Milano Issaquah Apartments

Issaquah, WA

Revised Transportation Impact Study

September 9, 2022

Prepared for:

Milano Issaquah Apartments, LLC
2300 Newport Way NW
Issaquah, WA 98027

Prepared by:

TENW

Transportation Engineering NorthWest

11400 SE 8th Street, Suite 200

Bellevue, WA 98004

Office: (425) 889-6747

Fax: (425) 889-8369

Table of Contents

FINDINGS/CONCLUSIONS 1
Project Description 2
Project Approach 2
Primary Data and Information Sources 2
EXISTING CONDITIONS 5
Roadway Network 5
Existing Traffic Volumes 5
Pedestrian & Bicycle Facilities 5
Collision History 5
FUTURE CONDITIONS AND TRAFFIC IMPACT ANALYSIS 7
Project Trip Generation 7
Future Traffic Volumes 7
Intersection Level of Service 8
Turn Lane Evaluation 9
Sight Distance Assessment 9
Safety 10
Neighborhood Impacts 10
Pedestrian & Bicycle Impacts 10
Parking Analysis 10
MITIGATION 11
Off-Site Improvements 11
Impact Fees 11

Appendices

Appendix A – Existing Traffic Counts
Appendix B – Trip Generation Calculations
Appendix C – Level of Service Calculations
Appendix D – WSDOT Right-Turn Lane Guidelines
Appendix E – Sight Distance Exhibits

List of Figures and Tables

Figure 1 Project Site Vicinity 3
Figure 2 Preliminary Site Plan 4
Figure 3 Traffic Volumes 6

Table 1 Milano Issaquah Apartments Trip Generation Summary 7
Table 2 LOS Criteria for Signalized and Stop Controlled Intersections 8
Table 3 Site Access Peak Hour LOS Summary – Stop Controlled 9

FINDINGS/CONCLUSIONS

This revised traffic impact analysis was prepared for the Milano Issaquah Apartments project located at 2300 Newport Way NW across from NW Pinecone Drive in the City of Issaquah. This is an update to the previous TIA (dated April 26, 2022) to address comments received from the City of Issaquah in May 2022.

Project Proposal. The project proposal includes up to 115 residential apartment units. The existing site includes one single-family home to be removed with the proposed project. Full project buildout is expected by 2023.

It should be noted that the current site plan includes 65 residential apartment units. The analysis presented in this report is based on up to 115 residential apartment units, and therefore should be considered conservative.

Vehicular Access and Parking. Primary vehicular access to the site (and underground parking garage) is proposed via a single access intersecting with Newport Way NW aligned with NW Pinecone Drive on the north side of the building. Two (2) new garage access points from this new access road are proposed on the north side of the building which will provide access to the proposed underground parking garage. The underground parking garage will include 57 on-site parking stalls.

Trip Generation. The Milano Issaquah Apartments project is estimated to generate a total of 616 net new weekday daily trips with 38 net new trips during the AM peak hour (10 entering, 28 exiting) and 50 net new trips during the PM peak hour (30 entering, 20 exiting).

Future Year LOS. Weekday AM and PM peak hour LOS analyses were conducted at the proposed site access intersection with Newport Way NW at NW Pinecone Drive. The results of the LOS analyses showed that the individual movements at the proposed site access are anticipated to operate at LOS D or better in 2023 during both the AM and PM peak hours with the proposed project.

Parking Analysis. Based on City requirements, the minimum number of parking spaces required is 1 per unit or 0.75 per unit if the unit is less than or equal to 600 SF. Based on the current site plan, the project proposal includes 58 units less than or equal to 600 SF and 7 units greater than 600 SF, resulting in a minimum code required parking of 51 stalls (58 x 0.75 + 7 x 1). The proposed project will provide 57 on-site parking stalls, meeting minimum City requirements.

Mitigation:

Off-Site Improvements. As part of the project, a raised intersection will be constructed at the Newport Way NW / NW Pinecone Drive (location of the proposed site access) and southbound and northbound left-turn lanes on Newport Way NW will be added. Individual movements at the proposed site access are anticipated to operate at acceptable levels and no additional mitigation is proposed.

Transportation Impact Fees. To mitigate long-term traffic impacts, the City of Issaquah requires payment of a traffic impact fee and a bicycle and pedestrian mitigation fee. The City's currently adopted impact fee rates for Multifamily (Mid-Rise) are $5,436.12 per unit (traffic impact fee) and $804.56 per unit (bicycle and pedestrian mitigation fee). Impact fee credit for the single-family detached home to be removed is $9,173.10 for the traffic impact fee and $1,357.12 for the bicycle and pedestrian mitigation fee. Final impact fees will be determined based on the final unit count and traffic impact fee rates effective at time of building permit issuance.

INTRODUCTION

This revised traffic impact analysis was prepared for the Milano Issaquah Apartments project located at 2300 Newport Way NW directly across from NW Pinecone Drive in the City of Issaquah as shown in the Figure 1 vicinity map. This is an update to the previous TIA (dated April 26, 2022) to address comments received from the City of Issaquah in May 2022.

Project Description

The project includes up to 115 residential apartment units. The existing site includes one (1) single-family home which will be removed with the proposed project. Full project buildout is expected by 2023. A site plan is provided in Figure 2.

It should be noted that the current site plan includes 65 residential apartment units. The analysis presented in this report is based on up to 115 residential apartment units, and therefore should be considered conservative.

Primary vehicular access to the site (and underground parking garage) is proposed via a single access intersecting with Newport Way NW aligned with NW Pinecone Drive on the north side of the building. Two (2) new garage access points from this new access road are proposed on the north side of the building which will provide access to the proposed underground parking garage. The underground parking garage will include 57 on-site parking stalls

Project Approach

The specific scope items included in the evaluation of traffic impacts and recommended mitigation measures were discussed and confirmed by City staff. To analyze the traffic impacts from the Milano Issaquah Apartments project, the following tasks were undertaken:

- Assessed existing conditions through field reconnaissance and reviewed existing planning documents;
- Estimated trip generation and documented trip distribution and assignment of project traffic;
- Documented traffic forecasts and assumptions for year 2023 conditions without and with the proposed project;
- Conducted weekday AM and PM peak hour level of service analyses at the Newport Way NW & NW Pinecone Drive intersection (location of the proposed site access);
- Summarized the proposed on-site parking compared to City Code requirements;
- Identified transportation mitigation fees to the City of Issaquah.

Primary Data and Information Sources

- Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, 2017.
- 2017 peak hour traffic counts, IDAX.
- *Highway Capacity Manual (HCM),* 6th Edition, TRB.
- City of Issaquah Mid-Rise and High-Rise Townhome Traffic Impact and Pedestrian & Bicycle Mitigation Fee, 2020.

Figure 1: Project Site Vicinity

N
NOT TO SCALE

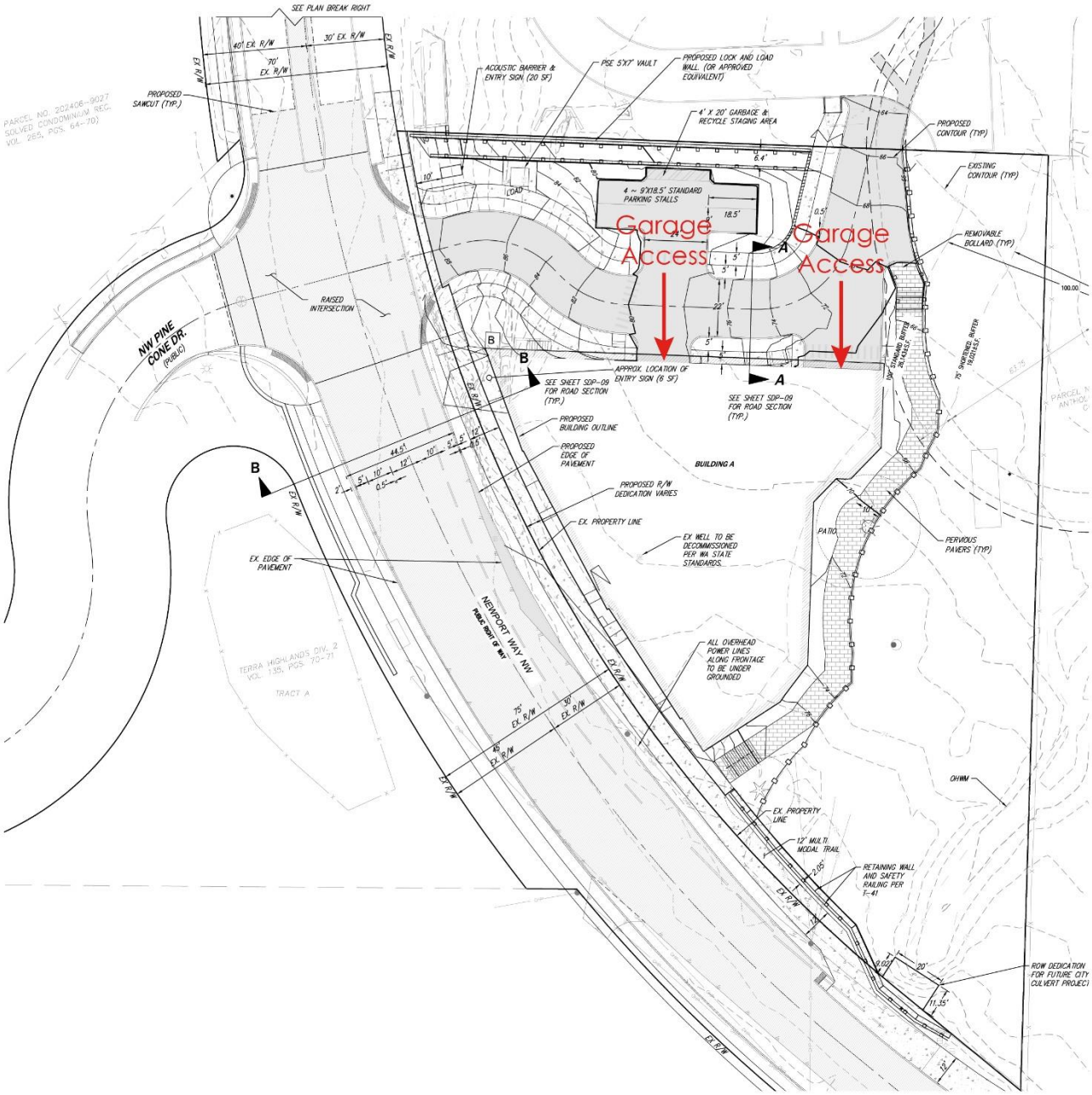


Figure 2: Preliminary Site Plan

N
NOT TO SCALE

EXISTING CONDITIONS

Roadway Network

The primary travel route to and from the site is Newport Way NW. The relationship of this roadway to the project site is shown in Figure 1. In general, Newport Way NW runs east/west. Near the location of the proposed site access, Newport Way NW runs north/south.

In the project vicinity, Newport Way NW is a 2-lane minor arterial road that carries traffic between Lakemont Boulevard (in Bellevue to the west) and SR-900 to the east with a posted speed limit of 30 mph. There are turn-lanes provided at a few City road and access locations with intersections serving residential developments.

Existing Traffic Volumes

Existing weekday AM and PM peak hour traffic volumes at the proposed site access location were based on counts conducted by All Traffic Data on Thursday, May 11, 2017 at the Newport Way NW intersection with NW Pinecone Drive. To estimate existing 2020 weekday AM and PM peak hour volumes, a two (2) percent annual growth rate was applied to the 2017 counts. Based on discussions with City of Issaquah staff, the use of 2017 traffic counts was determined to be acceptable given the current COVID-19 pandemic.

Figure 3 illustrates the 2020 existing weekday AM and PM peak hour traffic volumes at the Newport Way NW & NW Pinecone Dr intersection. Appendix A includes the existing peak hour turning movement data at the study intersections.

Pedestrian & Bicycle Facilities

Existing pedestrian facilities in the vicinity of the proposed project include sidewalks on both sides of Newport Way NW, west of NW Pinecone Drive. Newport Way NW includes paved shoulders on both sides, east of NW Pinecone Drive. A pedestrian crossing with a rectangular rapid flashing beacon (RRFB) exists on the west leg of the Newport Way NW / NW Pinecone Drive intersection (location of the proposed site access). The existing Newport Way Trail runs along Newport Way NW and 17th Avenue NW from Lakemont Blvd SE to NW Sammamish Rd.

Bicycle lanes currently exist along both sides of Newport Way and would be maintained with development of the proposed Milano Issaquah Apartments project.

Collision History

Collision records in the study area were reviewed for the five-year period from January 1, 2015 to December 31, 2019 (the most recent 5-year period as provided by WSDOT). Based on review of the information provided by WSDOT, there were no reported collisions at the Newport Way NW / NW Pinecone Drive intersection or along the project frontage in the most recent 5 years (2015-2019).

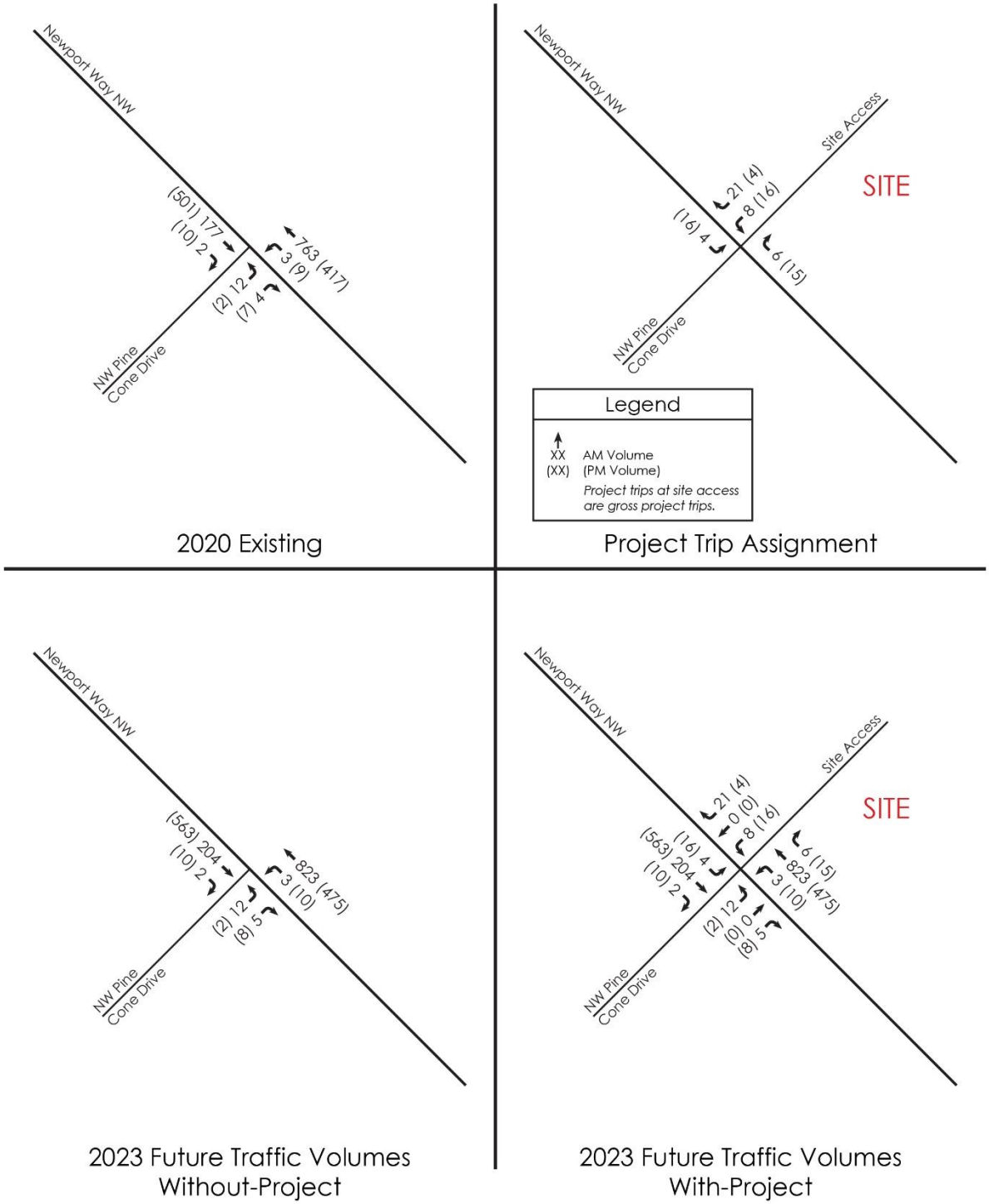


Figure 3: Weekday AM and PM Peak Hour Traffic Volumes

FUTURE CONDITIONS and TRAFFIC IMPACT ANALYSIS

Project Trip Generation

The trip generation estimate for the proposed project was based on the methodology included in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th edition for Land Use Code (LUC) 221 (Multifamily Housing – Mid-Rise). Trip credit for the existing single-family home currently on the site was based on LUC 210 (Single-Family Detached Housing).

The net new trip generation was calculated by subtracting the existing use trip generation from the proposed use trip generation. The resulting net new weekday daily, AM, and PM peak hour trip generation associated with the proposed project is summarized in Table 1.

Table 1
Milano Issaquah Apartments Trip Generation Summary

	Net New Trips Generated		
Time Period	In	Out	Total
Weekday Daily	308	308	616
Weekday AM Peak Hour	10	28	38
Weekday PM Peak Hour	30	20	50

As shown in Table 1, the proposed project is estimated to generate 616 net new weekday daily trips, with 38 net new trips occurring during the weekday AM peak hour (10 entering, 28 exiting) and 50 net new trips occurring during the weekday PM peak hour (30 entering, 20 exiting). Detailed trip generation calculations are included in Appendix B.

It should be noted that the current site plan includes 65 residential apartment units. The analysis presented in this report is based on up to 115 residential apartment units, and therefore should be considered conservative.

Future Traffic Volumes

To estimate future traffic volumes on Newport Way that include known and anticipated growth from pipeline development in the area, a two (2) percent annual growth rate was applied to the existing volumes. Weekday AM and PM peak hour Milano Issaquah Apartments project trips were added to the 2023 baseline volumes, resulting in an estimated year 2023 weekday peak hour traffic volumes when the Milano Issaquah Apartments project is expected to be open. In addition to the background growth rate, traffic from both the neighboring Revel residential development and the KC Trailhead expansion projects were included in the future traffic volumes on Newport Way NW. A summary of the peak hour traffic volumes used in the intersection LOS analyses were shown previously in Figure 3.

Intersection Level of Service

LOS generally refers to the degree of congestion on a roadway or intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes intersection LOS. At signalized intersections, LOS A represents free-flow conditions (motorists experience little or no delays), and LOS F represents forced-flow conditions where motorists experience an average delay in excess of 80 seconds per vehicle.

The LOS reported for signalized intersections represents the average control delay (sec/veh) and can be reported for the overall intersection, for each approach, and for each lane group (additional v/c ratio criteria apply to lane group LOS only).

The LOS reported at unsignalized intersections is based on the average control delay and can be reported for each controlled minor approach, controlled minor lane group, and controlled major-street movement (and for the overall intersection at all-way stop controlled intersections. Additional v/c ratio criteria apply to lane group or movement LOS only).

Table 2 outlines the current HCM 6th Edition LOS criteria for signalized and unsignalized intersections based on these methodologies.

Table 2
LOS Criteria for Signalized and Stop Controlled Intersections

SIGNALIZED INTERSECTIONS			UNSIGNALIZED INTERSECTIONS		
	LOS by Volume-to Capacity (V/C) Ratio[1]			LOS by Volume-to Capacity (V/C) Ratio[2]	
Control Delay (sec/veh)	≤ 1.0	> 1.0	Control Delay (sec/veh)	≤ 1.0	> 1.0
≤ 10	A	F	≤ 10	A	F
> 10 to ≤ 20	B	F	> 10 to ≤ 15	B	F
> 20 to ≤ 35	C	F	> 15 to ≤ 25	C	F
> 35 to ≤ 55	D	F	> 25 to ≤ 35	D	F
> 55 to ≤ 80	E	F	> 35 to ≤ 50	E	F
> 80	F	F	> 50	F	F

Source: Highway Capacity Manual, Transportation Research Board, 6th Edition, 2016.

[1] For approach-based and intersection-wide assessments at signals, LOS is defined solely by control delay.
[2] For two-way stop controlled intersections, the LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole at two-way stop controlled intersections. For approach-based and intersection-wide assessments at all-way stop controlled intersections and roundabouts, LOS is solely defined by control delay.

LOS calculations were based on methodology and procedures outlined in the 6th Edition of the *Highway Capacity Manual* using *Synchro 10* traffic analysis software at the proposed site access.

The City's adopted level of service standard is LOS D consistent with the latest edition of the *Highway Capacity Manual*. According to the City's TIA Guidelines, a development that exceeds the maximum allowable delay at a driveway or local roadway not included in the City's transportation concurrency analysis is considered as having a probably significant adverse impact and will be required to mitigate that impact.

Weekday AM and PM peak hour LOS, delays, and queues were evaluated at the intersection of the proposed access onto Newport Way NW at NW Pinecone Drive. LOS and queues were evaluated for future with-project conditions in 2023 assuming stop signs controlling the side-street turns. The results of the analysis are summarized in the Table 3 below. Detailed LOS results are provided in Appendix C.

Table 3
Site Access Peak Hour LOS Summary – Stop Controlled

	AM Peak Hour			PM Peak Hour		
Time Period	LOS[1]	Delay (sec/ veh)[2]	95th % Queue (ft)[3]	LOS[1]	Delay (sec/ veh)[2]	95th % Queue (ft)[3]
1. Newport Way NW / NW Pinecone Dr / Site Access						
Northbound Left-Turn	A	7.7	0'	A	8.8	0'
Eastbound Shared Left-Thru-Right	B	14.7	< 25'	B	12.2	< 25'
Westbound Shared Left-Thru-Right	C	21.1	< 25'	D	28.2	< 25'
Southbound Left-Turn	B	10.0	0'	A	8.5	< 25'

1. LOS = Level of Service
2. Delay refers to average control delay expressed in seconds per vehicle.
3. Queues are 95th Percentile queues. <25' indicates 95th Percentile queue statistically less than 1 vehicle.

As shown in Table 3, the individual movements at the proposed site access location on Newport Way NW, aligned with the existing NW Pinecone Drive, are anticipated to operate at LOS D or better with minimal queuing during the weekday AM and PM peak hours with the proposed Milano Issaquah Apartments project.

Turn Lane Evaluation

As part of the proposed project, Newport Way NW will be widened to include northbound and southbound left-turn lanes at the proposed site access (aligned with NW Pinecone Dr) with Newport Way NW.

The potential need for a northbound right-turn lane into the site was evaluated at the site access location on Newport Way NW based on review of the WSDOT *Design Manual* section 1310.03(3) Right-Turn Lanes. Based on the estimated future 2023 peak hour traffic volumes at the proposed site access, a northbound right-turn lane would not be recommended. The WSDOT right-turn lane exhibit is included in Appendix D.

Sight Distance Assessment

A sight distance assessment was conducted at the proposed site access location on Newport Way NW for vehicles, pedestrians, and bicycles based on City of Issaquah standards. Vehicular sight distance standards are based on City of Issaquah *Street Standards* Design Section C (Intersection and Driveway Sight Distance Triangles) and Standard Detail T-01. Pedestrian sight distance standards are based on *Street Standards* Design Section B (Access Control). Bicycle sight distance standards are based on discussions with the City of Issaquah and the 2012 AASHTO *Guide for the Development of Bicycle Facilities*.

The vehicular, pedestrian, and bicycle sight distance exhibits were provided by Core and are included in Appendix E.

Safety

According to the City's TIA Guidelines, the addition of 10 or more peak hour trips to a High Accident Location (HAL) is considered a probable significant adverse impact. When a development proposal impacts a HAL, the City may require reasonable mitigation even if the LOS thresholds are not exceeded. The City may also consider other safety threshold requirements.

Based on the most recent 5-year collision data at the Newport Way NW/NW Pinecone Dr study intersection, no collisions were reported and it is unlikely that this location would be considered a HAL.

Neighborhood Impacts

The proposed Milano Issaquah Apartments project will provide primary vehicular access to Newport Way NW at a location aligned with the existing NW Pinecone Drive. The project will also share a connection with the Revel development to the north that is providing direct vehicular access to Newport Way NW, north of NW Pinecone Drive. No cut-through traffic between these two developments was assumed as part of this analysis.

Pedestrian & Bicycle Impacts

Currently at the Newport Way NW / NW Pinecone Drive intersection (location of the proposed site access), there is a marked crosswalk on the north leg of the intersection with a rectangular rapid flashing beacon (RRFB). The existing Newport Way Trail runs along Newport Way NW and 17th Avenue NW from Lakemont Blvd SE to NW Sammamish Rd. As part of the proposed project, a fourth leg will be constructed to the Newport Way NW / NW Pinecone Drive intersection providing access to the proposed Milano Issaquah Apartments project. Additionally, the project will be constructing an RRFB across the site driveway for the multi-use trail, as requested by the City. The existing bicycle lanes and pedestrian crossing on the north leg of the intersection will be maintained as part of the intersection improvements.

Parking Analysis

The proposed Milano Issaquah Apartments project is located within the Central Issaquah Neighborhood. Based on Table 8.10-1 (Table of Vehicular Spaces) documented in Chapter 8 (Parking Standards) of the *Central Issaquah Plan*, the minimum number of parking spaces required is 1 per unit or 0.75 per unit if the unit is less than or equal to 600 SF. Based on the current site plan, the project proposal includes 58 units less than or equal to 600 SF and 7 units greater than 600 SF, resulting in a minimum code required parking of 51 stalls (58 x 0.75 + 7 x 1). The proposed project will provide 57 on-site parking stalls, meeting minimum City requirements.

MITIGATION

The following measures are proposed to mitigate transportation impacts of the proposed Milano Issaquah Apartments development.

Off-Site Improvements

As part of the project, a raised intersection will be constructed at the Newport Way NW / NW Pinecone Drive (location of the proposed site access) and southbound and northbound left-turn lanes on Newport Way NW will be added. Additionally, the project will be constructing a rectangular rapid flashing beacon (RRFB) across the site driveway, as requested by the City, for the multi-use trail to enhance safety between vehicular and pedestrian/bicycle interactions. Individual movements at the proposed site access are anticipated to operate at acceptable levels and no additional mitigation is required.

Impact Fees

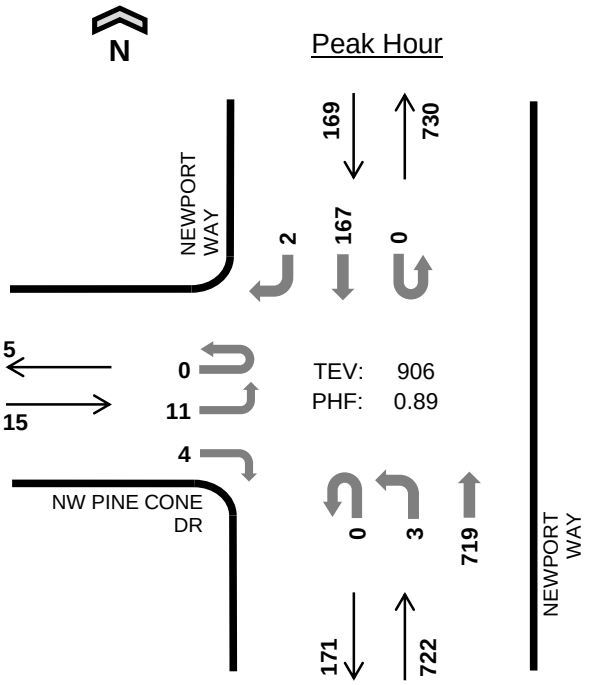
To mitigate long-term traffic impacts, the City of Issaquah requires payment of a traffic impact fee and a bicycle and pedestrian mitigation fee. The City's currently adopted impact fee rates for Multifamily (Mid-Rise) are $5,436.12 per unit (traffic impact fee) and $804.56 per unit (bicycle and pedestrian mitigation fee). Impact fee credit for the single-family detached home to be removed is $9,173.10 for the traffic impact fee and $1,357.12 for the bicycle and pedestrian mitigation fee. Final impact fees will be determined based on the final unit count and traffic impact fee rates effective at time of building permit issuance.

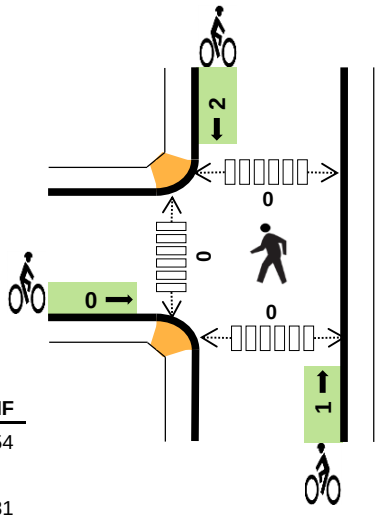
Appendix A

Existing Traffic Volumes

NEWPORT WAY
NW PINE CONE DR

Date: Thu, May 11, 2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	0.0%	0.54
WB	-	-
NB	1.8%	0.81
SB	4.7%	0.75
TOTAL	2.3%	0.89

Two-Hour Count Summaries

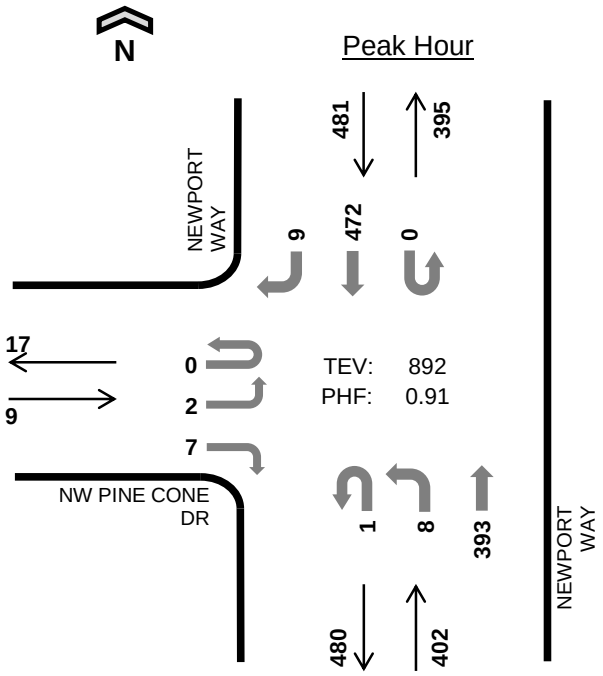
Interval Start	NW PINE CONE DR				0				NEWPORT WAY				NEWPORT WAY				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	4	0	2	0	0	0	0	0	0	123	0	0	0	56	0	185	0
7:15 AM	0	4	0	0	0	0	0	0	0	0	117	0	0	0	31	0	152	0
7:30 AM	0	3	0	1	0	0	0	0	0	0	160	0	0	0	27	0	191	0
7:45 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**223**	**0**	**0**	**0**	**27**	**1**	**254**	782
8:00 AM	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**159**	**0**	**0**	**0**	**44**	**0**	**212**	809
8:15 AM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**164**	**0**	**0**	**0**	**41**	**0**	**208**	865
8:30 AM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**173**	**0**	**0**	**0**	**55**	**1**	**232**	**906**
8:45 AM	0	4	0	0	0	0	0	0	0	6	138	0	0	0	39	0	187	839
Count Total	0	26	0	7	0	0	0	0	0	9	1,257	0	0	0	320	2	1,621	0
Peak Hour	**0**	**11**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**719**	**0**	**0**	**0**	**167**	**2**	**906**	**0**

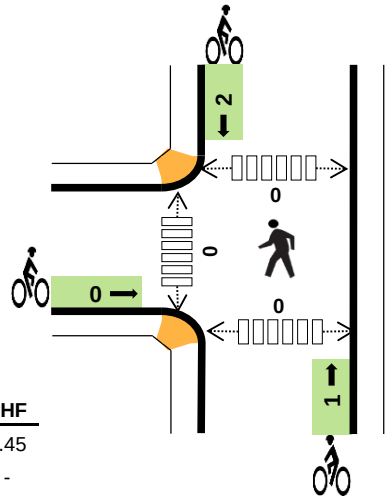
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	3	7	*10*	0	0	2	2	*4*	0	1	0	0	*1*
7:15 AM	0	0	5	4	*9*	0	0	1	0	*1*	0	0	0	0	*0*
7:30 AM	0	0	3	3	*6*	0	0	2	0	*2*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**6**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**1**	**3**	***4***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	0	3	8	*11*	0	0	2	0	*2*	0	0	0	0	*0*
Count Total	0	0	27	30	*57*	0	0	8	4	*12*	0	1	0	0	*1*
Peak Hr	**0**	**0**	**13**	**8**	***21***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

NEWPORT WAY
NW PINE CONE DR

Date: Thu, May 11, 2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.0%	0.45
WB	-	-
NB	0.5%	0.92
SB	0.0%	0.90
TOTAL	0.2%	0.91

Two-Hour Count Summaries

Interval Start	NW PINE CONE DR				0				NEWPORT WAY				NEWPORT WAY				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	2	75	0	0	0	109	2	188	0
4:15 PM	0	0	0	0	0	0	0	0	0	2	71	0	0	0	127	3	203	0
4:30 PM	0	0	0	1	0	0	0	0	0	1	90	0	0	0	99	0	191	0
4:45 PM	0	2	0	3	0	0	0	0	0	0	93	0	0	0	119	1	218	800
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**91**	**0**	**0**	**0**	**115**	**3**	**211**	823
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**93**	**0**	**0**	**0**	**107**	**2**	**207**	827
5:30 PM	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**1**	**103**	**0**	**0**	**0**	**131**	**3**	**244**	880
5:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**106**	**0**	**0**	**0**	**119**	**1**	**230**	**892**
Count Total	0	4	0	11	0	0	0	0	1	13	722	0	0	0	926	15	1,692	0
Peak Hour	**0**	**2**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**8**	**393**	**0**	**0**	**0**	**472**	**9**	**892**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	1	0	*1*	0	0	1	1	*2*	0	0	0	0	*0*
4:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	0	5	2	*7*	0	0	3	3	*6*	0	0	0	0	*0*
Peak Hr	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

Appendix B

Trip Generation Calculations

Milano Issaquah Apartments
Trip Generation

Land Use	Units [1]	ITE LUC [2]	Directional Split In	Directional Split Out	Trip Rate	Trips Generated In	Trips Generated Out	Trips Generated Total
DAILY								
Proposed Use:								
Multifamily Housing (Mid-Rise)	115 DU	221	50%	50%	T = 5.45(X)-1.75	313	312	625
Less Exisitng Use:								
Single-Family Detached Housing	1 DU	210	50%	50%	9.44	-5	-4	-9
					TOTAL DAILY TRIP GENERATION	**308**	**308**	**616**
AM PEAK HOUR								
Proposed Use:								
Multifamily Housing (Mid-Rise)	115 DU	221	26%	74%	Ln(T) = 0.98Ln(X)-0.98	10	29	39
Less Exisitng Use:								
Single-Family Detached Housing	1 DU	210	25%	75%	0.74	0	-1	-1
					TOTAL AM PEAK HOUR TRIP GENERATION	**10**	**28**	**38**
PM PEAK HOUR								
Proposed Use:								
Multifamily Housing (Mid-Rise)	115 DU	221	61%	39%	Ln(T) = 0.96Ln(X)-0.63	31	20	51
Less Exisitng Use:								
Single-Family Detached Housing	1 DU	210	63%	37%	0.99	-1	0	-1
					TOTAL PM PEAK HOUR TRIP GENERATION	**30**	**20**	**50**

Notes:

[1] DU is dwelling units.

[2] Institute of Transportation Engineers, *Trip Generation* Manual, 10th Edition, 2017 Land Use Code.

Appendix C

Level of Service (LOS) Calculations

2020 Existing

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	4	3	763	177	2
Future Volume (vph)	12	4	3	763	177	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-11%			0%	0%	
Link Speed (mph)	25			30	30	
Link Distance (ft)	293			286	241	
Travel Time (s)	8.0			6.5	5.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	4	3	763	177	2
Future Vol, veh/h	12	4	3	763	177	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-11	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	2	2	5	5
Mvmt Flow	13	4	3	857	199	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1063	200	201	0	-	0
Stage 1	200	-	-	-	-	-
Stage 2	863	-	-	-	-	-
Critical Hdwy	4.2	5.1	4.12	-	-	-
Critical Hdwy Stg 1	3.2	-	-	-	-	-
Critical Hdwy Stg 2	3.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	477	899	1371	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	475	899	1371	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	706	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1371	-	538	-	-
HCM Lane V/C Ratio	0.002	-	0.033	-	-
HCM Control Delay (s)	7.6	0	11.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	7	9	417	501	10
Future Volume (vph)	2	7	9	417	501	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-11%			0%	0%	
Link Speed (mph)	25			30	30	
Link Distance (ft)	293			286	241	
Travel Time (s)	8.0			6.5	5.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	7	9	417	501	10
Future Vol, veh/h	2	7	9	417	501	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-11	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	8	10	458	551	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1035	557	562	0	-	0
Stage 1	557	-	-	-	-	-
Stage 2	478	-	-	-	-	-
Critical Hdwy	4.2	5.1	4.11	-	-	-
Critical Hdwy Stg 1	3.2	-	-	-	-	-
Critical Hdwy Stg 2	3.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	488	633	1014	-	-	-
Stage 1	812	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	482	633	1014	-	-	-
Mov Cap-2 Maneuver	482	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1014	-	592	-	-
HCM Lane V/C Ratio	0.01	-	0.017	-	-
HCM Control Delay (s)	8.6	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

2023 Without-Project

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	5	3	823	204	2
Future Volume (vph)	12	5	3	823	204	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-11%			0%	0%	
Link Speed (mph)	25			30	30	
Link Distance (ft)	293			286	241	
Travel Time (s)	8.0			6.5	5.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	2%	2%	5%	5%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	5	3	823	204	2
Future Vol, veh/h	12	5	3	823	204	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-11	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	2	2	5	5
Mvmt Flow	13	6	3	925	229	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1161	230	231	0	-	0
Stage 1	230	-	-	-	-	-
Stage 2	931	-	-	-	-	-
Critical Hdwy	4.2	5.1	4.12	-	-	-
Critical Hdwy Stg 1	3.2	-	-	-	-	-
Critical Hdwy Stg 2	3.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.218	-	-	-
Pot Cap-1 Maneuver	443	873	1337	-	-	-
Stage 1	936	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	441	873	1337	-	-	-
Mov Cap-2 Maneuver	441	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	683	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1337	-	516	-	-
HCM Lane V/C Ratio	0.003	-	0.037	-	-
HCM Control Delay (s)	7.7	0	12.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings
1: Newport Way NW & NW Pine Cone Dr

05/26/2021

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	8	10	475	563	10
Future Volume (vph)	2	8	10	475	563	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-11%			0%	0%	
Link Speed (mph)	25			30	30	
Link Distance (ft)	293			286	241	
Travel Time (s)	8.0			6.5	5.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	1%	0%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	8	10	475	563	10
Future Vol, veh/h	2	8	10	475	563	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	-11	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	1	0	0
Mvmt Flow	2	9	11	522	619	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1169	625	630	0	-	0
Stage 1	625	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	4.2	5.1	4.11	-	-	-
Critical Hdwy Stg 1	3.2	-	-	-	-	-
Critical Hdwy Stg 2	3.2	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.209	-	-	-
Pot Cap-1 Maneuver	440	591	957	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	433	591	957	-	-	-
Mov Cap-2 Maneuver	433	-	-	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	957	-	551	-	-
HCM Lane V/C Ratio	0.011	-	0.02	-	-
HCM Control Delay (s)	8.8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

2023 With-Project

Lanes, Volumes, Timings
1: Newport Way NW & NW Pine Cone Dr/Site Access

05/21/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	0	5	8	0	21	3	823	6	4	204	2
Future Volume (vph)	12	0	5	8	0	21	3	823	6	4	204	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-11%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	93		0	98		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		293			159			286			241	
Travel Time (s)		8.0			4.3			6.5			5.5	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	2%	2%	2%	5%	5%	5%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	5	8	0	21	3	823	6	4	204	2
Future Vol, veh/h	12	0	5	8	0	21	3	823	6	4	204	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	93	-	-	98	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-11	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	3	3	3	2	2	2	5	5	5
Mvmt Flow	13	0	6	9	0	24	3	925	7	4	229	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1185	1176	230	1176	1174	929	231	0	0	932	0	0
Stage 1	238	238	-	935	935	-	-	-	-	-	-	-
Stage 2	947	938	-	241	239	-	-	-	-	-	-	-
Critical Hdwy	4.9	4.3	5.1	7.13	6.53	6.23	4.12	-	-	4.15	-	-
Critical Hdwy Stg 1	3.9	3.3	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	3.9	3.3	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.218	-	-	2.245	-	-
Pot Cap-1 Maneuver	345	396	873	167	191	323	1337	-	-	722	-	-
Stage 1	890	823	-	317	343	-	-	-	-	-	-	-
Stage 2	564	613	-	760	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	318	393	873	165	189	323	1337	-	-	722	-	-
Mov Cap-2 Maneuver	318	393	-	165	189	-	-	-	-	-	-	-
Stage 1	888	818	-	316	342	-	-	-	-	-	-	-
Stage 2	522	612	-	751	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	21.1	0	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1337	-	-	391	256	722	-	-
HCM Lane V/C Ratio	0.003	-	-	0.049	0.127	0.006	-	-
HCM Control Delay (s)	7.7	-	-	14.7	21.1	10	-	-
HCM Lane LOS	A	-	-	B	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-	-

Lanes, Volumes, Timings
1: Newport Way NW & NW Pine Cone Dr/Site Access

05/26/2021

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	8	16	0	4	10	475	15	16	563	10
Future Volume (vph)	2	0	8	16	0	4	10	475	15	16	563	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-11%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	93		0	98		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		293			159			286			241	
Travel Time (s)		8.0			4.3			6.5			5.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	3%	3%	3%	1%	1%	1%	0%	0%	0%
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	8	16	0	4	10	475	15	16	563	10
Future Vol, veh/h	2	0	8	16	0	4	10	475	15	16	563	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	93	-	-	98	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-11	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	0	0	0
Mvmt Flow	2	0	9	18	0	4	11	522	16	18	619	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1215	1221	625	1217	1218	530	630	0	0	538	0	0
Stage 1	661	661	-	552	552	-	-	-	-	-	-	-
Stage 2	554	560	-	665	666	-	-	-	-	-	-	-
Critical Hdwy	4.9	4.3	5.1	7.13	6.53	6.23	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	3.9	3.3	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	3.9	3.3	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	335	383	591	157	180	547	957	-	-	1040	-	-
Stage 1	681	693	-	516	513	-	-	-	-	-	-	-
Stage 2	730	723	-	448	456	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	325	372	591	151	175	547	957	-	-	1040	-	-
Mov Cap-2 Maneuver	325	372	-	151	175	-	-	-	-	-	-	-
Stage 1	674	681	-	510	507	-	-	-	-	-	-	-
Stage 2	716	715	-	434	448	-	-	-	-	-	-	-

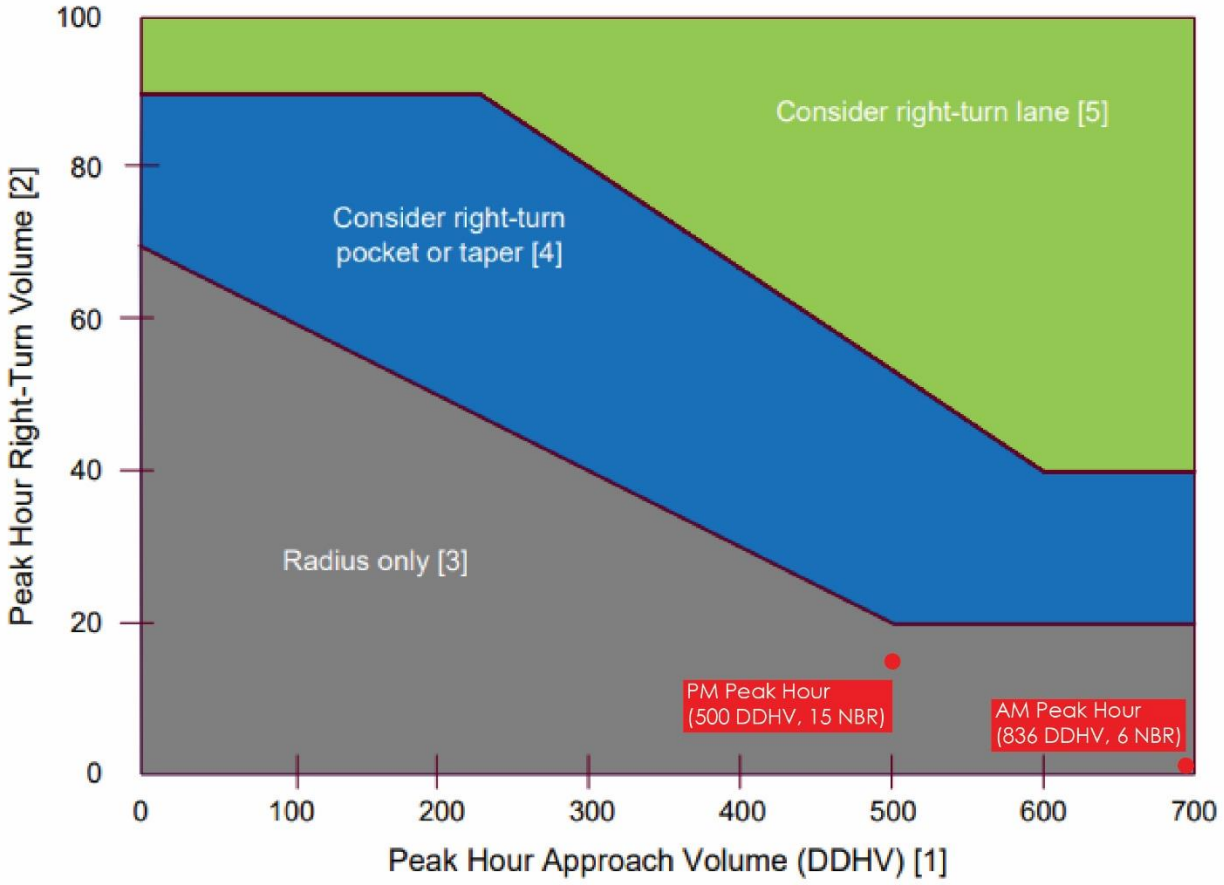
Approach	EB	WB	NB	SB
HCM Control Delay, s	12.2	28.2	0.2	0.2
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	957	-	-	508	177	1040	-	-
HCM Lane V/C Ratio	0.011	-	-	0.022	0.124	0.017	-	-
HCM Control Delay (s)	8.8	-	-	12.2	28.2	8.5	-	-
HCM Lane LOS	A	-	-	B	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0.1	-	-

Appendix D

WSDOT Right-Turn Lane Guidelines

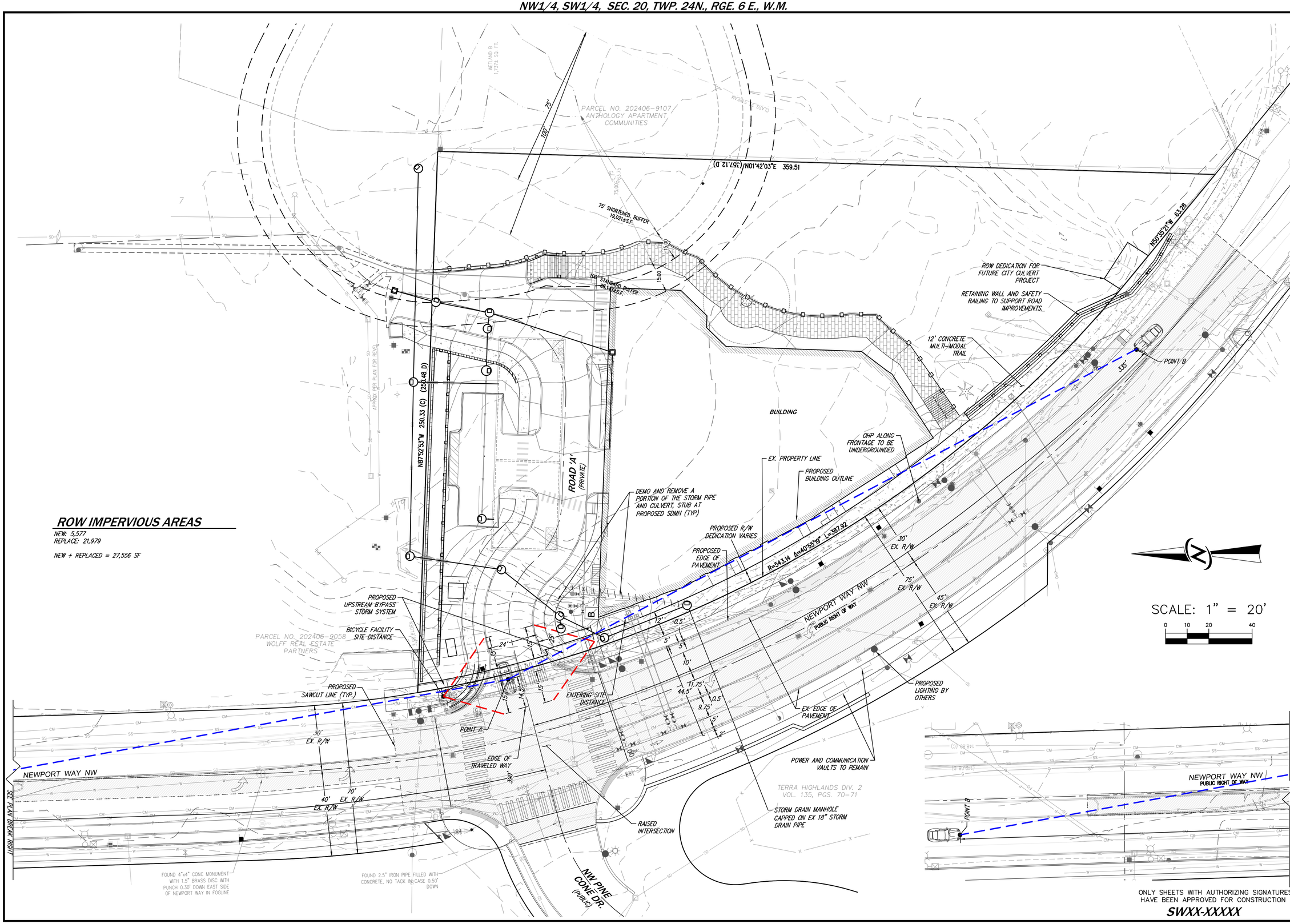
Exhibit 1310-11 Right-Turn Lane Guidelines
Newport Way NW / NW Pine Cone Dr / Site Access - Northbound Right Turn



Appendix D: WSDOT Right-Turn Lane Guidelines

Appendix E

Sight Distance Exhibits



ROW IMPERVIOUS AREAS

NEW: 5,577
REPLACE: 21,979

NEW + REPLACED = 27,556 SF

ONLY SHEETS WITH AUTHORIZING SIGNATURES HAVE BEEN APPROVED FOR CONSTRUCTION

SWXX-XXXXX

NO.	REVISIONS	DATE
1	REVISIONS PER CITY COMMENTS	6/24/21
2	REVISIONS PER CITY COMMENTS	8/31/22
2	REVISIONS PER CITY COMMENTS	9/09/22

9/09/22

CORE DESIGN
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
SURVEYING
12100 NE 195th St, Suite 300 Bothell, Washington 98011 425.885.7877

OFFSITE IMPROVEMENTS
MILANO ISSAQUAH APARTMENTS

HOSSEIN KHORRAM
12224 NE 8TH ST
BELLEVUE, WA 98005

DATE	JUNE 2021
DESIGNED	FLAVIO BIANOTTI
DRAWN	FRB / JRC
APPROVED	MICHAEL A. MOODY, P.E.
	GLENN R. SPRAGUE, P.L.S
	PROJECT MANAGER

SHEET
SDP-08

PROJECT NUMBER
19070

9/9/2022 7:07 PM L:\2019\19070\ENGINEERING\PRELIMINARY\SHEETS\SDP-08 OFFSITE IMPROVEMENTS.DWG