

Memorandum

To: **City of Woodburn**

Copy: **Ian Walline, Les Schwab Tire Centers**

From: **Melissa Webb, PE**

Date: **September 18, 2024**

Subject: **Les Schwab Tire Center – Trip Generation Memorandum**



Introduction

This memorandum reports and evaluates the transportation impacts related to the redevelopment of the existing Les Schwab Tire Center facility, located at 1140 N Pacific Highway in Woodburn, Oregon. The proposed development includes the construction of 1,866 square feet of new vehicle service center building space, removing 1,374 square feet of existing building space for a net increase of 492 square feet.

The purpose of this memorandum is to examine the projected trip generation of the proposed development for the morning peak hour, evening peak hour, and average weekday. Based on the trip generation projections, the City of Woodburn's and ODOT's impact thresholds for requiring a full Transportation Impact Analysis (TIA) will be evaluated.

Project Location & Description

The project site is located on tax lot numbers 051W08DC00700 and 051W08DC00401 and is situated east of N Pacific Highway and north of Hardcastle Avenue in Woodburn, Oregon. The properties together encompass approximately 1.75 acres and are currently developed as a Les Schwab Tire Center. The proposed vehicle service center addition will be an extension of the main building located in the southwest corner of lot 700. Access to the site is currently taken from existing access driveways along N Pacific Highway and Hardcastle Avenue.

An aerial view of the project site and the nearby vicinity is shown in Figure 1, with the subject site outlined in yellow. In addition, a site plan is attached to this memorandum.



Figure 1: Site Location (image from Google Earth)

Trip Generation

Between the two tax lots there are four buildings related to the Les Schwab Tire Center:

- Building 1 – Showroom and Vehicle Service Center
- Building 2 – Warehouse
- Building 3 – Alignment Center
- Building 4 – Truck and Large Vehicle Servicing Center

The proposed development will include constructing an approximate 1,866 square foot addition to the Building 1 vehicle service center. To make room for the additional square footage, a breezeway between Buildings 1 and 2 will be demolished along with a portion of Building 2, approximately 1,374 square feet of removed building area for a net increase of approximately 492 square feet. In addition, two vehicle canopies will be removed (one on the north side of Building 1 and another between Buildings 1 and 2). Buildings 3 and 4 will remain as is.

In addition, two vehicle canopies will be removed, one on the north side of Building 1 and another between Buildings 1 and 2. Each canopy accommodates covered service bays (four vehicle bays off Building 1 and two RV

bays between Buildings 1 and 2). The square footage of the bays was not included as part of the demolished building square footage.

To estimate the number of trips that will be generated by the proposed development, trip rates from the *Trip Generation Manual*¹ were used. Data from the land use code 943, *Automobile Parts and Service Center*, was used to estimate the existing and proposed development’s trip generation based on the square footage of gross floor area. The existing and redeveloped square footage of Buildings 1 and 2 were compared in order to determine a net increase in square footage due to the vehicle service center addition.

The trip generation calculations show that the proposed development is projected to generate up to 1 additional morning peak hour trip, up to 1 additional evening peak hour trip, and up to 8 additional average weekday trips. The resulting trip generation estimates are summarized in Table 1. Detailed trip generation calculations are included as an attachment to this memorandum.

Table 1: Trip Generation

ITE Code	Intensity	Morning Peak Hour			Evening Peak Hour			Daily Trips
		In	Out	Total	In	Out	Total	
Existing Conditions								
943 – Automobile Parts and Service Center (Building 1)	7,152 SF	10	4	14	6	9	15	120
943 – Automobile Parts and Service Center (Building 2)	3,861 SF	5	2	7	3	5	8	64
Total Existing	11,013 SF	15	6	21	9	14	23	184
Proposed Redevelopment								
943 – Automobile Parts and Service Center (Building 1)	9,018 SF	12	5	17	7	12	19	150
943 – Automobile Parts and Service Center (Building 2)	2,487 SF	4	1	5	2	3	5	42
Total Proposed	11,505 SF	16	6	22	9	15	24	192
Net Increase in Primary Trips	492 SF	1	0	1	0	1	1	8

Transportation Impact Analysis Requirements

The Woodburn Development Ordinance (WDO) section 3.04.05 states a TIA is required if a development generates 50 or more peak hour trips or 500 or more average daily trips (ADT). Additionally, per *Table 3.2: TIA Threshold and Analysis Areas* in ODOT’s *Development Review Guidelines*², a TIA would be necessary if the

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

² Oregon Department of Transportation, *Development Review Guidelines*, 2017.



proposed development were to generate 50 morning or evening peak hour trips, or 300 average daily trip impacts to ODOT intersections. Based on the trip generation estimates provided in Table 1, the proposed development generates less than 50 peak hour trips and less than 300 ADT. Therefore, a TIA is not required as part of the proposed development application.

Conclusions

The proposed development is not projected to trigger the City of Woodburn's or ODOT's trip impact thresholds requiring the need for a full TIA. Therefore, the construction and occupancy of the proposed building is not expected to create significant impacts to the transportation system, whereby this trip generation analysis memorandum is sufficient to capture the trip impacts of the proposed development.

Attachments

Site Plan

Trip Generation



SITE PLAN

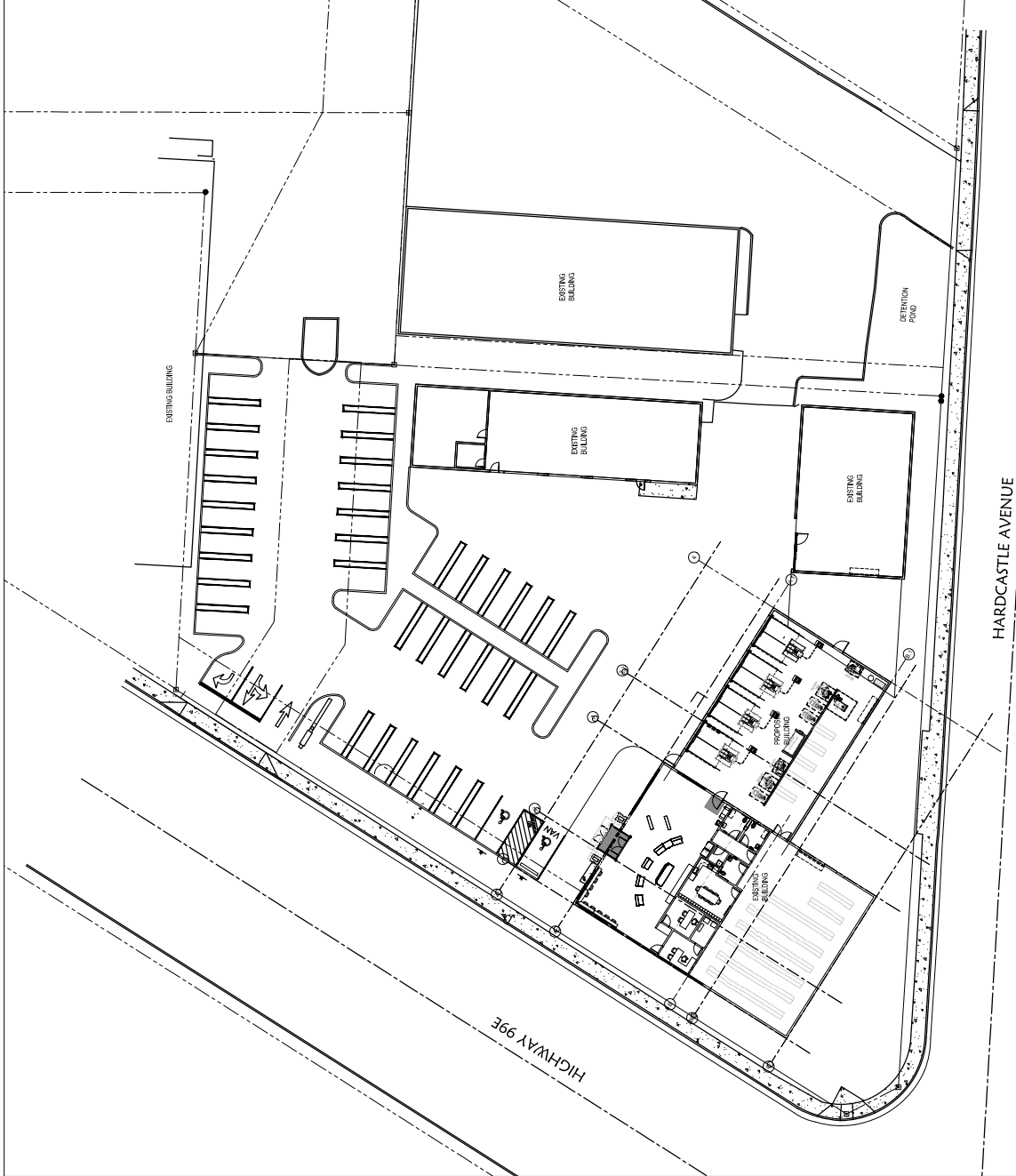
PROJECT NO.: 24-124
DATE: 07/17/24
DRAWN BY: TE CHECKED BY: FR

A100

COPYRIGHT

GENERAL NOTES

- UNOBTAINED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES IS THE CONTRACTOR'S RESPONSIBILITY. THE LOCATION OF THE HOUSING THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY EXISTING UTILITY LINES OR STRUCTURES LOCATED ON THE PROPERTY.
- SEE MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS FOR ASSOCIATED WORK. VERIFY ALL DIMENSIONS, SPACING, AND DEPTHS FOR ALL UNDERGROUND, REMOVAL, RELOCATION OF ELECTRICAL, THE ALJMA & MECHANICAL WORK SHALL BE AS SHOWN ON DRAWINGS.
- MAINTAIN & PROTECT ALL EXISTING WORK TO REMAIN AS NECESSARY.
- EXISTING WORK TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER. CONTRACTOR IS RESPONSIBLE FOR HANDLING & DISPOSAL OF ALL DEBRIS. ALL MATERIALS TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND APPEARANCE OF ADJACENT MATERIALS SHALL BE MAINTAINED.
- MAINTAIN FULL UNOBSTRUCTED ACCESS TO ALL BUILDING ENTRIES THROUGHOUT CONSTRUCTION.



1 SITE PLAN
A100 1" = 20'-0"



TRIP GENERATION CALCULATIONS
Existing Conditions - Building 1

Land Use: Automobile Parts and Service Center
Land Use Code: 943
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Formula Type: Rate
Variable Quantity: 7.2

AM PEAK HOUR

Trip Rate: 1.91

	Enter	Exit	Total
Directional Split	72%	28%	
Trip Ends	10	4	14

PM PEAK HOUR

Trip Rate: 2.06

	Enter	Exit	Total
Directional Split	39%	61%	
Trip Ends	6	9	15

WEEKDAY

Trip Rate: 16.6

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	60	60	120

Source: Trip Generation Manual, 11th Edition



TRIP GENERATION CALCULATIONS
Existing Conditions - Building 2

Land Use: Automobile Parts and Service Center
Land Use Code: 943
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Formula Type: Rate
Variable Quantity: **3.9**

AM PEAK HOUR

Trip Rate: 1.91

	Enter	Exit	Total
Directional Split	72%	28%	
Trip Ends	5	2	7

PM PEAK HOUR

Trip Rate: 2.06

	Enter	Exit	Total
Directional Split	39%	61%	
Trip Ends	3	5	8

WEEKDAY

Trip Rate: 16.6

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	32	32	64

Source: Trip Generation Manual, 11th Edition



TRIP GENERATION CALCULATIONS
Proposed Conditions - Building 1

Land Use: Automobile Parts and Service Center
Land Use Code: 943
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Formula Type: Rate
Variable Quantity: 9.02

AM PEAK HOUR

Trip Rate: 1.91

	Enter	Exit	Total
Directional Split	72%	28%	
Trip Ends	12	5	17

PM PEAK HOUR

Trip Rate: 2.06

	Enter	Exit	Total
Directional Split	39%	61%	
Trip Ends	7	12	19

WEEKDAY

Trip Rate: 16.6

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	75	75	150

Source: Trip Generation Manual, 11th Edition



TRIP GENERATION CALCULATIONS
Proposed Conditions - Building 2

Land Use: Automobile Parts and Service Center
Land Use Code: 943
Land Use Subcategory: All Sites
Setting/Location: General Urban/Suburban
Variable: 1000 SF GFA
Trip Type: Vehicle
Formula Type: Rate
Variable Quantity: 2.5

AM PEAK HOUR

Trip Rate: 1.91

	Enter	Exit	Total
Directional Split	72%	28%	
Trip Ends	4	1	5

PM PEAK HOUR

Trip Rate: 2.06

	Enter	Exit	Total
Directional Split	39%	61%	
Trip Ends	2	3	5

WEEKDAY

Trip Rate: 16.6

	Enter	Exit	Total
Directional Split	50%	50%	
Trip Ends	21	21	42

Source: Trip Generation Manual, 11th Edition