

 **TRAFFIC IMPACT ANALYSIS**


PILCHUCK RENTALS

JURISDICTION: CITY OF MARYSVILLE, WA
LOCATION: SMOKEY POINT BLVD, SOUTH OF 156TH STREET NE

Prepared for:
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August 2023
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1. DEVELOPMENT IDENTIFICATION

Kimley-Horn and Associates, Inc. (Kimley-Horn) has been retained to provide a traffic impact analysis for the Pilchuck Rentals development (Development). This report is intended to provide the City of Marysville (City) and Snohomish County (County) with the necessary traffic generation, trip distribution, and mitigation fee determination to facilitate their reviews of the Development. The Development is located at parcel 31053200102800 on the southwest corner of Smokey Point Boulevard and 156th Street NE. A site vicinity map is included in **Figure 1**. The Development is proposed to consist of 15,060 square feet (SF) of equipment rental space. The site is currently listed as developed with an existing warehouse and retail space per the *Snohomish County Online Property Information (SCOPI)* web map. The site will primarily access the City street network via one proposed access drive connected to Smokey point Boulevard. A site plan has been provided in **Appendix A**.

Brad Lincoln, responsible for this report and traffic analysis, is a licensed professional engineer (Civil) in the State of Washington and member of the Washington State section of the Institute of Transportation Engineers (ITE).



Figure 1: Site Vicinity Map

2. TRIP GENERATION

The Development is proposed to consist of 15,060 SF of construction equipment rental space. The site is currently developed with an existing warehouse and retail space. The trip generation calculations have been performed using data published by the ITE *Trip Generation Manual, 11th Edition (2021)*. The average trip generation rates for ITE Land Use Codes (LUC) 811, Construction Equipment Rental, ITE LUC 150, Warehousing, and ITE LUC 822, Strip Retail Plaza (<40k), have been used for the trip generation calculations. ITE also identifies a pass-by rate of 40% during the PM peak-hour for similar retail uses. This pass-by rate has also been applied to the daily and AM peak-hour trip generation calculations. The trip generation calculations for the Development are summarized in **Table 1**.

Table 1: Trip Generation Summary

Land Use	Size	Average Daily Trips (ADTs)	AM Peak-Hour Trips			PM Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Construction Equipment Rental ITE LUC 811	15,060 SF	141.71	10.90	3.26	14.16	4.17	10.74	14.91
Warehousing ITE LUC 150 (Removed)	-2,160 SF	-3.69	-0.28	-0.09	-0.37	-0.11	-0.28	-0.39
Strip Retail Plaza (<40k) ITE LUC 822 (Removed)	-2,280 SF	-74.49	-1.94	-1.29	-3.23	-4.51	-4.51	-9.02
TOTAL		63.53	8.68	1.88	10.56	-0.45	5.95	5.50

The Development is anticipated to generate approximately 64 new average daily trips with approximately 11 new AM peak-hour trips and 6 new PM peak-hour trips after applying the applicable pass-by reductions. The trip generation calculations are provided in **Appendix B**.

3. TRIP DISTRIBUTION

The trip distribution for the Development is based on distributions established by the City, which are included in the attachments. The Development is only anticipated to generate 14 new daily trips with 8 new AM peak-hour trips and x new PM peak-hour trips. This trip generation does not meet the City thresholds for analysis and there are not any County key intersections that will be impacted by 3 directional peak-hour trips. Detailed trip distributions for the Development should therefore not be required. The trip distribution for the 2026 opening year is:

- 57% to and from the north along Smokey Point Boulevard
 - 22% to and from the west along 172nd Street NE
 - 26% to and from the east along 172nd Street NE
 - 7% to and from local areas
 - 2% to and from the north
- 28% to and from the east along 152nd Street NE
- 10% to and from the south along Smokey Point Boulevard
- 5% to and from the west along 156th Street NE

The trip distribution for the 2032 horizon year is:

- 52% to and from the north along Smokey Point Boulevard
 - 25% to and from the west along 172nd Street NE
 - 20% to and from the east along 172nd Street NE
 - 5% to and from local areas
 - 2% to and from the north
- 38% to and from the east along 156th Street NE
- 5% to and from the south along Smokey Point Boulevard
- 5% to and from the west along 156th Street NE

There would have to be at least 45% of the trips generated by the Development traveling along a roadway to equal 3 directional trips. There is not anticipated to be 45% of the trips generated by the Development impacting any intersections within the City boundaries beyond the site access. A trip distribution should therefore not be required for the Development.

4. SITE ACCESS

The Development is proposed to have one access driveway along Smokey Point Boulevard along the southern property line. It is anticipated that the majority of the trips generated by the Development will travel to and from the north along Smokey Point Boulevard.

5. TRANSPORTATION IMPACT FEES

The City has interlocal agreements with the County and WSDOT for transportation impact fees. These transportation impact fees are based on the area wide traffic mitigation fee or actual impacts to improvement projects.

5.1 City of Marysville

The City traffic mitigation fees have been calculated using the commercial rates of \$2,220 per PM peak-hour trip. The Development is not anticipated to generate any new PM peak-hour trips. Therefore, the City of Marysville traffic mitigation fees should not be required.

5.2 Snohomish County

The City and County have an interlocal agreement that provides for the payment of traffic mitigation for impacts to County roadways by City developments. Traffic mitigation fees are based on predetermined area impacts or impacts to actual improvement projects. The Development does not generate three directional PM peak-hour trips and therefore County traffic mitigation fees should not be a condition of the Development.

5.3 Washington State Department of Transportation

WSDOT mitigation fees are based on impacts to improvement projects identified in the Exhibit C List included in the interlocal agreement between the County and WSDOT. There are not any WSDOT intersections on the Exhibit C List that will be impacted by three directional PM peak-hour trips generated by the Development. WSDOT transportation impact fees should therefore not be required for the Development.

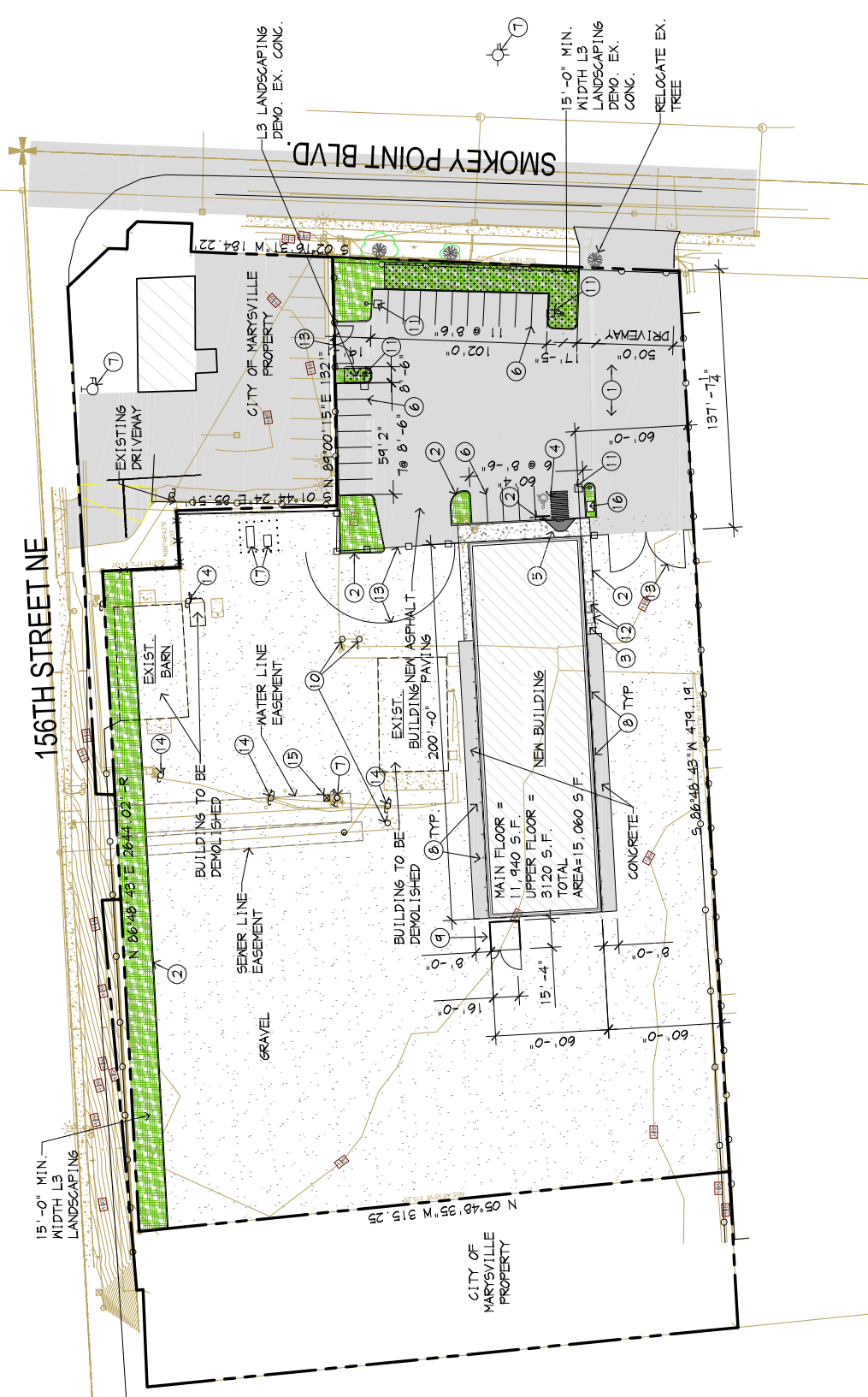
6. CONCLUSIONS

The Development is proposed to consist of 15,060 SF of construction equipment rental space. The site is currently developed with an existing warehouse and retail space. The Development is anticipated to generate approximately 64 new average daily trips with approximately 11 new AM peak-hour trips and 6 new PM peak-hour trips. City transportation impact mitigation fees should not be required as the Development is not anticipated to generate any new PM peak-hour trips. Neither County nor WSDOT traffic mitigation fees should be required for the Development.

APPENDIX A
SITE PLAN

KEY

- PAVEMENT
- SIDEWALK
- GRAVEL
- LANDSCAPING
- ASPHALT TO BE DEMOLISHED
- EX. FENCE
- NEW FENCE
- EX. BARBED WIRE FENCE
- EX. LIGHT POLE
- EX. UTILITY POLE
- NEW LIGHT POLE
- WATER METER
- MANHOLE
- FIRE HYDRANT



SITE PLAN
1" = 40'-0"

SITE PLAN NOTES

1. SHADING DENOTES EXTENT OF ASPHALT PAVING. SEE DET. 1/A1.2. CIVIL DRAWINGS AND GEOTECHNICAL ENGINEERS' RECOMMENDATIONS FOR BASE COURSE AND ASPHALT THICKNESSES.
2. CONCRETE CURB PER DET. 2/A1.2.
3. CONCRETE SIDEWALK. SEE DET. 3/A1.2.
4. ACCESSIBLE PARKING STALL WITH PAINTED WALKWAY & SIGN. SEE DET. 4/A1.2.
5. ACCESSIBLE CURB CUT. SEE DET. 6/A1.2.
6. PAINTED PARKING STRIPING, 4" WIDE LINES, 18 FT. IN LENGTH, SPACING PER PLAN. COLOR: TRAFFIC WHITE.
7. FIRE HYDRANT. SEE CIVIL DRAWINGS.
8. BOLLARD/PIPE GUARD. SEE FLOOR PLAN AND DET. 8/A1.2.
9. TRASH ENCLOSURE. SEE DET. 10/A1.2.
10. EX. LIGHT POLE. TO BE REMOVED.
11. LIGHT POLE. SEE DET. 9/A1.2.
12. BACK-UP GENERATOR.
13. CHAIN-LINK FENCE GATE.
14. EX. UTILITY POLE.
15. EX. EMPTY WATER METER.
16. ELECTRIC METER.
17. PROPANE TANKS.

PROJECT CRITERIA

SCOPE OF WORK
CONSTRUCT A NEW 11,940 S.F., TWO-STORY, MANUFACTURED METAL BUILDING FOR AN EQUIPMENT RENTAL FACILITY AND SITE IMPROVEMENTS.

TAX ACCOUNT NO. 91059200102800

LEGAL DESCRIPTION
SECTION 32 TOWNSHIP 31, RANGE 05 QUARTER NE - LOT 3 CITY OF MARYSVILLE NO 19-004 REC UND APN 201300075002 BEING PTN NE1/4 NE1/4 NE1/4 SD SEC 32 LY ELY OF SR 5 (AKA PSH NO 1)

CODES
2018 INTERNATIONAL BUILDING CODE (IBC)
2018 INTERNATIONAL MECHANICAL CODE (IMC)
2018 INTERNATIONAL FIRE CODE (IFC)
2018 UNIFORM PLUMBING CODE (UPC)

BUILDING CRITERIA
ZONING: GC (GENERAL COMMERCIAL)
MAX. HEIGHT: 35'-1"
OCCUPANCY: 5-1
CONSTRUCTION TYPE: VB
FULLY SPRINKLERED: YES
ALARMED: YES

PARKING CALCULATIONS
REQUIRED PARKING: PER 22C.130.020
RETAIL:
1. PER 600 S.F. = 2 PARKING SPACES
1. 256/600 =

OFFICE:
1. PER 400 S.F. = 7 PARKING SPACE
2. 942/400 =

WAREHOUSE:
1. PER 2,000 S.F. = 4 PARKING SPACES
2. 1,156/2,000 =

INDUSTRIAL:
1. PER 750 S.F. = 2 PARKING SPACES
1. 408/750 =

BUSINESS/TRAINING:
1. PER 400 S.F. = 3 PARKING SPACES
1. 297/400 =

TOTAL REQUIRED: 18 STALLS
PARKING PROVIDED: 24 STALLS

LANDSCAPING CALCULATIONS
TOTAL PARKING AREA: 22,690 S.F.
AS PER 22C.020.040 REQUIRED LANDSCAPING (1.0%): 22,690 X 1.0% = 2,269 S.F.
PROVIDED LANDSCAPING: 5,958 + 156 + 160 + 2,719 + 109 + 180 = 9,342 S.F.

UTILITY DISTRICTS
POWER: SNOHOMISH COUNTY PUD
WATER: CITY OF MARYSVILLE
SEWER: CITY OF MARYSVILLE
TELEPHONE: VERIZON/FRONTIER
GAS: PUGET SOUND ENERGY

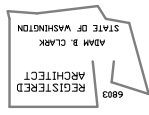
SEPERATE SUBMITTALS
ELECTRICAL
MECHANICAL
PLUMBING
SIGNS
FIRE PROTECTION / FIRE ALARM

*NOTE: ALL SEPERATE SUBMITTALS SHALL BE REVIEWED AND APPROVED BY ARCHITECT PRIOR TO PERMIT SUBMISSION.

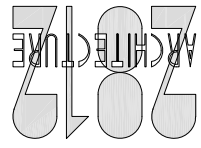


VICINITY MAP
NORTH

Date:	7 JUNE 2022
For:	PRELIMINARY



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APPENDIX B
TRIP GENERATION CALCULATIONS

Pilchuck Rentals
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Trip Generation for: Weekday
(a.k.a.): Average Weekday Daily Trips (AWDT)

LAND USES	VARIABLE	ITE LU code	Trip Rate	Gross Trips			Internal Crossover		IN BOTH DIRECTIONS				DIRECTIONAL ASSIGNMENTS						
									TOTAL		PASS-BY		DIVERTED LINK		NEW		PASS-BY		DIVERTED LINK
				% IN	% OUT	In+Out (Total)	% of Gross Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In	Out	In	Out	In	Out	In	Out
Construction Equipment Rental	15.060 K SF	811	9.41	50%	50%	141.71	0%	0	0%	0.00	0%	0	0%	0.00	0.00	0	0	70.86	70.85
Warehouse (Removed)	-2.160 K SF	150	1.71	50%	50%	-3.69	0%	0	0%	0.00	0%	0	0%	0.00	0.00	0	0	-1.85	-1.84
General Retail (<40k) (Removed)	-2.280 K SF	822	54.45	50%	50%	-124.15	0%	0	0%	-49.66	40%	-124.15	0%	-24.83	-24.83	0	0	-37.25	-37.24
Total						13.87		0		-49.66		13.87		-24.83	-24.83	0	0	31.76	31.77

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**Trip Generation for: Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 7 and 9 AM
(a.k.a.): Weekday AM Peak Hour**

LAND USES	VARIABLE LU code	ITE	Gross Trips					Internal Crossover			IN BOTH DIRECTIONS				DIRECTIONAL ASSIGNMENTS					
			Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	In+Out (Total)	% of Ext. Trips	PASS-BY In+Out (Total)	DIVERTED LINK % of Ext. Trips	NEW In+Out (Total)	PASS-BY		DIVERTED LINK		NEW			
													In	Out	In	Out	In	Out	In	Out
Construction Equipment Rental	15.060 K SF	811	0.94	77%	23%	14.16	0%	0.00	0.00	0%	0.00	0%	0.00	0.00	0.00	0.00	0	0	10.90	3.26
Warehouse (Removed)	-2.160 K SF	150	0.17	77%	23%	-0.37	0%	0.00	0.00	0%	0.00	0%	0.00	0.00	0.00	0	0	-0.28	-0.09	
General Retail (<40k) (Removed)	-2.280 K SF	822	2.36	60%	40%	-5.38	0%	0.00	0.00	0%	0.00	40%	-2.15	-3.23	-1.29	-0.86	0	0	-1.94	-1.29
Total						8.41		0.00	8.41		0.00		-2.15	10.56	-1.29	-0.86	0	0	8.68	1.88

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**Trip Generation for: Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 4 and 6 PM
(a.k.a.): Weekday PM Peak Hour**

LAND USES	VARIABLE LU code	NET EXTERNAL TRIPS BY TYPE																	
		Gross Trips						IN BOTH DIRECTIONS				DIRECTIONAL ASSIGNMENTS							
		ITE	Trip Rate	% IN	% OUT	In+Out (Total)	Internal Crossover % of Gross Trips	In+Out (Total)	PASS-BY		DIVERTED LINK		NEW	PASS-BY		DIVERTED LINK		NEW	
									% of Ext. Trips	In+Out (Total)	% of Ext. Trips	In+Out (Total)		In	Out	In	Out	In	Out
Construction Equipment Rental	15.060 K SF	811	0.99	28%	72%	14.91	0%	0.00	0.00	0%	0.00	14.91	0.00	0.00	0.00	0	0	4.17	10.74
Warehouse (Removed)	-2.160 K SF	150	0.18	28%	72%	-0.39	0%	0.00	0.00	0%	0.00	-0.39	0.00	0.00	0.00	0	0	-0.11	-0.28
General Retail (<40k) (Removed)	-2.280 K SF	822	6.59	50%	50%	-15.03	0%	0.00	0.00	40%	-6.01	-9.02	-3.01	-3.00	0	0	-4.51	-4.51	
Total						-0.51		0.00	0.00		-6.01	5.50	-3.01	-3.00	0	0	-0.45	5.95	