

MEMORANDUM Site Plan Review – Class 3

To: City of Salem
Community Development Department

Date: 08/25/2022

Project: Stop-N-Save Gas Station with Additional
Retail and Oil Change Facility
3997 Carson Dr SE Salem OR 97317

**Architect's
Project No:** 2020-109

From: Leonard Lodder, AIA, LEED AP for:
Studio 3 Architecture, Inc
275 Court Street NE
Salem OR 97301

Sent Via: Email

Subject: SPR Class III Modification with
Conditional Use.
Application Checklist

Project Description:

- The Owners of the properties have previously applied for Site Plan Review Class III located at 3997 Carson Drive SE, including tax lot 10100 immediately north of this property to include the following elements:
 - A 4 pump gas station.
 - A propane refill station.
 - A cashier's station for the fueling pad.
 - An enlarged, secure trash enclosure.
 - An additional retail commercial building.
 - An Oil Change facility.
 - A Storage Shipping Container attached to Existing C-Store
 - With other site improvements.
- Driveway permits were included to facilitate a new driveway onto Hagers Grove, "left out and left in only.
- A driveway permit to allow widening of the existing driveway exiting west from the site was also included.
- At this late stage, it was discovered that the Oil Change use was a conditional use so this application includes that request.
- The owners also wish to add three 2-bedroom apartment units as a second floor in the new retail building included in the Northwest corner of the site.

Application Checklist:

X COMPLETED APPLICATION FORM.

The application form must be signed by the applicant(s), property owner(s), and/or duly authorized representative(s). If the applicant and/or property owner is a Limited Liability Company (LLC), please also provide a list of all members of the LLC with your land use application.

See attached.

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X APPLICATION FEE.

The application fee must be paid at the time of filing your application.

Yes

o NEIGHBORHOOD ASSOCIATION CONTACT.

Neighborhood association contact, pursuant to SRC 300.310, is required prior to submitting this land use application. A copy of the required e-mail or letter to the neighborhood association, and a list of the e-mail or postal addresses to which the e-mail or letter was sent shall be submitted or the land use application will not be accepted.

See attached pdf of email sent to Southeast Mill Creek Association on 01/19/2023

o RECORDED DEED/LAND SALES CONTRACT WITH LEGAL DESCRIPTION.

A copy of the recorded deed/land sales contract of the total contiguous ownership of the applicant.

See attached Deed and Title Report for Tax Lots 10000 and 10100, recently acquired and provide in the preceding SPR Class III application

o HOMEOWNERS ASSOCIATION INFORMATION.

A statement indicating whether the subject property is subject to an active and duly incorporated Homeowner's Association (HOA) registered with the Oregon Secretary of State. If so, the applicant shall provide the HOA name, name of the registered agent and the mailing address for the registered agent.

Not Applicable

X TRIP GENERATION ESTIMATE (TGE) FORM.

A Trip Generation Estimate (TGE) form must be completed by the applicant and submitted to the Department of Public Works, Traffic Engineering Section, Room 325, to determine whether a Transportation Impact Analysis (TIA) is required for the application.

See Attached

o TRANSPORTATION IMPACT ANALYSIS (TIA).

If required for the development, a TIA shall be provided in the format, and based on thresholds, specified in standards established by the Director of Public Works.

Updated and attached.

o GEOLOGICAL ASSESSMENT OR GEOTECHNICAL REPORT.

If required by SRC Chapter 810, or a statement from an engineer certifying that landslide risk on the site is low, and that there is no need for further landslide risk assessment.

Site is not located in a landslide risk area.

X SITE PLAN.

The site plan must include the following information:

- *The total site area, dimensions, and orientation relative to north;*

See Site plan sheet A1.02

- *The location of all proposed primary and accessory structures and other improvements, including fences, walls, and driveways, indicating distance from the structures and improvements to all property lines and adjacent on-site structures;*

See Site Plan sheet A1.02

- *Loading areas, if included with proposed development;*

Loading Area shown on site plan adjacent to Trash Enclosure.

- *The size and location of solid waste and recyclables storage and collection areas, and amount of overhead clearance above such enclosures, if included with proposed development;*

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See the Site Plan for the location and size.

- *An indication of future phases of development on the site, if applicable;*

This proposal will max out the site development.

- *All proposed landscape areas on the site, with an indication of square footage and their percentage of the total site area (complete landscape and irrigation plans are required with the building permit application);*

Landscape areas are shown on the Site Plan. Design of Landscape elements will follow.

- *The location, height, and material of fences, berms, walls, and other proposed screening as they relate to landscaping and screening required by SRC Chapter 807;*

Refer to Civil Plans for location of Storm water treatment Facilities.

- *The location of all trees and vegetation required to be protected pursuant to SRC Chapter 808;*

See Site Plan. Note: there are no existing trees on the currently vacant portion of the site.

- *The location of all street trees, if applicable, or proposed location of street trees required to be planted at time of development pursuant to SRC Chapter 86; and*

Deferred to Landscape design. Currently Right-of-Way is bounded by sidewalks and paving with no space for street trees.

- *Identification of vehicle, pedestrian, and bicycle parking and circulation areas, including handicapped parking stalls, disembarking areas, accessible routes of travel, and proposed ramps.*

See Site Plan sheet A1.02.

- Bicycle parking shown central to site.
- Vehicle circulation shown on site plan.
- Pedestrian connections identified to all abutting streets.

X EXISTING CONDITIONS PLAN.

The existing conditions plan must include the following information:

- *The total site area, dimensions, and orientation relative to north;*

See Site Plan – Existing Conditions sheet A1.01

- *The location of existing structures and other improvements on the site, including accessory structures, fences, walls, and driveways, noting their distance from property lines;*

See Site Plan – Existing Conditions sheet A1.01

- *The location of the 100-year flood plain, if applicable.*

Not Applicable

- *The zoning district, comprehensive plan designation, and land uses for all properties abutting the site;*

See Site Plan – Existing Conditions sheet A1.01

- *Driveway locations, public and private streets, bike paths, transit stops, sidewalks, and other bike and pedestrian pathways, curbs, and easements;*

See Site Plan – Existing Conditions sheet A1.01

- *The elevation of the site at 2-foot contour intervals, with specific identification of slopes in excess of 15 percent; and*

See Site Plan – Existing Conditions sheet A1.01

- *The location of drainage patterns and drainage courses, if applicable.*

See Site Plan – Existing Conditions sheet A1.01

o PRELIMINARY UTILITY PLAN.

A preliminary utility plan shall be submitted showing capacity needs for municipal water, stormwater management, and sewer service, and schematic location of connection points to existing municipal water and sewer services. It is suggested that the utility plan contain the following items:

See Civil Engineering Drawings.

- *Existing drainage plan and drainage courses;*

See Civil Engineering Drawings.

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- *Water service connection and meter location;*

See Civil Engineering Drawings.

- *Maximum water meter size required;*

See Civil Engineering Drawings.

- *Maximum fire flow needs for development;*

See Civil Engineering Drawings. New and Existing buildings do not require fire sprinklers.

- *Sanitary sewer location and connection to public main;*

See Civil Engineering Drawings.

- *Maximum sanitary sewer service size required; and*

See Civil Engineering Drawings.

- *Storm drain service location and point of disposal.*

See Civil Engineering Drawings.

o PRELIMINARY GRADING PLAN.

A preliminary utility plan shall be submitted depicting proposed site conditions following completion of the proposed development, when grading of the subject property will be necessary to accommodate the proposed development.

See Civil Engineering Drawings.

o ARCHITECTURAL DRAWINGS.

For development in the Mixed Use-I (MU-I) and Mixed Use-II (MU-II) zones, architectural drawings, renderings, or sketches showing all elevations of the existing buildings and the proposed buildings as they will appear on completion.

This site is not in an MU-1 or MU-2 zone.

X SUMMARY TABLE.

A summary table shall be submitted which identifies the zoning designation for the subject property; total site area; gross floor area by use (i.e. manufacturing, office, retail, storage); building height; itemized number of full size, compact, and handicapped parking stalls, and the collective total number; total lot coverage proposed, including areas to be paved for parking and sidewalks.

See Site Plan Sheet A1.02

WRITTEN STATEMENT.

A written statement is recommended to be submitted describing how the proposed development meets the following approval criteria for Class 3 Site Plan Review:

The new development expands on the existing uses current at the site including a convenience store and related retail units.

Additional development includes the following:

- A new 4-pump gas station,
- A propane refill station,
- A cashier's station to serve the re-fueling pad,
- Additional ground floor retail space, accompanied by a second floor with three 2-bedroom apartment units.
- An enlarged and secure trash/recycling facility, and
- An oil change facility.
- Additional site improvements to support the new uses.

The new and existing uses are compatible service commercial uses that enhance their co-dependence and contribute to needs in the area. The addition of apartments contributes to diverse housing needs in the city. For the owners of the site the potential exists for housing employees who may double as a quasi-security presence at this commercial site.

- *The application meets all applicable standards of the UDC;*

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Yes, every attempt has been made to satisfy UDC requirements. The plans submitted with this application respond to two sets of responses to a previous attempt to gain a Class III Site Plan Approval for this site. We would have requested that the file would be declared complete with that response but the city has declared that the application has expired.

- *The transportation system provides for the safe, orderly, and efficient circulation of traffic into and out of the proposed development, and negative impacts to the transportation system are mitigated adequately;*

New and existing access points have been designed to enhance efficient movement of traffic within the site and its interface with public streets.

- *Parking areas and driveways are designed to facilitate safe and efficient movement of vehicles, bicycles, and pedestrians; and*

New and existing parking areas have been designed to enhance efficient movement of traffic within the site. Owners recent experiences with conflicts on the site have been mitigated by introducing wider driveway aisles.

- *The proposed development will be adequately served with City water, sewer, storm drainage, and other utilities appropriate to the nature of the development.*

The expanded development will be adequately served with City water, sewer, storm drainage and other utilities as appropriate for the type of development.

Signed Application

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Planning/Permit Application Center

City Hall / 555 Liberty St. SE / Room 320 / Salem, OR 97301-3513

503-588-6173 * planning@cityofsalem.net

If you need the following translated in Spanish, please call 503-588-6256.

Si usted necesita lo siguiente traducido en español, por favor llame 503-588-6256.

(For office use only)

Permit #:

Application type

Please describe the type of land use action requested:

Work site location and information

Street address or location of subject property	
Total size of subject property	
Assessor tax lot numbers	
Existing use structures and/or other improvements on site	
Zoning	
Comprehensive Plan Designation	
Project description	

People information

	Name	Full Mailing Address	Phone Number and Email address
Applicant			
Agent			
Paid By			

Project information

Project Valuation for Site Plan Review	
Neighborhood Association	
Have you contacted the Neighborhood Association?	Yes No
Date Neighborhood Association contacted	
Describe contact with the affected Neighborhood Association (The City of Salem recognizes, values, and supports the involvement of residents in land use decisions affecting neighborhoods across the city and strongly encourages anyone requesting approval for any land use proposal to contact the affected neighborhood association(s) as early in the process as possible.)	
Have you contacted Salem-Keizer Transit? planning@cherriots.org	Yes No
Date Salem-Keizer Transit contacted	
Describe contact with Salem-Keizer Transit	
Type the name and address of the Homeowners Association (If none, type "N/A".)	

Authorization by property owner(s)/applicant

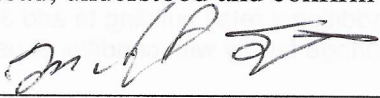
*If the applicant and/or property owner is a Limited Liability Company (LLC), please also provide a list of all members of the LLC with your application.

Copyright release for government entities: I hereby grant permission to the City of Salem to copy, in whole or part, drawings and all other materials submitted by me, my agents, or representatives. This grant of permission extends to all copies needed for administration of the City's regulatory, administrative, and legal functions, including sharing of information with other governmental entities.

Authorizations: Property owners and contract purchasers are required to authorize the filing of this application and must sign below.

- All signatures represent that they have full legal capacity to and hereby do authorize the filing of this application and certify that the information and exhibits herewith submitted are true and correct.
- I (we) hereby grant consent to the City of Salem and its officers, agents, employees, and/or independent contractors to enter the property identified above to conduct any and all inspections that are considered appropriate by the City to process this application.
- I (we) hereby give notice of the following concealed or unconcealed dangerous conditions on the property:

Electronic signature certification: By attaching an electronic signature (whether typed, graphical or free form) I certify herein that I have read, understood and confirm all the statements listed above and throughout the application form.

Authorized Signature: 

Print Name: Inderjit Dhaliwal  Date: 01/18/2023

Address (include ZIP): 2433 NW Broadway St Albany OR 97321

Authorized Signature: 

Print Name: Talwinder Singh Date: 01/18/2023

Address (include ZIP):

(For office use only)		
Received by	Date:	Receipt Number:

Not using Internet Explorer?
Save the file to your computer and email to planning@cityofsalem.net.

Trip Generation Report:



CITY OF Salem
AT YOUR SERVICE

Traffic Engineering Section
Public Works Department
555 Liberty Street SE, Room 325 Telephone: 503-588-6211
Salem, Oregon 97301-3513 TTY: 503-588-6292

Trip Generation Estimate

Street _____

Bin # _____ TGE # _____

Date Received _____

Section 1 (To be completed by applicant.)

Applicant Name: Inderjit S. Dhaliwahi Telephone: 503.999.6545

Applicant Mailing Address: 2433 NW Broadway St Albany OR 97321

Location of New Development: 3997 Carson Dr SE Salem OR 97317

(Please provide street address. If unknown, provide approximate address and geographical description/nearest cross streets.)

Description and Size of New Development: 4 Pump Gas Station, 4,315sf Retail Bldg, 1,888sf two bay Oil Change Bldg.
(e.g., 150 single-family homes, 20,000 sq. ft. office addition, 12-pump gas station, 50-student day care, additional parking, etc.)

Description and Size of Existing/Past Development, if any (note whether to remain or be removed): See attached previous calc. Existing 5,918sf Retail Building. (note: previous approval for 6,000sf Retail plus 1,500sf drive through retail, not built.

Planning Action Involved, if any: Site Plan Review Class III Building Permit Involved:
(e.g., zone change, subdivision, partition, conditional use, PUD, mobile home park, etc.) Yes ☒ No ☐

Section 2 (To be completed by City staff.)

Proposed Use	Existing Use
Development Quantity: _____	Development Quantity: _____
ITE Land Use Code: _____	ITE Land Use Code: _____
Trip Generation Rate/Equation: _____	Trip Generation Rate or Equation: _____
Average Daily Trips: _____	Average Daily Trips: _____
ELNDT Adjustment Factors	ELNDT Adjustment Factors
Trip Length: _____ Linked Trip: _____	Trip Length: _____ Linked Trip: _____
TSDC Trips: _____	TSDC Trips: _____

Section 3 (To be completed by City staff.)

Transportation Impact Analysis (TIA)	Transportation Systems Development Charge
Net Increase in Average Daily Trips: _____ (Proposed use minus existing use.)	Net Increase in TSDC Trips: _____ (Proposed use minus existing use.)
<input type="checkbox"/> A TIA will be required:	<input type="checkbox"/> A TSDC will be required.
<input type="checkbox"/> Arterial/Collector—1000 Trip/day Threshold <input type="checkbox"/> Local Street/Alley—200 Trip/day Threshold <input type="checkbox"/> Other: _____	(Fee determined by Development Services.)
<input type="checkbox"/> A TIA will not be required.	<input type="checkbox"/> A TSDC will not be required.

(For additional information, refer to the back of this application.)

Section 4 (To be completed by City staff.)

Remarks: _____ Date: _____

cc: ☐ Chief Development Services Engineer
☐ Community Development
☐ Building Permit Application
☐ _____

By: _____

Information Required to Assess the Need for a Traffic Impact Analysis and Transportation Systems Development Charge



The following information is required in order to assess the need for a Traffic Impact Analysis (TIA) and to calculate the Transportation Systems Development Charge (TSDC) to be levied on a proposed new development.

TIA Determination:

The City of Salem may require that a TIA be prepared as part of the approval process for major new development. The purpose of a TIA is to estimate the traffic impacts created by a new development on the surrounding street system. Any significantly adverse traffic impacts identified in the TIA must be mitigated by the applicant.

The estimated daily traffic generation of a new development is used as the criteria for determining whether a TIA is needed. If the new development access is located on an arterial or collector and the estimated daily traffic generation is more than 1000 trips, a TIA may be required. If access is located on a local street or alley and the generated trips exceed 200, a TIA may be required. Other criteria such as site access issues, driveway restrictions, and existing facilities deficiencies may also be used, if recommended by City Traffic Engineering staff.

The City Traffic Engineer makes the determination as to whether a TIA is required. (For more information on TIA criteria, see Development Bulletin No. 19 dated January 20, 1995.) When the determination has been made, copies of the Trip Generation Estimate form are sent to Public Works Development Services Division and the applicant. If a planning action is required, a copy is also forwarded to the Community Development Department.

TSDC Analysis:

The City of Salem charges a TSDC on all new development that creates a net increase in traffic on the surrounding street system. The total charge is assessed on a per trip fee times the TSDC trips calculated for the development. For more information on the TSDC, see Council Staff Report dated October 9, 1995.

To assist in estimating the daily trips generated by a new development, please answer the questions in Section 1 of this sheet and return it to Room 325 of the Civic Center. If you have any questions, Traffic Engineering staff are available at 503-588-6211. A copy of the completed trip generation estimate will be returned to you at the address provided in Section 1.

No Land Use, Planning, or Development Approval applications requiring Trip Generation Estimates will be processed until this information has been provided and the TIA/TSDC assessment has been made by City Traffic Engineering staff.

CITY OF Salem
AT YOUR SERVICE

Traffic Engineering Section
Public Works Department
555 Liberty Street SE, Room 325 Telephone: 503-588-6211
Salem, Oregon 97301-3513 TTY: 503-588-6292

Trip Generation Estimate

Street _____
Bin # _____ TGE # 2016109
Date Received 12-8-2016

Section 1 (To be completed by applicant.)

Applicant Name: Inderjit S. Dhalwani Telephone: 503-999-6545
Applicant Mailing Address: 2433 NW Broadway St., Albany OR 97321
Location of New Development: 1691 Lancaster Dr SE
(Please provide street address. If unknown, provide approximate address and geographical description/nearest cross streets.)
Description and Size of New Development: 6000 SF Convenience store & 1500 SF drive-through establishment
(e.g., 150 single-family homes, 20,000 sq. ft. office addition, 12-pump gas station, 50-student day care, additional parking, etc.)
Description and Size of Existing/Past Development, if any (note whether to remain or be removed): vacant lot
Planning Action Involved, if any: Site Plan Review, Class 3 Building Permit Involved: Yes ☒ No ☐
(e.g., zone change, subdivision, partition, conditional use, PUD, mobile home park, etc.)

Section 2 (To be completed by City staff.)

Proposed Use	Existing Use
Development Quantity: <u>6000 SF</u> <u>1500 SF</u>	Development Quantity: <u>Vacant</u>
ITE Land Use Code: <u>852</u> <u>937</u>	ITE Land Use Code: _____
Trip Generation Rate/Equation: <u>446.75/SF</u> <u>818.58/SF</u>	Trip Generation Rate or Equation: _____
Average Daily Trips: <u>2675 + 1228 = 3903</u>	Average Daily Trips: _____
ELNDT Adjustment Factors	ELNDT Adjustment Factors
Trip Length: <u>0.02, 0.09</u> Linked Trip: <u>0.35, 0.51</u>	Trip Length: _____ Linked Trip: _____
TSDC Trips: <u>75 + 56 = 131</u>	TSDC Trips: <u>0</u>

Section 3 (To be completed by City staff.)

Transportation Impact Analysis (TIA)	Transportation Systems Development Charge
Net Increase in Average Daily Trips: <u>3903</u> (Proposed use minus existing use.)	Net Increase in TSDC Trips: <u>131</u> (Proposed use minus existing use.)
<input checked="" type="checkbox"/> A TIA will be required: <input checked="" type="checkbox"/> Arterial/Collector—1000 Trip/day Threshold <input type="checkbox"/> Local Street/Alley—200 Trip/day Threshold <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> A TSDC will be required. (Fee determined by Development Services.)
<input type="checkbox"/> A TIA will not be required.	<input type="checkbox"/> A TSDC will not be required.

(For additional information, refer to the back of this application.)

Section 4 (To be completed by City staff.)

Remarks: TIA HAS BEEN SUBMITTED. Date: 12-16-2016

cc: ☐ Chief Development Services Engineer
☐ Community Development
☐ Building Permit Application
☒ Amy Dixon

By: Tomy

16-116753

Traffic Impact Analysis:



lancaster
mobley

Stop N Save Development

Transportation Impact
Study

Salem, Oregon



RENEWS: 6/30/2024

Date:

July 6, 2022

Prepared for:

Leonard Lodder

Prepared by:

Jessica Hjar

Daniel Stumpf, PE

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Executive Summary

1. A gas station and retail space are proposed to be located on a 0.67-acre property (Tax Lot 082W06AB100000) in Salem, Oregon. The restaurant/retail space will encompass approximately 4,315 square feet, and the proposed gas station will be comprised of 8 fueling positions and a 300 square foot building which houses the cashier. The development will construct a site access along the northern property line and share the existing western and southern site access with the property to the south.
2. The trip generation calculations show that the proposed project is projected to generate a total of 53 morning peak hour primary trips, 72 evening peak hour primary trips, and 1,062 average weekday primary trips.
3. No significant trends or crash patterns were identified at any of the study intersections that would be affected by the proposed development. Accordingly, no safety mitigation is recommended per the crash data analysis.
4. Preliminary traffic signal warrants are not projected to be met any of the unsignalized study intersections upon full buildout of the proposed development. Accordingly, no related mitigation is necessary or recommended.
5. Left-turn lanes are not projected to be met at the applicable intersections upon full buildout of the proposed development. Accordingly, no related mitigation is necessary or recommended.
6. All study intersections are currently operating acceptably per jurisdictional standards and are projected to continue operating acceptably through the 2024 site buildout year.



Project Description

Introduction

A gas station and retail space are proposed to be located on a 0.67-acre property (Tax Lot 082W06AB100000) in Salem, Oregon. The restaurant/retail space will encompass approximately 4,315 square feet, and the proposed gas station will be comprised of 8 fueling positions and a 300 square foot building which houses the cashier.

Based on correspondence with City of Salem, the report conducts safety and capacity/level of service analyses at the following intersections:

1. Hagers Grove Road SE at northern site access;
2. Hagers Grove Road SE at western site access;
3. Hagers Grove Road SE at southern site access; and
4. Lancaster Drive SE at Hagers Grove Road SE/Carson Drive SE.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the existing and proposed uses, and to determine any mitigation that may be necessary to do so. Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Location Description

The subject property is located east of Interstate 5 and south of Highway 22 (North Santiam Highway SE). The development will construct a site access along the northern property line and share the existing western and southern site access with the property to the south. Figure 1 on the following page shows the site vicinity with the subject site highlighted in red.





Figure 1: Vicinity Map

Vicinity Streets

The proposed development is expected to impact three roadways near the site. Table 1 provides a description of each vicinity roadway.

Table 1: Vicinity Roadway Descriptions

Street Name	Jurisdiction	Functional Classification	Cross-Section	Speed (MPH)	Curbs & Sidewalks	On-Street Parking	Bicycle Facilities
Lancaster Drive SE	City of Salem	Major Arterial	2-3 lanes	40 mph posted	Both sides	Not Permitted	Partial
Hagers Grove Road SE	City of Salem	Local Road	2 lanes	20 mph statutory	Partial both sides	Permitted	None
Carson Drive SE	City of Salem	Local Road	2 lanes	25 mph posted	Partial both sides	Permitted	None

Study Intersections

Based on coordination with City of Salem staff, four intersections were identified for analysis. A summarized description of these study intersections is provided in Table 2.










Table 2: Study Intersection Configurations

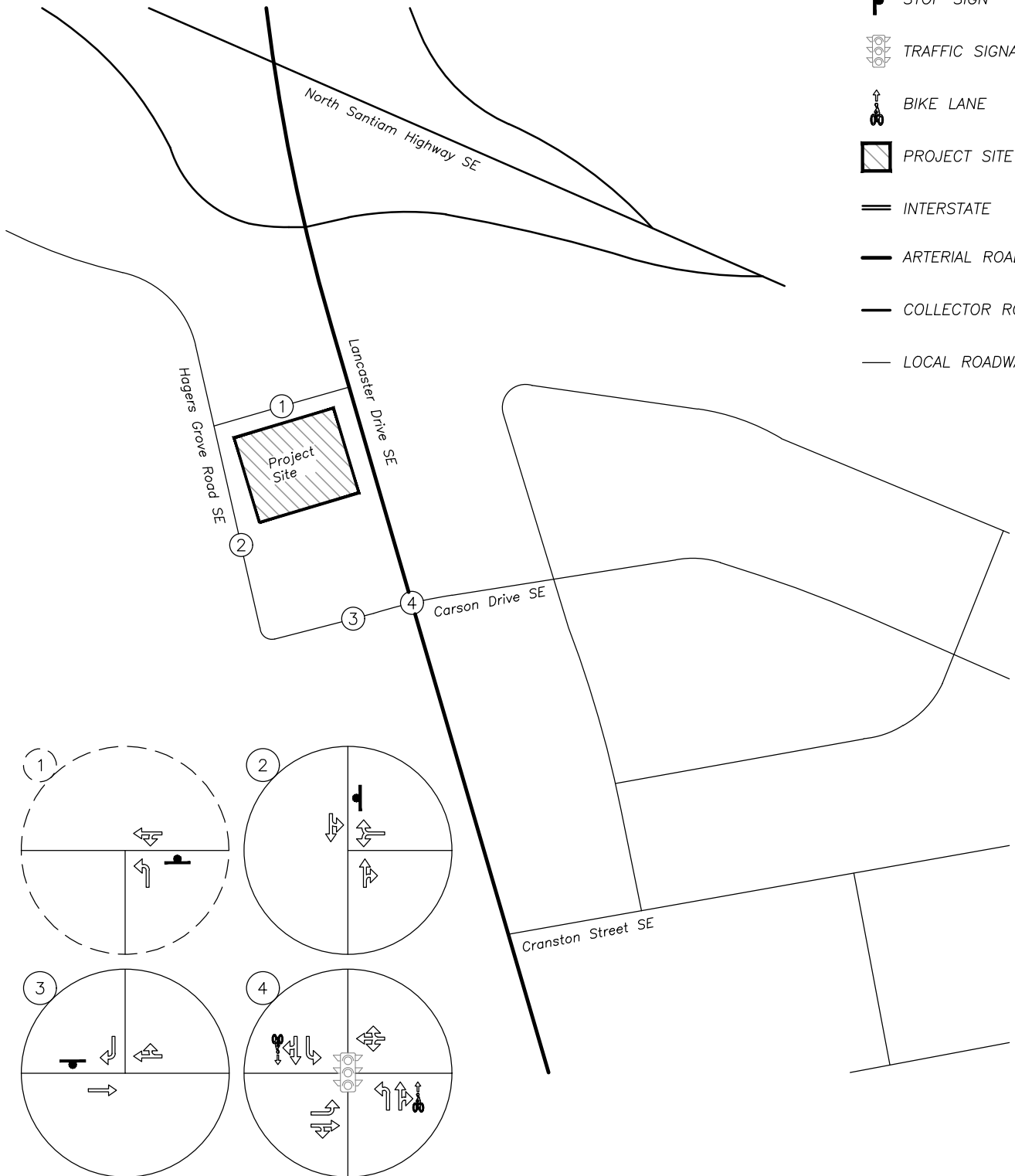
Intersection		Geometry	Traffic Control	Phasing/Stopped Approaches
1	Hagers Grove Road SE at northern site access	Three-Legged	Stop-Controlled	Northbound Stop-Controlled
2	Hagers Grove Road SE at western site access	Three-Legged	Stop-Controlled	Westbound Stop-Controlled
3	Hagers Grove Road SE at southern site access	Three-Legged	Stop-Controlled	Southbound Stop-Controlled
4	Lancaster Drive SE at Hagers Grove Road SE/Carson Drive SE	Four-Legged	Traffic Signal	Protected/Permitted with FYA North and Southbound Lefts, Permitted West and Eastbound Lefts

FYA = flashing yellow arrow

A vicinity map showing the project site, vicinity streets, and study intersection configurations is shown in Figure 2.

LEGEND

-  STUDY INTERSECTION
-  STOP SIGN
-  TRAFFIC SIGNAL
-  BIKE LANE
-  PROJECT SITE
-  INTERSTATE
-  ARTERIAL ROADWAY
-  COLLECTOR ROADWAY
-  LOCAL ROADWAY



no scale

Site Trips

Trip Generation

To estimate the number of trips that will be generated by the proposed use, trip rates from the *Trip Generation Manual*¹ were used. Trip generation for the proposed retail/restaurant use was estimated using data from land use code 932, *High Turnover Restaurant*, based on the building's gross floor area. Trip generation for the proposed gas station was estimated using data from land use code 944, *Gasoline Service Station*, based on the number of fueling positions.

Reductions at off-site intersections are taken to account for pass-by trips, which patronize retail/service uses within the site on the way to another destination. Since these trips would otherwise already be on the surrounding street system, they do not increase major-street volumes, but do affect turning movements at area intersections. Pass-by trip rates for land use codes 932 and 944 were used from the most recent edition of the *Trip Generation Manual*. Since no rate was given for land use code 932 during the morning peak hour, the evening pass-by rate was used for both peak hours.

The trip generation calculations show that the proposed project is projected to generate a total of 53 morning peak hour primary trips, 72 evening peak hour primary trips, and 1,062 average weekday primary trips. The trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included as an attachment to this memorandum.

Table 3: Trip Generation Summary

		Morning Peak Hour			Evening Peak Hour			Weekday
Land Use – ITE Code	Size	In	Out	Total	In	Out	Total	Total
High Turnover Restaurant – 932	4,315 sq ft	22	19	41	24	15	39	462
Pass-by	(43%/43%)	-9	-9	-18	-8	-8	-16	-198
Gasoline Service Station – 944	8 FPs	41	41	82	55	56	111	1,376
Pass-by	(63%/57%)	-26	-26	-52	-31	-31	-62	-578
Total Trip Generation		63	60	123	79	71	150	1,838
Total Pass-By		-35	-35	-70	-39	-39	-78	-776
Primary Trips		28	25	53	40	32	72	1,062

¹ Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, 2021.



Trip Distribution

The directional distribution of site trips to/from the project site was estimated based on locations of likely trip destinations, locations of major transportation facilities in the site vicinity, and existing travel patterns at study intersections.

The following trip distribution is projected:

- Approximately 70 percent of entering/exiting site trips will travel from/to the north along Lancaster Drive SE;
- Approximately 25 percent of entering/exiting site trips will travel from/to the south along Lancaster Drive SE;
- Approximately 5 percent of entering/exiting site trips will travel from/to the east along Carson Drive SE.

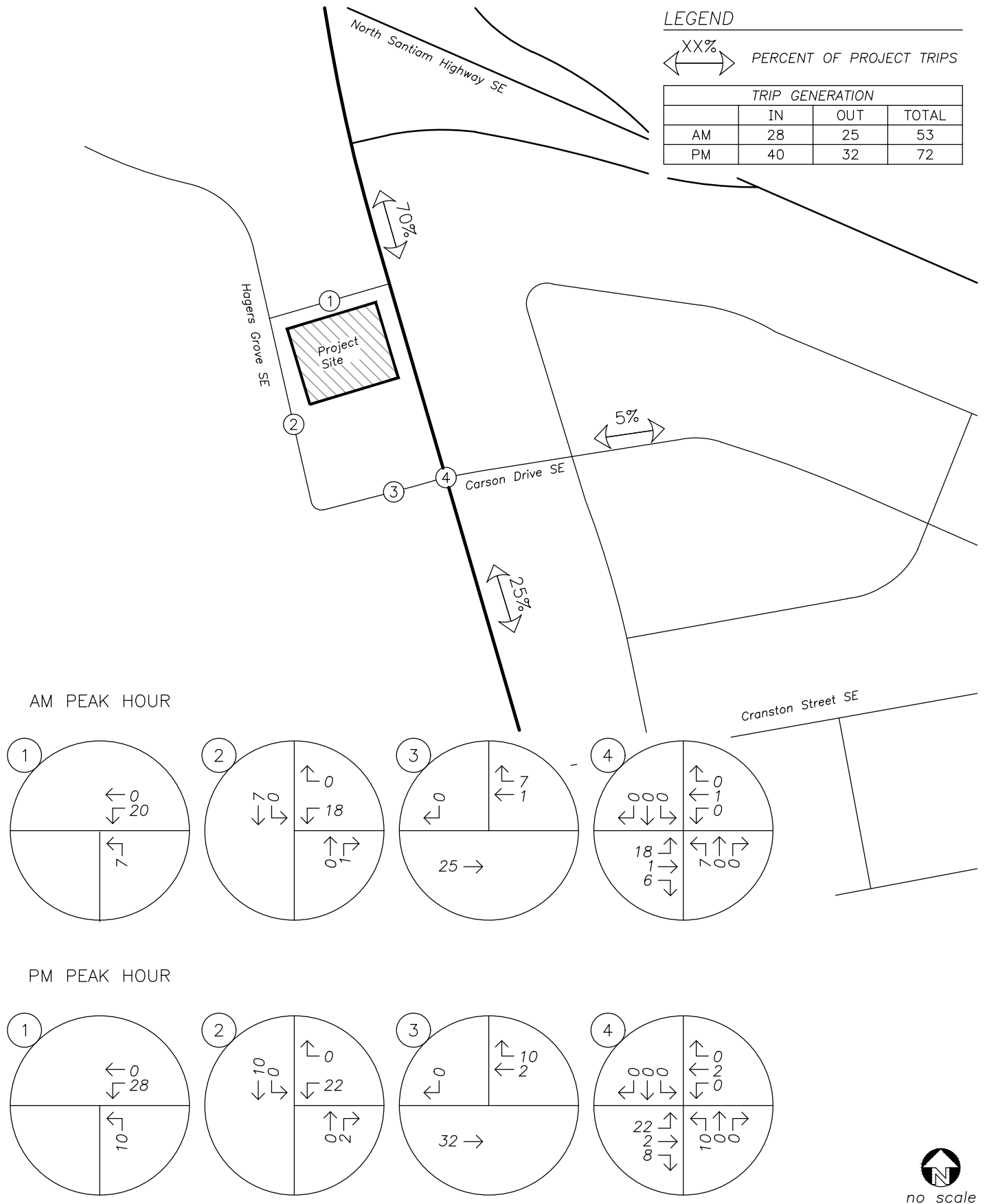
The trip distribution and assignment during the morning and evening peak hours is shown in Figure 3 for the primary trip generation and Figure 4 for the pass-by trip generation.



LEGEND

XX% PERCENT OF PROJECT TRIPS

TRIP GENERATION			
	IN	OUT	TOTAL
AM	28	25	53
PM	40	32	72



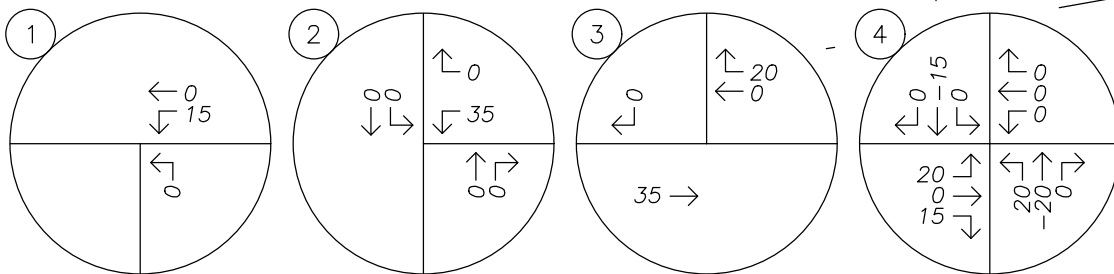
LEGEND

XX%
PERCENT OF PASS-BY TRIPS

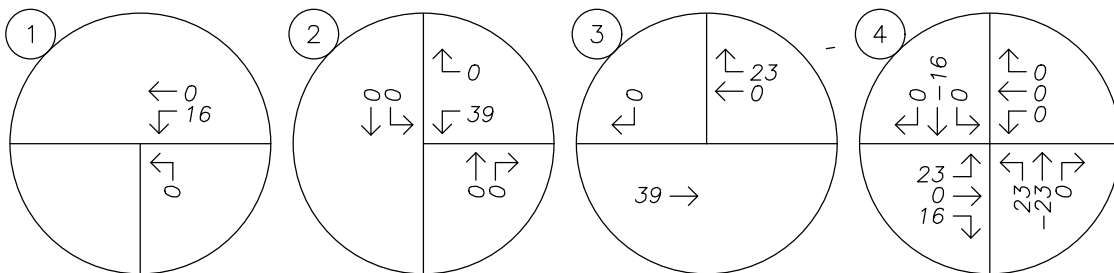
TRIP GENERATION			
	IN	OUT	TOTAL
AM	35	35	70
PM	39	39	78



AM PEAK HOUR



PM PEAK HOUR



no scale

Traffic Volumes

Existing Conditions

The ongoing COVID-19 pandemic is still causing a significant decrease in traffic due to closed or limited business operations and telecommuting. Therefore, historical data was used which was collected before the onset of the pandemic, with a growth rate applied to reflect the existing year 2022 traffic. This methodology was approved with the City during the scoping process.

Traffic counts were collected at all study intersections during the morning (between 7:00 AM and 9:00 AM) and evening (between 4:00 PM and 6:00 PM) peak hours on Wednesday, November 9th, 2016. Each intersection's peak hour was used for analysis. A compounded growth rate of two percent per year was applied to the 2016 traffic volumes to approximate year 2022 existing conditions.

Additionally, trips associated with the previously approved donut shop and convenience market were added as in-process traffic which would have been reflected in recent counts, had those been collected.

The existing traffic volumes at the study intersections during the morning and evening peak hours are shown in Figure 5.

Background Conditions

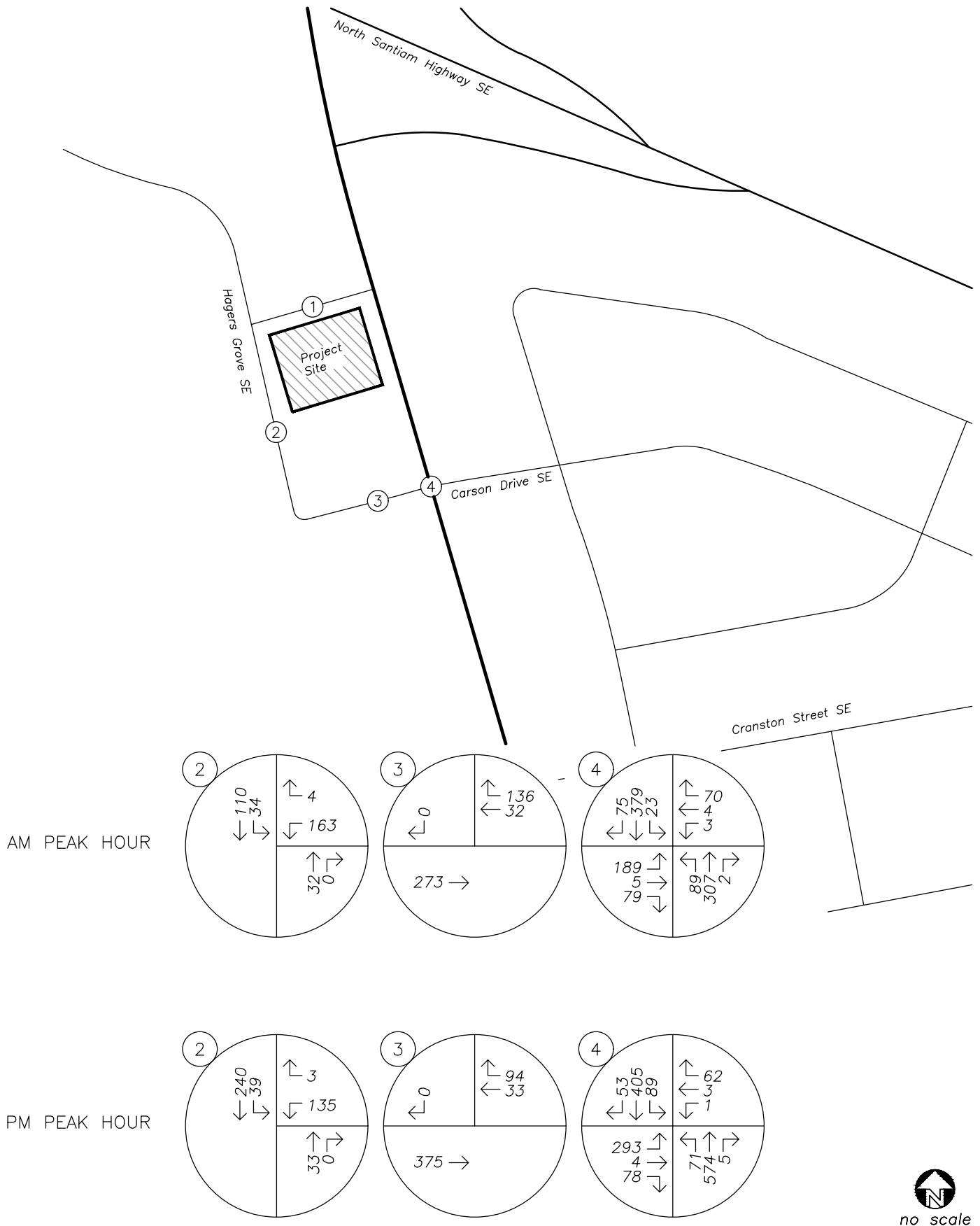
To provide analysis of the impact of the proposed development on the existing transportation facilities, an estimation of future traffic volumes is required. To calculate future traffic volumes for the year 2024 conditions, a compounded growth rate of two percent per year was applied. A build-out condition of two years was assumed.

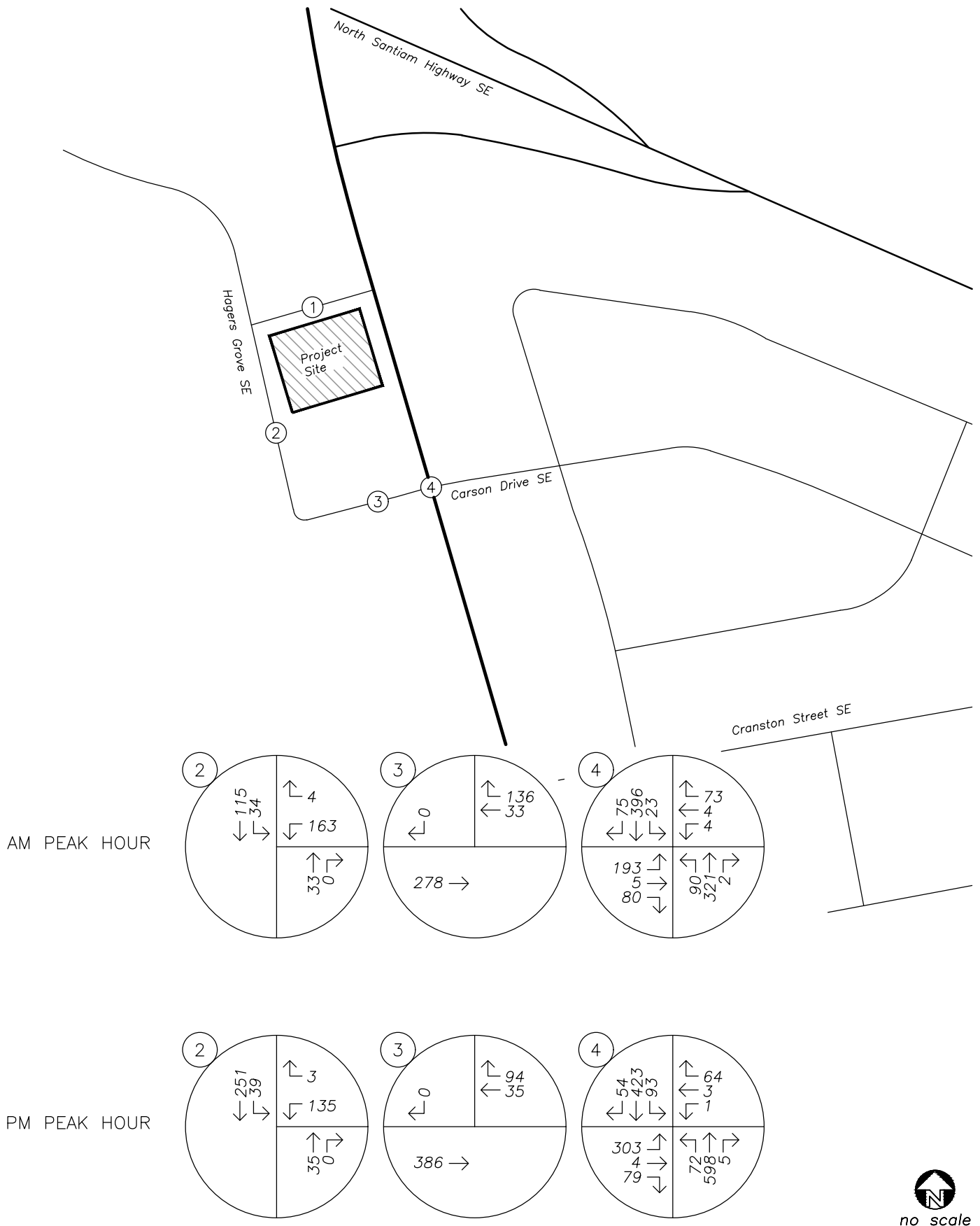
The background traffic volumes at the study intersections during the morning and evening peak hours are shown in Figure 6.

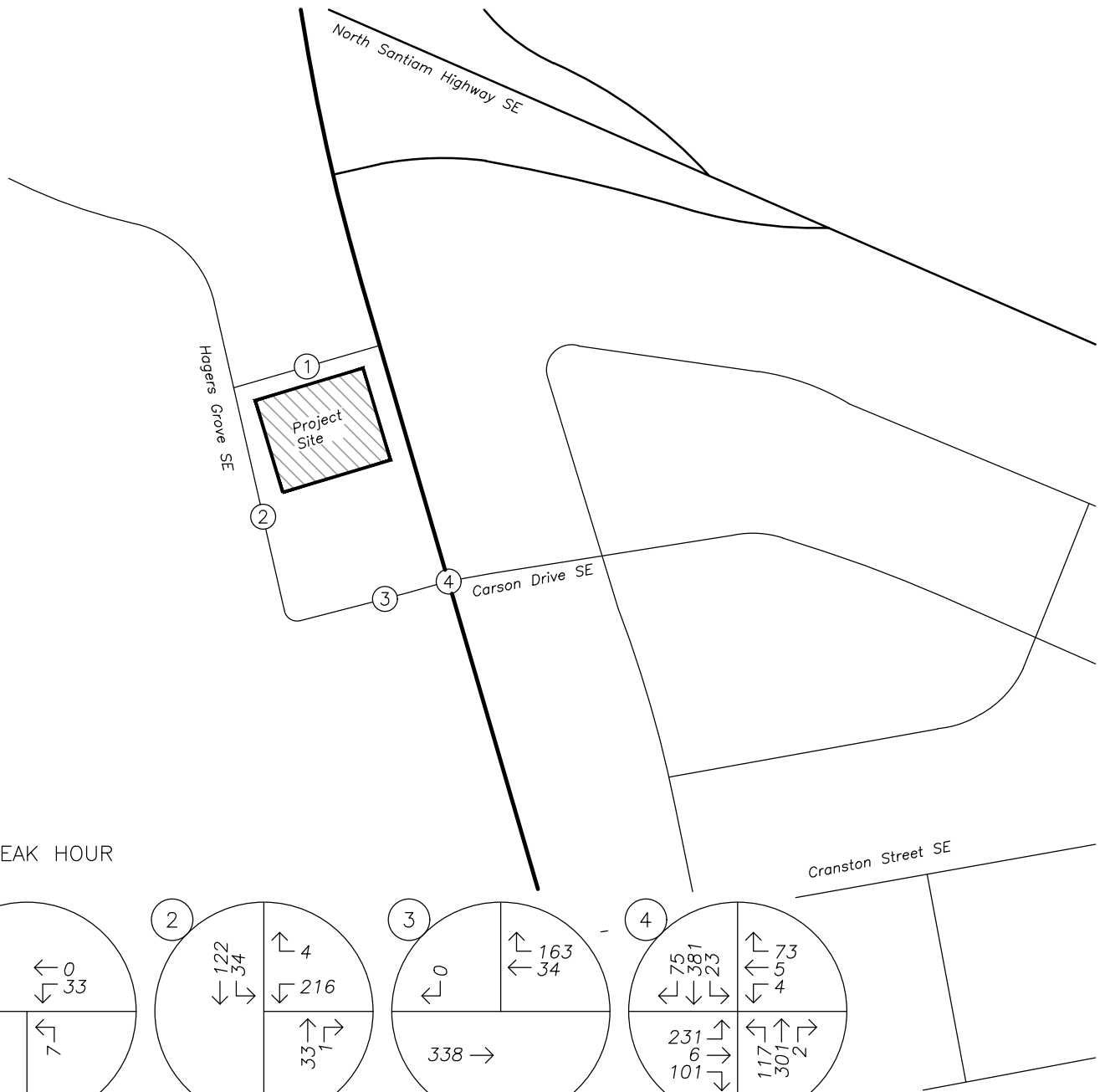
Buildout Conditions

Peak hour trips calculated to be generated by the proposed development, as described earlier within the *Site Trips* section, were added to the projected year 2024 background traffic volumes to obtain the expected 2024 site buildout volumes.

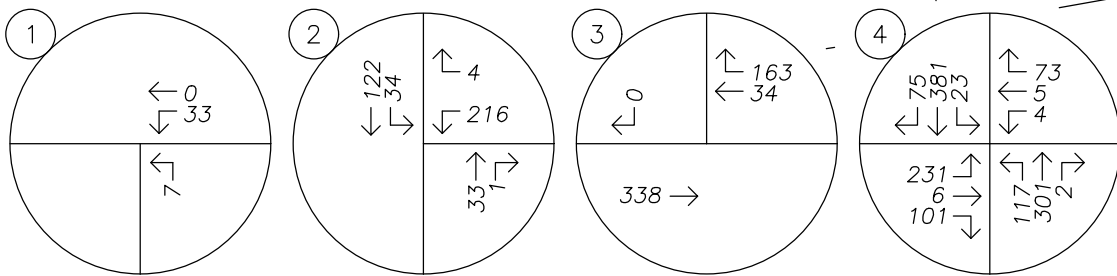
The buildout traffic volumes at the study intersections during the morning and evening peak hours are shown in Figure 7.



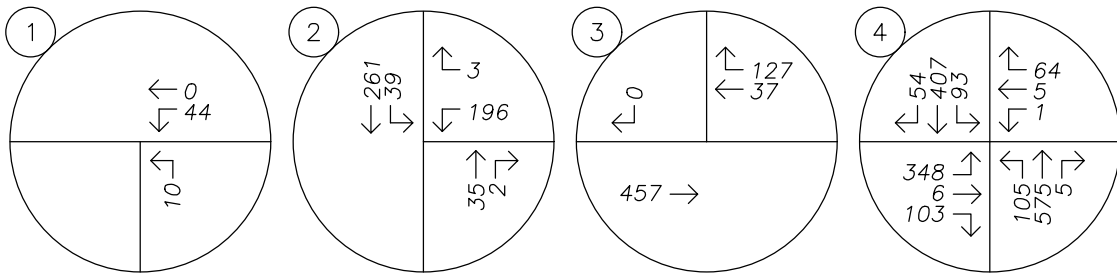




AM PEAK HOUR



PM PEAK HOUR



no scale

Safety Analysis

Crash History Review

Using data obtained from ODOT's Crash Data System, a review of approximately five years of the most recent available crash history (January 2016 through December 2020) was performed at the study intersections. The crash data was evaluated based on the number of crashes, the type of collisions, and the severity of the collisions. Crash severity is based on injuries sustained by people involved in the crash, and includes five categories:

- Property Damage Only (PDO)
- Possible Injury (Injury C)
- Non-Incapacitating Injury (Injury B)
- Incapacitating Injury (Injury A)
- Fatality or Fatal Injury

Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak period represents approximately 10 percent of the annual average daily traffic (AADT) at the intersection.

Table 4 provides a summary of crash types while Table 5 summarizes crash severities and rates for each of the study intersections. Detailed crash data is provided in the appendix to this report.

Table 4: Crash Type Summary

Intersection		Crash Type								Total Crashes
		Turn	Rear End	Angle	Fixed Object	Side Swipe	Ped	Bike	Other	
4	Hagers Grove Road SE at Lancaster Drive SE	2	2	1	0	0	0	0	0	5

Table 5: Crash Severity and Rate Summary

Intersection		Severity					Total Crashes	Peak Hour Volume	Crash Rate
		PDO	C	B	A	Fatal			
4	Hagers Grove Road SE at Lancaster Drive SE	3	2	0	0	0	5	1,771	0.15

Based on review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of study intersections that would be affected by the proposed development. Accordingly, no safety mitigation is recommended per crash data analysis.



Preliminary Traffic Signal Warrant Analysis

Traffic signal warrants were examined for all unsignalized intersections based on the methodologies in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration in 2009. Volumes were used from the year 2024 buildout conditions. Warrant 1, Eight Hour Vehicular Volumes, was evaluated based on the common assumption that traffic counted during the evening peak hour represents ten percent of the ADT. Detailed information on the traffic signal warrant analysis is included in the attached appendix.

Preliminary traffic signal warrants are not projected to be met any of the unsignalized study intersections upon full buildout of the proposed development.

Left-Turn Lane Warrants

A left-turn refuge lane is primarily a safety consideration for the major-street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants were examined for all intersections in which site trips are expected to increase the major street left turn movement using methodologies provided within the National Cooperative Highway Research Program's (NCHRP) Report 457. Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through lanes.

Left-turn lane warrants are not projected to be met at the applicable study intersection under the year 2024 buildout scenario.



Operational Analysis

Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual* (HCM)². Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little, or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay.

Performance Standards

According to the City of Salem's Transportation System Plan (TSP), the City shall allow its existing streets and intersections to function at LOS E during the morning and evening peak travel hours. However, traffic impacts created by new development, as identified in a traffic impact analysis, must be mitigated to maintain peak hour LOS D or better

Delay & Capacity Analysis

The LOS, delay, and v/c results of the capacity analysis are shown in Table 6 for the evening peak hour. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

² Transportation Research Board, *Highway Capacity Manual 6th Edition*, 2016.

Table 6: Capacity Analysis Summary

Intersection & Condition	AM Peak Hour			PM Peak Hour		
	LOS	Delay (s)	V/C	LOS	Delay (s)	V/C
1. Hagers Grove Road SE at Northern Site Access						
Year 2024 Buildout Conditions	A	9	0.01	A	9	0.01
2. Hagers Grove Road SE at Western Site Access						
Year 2022 Existing Conditions	B	11	0.24	B	13	0.25
Year 2024 Background Conditions	B	12	0.25	B	13	0.25
Year 2024 Buildout Conditions	B	12	0.33	B	15	0.37
3. Hagers Grove Road SE at Southern Site Access						
Year 2022 Existing Conditions	A	9	0.01	A	9	0.01
Year 2024 Background Conditions	A	9	0.01	A	9	0.01
Year 2024 Buildout Conditions	A	9	0.01	A	9	0.01
4. Hagers Grove Road SE at Lancaster Drive SE						
Year 2022 Existing Conditions	B	14	0.77	B	14	0.82
Year 2024 Background Conditions	B	15	0.79	B	14	0.85
Year 2024 Buildout Conditions	B	16	0.86	B	17	0.89

Based on the results of the operational analysis, all study intersections are currently operating acceptably per jurisdictional standards and are projected to continue operating acceptably through the 2024 site buildout year. No operational mitigation is necessary or recommended at these intersections.

Conclusions

Key findings include:

- No significant trends or crash patterns were identified at any of the study intersections that would be affected by the proposed development. Accordingly, no safety mitigation is recommended per the crash data analysis.
- Preliminary traffic signal warrants are not projected to be met any of the unsignalized study intersections upon full buildout of the proposed development. Accordingly, no related mitigation is necessary or recommended.
- Left-turn lanes are not projected to be met at the applicable intersections upon full buildout of the proposed development. Accordingly, no related mitigation is necessary or recommended.
- All study intersections are currently operating acceptably per jurisdictional standards and are projected to continue operating acceptably through the 2024 site buildout year.



Appendix A – Site Data

Site Plan

Trip Generation Calculations

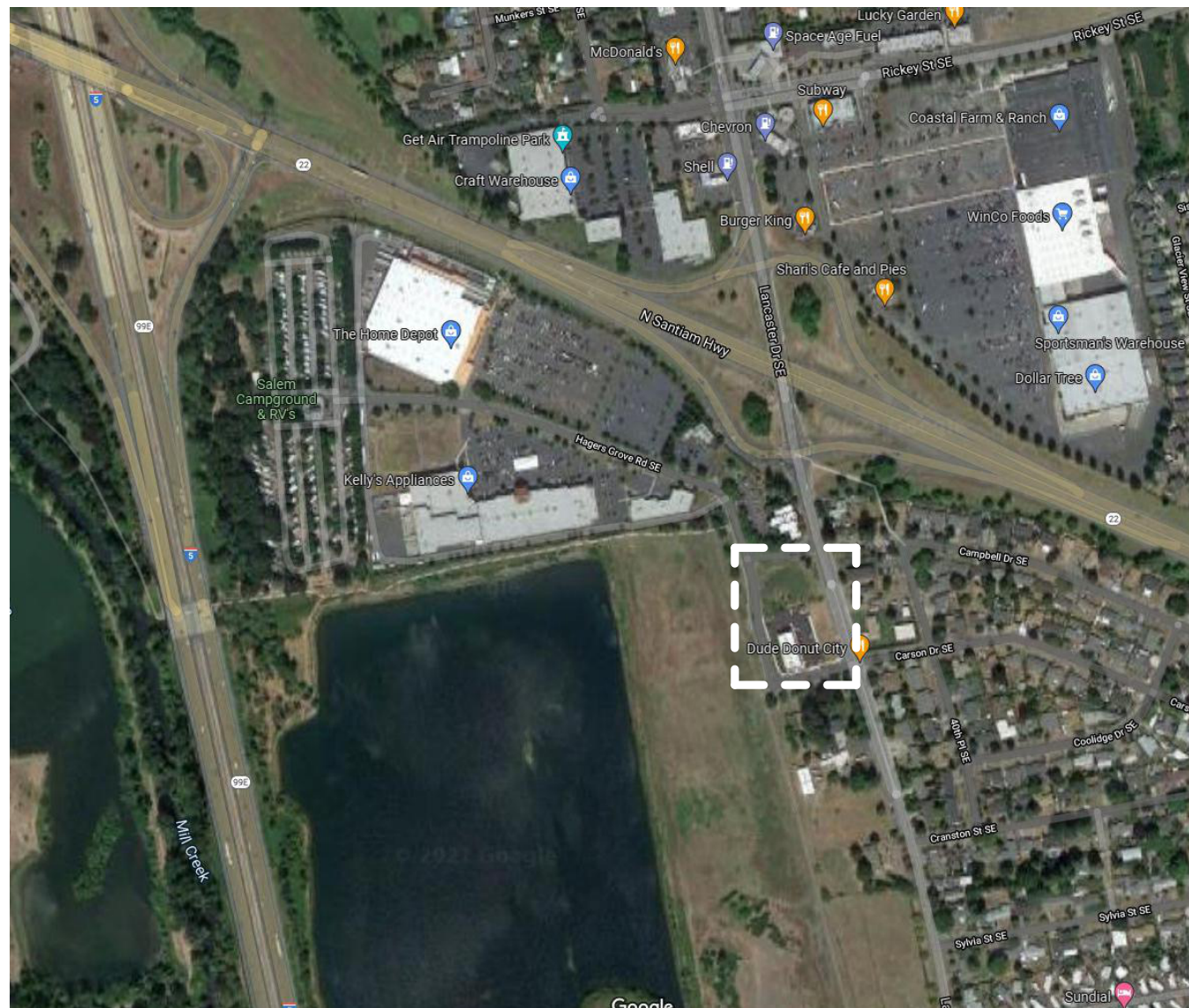


Stop-N-Save Gas

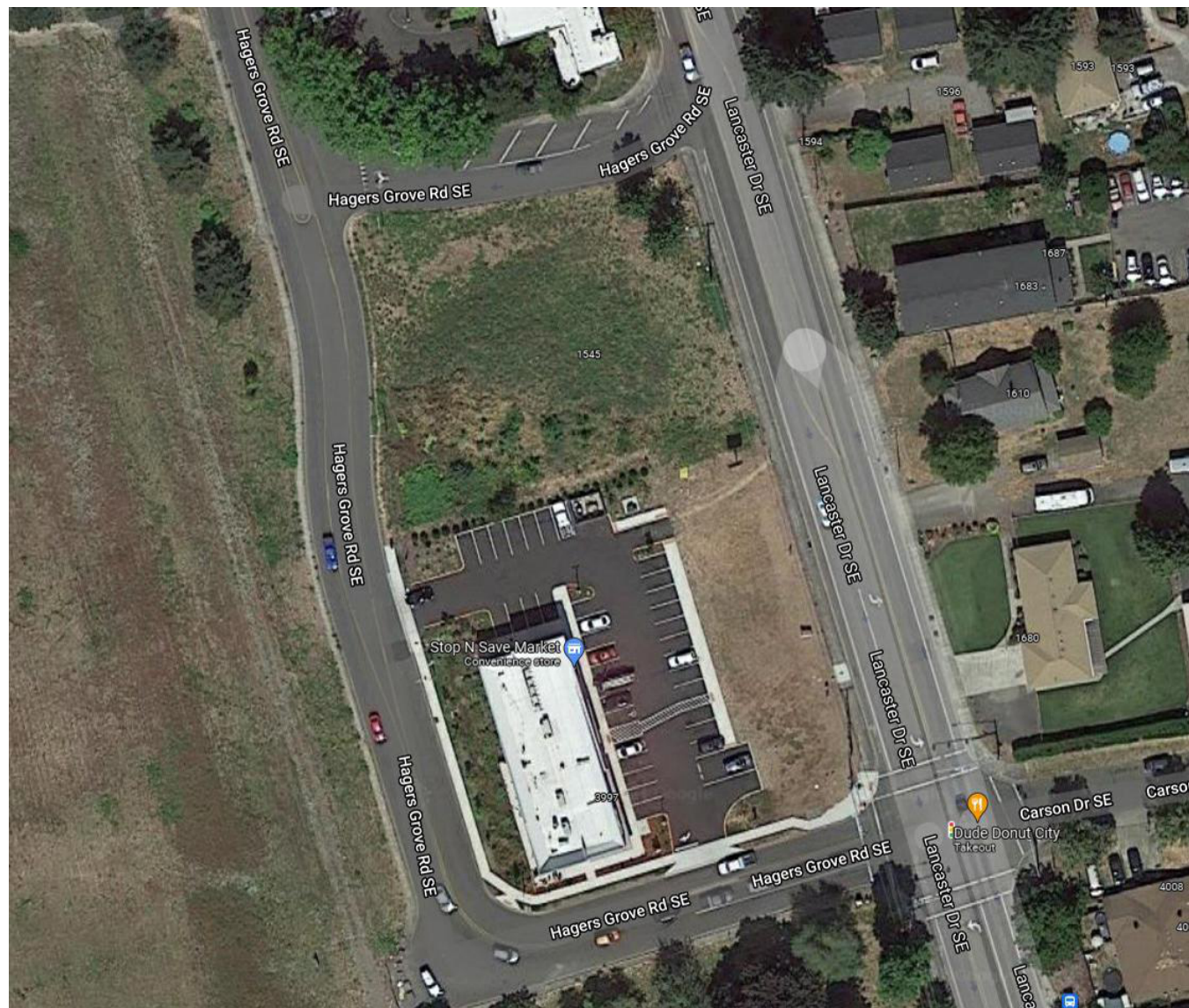
New Gas Station and C-Store

3997 Carson Dr SE Salem OR 97317

VICINITY IMAGE:



SITE IMAGE:



DRAWINGS LIST:

Sheet Number	Sheet Name	Sheet Issue Date	Current Revision	Revision Description	Sheet Number	Sheet Name	Sheet Issue Date	Current Revision	Revision Description
GENERAL DRAWINGS									
G0.01	COVER SHEET	01/09/2020							
G0.02	GENERAL NOTES	01/09/2020							
G3.01	PERSPECTIVE VIEWS	01/09/2020							
CIVIL ENGINEERING DRAWINGS									
C2.0	GRADING AND DRAINAGE PLAN	01/17/22							
C3.0	UTILITY PLAN	01/17/22							
ARCHITECTURAL DRAWINGS									
A1.01	SITE PLAN	01/09/2020							
A1.02	SITE PLAN - EXISTING CONDITIONS	01/12/22							

SYMBOL LEGEND:

ELEVATION DATUM:	WINDOW TYPE:
ELEVATION F.F.E. ELEVATION DATUM LOCATION:	REFER TO WINDOW ELEVATIONS SHOWN ON DRAWINGS A5.1X
SECTION REFERENCE:	DOOR NUMBER
FILLED ARROW DENOTES BUILDING SECTION OPEN ARROW DENOTES WALL SECTION/DETAIL DETAIL NUMBER SHEET NUMBER SIDE NOTE IF REQUIRED	DOOR SIZE OR NUMBER
ELEVATION REFERENCE:	PLAN NOTE DESIGNATION
ELEVATION NUMBER OR DESIGNATION AS OCCURS SHEET NUMBER	PLAN OR SIDE NOTE NUMBER MARK OR DIAGONAL NOTE NUMBER REVISION NUMBER
DETAIL REFERENCE:	ROOM TITLE + NUMBER:
DETAIL NUMBER SHEET NUMBER SIDE NOTE IF REQUIRED DETAIL CUT LOCATION IF SHOWN	ROOM NAME ROOM NUMBER
	WALL TYPE MARK:
	WALL OR PARTITION CONSTRUCTION TYPE. SEE LEGEND.

PROJECT TEAM:

OWNER:
Inderjit Dhaliwal
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P: 503.999.6545 E: hkour@hotmail.com

ARCHITECT:
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275 Court Street St. NE Salem OR 97303-3442
P: 503.390.6500
Project Architect: Leonard Lodder, AIA, LEED AP
D: 971.239.0207
E: leonard@studio3architecture.com
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LANDSCAPE ARCHITECT:
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Laura A. Antonson, LA
P: 503.784.6494 E: laura_a_antonson@hotmail.com

STRUCTURAL ENGINEERING:

GENERAL NOTES:

- General notes apply to all drawings.
- All construction shall comply with the Oregon Structural Specialty Code. Construction shall comply with any titles/rules/laws the local jurisdiction enforces up to and beyond the Oregon Structural Specialty Code. Accessibility shall comply with the ANSI/ICC A117.1.
- Contractor or its subcontractors shall be responsible for obtaining and paying for all inspections and tests required by any government agency to implement the plans and accept any required special inspections or reports, which shall be paid for by the owner.
- Work shown on these drawings is to be supplied, furnished, constructed, installed all as per the general conditions and the specifications: exceptions as described by the following abbreviations:
 - CFCI Contractor Furnished - Contractor Installed
 - OFCl Owner Furnished - Contractor Installed
 - OFOI Owner Furnished - Owner Installed
 - NIC OR N.I.C. Not in contract or not a part of this contract.
- Do not scale drawings, dimensions govern. The general contractor shall notify the architect of any discrepancies immediately. All dimensions are to face of stud or concrete, unless otherwise noted, those indicated as clear shall be from finish.
- These drawings have been assembled for use at their current size and scale. The contractor assumes all responsibility for work not conforming to these documents due to the use of reduced scale drawings for estimating or construction purposes.
- Where construction details are not shown or noted for any part of the work, the work shall be executed consistent with the intent demonstrated by details provided for other work. If questions remain about intent, contact the architect prior to proceeding with the work.
- All surfaces and materials shall be thoroughly prepared smooth, clean, level and even. By commencing finish installation, the finish contractor signifies its acceptance of the substrate and thereby assumes responsibility for the quality of the installation.
- Where devices or items or parts thereof are referred to in singular, it is intended that such shall apply to as many such devices, items, or parts as are required to properly complete the work.
- The contractor shall layout the work prior to proceeding. The contractor shall notify the architect of all discrepancies with the layout. Such inspection shall not relieve the contractor of responsibility to conform to the intent of the contract documents.
- Unless otherwise noted, dimensions, placements and alignments shown are critical for the installation of furniture and equipment as well as for the use of the space by occupants. Finished dimensions may vary upward by 1/4" but may not vary downward. Where +/- is indicated variation of up to 3% shall be allowable. Alignments of new and existing conditions shall be finished to a smooth and monolithic appearance (gap shall be overlapped to an inside or outside corner where practicable to avoid cracking).
- Do not deviate from the construction documents without the architect's written approval. The contractor agrees to defend indemnify and hold harmless the architect from any claims arising as a result of changes to the work without prior approval from the architect.
- The general contractor shall be responsible for the timely arrival of all specified finish materials, equipment and any other materials to be utilized on the project. The general contractor shall notify the architect in writing within 10 days of date of contract of those specified items that may not be readily available and substitute items of equal quality and description. If notification is not received by the architect, the contractor accepts responsibility for the proper ordering and follow up of specified cost to the owner to insure availability of all specified items so as not to create a hardship on the owner nor delay progress of the work.
- If required construction barriers shall be installed by the general contractor, painted, detailed, and illuminated as per the architect's direction. No signs other than those authorized by the architect or owner will be permitted on this barricade.
- Neither the owner nor the architect will enforce safety measures or regulations. The contractor shall design, install and maintain all safety devices and shall be solely responsible for conforming to all local, state and federal safety and health standards, laws and regulations.
- All existing facilities to be maintained in-place by the contractor unless otherwise shown or directed. Contractor shall take all precautions necessary to support, maintain or otherwise protect existing utilities and other facilities at all times during construction. Contractor shall leave existing facilities in an equal or better-than-original condition and to the satisfaction of the architect/owner.
- The general contractor shall locate all existing utilities whether shown hereon or not and to protect them from damage. The general contractor shall bear all expenses of repair or replacement of utilities or other property damaged by operations in conjunction with the execution of his/her work.
- The general contractor shall secure all permits required by the local jurisdiction, state agency and/or county.
- Mechanical hvac, plumbing, fire suppression, low voltage and electrical work require separate permits. Trade subcontractors shall secure all required permits affecting their scope of work.
- Exit doors shall be operable from the inside without the use of a key or any special knowledge or effort. Exit doors shall swing in the direction of exit travel when serving an occupant load greater than 50.
- Install wall backing for all wall mounted items, including but not limited to the following: door stops, fixtures, wall cabinets, shelving, counters, toilet accessories, security equipment, hand rails, window covering tracks, equipment racks, etc.
- Coordinate location of recessed or semi-recessed items to avoid back to back installation and to reduce noise transfer through partitions.
- Provide water resistant gypsum board at bathtub/shower walls and bathroom ceilings.
- Architect shows fire extinguishers in general logical location: verify requirements and locations with local fire marshal. General contractor to provide fire extinguishers and cabinets (where called out).
- Specifications of material and equipment by the use of name, model number, and/or general coordinate installations with equipment dimensions, including equipment to be installed by the tenant.
- All work shall conform to standards of the industry for first quality workmanship and materials and shall conform to manufacturer's recommendations and specifications.
- Materials are specified by name, model number and description were practicable in order to avoid inaccuracies. The contractor shall review all specifications and notify the architect of any discrepancies in these documents prior to proceeding with the work.
- Floor material changes shall occur at the centerline of doors except where notes. See threshold details for special conditions (if any).
- Blocking and grounds at areas which have millwork, shelving, and tenant furnished furniture wall cabinets indicated on the drawings shall be included with the work.

SUBMITTALS:

- General: the contractor shall submit shop drawings, product data and samples.
- The general contractor shall thoroughly review and check all submittals, coordinating separate trades and verifying conformance with the contract documents. The designer shall not review and will return without review any drawings or submittals not reviewed and noted by the general contractor.
- Submittals shall include shop drawings, schedules and manufacturer's product and equipment cuts for all fixtures, equipment, finishes, special materials, specialties, millwork & casework, doors, frames, and hardware.
- Finish materials: contractor shall submit samples of all finishes and materials, finishes shall be on actual materials.
- Cut sheets: contractor shall submit manufacturer's cuts and spec sheets for all fixtures, including lighting, equipment, special materials, specialties, doors, frames and hardware.
- Minimum sample size:
 - Wood veneered products - 8 1/2" x 11" x 1/4"
 - Solid lumber - 50 square inches
 - Other finishes and miscellaneous materials - 6" x 6"
- Quantity of submittals:
 - Material samples: 3
 - Shop drawings: 1 pdf
 - Erection drawings: 1 pdf
- Submittal markings: the samples shall bear identification of the project, designer, general contractor, and the manufacturer.
- Quality grade of millwork and casework: AWI quality standards and specifications shall govern according to the following grades:
 - Casework: Premium Grade
 - Natural finish millwork: Premium Grade
 - Running trim: Custom Grade
 - Architectural flush doors (natural finish): Premium Grade

DEFERRED SUBMITTALS:

- Deferred submittal review process: the portions of the project listed below will be constructed using a design/build approach.
- The drawings included in this package are preliminary to provide a basis for bidding and planning.
- Construction drawings for the portions listed are to be provided by the contractor as "deferred submittal" drawings.
- "Deferred submittal" drawings require approval of both architect/engineer and the authority having jurisdiction prior to construction per O.S.S.C. paragraph 107.3.4.2.
- The procedure for deferred submittal is as follows:
 - Contractor to review and provide submittal stamp of approval.
 - Deferred submittal shall be submitted to the architect for review.
 - Following the completion of the architects review the contractor shall submit to the authority having jurisdiction.
 - Work related to deferred submittal items shall not be performed until the deferred submittal documents have been approved by the authority having jurisdiction.
- The contractor is responsible for the following deferred submittals:
 - Electrical service design
 - Mechanical HVAC (Heating Ventilating And Air Conditioning) system design
 - Plumbing service design
 - Fire suppression
 - Fire alarm (where applicable)
- Design-build coordination, design build services shall include but not be limited to the following:
 - Electrical system and service design
 - Mechanical HVAC (Heating Ventilating And Air Conditioning) system design
 - Plumbing system and service design
 - Fire suppression
 - Fire alarm (approved first by general contractor)
- Final design, engineering and shop drawings shall be submitted to architect for review and approval prior to proceeding, shop drawings shall include all materials, configurations, attachments, and finishes.

DESIGN-BUILD NOTES:

- Design/Build - mechanical/electrical/plumbing/sprinkler.
- Design/Build services shall be required of the Contractor for the Mechanical, Electrical, Plumbing, and Sprinkler portions of the work. All systems new and existing shall be designed, modified, provided and/or installed as required by the new layout. Contractor shall submit design drawings and product submittals for all design/build systems to the designer and the building for review and approval.
- Conform to applicable codes, ordinances, specific building standards and industry standards for first class installations of all systems. Comply with building and lease specific requirements for emergency lighting, electrical service and sub-metering (contractor shall be responsible for the verification of adequacy of service and panel space). Contractor shall field verify and confirm with the building prior to submitting their bid for the work.
- Contractors shall be responsible for all design and documentation (including required design documents professionally sealed by an engineer where and as required by the local jurisdiction) as may be required for the full and complete installation of HVAC, power, lighting and sprinkler systems, as well as applying and obtaining all permits, approvals, inspections and certificates required for the completion of the project for occupancy.
- Contractor shall submit HVAC design drawings and product submittals to the designer and the building for review and approval, including clear indications of zones, locations of supply and return diffusers and thermostat locations. Contractor shall provide HVAC balancing report in triplicate to the architect and the building upon completion of the installation and balancing.
- Fire suppression system: contractor shall modify existing fire suppression system consistent with requirements of code, new use, NFPA, and owner's insurance underwriter. Submit shop drawings for approval of building's engineer.
- Sprinkler head types:
 - At gypsum board ceiling: fully recessed flush mounted type with white cover plates.
 - At suspended acoustic tile ceiling: centering not required, maintain min 6" from grid.
- Contractor shall be responsible for complete as-built documents at the completion of the project and shall submit reproducible copies to the landlord for their records.

R.C.P. GENERAL NOTES:

- Light fixtures, exit signs and other ceiling elements shall be located in center of individual ceiling plane or tile unless noted otherwise or as directed by architect.
- Provide ceiling access as required for equipment and systems maintenance. Verify manufacturer recommendations.
- Electrical contractor to provide all switches, dimmers and plates as required by design, multiple switches at one location shall be ganged together and furnished with one cover plate.
- The reflected ceiling plan indicates the location of ceiling types, ceiling fixtures light switches and associated items.
- Contractor to notify architect of any conflict of light fixture locations with main runners, ducts, etc. Prior to installation.
- Verify field conditions and locations of all plumbing, mechanical ducts, structural elements and any and all other applicable items. Install new plumbing, mechanical fans, ducts, conduits, and other related items so as to not conflict with lights and any unique field conditions.
- Furnish and install Underwriters Laboratory, Inc. (UL) labeled devices throughout.
- Any lighting control systems which utilize an automatic time switch, occupant-sensing device, automatic daylight control device, lumen maintenance control device or interior photocell sensor, shall be installed in accordance with the manufacturers instruction.
- Automatic daylight control devices and lumen maintenance control devices shall only control luminaries in the day lit area and have photocell sensors that are either ceiling mounted or located so that they are accessible only to authorized personnel.

PLUMBING MECHANICAL GENERAL NOTES:

- Plumbing systems work for this project is shown for design-build guidance.
- Plumbing fixtures are located on drawings for location only. Confirm fixture selection with owner prior to installation.
- Equipment schedule does not specify any plumbing fixtures such as grease traps, faucets, pressure reducing valves, etc. Nor does it include final connection to service. Plumbing contractor to provide if necessary.
- Contractor or its subcontractors shall be responsible for obtaining and paying for all inspections and tests required by any governmental agency to implement the plans and accept any required special inspections or reports, which shall be paid for by the owner.
- Plumbing requirements shown only for items listed on equipment schedule.
- Plumbing contractor to provide rough-in and final connect.
- Although some floor drains may be shown on plans, provide all required floor drains per the plumbing code.

HVAC MECHANICAL GENERAL NOTES:

- Mechanical HVAC work for this project is shown for design-build guidance.
- Mechanical HVAC work for this project consists in exhaust fans and duct work as well as any code mandated ventilation.
- Exhaust fans and circulation fans are located on drawings for general location only. Sizing is the responsibility of the design build contractor. Confirm equipment selection with owner prior to installation.
- HVAC subcontractor to provide submittal information and receive owner approval prior to ordering equipment.
- Contractor is required to review the drawings of all divisions of work contractor is responsible for coordination of this work and the work of all subcontractors with all divisions of work. It is this contractor's responsibility to provide all the subcontractors with a complete set of bid documents.
- Contractor or its subcontractors shall be responsible for obtaining and paying for all inspections and tests required by any governmental agency to implement the plans and accept any required special inspections or reports, which shall be paid for by the owner.
- The contractor shall furnish and install any additional structural steel required to support any mechanical equipment. This contractor shall coordinate locations and requirements with the general contractor and landlord prior to bid.

ELECTRICAL GENERAL NOTES:

- Electrical work for this project is shown for design-build guidance.
- Light fixtures and electric heating devices are located on drawings for general location only. Sizing of lumen output and power consumption is the responsibility of the design build contractor. Confirm fixture selection with owner prior to installation.
- Contractor and subcontractors are required to review the drawings for all divisions of work. Contractor is responsible for coordination of this work and the work of all subcontractors with all divisions of work including electrical demolition. It is this contractor's responsibility to provide all the subcontractors with a complete set of bid documents.
- Contractor or its subcontractors shall be responsible for obtaining and paying for all inspections and tests required by any governmental agency to implement the plans and accept any required special inspections or reports, which shall be paid for by the owner.
- Electrical information provided on architectural floor plans is for reference only, electrical design build sub-contractor to confirm and coordinate all work.
- Placement of light fixtures in ceiling planes takes precedence over all other services including fire protection or suppression devices.
- Placement of receptacles, convenience outlets, switches, smoke detectors, etc must meet electrical code requirements, accessibility requirements and must be rationally laid out in the space available.
- Circuiting indicated on plan is partially diagrammatic for clarity. Circuiting shall be "thru-wiring" where and whenever possible.
- Field verify exact location and electrical requirements of all HVAC equipment with mechanical contractor prior to ordering related electrical equipment.
- Coordinate with tenant's equipment power requirements.
- Electrical contractor shall make all final connections as required for a fully complete and operable system.
- All stub-up dimensions from finished floor to center of box.
- Equipment listed on equipment schedule will be uncrated and set in place only. Rough in and final hookup will be performed by the electrical contractor.
- All electrical outlets and connections to be grounded type.
- Electrical contractor to furnish disconnects where code requires.
- Equipment listed on the equipment schedule does not include electrical fittings such as relays or disconnects to the electrical service.
- Plugs should enter receptacle from the dimension side of symbols unless noted otherwise.

REFUELING CANOPY - DESIGN BUILD NOTES:

- These drawings provide the general configuration of the re-fueling canopy only, including general size and clear height.
- Design Build contractor is responsible for structural engineering of the canopy system including foundations, in accordance with the Oregon Structural Specialty Code, (OSSC).
- Design Build contractor is responsible for fabrication and erection of components, including branding elements, for a complete refueling canopy system.
- Prepare design and erection drawings under seal of a structural engineer registered in the State of Oregon.
- Apply for permits associated with the erection of the canopy system.
- Design canopy to collect and direct storm water to the site storm drainage system.
- Provide canopy lighting to illumination standard required by the the fueling brand.
- Coordinate electrical work and requirements with the owner and sitework contractor.

STUDIO

3

ARCHITECTURE
INCORPORATED

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SALEM, OR 97301-3442
P : 503.390.6500
www.studio3architecture.com

IN THE EVENT CONFLICTS ARE DISCOVERED
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THE DOCUMENTS TRANSMITTED BY MAIL, FAX,
ELECTRONICALLY OR OTHERWISE, THE ORIGINAL
SIGNED AND SEALED DOCUMENT SHALL GOVERN.

PROJECT # 2020-109
DATE: 01/17/2022
REVISIONS

Stop-N-Save Gas

New Gas Station

3997 Carson Dr SE Salem OR 97317

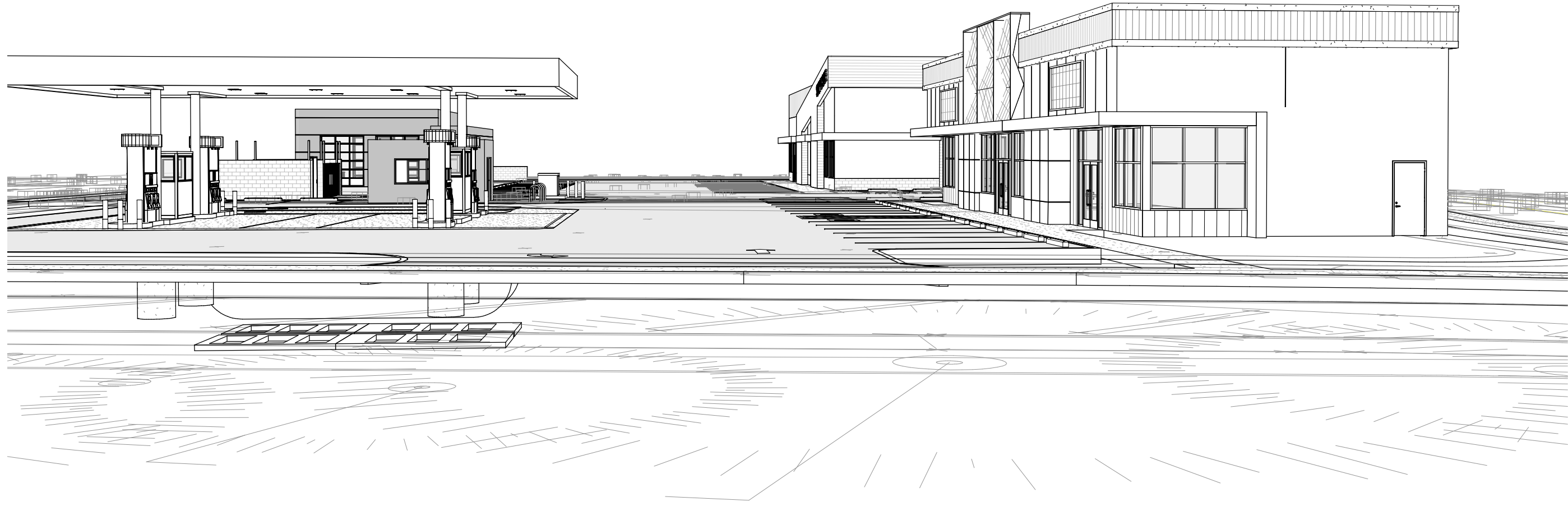
SHEET:

G0.02



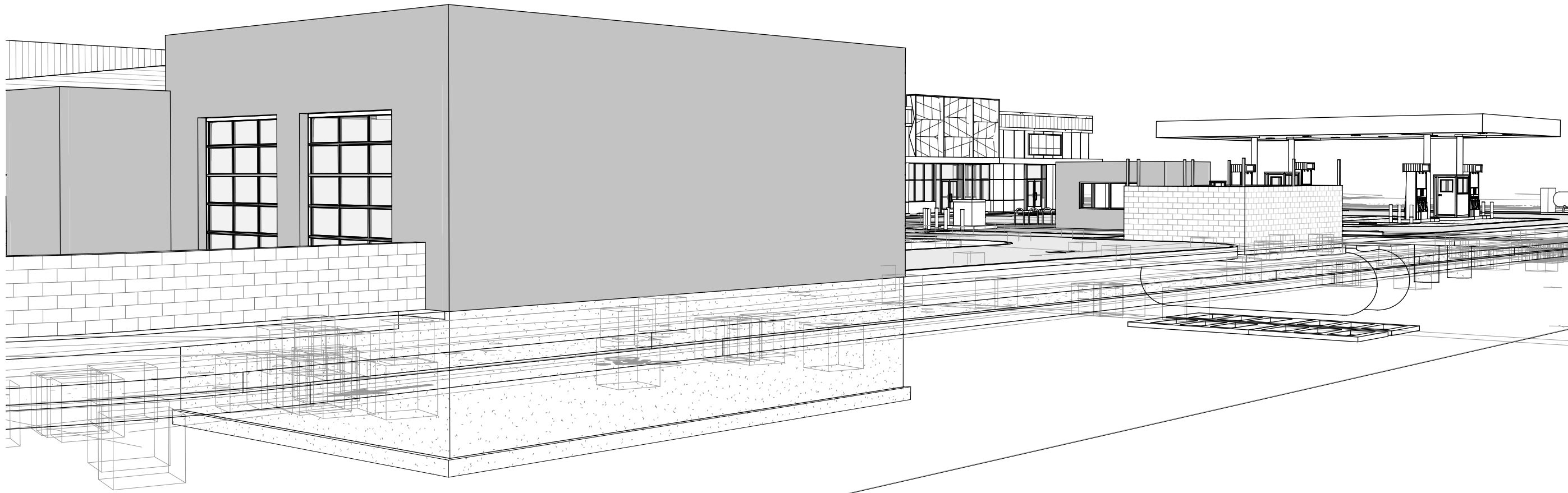
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3D View 3



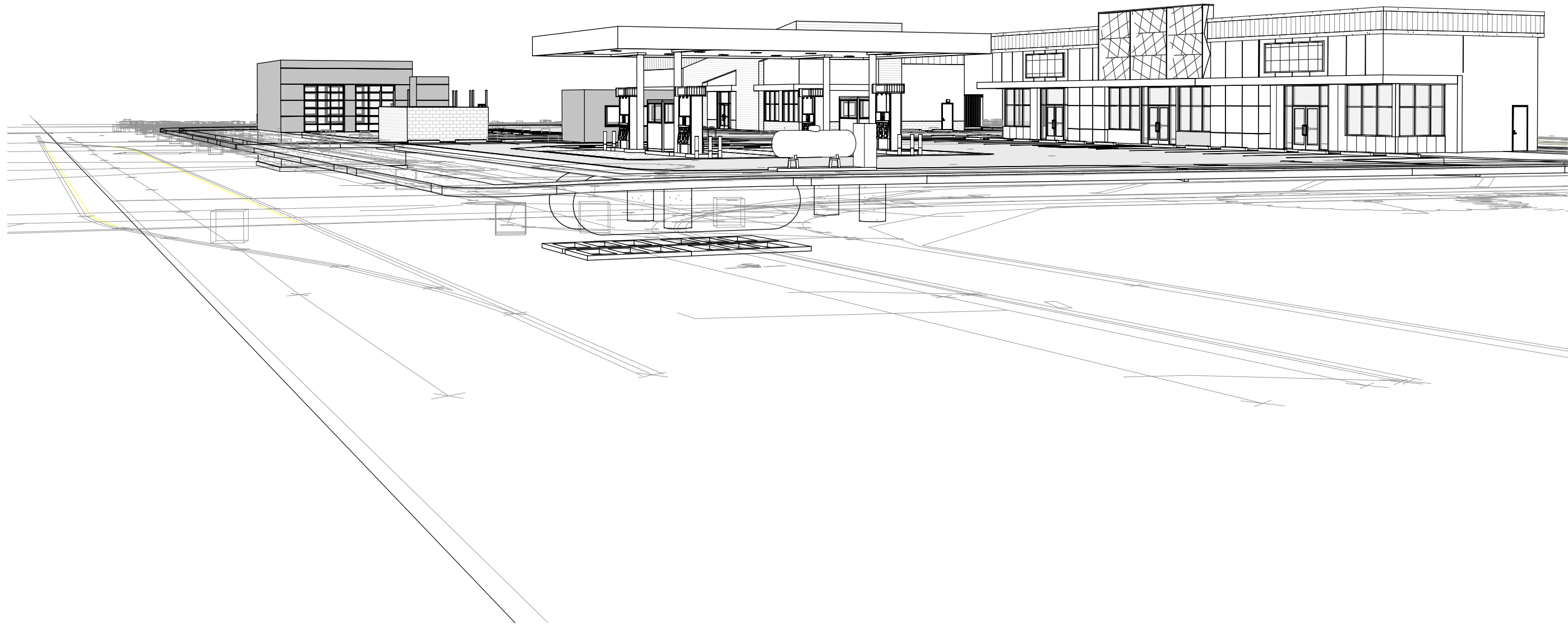
2

3D View 4



4

3D View 1



3

3D View 2

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ELECTRONICALLY OR OTHERWISE, THE ORIGINAL
SIGNED AND SEALED DOCUMENTS SHALL GOVERN.

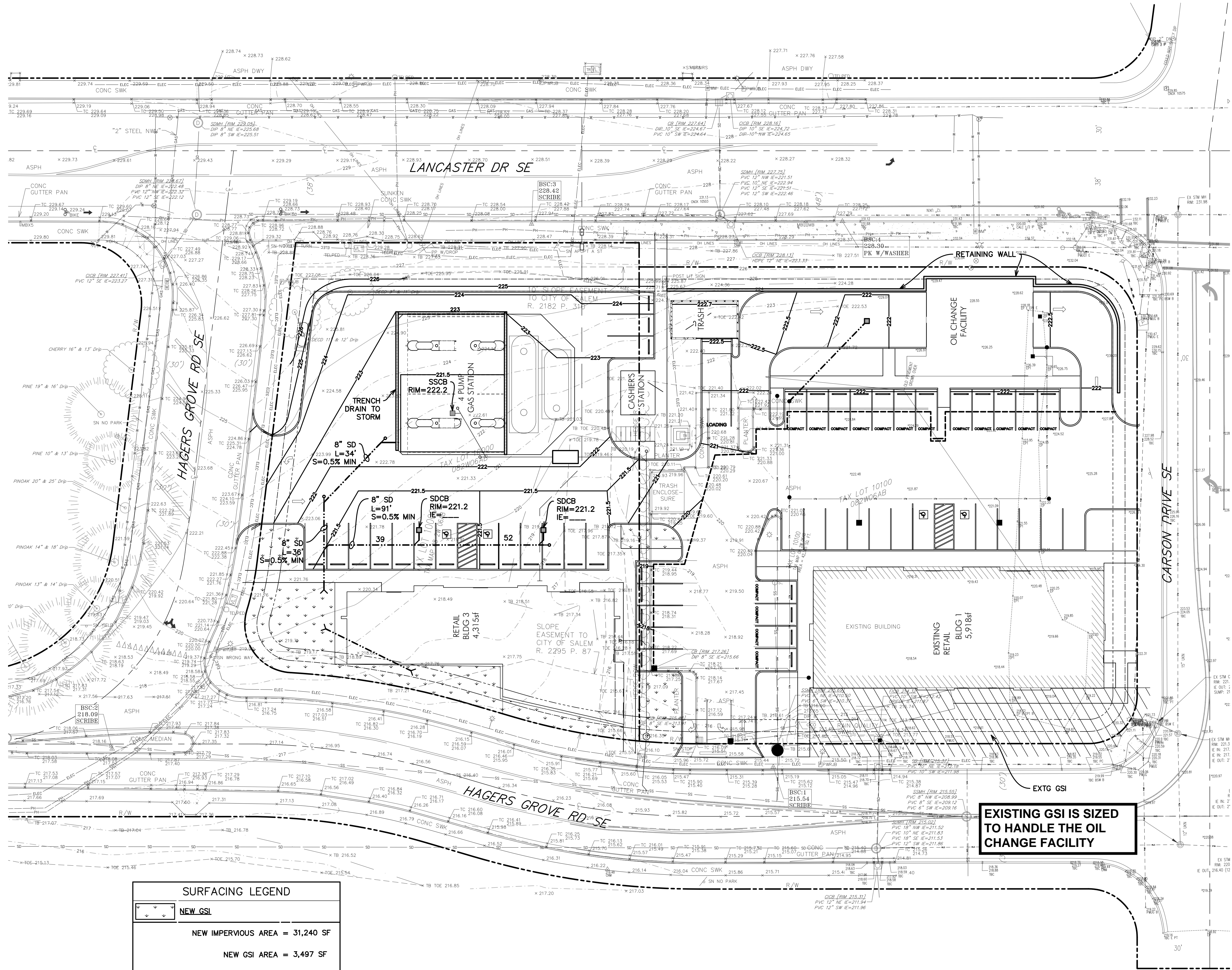
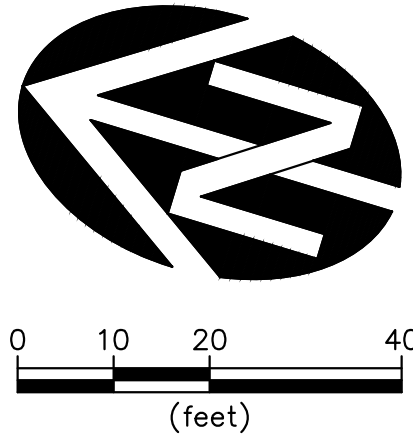
PROJECT # 2020-109
DATE: 01/17/2022
REVISIONS

Stop-N-Save Gas New Gas Station

3997 Carson Dr SE Salem OR 97317

SHEET:

G3.01



SURFACING LEGEND	
	NEW GSI
NEW IMPERVIOUS AREA = 31,240 SF	
NEW GSI AREA = 3,497 SF	
GSI/IMPERVIOUS = 11.2%	

STUDIO3 ARCHITECTURE

STOP 'N' SAVE HAGERS GROVE

DRAWING
C2.0

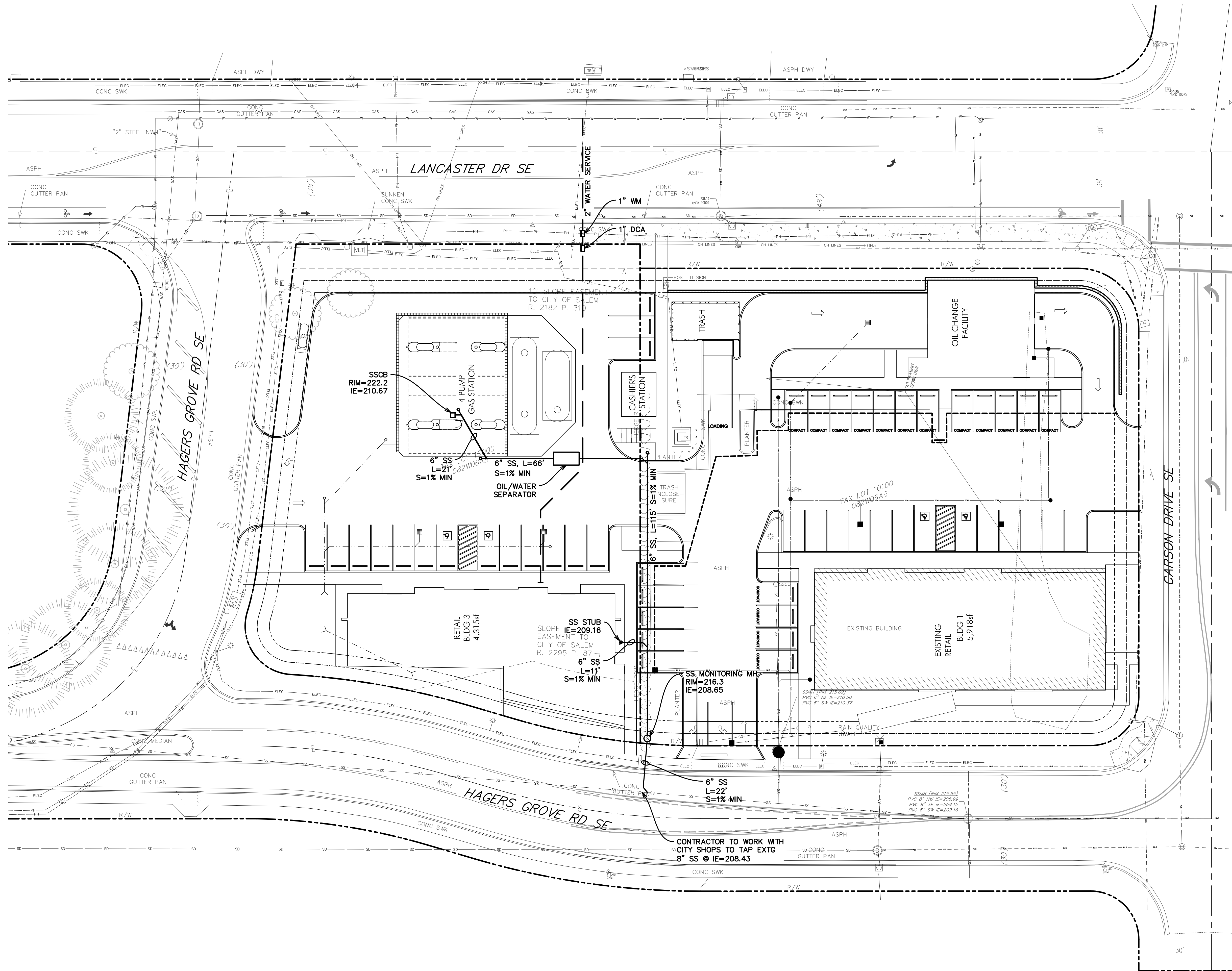
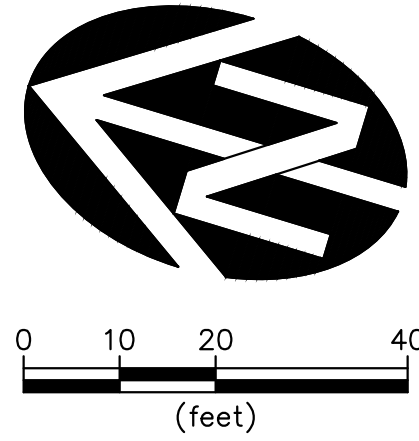
JOB NUMBER
3265.0000.0

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

REGISTERED PROFESSIONAL ENGINEER
REVIEW
WILLIAM J. STEWART
NOV. 12, 2020
RENEW: 6/30/2022

NO.	DATE	DESCRIPTION	BY
1	01/2022	REVISIONS	JW

1/5/2022 4:39:37 PM
C:\Users\N Save Hager\Civil\Projects\Studio 3\Stop N Save Hager\Civil\Plots\C3.0 - Utility Plan.dwg, (C3.0 tab)



STUDIO3 ARCHITECTURE
STOP 'N' SAVE HAGERS GROVE

UTILITY PLAN

DRAWING
C3.0
JOB NUMBER
3265.0000.0

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

REVIEW
REGISTERED PROFESSIONAL ENGINEER
WILLIAM J. WELLS
NOV 12 2020
OR REG. NO. 12345

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING
IF NOT ONE INCH ON
THIS SCALE, SCALE
ACCURATELY

DSN. JW
DRN. AK
CKD. JW

NO.	DATE	DESCRIPTION	BY
1	01/2022	REVISIONS	JW

SITE PLAN GENERAL NOTES:

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- REFER TO CIVIL DRAWINGS FOR GRADING. SITE IS REQUIRED TO MEET THE LAWS OF FHA AND ADA. ACCESSIBLE ROUTES SHALL NOT EXCEED 5% (1 IN 20) OR CROSS SLOPES SHALL NOT EXCEED 2% (1 IN 50). ALL AT GRADE SIDEWALKS ARE ACCESSIBLE ROUTES.
- JOINTS IN CONCRETE WALKS NOTED AS E.J. ARE TO BE CONSTRUCTED AS EXPANSION JOINTS. ALL OTHER JOINTS SHOWN, TO BE TOOLED CONTROL JOINTS, SEE CIVIL.
- PROVIDE CONSTRUCTION FENCING AS REQUIRED TO SECURE SITE AND BUILDING DURING CONSTRUCTION.
- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
- SEE ELECTRICAL DRAWINGS FOR SITE LIGHTING.

SITE DEVELOPMENT CODE REVIEW:

SITE AREA:	67,798.91 sf = 1.5564ac	BIKE PARKING:	• 1 SPACES PER 3,500 sf, or MINIMUM 4 SPACES • THEREFORE PROVIDE 4 BIKE PARKING SPACES.
ZONING:	CR Commercial Retail	LOADING SPACES:	• FOR BUILDINGS BETWEEN 5,000 sf TO 60,000 sf PROVIDE 1 SPACE: • LOADING SPACE SIZE: 12'-0" x 19'-0" WITH ACCESS TO STREET OR ALLEY.
COMPREHENSIVE PLAN:	COM		
BUILDING AREAS:			
• BLDG 1 RETAIL:	5,918 sf		
• BLDG 2 RETAIL:	4,315 sf		
• BLDG 3 FUEL CASHIER:	252 sf		
• BLDG 4 OIL CHANGE:	1,888 sf		
• TRASH ENCLOSURE:	480 sf		
PARKING:			
• COMMERCIAL USES:	1/250sf REQ'D		
• MOTOR VEHICLE SERVICES:	1/900sf REQ'D		
• BLDG 1 RETAIL:	@ 5,918sf/250sf = 23.672spaces		
• BLDG 2 RETAIL:	@ 4,315sf/250sf = 17.260spaces		
• BLDG 3 CASHIER:	@ 252sf/900sf = 0.280spaces		
• BLDG 4 OIL:	@ 1,888sf/900sf = 2.098spaces		
• FUEL CANOPY:	@ 2,320sf/900sf = 2.577spaces		
Total Parking Req'd	= 45.88spaces		
Total Parking Provided:	= 50spaces		
16 spaces, Compact, 34 spaces Full Size.			

SITE AREA CALCULATIONS

DESCRIPTION	AREA sf	PERCENT	REMARKS
BUILDINGS	12,373.00	18.25%	
LANDSCAPING	13,881.45	20.47%	
ASPHALT PAVING	31,044.56	45.79%	
ACCESSORY STRUCTURES	448.00	0.66%	TRASH ENCLOSURE
CONCRETE SIDEWALKS	5,281.94	7.79%	
CONCRETE CURBS	745.16	1.10%	
CONCRETE RE-FUELING PAD	4,024.80	5.94%	
MISCELLANEOUS	0.00	0.00%	
8	67,798.91	100.00%	

CANOPY AREA CALCULATIONS

COVER DESCRIPTION	COVER AREA sf	PERCENT	COVER REMARKS
RE-FUELING CANOPY	2,320.00	100.00%	
1	2,320.00	100.00%	

SITE PLAN NOTES:

- PROPERTY LINE
- RIGHT OF WAY DEDICATION
- BUILDINGS SETBACK LINE
- VEHICLE USE AREA SETBACK LINE
- NEW DRIVEWAY PERMIT, LEFT OUT, LEFT IN, ONLY.
- DRIVEWAY PERMIT, WIDEN DRIVEWAY TO 36'-0" WIDTH TO PROVIDE LEFT AND RIGHT OUT LANES.
- PEDESTRIAN CONNECTION POINT TO NEW OR EXISTING CITY SIDEWALK.

SITE PLAN GENERAL NOTES:

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- SEE LANDSCAPE DRAWINGS FOR LANDSCAPE AND IRRIGATION ELEMENTS.
- EXTREME CARE SHOULD BE TAKEN TO PRESERVE EXISTING ROOTS OF TREES TO REMAIN.
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SITE DEVELOPMENT CODE REVIEW:

SITE AREA: 67,798.91 sf = 1.5564ac

ZONING: CR Commercial Retail

COMPREHENSIVE PLAN: COM

BUILDING AREAS:
• BLDG 1 RETAIL: 5,918 sf
• BLDG 2 RETAIL: 4,315 sf
• BLDG 3 FUEL CASHIER: 252 sf
• BLDG 4 OIL CHANGE: 1,888 sf
• TRASH ENCLOSURE: 480 sf

BIKE PARKING:
• 1 SPACES PER 3,500 sf, or MINIMUM 4 SPACES
• THEREFORE PROVIDE 4 BIKE PARKING SPACES.

LOADING SPACES:
• FOR BUILDINGS BETWEEN 5,000 sf TO 60,000 sf
PROVIDE 1 SPACE:
• LOADING SPACE SIZE: 12'-0" x 19'-0" WITH ACCESS TO STREET OR ALLEY.

PARKING:
• COMMERCIAL USES: 1/250sf REQ'D
• MOTOR VEHICLE SERVICES: 1/900sf REQ'D
• BLDG 1 RETAIL: @ 5,918sf/250sf = 23.672spaces
• BLDG 2 RETAIL: @ 4,315sf/250sf = 17.260spaces
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Total Parking Req'd = 45.88spaces.
Total Parking Provided: = 50spaces.
16 spaces, Compact, 34 spaces Full Size.

SITE PLAN NOTES:

- PROPERTY LINE
- RIGHT OF WAY DEDICATION
- BUILDINGS SETBACK LINE
- VEHICLE USE AREA SETBACK LINE
- NEW DRIVEWAY PERMIT, LEFT OUT, LEFT IN, ONLY.
- DRIVEWAY PERMIT, WIDEN DRIVEWAY TO 36'-0" WIDTH TO PROVIDE LEFT AND RIGHT OUT LANES.
- PEDESTRIAN CONNECTION POINT TO NEW OR EXISTING CITY SIDEWALK.

1 SITE PLAN - EXISTING CONDITIONS

0' 5' 10' 20' 40' 60' 1" = 20'-0"



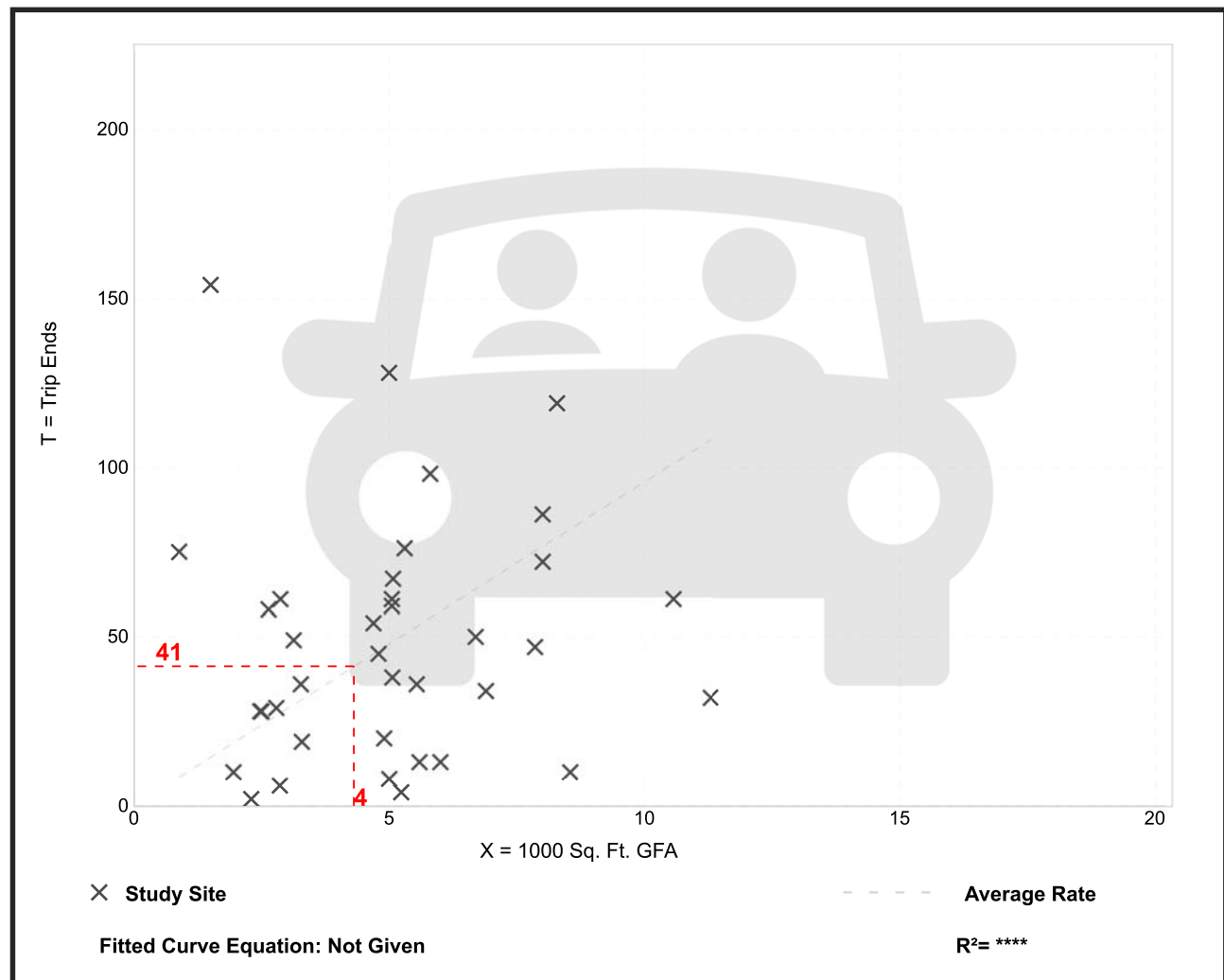
High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 37
 Avg. 1000 Sq. Ft. GFA: 5
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 104

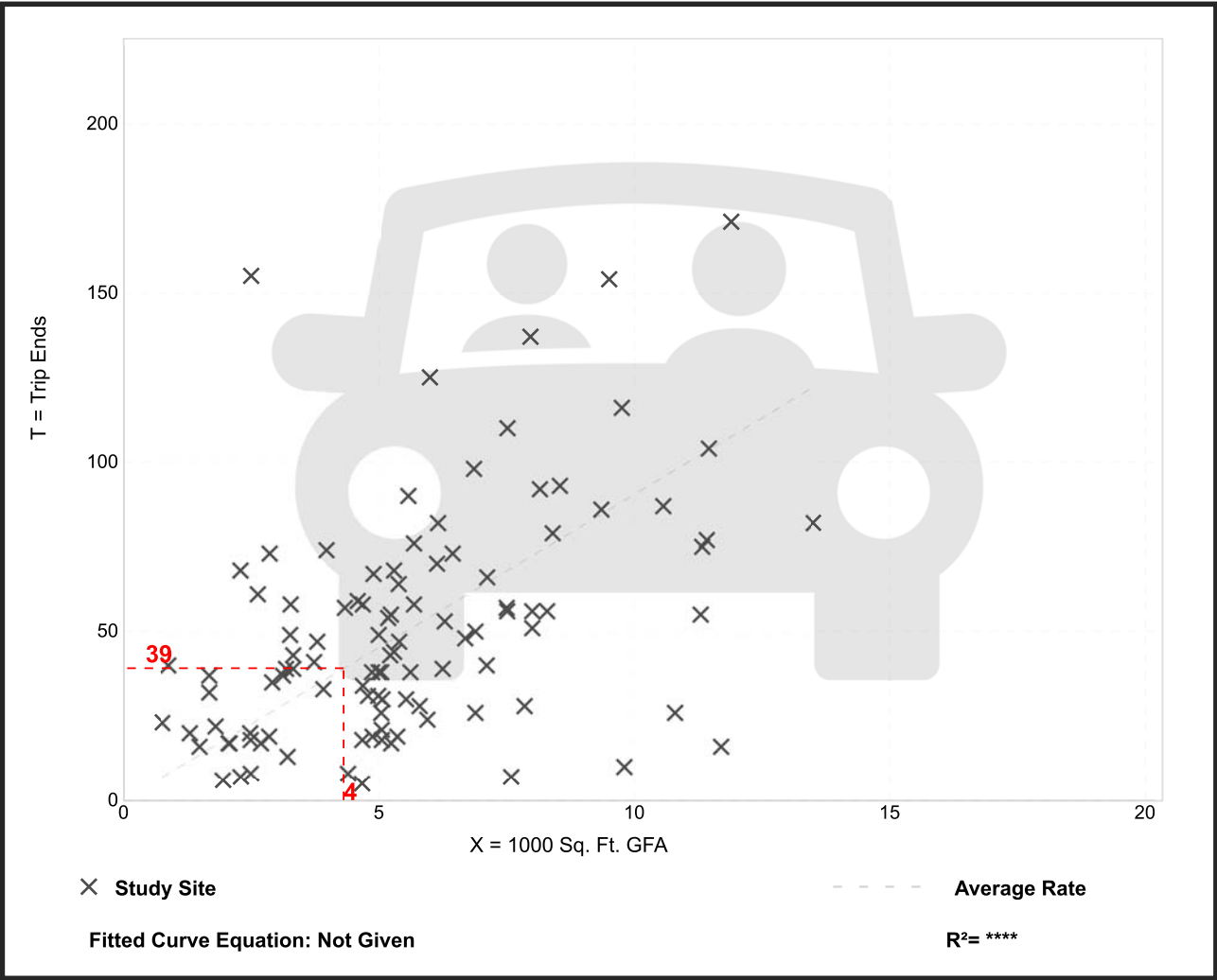
Avg. 1000 Sq. Ft. GFA: 6

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



Gasoline/Service Station (944)

Vehicle Trip Ends vs:

On a:

Setting/Location:

Number of Studies:

Avg. Num. of Vehicle Fueling Positions:

Directional Distribution:

Vehicle Fueling Positions

Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

General Urban/Suburban

53

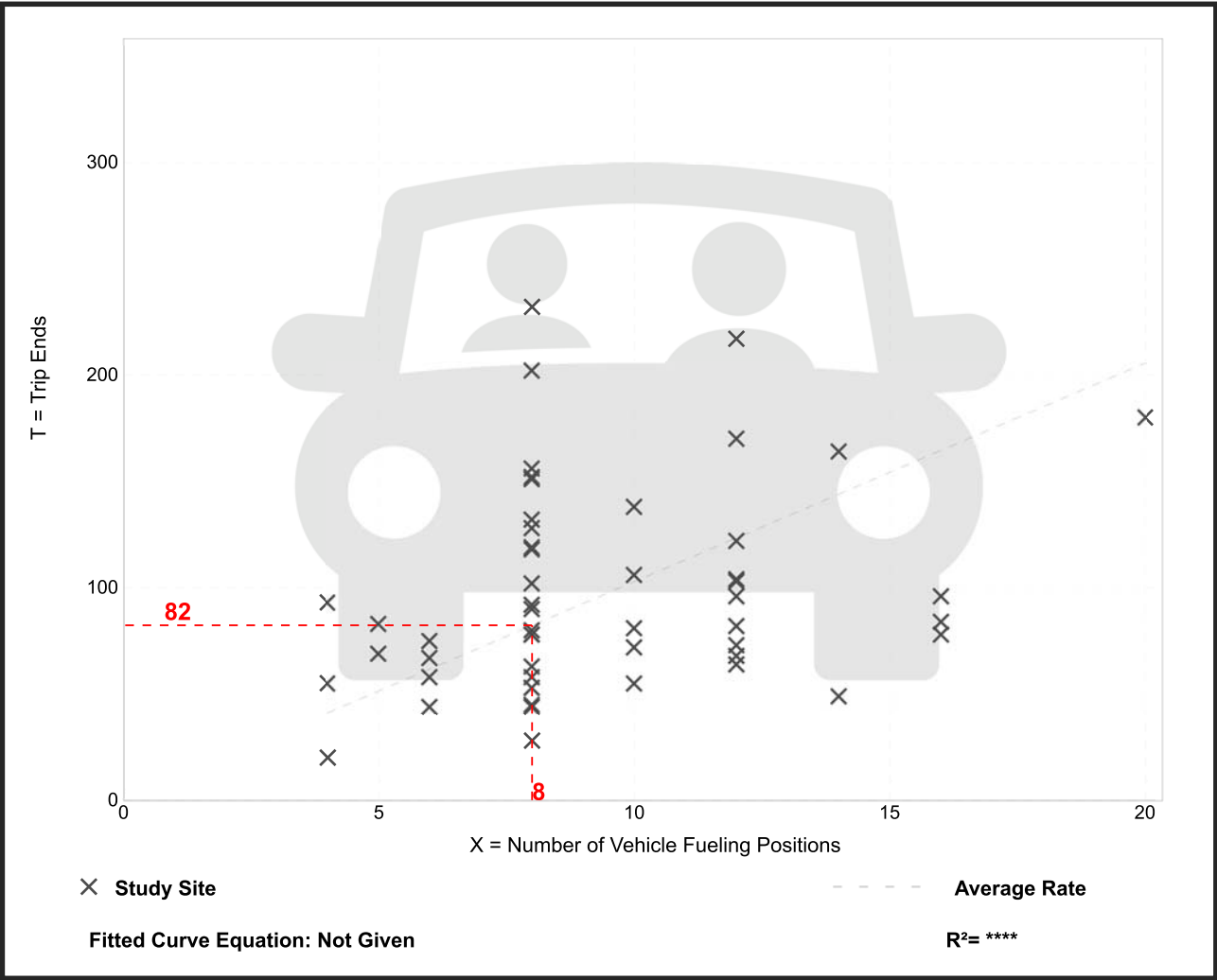
9

50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
10.28	3.50 - 29.00	5.36

Data Plot and Equation



Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

**On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.**

Setting/Location: General Urban/Suburban

Number of Studies: 65

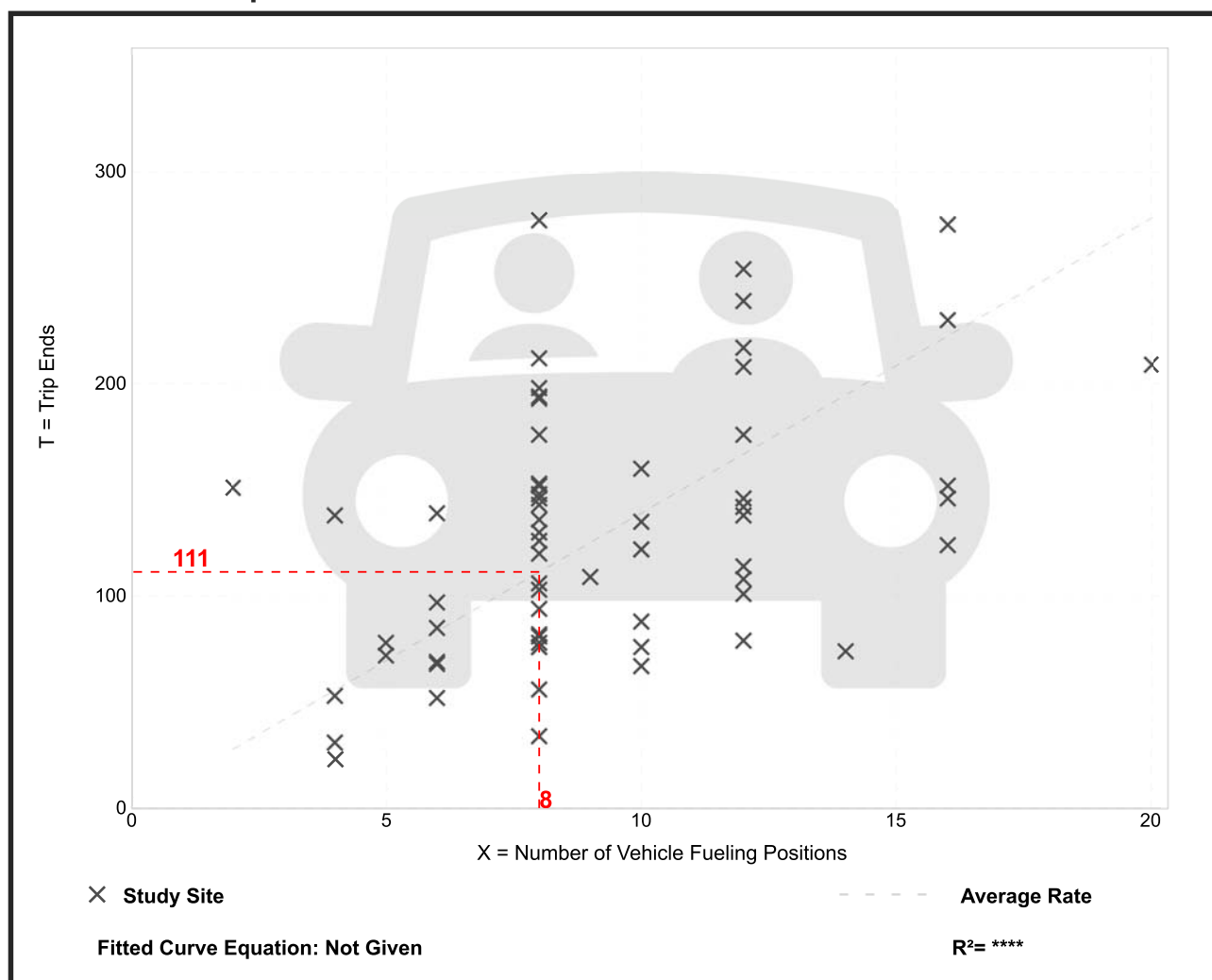
Avg. Num. of Vehicle Fueling Positions: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.91	4.25 - 75.50	6.93

Data Plot and Equation



[illegible]

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

[illegible]

Vehicle Pass-By Rates by Land Use

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

[illegible]

Vehicle Pass-By Rates by Land Use

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

[illegible]

Appendix B – Traffic Data

Traffic Counts



Total Vehicle Summary

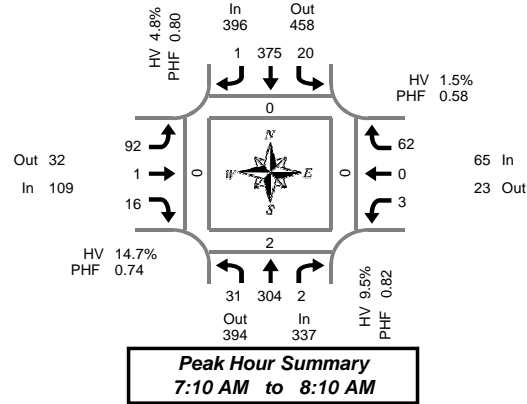


Clay Carney
(503) 833-2740

Lancaster Dr SE & Hagers Grove Rd SE

Wednesday, November 09, 2016

7:00 AM to 9:00 AM



5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	0	21	0	0	1	20	1	0	6	0	1	0	0	0	7	0	57	0	0	0	0
7:05 AM	2	19	0	0	3	20	0	0	5	0	2	0	0	0	7	0	58	0	0	0	0
7:10 AM	4	26	0	0	1	29	0	0	4	0	1	0	0	0	7	0	72	0	0	0	0
7:15 AM	2	18	1	0	2	25	0	0	10	0	0	0	0	0	5	0	63	0	1	0	0
7:20 AM	1	26	0	0	2	30	0	0	4	0	1	0	0	0	2	0	66	0	0	0	0
7:25 AM	4	25	0	0	2	23	0	0	7	0	2	0	0	0	7	0	70	0	0	0	0
7:30 AM	2	27	1	0	0	30	0	0	5	0	3	0	0	0	3	0	71	0	0	0	0
7:35 AM	2	38	0	0	1	37	0	0	5	1	2	0	1	0	8	0	95	0	0	0	0
7:40 AM	4	24	0	0	0	32	0	0	14	0	0	0	0	0	14	0	88	0	0	0	0
7:45 AM	2	33	0	0	3	42	0	0	11	0	2	0	0	0	5	0	98	0	1	0	0
7:50 AM	1	26	0	0	1	36	0	0	8	0	2	0	0	0	1	0	75	0	0	0	0
7:55 AM	4	18	0	0	1	40	1	0	8	0	0	0	0	0	5	0	77	0	0	0	0
8:00 AM	2	18	0	0	4	28	0	0	9	0	2	0	1	0	1	0	65	0	0	0	0
8:05 AM	3	25	0	0	3	23	0	0	7	0	1	0	1	0	4	0	67	0	0	0	0
8:10 AM	3	15	1	0	1	22	0	0	6	0	2	0	0	0	3	0	53	0	0	0	0
8:15 AM	2	20	0	0	1	18	0	0	11	0	2	0	0	0	5	0	59	0	0	0	1
8:20 AM	2	21	1	0	0	21	0	0	11	0	2	0	0	0	4	0	62	0	0	0	0
8:25 AM	5	21	0	1	1	28	0	0	11	0	5	0	0	0	6	0	77	0	0	0	0
8:30 AM	2	17	0	0	1	28	1	0	8	1	1	0	0	0	3	0	62	0	0	0	0
8:35 AM	5	24	1	0	1	19	0	0	9	1	2	0	1	0	4	0	67	0	0	0	0
8:40 AM	0	29	1	0	4	24	1	0	11	0	2	0	0	0	1	0	73	0	0	1	0
8:45 AM	3	29	0	0	2	17	1	0	14	0	3	0	0	1	5	0	75	0	0	0	0
8:50 AM	5	28	0	0	2	29	0	0	10	0	0	0	0	0	3	0	77	0	0	0	0
8:55 AM	3	27	0	0	3	17	0	0	9	0	4	0	0	0	2	0	65	0	0	0	0
Total Survey	63	575	6	1	40	638	5	0	203	3	42	0	4	1	112	0	1,692	0	2	1	1

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	6	66	0	0	5	69	1	0	15	0	4	0	0	0	21	0	187	0	0	0	0
7:15 AM	7	69	1	0	6	78	0	0	21	0	3	0	0	0	14	0	199	0	1	0	0
7:30 AM	8	89	1	0	1	99	0	0	24	1	5	0	1	0	25	0	254	0	0	0	0
7:45 AM	7	77	0	0	5	118	1	0	27	0	4	0	0	0	11	0	250	0	1	0	0
8:00 AM	8	58	1	0	8	73	0	0	22	0	5	0	2	0	8	0	185	0	0	0	0
8:15 AM	9	62	1	1	2	67	0	0	33	0	9	0	0	0	15	0	198	0	0	0	1
8:30 AM	7	70	2	0	6	71	2	0	28	2	5	0	1	0	8	0	202	0	0	1	0
8:45 AM	11	84	0	0	7	63	1	0	33	0	7	0	0	1	10	0	217	0	0	0	0
Total Survey	63	575	6	1	40	638	5	0	203	3	42	0	4	1	112	0	1,692	0	2	1	1

Peak Hour Summary

7:10 AM to 8:10 AM

By Approach	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	337	394	731	0	396	458	854	0	109	32	141	0	65	23	88	0	907	0	2	0	0
%HV	9.5%				4.8%				14.7%				1.5%				7.5%				
PHF	0.82				0.80				0.74				0.58				0.81				

By Movement	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	31	304	2	337	20	375	1	396	92	1	16	109	3	0	62	65	907
%HV	9.7%	9.5%	0.0%	9.5%	10.0%	4.5%	0.0%	4.8%	14.1%	0.0%	18.8%	14.7%	0.0%	0.0%	1.6%	1.5%	7.5%
PHF	0.86	0.80	0.50	0.82	0.63	0.79	0.25	0.80	0.70	0.25	0.57	0.74	0.38	0.00	0.57	0.58	0.81

Rolling Hour Summary

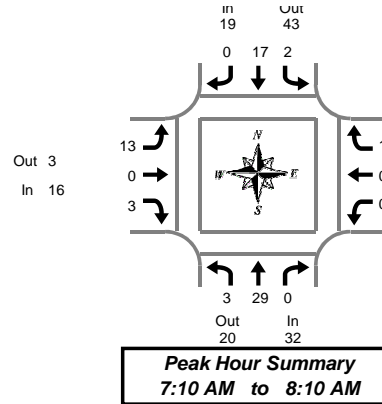
7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	28	301	2	0	17	364	2	0	87	1	16	0	1	0	71	0	890	0	2	0	0
7:15 AM	30	293	3	0	20	368	1	0	94	1	17	0	3	0	58	0	888	0	2	0	0
7:30 AM	32	286	3	1	16	357	1	0	106	1	23	0	3	0	59	0	887	0	1	0	1
7:45 AM	31	267	4	1	21	329	3	0	110	2	23	0	3	0	42	0	835	0	1	1	1
8:00 AM	35	274	4	1	23	274	3	0	116	2	26	0	3	1	41	0	802	0	0	1	1

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



Lancaster Dr SE & Hagers Grove Rd SE

Wednesday, November 09, 2016

7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7:05 AM	1	1	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
7:10 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
7:15 AM	0	1	0	1	0	1	0	1	1	0	0	1	0	0	0	0	3
7:20 AM	1	1	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
7:25 AM	0	3	0	3	0	0	0	0	1	0	0	1	0	0	0	0	4
7:30 AM	0	1	0	1	0	1	0	1	0	0	1	1	0	0	0	0	3
7:35 AM	1	4	0	5	1	1	0	2	1	0	0	1	0	0	0	0	8
7:40 AM	0	1	0	1	0	0	0	0	2	0	0	2	0	0	0	0	3
7:45 AM	1	5	0	6	1	2	0	3	2	0	1	3	0	0	0	0	12
7:50 AM	0	3	0	3	0	2	0	2	2	0	0	2	0	0	0	0	7
7:55 AM	0	3	0	3	0	3	0	3	1	0	0	1	0	0	0	0	7
8:00 AM	0	2	0	2	0	1	0	1	1	0	1	2	0	0	0	0	5
8:05 AM	0	4	0	4	0	2	0	2	2	0	0	2	0	0	1	1	9
8:10 AM	0	3	0	3	0	1	0	1	2	0	0	2	0	0	0	0	6
8:15 AM	0	2	0	2	0	1	0	1	1	0	0	1	0	0	0	0	4
8:20 AM	1	4	0	5	0	3	0	3	1	0	0	1	0	0	0	0	9
8:25 AM	0	3	0	3	0	3	0	3	2	0	0	2	0	0	0	0	8
8:30 AM	0	5	0	5	0	3	0	3	1	1	0	2	0	0	0	0	10
8:35 AM	1	1	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
8:40 AM	0	5	1	6	1	2	0	3	2	0	0	2	0	0	0	0	11
8:45 AM	0	4	0	4	1	1	0	2	2	0	1	3	0	0	0	0	9
8:50 AM	2	10	0	12	0	3	0	3	1	0	0	1	0	0	0	0	16
8:55 AM	0	3	0	3	1	4	0	5	3	0	1	4	0	0	0	0	12
Total Survey	8	72	1	81	5	43	0	48	28	1	5	34	0	0	1	1	164

Heavy Vehicle 15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	1	4	0	5	0	4	0	4	0	0	0	0	0	0	0	0	9
7:15 AM	1	5	0	6	0	3	0	3	2	0	0	2	0	0	0	0	11
7:30 AM	1	6	0	7	1	2	0	3	3	0	1	4	0	0	0	0	14
7:45 AM	1	11	0	12	1	7	0	8	5	0	1	6	0	0	0	0	26
8:00 AM	0	9	0	9	0	4	0	4	5	0	1	6	0	0	1	1	20
8:15 AM	1	9	0	10	0	7	0	7	4	0	0	4	0	0	0	0	21
8:30 AM	1	11	1	13	1	8	0	9	3	1	0	4	0	0	0	0	26
8:45 AM	2	17	0	19	2	8	0	10	6	0	2	8	0	0	0	0	37
Total Survey	8	72	1	81	5	43	0	48	28	1	5	34	0	0	1	1	164

Heavy Vehicle Peak Hour Summary

7:10 AM to 8:10 AM

By Approach	Northbound Lancaster Dr SE			Southbound Lancaster Dr SE			Eastbound Hagers Grove Rd SE			Westbound Hagers Grove Rd SE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	32	20	52	19	43	62	16	3	19	1	2	3	68
PHF	0.67			0.59			0.57			0.25			0.65

By Movement	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	3	29	0	32	2	17	0	19	13	0	3	16	0	0	1	1	68
PHF	0.38	0.66	0.00	0.67	0.25	0.61	0.00	0.59	0.54	0.00	0.75	0.57	0.00	0.00	0.25	0.25	0.65

Heavy Vehicle Rolling Hour Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	4	26	0	30	2	16	0	18	10	0	2	12	0	0	0	0	60
7:15 AM	3	31	0	34	2	16	0	18	15	0	3	18	0	0	1	1	71
7:30 AM	3	35	0	38	2	20	0	22	17	0	3	20	0	0	1	1	81
7:45 AM	3	40	1	44	2	26	0	28	17	1	2	20	0	0	1	1	93
8:00 AM	4	46	1	51	3	27	0	30	18	1	3	22	0	0	1	1	104

Peak Hour Summary

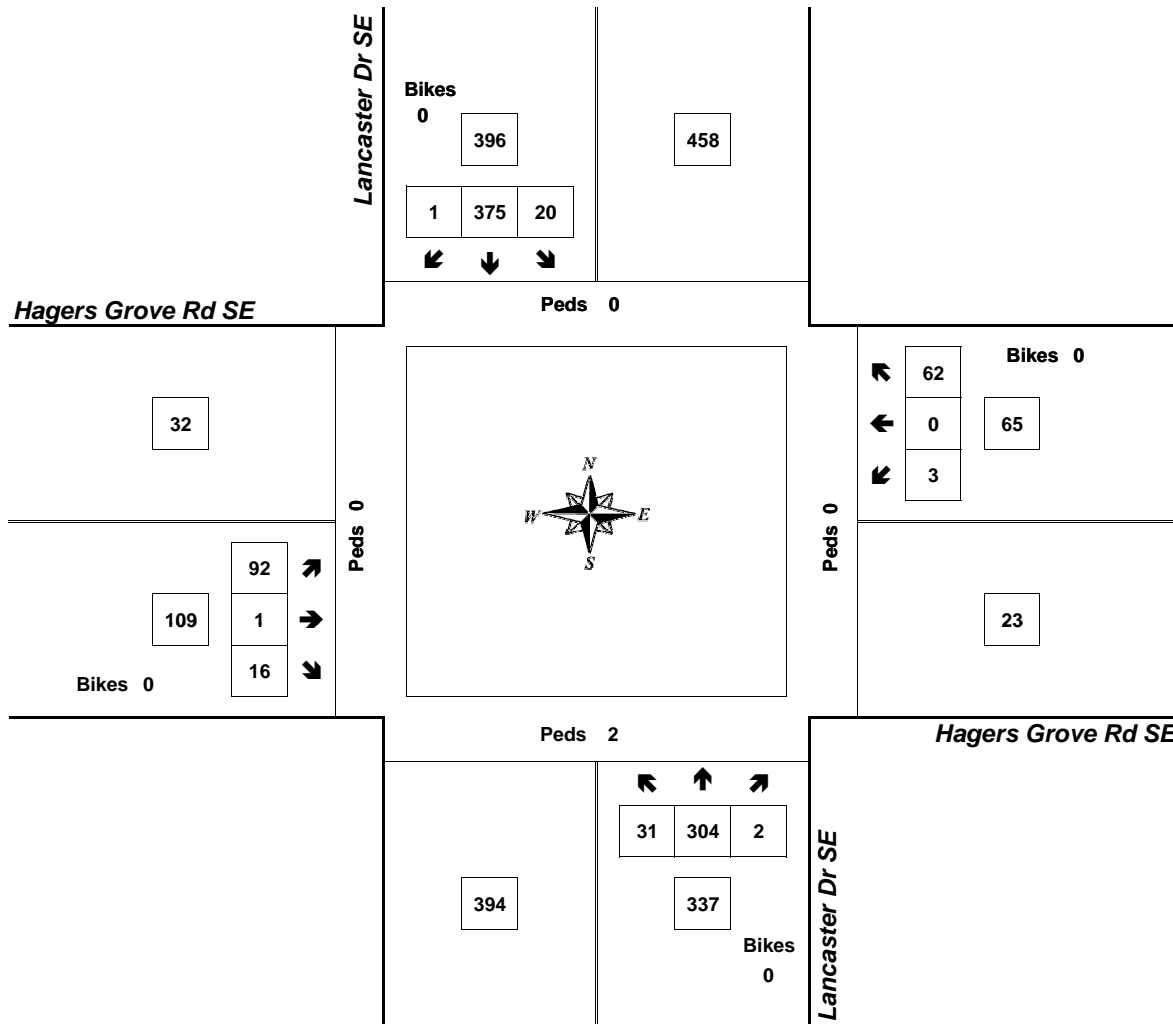


Clay Carney
(503) 833-2740

Lancaster Dr SE & Hagers Grove Rd SE

7:10 AM to 8:10 AM

Wednesday, November 09, 2016



Approach	PHF	HV%	Volume
EB	0.74	14.7%	109
WB	0.58	1.5%	65
NB	0.82	9.5%	337
SB	0.80	4.8%	396
Intersection	0.81	7.5%	907

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

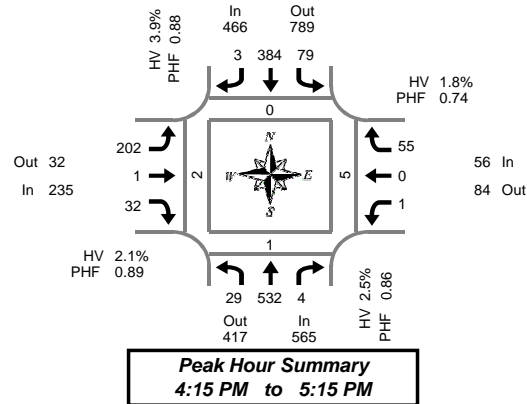


Clay Carney
(503) 833-2740

Lancaster Dr SE & Hagers Grove Rd SE

Wednesday, November 09, 2016

4:00 PM to 6:00 PM



5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	4	16	0	0	8	32	0	0	14	0	7	0	0	1	3	0	85	1	0	0	0
4:05 PM	3	27	0	0	4	43	0	0	15	0	2	0	0	0	6	0	100	0	0	0	0
4:10 PM	2	39	0	0	6	34	1	0	17	0	5	0	1	0	2	0	107	0	0	0	0
4:15 PM	4	39	1	0	8	23	0	0	20	1	4	0	0	0	3	0	103	0	0	0	0
4:20 PM	4	35	0	0	5	31	0	0	16	0	2	0	0	0	7	0	100	0	0	0	0
4:25 PM	2	51	1	0	7	40	1	0	19	0	4	0	0	0	9	0	134	0	0	0	0
4:30 PM	2	49	0	0	9	39	0	0	14	0	2	0	0	0	2	0	117	0	0	4	0
4:35 PM	1	26	0	0	6	27	0	0	24	0	3	1	1	0	7	0	95	0	0	0	0
4:40 PM	2	53	2	0	6	28	0	0	16	0	5	0	0	0	3	0	115	0	0	1	0
4:45 PM	2	63	0	0	5	26	1	0	12	0	3	0	0	0	5	0	117	0	0	0	0
4:50 PM	3	39	0	0	4	26	0	0	18	0	2	0	0	0	5	0	97	0	1	0	2
4:55 PM	3	47	0	0	11	31	0	0	13	0	4	0	0	0	2	0	111	0	0	0	0
5:00 PM	1	44	0	0	9	39	1	0	25	0	1	0	0	0	5	0	125	0	0	0	0
5:05 PM	3	40	0	0	5	37	0	0	6	0	2	0	0	0	4	0	97	0	0	0	0
5:10 PM	2	46	0	0	4	37	0	0	19	0	0	0	0	0	3	0	111	0	0	0	0
5:15 PM	4	30	1	0	3	27	0	0	5	0	5	0	2	0	7	0	84	2	0	2	0
5:20 PM	1	30	2	0	13	47	0	0	12	0	3	0	0	0	3	0	111	0	0	0	0
5:25 PM	2	33	0	0	6	26	0	0	15	0	4	0	0	0	2	0	88	0	0	0	0
5:30 PM	1	38	0	0	8	21	0	0	14	0	3	0	0	0	3	0	88	0	0	0	0
5:35 PM	2	30	0	0	8	30	1	0	13	0	4	0	0	0	5	0	93	0	1	0	0
5:40 PM	4	30	1	0	2	24	1	0	13	0	3	0	0	1	3	0	82	0	0	0	0
5:45 PM	2	26	0	0	11	48	0	0	10	0	2	0	0	0	3	0	102	0	0	0	0
5:50 PM	0	14	0	0	4	26	0	0	15	0	2	0	0	0	2	0	63	0	0	1	0
5:55 PM	3	28	0	0	8	26	1	0	11	0	1	0	0	0	4	0	82	0	2	0	0
Total Survey	57	873	8	0	160	768	7	0	356	1	73	1	4	2	98	0	2,407	3	4	8	2

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	9	82	0	0	18	109	1	0	46	0	14	0	1	1	11	0	292	1	0	0	0
4:15 PM	10	125	2	0	20	94	1	0	55	1	10	0	0	0	19	0	337	0	0	0	0
4:30 PM	5	128	2	0	21	94	0	0	54	0	10	1	1	0	12	0	327	0	0	5	0
4:45 PM	8	149	0	0	20	83	1	0	43	0	9	0	0	0	12	0	325	0	1	0	2
5:00 PM	6	130	0	0	18	113	1	0	50	0	3	0	0	0	12	0	333	0	0	0	0
5:15 PM	7	93	3	0	22	100	0	0	32	0	12	0	2	0	12	0	283	2	0	2	0
5:30 PM	7	98	1	0	18	75	2	0	40	0	10	0	0	1	11	0	263	0	1	0	0
5:45 PM	5	68	0	0	23	100	1	0	36	0	5	0	0	0	9	0	247	0	2	1	0
Total Survey	57	873	8	0	160	768	7	0	356	1	73	1	4	2	98	0	2,407	3	4	8	2

Peak Hour Summary

4:15 PM to 5:15 PM

By Approach	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	565	417	982	0	466	789	1,255	0	235	32	267	1	56	84	140	0	1,322	0	1	5	2
%HV	2.5%				3.9%				2.1%				1.8%				2.9%				
PHF	0.86				0.88				0.89				0.74				0.94				

By Movement	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	29	532	4	565	79	384	3	466	202	1	32	235	1	0	55	56	1,322
%HV	3.4%	2.4%	0.0%	2.5%	2.5%	4.2%	0.0%	3.9%	2.0%	0.0%	3.1%	2.1%	####	0.0%	0.0%	1.8%	2.9%
PHF	0.73	0.86	0.50	0.86	0.79	0.85	0.75	0.88	0.89	0.25	0.73	0.89	0.25	0.00	0.72	0.74	0.94

Rolling Hour Summary

4:00 PM to 6:00 PM

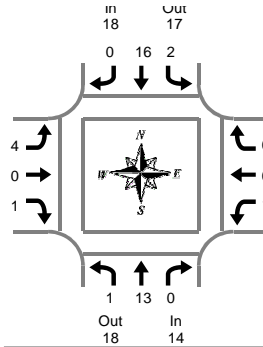
Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	32	484	4	0	79	380	3	0	198	1	43	1	2	1	54	0	1,281	1	1	5	2
4:15 PM	29	532	4	0	79	384	3	0	202	1	32	1	1	0	55	0	1,322	0	1	5	2
4:30 PM	26	500	5	0	81	390	2	0	179	0	34	1	3	0	48	0	1,268	2	1	7	2
4:45 PM	28	470	4	0	78	371	4	0	165	0	34	0	2	1	47	0	1,204	2	2	2	2
5:00 PM	25	389	4	0	81	388	4	0	158	0	30	0	2	1	44	0	1,126	2	3	3	0

Heavy Vehicle Summary



Clay Carney
(503) 833-2740

Out 1
In 5



Lancaster Dr SE & Hagers Grove Rd SE

Wednesday, November 09, 2016

4:00 PM to 6:00 PM

Peak Hour Summary
4:15 PM to 5:15 PM

Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	1	0	1	1	5	0	6	1	0	0	1	0	0	0	0	8
4:05 PM	0	2	0	2	0	3	0	3	2	0	0	2	0	0	0	0	7
4:10 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
4:20 PM	0	1	0	1	0	4	0	4	0	0	0	0	0	0	0	0	5
4:25 PM	1	1	0	2	0	2	0	2	1	0	0	1	0	0	0	0	5
4:30 PM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	0	0	4
4:35 PM	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0	1	3
4:40 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	1	1	0	2	1	0	0	1	0	0	0	0	3
4:50 PM	0	3	0	3	0	3	0	3	0	0	0	0	0	0	0	0	6
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
5:05 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:10 PM	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
5:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:20 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
5:25 PM	0	0	0	0	0	1	0	1	2	0	0	2	0	0	1	1	4
5:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:50 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	21	1	23	3	32	1	36	9	0	1	10	1	0	1	2	71

Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	4	0	4	1	8	1	10	3	0	0	3	0	0	0	0	17
4:15 PM	1	2	0	3	0	6	0	6	2	0	1	3	0	0	0	0	12
4:30 PM	0	4	0	4	1	2	0	3	0	0	0	0	1	0	0	1	8
4:45 PM	0	3	0	3	1	4	0	5	1	0	0	1	0	0	0	0	9
5:00 PM	0	4	0	4	0	4	0	4	1	0	0	1	0	0	0	0	9
5:15 PM	0	3	1	4	0	1	0	1	2	0	0	2	0	0	1	1	8
5:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	0	6
Total Survey	1	21	1	23	3	32	1	36	9	0	1	10	1	0	1	2	71

Heavy Vehicle Peak Hour Summary

4:15 PM to 5:15 PM

By Approach	Northbound Lancaster Dr SE			Southbound Lancaster Dr SE			Eastbound Hagers Grove Rd SE			Westbound Hagers Grove Rd SE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	14	18	32	18	17	35	5	1	6	1	2	3	38
PHF	0.58			0.56			0.42			0.25			0.68

By Movement	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	13	0	14	2	16	0	18	4	0	1	5	1	0	0	1	38
PHF	0.25	0.54	0.00	0.58	0.50	0.57	0.00	0.56	0.50	0.00	0.25	0.42	0.25	0.00	0.00	0.25	0.68

Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound Lancaster Dr SE				Southbound Lancaster Dr SE				Eastbound Hagers Grove Rd SE				Westbound Hagers Grove Rd SE				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	13	0	14	3	20	1	24	6	0	1	7	1	0	0	1	46
4:15 PM	1	13	0	14	2	16	0	18	4	0	1	5	1	0	0	1	38
4:30 PM	0	14	1	15	2	11	0	13	4	0	0	4	1	0	1	2	34
4:45 PM	0	11	1	12	1	10	0	11	4	0	0	4	0	0	1	1	28
5:00 PM	0	8	1	9	0	12	0	12	3	0	0	3	0	0	1	1	25

Peak Hour Summary

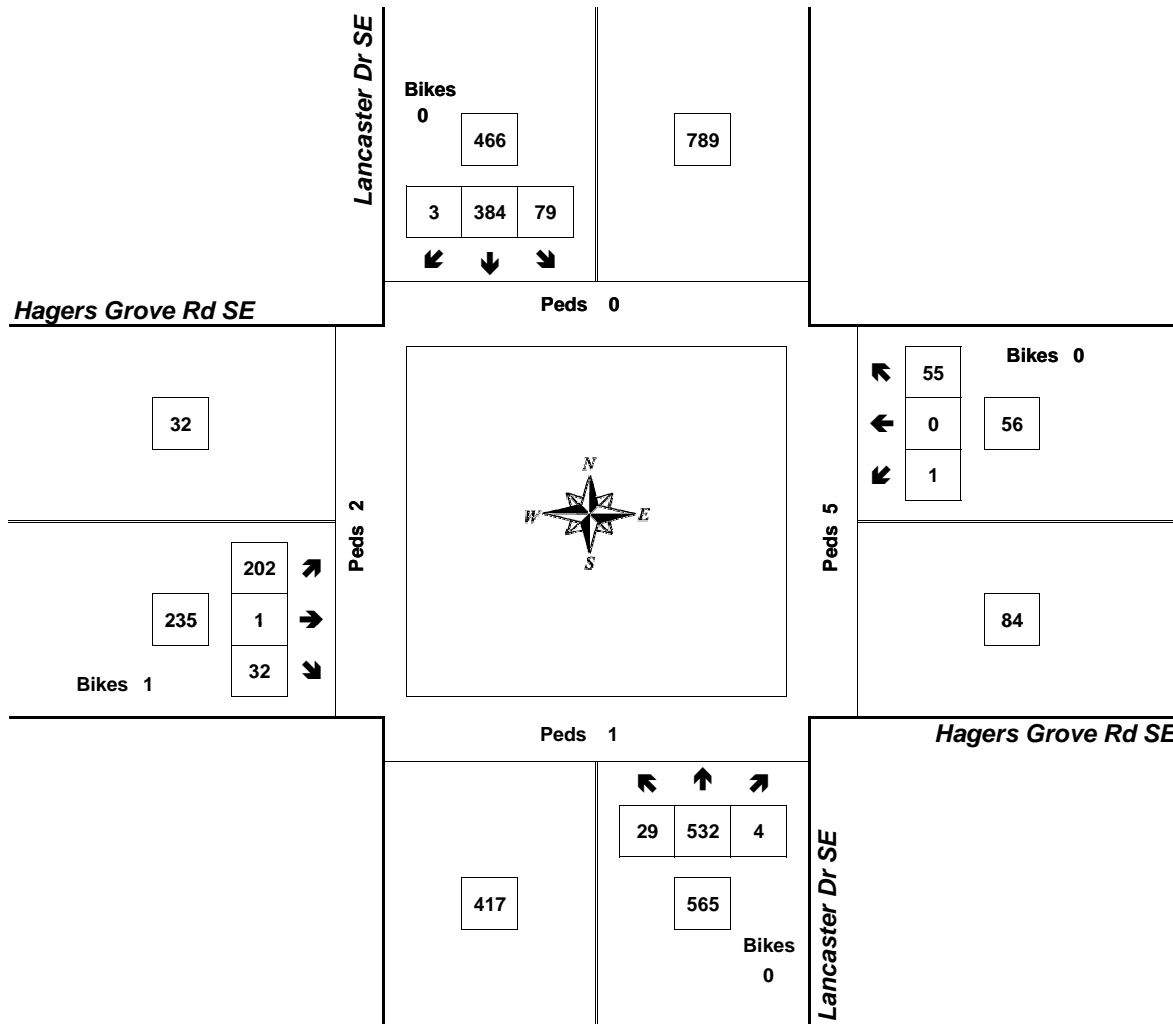


Clay Carney
(503) 833-2740

Lancaster Dr SE & Hagers Grove Rd SE

4:15 PM to 5:15 PM

Wednesday, November 09, 2016



Approach	PHF	HV%	Volume
EB	0.89	2.1%	235
WB	0.74	1.8%	56
NB	0.86	2.5%	565
SB	0.88	3.9%	466
Intersection	0.94	2.9%	1,322

Count Period: 4:00 PM to 6:00 PM

Appendix C - Safety

Crash History Data

Preliminary Signal Warrants

Left-turn Lane Warrants



CITY OF SALEM, MARION COUNTY

HAGERS GROVE at CARSON DR, City of Salem, Marion County, 01/01/2016 to 12/31/2020

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

CITY OF SALEM, MARION COUNTY

HAGERS GROVE at LANCASTER DR, City of Salem, Marion County, 01/01/2016 to 12/31/2020

S	D	M																																
SER#	P	R	J	S	W	DATE	CLASS	CITY	STREET	INT-TYPE	SPCL USE																							
INVEST	E	A	U	I	C	O	DAY	DIST	FIRST	STREET	RD	CHAR	(MEDIAN)	INT-REL	OFFRD	WTHR	CRASH	TRLR	QTY	MOVE	A S													
RD DPT	E	L	G	N	H	R	TIME	FROM	SECOND	STREET	DIRECT	LEGS	TRAF-	RNDBT	SURF	COLL	OWNER	FROM	PRTC	INJ	G	E	LICNS	PED										
UNLOC?	D	C	S	V	L	K	LAT	LONG	LRS	LOCTN	(#LANES)	CONTL	DRVWY	LIGHT	SVRTY	V#	TYPE	TO	P#	TYPE	SVRTY	E	X	RES	LOC	ERROR	ACT	EVENT	CAUSE					

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submittal of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

CITY OF SALEM, MARION COUNTY

HAGERS GROVE at LANCASTER DR, City of Salem, Marion County, 01/01/2016 to 12/31/2020

CITY OF SALEM, MARION COUNTY

LANCASTER DR at CARSON DR, City of Salem, Marion County, 01/01/2016 to 12/31/2020

CITY OF SALEM, MARION COUNTY

LANCASTER DR at CARSON DR, City of Salem, Marion County, 01/01/2016 to 12/31/2020

Traffic Signal Warrant Analysis



Project: Stop N Save Development
 Date: 7/6/2022
 Scenario: Year 2024 Buildout

Major Street:	Hagers Grove Road SE	Minor Street:	Northern Site Access
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	44	PM Peak Hour Volumes:	10

Warrant Used:

 X 100 percent of standard warrants used
 70 percent of standard warrants used due to 85th percentile speed in excess
 of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
		100%	70%	100%	70%
<u>Major St.</u>	<u>Minor St.</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500

<u>WARRANT 1, CONDITION B</u>					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
<i>Warrant 1</i>			
<i>Condition A: Minimum Vehicular Volume</i>			
Major Street	440	8,850	
Minor Street*	100	2,650	No
<i>Condition B: Interruption of Continuous Traffic</i>			
Major Street	440	13,300	
Minor Street*	100	1,350	No
<i>Combination Warrant</i>			
Major Street	440	10,640	
Minor Street*	100	2,120	No

* Minor street right-turning traffic volumes reduced by 25%

Traffic Signal Warrant Analysis



Project: Stop N Save Development
 Date: 7/6/2022
 Scenario: Year 2024 Buildout

Major Street:	Hagers Grove Road SE	Minor Street:	Western Site Access
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	337	PM Peak Hour Volumes:	198

Warrant Used:

 X 100 percent of standard warrants used
 70 percent of standard warrants used due to 85th percentile speed in excess
of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
		100%	70%	100%	70%
<u>Major St.</u>	<u>Minor St.</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500

<u>WARRANT 1, CONDITION B</u>					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
<i>Warrant 1</i>			
<i>Condition A: Minimum Vehicular Volume</i>			
Major Street	3,370	8,850	
Minor Street*	1,980	2,650	No
<i>Condition B: Interruption of Continuous Traffic</i>			
Major Street	3,370	13,300	
Minor Street*	1,980	1,350	No
<i>Combination Warrant</i>			
Major Street	3,370	10,640	
Minor Street*	1,980	2,120	No

* Minor street right-turning traffic volumes reduced by 25%

Traffic Signal Warrant Analysis



Project: Stop N Save Development
 Date: 7/6/2022
 Scenario: Year 2024 Buildout

Major Street:	Hager Grove Road SE	Minor Street:	Southern Site Access
Number of Lanes:	3	Number of Lanes:	1
PM Peak Hour Volumes:	621	PM Peak Hour Volumes:	1

Warrant Used:

 X 100 percent of standard warrants used
 70 percent of standard warrants used due to 85th percentile speed in excess
 of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
<u>WARRANT 1, CONDITION A</u>		100%	70%	100%	70%
<u>Major St.</u>	<u>Minor St.</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
<u>WARRANT 1, CONDITION B</u>					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
<i>Warrant 1</i>			
<i>Condition A: Minimum Vehicular Volume</i>			
Major Street	6,210	10,600	
Minor Street*	10	2,650	No
<i>Condition B: Interruption of Continuous Traffic</i>			
Major Street	6,210	15,900	
Minor Street*	10	1,350	No
<i>Combination Warrant</i>			
Major Street	6,210	12,720	
Minor Street*	10	2,120	No

* Minor street right-turning traffic volumes reduced by 85% of the capacity

Left-Turn Lane Warrant Analysis



Project: Stop N Save Development
Intersection: Hagers Grove Rd SE at Western Site Access
Date: 7/6/2022
Scenario: 2024 buildout conditions PM (SB)

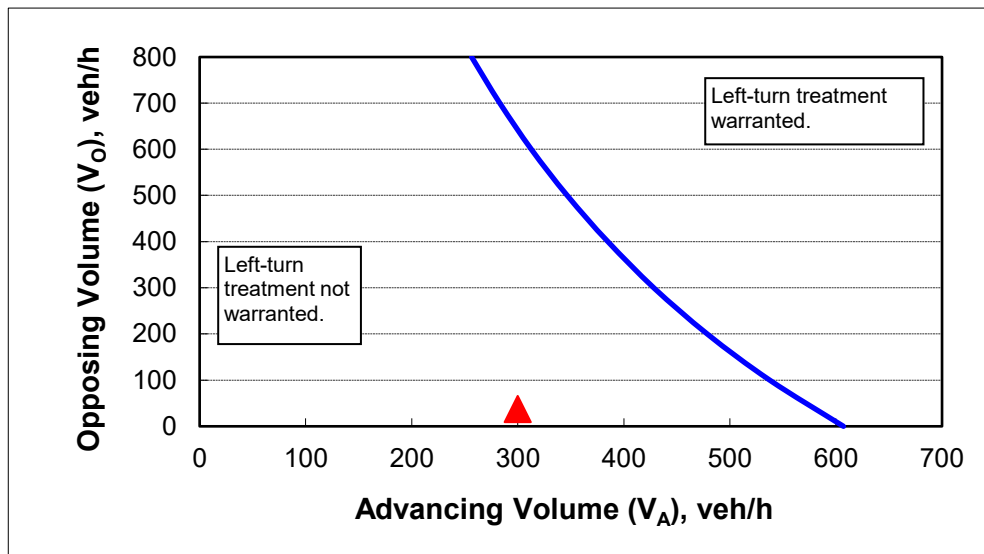
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	13%
Advancing volume (V_A), veh/h:	300
Opposing volume (V_O), veh/h:	37

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	580
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis



Project: Stop N Save Development
Intersection: Hagers Grove Rd SE at Western Site Access
Date: 7/6/2022
Scenario: 2024 buildout conditions AM (SB)

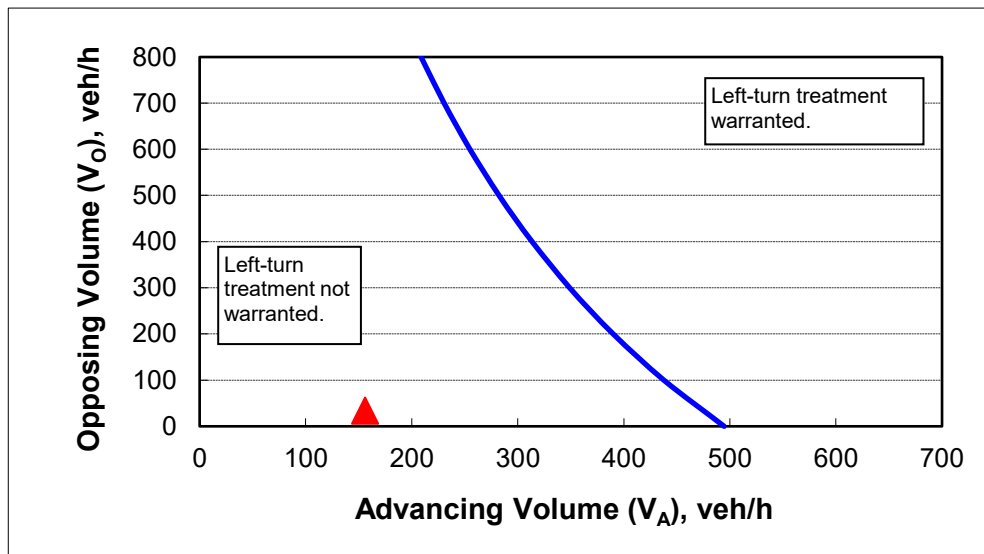
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	22%
Advancing volume (V_A), veh/h:	156
Opposing volume (V_O), veh/h:	34

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	474
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Appendix D – Operations




Capacity Reports



HCM 6th TWSC

2: Hagers Grove Road & Western Access

05/23/2022

Intersection						
Int Delay, s/veh	6.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	163	4	32	0	34	110
Future Vol, veh/h	163	4	32	0	34	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	177	4	35	0	37	120
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	229	35	0	0	35	0
Stage 1	35	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	759	1038	-	-	1576	-
Stage 1	987	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	740	1038	-	-	1576	-
Mov Cap-2 Maneuver	740	-	-	-	-	-
Stage 1	962	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.4	0		1.7		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 745		1576	-	
HCM Lane V/C Ratio	-	- 0.244		0.023	-	
HCM Control Delay (s)	-	- 11.4		7.3	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 1		0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access

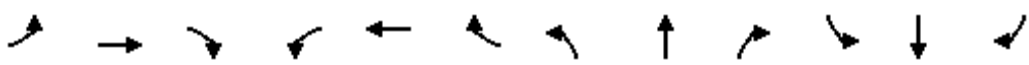







05/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	273	32	136	0	0
Future Vol, veh/h	0	273	32	136	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	297	35	148	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	109
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	945
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	945
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS					A	
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	-	-	-	0		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	-		

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE




05/23/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	5	79	3	4	70	89	307	2	23	379	75
Future Volume (veh/h)	189	5	79	3	4	70	89	307	2	23	379	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1589	1589	1589	1772	1772	1772	1660	1660	1660	1730	1730	1730
Adj Flow Rate, veh/h	233	6	98	4	5	86	110	379	2	28	468	93
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	15	15	15	2	2	2	10	10	10	5	5	5
Cap, veh/h	450	18	301	92	29	323	133	726	4	33	526	105
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.08	0.44	0.44	0.02	0.38	0.38
Sat Flow, veh/h	1106	78	1275	20	123	1367	1581	1649	9	1647	1401	278
Grp Volume(v), veh/h	233	0	104	95	0	0	110	0	381	28	0	561
Grp Sat Flow(s),veh/h/ln	1106	0	1353	1510	0	0	1581	0	1658	1647	0	1680
Q Serve(g_s), s	5.5	0.0	2.7	0.0	0.0	0.0	2.9	0.0	7.1	0.7	0.0	13.4
Cycle Q Clear(g_c), s	7.7	0.0	2.7	2.2	0.0	0.0	2.9	0.0	7.1	0.7	0.0	13.4
Prop In Lane	1.00		0.94	0.04		0.91	1.00		0.01	1.00		0.17
Lane Grp Cap(c), veh/h	450	0	320	444	0	0	133	0	730	33	0	631
V/C Ratio(X)	0.52	0.00	0.33	0.21	0.00	0.00	0.83	0.00	0.52	0.86	0.00	0.89
Avail Cap(c_a), veh/h	835	0	791	964	0	0	369	0	1395	231	0	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	13.5	13.3	0.0	0.0	19.3	0.0	8.7	20.9	0.0	12.5
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	0.0	0.0	4.8	0.0	0.2	20.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.7	0.7	0.0	0.0	1.1	0.0	1.7	0.4	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	13.7	13.4	0.0	0.0	24.1	0.0	8.9	40.9	0.0	14.3
LnGrp LOS	B	A	B	B	A	A	C	A	A	D	A	B
Approach Vol, veh/h	337			95			491			589		
Approach Delay, s/veh	15.0			13.4			12.3			15.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	21.1		14.1	4.8	23.8		14.1				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	10.0	32.0		25.0	6.0	36.0		25.0				
Max Q Clear Time (g_c+I1), s	4.9	15.4		4.2	2.7	9.1		9.7				
Green Ext Time (p_c), s	0.0	0.7		0.1	0.0	0.4		0.3				
Intersection Summary												
HCM 6th Ctrl Delay	14.2											
HCM 6th LOS	B											

HCM 6th TWSC

2: Hagers Grove Road & Western Access

07/06/2022

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	135	3	33	0	39	240
Future Vol, veh/h	135	3	33	0	39	240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	3	36	0	42	261
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	381	36	0	0	36	0
Stage 1	36	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	621	1037	-	-	1575	-
Stage 1	986	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	602	1037	-	-	1575	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	12.8	0	1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	608	1575	-	
HCM Lane V/C Ratio	-	-	0.247	0.027	-	
HCM Control Delay (s)	-	-	12.8	7.3	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1	0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access




















07/06/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	375	33	94	0	1
Future Vol, veh/h	0	375	33	94	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	408	36	102	0	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	87
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	971
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	971
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	971		
HCM Lane V/C Ratio	-	-	-	0.001		
HCM Control Delay (s)	-	-	-	8.7		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	0		

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE




07/06/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	4	78	1	3	62	71	574	5	89	405	53
Future Volume (veh/h)	293	4	78	1	3	62	71	574	5	89	405	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1758	1758	1758	1744	1744	1744
Adj Flow Rate, veh/h	312	4	83	1	3	66	76	611	5	95	431	56
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	515	19	393	81	22	388	367	678	6	292	605	79
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.39	0.39	0.05	0.40	0.40
Sat Flow, veh/h	1258	69	1438	5	82	1422	1674	1741	14	1661	1512	196
Grp Volume(v), veh/h	312	0	87	70	0	0	76	0	616	95	0	487
Grp Sat Flow(s),veh/h/ln	1258	0	1507	1508	0	0	1674	0	1755	1661	0	1708
Q Serve(g_s), s	8.7	0.0	2.0	0.0	0.0	0.0	1.2	0.0	15.2	1.6	0.0	11.0
Cycle Q Clear(g_c), s	10.3	0.0	2.0	1.6	0.0	0.0	1.2	0.0	15.2	1.6	0.0	11.0
Prop In Lane	1.00		0.95	0.01		0.94	1.00		0.01	1.00		0.11
Lane Grp Cap(c), veh/h	515	0	412	491	0	0	367	0	684	292	0	683
V/C Ratio(X)	0.61	0.00	0.21	0.14	0.00	0.00	0.21	0.00	0.90	0.33	0.00	0.71
Avail Cap(c_a), veh/h	856	0	820	898	0	0	505	0	1391	404	0	1346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	12.9	12.7	0.0	0.0	9.0	0.0	13.2	10.4	0.0	11.6
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.0	0.0	0.0	0.1	0.0	1.8	0.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.6	0.5	0.0	0.0	0.3	0.0	4.6	0.4	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	13.0	12.8	0.0	0.0	9.1	0.0	15.0	10.6	0.0	12.1
LnGrp LOS	B	A	B	B	A	A	A	A	B	B	A	B
Approach Vol, veh/h	399			70			692			582		
Approach Delay, s/veh	15.4			12.8			14.4			11.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.0	23.4	16.6		6.5	22.9	16.6					
Change Period (Y+Rc), s	4.0	5.0	4.0		4.0	5.0	4.0					
Max Green Setting (Gmax), s	5.8	36.2	25.0		5.6	36.4	25.0					
Max Q Clear Time (g_c+I1), s	3.2	13.0	3.6		3.6	17.2	12.3					
Green Ext Time (p_c), s	0.0	0.6	0.1		0.0	0.7	0.2					
Intersection Summary												
HCM 6th Ctrl Delay	13.7											
HCM 6th LOS	B											

HCM 6th TWSC

2: Hagers Grove Road & Western Access

05/23/2022

Intersection						
Int Delay, s/veh	6.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	163	4	33	0	34	115
Future Vol, veh/h	163	4	33	0	34	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	177	4	36	0	37	125
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	235	36	0	0	36	0
Stage 1	36	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	753	1037	-	-	1575	-
Stage 1	986	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	734	1037	-	-	1575	-
Mov Cap-2 Maneuver	734	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.5	0		1.7		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 739		1575	-	
HCM Lane V/C Ratio	-	- 0.246		0.023	-	
HCM Control Delay (s)	-	- 11.5		7.3	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 1		0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access

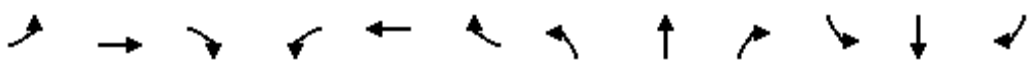







05/23/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	278	33	136	0	0
Future Vol, veh/h	0	278	33	136	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	302	36	148	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	110
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	943
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	943
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS					A	
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	-	-	-	0		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	-		

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE




05/23/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	5	80	4	4	73	90	321	2	23	396	75
Future Volume (veh/h)	193	5	80	4	4	73	90	321	2	23	396	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1589	1589	1589	1772	1772	1772	1660	1660	1660	1730	1730	1730
Adj Flow Rate, veh/h	238	6	99	5	5	90	111	396	2	28	489	93
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	15	15	15	2	2	2	10	10	10	5	5	5
Cap, veh/h	445	18	304	90	30	324	135	744	4	32	545	104
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.09	0.45	0.45	0.02	0.39	0.39
Sat Flow, veh/h	1102	77	1276	24	127	1359	1581	1650	8	1647	1413	269
Grp Volume(v), veh/h	238	0	105	100	0	0	111	0	398	28	0	582
Grp Sat Flow(s),veh/h/ln	1102	0	1353	1510	0	0	1581	0	1658	1647	0	1681
Q Serve(g_s), s	5.9	0.0	2.9	0.0	0.0	0.0	3.1	0.0	7.8	0.8	0.0	14.5
Cycle Q Clear(g_c), s	8.3	0.0	2.9	2.4	0.0	0.0	3.1	0.0	7.8	0.8	0.0	14.5
Prop In Lane	1.00		0.94	0.05		0.90	1.00		0.01	1.00		0.16
Lane Grp Cap(c), veh/h	445	0	323	444	0	0	135	0	748	32	0	648
V/C Ratio(X)	0.53	0.00	0.33	0.23	0.00	0.00	0.82	0.00	0.53	0.86	0.00	0.90
Avail Cap(c_a), veh/h	799	0	757	922	0	0	353	0	1335	221	0	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	14.1	13.9	0.0	0.0	20.1	0.0	8.9	21.9	0.0	12.9
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.1	0.0	0.0	4.7	0.0	0.2	20.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.8	0.7	0.0	0.0	1.1	0.0	1.9	0.4	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	0.0	14.3	14.0	0.0	0.0	24.8	0.0	9.1	42.7	0.0	14.8
LnGrp LOS	B	A	B	B	A	A	C	A	A	D	A	B
Approach Vol, veh/h	343			100			509			610		
Approach Delay, s/veh	15.6			14.0			12.5			16.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	22.2		14.7	4.9	25.2		14.7				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	10.0	32.0		25.0	6.0	36.0		25.0				
Max Q Clear Time (g_c+I1), s	5.1	16.5		4.4	2.8	9.8		10.3				
Green Ext Time (p_c), s	0.0	0.7		0.2	0.0	0.4		0.3				
Intersection Summary												
HCM 6th Ctrl Delay	14.7											
HCM 6th LOS	B											

HCM 6th TWSC

2: Hagers Grove Road & Western Access

07/06/2022

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	135	3	35	0	39	251
Future Vol, veh/h	135	3	35	0	39	251
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	3	38	0	42	273
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	395	38	0	0	38	0
Stage 1	38	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	610	1034	-	-	1572	-
Stage 1	984	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	591	1034	-	-	1572	-
Mov Cap-2 Maneuver	591	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	13	0		1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 597		1572	-	
HCM Lane V/C Ratio	-	- 0.251		0.027	-	
HCM Control Delay (s)	-	- 13		7.4	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 1		0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access




















07/06/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	386	35	94	0	1
Future Vol, veh/h	0	386	35	94	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	420	38	102	0	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	89
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	969
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	969
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	969		
HCM Lane V/C Ratio	-	-	-	0.001		
HCM Control Delay (s)	-	-	-	8.7		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	0		

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE

07/06/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	4	79	1	3	64	72	598	5	93	423	54
Future Volume (veh/h)	303	4	79	1	3	64	72	598	5	93	423	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1758	1758	1758	1744	1744	1744
Adj Flow Rate, veh/h	322	4	84	1	3	68	77	636	5	99	450	57
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	512	19	400	76	22	396	359	698	5	281	626	79
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.40	0.40	0.06	0.41	0.41
Sat Flow, veh/h	1256	68	1438	4	80	1424	1674	1742	14	1661	1517	192
Grp Volume(v), veh/h	322	0	88	72	0	0	77	0	641	99	0	507
Grp Sat Flow(s),veh/h/ln	1256	0	1507	1508	0	0	1674	0	1755	1661	0	1709
Q Serve(g_s), s	9.6	0.0	2.2	0.0	0.0	0.0	1.3	0.0	16.9	1.7	0.0	12.2
Cycle Q Clear(g_c), s	11.4	0.0	2.2	1.8	0.0	0.0	1.3	0.0	16.9	1.7	0.0	12.2
Prop In Lane	1.00		0.95	0.01		0.94	1.00		0.01	1.00		0.11
Lane Grp Cap(c), veh/h	512	0	420	494	0	0	359	0	704	281	0	705
V/C Ratio(X)	0.63	0.00	0.21	0.15	0.00	0.00	0.21	0.00	0.91	0.35	0.00	0.72
Avail Cap(c_a), veh/h	802	0	768	841	0	0	476	0	1303	378	0	1268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	13.6	13.4	0.0	0.0	9.4	0.0	13.9	11.1	0.0	12.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.0	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.7	0.5	0.0	0.0	0.3	0.0	5.3	0.4	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	13.7	13.5	0.0	0.0	9.5	0.0	15.9	11.3	0.0	12.5
LnGrp LOS	B	A	B	B	A	A	A	A	B	B	A	B
Approach Vol, veh/h	410			72			718			606		
Approach Delay, s/veh	16.4			13.5			15.2			12.4		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.2	25.2	17.7		6.7	24.7	17.7					
Change Period (Y+Rc), s	4.0	5.0	4.0		4.0	5.0	4.0					
Max Green Setting (Gmax), s	5.6	36.4	25.0		5.6	36.4	25.0					
Max Q Clear Time (g_c+I1), s	3.3	14.2	3.8		3.7	18.9	13.4					
Green Ext Time (p_c), s	0.0	0.6	0.1		0.0	0.8	0.2					
Intersection Summary												
HCM 6th Ctrl Delay	14.4											
HCM 6th LOS	B											

HCM 6th TWSC

1: Nothorn Site Access & Hagers Grove Road

07/06/2022

Intersection

Int Delay, s/veh 1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↶	↷	
Traffic Vol, veh/h	0	0	33	0	7	0
Future Vol, veh/h	0	0	33	0	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	36	0	8	0

Major/Minor	Major2	Minor1
Conflicting Flow All	0	72
Stage 1	-	0
Stage 2	-	72
Critical Hdwy	4.12	6.42
Critical Hdwy Stg 1	-	-
Critical Hdwy Stg 2	-	5.42
Follow-up Hdwy	2.218	3.518
Pot Cap-1 Maneuver	-	932
Stage 1	-	0
Stage 2	-	951
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	932
Mov Cap-2 Maneuver	-	932
Stage 1	-	-
Stage 2	-	951




Approach	WB	NB
HCM Control Delay, s		8.9
HCM LOS		A

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	932	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	8.9	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

HCM 6th TWSC

2: Hagers Grove Road & Western Access

07/06/2022

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	216	4	33	1	34	122
Future Vol, veh/h	216	4	33	1	34	122
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	235	4	36	1	37	133
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	244	37	0	0	37	0
Stage 1	37	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	744	1035	-	-	1574	-
Stage 1	985	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	725	1035	-	-	1574	-
Mov Cap-2 Maneuver	725	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	828	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	12.3	0		1.6		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 729		1574	-	
HCM Lane V/C Ratio	-	- 0.328		0.023	-	
HCM Control Delay (s)	-	- 12.3		7.3	0	
HCM Lane LOS	-	- B		A	A	
HCM 95th %tile Q(veh)	-	- 1.4		0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access

07/06/2022

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	338	34	163	0	1
Future Vol, veh/h	0	338	34	163	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	367	37	177	0	1

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 126
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.22
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.318
Pot Cap-1 Maneuver	0	-	- 0 924
Stage 1	0	-	- 0 -
Stage 2	0	-	- 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - 924
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -




















Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	924
HCM Lane V/C Ratio	-	-	-	0.001
HCM Control Delay (s)	-	-	-	8.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE

07/06/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	6	101	4	5	73	117	301	2	23	381	75
Future Volume (veh/h)	231	6	101	4	5	73	117	301	2	23	381	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1589	1589	1589	1772	1772	1772	1660	1660	1660	1730	1730	1730
Adj Flow Rate, veh/h	285	7	125	5	6	90	144	372	2	28	470	93
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	15	15	15	2	2	2	10	10	10	5	5	5
Cap, veh/h	476	20	354	85	40	373	319	713	4	432	520	103
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.08	0.43	0.43	0.02	0.37	0.37
Sat Flow, veh/h	1101	72	1281	22	143	1348	1581	1649	9	1647	1402	277
Grp Volume(v), veh/h	285	0	132	101	0	0	144	0	374	28	0	563
Grp Sat Flow(s),veh/h/ln	1101	0	1353	1513	0	0	1581	0	1658	1647	0	1680
Q Serve(g_s), s	8.4	0.0	3.7	0.0	0.0	0.0	2.5	0.0	7.9	0.5	0.0	15.2
Cycle Q Clear(g_c), s	10.9	0.0	3.7	2.5	0.0	0.0	2.5	0.0	7.9	0.5	0.0	15.2
Prop In Lane	1.00		0.95	0.05		0.89	1.00		0.01	1.00		0.17
Lane Grp Cap(c), veh/h	476	0	374	497	0	0	319	0	717	432	0	623
V/C Ratio(X)	0.60	0.00	0.35	0.20	0.00	0.00	0.45	0.00	0.52	0.06	0.00	0.90
Avail Cap(c_a), veh/h	631	0	565	708	0	0	379	0	918	589	0	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	13.9	13.4	0.0	0.0	10.6	0.0	10.0	9.3	0.0	14.2
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.1	0.0	0.0	0.4	0.0	0.2	0.0	0.0	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.0	0.8	0.0	0.0	0.6	0.0	2.1	0.1	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	14.1	13.5	0.0	0.0	11.0	0.0	10.2	9.3	0.0	20.8
LnGrp LOS	B	A	B	B	A	A	B	A	B	A	A	C
Approach Vol, veh/h	417			101			518			591		
Approach Delay, s/veh	15.8			13.5			10.4			20.3		
Approach LOS	B			B			B			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	22.8		17.2	4.9	25.7		17.2				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	5.7	26.3		20.0	5.5	26.5		20.0				
Max Q Clear Time (g_c+I1), s	4.5	17.2		4.5	2.5	9.9		12.9				
Green Ext Time (p_c), s	0.0	0.6		0.1	0.0	0.4		0.3				
Intersection Summary												
HCM 6th Ctrl Delay	15.6											
HCM 6th LOS	B											

HCM 6th TWSC

1: Site Access & Hagers Grove Road




07/06/2022

Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↰	↱	
Traffic Vol, veh/h	0	0	44	0	10	0
Future Vol, veh/h	0	0	44	0	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	48	0	11	0
Major/Minor		Major2		Minor1		
Conflicting Flow All		0	0	96	-	-
Stage 1		-	-	0	-	-
Stage 2		-	-	96	-	-
Critical Hdwy		4.12	-	6.42	-	-
Critical Hdwy Stg 1		-	-	-	-	-
Critical Hdwy Stg 2		-	-	5.42	-	-
Follow-up Hdwy		2.218	-	3.518	-	-
Pot Cap-1 Maneuver		-	-	903	0	-
Stage 1		-	-	-	0	-
Stage 2		-	-	928	0	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver		-	-	903	-	-
Mov Cap-2 Maneuver		-	-	903	-	-
Stage 1		-	-	-	-	-
Stage 2		-	-	928	-	-
Approach		WB		NB		
HCM Control Delay, s				9		
HCM LOS				A		
Minor Lane/Major Mvmt	NBLn1	WBL	WBT			
Capacity (veh/h)	903	-	-			
HCM Lane V/C Ratio	0.012	-	-			
HCM Control Delay (s)	9	-	-			
HCM Lane LOS	A	-	-			
HCM 95th %tile Q(veh)	0	-	-			

HCM 6th TWSC

2: Hagers Grove Road & Western Access

07/06/2022

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	196	3	35	2	39	261
Future Vol, veh/h	196	3	35	2	39	261
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	213	3	38	2	42	284
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	407	39	0	0	40	0
Stage 1	39	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	600	1033	-	-	1570	-
Stage 1	983	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	581	1033	-	-	1570	-
Mov Cap-2 Maneuver	581	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	14.7	0		1		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	585	1570	-	
HCM Lane V/C Ratio	-	-	0.37	0.027	-	
HCM Control Delay (s)	-	-	14.7	7.4	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.7	0.1	-	

HCM 6th TWSC

3: Hagers Grove Road & Southern Access





















07/06/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑			↑
Traffic Vol, veh/h	0	457	37	127	0	1
Future Vol, veh/h	0	457	37	127	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	497	40	138	0	1
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	109
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	945
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	945
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.8		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	945		
HCM Lane V/C Ratio	-	-	-	0.001		
HCM Control Delay (s)	-	-	-	8.8		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	0		

HCM 6th Signalized Intersection Summary

4: Lancaster Drive SE & Hagers Grove Road/Carson Drive SE

07/06/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	6	103	1	5	64	105	575	5	93	407	54
Future Volume (veh/h)	348	6	103	1	5	64	105	575	5	93	407	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1772	1772	1772	1772	1772	1758	1758	1758	1744	1744	1744
Adj Flow Rate, veh/h	370	6	110	1	5	68	112	612	5	99	433	57
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	544	24	448	70	37	436	351	670	5	268	571	75
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.06	0.38	0.38	0.06	0.38	0.38
Sat Flow, veh/h	1254	78	1431	4	119	1392	1674	1741	14	1661	1509	199
Grp Volume(v), veh/h	370	0	116	74	0	0	112	0	617	99	0	490
Grp Sat Flow(s),veh/h/ln	1254	0	1509	1514	0	0	1674	0	1755	1661	0	1708
Q Serve(g_s), s	12.4	0.0	3.0	0.0	0.0	0.0	2.1	0.0	17.6	1.9	0.0	13.2
Cycle Q Clear(g_c), s	14.3	0.0	3.0	1.9	0.0	0.0	2.1	0.0	17.6	1.9	0.0	13.2
Prop In Lane	1.00		0.95	0.01		0.92	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	544	0	472	543	0	0	351	0	675	268	0	646
V/C Ratio(X)	0.68	0.00	0.25	0.14	0.00	0.00	0.32	0.00	0.91	0.37	0.00	0.76
Avail Cap(c_a), veh/h	815	0	799	870	0	0	423	0	1109	350	0	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	13.5	13.1	0.0	0.0	10.8	0.0	15.4	12.2	0.0	14.3
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.0	0.0	0.0	0.2	0.0	4.6	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.9	0.6	0.0	0.0	0.6	0.0	6.3	0.5	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	0.0	13.6	13.2	0.0	0.0	10.9	0.0	20.1	12.6	0.0	15.0
LnGrp LOS	B	A	B	B	A	A	B	A	C	B	A	B
Approach Vol, veh/h	486			74			729			589		
Approach Delay, s/veh	16.7			13.2			18.7			14.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	7.3	25.0	20.5		7.0	25.3	20.5					
Change Period (Y+Rc), s	4.0	5.0	4.0		4.0	5.0	4.0					
Max Green Setting (Gmax), s	5.6	33.4	28.0		5.6	33.4	28.0					
Max Q Clear Time (g_c+I1), s	4.1	15.2	3.9		3.9	19.6	16.3					
Green Ext Time (p_c), s	0.0	0.6	0.1		0.0	0.7	0.2					
Intersection Summary												
HCM 6th Ctrl Delay	16.7											
HCM 6th LOS	B											

Signalized Intersection V/C Calculation Summary

MORNING PEAK HOUR

Intersection 4: Hagers Grove Road SE & Carson Drive

Year 2022

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	110	379	2	28	468	93	233	6	98	4	5	86
Saturated Flow:	1581	1649	9	1647	1401	278	1106	78	1275	20	123	1367
Flow Ratio:	0.07	0.23	0.22	0.02	0.33	0.33	0.21	0.08	0.08	0.20	0.04	0.06
	0.40						0.21					

Sum of Critical Flow Ratios:	0.61	Critical Intersection V/C:	0.77
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

Year 2024 Background

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	111	396	2	28	489	93	238	6	99	5	5	90
Saturated Flow:	1581	1650	8	1647	1413	269	1102	77	1276	24	127	1359
Flow Ratio:	0.07	0.24	0.25	0.02	0.35	0.35	0.22	0.08	0.08	0.21	0.04	0.07
	0.42						0.22					

Sum of Critical Flow Ratios:	0.63	Critical Intersection V/C:	0.79
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

Year 2024 Buildout

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	144	372	2	28	470	93	285	7	125	5	6	90
Saturated Flow:	1581	1649	9	1647	1403	277	1101	72	1281	22	142	1348
Flow Ratio:	0.09	0.23	0.22	0.02	0.33	0.34	0.26	0.10	0.10	0.23	0.04	0.07
	0.43						0.26					

Sum of Critical Flow Ratios:	0.69	Critical Intersection V/C:	0.86
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

EVENING PEAK HOUR

Intersection 4: Hagers Grove Road SE & Carson Drive

Year 2022

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	76	611	5	95	431	56	312	4	83	1	3	66
Saturated Flow:	1674	1741	14	1661	1512	196	1258	69	1438	4	82	1422
Flow Ratio:	0.05	0.35	0.36	0.06	0.29	0.29	0.25	0.06	0.06	0.25	0.04	0.05
	0.41						0.25					

Sum of Critical Flow Ratios:	0.66	Critical Intersection V/C:	0.83
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

Year 2024 Background

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	77	636	5	99	450	57	322	4	84	1	3	68
Saturated Flow:	1674	1742	14	1661	1517	192	1256	68	1438	4	80	1424
Flow Ratio:	0.05	0.37	0.36	0.06	0.30	0.30	0.26	0.06	0.06	0.25	0.04	0.05
	0.42						0.26					

Sum of Critical Flow Ratios:	0.68	Critical Intersection V/C:	0.85
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

Year 2042 Buildout

	Protected/Permitted Left-Turn Phasing						Permitted Left-Turn Phasing					
Critical Movement:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Adjusted Flow Rate:	112	617	5	99	433	57	370	6	110	1	5	68
Saturated Flow:	1674	1741	14	1661	1511	198	1254	79	1430	4	119	1392
Flow Ratio:	0.07	0.35	0.36	0.06	0.29	0.29	0.30	0.08	0.08	0.25	0.04	0.05
	0.42						0.30					

Sum of Critical Flow Ratios:	0.71	Critical Intersection V/C:	0.89
Cycle Length (seconds):	80		
Lost Time per phase (seconds):	4		
Number of Phases:	4		

Notes:

Since NB and SB left-turn phases are protected, critical ring is either EBL+WBT or WBL+EBT - HCM6 does not show reductions for permitted left turns

Since EB and WB left-turn phases are permitted, critical ring is maximum of any lane group.

Deed/Title Report for Tax Lot 10000

275 Court Street NE Salem, Oregon 97301-3442 T: 503.390.6500 www.studio3architecture.com

Memorandum

Stop-N-Save Gas Station

File: 2020-109.01

Project No: 2020-109

Page 9 of 12

Preliminary Report

Ticor Title - Oregon

File No.: 471822121771

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1433 SW 6th Avenue
Portland, OR 97201
Phone: (503)646-4444 / Fax: (503)469-4198

TITLE PLANT RECORDS REPORT Report of Requested Information from Title Plant Records

Studio 3 Architecture
275 Court Street NE
Salem, OR 97301

Customer Ref.: _____
Order No.: 471822121771
Effective Date: October 12, 2022 at 08:00 AM
Fee(s): \$200.00

The information contained in this report is furnished by Ticor Title Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE NOR IS IT A PRELIMINARY TITLE REPORT OR A COMMITMENT FOR TITLE INSURANCE. No examination has been made of the Company's records, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the customer, and the Company will have no greater liability by reason of this report. THIS REPORT ("THE REPORT") IS SUBJECT TO THE LIMITATIONS OF LIABILITY STATED BELOW, WHICH LIMITATIONS OF LIABILITY ARE A PART OF THIS REPORT

County and Time Period

This report is based on a search of the Company's title plant records for County of Marion, State of Oregon, for the time period **from October 26, 1946 through October 12, 2022** (with the through date being "the Effective Date").

Ownership and Property Description

The Company reports the following, as of the Effective date and with respect to the following described property ("the Property"):

Owner. The apparent vested owner of the Property is:

Inderjit Singh Dhaliwal and Harender K. Dhaliwal and Talwinder Singh Dhaliwal and Varinder K. Dhaliwal, not as tenants in common, but with rights or survivorship

Premises. The Property is:

(a) Street Address:

1545 Lancaster Drive SE, Salem, OR 97317

(b) Legal Description:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Encumbrances

[If no information appears in this section, the section is intentionally omitted.]

General Index Liens against Named Party

[If no information appears in this section, the section is intentionally omitted.]

Recorded Documents

For the above stated county and time period, the Company reports the following types of recordings that relate to the Property:

a. Types of recordings: Deeds

b. List of recordings: WD- Fitzpatrick to Swigart, recorded 10-26-46 [Book 357, page 633](#)

WD- Fitzpatrick & Swigart to Fitzpatrick, recorded 1-10-49, [Book 399, page 361](#)

WD- Fitzpatrick to Swigart, recorded 1-21-53, [Book 447, page 189](#)

WD- Fitzpatrick to Freeways West, recorded 1-30-78, [Reel 111, page 638](#)

WD- Freeways West to Granada Land, recorded 1-31-79, [Reel 155, page 442](#)

BSD- Granada Land to Granada Land, recorded 1-31-79, [Reel 155, page 450](#)

WD- Granada Land to Larry & Jeanette Epping Family Foundation, recorded 3-10-05, [Reel 2449, page 9](#)

BSD- Larry & Jeanette Epping Family Foundation to Epping Foundation Holdings, recorded 8-1-17, [Reel 3977, page 9](#)

WD- Epping Foundation Holdings to Dhaliwal, etal, recorded 8-31-20, [Reel 4379, page 17](#)

End of Reported Information

There will be additional charges for additional information or copies. For questions or additional requests, contact:

James Carter
503-336-9126
FAX
james.carterjr@titlegroup.fntg.com

Ticor Title Company of Oregon
1433 SW 6th Avenue
Portland, OR 97201

EXHIBIT "A"
Legal Description

A parcel of land lying in the South half of the Benjamin Munkers Donation Land Claim No. 52 in Section 6 of Township 8 South, Range 2 West of the Willamette Meridian, in the City of Salem, County of Marion, State of Oregon, being more particularly described as follows:

Beginning at Engineer's Station 61-66.63 in the center of Lancaster Drive on the line dividing the North and South halves of the said Munkers Donation Land Claim as shown in C.S. 33072 a recorded in the Marion County Surveyors Office; thence South 15°05'13" East, along the centerline of said Lancaster Drive, a distance of 326.71 feet to a point on the South line of that tract of land described and recorded in Reel 155, page 450, Deed Records for Marion County, Oregon; thence South 74°51'55" West, along the South line of said tract, a distance of 38.00 feet to the Westerly right-of-way line of said Lancaster Drive and being the TRUE POINT OF BEGINNING: thence South 74°51'55" West, along said South line, a distance of 205.87 feet to a point on the Easterly line of the relocated Hagers Grove Road; thence Northerly, along said Easterly line, on the arc of a 270.00 foot radius curve to the right, (the chord of which bears North 04°18'10" West 52.42 feet), a distance of 52.50 feet; thence North 01°16'05" East, along said Easterly line, a distance of 20.00 feet; thence Northerly, along said Easterly line, on the arc of a 330.00 foot radius curve to the left, (the chord of which bears North 05°13'04" West 74.55 feet), a distance of 74.71 feet; thence Northeasterly, along the arc of a 20.00 foot radius curve to the right, (the chord of which bears North 40°01'27" East 31.40 feet), a distance of 36.11 feet to a point on the Southerly right-of-way line of Hagers Grove Road; thence Northeasterly, along said right-of-way line, on the arc of a 120.00 foot radius curve to the left, (the chord of which bears North 86°47'08" East 20.78 feet), a distance of 20.80 feet; thence North 81°49'08" East, along said right-of-way, a distance of 132.52 feet to a point on the Westerly right-of-way line of said Lancaster Drive; thence South 15°05'13" East, along said right-of-way line, a distance of 141.72 feet to the TRUE POINT OF BEGINNING.

LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN, OR THE COMPANY'S NEGLIGENCE IN PRODUCING, THE REQUESTED REPORT, HEREIN "THE REPORT." CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES WITH THE PROPRIETY OF SUCH LIMITATION AND AGREES TO BE BOUND BY ITS TERMS.

THE LIMITATIONS ARE AS FOLLOWS AND THE LIMITATIONS WILL SURVIVE THE CONTRACT:

ONLY MATTERS IDENTIFIED IN THIS REPORT AS THE SUBJECT OF THE REPORT ARE WITHIN ITS SCOPE. ALL OTHER MATTERS ARE OUTSIDE THE SCOPE OF THE REPORT.

CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS FOR ANY AND ALL CLAIMS, LIABILITIES, CAUSES OF ACTION, LOSSES, COSTS, DAMAGES AND EXPENSES OF ANY NATURE WHATSOEVER, INCLUDING ATTORNEY'S FEES, HOWEVER ALLEGED OR ARISING, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM BREACH OF CONTRACT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF WARRANTY, EQUITY, THE COMMON LAW, STATUTE OR ANY OTHER THEORY OF RECOVERY, OR FROM ANY PERSON'S USE, MISUSE, OR INABILITY TO USE THE REPORT OR ANY OF THE MATERIALS CONTAINED THEREIN OR PRODUCED, **SO THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT.**

CUSTOMER AGREES THAT THE FOREGOING LIMITATION ON LIABILITY IS A TERM MATERIAL TO THE PRICE THE CUSTOMER IS PAYING, WHICH PRICE IS LOWER THAN WOULD OTHERWISE BE OFFERED TO THE CUSTOMER WITHOUT SAID TERM. CUSTOMER RECOGNIZES THAT THE COMPANY WOULD NOT ISSUE THE REPORT BUT FOR THIS CUSTOMER AGREEMENT, AS PART OF THE CONSIDERATION GIVEN FOR THE REPORT, TO THE FOREGOING LIMITATION OF LIABILITY AND THAT ANY SUCH LIABILITY IS CONDITIONED AND PREDICATED UPON THE FULL AND TIMELY PAYMENT OF THE COMPANY'S INVOICE FOR THE REPORT.

THE REPORT IS LIMITED IN SCOPE AND IS NOT AN ABSTRACT OF TITLE, TITLE OPINION, PRELIMINARY TITLE REPORT, TITLE REPORT, COMMITMENT TO ISSUE TITLE INSURANCE, OR A TITLE POLICY, AND SHOULD NOT BE RELIED UPON AS SUCH. THE REPORT DOES NOT PROVIDE OR OFFER ANY TITLE INSURANCE, LIABILITY COVERAGE OR ERRORS AND OMISSIONS COVERAGE. THE REPORT IS NOT TO BE RELIED UPON AS A REPRESENTATION OF THE STATUS OF TITLE TO THE PROPERTY. THE COMPANY MAKES NO REPRESENTATIONS AS TO THE REPORT'S ACCURACY, DISCLAIMS ANY WARRANTY AS TO THE REPORT, ASSUMES NO DUTIES TO CUSTOMER, DOES NOT INTEND FOR CUSTOMER TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THE REPORT OR OTHERWISE.

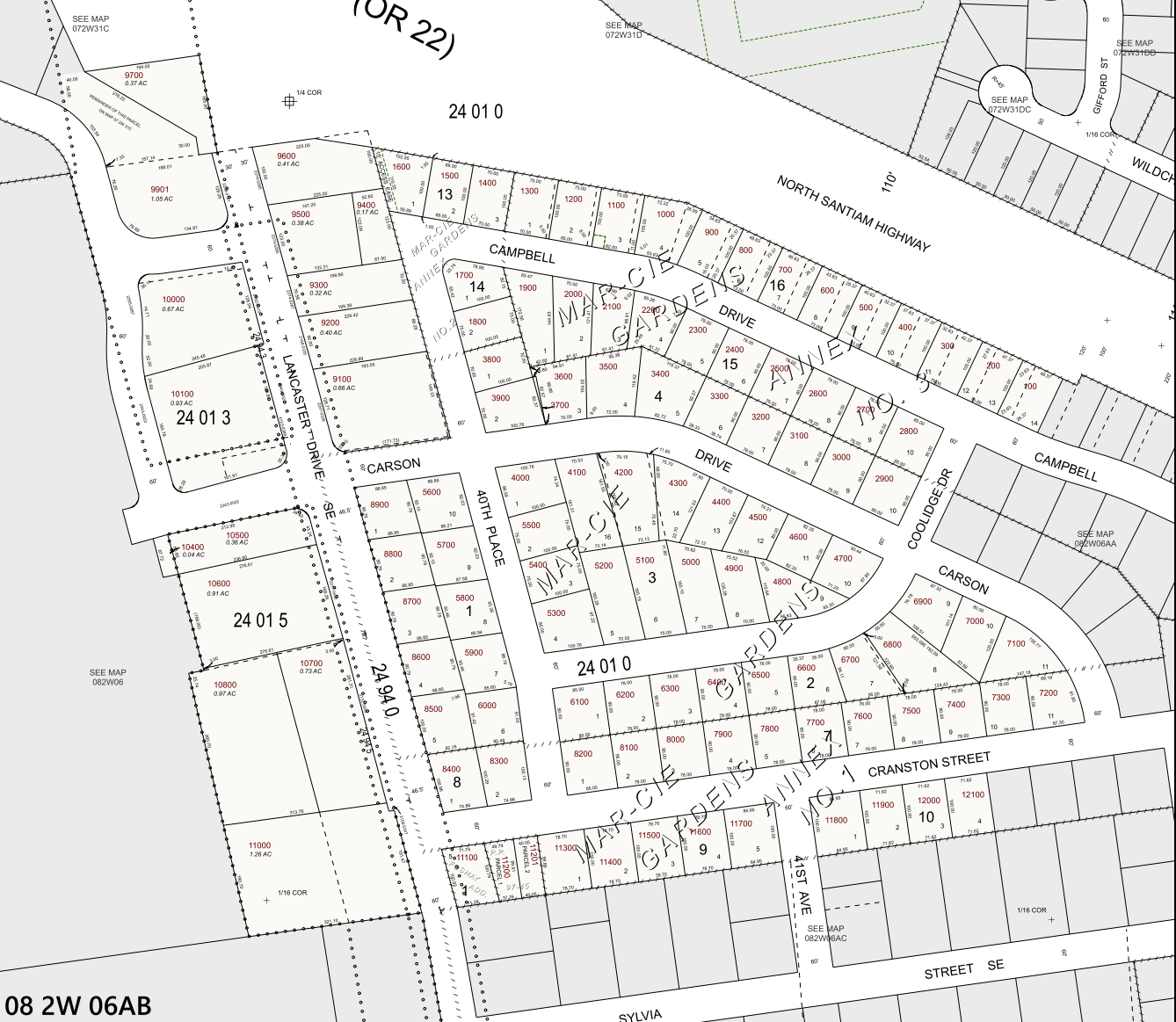
IF CUSTOMER (A) HAS OR WILL HAVE AN INSURABLE INTEREST IN THE SUBJECT REAL PROPERTY, (B) DOES NOT WISH TO LIMIT LIABILITY AS STATED HEREIN AND (C) DESIRES THAT ADDITIONAL LIABILITY BE ASSUMED BY THE COMPANY, THEN CUSTOMER MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE OR STATUS OF TITLE. CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES IT HAS AN INDEPENDENT DUTY TO ENSURE AND/OR RESEARCH THE ACCURACY OF ANY INFORMATION OBTAINED FROM THE COMPANY OR ANY PRODUCT OR SERVICE PURCHASED.

NO THIRD PARTY IS PERMITTED TO USE OR RELY UPON THE INFORMATION SET FORTH IN THE REPORT, AND NO LIABILITY TO ANY THIRD PARTY IS UNDERTAKEN BY THE COMPANY.

CUSTOMER AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT WILL THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS, AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, EXEMPLARY, OR SPECIAL DAMAGES, OR LOSS OF PROFITS, REVENUE, INCOME, SAVINGS, DATA, BUSINESS, OPPORTUNITY, OR GOODWILL, PAIN AND SUFFERING, EMOTIONAL DISTRESS, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, BUSINESS INTERRUPTION OR DELAY, COST OF CAPITAL, OR COST OF REPLACEMENT PRODUCTS OR SERVICES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE AND WHETHER CAUSED BY NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT, BREACH OF WARRANTY, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE OR ANY OTHER CAUSE WHATSOEVER, AND EVEN IF THE COMPANY HAS BEEN ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OR KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY FOR SUCH DAMAGES.

END OF THE LIMITATIONS OF LIABILITY

08 2W 06AB



08 2W 06AB

08 2W 06AB
SALEM



MARION COUNTY, OREGON
NW1/4 NE1/4 SEC6 T8S R2W W.M.
SCALE 1" = 100'

LEGEND

- LINE TYPES
- Taxlot Boundary
 - Road Right-of-Way
 - Railroad Right-of-Way
 - Private Road ROW
 - Subdivision/Plat Bndry
 - Waterline - Taxlot Bndry
 - Historical Boundary
 - Easement
 - Railroad Centerline
 - Taxcode Line
 - Map Boundary
 - Waterline - Non Bndry

- CORNER TYPES
- + 1/16TH Section Cor.
 - ⊙ DLC Corner
 - ⊕ 1/4 Section Cor.
 - 16 15 Section Corner
 - 21 22

NUMBERS
Tax Code Number
00 00 0
Acreage 0.29 AC All acres listed are Net Acres, excluding any portions of the taxlot within public ROWs

NOTES
Tick Marks: A tick mark in the road indicates that the labeled dimension extends into the public ROW

CANCELLED NUMBERS			
9000			
9800			
9900			
9902			
10200			
10300			
10401			
10601			
10600			

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY



FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT www.co.marion.or.us

PLOT DATE: 10/16/2020

SALEM
08 2W 06AB

RECORDING REQUESTED BY:



315 Commercial St SE, Ste 150
Salem, OR 97301

GRANTOR'S NAME:

Epping Foundation Holdings LLC

GRANTEE'S NAME:

Inderjit Singh Dhaliwal, Harender K. Dhaliwal, Talwinder Singh
Dhaliwal, and Varinder K. Dhaliwal

REEL 4379 PAGE 17
MARION COUNTY
BILL BURGESS, COUNTY CLERK
08-31-2020 01:21 pm.
Control Number 615746 \$ 96.00
Instrument 2020 00047399

AFTER RECORDING RETURN TO:

Order No.: 471820096292-LN

Inderjit Singh Dhaliwal and Harender K. Dhaliwal and Talwinder
Singh Dhaliwal and Varinder K. Dhaliwal, not as tenants in
common, but with the rights of survivorship
417 Main St E
Monmouth, OR 97361

SEND TAX STATEMENTS TO:

Inderjit Singh Dhaliwal
417 Main St E
Monmouth, OR 97361

APN: 529459

Map: 082W06AB10000

1545 Lancaster Drive SE, Salem, OR 97317

SPACE ABOVE THIS LINE FOR RECORDER'S USE

STATUTORY WARRANTY DEED

Epping Foundation Holdings LLC, Grantor, conveys and warrants to **Inderjit Singh Dhaliwal and Harender K. Dhaliwal and Talwinder Singh Dhaliwal and Varinder K. Dhaliwal, not as tenants in common, but with the rights of survivorship**, Grantee, the following described real property, free and clear of encumbrances except as specifically set forth below, situated in the County of Marion, State of Oregon:

A parcel of land lying in the South half of the Benjamin Munkers Donation Land Claim No. 52 in Section 6 of Township 8 South, Range 2 West of the Willamette Meridian, in the City of Salem, County of Marion, State of Oregon, being more particularly described as follows:

Beginning at Engineer's Station 61-66.63 in the center of Lancaster Drive on the line dividing the North and South halves of the said Munkers Donation Land Claim as shown in C.S. 33072 a recorded in the Marion County Surveyors Office; thence South 15°05'13" East, along the centerline of said Lancaster Drive, a distance of 326.71 feet to a point on the South line of that tract of land described and recorded in Reel 155, page 450, Deed Records for Marion County, Oregon; thence South 74°51'55" West, along the South line of said tract, a distance of 38.00 feet to the Westerly right-of-way line of said Lancaster Drive and being the TRUE POINT OF BEGINNING: thence South 74°51'55" West, along said South line, a distance of 205.87 feet to a point on the Easterly line of the relocated Hagers Grove Road; thence Northerly, along said Easterly line, on the arc of a 270.00 foot radius curve to the right, (the chord of which bears North 04°18'10" West 52.42 feet), a distance of 52.50 feet; thence North 01°16'05" East, along said Easterly line, a distance of 20.00 feet; thence Northerly, along said Easterly line, on the arc of a 330.00 foot radius curve to the left, (the chord of which bears North 05°13'04" West 74.55 feet), a distance of 74.71 feet; thence Northeasterly, along the arc of a 20.00 foot radius curve to the right, (the chord of which bears North 40°01'27" East 31.40 feet), a distance of 36.11 feet to a point on the Southerly right-of-way line of Hagers Grove Road; thence Northeasterly, along said right-of-way line, on the arc of a 120.00 foot radius curve to the left, (the chord of which bears North 86°47'08" East 20.78 feet), a distance of 20.80 feet; thence North 81°49'08" East, along said right-of-way, a distance of 132.52 feet to a point on the Westerly right-of-way line of said Lancaster Drive; thence South 15°05'13" East, along said right-of-way line, a distance of 141.72 feet to the TRUE POINT OF BEGINNING.

THE TRUE AND ACTUAL CONSIDERATION FOR THIS CONVEYANCE IS THREE HUNDRED NINETY THOUSAND AND NO/100 DOLLARS (**\$390,000.00**). (See ORS 93.030).

Subject to:

Property taxes in an undetermined amount, which are a lien but not yet payable, including any assessments collected with taxes to be levied for the fiscal year 2020-2021.

Any rights, liens, claims or equities, if any, in favor of East Salem Sewer and Drainage District.

Rights of the public to any portion of the Land lying within the area commonly known as streets, roads and/or highways.

STATUTORY WARRANTY DEED

(continued)

Limited access to and from the Land as set forth in Deed shown below, which provides that there shall be no right of easement or right of access to, from or across the State Highway other than as expressly provided for in said Deed:

Grantor:
Grantee: State of Oregon, by and through its State Highway Commission
Recording Date: November 19, 1952
Recording No.: Book 445, page 426

Limited access to and from the Land as set forth in Deed shown below, which provides that there shall be no right of easement or right of access to, from or across the State Highway other than as expressly provided for in said Deed:

Grantee: State of Oregon, by and through its State Highway Commission
Recording Date: May 14, 1958
Recording No.: Book 511, page 606

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Suburban East Salem Water District
Purpose: Water pipe
Recording Date: June 16, 1972
Recording No: Book 728, page 666

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: City of Salem
Purpose: Slopes
Recording Date: August 22, 2003
Recording No: Reel 2182, page 311
Affects: Reference is hereby made to said document for full particulars

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: City of Salem
Purpose: Public utilities and appurtenances
Recording Date: August 22, 2003
Recording No: Reel 2182, page 312
Affects: Reference is hereby made to said document for full particulars

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: City of Salem
Purpose: Slopes
Recording Date: March 30, 2004
Recording No: Reel 2295, page 88
Affects: Reference is hereby made to said document for full particulars

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

STATUTORY WARRANTY DEED

(continued)

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Dated: 8-27-2020

Epping Foundation Holdings LLC

BY: William C. Davis

William C. Davis
Authorized Signer

BY: Michael Pettyjohn

Michael Pettyjohn
Trust Officer for Pioneer Trust Bank NA

State of Oregon
County of Marion

This instrument was acknowledged before me on 8/27/2020 by Michael Pettyjohn, as Trust Officer for Pioneer Trust Bank NA for Epping Foundation Holdings LLC and William C. Davis, as Authorized Signer for Epping Foundation Holdings LLC.

Marianne Scheelar
Notary Public - State of Oregon

My Commission Expires: 01/28/2023



REEL: 4379

PAGE: 17

August 31, 2020, 01:21 pm.

CONTROL #: 615746

State of Oregon
County of Marion

I hereby certify that the attached
instrument was received and duly
recorded by me in Marion County
records:

FEE: \$ 96.00

**BILL BURGESS
COUNTY CLERK**

THIS IS NOT AN INVOICE.

Deed/Title Report for Tax Lot 10100

275 Court Street NE Salem, Oregon 97301-3442 T: 503.390.6500 www.studio3architecture.com

Memorandum

Stop-N-Save Gas Station

File: 2020-109.01

Project No: 2020-109

Page 10 of 12

Preliminary Report

Ticor Title - Oregon

File No.: 471822121598

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1433 SW 6th Avenue
Portland, OR 97201
Phone: (503)646-4444 / Fax: (503)469-4198

TITLE PLANT RECORDS REPORT Report of Requested Information from Title Plant Records

Studio 3 Architecture
275 Court Street NE
Salem, OR 97301

Customer Ref.: _____
Order No.: 471822121598
Effective Date: September 29, 2022 at 08:00 AM
Fee(s): \$200.00

The information contained in this report is furnished by Tigor Title Company of Oregon (the "Company") as an information service based on the records and indices maintained by the Company for the county identified below. THIS IS NOT TITLE INSURANCE NOR IS IT A PRELIMINARY TITLE REPORT OR A COMMITMENT FOR TITLE INSURANCE. No examination has been made of the Company's records, other than as specifically set forth herein. Liability for any loss arising from errors and/or omissions is limited to the lesser of the fee paid or the actual loss to the customer, and the Company will have no greater liability by reason of this report. THIS REPORT ("THE REPORT") IS SUBJECT TO THE LIMITATIONS OF LIABILITY STATED BELOW, WHICH LIMITATIONS OF LIABILITY ARE A PART OF THIS REPORT

County and Time Period

This report is based on a search of the Company's title plant records for County of Marion, State of Oregon, for the time period **from March 13, 1967 through September 29, 2022** (with the through date being "the Effective Date").

Ownership and Property Description

The Company reports the following, as of the Effective date and with respect to the following described property ("the Property"):

Owner. The apparent vested owner of the Property is:

Avi, LLC, an Oregon limited liability company

Premises. The Property is:

(a) Street Address:

3997 Carson Drive SE, Salem, OR 97317

(b) Legal Description:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Encumbrances

[If no information appears in this section, the section is intentionally omitted.]

General Index Liens against Named Party

[If no information appears in this section, the section is intentionally omitted.]

Recorded Documents

For the above stated county and time period, the Company reports the following types of recordings that relate to the Property:

a. Types of recordings: Deeds

- b. List of recordings:**
- WD- Swigart to Dibacco, recorded 3-13-1967, [Book 628, page 601](#)
 - DED- Walling Investments to Walling, recorded 5-1-1984, [Reel 343, page 1](#)
 - BSD- Walling to Walling Trust, recorded 6-2-1988, [Reel 623, page 249](#)
 - WD- Walling Trust to Walling Family LP, recorded 12-19-1997, [Reel 1449, page 269](#)
 - WD- Dibacco to Benson, recorded 1-31-2003, [Reel 2062, page 288](#)
 - WD- Benson to Home Depot, recorded 1-31-2003, [Reel 2062, page 290](#)
 - WD- Home Depot to Walling Family LP, recorded 4-17-2003, [Reel 2105, page 225](#)
 - WD- Walling Family LP to Boss-Aften, recorded 10-4-2005, [Reel 2547, page 148](#)
 - BSD- Boss-Aften to Yellow Dog Holdings, recorded 2-26-2008, [Reel 2923, page 302](#)
 - WD- Yellow Dog Holdings to Dhaliwal, recorded 4-28-2017, [Reel 3940, page 167](#)
 - BSD- Dhaliwal to Avi, LLC, recorded 6-25-2018, [Reel 4091, page 319](#)

End of Reported Information

There will be additional charges for additional information or copies. For questions or additional requests, contact:

James Carter
503-336-9126
FAX
james.carterjr@titlegroup.fntg.com

Ticor Title Company of Oregon
1433 SW 6th Avenue
Portland, OR 97201

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 332584, 337070, 337071 and 529457

For Tax Map ID(s): 082W06AB10100, 082W06AB10100, 082W06AB10100 and 082W06AB10100

Beginning in the center of the County Road at a point which is 326.04 feet South 17° 00' East from the intersection of the center line of said County Road with the North line of the South half of the Benjamin Munkers Donation Land Claim in Township 8 South, Range 2 West of the Willamette Meridian in Marion County, Oregon, said point of beginning being the Southeast corner of a tract of land conveyed to M. E. Fitzpatrick by deed recorded in Volume 399, Page 361, Deed Records for said County and State; thence South 73° 00' West 276.40 feet to the Southwest corner of said tract; thence South 17° 00' East parallel with the center of said County Road, 147.00 feet; thence North 75° 46' East, 276.60 feet to a point in the center of said County Road; thence North 17° 00' West 164.10 feet to the Place of Beginning.

EXCEPTING THEREFROM that portion within the limits of the County Road.

Reserving for road and right of way purposes a strip of land 30 feet in width off the Easterly side of the above described tract.

ALSO:

A parcel of land lying in the South half of the Benjamin Munkers Donation Land Claim No. 52 in Section 6 in Township 8 South, Range 2 West of the Willamette Meridian, in Marion County, Oregon, being more particularly described as follows:

Beginning at Engineer's Station 61+66.63 in the center of Lancaster Drive on the line dividing the North and South halves of the said Munkers Donation Land Claim as shown in C.S. 33072 as recorded in the Marion County Surveyors Office; thence South 15° 05' 13" East along the centerline of said Lancaster Drive, a distance of 490.21 feet to a point on the North line of those tracts of land described and recorded in Reel 1178, Page 590, Deed Records for Marion County, Oregon; thence South 78° 17' 14" West along said Northerly line a distance of 38.07 feet to the True Point of Beginning; thence South 15° 05' 13" East 19.37 feet; thence Southwesterly along the arc of a 25.00 foot radius curve to the right (the long chord of which bears South 29° 54' 47" West 35.36 feet) a distance of 39.27 feet; thence South 74° 54' 47" West 161.91 feet; thence Northwesterly along the arc of a 20.00 foot radius curve to the right (the long chord of which bears North 60° 06' 01" West 28.28 feet) a distance of 31.41 feet; thence North 15° 06' 52" West a distance of 36.58 feet to a point on said Northerly line; thence North 78° 17' 14" East along said Northerly line a distance of 207.29 feet to the True Point of Beginning.

EXCEPTING THEREFROM that portion conveyed to the City of Salem as Warranty Deed recorded September 20, 2018 in Reel 4123, Page 388, Deed Records for Marion County, Oregon

LIMITATIONS OF LIABILITY

"CUSTOMER" REFERS TO THE RECIPIENT OF THIS REPORT.

CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES THAT IT IS EXTREMELY DIFFICULT, IF NOT IMPOSSIBLE, TO DETERMINE THE EXTENT OF LOSS WHICH COULD ARISE FROM ERRORS OR OMISSIONS IN, OR THE COMPANY'S NEGLIGENCE IN PRODUCING, THE REQUESTED REPORT, HEREIN "THE REPORT." CUSTOMER RECOGNIZES THAT THE FEE CHARGED IS NOMINAL IN RELATION TO THE POTENTIAL LIABILITY WHICH COULD ARISE FROM SUCH ERRORS OR OMISSIONS OR NEGLIGENCE. THEREFORE, CUSTOMER UNDERSTANDS THAT THE COMPANY IS NOT WILLING TO PROCEED IN THE PREPARATION AND ISSUANCE OF THE REPORT UNLESS THE COMPANY'S LIABILITY IS STRICTLY LIMITED. CUSTOMER AGREES WITH THE PROPRIETY OF SUCH LIMITATION AND AGREES TO BE BOUND BY ITS TERMS.

THE LIMITATIONS ARE AS FOLLOWS AND THE LIMITATIONS WILL SURVIVE THE CONTRACT:

ONLY MATTERS IDENTIFIED IN THIS REPORT AS THE SUBJECT OF THE REPORT ARE WITHIN ITS SCOPE. ALL OTHER MATTERS ARE OUTSIDE THE SCOPE OF THE REPORT.

CUSTOMER AGREES, AS PART OF THE CONSIDERATION FOR THE ISSUANCE OF THE REPORT AND TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE LIABILITY OF THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS FOR ANY AND ALL CLAIMS, LIABILITIES, CAUSES OF ACTION, LOSSES, COSTS, DAMAGES AND EXPENSES OF ANY NATURE WHATSOEVER, INCLUDING ATTORNEY'S FEES, HOWEVER ALLEGED OR ARISING, INCLUDING BUT NOT LIMITED TO THOSE ARISING FROM BREACH OF CONTRACT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF WARRANTY, EQUITY, THE COMMON LAW, STATUTE OR ANY OTHER THEORY OF RECOVERY, OR FROM ANY PERSON'S USE, MISUSE, OR INABILITY TO USE THE REPORT OR ANY OF THE MATERIALS CONTAINED THEREIN OR PRODUCED, **SO THAT THE TOTAL AGGREGATE LIABILITY OF THE COMPANY AND ITS AGENTS, SUBSIDIARIES, AFFILIATES, EMPLOYEES, AND SUBCONTRACTORS SHALL NOT IN ANY EVENT EXCEED THE COMPANY'S TOTAL FEE FOR THE REPORT.**

CUSTOMER AGREES THAT THE FOREGOING LIMITATION ON LIABILITY IS A TERM MATERIAL TO THE PRICE THE CUSTOMER IS PAYING, WHICH PRICE IS LOWER THAN WOULD OTHERWISE BE OFFERED TO THE CUSTOMER WITHOUT SAID TERM. CUSTOMER RECOGNIZES THAT THE COMPANY WOULD NOT ISSUE THE REPORT BUT FOR THIS CUSTOMER AGREEMENT, AS PART OF THE CONSIDERATION GIVEN FOR THE REPORT, TO THE FOREGOING LIMITATION OF LIABILITY AND THAT ANY SUCH LIABILITY IS CONDITIONED AND PREDICATED UPON THE FULL AND TIMELY PAYMENT OF THE COMPANY'S INVOICE FOR THE REPORT.

THE REPORT IS LIMITED IN SCOPE AND IS NOT AN ABSTRACT OF TITLE, TITLE OPINION, PRELIMINARY TITLE REPORT, TITLE REPORT, COMMITMENT TO ISSUE TITLE INSURANCE, OR A TITLE POLICY, AND SHOULD NOT BE RELIED UPON AS SUCH. THE REPORT DOES NOT PROVIDE OR OFFER ANY TITLE INSURANCE, LIABILITY COVERAGE OR ERRORS AND OMISSIONS COVERAGE. THE REPORT IS NOT TO BE RELIED UPON AS A REPRESENTATION OF THE STATUS OF TITLE TO THE PROPERTY. THE COMPANY MAKES NO REPRESENTATIONS AS TO THE REPORT'S ACCURACY, DISCLAIMS ANY WARRANTY AS TO THE REPORT, ASSUMES NO DUTIES TO CUSTOMER, DOES NOT INTEND FOR CUSTOMER TO RELY ON THE REPORT, AND ASSUMES NO LIABILITY FOR ANY LOSS OCCURRING BY REASON OF RELIANCE ON THE REPORT OR OTHERWISE.

IF CUSTOMER (A) HAS OR WILL HAVE AN INSURABLE INTEREST IN THE SUBJECT REAL PROPERTY, (B) DOES NOT WISH TO LIMIT LIABILITY AS STATED HEREIN AND (C) DESIRES THAT ADDITIONAL LIABILITY BE ASSUMED BY THE COMPANY, THEN CUSTOMER MAY REQUEST AND PURCHASE A POLICY OF TITLE INSURANCE, A BINDER, OR A COMMITMENT TO ISSUE A POLICY OF TITLE INSURANCE. NO ASSURANCE IS GIVEN AS TO THE INSURABILITY OF THE TITLE OR STATUS OF TITLE. CUSTOMER EXPRESSLY AGREES AND ACKNOWLEDGES IT HAS AN INDEPENDENT DUTY TO ENSURE AND/OR RESEARCH THE ACCURACY OF ANY INFORMATION OBTAINED FROM THE COMPANY OR ANY PRODUCT OR SERVICE PURCHASED.

NO THIRD PARTY IS PERMITTED TO USE OR RELY UPON THE INFORMATION SET FORTH IN THE REPORT, AND NO LIABILITY TO ANY THIRD PARTY IS UNDERTAKEN BY THE COMPANY.

CUSTOMER AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY LAW, IN NO EVENT WILL THE COMPANY, ITS LICENSORS, AGENTS, SUPPLIERS, RESELLERS, SERVICE PROVIDERS, CONTENT PROVIDERS, AND ALL OTHER SUBSCRIBERS OR SUPPLIERS, SUBSIDIARIES, AFFILIATES, EMPLOYEES AND SUBCONTRACTORS BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, PUNITIVE, EXEMPLARY, OR SPECIAL DAMAGES, OR LOSS OF PROFITS, REVENUE, INCOME, SAVINGS, DATA, BUSINESS, OPPORTUNITY, OR GOODWILL, PAIN AND SUFFERING, EMOTIONAL DISTRESS, NON-OPERATION OR INCREASED EXPENSE OF OPERATION, BUSINESS INTERRUPTION OR DELAY, COST OF CAPITAL, OR COST OF REPLACEMENT PRODUCTS OR SERVICES, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, NEGLIGENCE, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTIES, FAILURE OF ESSENTIAL PURPOSE, OR OTHERWISE AND WHETHER CAUSED BY NEGLIGENCE, ERRORS, OMISSIONS, STRICT LIABILITY, BREACH OF CONTRACT, BREACH OF WARRANTY, THE COMPANY'S OWN FAULT AND/OR NEGLIGENCE OR ANY OTHER CAUSE WHATSOEVER, AND EVEN IF THE COMPANY HAS BEEN ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES OR KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY FOR SUCH DAMAGES.

END OF THE LIMITATIONS OF LIABILITY

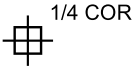
08 2W 06AB

SEE MAP
072W31C

(OR 22)

SEE MAP
072W31D

24 01 0



REMAINDER OF THIS PARCEL
ON MAP 07 2W 31C

9700
0.37 AC

9901
1.05 AC

10000
0.67 AC

10100
0.93 AC

24 01 3

LANCASTER DRIVE

9600
0.41 AC

9500
0.38 AC

9300
0.32 AC

9200
0.40 AC

9100
0.66 AC

1600

13

1400

1300

1200

1100

CAMPBELL

1700

1900

2000

2100

1800

3800

3900

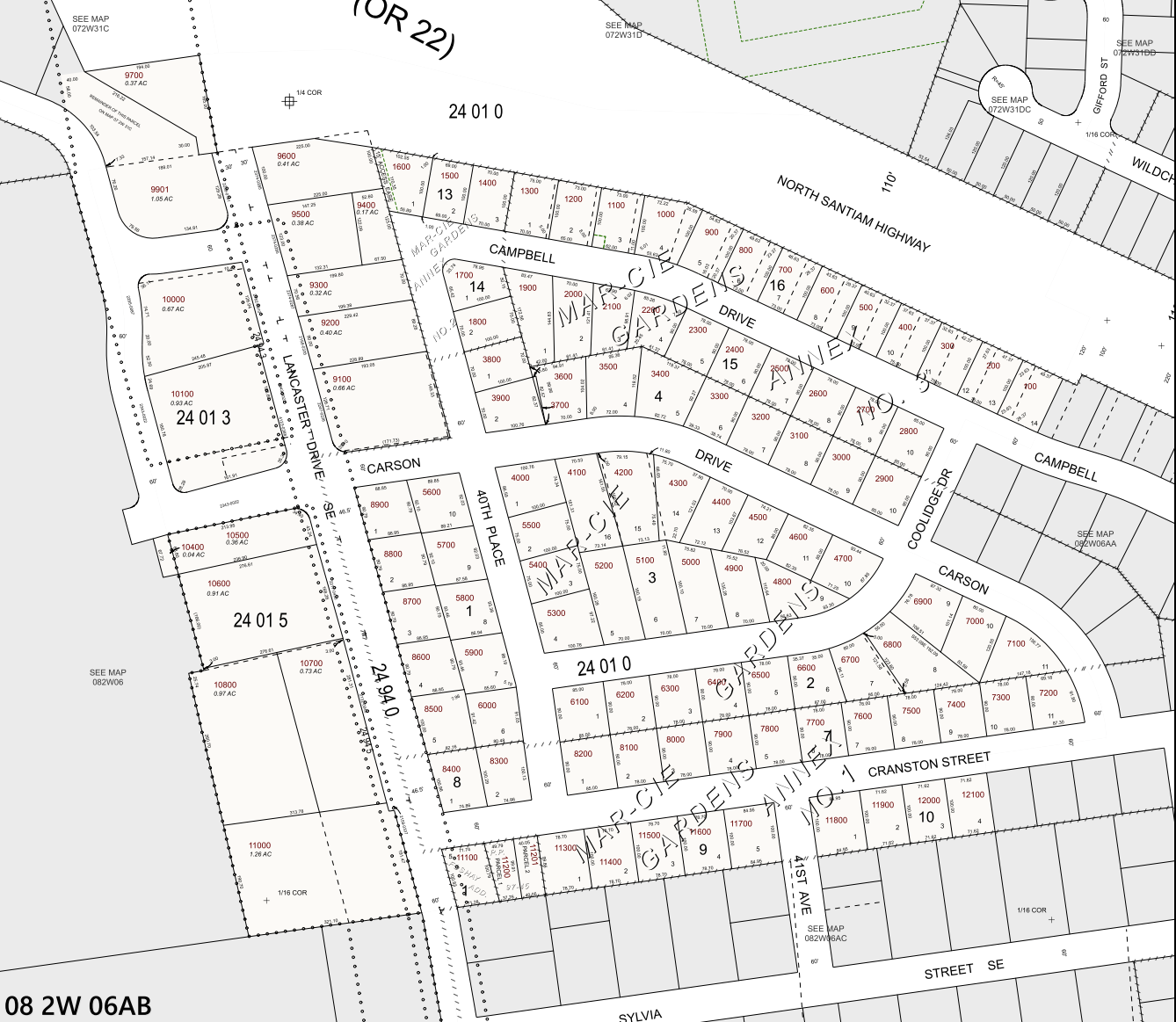
3600

3500

MAR-CIE GARDENS
ANNEX NO. 2

CON

08 2W 06AB



08 2W 06AB

08 2W 06AB
SALEM



MARION COUNTY, OREGON
NW1/4 NE1/4 SEC6 T8S R2W W.M.
SCALE 1" = 100'

LEGEND

- LINE TYPES
- Taxlot Boundary
 - Road Right-of-Way
 - Railroad Right-of-Way
 - Private Road ROW
 - Subdivision/Plat Bndry
 - Waterline - Taxlot Bndry
 - Historical Boundary
 - Easement
 - Railroad Centerline
 - Taxcode Line
 - Map Boundary
 - Waterline - Non Bndry

- CORNER TYPES
- + 1/16TH Section Cor.
 - ⊙ DLC Corner
 - ⊕ 1/4 Section Cor.
 - ⊕ 16 1/2 Section Corner
 - ⊕ 21 22

NUMBERS
Tax Code Number
00 00 0
Acreage 0.29 AC All acres listed are Net Acres, excluding any portions of the taxlot within public ROWs

NOTES
Tick Marks: A tick mark in the road indicates that the labeled dimension extends into the public ROW

CANCELLED NUMBERS			
9000			
9800			
9900			
9902			
10200			
10300			
10401			
10601			
10600			

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY



FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT www.co.marion.or.us

PLOT DATE: 10/16/2020

SALEM
08 2W 06AB

Contact with Neighborhood Assoc.

From: Leonard Lodder
Sent: Thursday, January 19, 2023 8:22 PM
To: 'robosushi@robosushi.com'
Cc: 'arasmussen@modernbuildingsystems.com'
Subject: Stop-N-Save Gas Station
Attachments: 2020-109 Stop-N-Save Gas SPR 3rd Pass 01-19-2023.pdf

Due to an incredible oversight at the City's Planning Department we are submitting a new Site Plan Review Application with a Conditional Use Application for an Oil Change Facility. The new plan will also accommodate 3 apartment units above a previously planned retail building. The attached file includes an existing conditions site plan as well as the proposed site plan.

Leonard Lodder, AIA, LEED AP

Studio 3 Architecture, Inc.

275 Court St. NE

Salem, OR 97301-3442

P: 503.390.6500

D: 971.239.0207

C: 503.949.3301

E: leonard@studio3architecture.com

W: www.studio3architecture.com



End of Application documentation.

The Application is supported by a separate pdf file containing the following sheets:

General Drawings:

Sheet G0.01 Cover Sheet

Sheet G0.02 General Notes

Sheet G3.01 Perspective Views

Civil Engineering Drawings:

Sheet C2.0 Grading and Drainage Plan

Sheet C3.0 Utility Plan

Architectural Drawings:

Sheet A1.01 Site Plan

Sheet A1.02 Site Plan – Existing Conditions

Separate Drawing:

Topographic Survey.