/h]	0	0	128	0	0	80
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.61	8.90	0.00	0.00	7.47	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.26		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Approach	Eastbound	Westbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	0
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Base Volume Input [veh/h]	149	91
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	6.00	0.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	149	91
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	23
Total Analysis Volume [veh/h]	149	91
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	11.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.668

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	4	52	0	112	288	564	0	4	576	108
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	4	52	0	112	288	564	0	4	576	108
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	13	0	28	72	141	0	1	144	27
Total Analysis Volume [veh/h]	0	0	4	52	0	112	288	564	0	4	576	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	39	39	39	39	39	39	39	39	39
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	21	9	19	19	0	10	10
g / C, Green / Cycle	0.21	0.21	0.53	0.22	0.48	0.48	0.01	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.07	0.16	0.15	0.15	0.00	0.19	0.19
s, saturation flow rate [veh/h]	1615	1525	1615	1810	1900	1900	1795	1885	1783
c, Capacity [veh/h]	434	506	861	396	908	908	10	498	471
d1, Uniform Delay [s]	12.27	12.60	4.63	14.31	6.32	6.32	19.56	13.12	13.14
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.09	0.07	2.55	0.19	0.19	23.45	1.83	1.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.10	0.13	0.73	0.31	0.31	0.40	0.70	0.71
d, Delay for Lane Group [s/veh]	12.28	12.69	4.69	16.86	6.51	6.51	43.01	14.95	15.10
Lane Group LOS	B	B	A	B	A	A	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.02	0.29	0.23	2.06	0.84	0.84	0.10	2.28	2.19
50th-Percentile Queue Length [ft/ln]	0.62	7.37	5.73	51.61	20.92	20.92	2.39	57.07	54.69
95th-Percentile Queue Length [veh/ln]	0.04	0.53	0.41	3.72	1.51	1.51	0.17	4.11	3.94
95th-Percentile Queue Length [ft/ln]	1.12	13.26	10.32	92.89	37.66	37.66	4.31	102.72	98.45

Movement, Approach, & Intersection Results

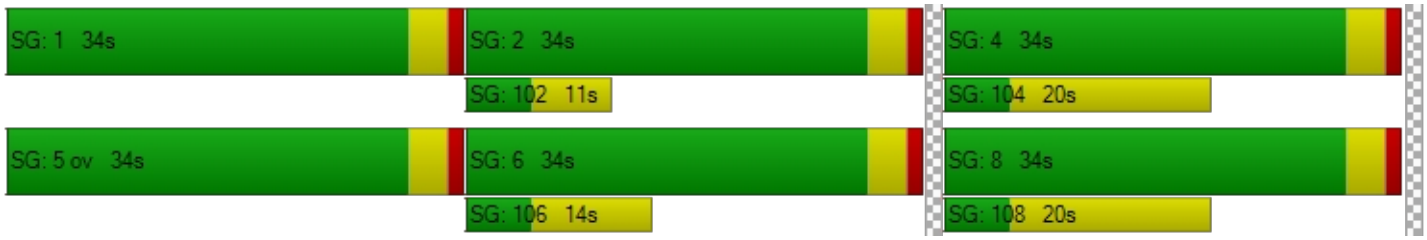
d_M, Delay for Movement [s/veh]	12.28	12.28	12.28	12.69	12.69	4.69	16.86	6.51	6.51	43.01	15.01	15.10
Movement LOS	B	B	B	B	B	A	B	A	A	D	B	B
d_A, Approach Delay [s/veh]	12.28			7.23			10.01			15.18		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	11.83											
Intersection LOS	B											
Intersection V/C	0.668											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	11.71	11.71	11.71	11.71
l_p,int, Pedestrian LOS Score for Intersection	1.674	2.139	2.656	2.670
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1524	1524	1524	1524
d_b, Bicycle Delay [s]	1.11	1.11	1.11	1.11
l_b,int, Bicycle LOS Score for Intersection	1.566	1.830	2.263	2.127
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	132	68	60	52	104	40	28	396	84	108	656	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	68	60	52	104	40	28	396	84	108	656	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	17	15	13	26	10	7	99	21	27	164	12
Total Analysis Volume [veh/h]	132	68	60	52	104	40	28	396	84	108	656	48
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	16	10	16	8	19	12	20	19	14	14
g / C, Green / Cycle	0.37	0.23	0.37	0.19	0.44	0.27	0.45	0.44	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.04	0.08	0.03	0.21	0.05	0.09	0.19	0.19
s, saturation flow rate [veh/h]	1442	1727	1401	1783	943	1900	1615	1178	1885	1840
c, Capacity [veh/h]	696	394	692	339	548	510	730	593	602	588
d1, Uniform Delay [s]	9.42	14.13	8.95	15.66	7.44	14.83	6.95	8.12	12.54	12.54
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.13	0.48	0.05	0.85	0.04	2.57	0.07	0.15	0.93	0.96
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.33	0.08	0.42	0.05	0.78	0.12	0.18	0.59	0.59
d, Delay for Lane Group [s/veh]	9.55	14.61	9.00	16.50	7.48	17.41	7.02	8.26	13.47	13.50
Lane Group LOS	A	B	A	B	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.67	0.92	0.27	1.20	0.10	3.14	0.31	0.44	2.42	2.37
50th-Percentile Queue Length [ft/ln]	16.66	22.96	6.85	30.11	2.58	78.61	7.72	11.08	60.61	59.31
95th-Percentile Queue Length [veh/ln]	1.20	1.65	0.49	2.17	0.19	5.66	0.56	0.80	4.36	4.27
95th-Percentile Queue Length [ft/ln]	29.99	41.33	12.33	54.19	4.64	141.49	13.90	19.95	109.09	106.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.55	14.61	14.61	9.00	16.50	16.50	7.48	17.41	7.02	8.26	13.48	13.50
Movement LOS	A	B	B	A	B	B	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	12.04			14.51			15.14			12.79		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.54											
Intersection LOS	B											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	13.79	13.79	13.79	13.79
l_p,int, Pedestrian LOS Score for Intersection	2.162	2.009	2.654	2.489
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1372	1372	1372	1372
d_b, Bicycle Delay [s]	2.15	2.15	2.15	2.15
l_b,int, Bicycle LOS Score for Intersection	1.989	1.883	2.398	2.230
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	36	0	8	0	0	0	0	96	32	4	68	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	0	8	0	0	0	0	96	32	4	68	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	0	2	0	0	0	0	24	8	1	17	0
Total Analysis Volume [veh/h]	36	0	8	0	0	0	0	96	32	4	68	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	96			108			4			36		
Exiting Flow Rate [veh/h]	36			0			104			104		
Demand Flow Rate [veh/h]	36	0	8	0	0	0	0	96	32	4	68	0
Adjusted Demand Flow Rate [veh/h]	36	0	8	0	0	0	0	96	32	4	68	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	1.00	1.00	1.00
Entry Flow Rate [veh/h]	44	0	128	72
Capacity of Entry and Bypass Lanes [veh/h]	1252	1237	1375	1331
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1252	1237	1375	1331
X, volume / capacity	0.04	0.00	0.09	0.05

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.11	0.00	0.31	0.17
95th-Percentile Queue Length [ft]	2.73	0.00	7.69	4.29
Approach Delay [s/veh]	3.16	2.91	3.35	3.13
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.25			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	22.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.239

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	504	12	60	344	64	104
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	504	12	60	344	64	104
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	126	3	15	86	16	26
Total Analysis Volume [veh/h]	504	12	60	344	64	104
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.06	0.00	0.24	0.18
d_M, Delay for Movement [s/veh]	0.00	0.00	8.60	0.00	22.60	12.69
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.18	0.00	0.91	0.66
95th-Percentile Queue Length [ft/ln]	0.00	0.00	4.49	0.00	22.73	16.49
d_A, Approach Delay [s/veh]	0.00		1.28		16.47	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	4	84	0	0	156
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	100.00	100.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	84	0	0	156
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	21	0	0	39
Total Analysis Volume [veh/h]	0	4	84	0	0	156
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.27	9.76	0.00	0.00	7.36	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.76		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	21.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	12	32	44	580	568	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	32	44	580	568	24
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	8	11	145	142	6
Total Analysis Volume [veh/h]	12	32	44	580	568	24
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.05	0.04	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	21.39	11.18	8.79	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.33	0.33	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.16	8.16	3.47	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.96		0.62		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.79					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: NW Camas Meadows Drive/Business Park Driveway/Project Access (West)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	84	0	0	156
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	84	0	0	156
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	21	0	0	39
Total Analysis Volume [veh/h]	0	0	84	0	0	156
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.81	8.69	0.00	0.00	7.38	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.25		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Approach	Eastbound	Westbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	0
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Base Volume Input [veh/h]	105	188
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	105	188
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	47
Total Analysis Volume [veh/h]	105	188
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

APPENDIX C

ACCIDENT DATA

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *in the vicinity of* THE FOLLOWING INTERSECTIONS IN THE CITIES OF CAMAS & VANCOUVER

1ST ST / LAKE RD @ 202ND AVE / FRIBERG-STRUNK ST
LAKE RD @ PAYNE ST
PARKER ST / LARKSPURT ST @ LAKE RD
PARKER ST @ 38TH AVE
CAMAS MEADOWS DR @ GOODWIN RD
CAMAS MEADOWS DR @ PAYNE ST
CAMAS MEADOWS DR FROM GOODWIN RD TO PAYNE ST

01/01/2017 - *available 2021*

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	A / B	SR ONLY HISTORY/ SUSPENSE	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# PEDS	# BIKES	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
City Street	Clark	Camas	NE LAKE RD	100		419	F	E	NW LAKE RD			No	3766527	08/22/2017	15:09	Suspected Minor Injury	2	0	2	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	East	Southeast	Vehicle Backing	Vehicle Stopped	Follow Too Closely			None	Lane of Primary Trafficway	1152003.85	104462.33
City Street	Clark	Camas	NW 38TH AVE	0	NW PARKER ST							No	E875200	12/15/2018	22:28	No Apparent Injury	0	0	1	0	At Intersection and Related	Raining	Wet	Dark-Street Lights On	Signal Pole	Going Straight Ahead		West	East			Under Influence of Alcohol	Disregard Stop and Go Light	Exceeding Reas. Safe Speed		Past the Outside Shoulder of Primary Trafficway	1141221.59	105906.4
City Street	Clark	Camas	NW 38TH AVE	0	NW PARKER ST							No	E809032	06/09/2018	02:00	No Apparent Injury	0	0	2	0	At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction - one left turn - one right turn	Making Left Turn	Making Right Turn	East	South	West	South	None			Other Contributing Circ Not Listed	Intersecting Trafficway	1141189.09	105907.21
City Street	Clark	Camas	NW 38TH AVE	0	NW PARKER ST							No	E812543	06/18/2018	11:45	Possible Injury	1	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	East	West	East	Vehicle Stopped	Inattention			None	Lane of Primary Trafficway	1141189.09	105907.21
City Street	Clark	Camas	NW 38TH AVE	4700		0.28	M	W	NW PARKER ST			No	E803290	05/19/2018	15:16	Suspected Minor Injury	1	0	2	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped in Roadway	East	West	West	Vehicle Stopped	Inattention			None	Lane of Primary Trafficway	1139711.45	105929.17
City Street	Clark	Camas	NW 38TH AVE	4700		250	F	W	NW PARKER ST			No	E932711	06/18/2019	17:42	No Apparent Injury	0	0	3	0	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	West	East	Vehicle Stopped	Vehicle Stopped	Distractions Outside Vehicle	Follow Too Closely		Driver Not Distracted	Lane of Primary Trafficway	1140939.28	105910.69
City Street	Clark	Camas	NW 38TH AVE	4700		0.3	M	W	NW PARKER ST			No	E767864	01/29/2018	02:00	No Apparent Injury	0	0	1	0	Not at Intersection and Not Related	Unknown	Wet	Dark-Street Lights On	Tree or Stump (stationary)	Going Straight Ahead		East	West			Operating Hands-Free Cell Phone				Median of Primary Trafficway	1139611.46	105930.52
City Street	Clark	Camas	NW 38TH AVE	4700		0.39	M	W	NW PARKER ST			No	3766523	02/03/2017	09:23	No Apparent Injury	0	0	1	0	Not at Intersection and Not Related	Overcast	Ice	Daylight	Tree or Stump (stationary)	Going Straight Ahead		West	East			Exceeding Reas. Safe Speed				Past the Outside Shoulder of Primary Trafficway	1139119.97	105937.93
City Street	Clark	Camas	NW LAKE RD	0	NW LARKSPUR ST							No	E982027	11/12/2019	08:49	No Apparent Injury	0	0	2	0	At Intersection and Related	Raining	Wet	Daylight	Entering at angle	Going Straight Ahead	Starting in Traffic Lane	East	West	North	South	Disregard Stop Sign - Flashing Red	Inattention		None	Lane of Primary Trafficway	1142166.91	111228.57
City Street	Clark	Camas	NW LAKE RD	0	NW PARKER ST							No	E840593	09/04/2018	19:55	Possible Injury	2	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	South	North	Disregard Stop and Go Light			Driver Not Distracted	Lane of Primary Trafficway	1142166.92	111228.58
City Street	Clark	Camas	NW LAKE RD	3716	NW PARKER ST							No	EB35916	06/03/2021	10:12	Possible Injury	1	0	3	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	Southeast	Northwest	South	North	Did Not Grant R/W to Non Motorist			None	Lane of Primary Trafficway	1142143.4	111229.4
City Street	Clark	Camas	NW LAKE RD	0	NW PARKER ST							No	E836135	09/08/2018	11:58	No Apparent Injury	0	0	2	0	At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Inattention	Follow Too Closely		None	Lane of Primary Trafficway	1142168.5	111190.54
City Street	Clark	Camas	NW LAKE RD	0	NW PAYNE ST							No	E751772	12/26/2017	11:30	No Apparent Injury	0	0	1	0	At Intersection and Not Related	Clear or Partly Cloudy	Ice	Daylight	Tree or Stump (stationary)	Going Straight Ahead		West	East			None				Past the Outside Shoulder of Primary Trafficway	1141102.94	111209.18
City Street	Clark	Camas	NW LAKE RD	3600		34	F	W	NW PARKER ST			No	E822462	07/18/2018	17:15	No Apparent Injury	0	0	3	0	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Operating Handheld Cell Phone			None	Lane of Primary Trafficway	1142135.08	111193.9
City Street	Clark	Camas	NW LAKE RD	3900		233	F	E	NW PAYNE ST			No	EB83959	10/30/2021	10:24	No Apparent Injury	0	0	1	0	Not at Intersection and Not Related	Clear	Dry	Daylight	Vehicle Strikes Deer	Going Straight Ahead		East	West			None				Lane of Primary Trafficway	1141335.41	111204.86

OFFICER REPORTED CRASHES THAT OCCURRED *at* OR *in the vicinity of* THE FOLLOWING INTERSECTIONS IN THE CITIES OF CAMAS & VANCOUVER

1ST ST / LAKE RD @ 202ND AVE / FRIBERG-STRUNK ST
LAKE RD @ PAYNE ST
PARKER ST / LARKSPURT ST @ LAKE RD
PARKER ST @ 38TH AVE
CAMAS MEADOWS DR @ GOODWIN RD
CAMAS MEADOWS DR @ PAYNE ST
CAMAS MEADOWS DR FROM GOODWIN RD TO PAYNE ST

01/01/2017 - *available 2021*

Under 23 U.S. Code § 148 and 23 U.S. Code § 407, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

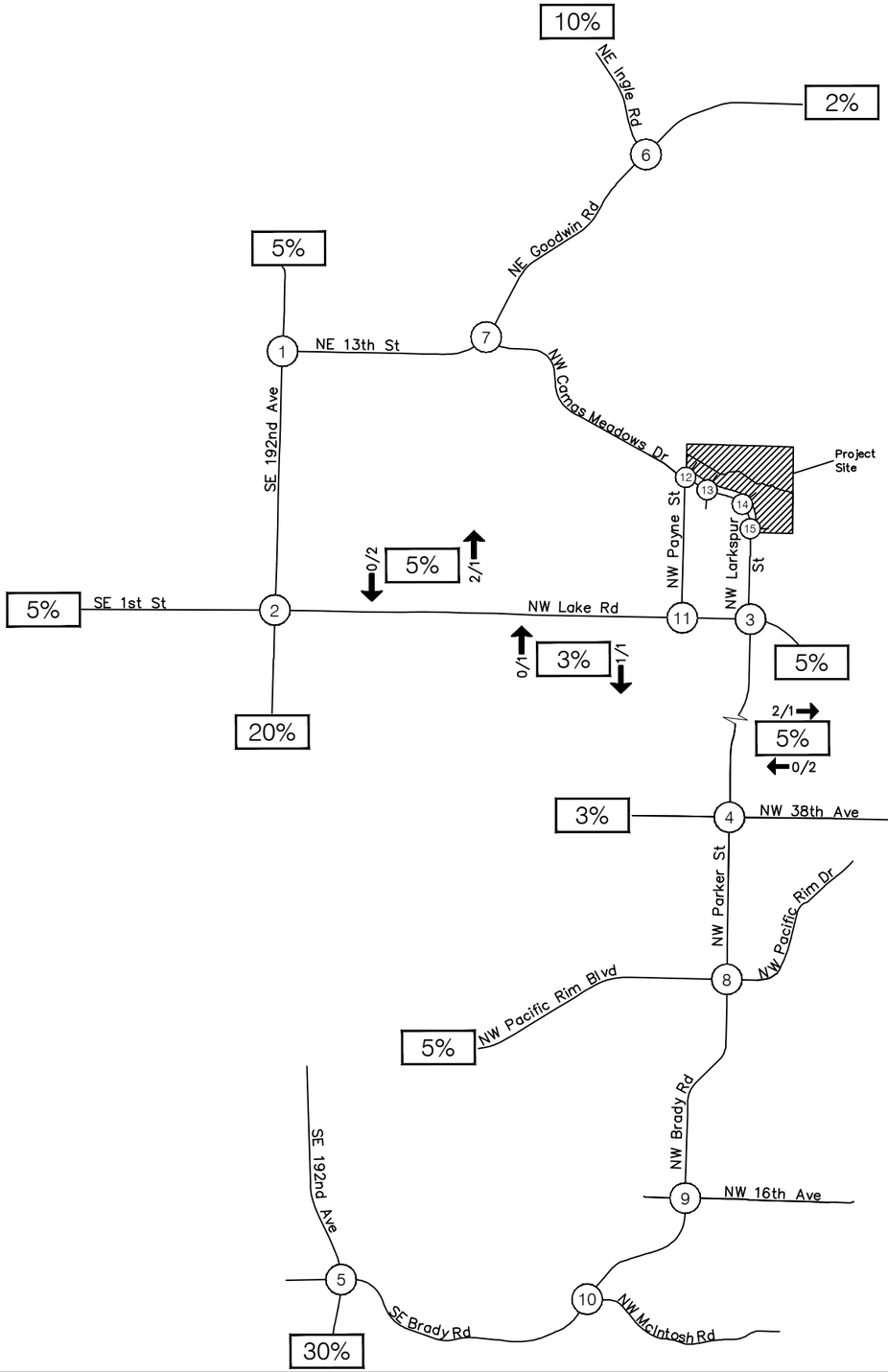
JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	BLOCK NUMBER	INTERSECTING TRAFFICWAY	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	MILEPOST	A / B	SR ONLY HISTORY/ SUSPENSE	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# PED	# BIKES	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH - X 2010 - FORWARD	WA STATE PLANE SOUTH - Y 2010 - FORWARD
City Street	Clark	Camas	NW LAKE RD	4200		0.1	M	W	NW PAYNE ST			No	E984979	11/21/2019	17:19	No Apparent Injury	0	0	2	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - both moving - sideswipe	Going Straight Ahead	Going Straight Ahead	West	East	West	East	Follow Too Closely			Distractions Outside Vehicle	Lane of Primary Trafficway	1140582.38	111218.3
City Street	Clark	Camas	NW LAKE RD	3900		124	F	E	NW PAYNE ST			No	E682840	06/06/2017	07:50	No Apparent Injury	0	0	1	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	Vehicle Strikes Deer	Going Straight Ahead		East	West			None				Lane of Primary Trafficway	1141228.85	111241.2
City Street	Clark	Camas	NW LAKE RD	4200		475	F	W	NW PAYNE ST			No	EA50130	07/24/2020	13:06	Possible Injury	1	0	2	0	Not at Intersection and Not Related	Overcast	Dry	Daylight	From same direction - both going straight - both moving - sideswipe	Changing Lanes	Changing Lanes	West	East	West	East	Other Contributing Circ Not Listed			Other Contributing Circ Not Listed	Lane of Primary Trafficway	1140627.46	111217.51
City Street	Clark	Camas	NW PARKER ST	0	NW LAKE RD							No	3766530	10/03/2017	06:59	Possible Injury	1	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle			None	Lane of Primary Trafficway	1142166.92	111228.58
City Street	Clark	Camas	NW PARKER ST	4300		438	F	N	NW 38TH AVE			No	E719818	09/26/2017	15:03	Possible Injury	1	0	2	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Inattention			None	Lane of Primary Trafficway	1141201.47	106344.24
City Street	Clark	Camas	NW PARKER ST	4300		0.2	M	N	NW 38TH AVE			No	E841376	09/23/2018	17:38	No Apparent Injury	0	0	1	0	Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight	Street Light Pole or Base	Going Straight Ahead		South	North			Driver Interacting with Passengers, Anim				Median of Primary Trafficway	1141241.98	106960.59
City Street	Clark	Vancouver	NE 202ND AVE	9900	SE 1ST ST							No	E928740	06/08/2019	22:44	Possible Injury	1	0	1	0	At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Tree or Stump (stationary)	Going Straight Ahead		North	South			Other Contributing Circ Not Listed	Exceeding Reas. Safe Speed			Other Location (City/County/Misc. Trafficway)	1137497.64	111285.35
City Street	Clark	Vancouver	NW FRIBERG STRUNK ST	200		112	F	N	NW LAKE RD			No	E869653	12/06/2018	15:25	Possible Injury	2	0	4	0	Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	North	South	Vehicle Stopped	Vehicle Stopped	Inattention			None	Lane of Primary Trafficway	1137495.99	111396.93
City Street	Clark	Vancouver	NW LAKE RD	9900	NW FRIBERG STRUNK ST							No	E774352	02/20/2018	19:25	No Apparent Injury	0	0	2	0	At Intersection and Related	Snowing	Snow/Slush	Dark-Street Lights On	From opposite direction - all others	Making U-Turn	Going Straight Ahead	East	East	West	East	Other Contributing Circ Not Listed			Other Contributing Circ Not Listed	Lane of Primary Trafficway	1137496.61	111331.95
City Street	Clark	Vancouver	SE 1ST ST	0	NW FRIBERG STRUNK ST							No	EA42305	06/22/2020	17:38	Suspected Minor Injury	1	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Going Straight Ahead	Making Left Turn	East	West	West	North	Unknown Distraction			None	Lane of Primary Trafficway	1137496.61	111331.93
City Street	Clark	Vancouver	SE 1ST ST	0	NW FRIBERG STRUNK ST							No	E846435	10/08/2018	06:53	No Apparent Injury	0	0	2	0	At Intersection and Related	Raining	Wet	Dawn	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Inattention	Did Not Grant RW to Vehicle		None	Lane of Primary Trafficway	1137496.61	111331.95
City Street	Clark	Camas	NE GOODWIN RD	0	NW CAMAS MEADOWS DR							No	E930592	06/13/2019	17:55	Possible Injury	1	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction - one left turn - one straight	Making Left Turn	Going Straight Ahead	Northeast	Southeast	Southwest	Northeast	Inattention			None	Lane of Primary Trafficway	1138096.36	115547.28
City Street	Clark	Camas	NE GOODWIN RD	0	NW CAMAS MEADOWS DR							No	E955382	08/30/2019	14:52	Possible Injury	1	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	South	West	West	East	Did Not Grant RW to Vehicle			None	Lane of Primary Trafficway	1138096.36	115547.28
City Street	Clark	Camas	NW CAMAS MEADOWS DR	0	NE GOODWIN RD							No	E767950	02/06/2018	19:25	No Apparent Injury	0	0	2	0	At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Making Left Turn	Going Straight Ahead	Southeast	Southwest	West	Northeast	Inattention			None	Lane of Primary Trafficway	1138096.36	115547.28

APPENDIX D

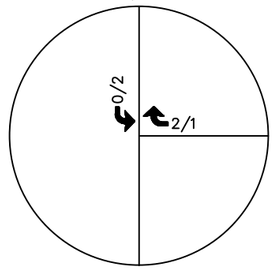
IN-PROCESS

Residential: 100% Built out (42 SFR Lots)
Commercial: 0% Built out

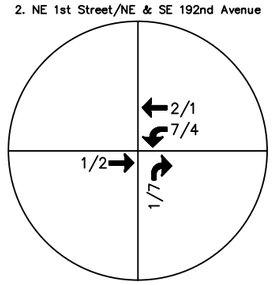
Parklands at Camas Meadows TIA
Camas, WA



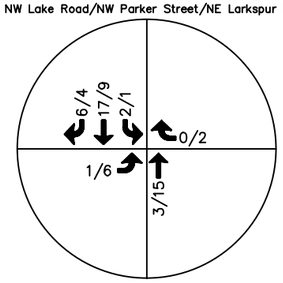
1. NE 13th Street/NE 192nd Avenue



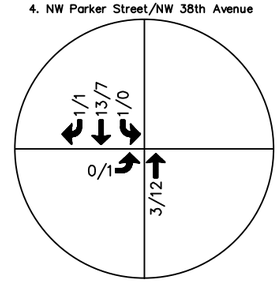
2. NE 1st Street/NE & SE 192nd Avenue



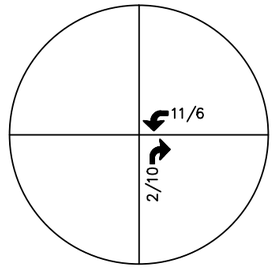
3. NW Lake Road/NW Parker Street/NE Larkspur Street



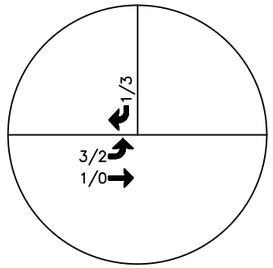
4. NW Parker Street/NW 38th Avenue



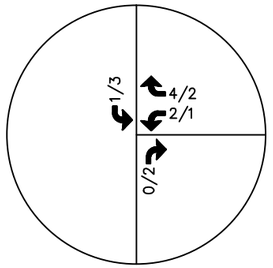
5. SE Brady Road/SE 192nd Avenue



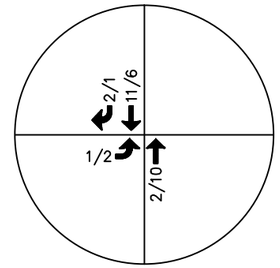
6. NE Goodwin Road/NE Ingle Road



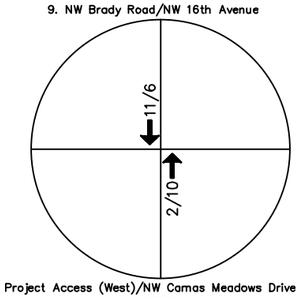
7. NE Goodwin Road/NW Camas Meadows Drive



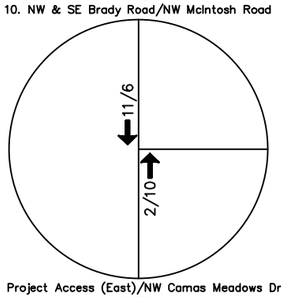
8. NW Parker Street/NW Pacific Rim Boulevard/NW Pacific Rim Drive



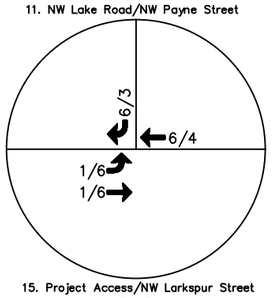
9. NW Brady Road/NW 16th Avenue



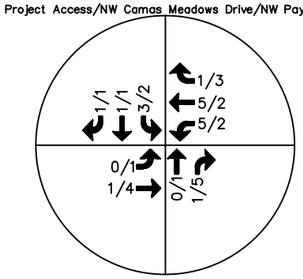
10. NW & SE Brady Road/NW McIntosh Road



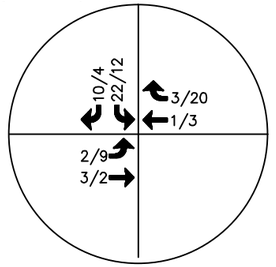
11. NW Lake Road/NW Payne Street



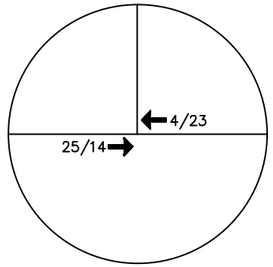
12. Project Access/NW Camas Meadows Drive/NW Payne Street



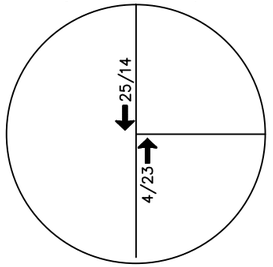
13. Project Access (West)/NW Camas Meadows Drive



14. Project Access (East)/NW Camas Meadows Drive



15. Project Access/NW Larkspur Street



NOT TO SCALE

LEGEND

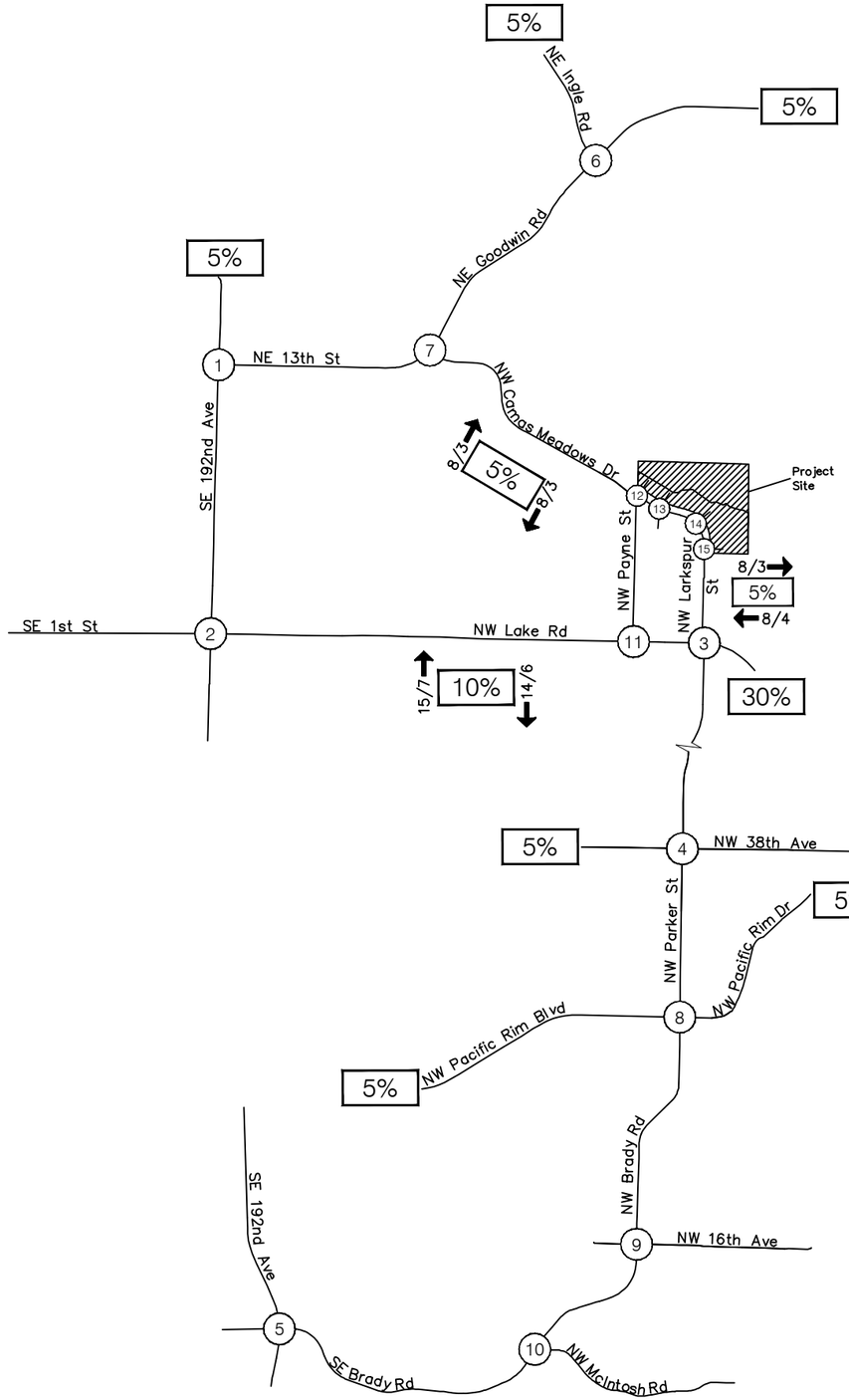
128/200 A.M./P.M. Peak Hour Traffic Volume

10% A.M. and P.M. Peak Hour Trip Distribution

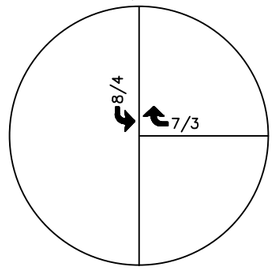
FIGURE 6a
"Residential"
Trip Distribution and Assignment
Traffic Volumes

315021.0Figures.Dwg

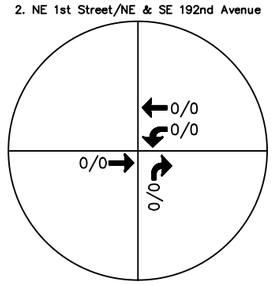
Parklands at Camas Meadows TIA
Camas, WA



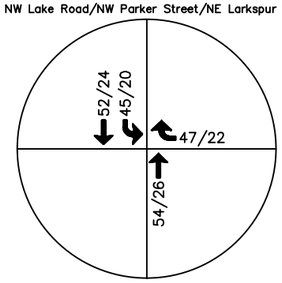
1. NE 13th Street/NE 192nd Avenue



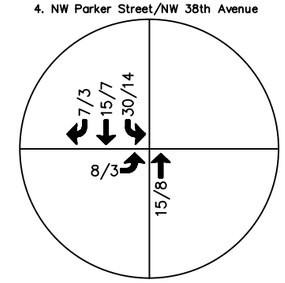
2. NE 1st Street/NE & SE 192nd Avenue



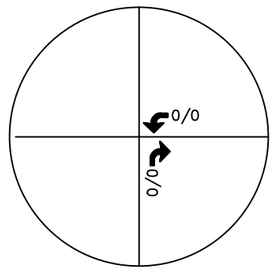
3. NW Lake Road/NW Parker Street/NE Larkspur Street



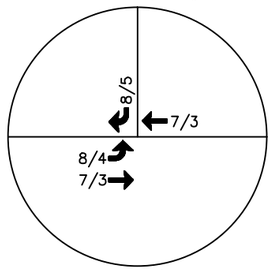
4. NW Parker Street/NW 38th Avenue



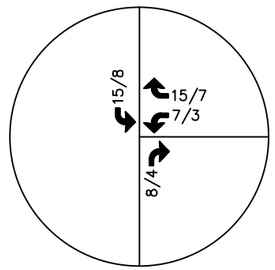
5. SE Brady Road/SE 192nd Avenue



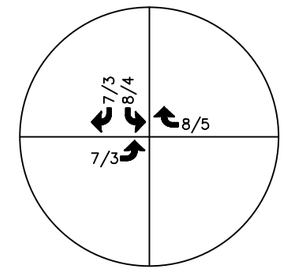
6. NE Goodwin Road/NE Ingle Road



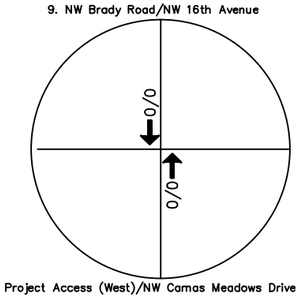
7. NE Goodwin Road/NW Camas Meadows Drive



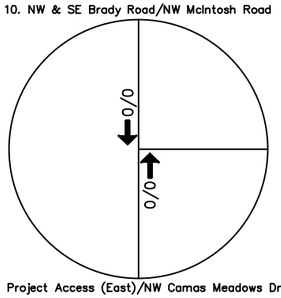
8. NW Parker Street/NW Pacific Rim Boulevard/NW Pacific Rim Drive



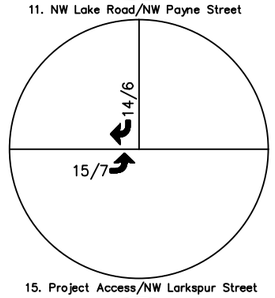
9. NW Brady Road/NW 16th Avenue



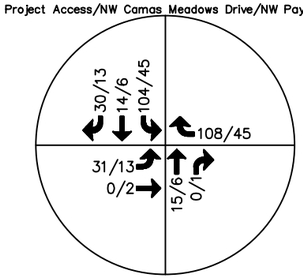
10. NW & SE Brady Road/NW McIntosh Road



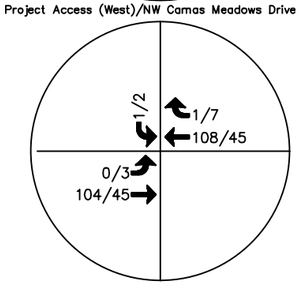
11. NW Lake Road/NW Payne Street



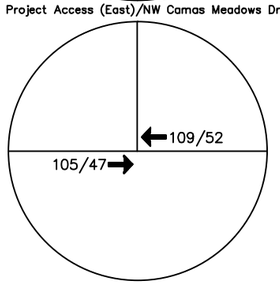
12. Project Access/NW Camas Meadows Drive/NW Payne Street



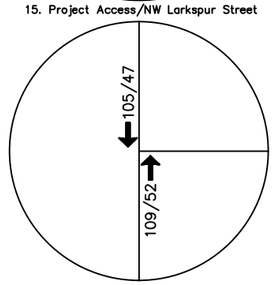
13. Project Access (West)/NW Camas Meadows Drive



14. Project Access (East)/NW Camas Meadows Drive



15. Project Access/NW Larkspur Street



NOT TO SCALE

LEGEND

100/128 A.M./P.M. Peak Hour Traffic Volumes

10% A.M. and P.M. Peak Hour Trip Distribution

FIGURE 6b
"Coffee Shop/Quality Restaurant"
Trip Distribution and Assignment
Traffic Volumes

315021.0Figures.Dwg

Parklands at Camas Meadows TIA
Camas, WA

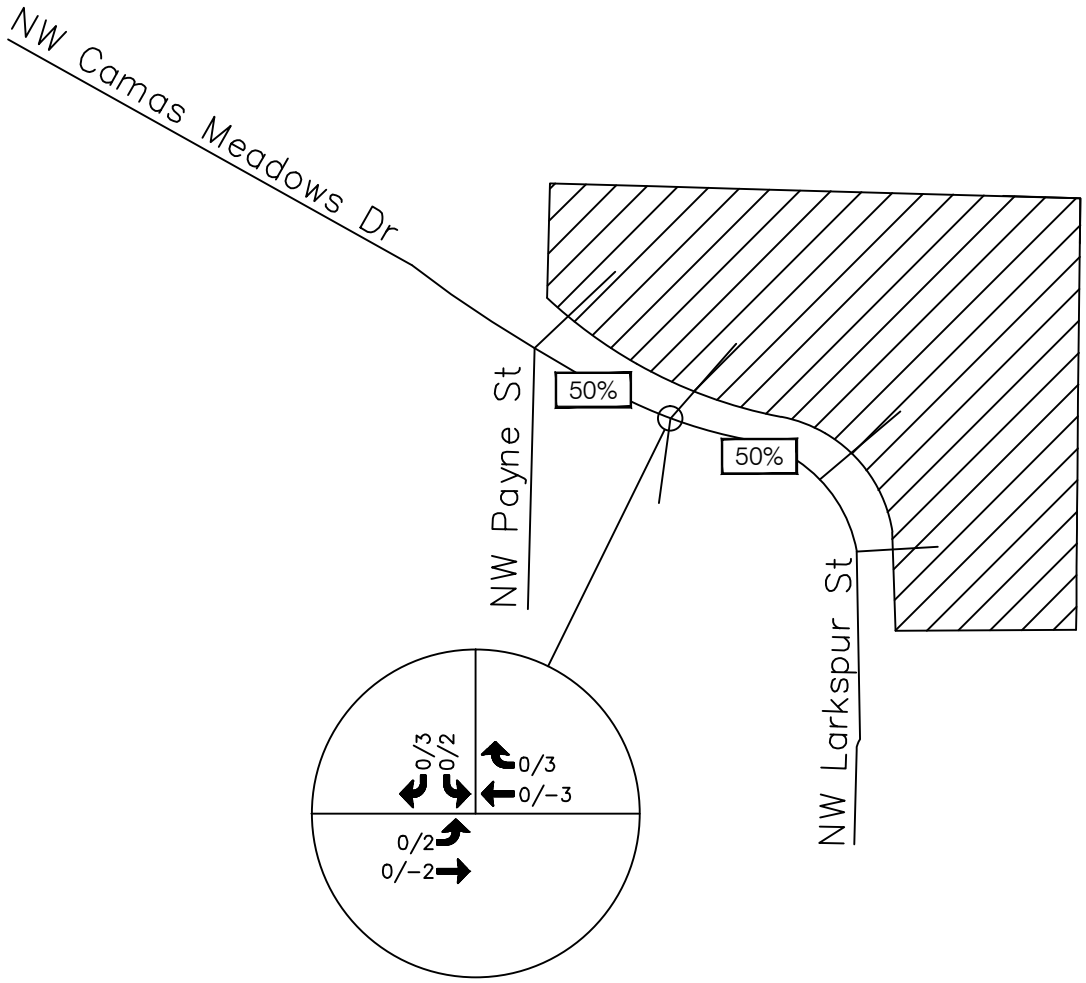
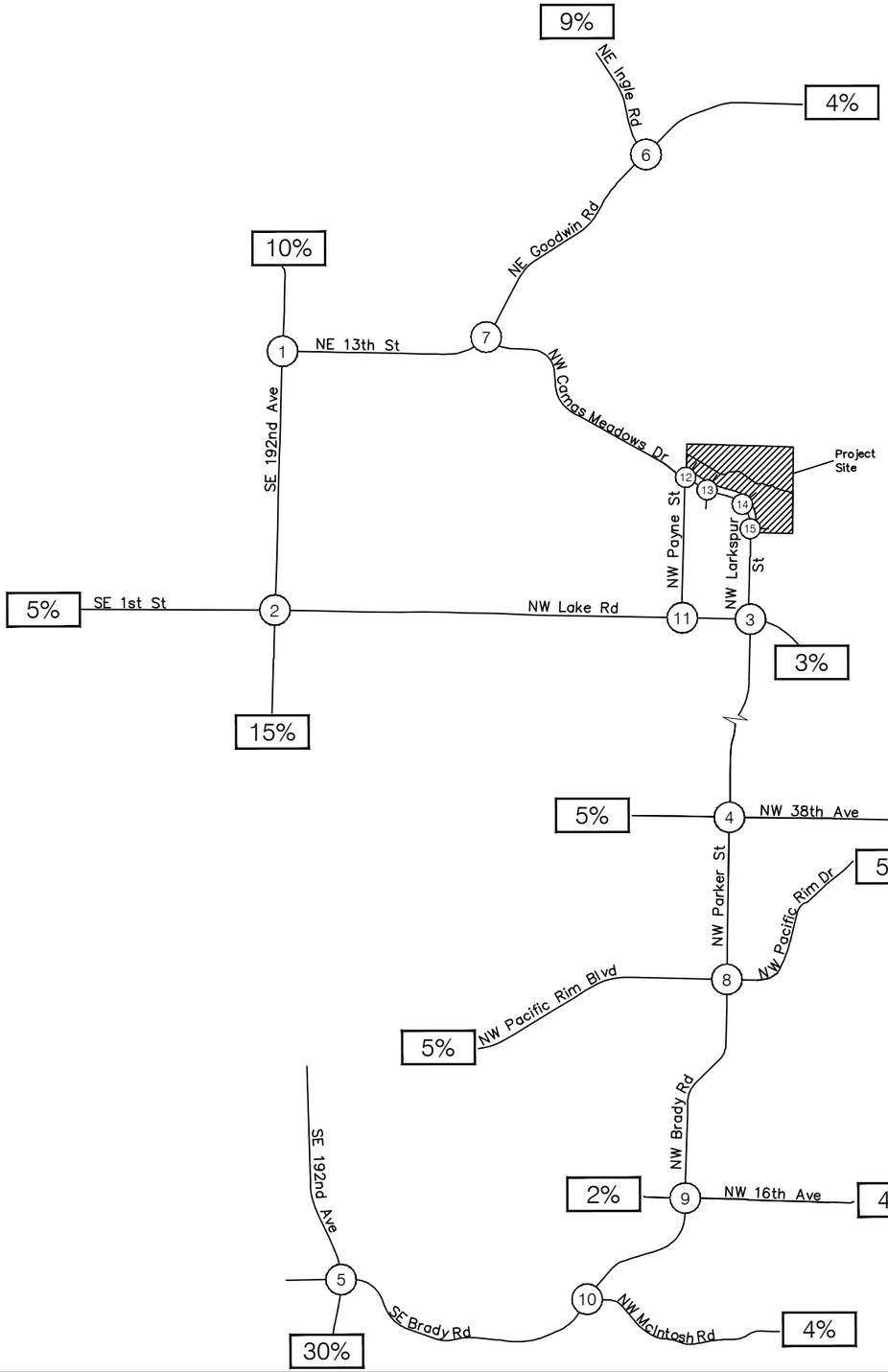


FIGURE 6c
"Quality Restaurant"
Pass-By Trips
Traffic Volumes

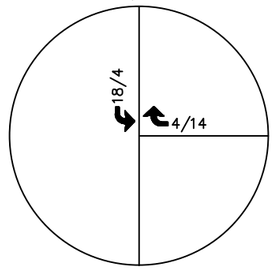
NOT TO SCALE

315021.0Figures.Dwg

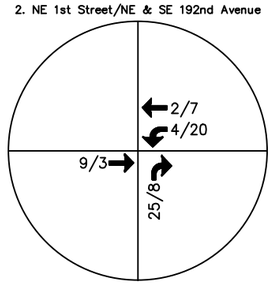
Parklands at Camas Meadows TIA
Camas, WA



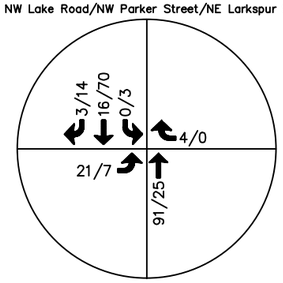
1. NE 13th Street/NE 192nd Avenue



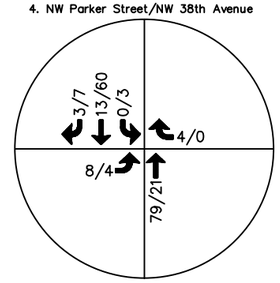
2. NE 1st Street/NE & SE 192nd Avenue



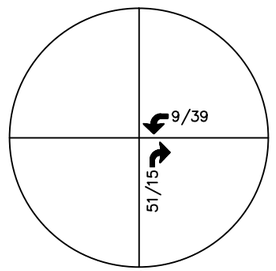
3. NW Lake Road/NW Parker Street/NE Larkspur Street



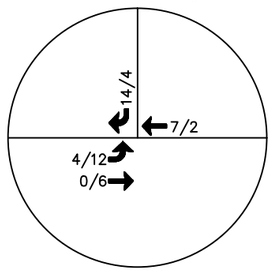
4. NW Parker Street/NW 38th Avenue



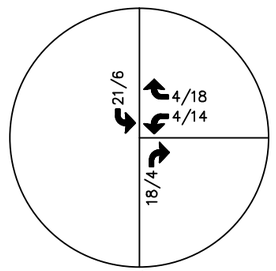
5. SE Brady Road/SE 192nd Avenue



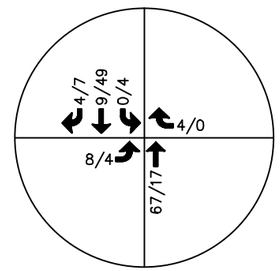
6. NE Goodwin Road/NE Ingle Road



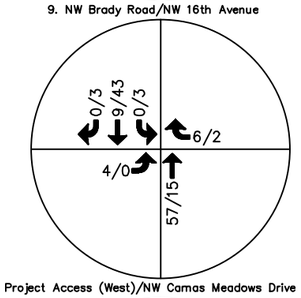
7. NE Goodwin Road/NW Camas Meadows Drive



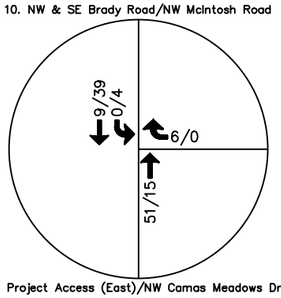
8. NW Parker Street/NW Pacific Rim Boulevard/NW Pacific Rim Drive



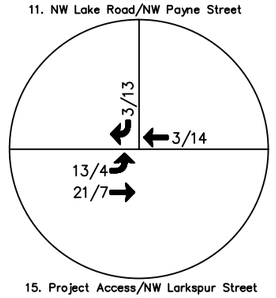
9. NW Brady Road/NW 16th Avenue



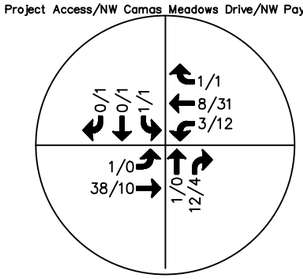
10. NW & SE Brady Road/NW McIntosh Road



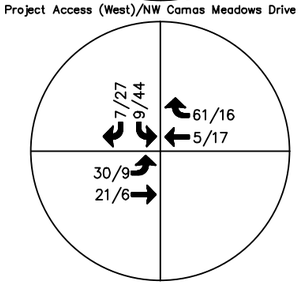
11. NW Lake Road/NW Payne Street



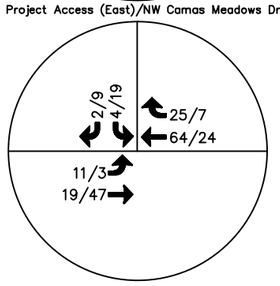
12. Project Access/NW Camas Meadows Drive/NW Payne Street



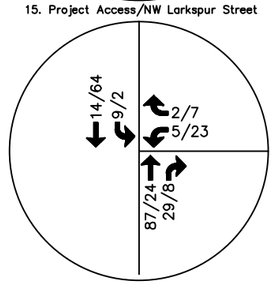
13. Project Access (West)/NW Camas Meadows Drive



14. Project Access (East)/NW Camas Meadows Drive



15. Project Access/NW Larkspur Street



NOT TO SCALE

LEGEND

100/128 A.M./P.M. Peak Hour Traffic Volumes

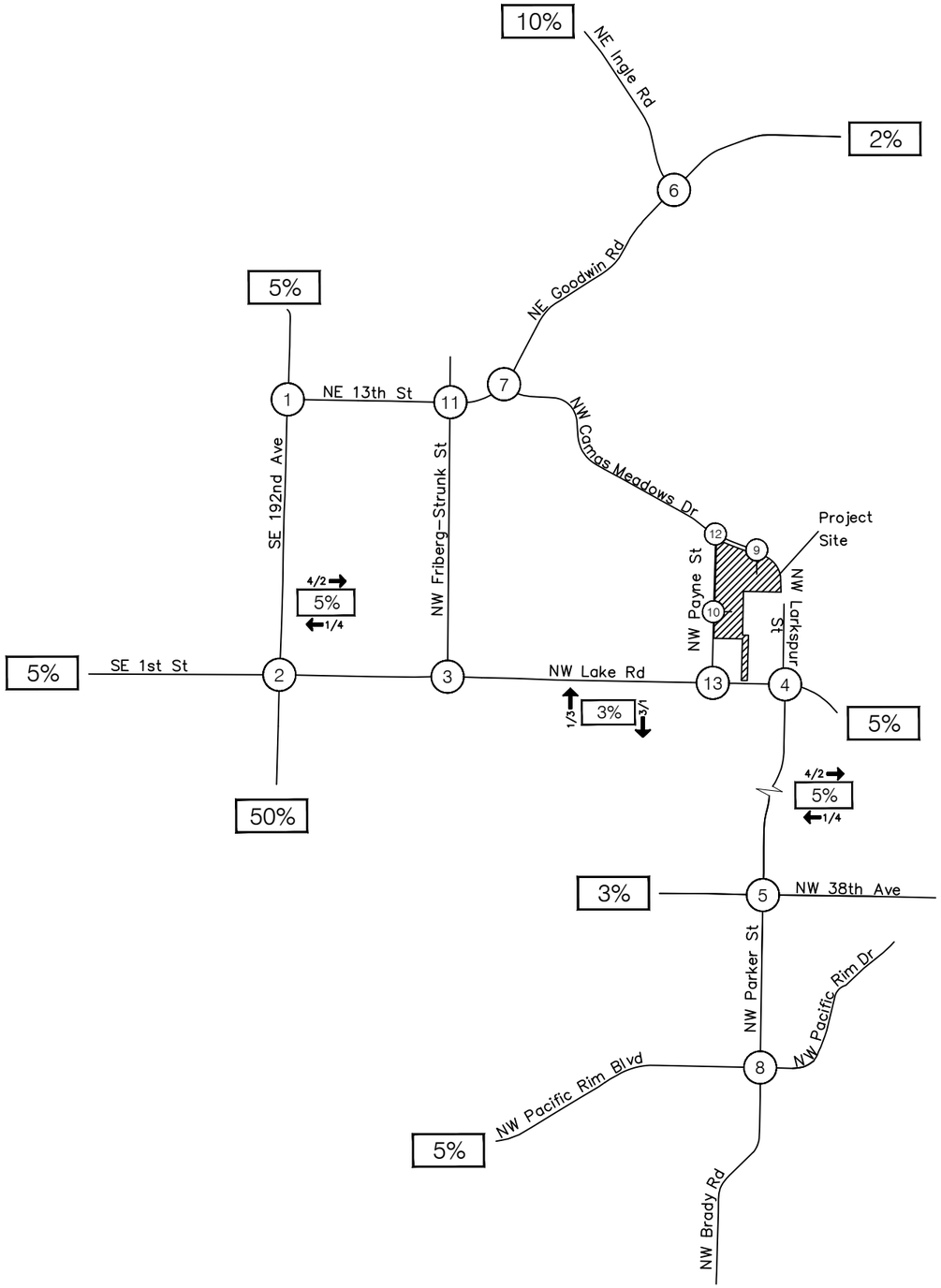
10% A.M. and P.M. Peak Hour Trip Distribution

FIGURE 6d
"Business Park"
Trip Distribution and Assignment
Traffic Volumes

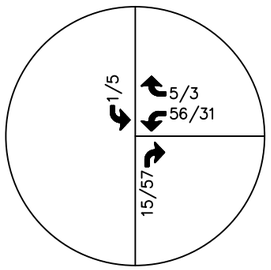
315021.0Figures.Dwg

75% Built out

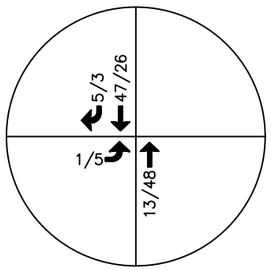
Village at Camas Meadows TIA
Camas, WA



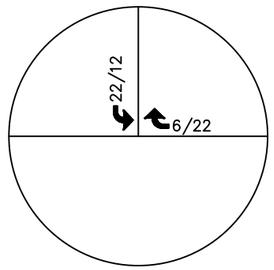
1. NE 13th Street/NE 192nd Avenue



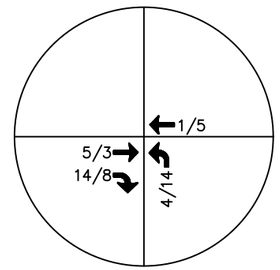
2. NE 1st Street/NE & SE 192nd Avenue



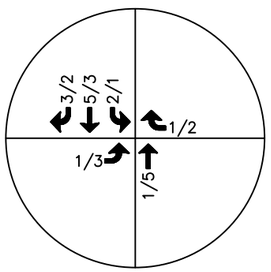
3. NW Lake Road/NW Friberg–Strunk Street



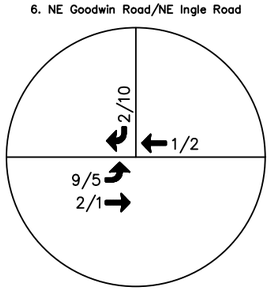
4. NW Lake Road/NW Parker Street/NE Larkspur Street



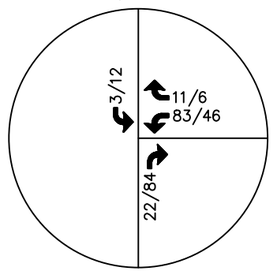
5. NW Parker Street/NW 38th Avenue



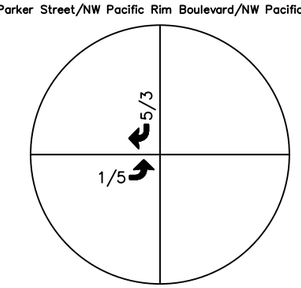
6. NE Goodwin Road/NE Ingle Road



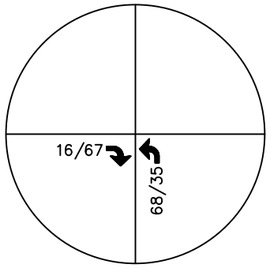
7. NE Goodwin Road/NW Camas Meadows Drive



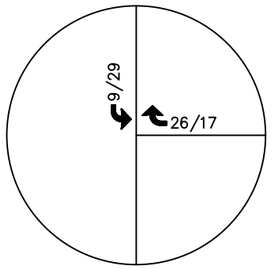
8. NW Parker Street/NW Pacific Rim Boulevard/NW Pacific Rim Drive



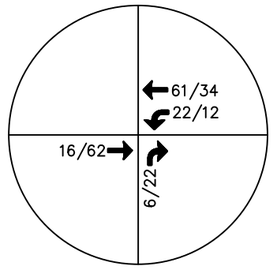
9. NW Camas Meadows Drive/Project Access



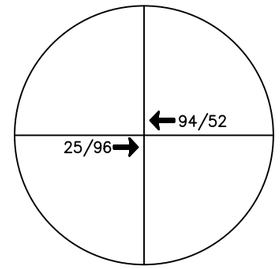
10. NW Payne Street/Project Access



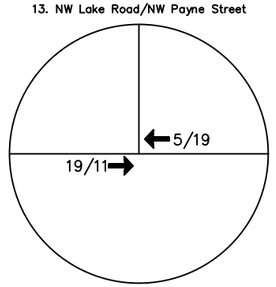
11. NW Friberg–Strunk Street/NE 13th Street/NE Goodwin Road



12. NW Payne Street/NW Camas Meadows Drive



13. NW Lake Road/NW Payne Street



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

10% A.M. and P.M. Peak Hour Trip Distribution

NOT TO SCALE

FIGURE 6
Trip Distribution and Assignment
Traffic Volumes

16025_Figures.Dwg

50% Build out for Phases 1-6:
GME Phases 1-3: 100%
GME Phases 4-6: 0%

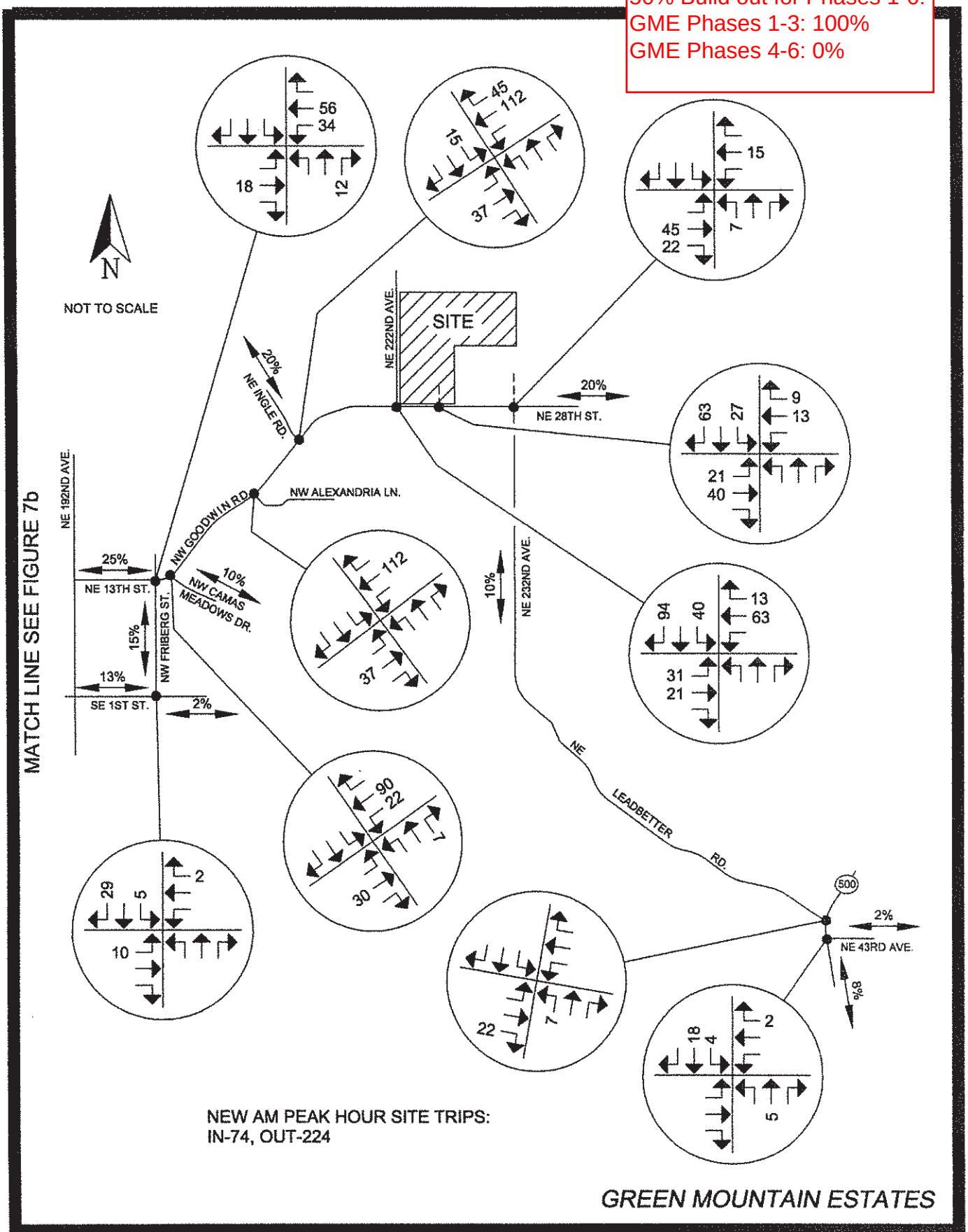


FIGURE 7a
SITE TRAFFIC DISTRIBUTION/ ASSIGNMENT, AM PEAK HOUR

KELLY ENGINEERING
316 E. Fourth Plain, A-2, Vancouver, WA 98663
Phone: 360-433-7530

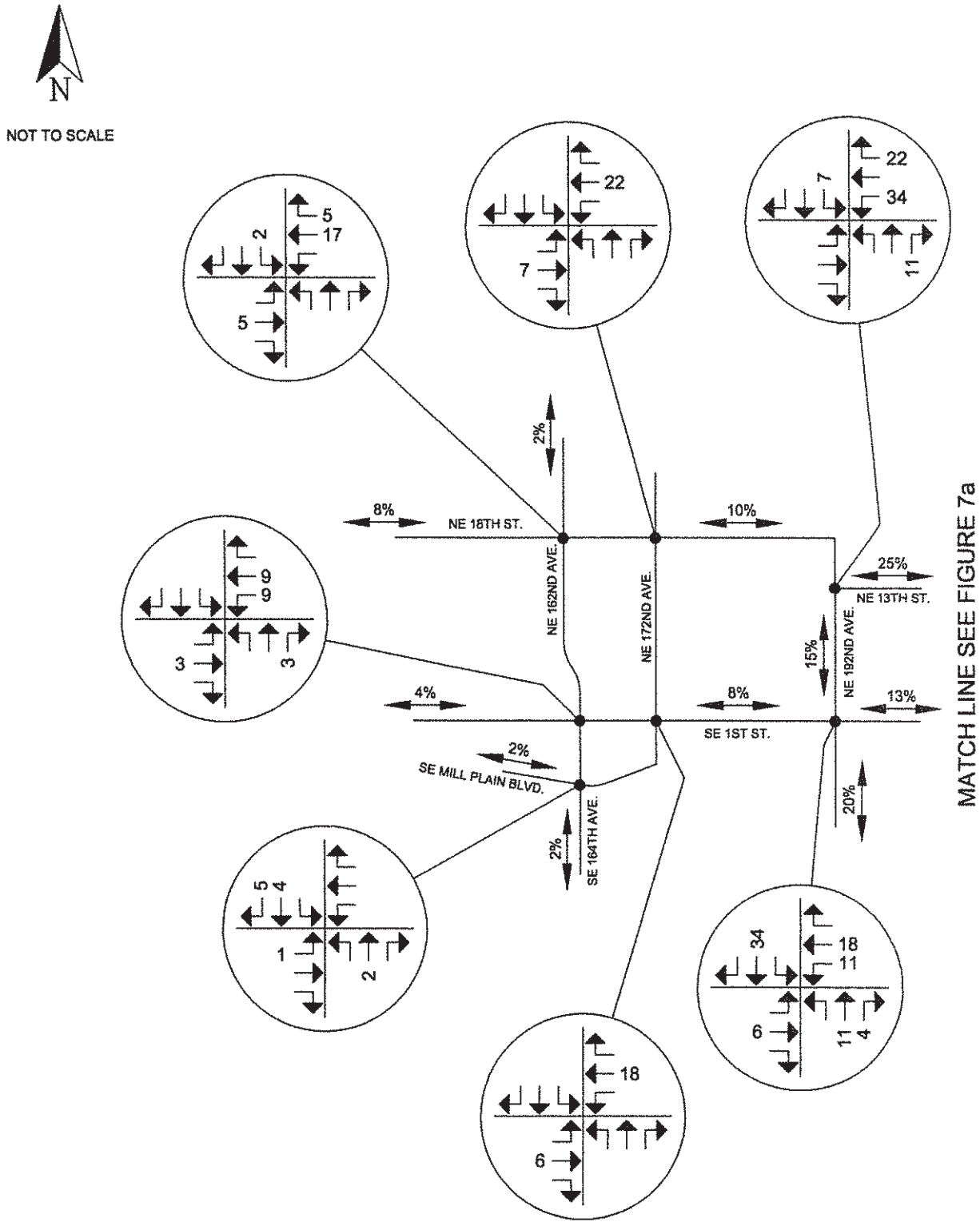


FIGURE 7b
SITE TRAFFIC DISTRIBUTION/
ASSIGNMENT, AM PEAK HOUR

KELLY ENGINEERING
316 E. Fourth Plain, A-2, Vancouver, WA 98663
Phone: 360-433-7530

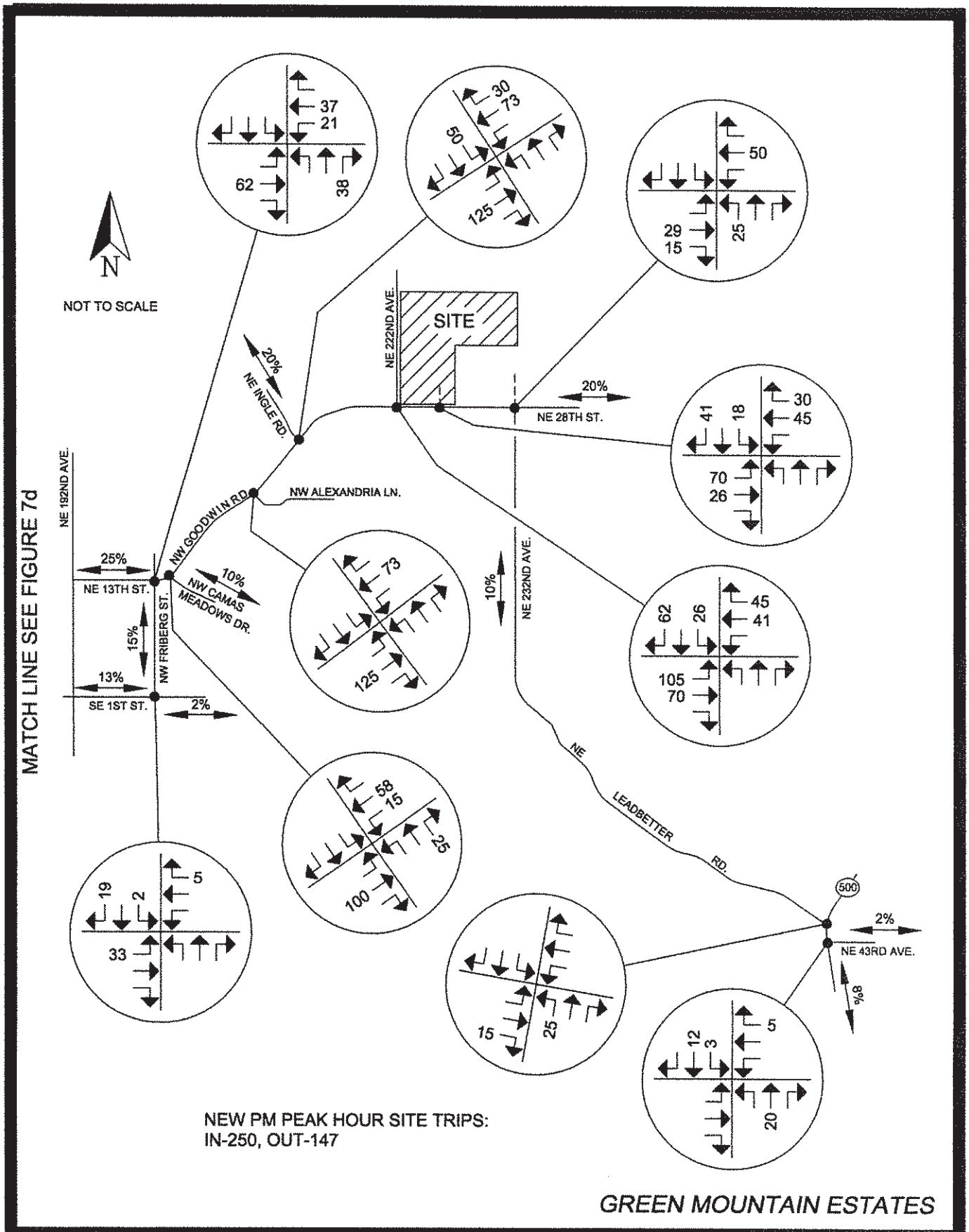


FIGURE 7c
SITE TRAFFIC DISTRIBUTION/ ASSIGNMENT, PM PEAK HOUR

KELLY ENGINEERING
316 E. Fourth Plain, A-2, Vancouver, WA 98663
Phone: 360-433-7530

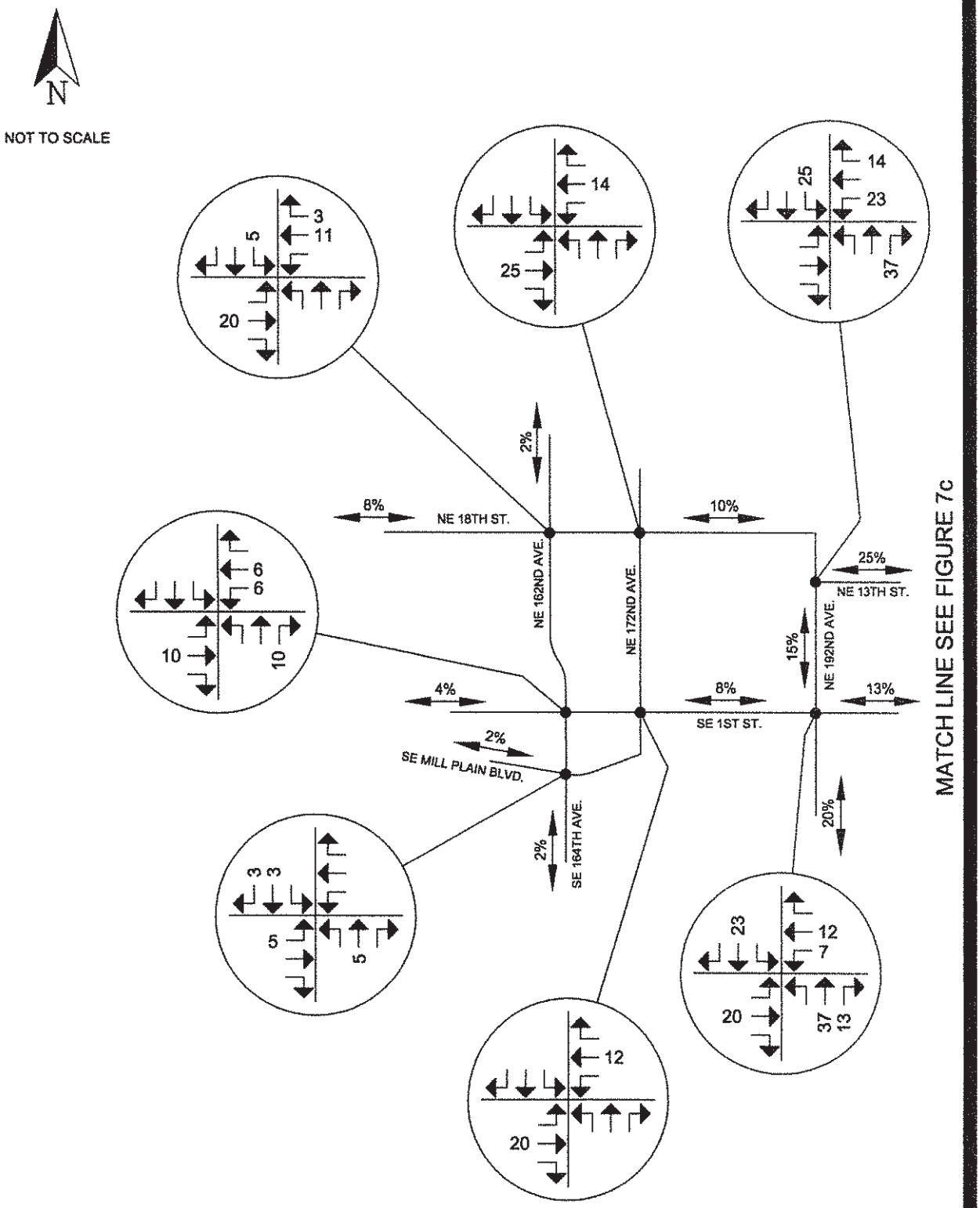
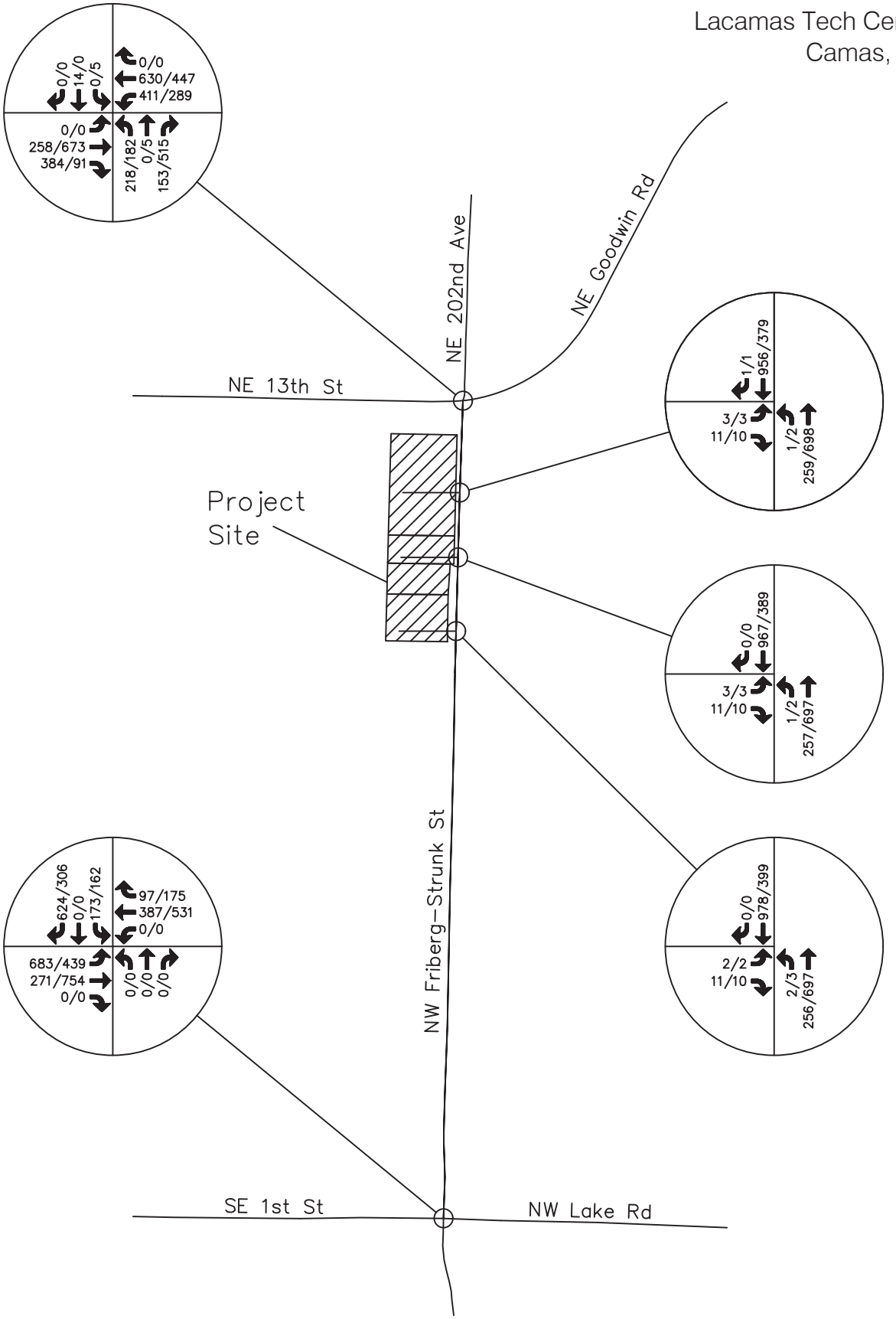


FIGURE 7d
SITE TRAFFIC DISTRIBUTION/ ASSIGNMENT, PM PEAK HOUR

KELLY ENGINEERING
316 E. Fourth Plain, A-2, Vancouver, WA 98663
Phone: 360-433-7530

Lacamas Tech Center
Camas, WA



LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 7
2022 "With Project"
A.M. and P.M. Peak Hour Traffic Volumes

18047_Figures.Dwg

APPENDIX E

2028 "WITHOUT PROJECT" LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.887

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	0	44	0	669	504	274	0	0	287	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	3.00	3.00	3.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	44	0	669	504	274	0	0	287	78
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	11	0	167	126	69	0	0	72	20
Total Analysis Volume [veh/h]	0	0	0	44	0	669	504	274	0	0	287	78
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	18	44	22	32	32	0	10	10
g / C, Green / Cycle	0.29	0.29	0.71	0.35	0.51	0.51	0.00	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.43	0.29	0.07	0.07	0.00	0.10	0.10
s, saturation flow rate [veh/h]	1900	1406	1538	1767	1855	1855	1781	1870	1736
c, Capacity [veh/h]	616	529	1090	619	950	950	0	303	281
d1, Uniform Delay [s]	0.00	15.81	4.64	18.23	7.94	7.94	0.00	24.08	24.16
k, delay calibration	0.11	0.11	0.37	0.15	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.07	1.94	3.61	0.07	0.07	0.00	2.04	2.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.08	0.61	0.81	0.14	0.14	0.00	0.62	0.63
d, Delay for Lane Group [s/veh]	0.00	15.88	6.58	21.84	8.01	8.01	0.00	26.12	26.53
Lane Group LOS	A	B	A	C	A	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.40	2.55	6.11	0.76	0.76	0.00	2.45	2.37
50th-Percentile Queue Length [ft/ln]	0.00	10.12	63.78	152.81	19.00	19.00	0.00	61.29	59.23
95th-Percentile Queue Length [veh/ln]	0.00	0.73	4.59	10.17	1.37	1.37	0.00	4.41	4.26
95th-Percentile Queue Length [ft/ln]	0.00	18.22	114.81	254.17	34.20	34.20	0.00	110.32	106.61

Movement, Approach, & Intersection Results

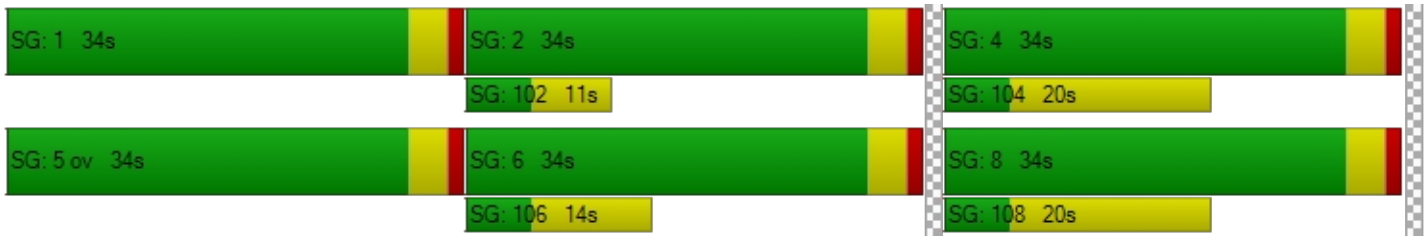
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	15.88	15.88	6.58	21.84	8.01	8.01	0.00	26.26	26.53
Movement LOS	A	A	A	B	B	A	C	A	A	A	C	C
d_A, Approach Delay [s/veh]	0.00			7.16			16.97			26.32		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	15.04											
Intersection LOS	B											
Intersection V/C	0.887											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.45	22.45	22.45	22.45
l_p,int, Pedestrian LOS Score for Intersection	1.697	2.483	2.733	2.522
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	974	974	974	974
d_b, Bicycle Delay [s]	8.10	8.10	8.10	8.10
l_b,int, Bicycle LOS Score for Intersection	1.560	2.736	2.201	1.861
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	94	198	57	98	262	29	21	182	212	106	327	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	198	57	98	262	29	21	182	212	106	327	69
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	50	14	25	66	7	5	46	53	27	82	17
Total Analysis Volume [veh/h]	94	198	57	98	262	29	21	182	212	106	327	69
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	18	11	18	10	18	10	19	18	12	12
g / C, Green / Cycle	0.42	0.25	0.42	0.22	0.40	0.23	0.42	0.40	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.07	0.14	0.07	0.16	0.02	0.10	0.13	0.08	0.11	0.11
s, saturation flow rate [veh/h]	1340	1799	1310	1823	1130	1870	1589	1265	1900	1787
c, Capacity [veh/h]	646	447	659	404	609	421	672	665	536	504
d1, Uniform Delay [s]	8.37	14.51	8.22	15.90	8.23	14.66	8.47	8.63	12.72	12.74
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	1.15	0.10	2.44	0.02	0.70	0.27	0.11	0.44	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.15	0.57	0.15	0.72	0.03	0.43	0.32	0.16	0.38	0.38
d, Delay for Lane Group [s/veh]	8.48	15.66	8.32	18.34	8.25	15.36	8.74	8.74	13.16	13.22
Lane Group LOS	A	B	A	B	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.41	1.95	0.48	2.65	0.09	1.32	0.96	0.50	1.35	1.29
50th-Percentile Queue Length [ft/ln]	10.37	48.75	12.01	66.20	2.22	32.93	23.98	12.41	33.72	32.33
95th-Percentile Queue Length [veh/ln]	0.75	3.51	0.86	4.77	0.16	2.37	1.73	0.89	2.43	2.33
95th-Percentile Queue Length [ft/ln]	18.67	87.75	21.62	119.16	4.00	59.28	43.16	22.34	60.70	58.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.48	15.66	15.66	8.32	18.34	18.34	8.25	15.36	8.74	8.74	13.18	13.22
Movement LOS	A	B	B	A	B	B	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	13.73			15.82			11.62			12.25		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.24											
Intersection LOS	B											
Intersection V/C	0.557											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	13.92	13.92	13.92	13.92
l_p,int, Pedestrian LOS Score for Intersection	2.296	2.096	2.523	2.373
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1364	1364	1364	1364
d_b, Bicycle Delay [s]	2.23	2.23	2.23	2.23
l_b,int, Bicycle LOS Score for Intersection	2.135	2.201	2.244	1.974
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	9	0	0	9	0	0	0	124	35	22	71	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	0	0	9	0	0	0	124	35	22	71	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	0	2	0	0	0	31	9	6	18	0
Total Analysis Volume [veh/h]	9	0	0	9	0	0	0	124	35	22	71	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	134			102			32			9		
Exiting Flow Rate [veh/h]	57			0			80			134		
Demand Flow Rate [veh/h]	9	0	0	9	0	0	0	124	35	22	71	0
Adjusted Demand Flow Rate [veh/h]	9	0	0	9	0	0	0	124	35	22	71	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	0.94	1.00	1.00
Entry Flow Rate [veh/h]	9	10	159	93
Capacity of Entry and Bypass Lanes [veh/h]	1205	1244	1337	1368
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1205	1174	1337	1368
X, volume / capacity	0.01	0.01	0.12	0.07

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.02	0.02	0.40	0.22
95th-Percentile Queue Length [ft]	0.56	0.58	10.10	5.47
Approach Delay [s/veh]	3.05	3.13	3.65	3.16
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.45			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.066

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	216	26	53	614	18	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	18.00	18.00	9.00	9.00	9.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	26	53	614	18	31
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	7	13	154	5	8
Total Analysis Volume [veh/h]	216	26	53	614	18	31
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.01	0.07	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	7.92	0.00	19.06	9.64
Movement LOS	A	A	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.13	0.00	0.21	0.12
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.23	0.00	5.24	2.99
d_A, Approach Delay [s/veh]	0.00		0.63		13.10	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	141	0	0	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	6.00	6.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	141	0	0	88
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	35	0	0	22
Total Analysis Volume [veh/h]	0	0	141	0	0	88
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.71	8.95	0.00	0.00	7.48	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.33		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.100

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	40	13	9	375	437	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	1.00	1.00	1.00	1.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	13	9	375	437	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	3	2	94	109	6
Total Analysis Volume [veh/h]	40	13	9	375	437	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.01	10.66	8.28	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.80	9.80	0.62	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.95		0.19		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.91					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: NW Camas Meadows Drive/Business Park Driveway (West)

Control Type:	Two-way stop	Delay (sec / veh):	7.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.061

Intersection Setup

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	141	0	88	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	141	0	88	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	35	0	22	0
Total Analysis Volume [veh/h]	0	0	141	0	88	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	10.67	8.97	0.00	0.00	7.66	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.19	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	4.87	0.00
d_A, Approach Delay [s/veh]	9.82		0.00		7.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.94					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Approach	Eastbound	Westbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	0
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Base Volume Input [veh/h]	149	91
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	6.00	0.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	149	91
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	37	23
Total Analysis Volume [veh/h]	149	91
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.709

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	4	61	0	134	335	623	0	4	636	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	4	61	0	134	335	623	0	4	636	128
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	15	0	34	84	156	0	1	159	32
Total Analysis Volume [veh/h]	0	0	4	61	0	134	335	623	0	4	636	128
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	24	11	23	23	0	12	12
g / C, Green / Cycle	0.21	0.21	0.54	0.24	0.52	0.52	0.01	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.04	0.08	0.19	0.16	0.16	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1615	1519	1615	1810	1900	1900	1795	1885	1777
c, Capacity [veh/h]	413	474	872	442	985	985	10	528	497
d1, Uniform Delay [s]	14.05	14.50	5.13	15.56	6.15	6.15	22.00	14.54	14.55
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.12	0.08	2.69	0.18	0.18	23.82	2.11	2.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.13	0.15	0.76	0.32	0.32	0.40	0.74	0.75
d, Delay for Lane Group [s/veh]	14.06	14.62	5.21	18.25	6.33	6.33	45.83	16.65	16.81
Lane Group LOS	B	B	A	B	A	A	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	0.42	0.36	2.78	1.02	1.02	0.10	3.05	2.91
50th-Percentile Queue Length [ft/ln]	0.74	10.56	8.98	69.58	25.41	25.41	2.55	76.30	72.64
95th-Percentile Queue Length [veh/ln]	0.05	0.76	0.65	5.01	1.83	1.83	0.18	5.49	5.23
95th-Percentile Queue Length [ft/ln]	1.33	19.01	16.17	125.24	45.74	45.74	4.58	137.34	130.75

Movement, Approach, & Intersection Results

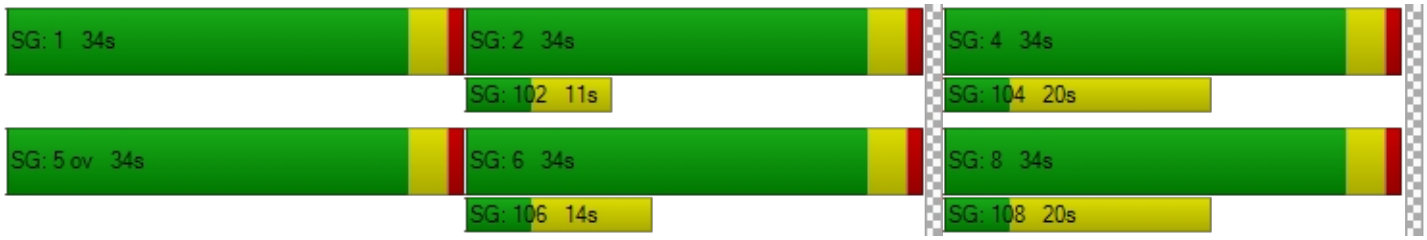
d_M, Delay for Movement [s/veh]	14.06	14.06	14.06	14.62	14.62	5.21	18.25	6.33	6.33	45.83	16.71	16.81
Movement LOS	B	B	B	B	B	A	B	A	A	D	B	B
d_A, Approach Delay [s/veh]	14.06			8.15			10.50			16.88		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	12.81											
Intersection LOS	B											
Intersection V/C	0.709											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	14.07	14.07	14.07	14.07
l_p,int, Pedestrian LOS Score for Intersection	1.681	2.189	2.712	2.729
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1354	1354	1354	1354
d_b, Bicycle Delay [s]	2.31	2.31	2.31	2.31
l_b,int, Bicycle LOS Score for Intersection	1.566	1.881	2.350	2.193
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	15.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	150	126	66	80	209	58	38	438	95	119	725	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	126	66	80	209	58	38	438	95	119	725	75
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	32	17	20	52	15	10	110	24	30	181	19
Total Analysis Volume [veh/h]	150	126	66	80	209	58	38	438	95	119	725	75
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	48	48	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	18	11	18	10	22	14	23	22	16	16
g / C, Green / Cycle	0.38	0.23	0.38	0.20	0.45	0.29	0.47	0.45	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.06	0.15	0.04	0.23	0.06	0.11	0.22	0.22
s, saturation flow rate [veh/h]	1356	1763	1361	1801	897	1900	1615	1130	1885	1824
c, Capacity [veh/h]	586	408	633	363	502	545	755	547	618	598
d1, Uniform Delay [s]	10.63	16.08	9.89	18.14	8.29	16.04	7.30	9.06	13.98	13.98
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.84	0.09	2.90	0.06	2.84	0.07	0.20	1.20	1.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.47	0.13	0.73	0.08	0.80	0.13	0.22	0.66	0.66
d, Delay for Lane Group [s/veh]	10.86	16.92	9.98	21.04	8.36	18.88	7.37	9.25	15.18	15.22
Lane Group LOS	B	B	A	C	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.88	1.65	0.49	2.82	0.16	3.99	0.40	0.57	3.28	3.18
50th-Percentile Queue Length [ft/ln]	22.11	41.21	12.17	70.42	4.12	99.65	10.03	14.29	81.91	79.42
95th-Percentile Queue Length [veh/ln]	1.59	2.97	0.88	5.07	0.30	7.17	0.72	1.03	5.90	5.72
95th-Percentile Queue Length [ft/ln]	39.80	74.18	21.91	126.76	7.42	179.37	18.05	25.72	147.43	142.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.86	16.92	16.92	9.98	21.04	21.04	8.36	18.88	7.37	9.25	15.20	15.22
Movement LOS	B	B	B	A	C	C	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	14.26			18.49			16.26			14.43		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.53											
Intersection LOS	B											
Intersection V/C	0.728											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.00	16.00	16.00	16.00
l_p,int, Pedestrian LOS Score for Intersection	2.254	2.087	2.711	2.558
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1242	1242	1242	1242
d_b, Bicycle Delay [s]	3.47	3.47	3.47	3.47
l_b,int, Bicycle LOS Score for Intersection	2.124	2.132	2.502	2.318
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	40	0	9	0	0	0	0	106	35	4	75	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	0	9	0	0	0	0	106	35	4	75	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	2	0	0	0	0	27	9	1	19	0
Total Analysis Volume [veh/h]	40	0	9	0	0	0	0	106	35	4	75	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	106			119			4			40		
Exiting Flow Rate [veh/h]	39			0			115			115		
Demand Flow Rate [veh/h]	40	0	9	0	0	0	0	106	35	4	75	0
Adjusted Demand Flow Rate [veh/h]	40	0	9	0	0	0	0	106	35	4	75	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	1.00	1.00	1.00
Entry Flow Rate [veh/h]	49	0	141	79
Capacity of Entry and Bypass Lanes [veh/h]	1239	1223	1375	1325
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1239	1223	1375	1325
X, volume / capacity	0.04	0.00	0.10	0.06

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.12	0.00	0.34	0.19
95th-Percentile Queue Length [ft]	3.09	0.00	8.56	4.75
Approach Delay [s/veh]	3.22	2.95	3.43	3.19
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.32			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	27.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	556	13	66	380	71	115
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	556	13	66	380	71	115
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	139	3	17	95	18	29
Total Analysis Volume [veh/h]	556	13	66	380	71	115
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.07	0.00	0.31	0.22
d_M, Delay for Movement [s/veh]	0.00	0.00	8.80	0.00	27.29	13.57
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.21	0.00	1.25	0.81
95th-Percentile Queue Length [ft/ln]	0.00	0.00	5.22	0.00	31.23	20.25
d_A, Approach Delay [s/veh]	0.00		1.30		18.81	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.40					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Business Park Driveway		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	4	93	0	0	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	100.00	100.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	93	0	0	172
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	23	0	0	43
Total Analysis Volume [veh/h]	0	4	93	0	0	172
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.51	9.82	0.00	0.00	7.38	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.40	0.40	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.82		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.15					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	24.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.066

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	13	35	49	640	627	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	35	49	640	627	26
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	9	12	160	157	7
Total Analysis Volume [veh/h]	13	35	49	640	627	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.05	0.05	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	24.41	11.76	9.03	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.40	0.40	0.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	10.10	10.10	4.10	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.19		0.64		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.84					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: NW Camas Meadows Drive/Business Park Driveway/Project Access (West)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	0	0	93	0	0	172
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	93	0	0	172
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	23	0	0	43
Total Analysis Volume [veh/h]	0	0	93	0	0	172
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.97	8.73	0.00	0.00	7.40	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.35		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Approach	Eastbound	Westbound
Lane Configuration		
Turning Movement	Thru	Thru
Lane Width [ft]	12.00	12.00
No. of Lanes in Entry Pocket	1	0
Entry Pocket Length [ft]	100.00	100.00
No. of Lanes in Exit Pocket	0	0
Exit Pocket Length [ft]	0.00	0.00
Speed [mph]	35.00	35.00
Grade [%]	0.00	0.00
Crosswalk	Yes	Yes

Volumes

Name	NW Camas Meadows Drive	NW Camas Meadows Drive
Base Volume Input [veh/h]	105	188
Base Volume Adjustment Factor	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	2.00
Growth Factor	1.0000	1.0000
In-Process Volume [veh/h]	0	0
Site-Generated Trips [veh/h]	0	0
Diverted Trips [veh/h]	0	0
Pass-by Trips [veh/h]	0	0
Existing Site Adjustment Volume [veh/h]	0	0
Other Volume [veh/h]	0	0
Total Hourly Volume [veh/h]	105	188
Peak Hour Factor	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	47
Total Analysis Volume [veh/h]	105	188
Pedestrian Volume [ped/h]	0	0

Intersection Settings

Priority Scheme	Free	Free
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance		
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00
Movement LOS	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00
d_A, Approach Delay [s/veh]	0.00	0.00
Approach LOS	A	A
d_I, Intersection Delay [s/veh]	0.00	
Intersection LOS	A	

APPENDIX E

TRIP DISTRIBUTION AND ASSIGNMENT SUPPORTING DOCUMENTS

km²

MEMORANDUM

TO: Grant Stonex, H. Lee and Associates
FROM: Mark Harrington, Transportation Planner
DATE: March 14, 2023
SUBJECT: Select Zone Assignment for TAZ 1780

Enclosed are plots showing auto volumes and distributions (additional volumes) during the PM peak 1 hour for the years 2015 and 2040. TAZ 1780 was selected for auto assignment. Please note a new TAZ numbering scheme – 426 is now 1780. These assignments are based on the 2040 RTP adopted in March 2019.

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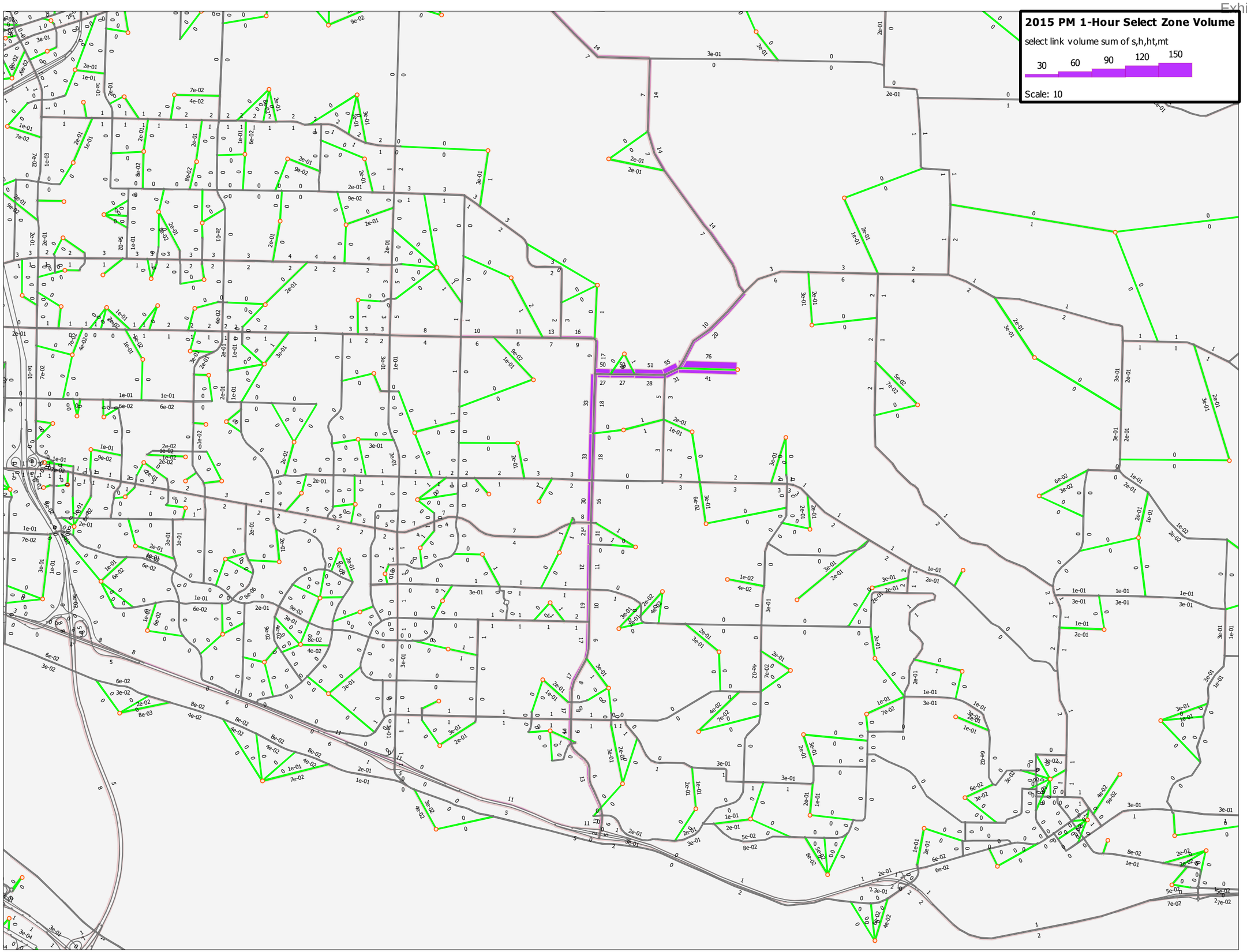
- 2015 Base HWY w/ 2015 Demand – TAZ 1780
- 2040 RTP w/ 2040 Demand – TAZ 1780
- TAZ Maps
- Land Use

TAZ	2015 HH	2015 Jobs	2040 HH	2040 Jobs
1780	28	296	239	300

An invoice will be sent to you under a separate cover for 2 hours of staff time and other costs. If you have any questions, please let me know.

Enclosures:

cc: Shann Westrand, RTC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select link volume sum of s,h,ht,mt
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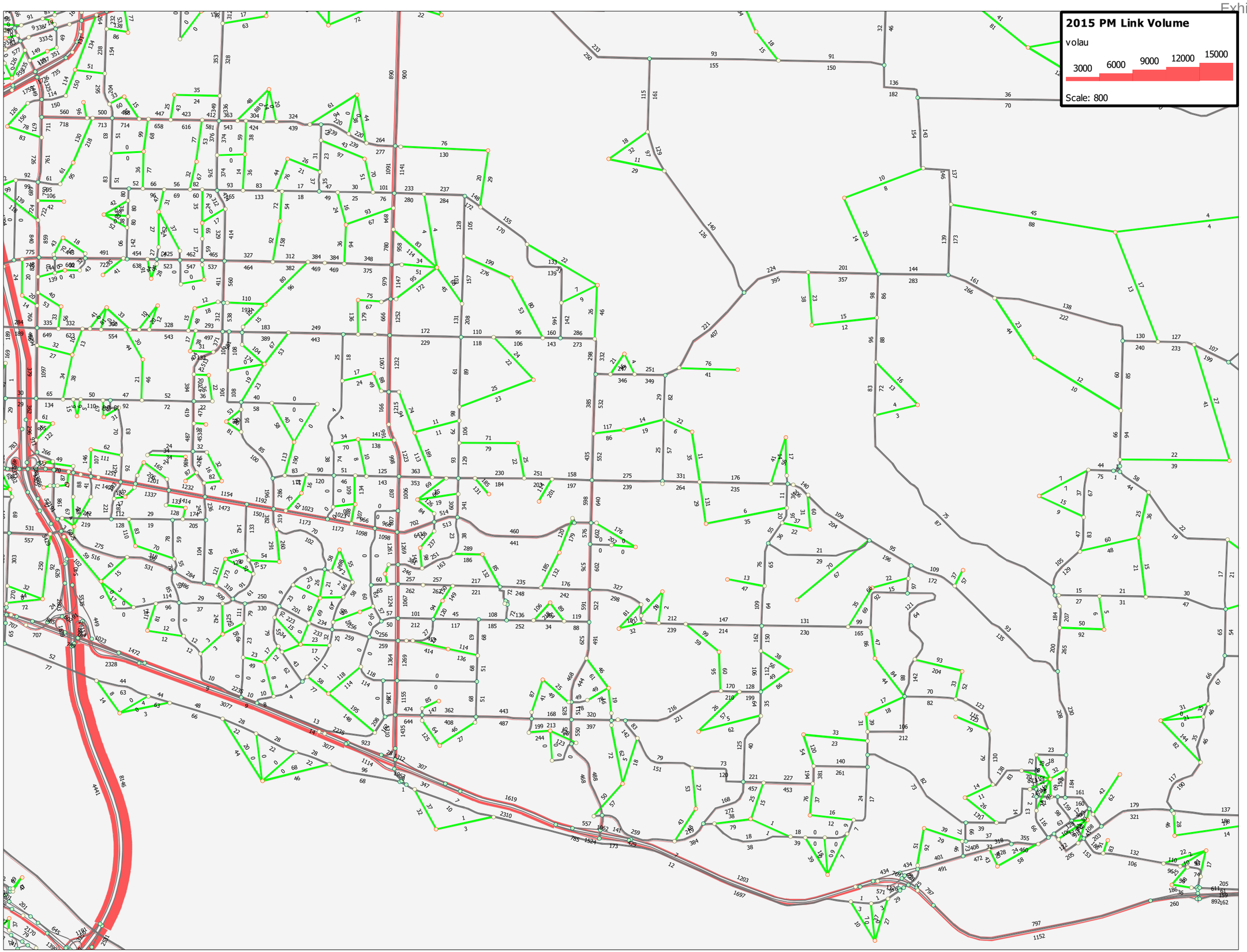
90
120
150
Scale: 10


2015 PM Link Volume
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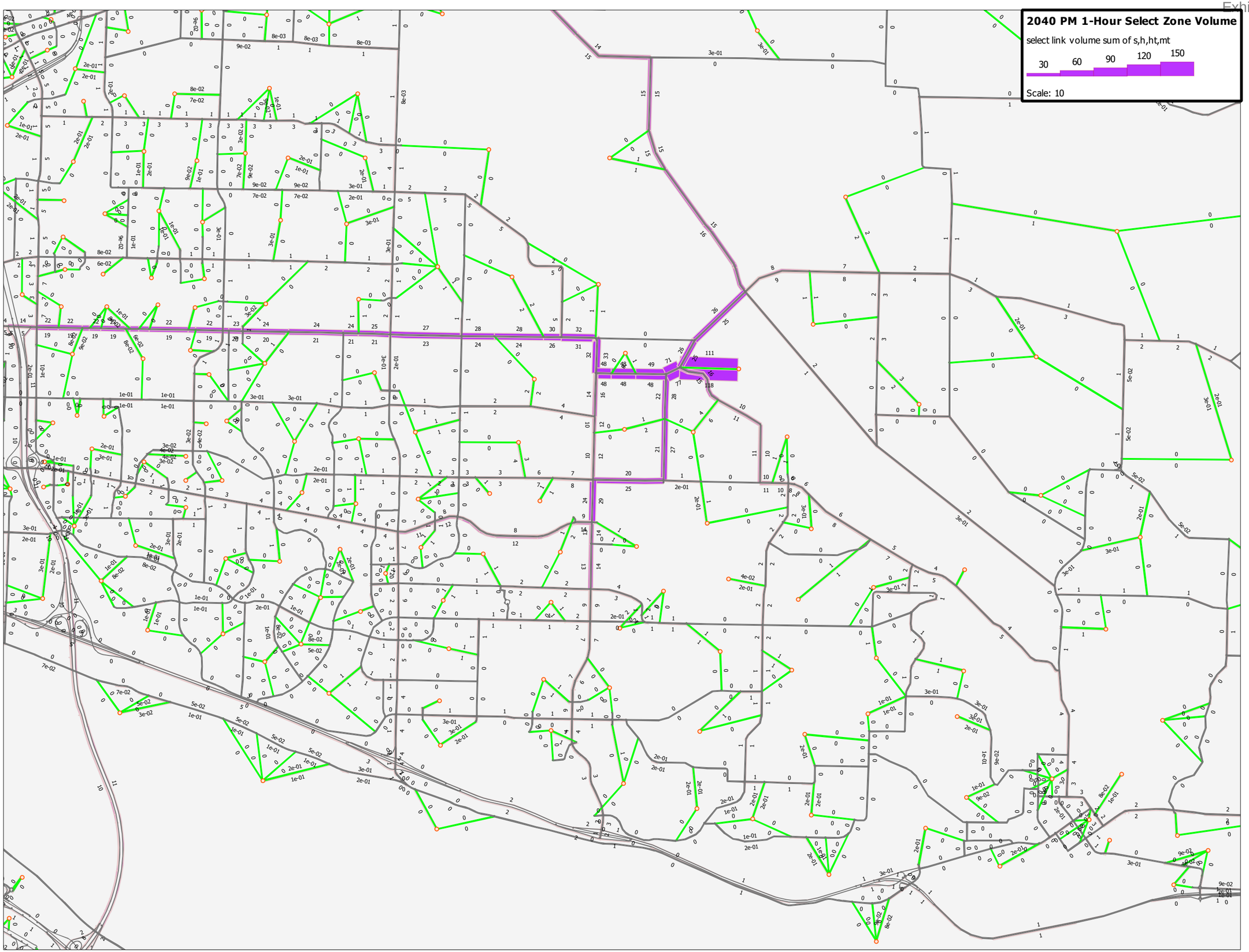
Scale: 800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select link volume sum of s,h,ht,mt
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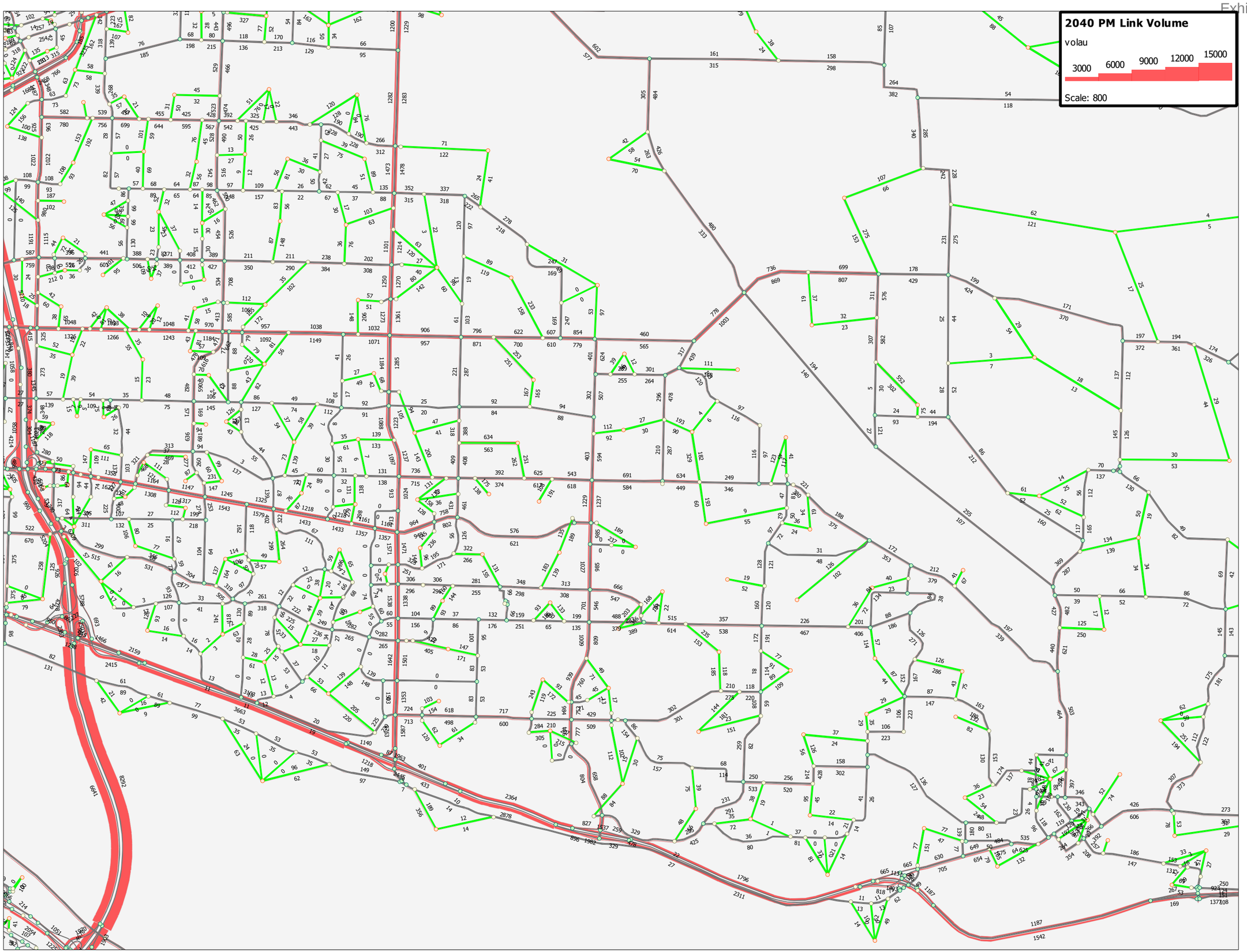
Scale: 10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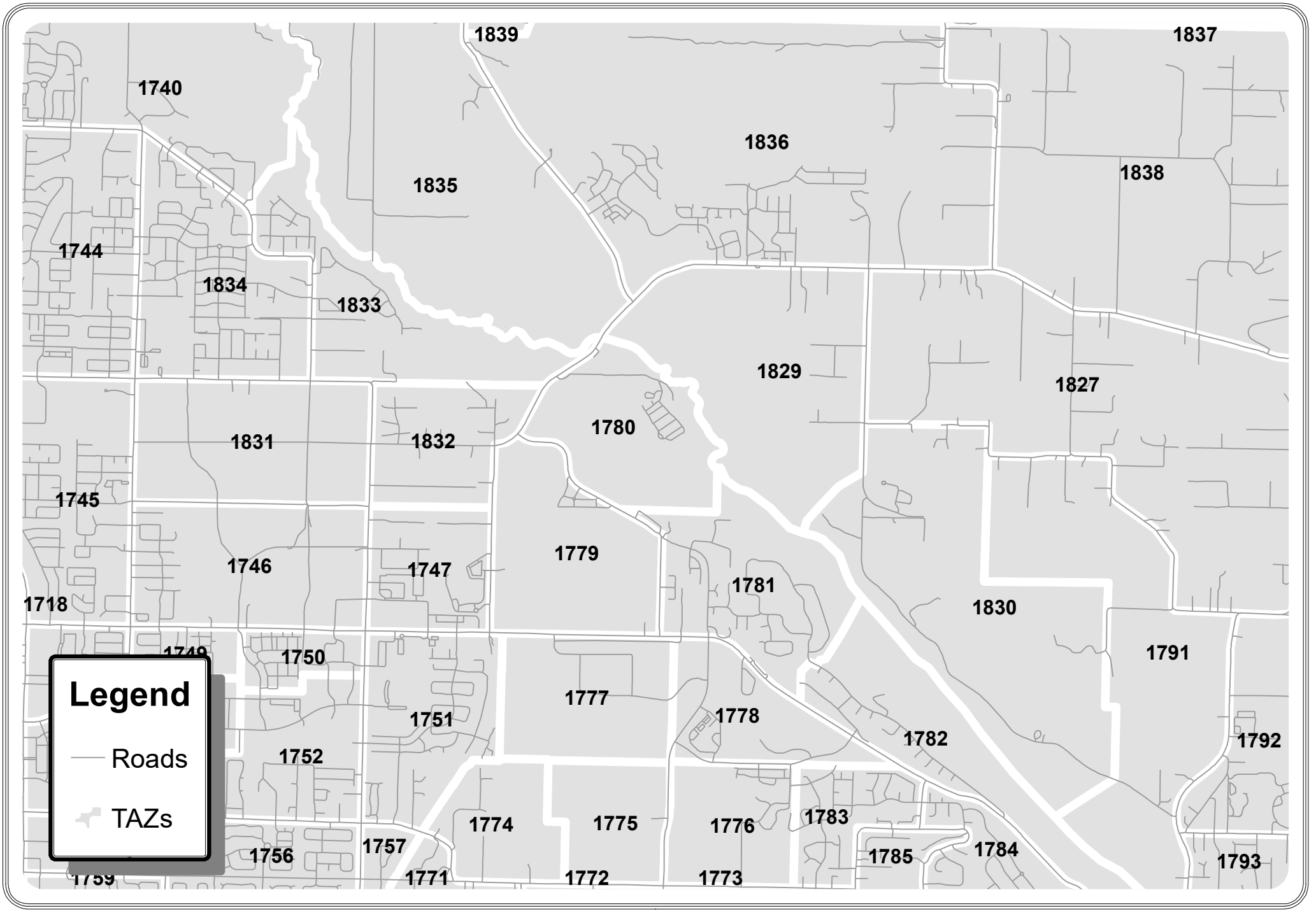
TAZ MAP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Legend
Roads
TAZs

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	932
Land Use	High-Turnover (Sit-Down) Restaurant
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	12
Average Pass-By Rate	43%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
2.9	Kentucky	1993	41	37	27	36	63	3935	2
3.1	Kentucky	1993	21	38	29	33	62	2580	2
4.6	Florida	1992	276	63	—	—	37	—	30
5	Florida	1992	65	58	—	—	42	—	30
5.3	Kentucky	1993	24	50	37	13	50	1615	2
5.7	Florida	1994	308	57	—	—	43	—	30
5.8	Florida	1992	150	32	—	—	68	—	30
6.2	Florida	1995	521	46	43	11	54	—	30
7.1	Indiana	1993	—	23	23	54	77	1565	2
8	Florida	1995	664	40	39	21	60	—	30
11	Florida	1996	267	38	43	19	62	—	30
12	Florida	1996	317	29	51	20	71	—	30

APPENDIX G

2028 "WITH PROJECT" LEVEL OF SERVICE

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.892

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	0	44	0	669	504	279	0	0	298	78
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	3.00	3.00	3.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	44	0	669	504	279	0	0	298	78
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	11	0	167	126	70	0	0	75	20
Total Analysis Volume [veh/h]	0	0	0	44	0	669	504	279	0	0	298	78
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	62	62	62	62	62	62	62	62	62
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	18	44	21	31	31	0	10	10
g / C, Green / Cycle	0.29	0.29	0.71	0.35	0.51	0.51	0.00	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.43	0.29	0.08	0.08	0.00	0.10	0.11
s, saturation flow rate [veh/h]	1900	1408	1538	1767	1855	1855	1781	1870	1740
c, Capacity [veh/h]	616	530	1089	618	949	949	0	303	282
d1, Uniform Delay [s]	0.00	15.79	4.65	18.23	7.94	7.94	0.00	24.10	24.17
k, delay calibration	0.11	0.11	0.37	0.15	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.07	1.94	3.63	0.07	0.07	0.00	2.19	2.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.08	0.61	0.82	0.15	0.15	0.00	0.63	0.65
d, Delay for Lane Group [s/veh]	0.00	15.85	6.59	21.86	8.01	8.01	0.00	26.29	26.70
Lane Group LOS	A	B	A	C	A	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	0.40	2.55	6.11	0.77	0.77	0.00	2.54	2.45
50th-Percentile Queue Length [ft/ln]	0.00	10.11	63.76	152.75	19.35	19.35	0.00	63.41	61.31
95th-Percentile Queue Length [veh/ln]	0.00	0.73	4.59	10.16	1.39	1.39	0.00	4.57	4.41
95th-Percentile Queue Length [ft/ln]	0.00	18.19	114.77	254.10	34.83	34.83	0.00	114.14	110.35

Movement, Approach, & Intersection Results

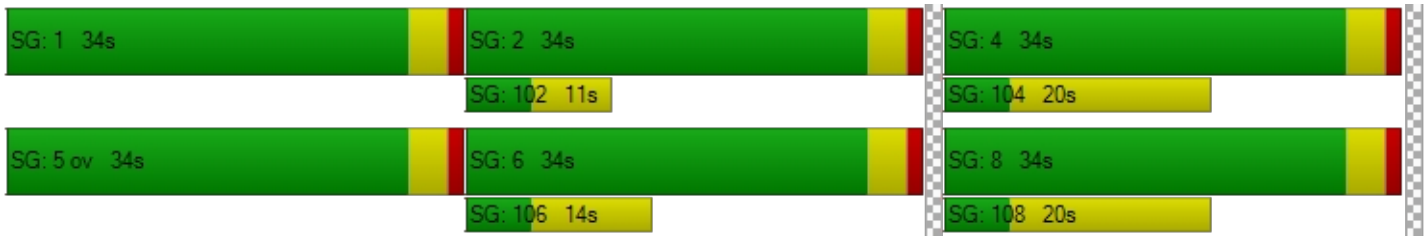
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	15.85	15.85	6.59	21.86	8.01	8.01	0.00	26.44	26.70
Movement LOS	A	A	A	B	B	A	C	A	A	A	C	C
d_A, Approach Delay [s/veh]	0.00			7.16			16.92			26.49		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	15.13											
Intersection LOS	B											
Intersection V/C	0.892											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.41	22.41	22.41	22.41
l_p,int, Pedestrian LOS Score for Intersection	1.697	2.483	2.737	2.526
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	975	975	975	975
d_b, Bicycle Delay [s]	8.07	8.07	8.07	8.07
l_b,int, Bicycle LOS Score for Intersection	1.560	2.736	2.206	1.870
Bicycle LOS	A	B	B	A

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	94	198	57	100	263	29	21	182	212	106	327	70
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	94	198	57	100	263	29	21	182	212	106	327	70
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	50	14	25	66	7	5	46	53	27	82	18
Total Analysis Volume [veh/h]	94	198	57	100	263	29	21	182	212	106	327	70
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	18	11	18	10	18	10	19	18	12	12
g / C, Green / Cycle	0.42	0.25	0.42	0.22	0.40	0.23	0.42	0.40	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.07	0.14	0.08	0.16	0.02	0.10	0.13	0.08	0.11	0.11
s, saturation flow rate [veh/h]	1339	1799	1312	1823	1130	1870	1589	1265	1900	1786
c, Capacity [veh/h]	645	446	660	404	608	421	672	665	536	504
d1, Uniform Delay [s]	8.38	14.54	8.23	15.91	8.23	14.67	8.47	8.63	12.72	12.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.10	1.16	0.11	2.46	0.02	0.70	0.27	0.11	0.44	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.15	0.57	0.15	0.72	0.03	0.43	0.32	0.16	0.38	0.38
d, Delay for Lane Group [s/veh]	8.48	15.70	8.33	18.38	8.25	15.37	8.74	8.74	13.17	13.23
Lane Group LOS	A	B	A	B	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.41	1.95	0.49	2.66	0.09	1.32	0.96	0.50	1.35	1.30
50th-Percentile Queue Length [ft/ln]	10.37	48.85	12.27	66.52	2.22	32.94	23.98	12.41	33.84	32.43
95th-Percentile Queue Length [veh/ln]	0.75	3.52	0.88	4.79	0.16	2.37	1.73	0.89	2.44	2.33
95th-Percentile Queue Length [ft/ln]	18.67	87.93	22.09	119.74	4.00	59.29	43.17	22.35	60.91	58.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.48	15.70	15.70	8.33	18.38	18.38	8.25	15.37	8.74	8.74	13.19	13.23
Movement LOS	A	B	B	A	B	B	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	13.76			15.82			11.62			12.26		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.25											
Intersection LOS	B											
Intersection V/C	0.557											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	13.92	13.92	13.92	13.92
l_p,int, Pedestrian LOS Score for Intersection	2.297	2.097	2.523	2.375
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1364	1364	1364	1364
d_b, Bicycle Delay [s]	2.23	2.23	2.23	2.23
l_b,int, Bicycle LOS Score for Intersection	2.135	2.206	2.244	1.975
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	14	0	0	9	0	0	0	128	42	22	72	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	6.00	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	0	0	9	0	0	0	128	42	22	72	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	2	0	0	0	32	11	6	18	0
Total Analysis Volume [veh/h]	14	0	0	9	0	0	0	128	42	22	72	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	138			108			32			14		
Exiting Flow Rate [veh/h]	64			0			86			138		
Demand Flow Rate [veh/h]	14	0	0	9	0	0	0	128	42	22	72	0
Adjusted Demand Flow Rate [veh/h]	14	0	0	9	0	0	0	128	42	22	72	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	0.94	1.00	1.00
Entry Flow Rate [veh/h]	14	10	170	94
Capacity of Entry and Bypass Lanes [veh/h]	1200	1237	1337	1361
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1200	1167	1337	1361
X, volume / capacity	0.01	0.01	0.13	0.07

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.04	0.02	0.44	0.22
95th-Percentile Queue Length [ft]	0.89	0.58	10.90	5.56
Approach Delay [s/veh]	3.10	3.15	3.72	3.19
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.50			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.111

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	216	30	56	614	30	39
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	18.00	18.00	9.00	9.00	9.00	9.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	216	30	56	614	30	39
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	8	14	154	8	10
Total Analysis Volume [veh/h]	216	30	56	614	30	39
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.01	0.11	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	7.94	0.00	19.93	9.69
Movement LOS	A	A	A	A	C	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.14	0.00	0.37	0.15
95th-Percentile Queue Length [ft/ln]	0.00	0.00	3.43	0.00	9.22	3.80
d_A, Approach Delay [s/veh]	0.00		0.66		14.14	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.44					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Business Park Driveway						NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Business Park Driveway						NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	0	1	0	9	1	12	4	146	0	0	94	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	2.00	0.00	2.00	2.00	2.00	2.00	6.00	6.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1	0	9	1	12	4	146	0	0	94	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	2	0	3	1	37	0	0	24	1
Total Analysis Volume [veh/h]	0	1	0	9	1	12	4	146	0	0	94	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.23	10.54	8.98	10.25	10.64	8.86	7.41	0.00	0.00	7.49	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.08	0.08	0.08	0.01	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.12	0.12	0.12	2.06	2.06	2.06	0.20	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.54			9.51			0.20			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	0.92											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.102

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	40	24	14	375	437	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	1.00	1.00	1.00	1.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	24	14	375	437	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	6	4	94	109	6
Total Analysis Volume [veh/h]	40	24	14	375	437	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.03	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.28	10.75	8.30	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.45	0.45	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.35	11.35	0.96	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.58		0.30		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.08					
Intersection LOS	C					

Intersection Level Of Service Report

Intersection 7: NW Camas Meadows Drive/Business Park Driveway/Project Access (West)

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.166

Intersection Setup

Name							NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	0	0	0	3	0	4	2	147	0	0	104	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	3	0	4	2	147	0	0	104	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	1	1	37	0	0	26	0
Total Analysis Volume [veh/h]	0	0	0	3	0	4	2	147	0	0	104	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.12	0.00
d_M, Delay for Movement [s/veh]	7.23	0.00	0.00	7.22	0.00	0.00	9.39	9.87	9.13	9.77	9.62	8.87
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.59	0.59	0.00	0.40	0.40
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.15	0.15	0.15	0.18	14.84	14.84	0.00	10.06	10.06
d_A, Approach Delay [s/veh]	2.41			3.10			9.87			9.62		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	9.58											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Project Access (East)		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Access (East)		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	3	4	2	153	93	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	6.00	6.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	4	2	153	93	1
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	38	23	0
Total Analysis Volume [veh/h]	3	4	2	153	93	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.89	8.75	7.44	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.62	0.62	0.10	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.24		0.10		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.31					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 1: NW Lake Road/NW Friberg-Strunk Street/SE 1st Street

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.711

Intersection Setup

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	320.00	100.00	100.00	190.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				NW Friberg-Strunk Street			SE 1st Street			NW Lake Road		
Base Volume Input [veh/h]	0	0	4	61	0	134	335	644	0	4	647	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	4	61	0	134	335	644	0	4	647	128
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	1	15	0	34	84	161	0	1	162	32
Total Analysis Volume [veh/h]	0	0	4	61	0	134	335	644	0	4	647	128
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	4	5	2	0	1	6	0
Auxiliary Signal Groups						4,5						
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	10	5	10	0	5	10	0
Maximum Green [s]	0	30	0	0	30	30	30	30	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	15	15	0	6	0	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No	No	No	No		No	No	
Maximum Recall		No			No	No	No	No		No	No	
Pedestrian Recall		No			No	No	No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	6.0	0.0	0.0	6.0	6.0	20.0	6.0	0.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	R	L	C	C	L	C	C
C, Cycle Length [s]	45	45	45	45	45	45	45	45	45
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	9	24	11	23	23	0	13	13
g / C, Green / Cycle	0.20	0.20	0.54	0.24	0.52	0.52	0.01	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.00	0.04	0.08	0.19	0.17	0.17	0.00	0.21	0.21
s, saturation flow rate [veh/h]	1615	1519	1615	1810	1900	1900	1795	1885	1778
c, Capacity [veh/h]	411	472	869	442	990	990	10	533	503
d1, Uniform Delay [s]	14.16	14.62	5.19	15.66	6.17	6.17	22.13	14.57	14.58
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.01	0.12	0.08	2.70	0.19	0.19	23.84	2.12	2.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.13	0.15	0.76	0.33	0.33	0.40	0.75	0.75
d, Delay for Lane Group [s/veh]	14.17	14.74	5.28	18.36	6.35	6.35	45.97	16.69	16.84
Lane Group LOS	B	B	A	B	A	A	D	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	0.43	0.37	2.81	1.06	1.06	0.10	3.11	2.97
50th-Percentile Queue Length [ft/ln]	0.75	10.67	9.19	70.21	26.48	26.48	2.55	77.87	74.16
95th-Percentile Queue Length [veh/ln]	0.05	0.77	0.66	5.06	1.91	1.91	0.18	5.61	5.34
95th-Percentile Queue Length [ft/ln]	1.34	19.20	16.53	126.38	47.67	47.67	4.60	140.17	133.49

Movement, Approach, & Intersection Results

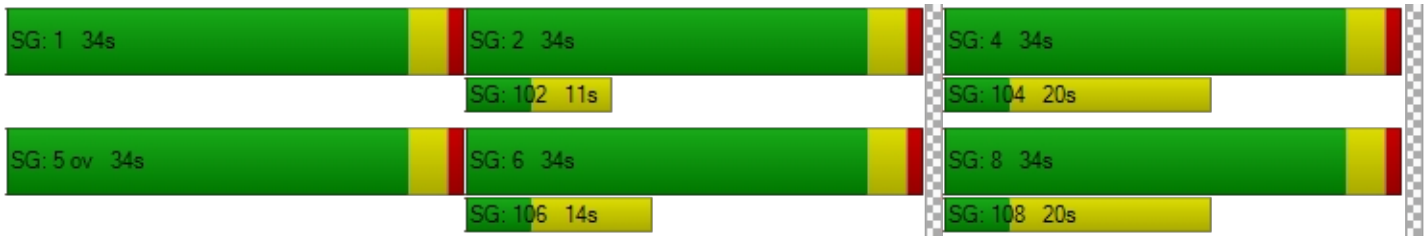
d_M, Delay for Movement [s/veh]	14.17	14.17	14.17	14.74	14.74	5.28	18.36	6.35	6.35	45.97	16.75	16.84
Movement LOS	B	B	B	B	B	A	B	A	A	D	B	B
d_A, Approach Delay [s/veh]	14.17			8.24			10.46			16.91		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	12.82											
Intersection LOS	B											
Intersection V/C	0.711											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	14.19	14.19	14.19	14.19
l_p,int, Pedestrian LOS Score for Intersection	1.682	2.189	2.721	2.737
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1346	1346	1346	1346
d_b, Bicycle Delay [s]	2.38	2.38	2.38	2.38
l_b,int, Bicycle LOS Score for Intersection	1.566	1.881	2.367	2.202
Bicycle LOS	A	A	B	B

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: NW Lake Road/NW Parker Street/NW Larkspur Street

Control Type:	Signalized	Delay (sec / veh):	15.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.729

Intersection Setup

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	340.00	100.00	100.00	140.00	100.00	100.00	215.00	100.00	100.00	232.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			25.00			40.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Parker Street			NW Larkspur Street			NW Lake Road					
Base Volume Input [veh/h]	150	127	66	82	210	58	38	438	95	119	725	79
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	0.00	0.00	0.00	1.00	1.00	1.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	127	66	82	210	58	38	438	95	119	725	79
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	32	17	21	53	15	10	110	24	30	181	20
Total Analysis Volume [veh/h]	150	127	66	82	210	58	38	438	95	119	725	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	9.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	ProtPer	Permiss	Overlap	ProtPer	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	2	1	6	0
Auxiliary Signal Groups									2,3			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	10	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	9	9	0	9	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	No		No	No		No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	20.0	6.0	0.0	20.0	6.0	0.0	6.0	6.0	6.0	20.0	6.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	L	C	L	C	R	L	C	C
C, Cycle Length [s]	48	48	48	48	48	48	48	48	48	48
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	19	11	19	10	22	14	23	22	16	16
g / C, Green / Cycle	0.38	0.23	0.38	0.20	0.45	0.29	0.47	0.45	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.06	0.15	0.04	0.23	0.06	0.11	0.22	0.22
s, saturation flow rate [veh/h]	1356	1764	1361	1801	895	1900	1615	1130	1885	1821
c, Capacity [veh/h]	586	407	633	363	501	545	755	547	618	597
d1, Uniform Delay [s]	10.64	16.13	9.91	18.16	8.31	16.04	7.30	9.06	14.00	14.00
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	0.86	0.09	2.93	0.06	2.84	0.07	0.20	1.22	1.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.47	0.13	0.74	0.08	0.80	0.13	0.22	0.66	0.66
d, Delay for Lane Group [s/veh]	10.87	16.99	10.00	21.09	8.37	18.88	7.38	9.26	15.22	15.27
Lane Group LOS	B	B	B	C	A	B	A	A	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.88	1.66	0.50	2.83	0.17	3.99	0.40	0.57	3.30	3.20
50th-Percentile Queue Length [ft/ln]	22.12	41.55	12.49	70.80	4.13	99.67	10.03	14.29	82.59	79.96
95th-Percentile Queue Length [veh/ln]	1.59	2.99	0.90	5.10	0.30	7.18	0.72	1.03	5.95	5.76
95th-Percentile Queue Length [ft/ln]	39.81	74.80	22.49	127.44	7.43	179.41	18.06	25.73	148.66	143.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.87	16.99	16.99	10.00	21.09	21.09	8.37	18.88	7.38	9.26	15.24	15.27
Movement LOS	B	B	B	B	C	C	A	B	A	A	B	B
d_A, Approach Delay [s/veh]	14.31			18.49			16.27			14.47		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.56											
Intersection LOS	B											
Intersection V/C	0.729											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.00	16.00	16.00	16.00
l_p,int, Pedestrian LOS Score for Intersection	2.255	2.089	2.711	2.560
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1242	1242	1242	1242
d_b, Bicycle Delay [s]	3.48	3.48	3.48	3.48
l_b,int, Bicycle LOS Score for Intersection	2.126	2.137	2.502	2.321
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 3: NW Camas Meadows Drive/NW Payne Street

Control Type:	Roundabout	Delay (sec / veh):	3.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	NW Payne Street			NW Pittock Place			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	62	0	9	0	0	0	0	110	47	4	81	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	0	9	0	0	0	0	110	47	4	81	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	2	0	0	0	0	28	12	1	20	0
Total Analysis Volume [veh/h]	62	0	9	0	0	0	0	110	47	4	81	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	110			147			4			62		
Exiting Flow Rate [veh/h]	51			0			143			119		
Demand Flow Rate [veh/h]	62	0	9	0	0	0	0	110	47	4	81	0
Adjusted Demand Flow Rate [veh/h]	62	0	9	0	0	0	0	110	47	4	81	0

Lanes

Overwrite Calculated Critical Headway	No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00	3.00	3.00
A (intercept)	1380.00	1380.00	1380.00	1380.00
B (coefficient)	0.00102	0.00102	0.00102	0.00102
HV Adjustment Factor	1.00	1.00	1.00	1.00
Entry Flow Rate [veh/h]	71	0	157	85
Capacity of Entry and Bypass Lanes [veh/h]	1234	1188	1375	1296
Pedestrian Impedance	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	1234	1188	1375	1296
X, volume / capacity	0.06	0.00	0.11	0.07

Movement, Approach, & Intersection Results

Lane LOS	A	A	A	A
95th-Percentile Queue Length [veh]	0.18	0.00	0.39	0.21
95th-Percentile Queue Length [ft]	4.57	0.00	9.65	5.26
Approach Delay [s/veh]	3.38	3.03	3.53	3.30
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	3.43			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 4: NW Camas Meadows Drive/NE Goodwin Road

Control Type:	Two-way stop	Delay (sec / veh):	31.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	1	0	1	0
Entry Pocket Length [ft]	100.00	220.00	90.00	100.00	140.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NE Goodwin Road		NE Goodwin Road		NW Camas Meadows Drive	
Base Volume Input [veh/h]	556	37	81	380	83	123
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	556	37	81	380	83	123
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	139	9	20	95	21	31
Total Analysis Volume [veh/h]	556	37	81	380	83	123
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.08	0.00	0.38	0.23
d_M, Delay for Movement [s/veh]	0.00	0.00	8.95	0.00	31.28	13.74
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.27	0.00	1.68	0.88
95th-Percentile Queue Length [ft/ln]	0.00	0.00	6.65	0.00	41.88	22.04
d_A, Approach Delay [s/veh]	0.00		1.57		20.81	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	3.98					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: NW Camas Meadows Drive/Business Park Driveway/Project Access (Middle)

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	Business Park Driveway			Project Access (West)			NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Business Park Driveway			Project Access (West)			NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	0	3	4	7	1	9	12	104	0	0	193	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	3	4	7	1	9	12	104	0	0	193	7
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	2	0	2	3	26	0	0	48	2
Total Analysis Volume [veh/h]	0	3	4	7	1	9	12	104	0	0	193	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.84	12.97	9.94	10.96	11.21	9.36	7.62	0.00	0.00	7.40	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.07	0.07	0.07	0.03	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.91	1.81	1.81	1.81	0.66	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.24			10.13			0.79			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.01											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: NW Lake Road/NW Payne Street

Control Type:	Two-way stop	Delay (sec / veh):	26.4
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	240.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	NW Payne Street		NW Lake Road		NW Lake Road	
Base Volume Input [veh/h]	13	47	71	640	627	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	9.00	9.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	47	71	640	627	26
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	12	18	160	157	7
Total Analysis Volume [veh/h]	13	47	71	640	627	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.07	0.08	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	26.41	12.00	9.13	0.00	0.00	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.50	0.50	0.24	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.52	12.52	6.09	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.13		0.91		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.09					
Intersection LOS	D					

Intersection Level Of Service Report

Intersection 7: NW Camas Meadows Drive/Business Park Driveway/Project Access (West)

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.047

Intersection Setup

Name							NW Camas Meadows Drive			NW Camas Meadows Drive		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name							NW Camas Meadows Drive			NW Camas Meadows Drive		
Base Volume Input [veh/h]	0	0	0	14	0	16	30	102	0	0	176	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	14	0	16	30	102	0	0	176	26
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	4	0	4	8	26	0	0	44	7
Total Analysis Volume [veh/h]	0	0	0	14	0	16	30	102	0	0	176	26
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			No	No
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			No	No
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.12	0.00	0.00	0.21	0.02
d_M, Delay for Movement [s/veh]	7.25	0.00	0.00	7.24	0.00	0.00	10.91	9.82	8.93	9.59	10.55	9.58
Movement LOS	A	A	A	A	A	A	B	A	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.03	0.03	0.03	0.15	0.41	0.41	0.00	0.90	0.90
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.71	0.71	0.71	3.69	10.20	10.20	0.00	22.59	22.59
d_A, Approach Delay [s/veh]	2.42			3.38			10.07			10.42		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	9.71											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 8: NW Camas Meadows/Project Access (East)

Control Type:	Two-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Project Access (East)		NW Camas Meadows Drive		NW Camas Meadows Drive	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Project Access (East)		NW Camas Meadows Drive		NW Camas Meadows Drive	
Base Volume Input [veh/h]	3	3	5	110	197	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	3.00	3.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	3	5	110	197	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	1	28	49	1
Total Analysis Volume [veh/h]	3	3	5	110	197	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.39	9.31	7.64	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.01	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.61	0.61	0.28	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.85		0.33		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.30					
Intersection LOS	B					