

# Traffic Impact Analysis

Florence Dollar General

Florence, Oregon

**Prepared For:**

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# Traffic Impact Analysis

## **Project Information**

Project: Florence Dollar General

Prepared for: Capital Growth Buchalter, Inc

## **Reviewing Agency**

Jurisdiction: City of Florence

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## Signature

The technical material and data contained in the Traffic Impact Analysis were prepared under the supervision and direction of the undersigned, whose seal, as a professional engineer licensed to practice as such, is affixed below.



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Prepared by Ryan Shea, PTP, Senior Transportation  
Planner



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Approved by Eric Johnston, PE, Principal



10/23/2023

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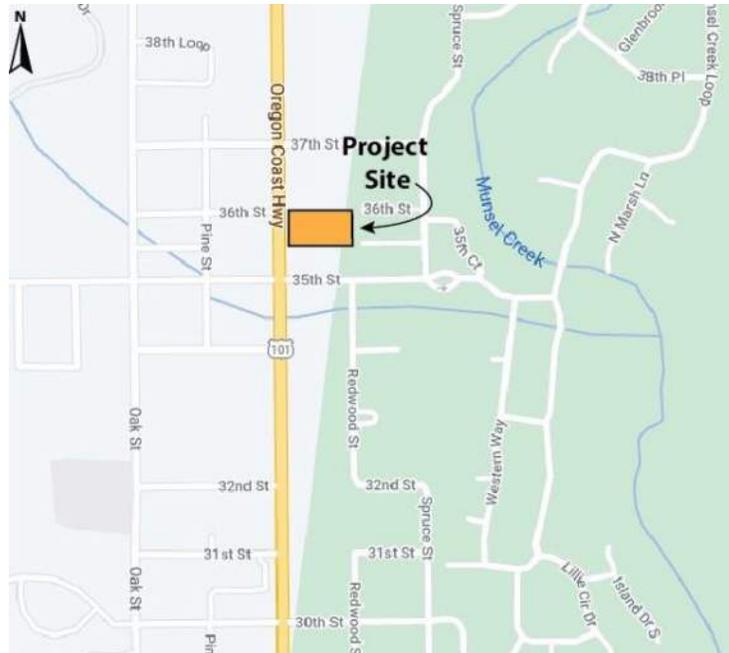
Appendix A	Traffic Volume Counts
Appendix B	Traffic Volume Calculation Worksheets
Appendix C	Capacity Analysis Worksheets

# 1 Introduction

## 1.1 Project Overview

Capital Growth Buchalter, Inc. proposes to construct a new Dollar General neighborhood store to be located along US Highway 101 in Florence, Oregon. The proposed store will be 10,640 square feet in size. **Figure 1** illustrates the site vicinity and the transportation network serving the project area.

**Figure 1.** Site Vicinity Map



## 1.2 Study Context

This report has been prepared to provide the traffic analysis and project information for the City of Florence in reviewing the development proposal. The report describes the existing and forecasted operation of the following study area intersections:

- ◆ US 101/37<sup>th</sup> Street
- ◆ US 101/35<sup>th</sup> Street
- ◆ Redmond Street/35<sup>th</sup> Street
- ◆ Site Driveway/US 101

Operational analysis has been prepared for existing 2023 AM and PM peak hour conditions and forecasted 2024 AM and PM peak hour conditions with and without completion of the development.

## 2 Project Description

### 2.1 Development Proposal

The proposed project would construct a new 10,640 square foot Dollar General neighborhood store on undeveloped land in Florence, OR. The project will provide thirty-one parking stalls, including two ADA stalls, and will provide four bicycle parking stalls. Access to the project will be provided by two existing site driveways: one along US Highway 101 and one along 35<sup>th</sup> Street. The driveway along US highway 101 is restricted to right-in-right-out (RIRO) and the driveway along 35<sup>th</sup> Street provides full access. Both driveways also serve an existing Burger King restaurant directly south of the proposed project. The project is anticipated to open in 2024.

The preliminary site plan is provided on **Figure 2**.



## 3 Existing Conditions

### 3.1 Area Land Uses

The *Florence Dollar General* project will be constructed on undeveloped land in Florence, OR. The adjacent land uses are primarily residential and commercial.

### 3.2 Roadway Inventory

#### 3.2.1 US Highway 101 (Oregon Coast Highway)

US Highway 101 (Oregon Coast Highway) is a north-south highway/major arterial that extends through the state of Oregon along the western coastline. Within the study area, this is a five-lane roadway with two travel lanes in each direction and a two-way left-turn lane. Bike lanes and sidewalks are provided on both sides of the road. Along the project frontage this roadway has a posted speed limit of 40 mph.

#### 3.2.2 35<sup>th</sup> Street

35<sup>th</sup> Street is an east-west collector providing one lane in each direction with a posted speed limit of 25 mph. Along the project frontage bike lanes and sidewalks are provided.

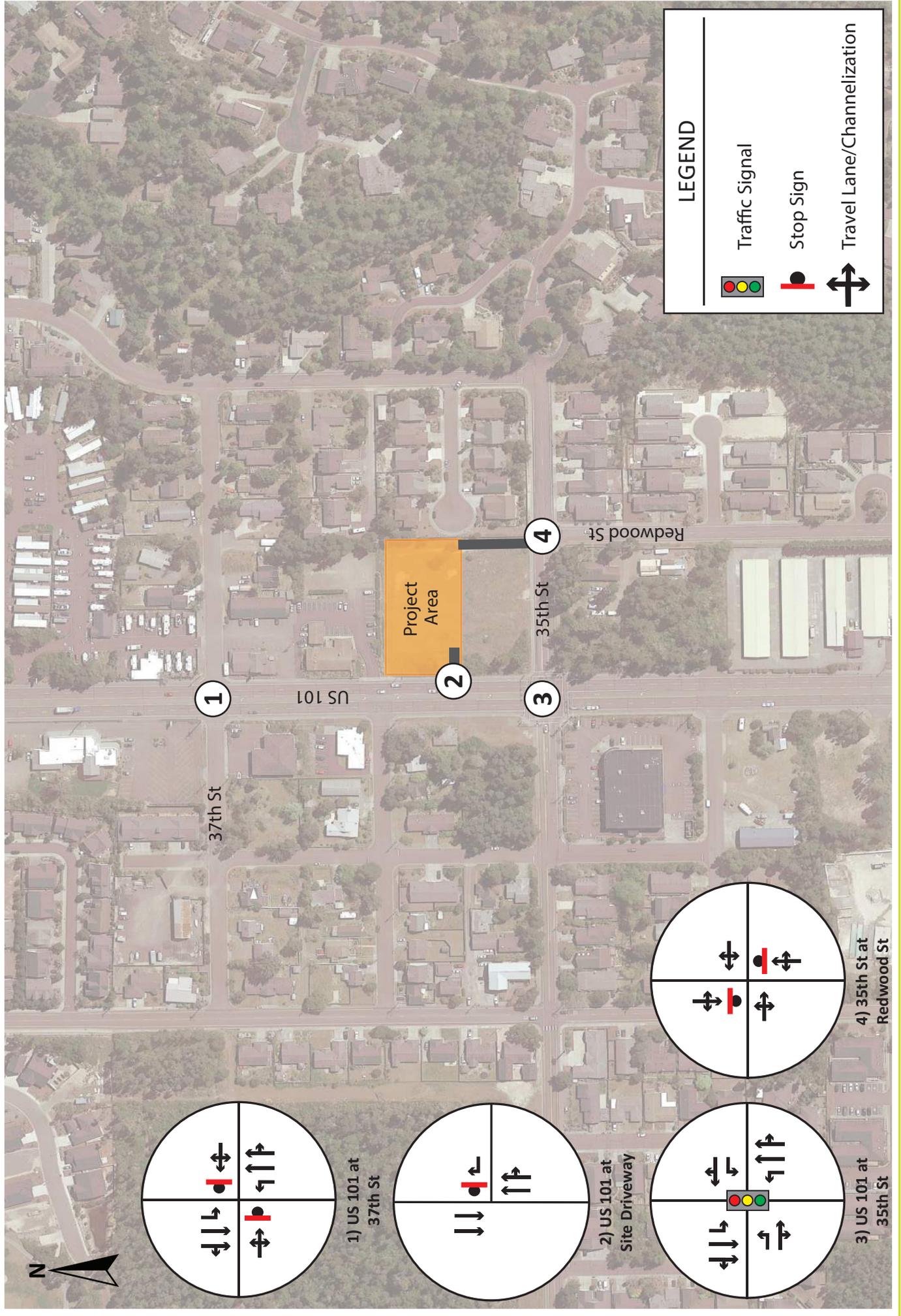
#### 3.2.3 37<sup>th</sup> Street

37<sup>th</sup> Street is an east-west local road extending from Oak Street to Spruce Street. This roadway provides one lane in each direction with a speed limit of 25 mph.

#### 3.2.4 Redwood Street

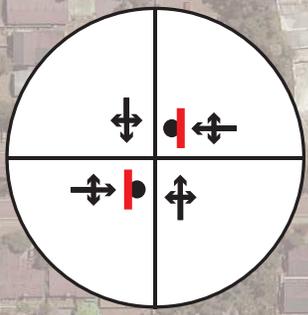
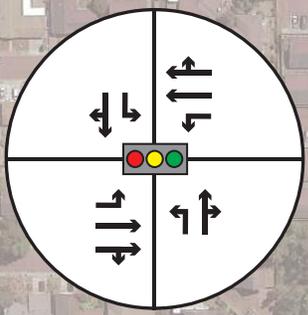
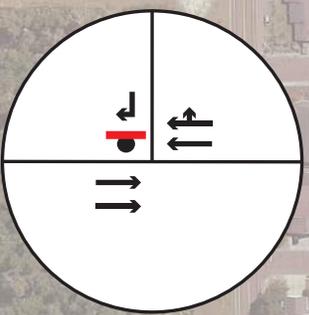
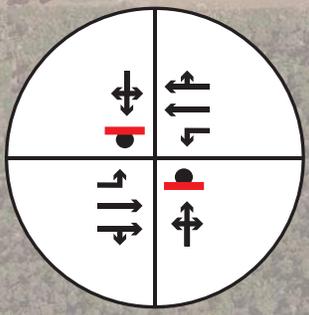
Redwood Street is a north-south collector providing one lane in each direction. Within the project vicinity, this roadway provides bike lanes and sidewalks and has a posted speed limit of 25 mph. Redwood Street has its northern terminus at 35<sup>th</sup> Street, with the project site driveway extending north of 35<sup>th</sup> Street.

A summary of the existing intersection channelization and control type for the study intersection is provided in **Figure 3**.



**LEGEND**

-  Traffic Signal
-  Stop Sign
-  Travel Lane/Channelization



**Figure 3**  
Existing Channelization

**Dollar General**  
Florence, Oregon  
Traffic Impact Analysis

### 3.3 Traffic Volume Data

Quality Counts, a transportation data collection service, provided AM and PM peak period turning movement counts at the following study intersections:

- ◆ US 101/37<sup>th</sup> Street
- ◆ US 101/35<sup>th</sup> Street
- ◆ Redmond Street/35<sup>th</sup> Street

The counts were conducted on October 10, 2023 between 7:00 am and 9:00 am for the morning peak period and between 4:00 pm and 6:00 pm for the evening peak period.

The existing right-in-right-out driveway serving the Burger King property, which will also provide access to the proposed project site, was not counted. Given its proximity to the US 101 and 25<sup>th</sup> Street intersection, through volumes were taken from that count. The right turns associated with the Burger King site were taken from the Traffic Impact Analysis. To be conservative the right turns for the Burger King were added to the total through traffic on US 101.

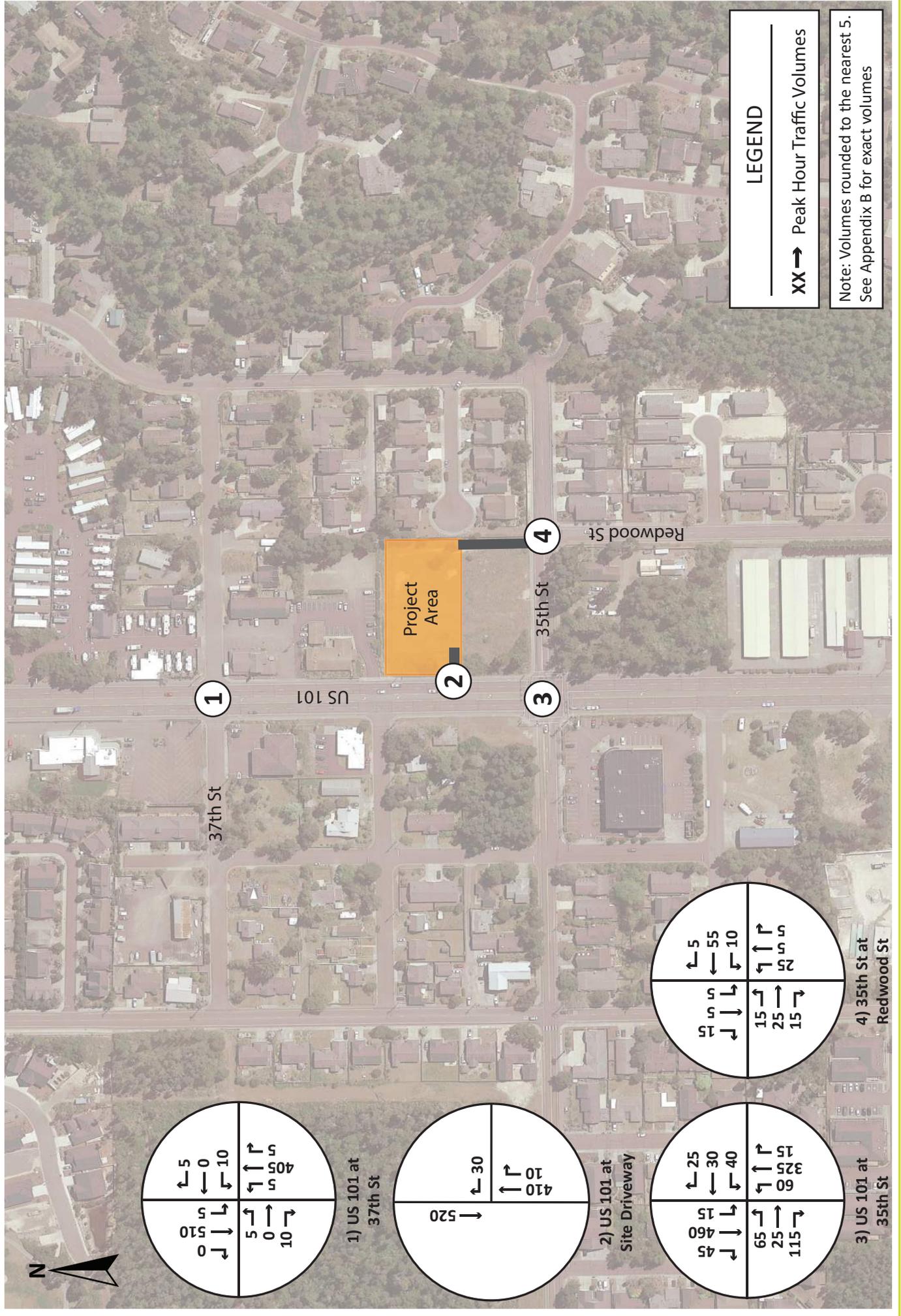
The turning movement count diagrams are provided in **Appendix A**

#### 3.3.1 Seasonal Adjustment

The Oregon DOT *Analysis Procedures Manual* (APM) Chapter 5 provides guidance for performing seasonal adjustments to traffic volume data to develop 30<sup>th</sup> highest hourly design volumes (30 HV). Data from the seasonal trend table (updated 11/10/2022) was reviewed to identify the most appropriate traffic count seasonal adjustment factors. The seasonal trend data for Coastal Destination was used. Following procedures in the APM, the data month (October, 15th) and the seasonal trend peak period factor were used to calculate the adjustment value. The October 15<sup>th</sup> data point was selected as it was nearest the count day, October 10<sup>th</sup>. The October 1<sup>st</sup> data point was a lower factor than October 15<sup>th</sup>, so while using interpolation to identify a factor specific to October 10<sup>th</sup> is possible with the available data, using the adjustment factor for October 15<sup>th</sup> provides a more conservative volume adjustment by providing higher adjusted volumes.

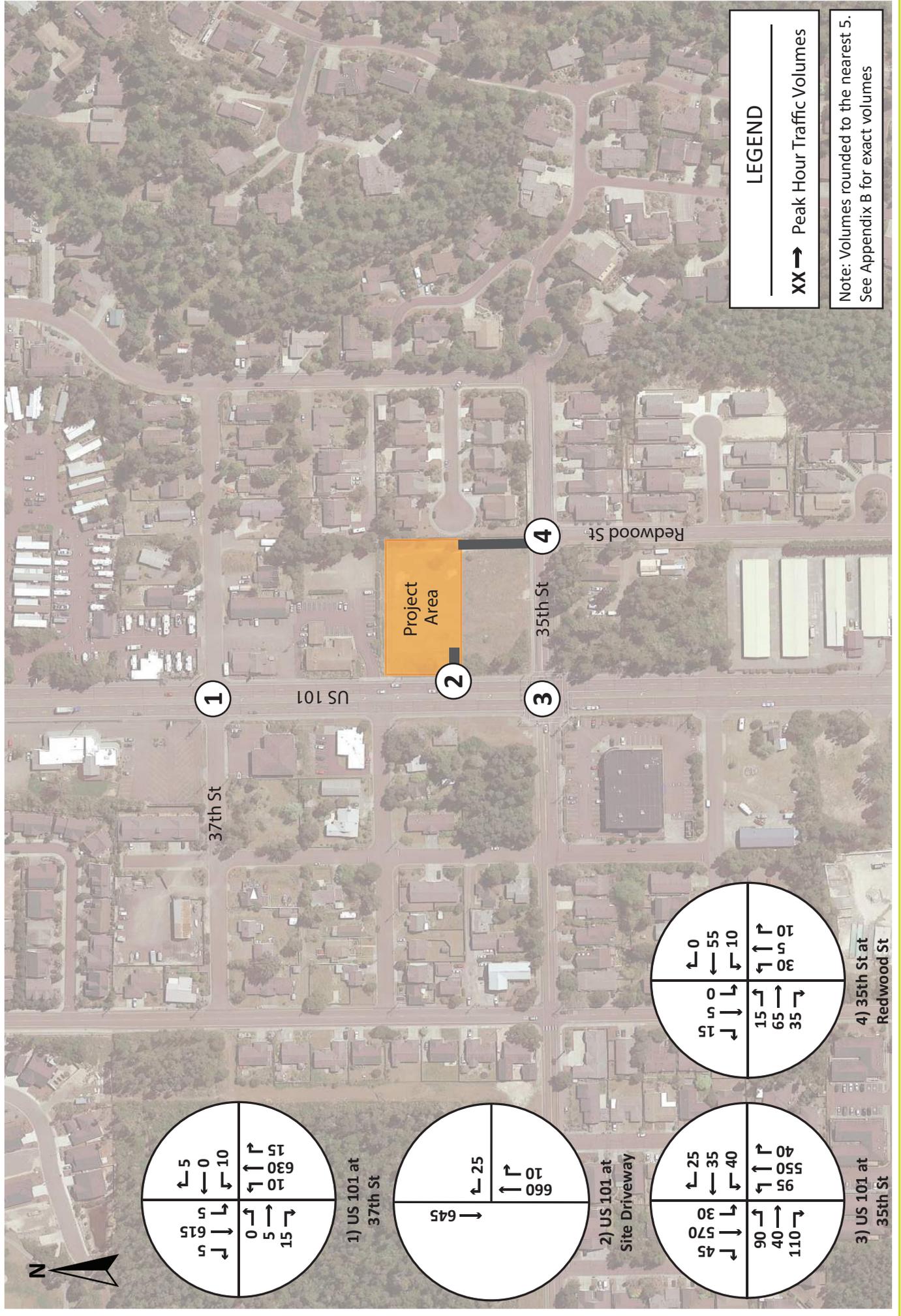
The rounded seasonal adjustment value of 1.30 was selected and applied to the raw traffic counts to develop the seasonally adjusted volumes that are used in this Traffic Impact Analysis.

The existing, seasonally adjusted 2023 traffic volumes for the study intersections for the AM peak hour are presented in **Figure 4** and the PM peak hour in **Figure 5** for the study intersections.



**Figure 4**  
 Existing 2023 Seasonally Adjusted  
 AM Peak Hour Traffic Volumes

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 Florence, Oregon  
 Traffic Impact Analysis



**Figure 5**  
 Existing 2023 Seasonally Adjusted  
 PM Peak Hour Traffic Volumes

**Dollar General**  
 Florence, Oregon  
 Traffic Impact Analysis

### 3.4 Crash History

ODOT crash data records were reviewed to determine if any crashes had occurred in the study area over the five-year period from January 1, 2017 to December 31, 2021. A crash frequency rate per Millions of Entering Vehicles (MEV) was calculated for the study intersections based on the following formula:

$$\text{Crash Rate} = \frac{1,000,000 \times \text{Total Crashes}}{365 \times \text{Number of Years} \times \text{Average Daily Entering Traffic}}$$

The average daily traffic entering the study intersection was estimated by adding the entering PM peak hour turning movements and multiplying by a factor of 10. We have summarized the crash data for the study intersections in **Table 1**.

**Table 1. Existing Crash Severity by Study Intersection**

Intersection	Total Daily Entering Traffic	Total Number of Reported Crashes	Number of Injury Crashes	Average crashes per Year	Crashes per MEV
US Highway 101 at 35 <sup>th</sup> Street	12,830	10	5	2	<b>0.43</b>
Redwood Street at 35 <sup>th</sup> Street	1,810	1	1	0.2	<b>0.30</b>
US Highway 101 at 37 <sup>th</sup> Street	10,010	0	0	0	<b>0.00</b>

Within the study area, there are no intersections that have a crash rate greater than 1.0 crashes per million entering vehicles. There were no fatal or major injury crashes reported.

### 3.5 Transit and Non-Motorized Facilities

Rhody Express currently provides transit services in the City of Florence. The project site and vicinity are served by the North Loop transit route. The closest transit stop is located approximately 0.35 miles southwest of the project site.

In the project vicinity, sidewalks and bicycle lanes are provided along US Highway 101 (Oregon Coast Highway) and 35<sup>th</sup> Street.

## 4 Project Traffic Characteristics

### 4.1 Site-Generated Traffic Volumes

The two project-related characteristics having the most effect on area traffic conditions are peak hour trip generation and the directional distribution of traffic volumes on the surrounding roadway network. These are discussed in the following paragraphs.

#### Site-Generated Traffic Volumes

Vehicle trip generation was calculated using the trip generation rates contained in the 11<sup>th</sup> edition of the Trip Generation Manual by the *Institute of Transportation Engineers (ITE)*. The Variety Store category (land-use code #814) was determined to be the most applicable to this project based on the following ITE description of this project type:

*A variety store is a retail store that sells a broad range of inexpensive items often at a single price. These stores are typically referred to as “dollar stores.”*

It is anticipated that this project will attract some traffic from people already driving on area roadways. These trips are not new trips added to the local roadways by a project (primary trips) but represent “pass-by” trips according to the following definition:

Pass-by Trips are trips made as an intermediate stop from an origin to a primary destination by vehicles passing directly by the project driveway.

The 3<sup>rd</sup> edition of the ITE Trip Generation Handbook provides information on pass-by rates for different land uses. The PM peak hour new-to-network trip total reflects an estimated 34 percent occurrence of “pass-by” vehicles which should be deducted from total project trip generation estimates on the surrounding street system but included in the estimated driveway volumes. The ITE Handbook does not provide a pass-by rate for the AM peak hour. For daily, the PM peak hour pass-by rate was used.

The trip generation used for the AM peak hour and PM peak hour trips are shown in **Table 2**.

**Table 2. Trip Generation Rates for Variety Store (LU 814)**

Time Period	Unit	Trip Rate	Pass-By %	% Enter	% Exit
AM Peak Hour	1,000 sf	3.04	0%	55%	45%
PM Peak Hour	1,000 sf	6.70	34%	51%	49%
Daily	1,000 sf	63.66	34%	50%	50%

The total trip generation expected from this project is calculated by applying the unit measure for each land use category to the appropriate trip generation rate. The trip generation calculations are shown in **Table 3**.

**Table 3. Project Trip Generation**

Time Period	Size (1,000 sf)	Total Trips	Pass-By Trips*	New-to-Network Trips		
				Enter	Exit	Total
AM Peak Hour	10.640	32	0	18	45	32
PM Peak Hour	10.640	71	25	24	23	47
Daily	10.640	677	230	224	223	447

\*Pass by trips were assigned evenly to US Highway 101

## 4.2 Site Traffic Distribution and Assignment

The regional distribution of traffic to and from the proposed project was estimated based on the trip distribution identified in the approved Traffic Impact Analysis prepared by Branch Engineering for the adjacent Burger King project. The regional traffic distribution percentages and site traffic assignment for the proposed development for the AM peak hour are shown on **Figure 6** and the PM peak hour is shown on **Figure 7**.

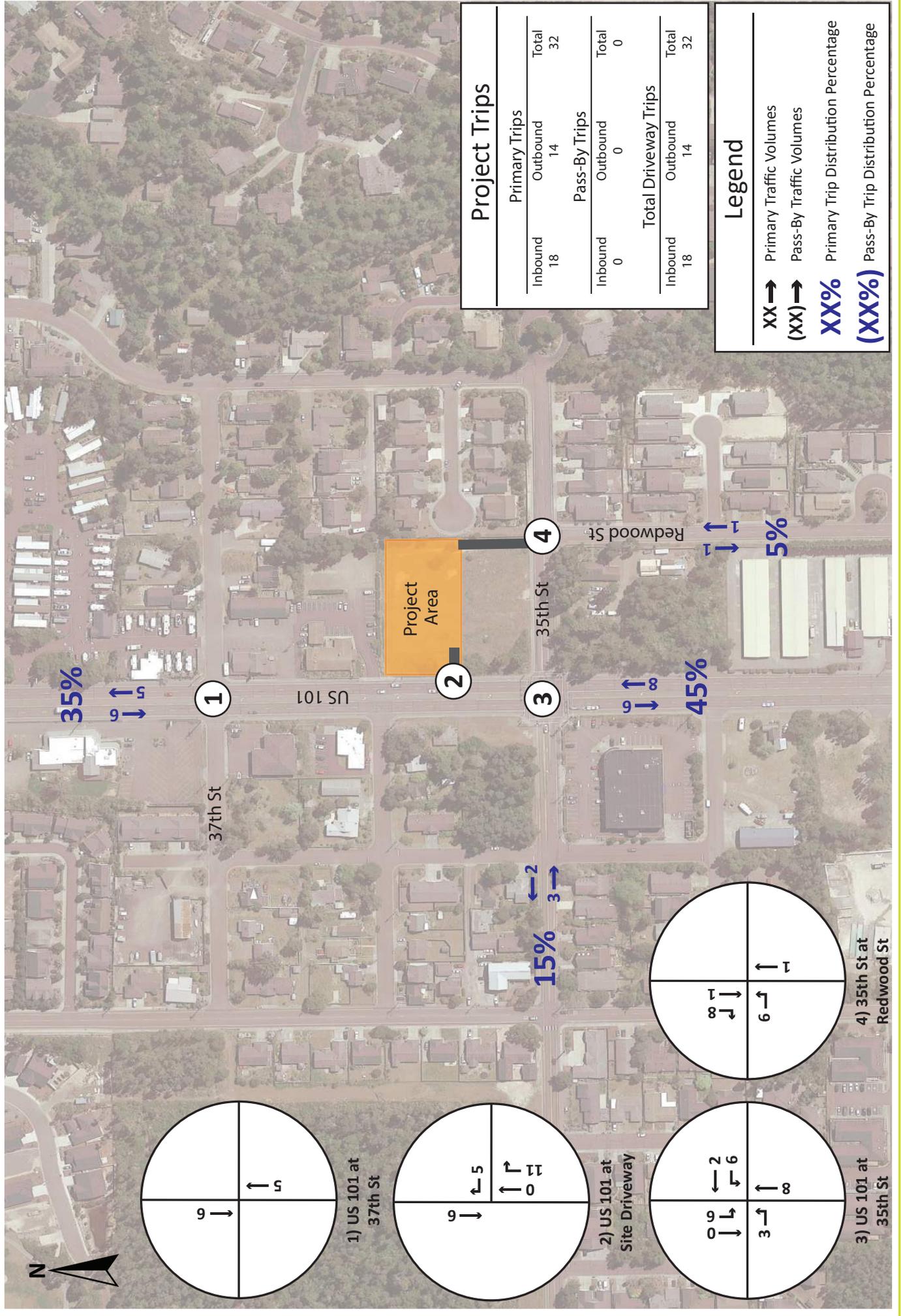


Figure 6  
 Site-Generated Traffic Volumes  
 AM Peak Hour

Dollar General  
 Florence, Oregon  
 Traffic Impact Analysis

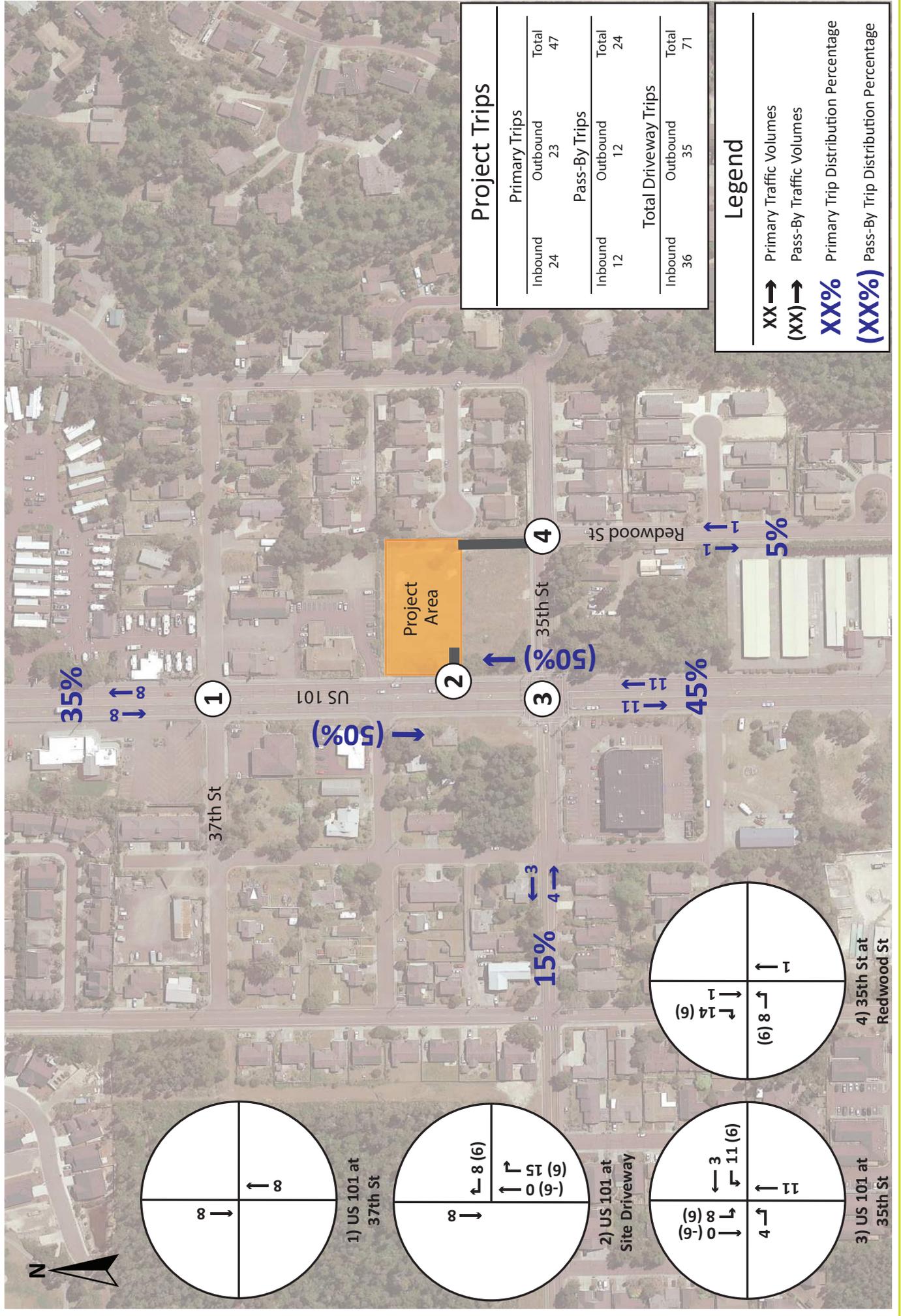


Figure 7  
 Site-Generated Traffic Volumes  
 PM Peak Hour

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 Florence, Oregon  
 Traffic Impact Analysis

## 5 Future Traffic Conditions

This section describes any planned roadway or intersection improvements within the study area and traffic volume forecast calculations. These two elements will contribute to the projected 2024 operational analysis.

### 5.1 Planned Roadway Improvements

The *Florence Transportation System Plan (TSP)*, published in 2012, does not include identified project strategies that could affect the study area. The *Oregon 2024-2027 State Transportation Improvement Program (STIP)* was reviewed and no projects were identified in the project area.

### 5.2 Future Traffic Volumes

Oregon Department of Transportation Development Review Guidelines, Table 3.3; Future Year Analysis: Suggested Time lines, identifies the horizon year to be the year of opening for single phase projects with up to 999 ADT. Based on these guidelines, traffic volume forecasts were prepared for the 2024 opening year. The future year analysis was completed for both the AM and PM peak hour conditions.

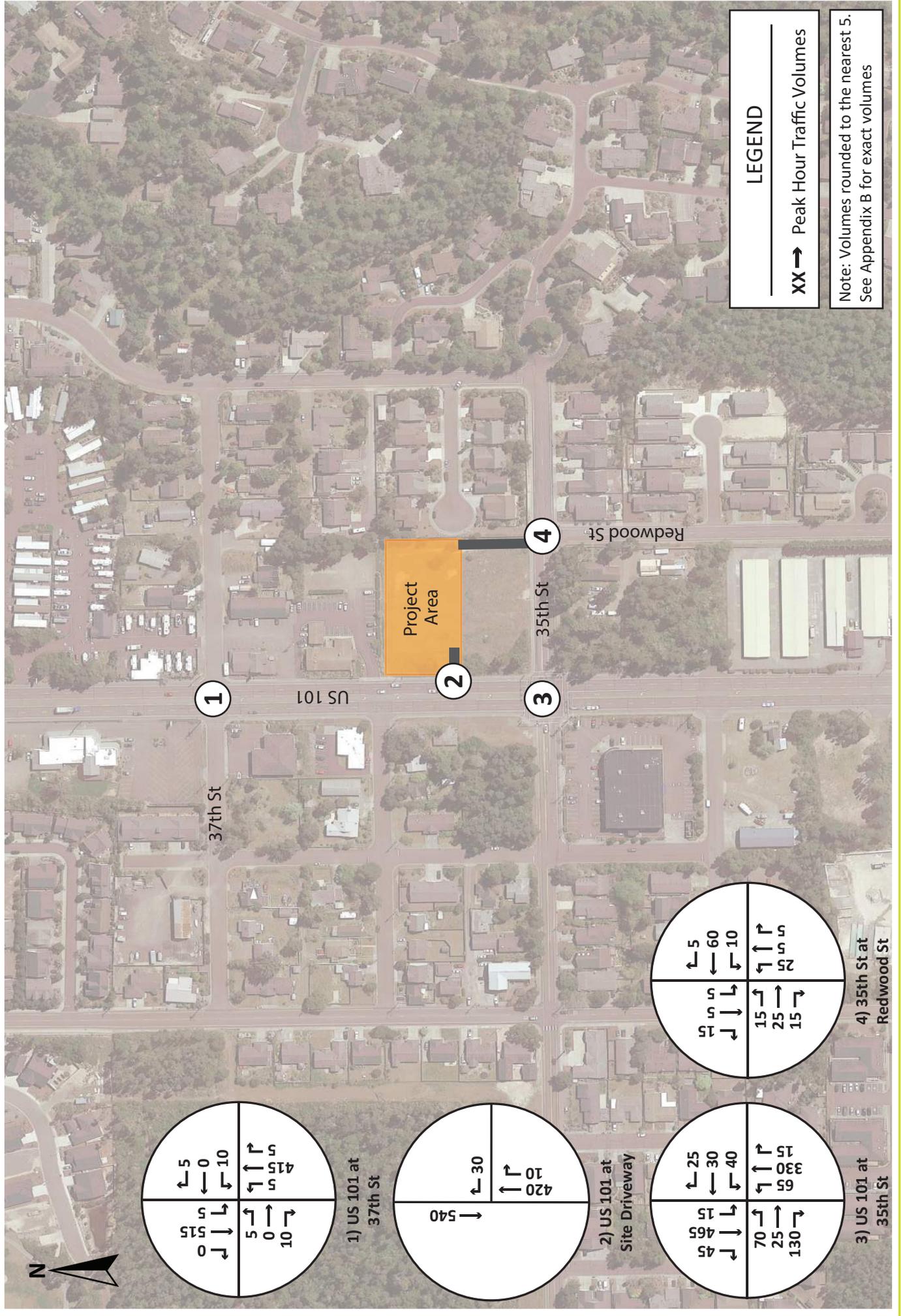
The future traffic volume forecast includes non-specific background traffic growth, pipeline developments and estimated traffic generated by the proposed *Florence Dollar General* project.

The non-specific background traffic growth rate was calculated using the ODOT Future Volumes Table. The average annual growth rate of 0.037%, was calculated using volumes from site 1172 for the years 2021 and 2042. To be conservative an annual growth rate of 1.0% was used which equates to a growth factor of 1.01. This rate was applied to existing adjusted traffic volumes at the study area intersections to obtain future 2024 turning movement projections.

One pipeline development was identified within the study area, as provided from the Burger King TIA, and is described below:

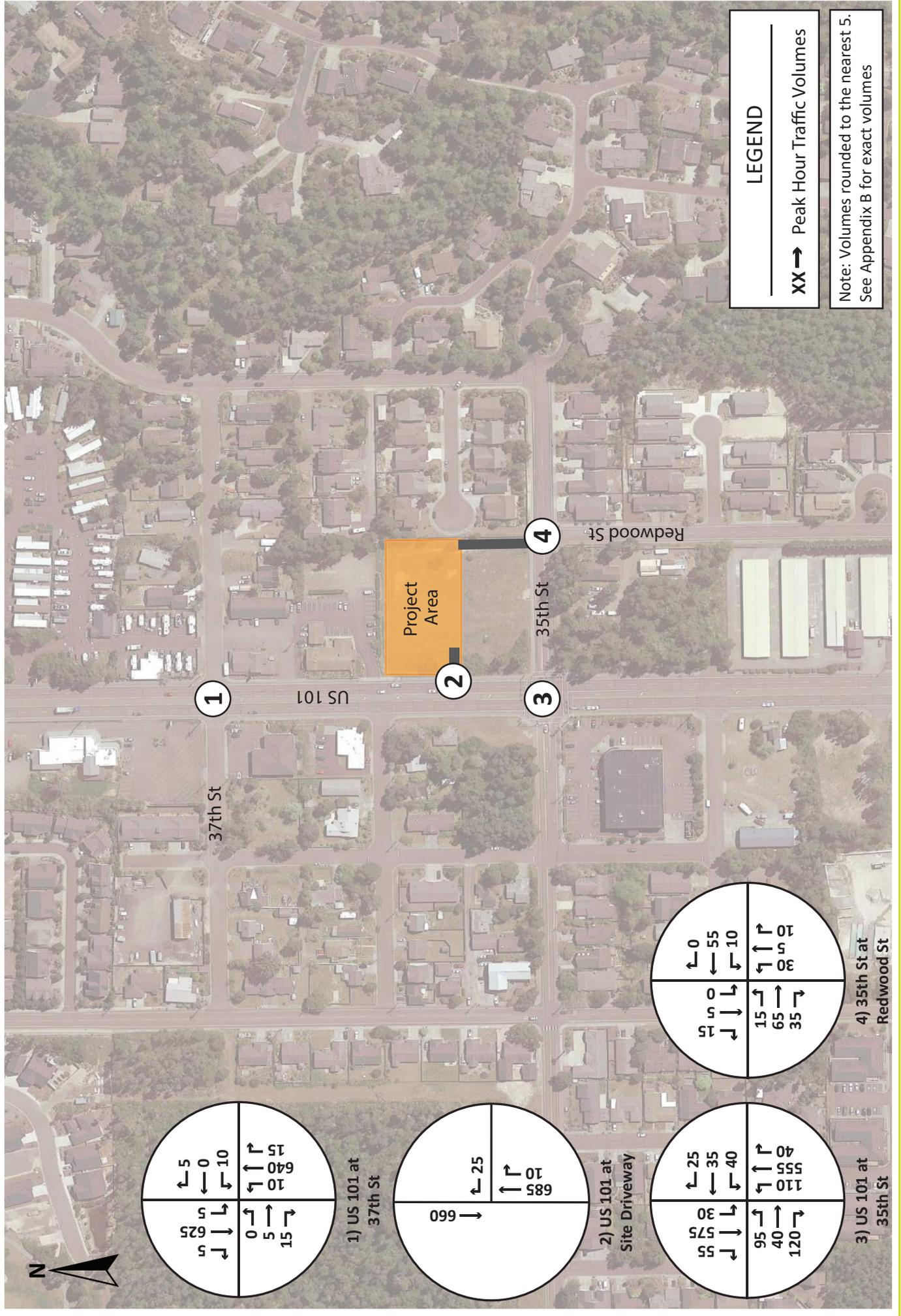
- ◆ Florence Residential Subdivision - A single family homes and apartment units development located west of the project site along Rhododendron Drive.

The projected 2024 AM and PM traffic volumes without the *Florence Dollar General* project are shown on **Figure 8** and **Figure 9**. The projected 2024 AM and PM traffic volumes with the project are shown on **Figure 10** and **Figure 11**. The traffic volume calculations for the study intersections are included in **Appendix B**.



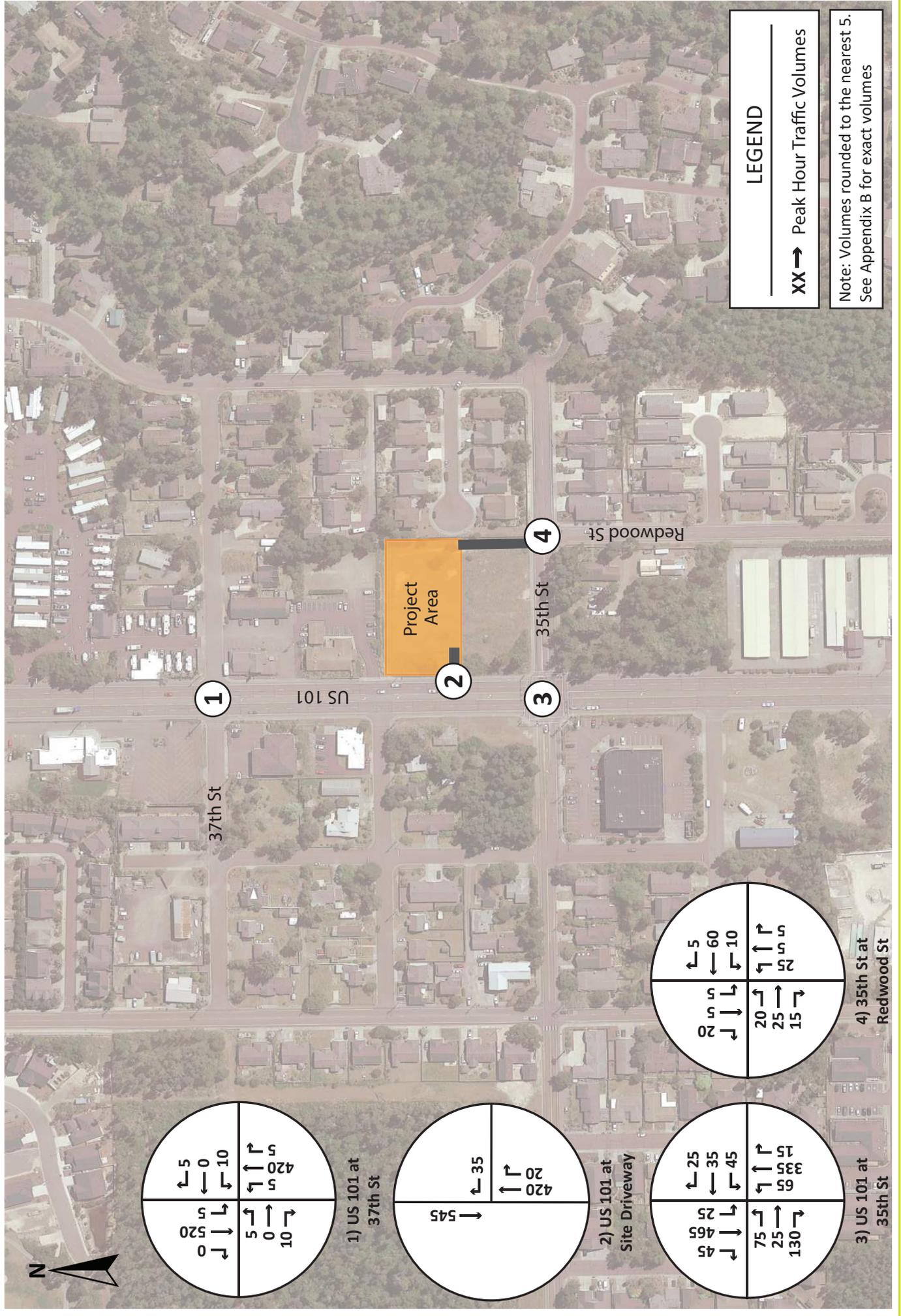
**Figure 8**  
 Projected 2024 AM Peak Hour  
 Traffic Volumes Without Project

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 Florence, Oregon  
 Traffic Impact Analysis



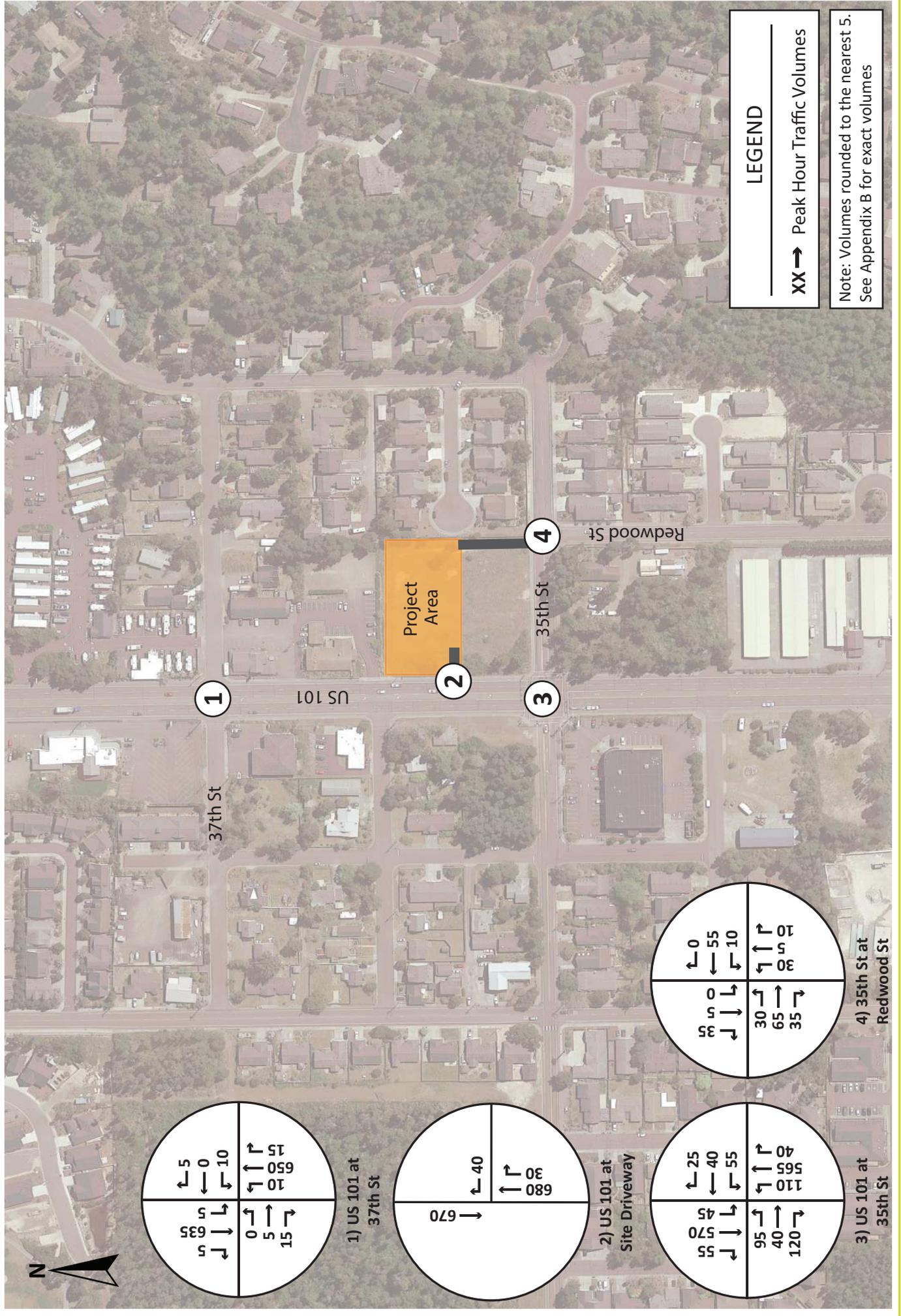
**Figure 9**  
 Projected 2024 PM Peak Hour  
 Traffic Volumes Without Project

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 Florence, Oregon  
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**Figure 10**  
 Projected 2024 AM Peak Hour  
 Traffic Volumes With Project

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 Florence, Oregon  
 Traffic Impact Analysis



**Figure 11**  
 Projected 2024 PM Peak Hour  
 Traffic Volumes With Project

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## 6 Traffic Operations Analysis

Traffic analyses were conducted to identify any deficiencies within the study area for the AM peak hour and the PM peak hour in the 2023 base year and the 2024 project opening year.

### 6.1 Intersection Operations

The acknowledged source for determining overall capacity for arterial segments and independent intersections is the current edition of the Highway Capacity Manual (HCM). Capacity analyses were completed for the base year and projected 2024 AM and PM peak hour traffic volume scenarios for all study intersections. Intersection analysis was performed using Synchro version 11, with the HCM6 output of the Synchro software. The Synchro software packages implement the methodologies described in the current HCM.

#### 6.1.1 Level of Service

Level of service calculations for intersections determine the amount of control delay (in seconds) that drivers will experience while proceeding through an intersection. Control delay includes all deceleration delay, stopped delay and acceleration delay caused by the traffic control device. The Level of Service is directly related to the amount of delay experienced. For intersections under minor street stop-control, the LOS of the most difficult movement (typically the minor street left-turn) represents the intersection Level of Service for purposes of assessing potential impacts. **Table 4** shows the Level of Service criteria for stop-controlled intersections and for signalized intersections.

**Table 4. Level of Service Criteria for Intersections**

Level of Service	Signalized Intersection Average Control Delay (seconds/vehicle)	Stop-Controlled Intersection Average Control Delay (seconds/vehicle)
A	≤ 10	≤ 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

#### 6.1.2 Volume to Capacity Ratio

Another measure of the performance of an intersection is the “degree of saturation” which is typically presented as the “volume to capacity” (v/c) ratio. Many factors affect the volume of traffic an intersection can accommodate during a specific time interval. These factors include the number of lanes, lane widths, the type of signal phasing, the number of parking maneuvers on the adjacent street, etc. Based on these factors, the intersection (or individual lane group) is determined to have a total vehicle carrying capacity “c” for the analysis period. The analysis period volume “v” is compared to the calculated carrying capacity and presented as a ratio. If the v/c ratio is below 1.0, the demand volume is less than the maximum capacity. If the v/c ratio is over 1.0, the demand volume exceeds the available capacity.

The City of Florence *Transportation System Plan* identifies the following operating standards:

- ◆ LOS D standard for signalized and all-way stop intersections, with a V/C ratio of less than 1.0 for the sum of the critical movements.
- ◆ LOS E for the worst approach at two-way stop intersections. LOS F is considered acceptable when a signal is not warranted.

## 6.2 Intersection Analysis

The analysis was conducted for the following scenarios:

- ◆ Existing 2023 traffic volumes
- ◆ Projected 2024 background traffic volumes without the *Florence Dollar General* project
- ◆ Projected 2024 traffic volumes with the *Florence Dollar General* project

The operational analysis results of the study intersections for the AM peak hour are provided in **Table 5** and the PM peak hour in **Table 6**. The LOS analysis worksheets are included in **Appendix C**.

**Table 5. AM Peak Hour Intersection Level of Service**

Intersection	Control Type	Base Year 2023		Projected 2024			
		LOS (delay)	Worst V/C Ratio	Without Project		With Project	
				LOS (delay)	Worst V/C Ratio	LOS (delay)	Worst V/C Ratio
1 US Hwy 101 / 37th St	TWSC <sup>1</sup>	C (19.7)	0.07	C (20.0)	0.08	C (20.3)	0.08
2 US Hwy 101/Site Driveway	TWSC <sup>1</sup>	A (9.9)	0.04	A (9.9)	0.04	B (10.0)	0.05
3 US Hwy 101 / 35th St	Signal	B (10.2)	0.60	B (10.5)	0.61	B (10.7)	0.62
4 Redwood St/35th St	TWSC <sup>1</sup>	B (10.0)	0.05	B (10.0)	0.05	B (10.0)	0.05

<sup>1</sup>Two-Way-Stop-Control

**Table 6. PM Peak Hour Intersection Level of Service**

Intersection	Control Type	Base Year 2023		Projected 2024			
		LOS (delay)	Worst V/C Ratio	Without Project		With Project	
				LOS (delay)	Worst V/C Ratio	LOS (delay)	Worst V/C Ratio
1 US Hwy 101 / 37 <sup>th</sup> St	TWSC <sup>1</sup>	D (27.2)	0.11	D (28.1)	0.11	D (28.7)	0.11
2 US Hwy 101/Site Driveway	TWSC <sup>1</sup>	B (10.9)	0.04	B (11.1)	0.04	B (11.3)	0.07
3 US Hwy 101 / 35 <sup>th</sup> St	Signal	B (11.2)	0.68	B (11.5)	0.69	B (12.0)	0.70
4 Redwood St/35 <sup>th</sup> St	TWSC <sup>1</sup>	B (10.1)	0.07	B (10.1)	0.07	B (10.6)	0.07

<sup>1</sup>Two-Way-Stop-Control

### 6.2.1 US Highway 101 at 37<sup>th</sup> Street

This is a four-leg intersection under stop control for the eastbound and westbound approaches. During the AM peak hour this intersection currently operates at LOS C and is projected to remain LOS C for the 2024 horizon with and without the project.

During the PM peak hour this intersection currently operates at LOS D and is projected to remain LOS D for the 2024 horizon with and without the project.

### 6.2.2 US Highway 101 at Site Driveway

This is a three-leg intersection under stop control for the westbound approach. In both the AM and PM peak hours, this intersection currently operates at LOS B or better and is projected to operate at LOS B or better for the 2024 horizon with and without the project.

### 6.2.3 US Highway 101 at 35<sup>th</sup> Street

This is a four-leg intersection under traffic signal control. During the AM peak hour this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

During the PM peak hour this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

### 6.2.4 Redwood Street at 35<sup>th</sup> Street

This is a four-leg intersection under stop control for the northbound and southbound approaches. In both the AM and PM peak hours, this intersection currently operates at LOS B and is projected to remain LOS B for the 2024 horizon with and without the project.

### 6.3 Vehicle Queuing

A vehicle queue is the number of stopped vehicles waiting to travel through an intersection. The queue length includes all vehicles that stop at an intersection even after vehicles at the front begin to move forward. The 95<sup>th</sup> percentile queue value reflects the “peak typical” queue that occurs during the analysis period, discarding the highest 5 percent of queue occurrences. The queue study was performed using the SimTraffic microsimulation program. The average of five simulations was calculated. The SimTraffic queue analysis worksheets are attached.

Analysis results for the AM peak hour are presented in **Table 7** and PM peak hour in **Table 8** and are rounded to the nearest five feet.

**Table 7. 2023 Existing and 2024 Project Opening AM Peak Hour Queuing**

Intersection/Movement	95 <sup>th</sup> Percentile Queues (Feet)			
	Available Storage (ft)	Base Year 2023	2024	
			Without Project	With Project – Phase 1
<b>US Hwy 101 at 37<sup>th</sup> St</b>				
<i>Eastbound Left/Through/Right</i>	250 ft	35 ft	35 ft	40 ft
<i>Westbound Left/Through/Right</i>	100 ft	45 ft	45 ft	55 ft
<i>Northbound Left</i>	100 ft	15 ft	15 ft	15 ft
<i>Northbound Through/Right</i>	100 ft	10 ft	10 ft	5 ft
<i>Southbound Left</i>	100 ft	20 ft	20 ft	15 ft
<b>US Hwy 101 at Site Driveway</b>				
<i>Westbound Right</i>	75 ft	45 ft	45 ft	50 ft
<b>US Hwy 101 at 35<sup>th</sup> St</b>				
<i>Eastbound Left</i>	100 ft	65 ft	65 ft	75 ft
<i>Eastbound Through/Right</i>	250 ft	85 ft	85 ft	80 ft
<i>Westbound Left</i>	150 ft	55 ft	55 ft	55 ft
<i>Westbound Through/Right</i>	250 ft	60 Ft	60 Ft	60 Ft
<i>Northbound Left</i>	150 ft	50 ft	50 ft	50 ft
<i>Northbound Through</i>	250 ft	80 ft	80 ft	80 ft
<i>Northbound Through/Right</i>	250 ft	55 ft	55 ft	55 ft
<i>Southbound Left</i>	100 ft	35 ft	35 ft	40 ft
<i>Southbound Through</i>	250 ft	105 ft	105 ft	105 ft
<i>Southbound Through/Right</i>	250 ft	90 ft	90 ft	95 ft
<b>Redwood St at 35<sup>th</sup> St</b>				
<i>Eastbound Left/Through/Right</i>	250 ft	10 ft	10 ft	10 ft
<i>Westbound Left/Through/Right</i>	275 ft	0 ft	0 ft	5 ft
<i>Northbound Left/Through/Right</i>	250 ft	55 ft	55 ft	55 ft
<i>Southbound Left/Through/Right</i>	100 ft	40 ft	40 ft	45 ft

**Table 8. 2023 Existing and 2024 Project Opening PM Peak Hour Queuing**

Intersection/Movement	Available Storage (ft)	95 <sup>th</sup> Percentile Queues (Feet)		
		Base Year 2023	2024	
			Without Project	With Project – Phase 1
<b>US Hwy 101 at 37<sup>th</sup> St</b>				
<i>Eastbound Left/Through/Right</i>	250 ft	40 ft	40 ft	40 ft
<i>Westbound Left/Through/Right</i>	100 ft	35 ft	35 ft	40 ft
<i>Northbound Left</i>	100 ft	25 ft	25 ft	35 ft
<i>Northbound Through/Right</i>	100 ft	0 ft	0 ft	5 ft
<i>Southbound Left</i>	100 ft	10 ft	15 ft	20 ft
<b>US Hwy 101 at Site Driveway</b>				
<i>Westbound Right</i>	75 ft	50 ft	50 ft	50 ft
<b>US Hwy 101 at 35<sup>th</sup> St</b>				
<i>Eastbound Left</i>	100 ft	85 ft	70 ft	80 ft
<i>Eastbound Through/Right</i>	250 ft	80 ft	85 ft	85 ft
<i>Westbound Left</i>	150 ft	55 ft	55 ft	65 ft
<i>Westbound Through/Right</i>	250 ft	55 Ft	55 Ft	60 Ft
<i>Northbound Left</i>	150 ft	65 ft	70 ft	70 ft
<i>Northbound Through</i>	250 ft	100 ft	95 ft	100 ft
<i>Northbound Through/Right</i>	250 ft	70 ft	70 ft	80 ft
<i>Southbound Left</i>	100 ft	50 ft	60 ft	60 ft
<i>Southbound Through</i>	250 ft	125 ft	120 ft	125 ft
<i>Southbound Through/Right</i>	250 ft	110 ft	105 ft	110 ft
<b>Redwood St at 35<sup>th</sup> St</b>				
<i>Eastbound Left/Through/Right</i>	250 ft	5 ft	5 ft	15 ft
<i>Westbound Left/Through/Right</i>	275 ft	5 ft	10 ft	10 ft
<i>Northbound Left/Through/Right</i>	250 ft	50 ft	50 ft	55 ft
<i>Southbound Left/Through/Right</i>	100 ft	40 ft	40 ft	50 ft

As shown in the tables, all of the study intersections are projected to provide sufficient vehicle storage for all movements through the 2024 horizon after completion of the Florence Dollar General project.

## Summary

Capital Growth Buchalter, Inc. proposes to construct a new Dollar General neighborhood store to be located along US Highway 101 in Florence, Oregon. The proposed store will be 10,640 square feet in size and is expected to open 2024. Access to the project will be provided by two existing site driveways: one along US Highway 101 and one along 35<sup>th</sup> Street. The driveway on US Highway 101 is restricted to right-in-right-out (RIRO) and the driveway on 35<sup>th</sup> Street provides full access.

At full occupancy and operation, the project is estimated to generate approximately 32 new trip ends during the AM peak hour and 47 new trips ends during the PM peak hour. An evaluation of the existing 2023 and project opening year (2024) with and without the project traffic was performed. All of the study intersections currently operate and are projected to operate at LOS D or better which is within the identified LOS standard.

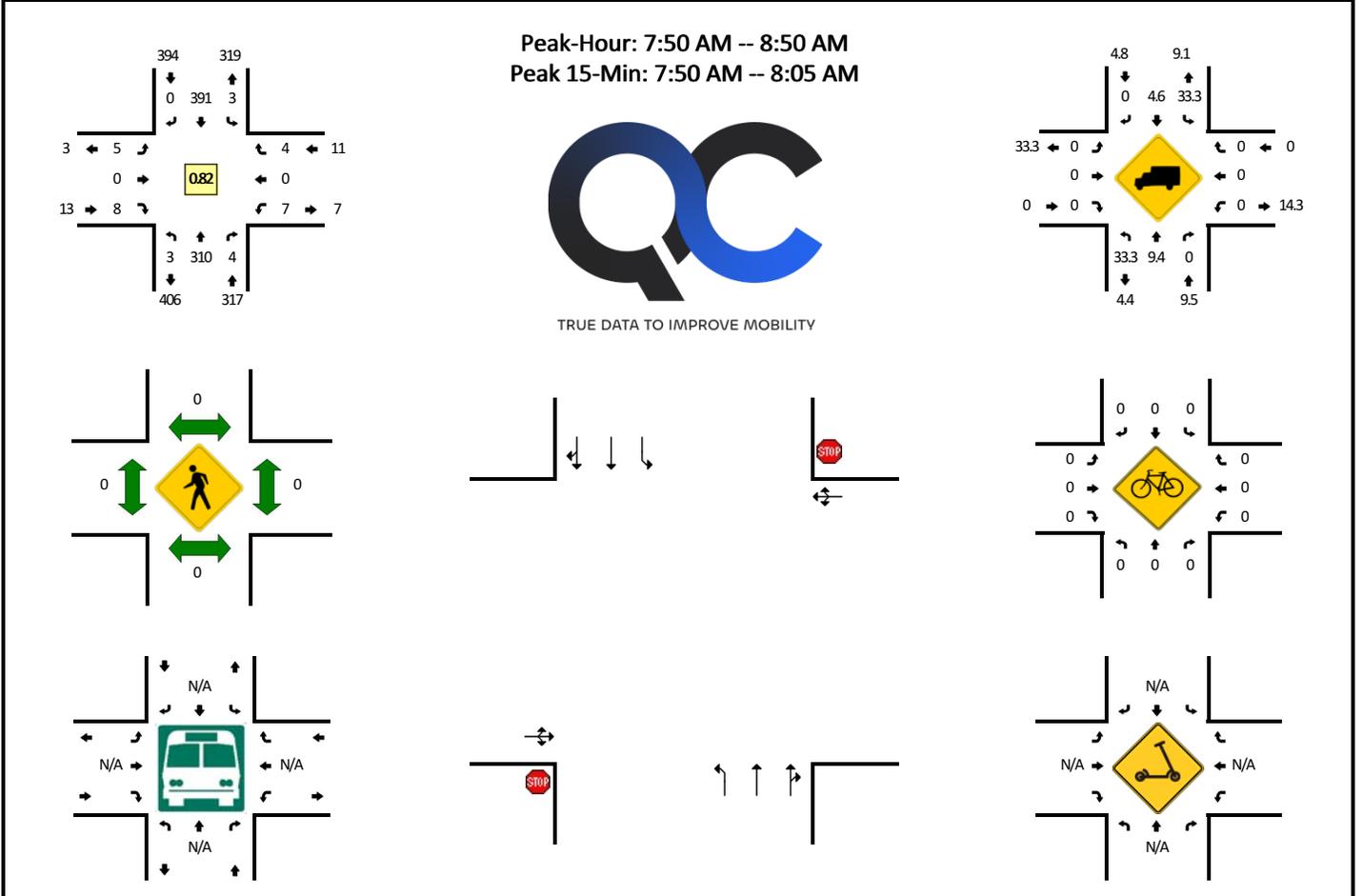
A vehicle queue assessment was performed for the study area intersections for existing volumes and projected 2024 with and without project traffic. For all three scenarios all of the intersections are projected to generate 95<sup>th</sup> percentile queues within the available storage.

# Appendix A

## Traffic Volume Counts

**LOCATION:** US 101 -- 37th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365205  
**DATE:** Tue, Oct 10 2023

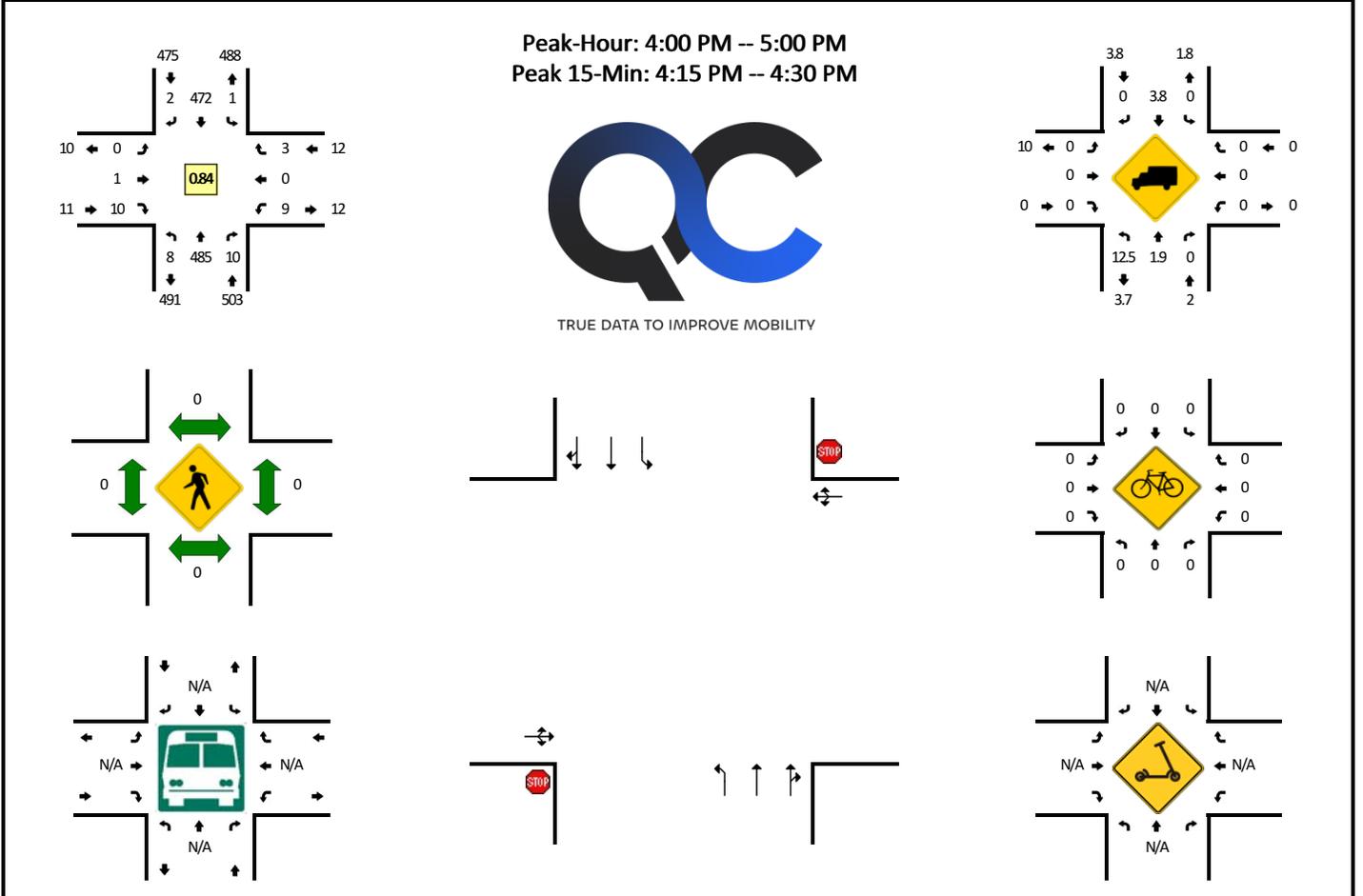


5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				37th St (Eastbound)				37th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U														
7:00 AM	1	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	31	
7:05 AM	0	11	1	0	0	19	1	0	0	0	0	0	0	0	0	0	32	
7:10 AM	0	12	0	0	0	10	0	0	0	0	0	0	1	0	0	0	23	
7:15 AM	2	16	0	0	0	17	0	0	0	0	0	1	0	0	0	0	37	
7:20 AM	1	13	1	0	1	23	0	0	0	0	0	0	1	0	0	0	40	
7:25 AM	0	15	0	0	0	13	0	0	0	0	0	1	0	1	0	0	31	
7:30 AM	0	13	0	0	1	25	0	0	0	0	0	2	0	1	0	0	43	
7:35 AM	1	29	1	0	0	22	0	0	0	0	0	0	0	2	0	0	55	
7:40 AM	0	24	1	0	0	35	0	0	0	0	0	1	0	1	0	0	64	
7:45 AM	1	18	0	0	0	31	0	0	0	0	0	0	0	0	0	0	50	
7:50 AM	1	34	0	0	0	45	0	0	1	0	1	0	1	0	1	0	84	
7:55 AM	0	38	0	0	0	31	0	0	0	0	0	0	1	0	0	0	70	560
8:00 AM	1	29	0	0	0	38	0	0	0	0	0	0	1	0	0	0	69	598
8:05 AM	1	30	1	0	0	33	0	0	0	0	0	0	1	0	2	0	68	634
8:10 AM	0	35	0	0	1	36	0	0	1	0	0	0	1	0	0	0	74	685
8:15 AM	0	31	0	0	0	34	0	0	0	0	0	0	0	0	1	0	66	714
8:20 AM	0	11	0	0	1	20	0	0	0	0	0	4	0	0	0	0	36	710
8:25 AM	0	16	1	0	0	26	0	0	2	0	0	0	2	0	0	0	47	726
8:30 AM	0	18	1	0	1	21	0	0	0	0	0	1	0	0	0	0	42	725
8:35 AM	0	24	0	0	0	34	0	0	0	0	0	1	0	0	0	0	59	729
8:40 AM	0	25	1	0	0	24	0	0	1	0	1	0	0	0	0	0	52	717
8:45 AM	0	19	0	0	0	49	0	0	0	0	0	0	0	0	0	0	68	735
8:50 AM	0	30	2	0	0	38	1	0	0	0	0	0	1	0	1	0	73	724
8:55 AM	0	25	0	0	0	32	0	0	0	0	0	2	1	0	0	0	60	714
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U														
All Vehicles	8	404	0	0	0	456	0	0	4	0	4	0	12	0	4	0	892	
Heavy Trucks	4	24	0	0	0	20	0	0	0	0	0	0	0	0	0	0	48	
Buses																		
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters																		

Comments:

**LOCATION:** US 101 -- 37th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365206  
**DATE:** Tue, Oct 10 2023



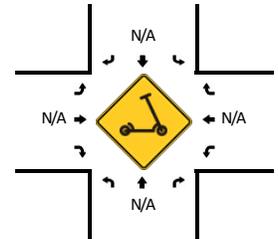
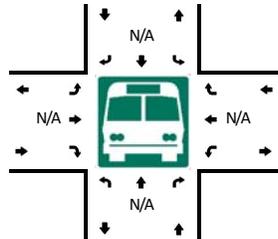
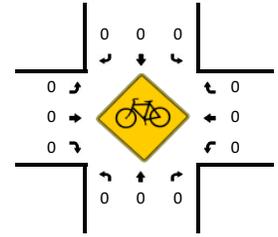
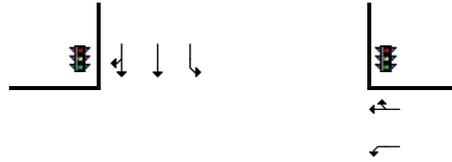
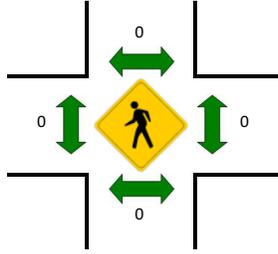
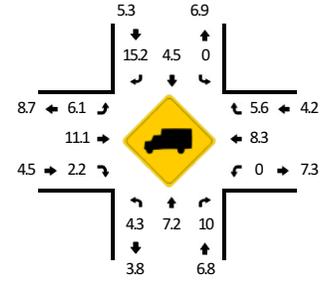
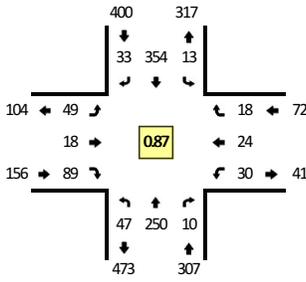
5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				37th St (Eastbound)				37th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U														
4:00 PM	0	40	0	0	0	39	1	0	0	0	2	0	0	0	1	0	83	
4:05 PM	1	34	1	0	0	39	0	0	0	0	1	0	1	0	0	0	77	
4:10 PM	1	49	1	0	1	37	1	0	0	0	1	0	1	0	1	0	93	
4:15 PM	0	67	1	0	0	39	0	0	0	0	2	0	0	0	0	0	109	
4:20 PM	2	43	0	0	0	35	0	0	0	0	2	0	2	0	0	0	84	
4:25 PM	0	42	1	0	0	61	0	0	0	0	1	0	1	0	0	0	106	
4:30 PM	1	33	1	0	0	43	0	0	0	0	0	0	0	0	0	0	78	
4:35 PM	1	38	1	0	0	29	0	0	0	0	1	0	2	0	0	0	72	
4:40 PM	2	33	1	0	0	39	0	0	0	0	1	0	1	0	0	0	77	
4:45 PM	0	36	1	0	0	48	0	0	0	0	0	0	0	0	1	0	86	
4:50 PM	0	35	0	0	0	28	0	0	0	0	0	0	1	0	0	0	64	
4:55 PM	0	35	2	0	0	35	0	0	0	0	0	0	0	0	0	0	72	1001
5:00 PM	0	33	1	0	0	40	1	0	0	0	0	0	0	0	0	0	75	993
5:05 PM	1	41	0	0	0	31	0	0	0	0	0	0	0	0	0	0	73	989
5:10 PM	1	42	0	0	0	37	0	0	0	0	0	0	0	0	0	0	80	976
5:15 PM	0	42	0	0	0	35	0	0	0	0	0	0	1	0	0	0	78	945
5:20 PM	0	42	2	0	0	31	0	0	0	0	1	0	1	0	1	0	78	939
5:25 PM	0	29	1	0	0	37	1	0	1	0	0	0	0	0	0	0	69	902
5:30 PM	0	34	2	0	0	27	0	0	0	0	0	0	0	0	0	0	63	887
5:35 PM	0	33	0	0	1	39	0	0	0	0	0	0	1	0	0	0	74	889
5:40 PM	0	31	0	0	0	34	1	0	0	0	0	0	2	0	0	0	68	880
5:45 PM	0	30	3	0	0	40	0	0	0	0	0	0	2	0	0	0	75	869
5:50 PM	0	28	0	0	0	23	0	0	0	0	1	0	0	0	1	0	53	858
5:55 PM	0	22	0	0	2	21	0	0	1	0	0	0	1	0	0	0	47	833
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U														
All Vehicles	8	608	8	0	0	540	0	0	0	0	20	0	12	0	0	0	1196	
Heavy Trucks	4	8	0		0	24	0		0	0	0		0	0	0		36	
Buses																		
Pedestrians	0	0				0				0				0			0	
Bicycles	0	0			0	0				0	0		0	0			0	
Scoters																		

Comments:

**LOCATION:** US 101 -- 35th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365201  
**DATE:** Tue, Oct 10 2023

**Peak-Hour: 7:40 AM -- 8:40 AM**  
**Peak 15-Min: 7:50 AM -- 8:05 AM**

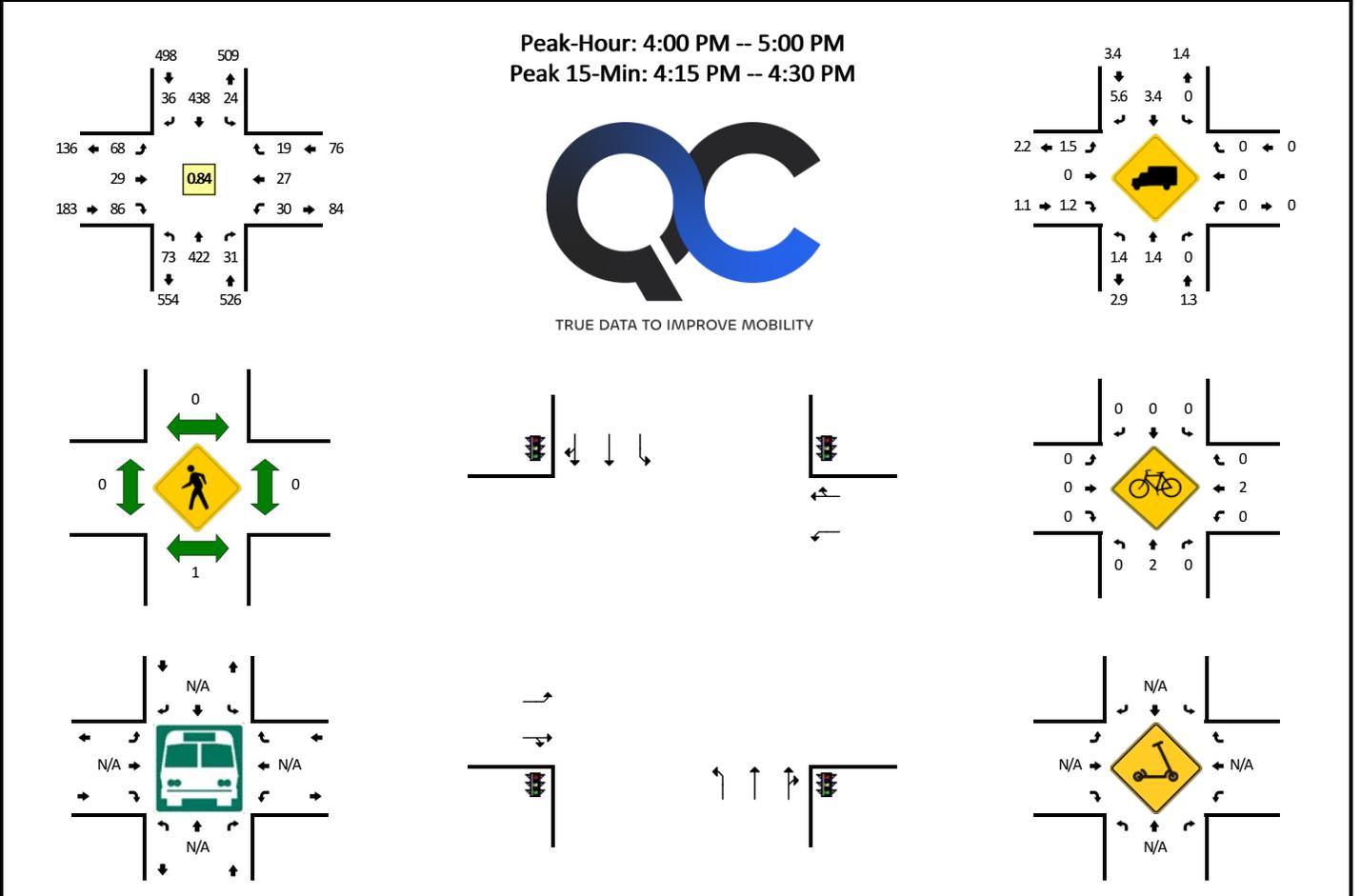


5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U														
7:00 AM	2	17	0	0	0	13	1	0	1	0	2	0	1	0	0	0	37	
7:05 AM	1	12	0	0	0	18	2	0	0	0	0	0	1	0	1	0	35	
7:10 AM	1	13	1	0	1	10	1	0	4	0	6	0	0	0	0	0	37	
7:15 AM	2	14	1	0	0	15	2	0	3	0	6	0	0	2	1	0	46	
7:20 AM	1	13	0	0	0	23	0	0	4	0	4	0	0	0	0	0	45	
7:25 AM	2	12	3	0	1	15	1	0	0	0	3	0	0	0	0	0	37	
7:30 AM	3	9	0	0	1	23	5	0	3	0	4	0	0	1	1	0	50	
7:35 AM	4	31	1	0	0	19	2	0	2	0	8	0	1	3	0	0	71	
7:40 AM	4	19	1	0	0	33	3	0	6	1	4	0	2	1	0	0	74	
7:45 AM	3	17	0	0	0	25	7	0	2	2	5	0	1	2	1	0	65	
7:50 AM	1	33	0	0	2	39	5	0	2	1	7	0	2	5	1	0	98	
7:55 AM	1	26	0	0	0	28	1	0	8	2	8	0	3	3	2	0	82	677
8:00 AM	2	23	0	0	0	42	0	0	4	0	12	0	4	1	2	0	90	730
8:05 AM	1	23	2	0	0	27	3	0	7	2	8	0	2	1	3	0	79	774
8:10 AM	4	22	5	0	1	32	7	0	8	1	6	0	4	0	1	0	91	828
8:15 AM	7	34	1	0	2	31	0	0	0	3	9	0	2	3	1	0	93	875
8:20 AM	5	8	0	0	4	19	1	0	2	0	5	0	2	1	0	0	47	877
8:25 AM	8	15	1	0	1	27	3	0	5	3	7	0	4	5	0	0	79	919
8:30 AM	6	12	0	0	1	18	3	0	3	1	10	0	2	1	5	0	62	931
8:35 AM	5	18	0	0	2	33	0	0	2	2	8	0	2	1	2	0	75	935
8:40 AM	0	16	4	0	1	22	1	0	7	0	4	0	3	0	1	0	59	920
8:45 AM	1	16	0	0	0	39	6	0	2	2	8	0	4	0	0	0	78	933
8:50 AM	3	25	1	0	0	39	1	0	5	1	8	0	7	1	3	0	94	929
8:55 AM	3	20	1	0	1	33	1	0	2	2	9	0	2	1	3	0	78	925
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U														
All Vehicles	16	328	0	0	8	436	24	0	56	12	108	0	36	36	20	0	1080	
Heavy Trucks	0	16	0	0	0	16	0	0	0	0	0	0	0	8	0	0	40	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

**LOCATION:** US 101 -- 35th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365202  
**DATE:** Tue, Oct 10 2023



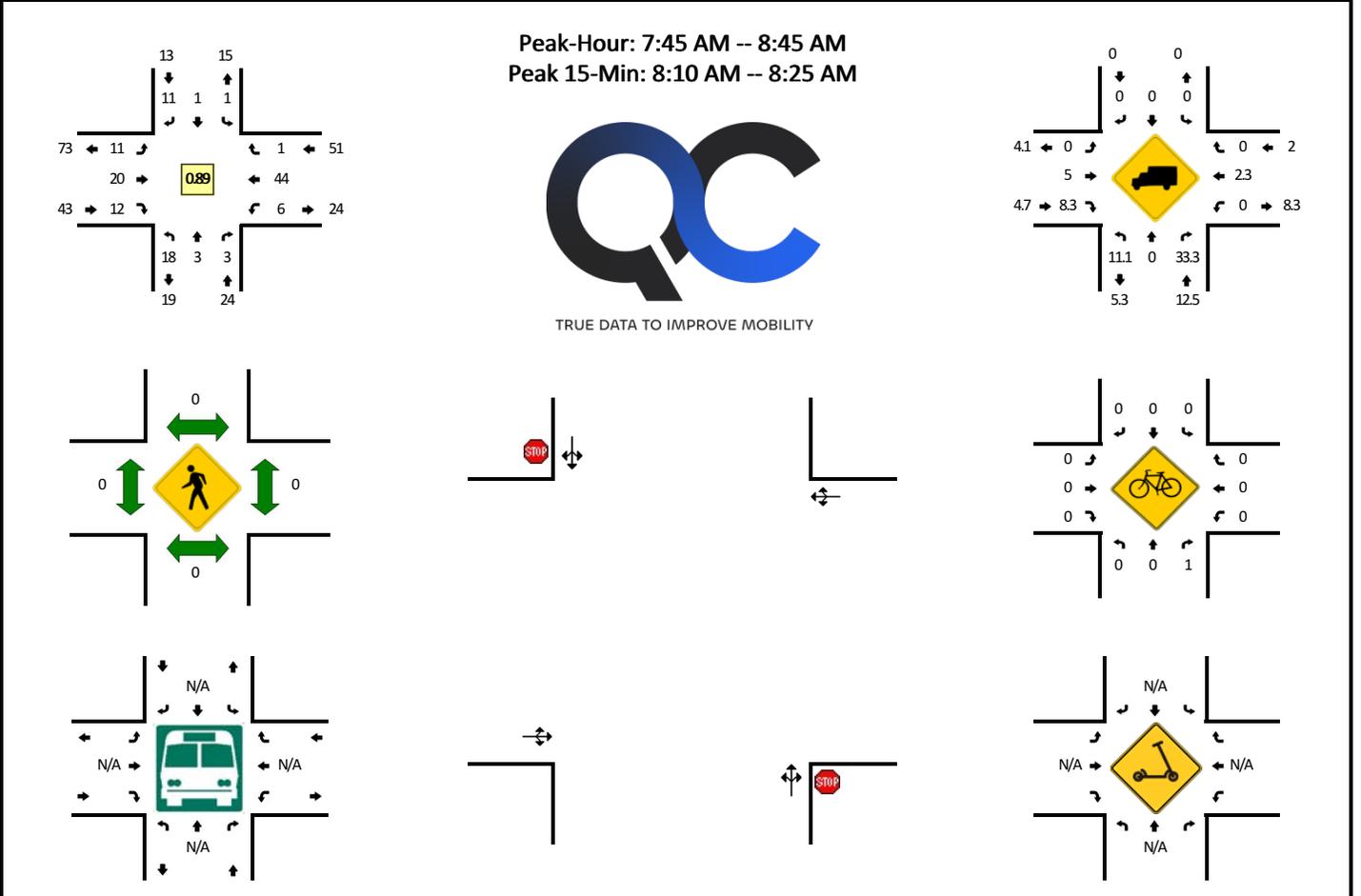
5-Min Count Period Beginning At	US 101 (Northbound)				US 101 (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U														
4:00 PM	2	28	1	0	3	36	6	0	10	2	2	0	3	3	1	0	97	
4:05 PM	4	22	4	0	2	35	5	0	9	2	13	0	3	0	3	0	102	
4:10 PM	7	50	2	0	2	31	6	0	6	4	13	0	1	2	3	0	127	
4:15 PM	12	58	4	0	0	36	4	0	4	8	6	0	0	3	1	0	136	
4:20 PM	6	34	3	0	2	36	1	0	7	1	11	0	3	4	2	0	110	
4:25 PM	10	41	3	0	3	59	2	0	3	1	8	0	3	1	1	0	135	
4:30 PM	4	34	1	0	2	40	1	0	2	4	6	0	2	4	1	0	101	
4:35 PM	5	33	2	0	1	29	2	0	1	2	7	0	1	2	3	0	88	
4:40 PM	6	29	0	0	3	35	3	0	10	3	7	0	3	1	1	0	101	
4:45 PM	11	27	3	0	2	42	3	0	7	2	3	0	3	1	1	0	105	
4:50 PM	1	30	6	0	2	27	2	0	3	0	6	0	5	3	1	0	86	
4:55 PM	5	36	2	0	2	32	1	0	6	0	4	0	3	3	1	0	95	1283
5:00 PM	5	28	1	0	1	35	6	0	1	1	8	0	2	1	0	0	89	1275
5:05 PM	3	38	5	0	4	30	0	0	5	4	4	0	5	1	3	0	102	1275
5:10 PM	7	44	6	0	1	32	3	0	3	4	2	0	2	5	0	0	109	1257
5:15 PM	6	34	4	0	1	31	4	0	4	1	5	0	2	0	3	0	95	1216
5:20 PM	5	43	0	0	0	32	2	0	2	3	5	0	3	1	2	0	98	1204
5:25 PM	8	27	1	0	1	35	0	0	1	3	5	0	6	3	1	0	91	1160
5:30 PM	1	30	2	0	1	24	5	0	2	0	2	0	3	1	3	0	74	1133
5:35 PM	10	33	3	0	1	37	1	0	4	3	4	0	1	1	0	0	98	1143
5:40 PM	5	33	3	0	1	31	1	0	7	1	3	0	4	2	1	0	92	1134
5:45 PM	5	22	2	0	1	40	3	0	5	3	3	0	2	3	1	0	90	1119
5:50 PM	4	20	2	0	3	20	1	0	5	2	7	0	1	4	5	0	74	1107
5:55 PM	8	21	2	0	0	21	2	0	3	0	2	0	1	2	1	0	63	1075

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	112	532	40	0	20	524	28	0	56	40	100	0	24	32	16	0	1524
Heavy Trucks	0	8	0		0	24	0		0	0	0		0	0	0		32
Buses																	
Pedestrians	0	0			0	0			0	0			0	0			0
Bicycles	0	0			0	0			0	0			0	4			4
Scoters																	

*Comments:*

**LOCATION:** Redwood St -- 35th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365203  
**DATE:** Tue, Oct 10 2023

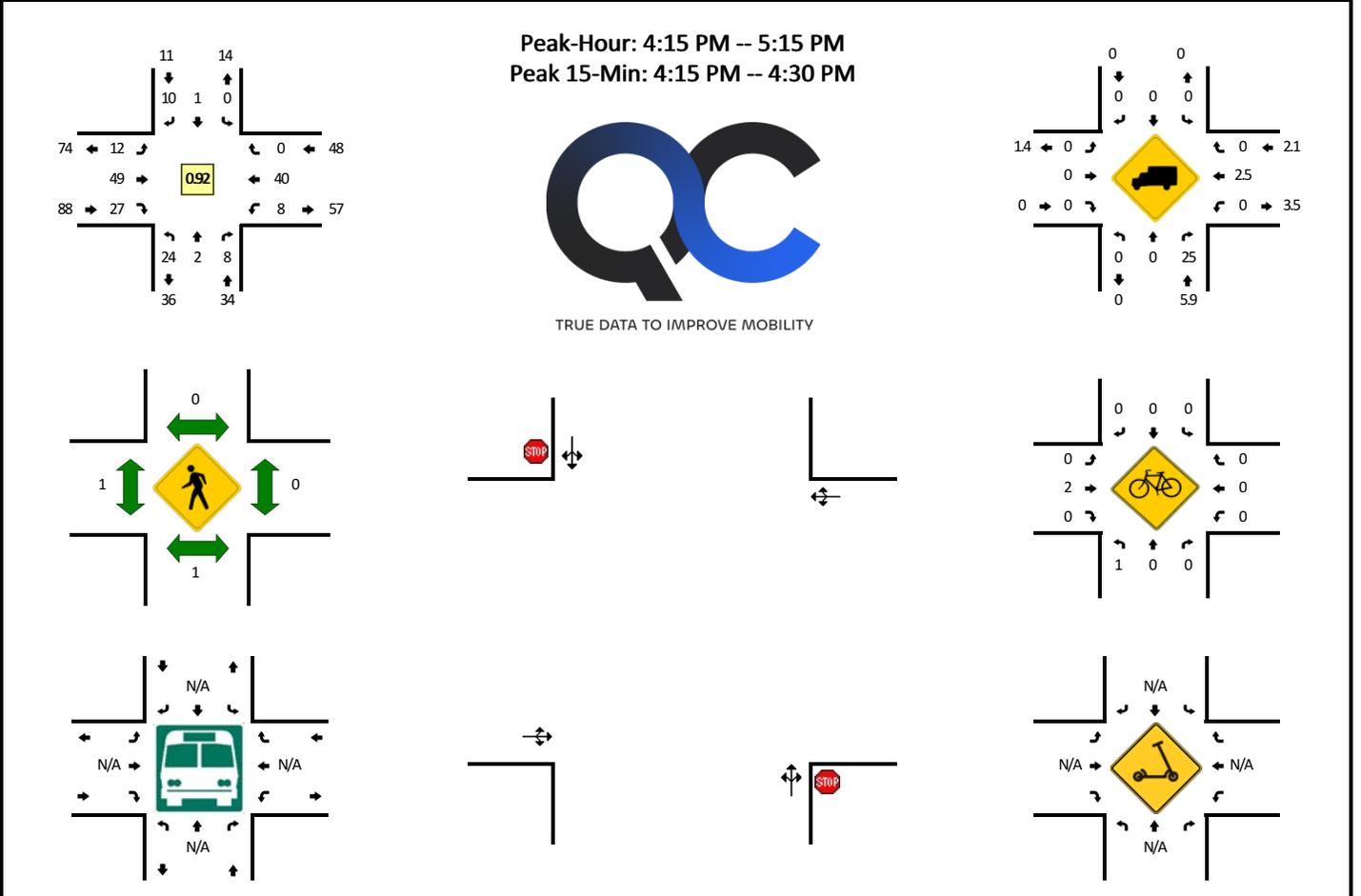


5-Min Count Period Beginning At	Redwood St (Northbound)				Redwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2		
7:05 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	
7:10 AM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	4	
7:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:25 AM	0	0	0	0	0	0	0	0	0	2	2	0	0	1	0	0	0	5	
7:30 AM	0	0	2	0	0	0	1	0	0	0	0	1	0	0	1	0	0	5	
7:35 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	5	
7:40 AM	1	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	0	6	
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	5	0	0	8	
7:50 AM	3	1	1	0	0	0	1	0	0	1	1	1	0	1	5	0	0	15	
7:55 AM	3	0	0	0	0	0	0	0	0	0	1	1	0	1	3	0	0	9	65
8:00 AM	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	8	71
8:05 AM	2	1	1	0	0	0	0	0	0	2	1	1	0	1	2	0	0	11	79
8:10 AM	1	1	0	0	0	0	1	0	0	2	3	2	0	0	5	0	0	15	90
8:15 AM	0	0	0	0	0	0	0	0	0	1	2	2	0	0	4	0	0	9	96
8:20 AM	1	0	1	0	0	0	1	0	0	1	4	0	0	1	4	0	0	13	109
8:25 AM	1	0	0	0	0	0	2	0	0	1	2	1	0	0	3	0	0	10	114
8:30 AM	2	0	0	0	1	0	5	0	0	1	1	1	0	0	1	0	0	12	121
8:35 AM	0	0	0	0	0	0	1	0	0	2	0	2	0	0	4	0	0	9	125
8:40 AM	1	0	0	0	0	1	0	0	0	0	3	1	0	1	4	1	0	12	131
8:45 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	6	129
8:50 AM	4	0	3	0	0	0	0	0	0	1	2	0	0	0	5	0	0	15	129
8:55 AM	1	0	1	0	0	0	0	0	0	0	1	3	0	0	5	0	0	11	131
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	8	4	4	0	0	0	8	0	16	36	16	0	4	52	0	0	148		
Heavy Trucks	0	0	4		0	0	0		0	0	0		0	0	0		4		
Buses																			
Pedestrians		0				0				0				0			0		
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0		
Scoters																			

Comments:

**LOCATION:** Redwood St -- 35th St  
**CITY/STATE:** Florence, OR

**QC JOB #:** 16365204  
**DATE:** Tue, Oct 10 2023



5-Min Count Period Beginning At	Redwood St (Northbound)				Redwood St (Southbound)				35th St (Eastbound)				35th St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	1	0	0	0	1	0	0	6	1	0	0	3	0	0	15	
4:05 PM	3	0	1	0	0	0	0	0	2	2	2	1	0	2	0	0	13	
4:10 PM	2	0	0	0	0	0	1	0	3	3	3	0	1	4	0	0	17	
4:15 PM	1	1	1	0	0	0	0	0	2	5	5	0	2	2	0	0	19	
4:20 PM	1	0	0	0	0	0	2	0	1	4	1	0	2	6	0	0	17	
4:25 PM	2	0	0	0	0	0	1	0	1	3	3	0	0	3	0	0	13	
4:30 PM	2	0	3	0	0	0	1	0	1	3	4	0	0	3	0	0	17	
4:35 PM	1	1	2	0	0	0	2	0	1	1	1	0	1	2	0	0	12	
4:40 PM	1	0	1	0	0	1	1	0	0	3	4	0	0	4	0	0	15	
4:45 PM	3	0	0	0	0	0	0	0	1	4	2	0	0	4	0	0	14	
4:50 PM	3	0	0	0	0	0	0	0	1	5	2	0	0	3	0	0	14	
4:55 PM	1	0	0	0	0	0	1	0	1	3	1	0	1	6	0	0	14	180
5:00 PM	1	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	5	170
5:05 PM	4	0	0	0	0	0	2	0	2	7	3	0	0	3	0	0	21	178
5:10 PM	4	0	1	0	0	0	0	0	1	9	1	0	1	3	0	0	20	181
5:15 PM	3	0	0	0	0	0	1	0	3	2	1	0	0	2	0	0	12	174
5:20 PM	3	0	5	0	1	0	0	0	1	1	0	0	0	5	0	0	16	173
5:25 PM	4	0	0	0	0	1	1	0	2	4	1	0	1	3	1	0	18	178
5:30 PM	3	1	3	0	0	0	3	0	0	3	0	0	1	1	0	0	15	176
5:35 PM	1	0	0	0	0	1	0	0	2	4	1	0	1	1	0	0	11	175
5:40 PM	2	0	1	0	0	0	1	0	1	4	0	0	0	4	0	0	13	173
5:45 PM	4	0	2	0	0	1	0	0	0	5	1	0	1	2	0	0	16	175
5:50 PM	5	0	1	0	0	0	2	0	0	2	5	0	1	3	0	0	19	180
5:55 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	6	172
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	16	4	4	0	0	0	12	0	16	48	36	0	16	44	0	0	196	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scoters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

SEASONAL TREND TABLE (Updated: 11/10/2022)																									Seasonal Trend Peak Period Factor
TREND	1-Jan	15-Jan	1-Feb	15-Feb	1-Mar	15-Mar	1-Apr	15-Apr	1-May	15-May	1-Jun	15-Jun	1-Jul	15-Jul	1-Aug	15-Aug	1-Sep	15-Sep	1-Oct	15-Oct	1-Nov	15-Nov	1-Dec	15-Dec	
INTERSTATE URBANIZED	1.0937	1.1592	1.1547	1.1502	1.0841	1.0180	0.9963	0.9746	0.9815	0.9885	0.9625	0.9366	0.9211	0.9056	0.9175	0.9295	0.9470	0.9645	0.9721	0.9796	0.9885	0.9973	1.0384	1.0794	0.9056
INTERSTATE NONURBANIZED	1.2128	1.3303	1.3475	1.3647	1.2141	1.0634	1.0236	0.9838	0.9687	0.9536	0.9130	0.8724	0.8404	0.8084	0.8293	0.8501	0.8889	0.9276	0.9583	0.9889	1.0037	1.0185	1.1007	1.1830	0.8084
COMMUTER	1.1005	1.1479	1.1341	1.1204	1.0651	1.0099	0.9836	0.9574	0.9663	0.9752	0.9544	0.9336	0.9338	0.9341	0.9453	0.9566	0.9608	0.9649	0.9693	0.9736	0.9935	1.0134	1.0465	1.0796	0.9336
COASTAL DESTINATION	1.1584	1.2243	1.2052	1.1862	1.1005	1.0149	0.9887	0.9625	0.9672	0.9720	0.9181	0.8642	0.8386	0.8130	0.8299	0.8468	0.8926	0.9384	0.9940	1.0496	1.0999	1.1502	1.1960	1.2419	0.8130
COASTAL DESTINATION ROUTE	1.2909	1.3694	1.3728	1.3763	1.2315	1.0867	1.0419	0.9972	0.9581	0.9191	0.8590	0.7989	0.7607	0.7225	0.7389	0.7554	0.8235	0.8916	0.9820	1.0724	1.1507	1.2291	1.3629	1.4967	0.7225
AGRICULTURE	1.4312	1.4915	1.4980	1.5046	1.3605	1.2164	1.1152	1.0141	0.9356	0.8572	0.8266	0.7960	0.8137	0.8315	0.8448	0.8581	0.8336	0.8092	0.8496	0.8901	0.9684	1.0467	1.2566	1.4666	0.7960
RECREATIONAL SUMMER	1.4118	1.5326	1.6112	1.6898	1.4761	1.2623	1.1772	1.0921	0.9752	0.8582	0.7947	0.7311	0.7197	0.7082	0.7395	0.7708	0.8006	0.8304	0.8977	0.9651	1.0781	1.1910	1.4205	1.6501	0.7082
RECREATIONAL SUMMER WINTER	0.7518	0.8394	0.9654	1.0914	1.0422	0.9930	1.0357	1.0785	1.0310	0.9834	0.9358	0.8882	0.7824	0.6767	0.7712	0.8658	0.9973	1.1289	1.2850	1.4412	1.5833	1.7254	1.3952	1.0650	0.6767
RECREATIONAL WINTER	0.5086	0.5112	0.5988	0.6864	0.7354	0.7845	0.9435	1.1025	1.2219	1.3414	1.2723	1.2032	1.0545	0.9058	1.0033	1.1007	1.2108	1.3209	1.4791	1.6373	2.0741	2.5110	1.7317	0.9524	0.5086
SUMMER	1.2166	1.2914	1.2738	1.2563	1.1530	1.0496	1.0061	0.9625	0.9423	0.9220	0.8906	0.8591	0.8435	0.8279	0.8550	0.8821	0.9088	0.9355	0.9732	1.0109	1.0420	1.0731	1.1534	1.2337	0.8279
SUMMER < 2500	1.2683	1.3194	1.3010	1.2826	1.1889	1.0952	1.0262	0.9573	0.9119	0.8664	0.8549	0.8434	0.8442	0.8451	0.8727	0.9003	0.9080	0.9157	0.9406	0.9654	1.0279	1.0903	1.1996	1.3089	0.8434

\* Seasonal Trend Table factors are based on previous year ATR data. The table is updated yearly.  
 \* Grey shading indicates months where seasonal factor is greater than or less than 30%

# Appendix B

## Traffic Volume Calculation Worksheets



**Dollar General**  
**Trip Generation Summary**  
 Florence, OR

AM Peak Hour Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	3.04	55%	45%	18	14	32		0	18	14	32
<b>Total</b>								<b>18</b>	<b>14</b>	<b>32</b>		<b>0</b>	<b>18</b>	<b>14</b>	<b>32</b>

PM Peak Hour Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	6.70	51%	49%	36	35	71	34.0%	24	24	23	47
<b>Total</b>								<b>36</b>	<b>35</b>	<b>71</b>		<b>24</b>	<b>24</b>	<b>23</b>	<b>47</b>

Daily Trip Generation															
Site Plan Description	LUC	ITE Description	Variable	Value	ITE Rate	Distribution		Total Trips			Pass-By Trips		Net New Trips		
						In	Out	In	Out	Total	%	Total	In	Out	Total
Dollar General	814	Variety Store	ksqft	10.640	63.66	50%	50%	339	338	677	34.0%	230	224	223	447
<b>Total</b>								<b>339</b>	<b>338</b>	<b>677</b>		<b>230</b>	<b>224</b>	<b>223</b>	<b>447</b>



# Dollar General

## PM Peak Hour Volumes

Annual Growth Rate 1.0%  
30th Hour Adjustment 1.3

Intersection	Movement		Existing	Adjusted	Background	Housing Project	Baseline	Primary	Pass-By	Site	Projected
			2023	2023	2024	Pipeline	2024	Traffic	Traffic	Generated	2024
			Volumes	Volumes	Growth	Volumes	Volumes	Volumes	Volumes	Volmes	Volumes
1 US 101 37th St  TMC Date: 10/10/2023  7:50 - 8:50 PHF: 0.82	EB	L	5	7	0	0	7	0	0	0	7
		T	0	0	0	0	0	0	0	0	0
		R	8	10	0	0	10	0	0	0	10
		L	7	9	0	0	9	0	0	0	9
	WB	T	0	0	0	0	0	0	0	0	0
		R	4	5	0	0	5	0	0	0	5
	NB	L	3	4	0	0	4	0	0	0	4
		T	310	403	4	7	414	5	0	5	419
		R	4	5	0	0	5	0	0	0	5
		L	3	4	0	0	4	0	0	0	4
SB	T	391	508	5	2	515	6	0	6	521	
	R	0	0	0	0	0	0	0	0	0	
			735		7		742				984
2 US 101 Site Driveway	EB	L	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0
		R	0	0	0	0	0	0	0	0	0
		L	0	0	0	0	0	0	0	0	0
	WB	T	0	0	0	0	0	0	0	0	0
		R	24	31	0	0	31	5	0	5	36
	NB	L	0	0	0	0	0	0	0	0	0
		T	317	412	4	4	420	0	0	0	420
		R	7	9	0	0	9	11	0	11	20
		L	0	0	0	0	0	0	0	0	0
SB	T	400	520	5	14	539	6	0	6	545	
	R	0	0	0	0	0	0	0	0	0	
			748		7		755				1,021
3 US 101 35th St  TMC Date: 10/10/2023  7:40 - 8:40 PHF: 0.87	EB	L	49	64	1	7	72	3	0	3	75
		T	18	23	0	0	23	0	0	0	23
		R	89	116	1	14	131	0	0	0	131
		L	30	39	0	0	39	6	0	6	45
	WB	T	24	31	0	0	31	2	0	2	33
		R	18	23	0	0	23	0	0	0	23
	NB	L	47	61	1	4	66	0	0	0	66
		T	250	325	3	0	328	8	0	8	336
		R	10	13	0	0	13	0	0	0	13
		L	13	17	0	0	17	6	0	6	23
SB	T	354	460	5	0	465	0	0	0	465	
	R	33	43	0	2	45	0	0	0	45	
			935		9		944				1,278
4 Redwood St 35th St  TMC Date: 10/10/2023  7:45 - 8:45 PHF: 0.89	EB	L	11	14	0	0	14	6	0	6	20
		T	20	26	0	0	26	0	0	0	26
		R	12	16	0	0	16	0	0	0	16
		L	6	8	0	0	8	0	0	0	8
	WB	T	44	57	1	0	58	0	0	0	58
		R	1	1	0	0	1	0	0	0	1
	NB	L	18	23	0	0	23	0	0	0	23
		T	3	4	0	0	4	1	0	1	5
		R	3	4	0	0	4	0	0	0	4
		L	1	1	0	0	1	0	0	0	1
SB	T	1	1	0	0	1	1	0	1	2	
	R	11	14	0	0	14	8	0	8	22	
			131		1		132				186



# Dollar General

## PM Peak Hour Volumes

Annual Growth Rate 1.0%  
30th Hour Adjustment 1.3

Intersection	Movement		Existing	Adjusted	Background	Housing Project	Baseline	Primary	Pass-By	Site	Projected
			2023	2023	2024	Pipeline	2024	Traffic	Traffic	Generated	2024
			Volumes	Volumes	Growth	Volumes	Volumes	Volumes	Volumes	Volumes	Volumes
1 US 101 37th St  TMC Date: 10/10/2023  4:00 - 5:00 PHF: 0.84	EB	L	0	0	0	0	0	0	0	0	0
		T	1	1	0	0	1	0	0	0	1
		R	10	13	0	0	13	0	0	0	13
		L	9	12	0	0	12	0	0	0	12
	WB	T	0	0	0	0	0	0	0	0	0
		R	3	4	0	0	4	0	0	0	4
		L	8	10	0	0	10	0	0	0	10
		T	485	631	6	4	641	8	0	8	649
		R	10	13	0	0	13	0	0	0	13
		L	1	1	0	0	1	0	0	0	1
SB	T	472	614	6	6	626	8	0	8	634	
	R	2	3	0	0	3	0	0	0	3	
			1,001	1,011	10		1,011				1,340
2 US 101 Site Driveway		L	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0
		R	0	0	0	0	0	0	0	0	0
		L	0	0	0	0	0	0	0	0	0
	WB	T	0	0	0	0	0	0	0	0	0
		R	20	26	0	0	26	8	6	14	40
		L	0	0	0	0	0	0	0	0	0
		T	509	662	7	16	685	0	-6	-6	679
		R	6	8	0	0	8	15	6	21	29
		L	0	0	0	0	0	0	0	0	0
SB	T	498	647	6	9	662	8	0	8	670	
	R	0	0	0	0	0	0	0	0	0	
			1,033	1,043	10		1,043				1,418
3 US 101 35th St  TMC Date: 10/10/2023  4:00 - 5:00 PHF: 0.84		L	68	88	1	4	93	4	0	4	97
		T	29	38	0	0	38	0	0	0	38
		R	86	112	1	9	122	0	0	0	122
		L	30	39	0	0	39	11	6	17	56
	WB	T	27	35	0	0	35	3	0	3	38
		R	19	25	0	0	25	0	0	0	25
		L	73	95	1	16	112	0	0	0	112
		T	422	549	5	0	554	11	0	11	565
		R	31	40	0	0	40	0	0	0	40
		L	24	31	0	0	31	8	6	14	45
SB	T	438	569	6	0	575	0	-6	-6	569	
	R	36	47	0	6	53	0	0	0	53	
			1,283	1,296	13		1,296				1,760
4 Redwood St 35th St  TMC Date: 10/10/2023  4:15 - 5:15 PHF: 0.92		L	12	16	0	0	16	8	6	14	30
		T	49	64	1	0	65	0	0	0	65
		R	27	35	0	0	35	0	0	0	35
		L	8	10	0	0	10	0	0	0	10
	WB	T	40	52	1	0	53	0	0	0	53
		R	0	0	0	0	0	0	0	0	0
		L	24	31	0	0	31	0	0	0	31
		T	2	3	0	0	3	1	0	1	4
		R	8	10	0	0	10	0	0	0	10
		L	0	0	0	0	0	0	0	0	0
SB	T	1	1	0	0	1	1	0	1	2	
	R	10	13	0	0	13	14	6	20	33	
			181	183	2		183				273

# Appendix C

## Capacity Analysis Worksheets

HCM 6th TWSC  
 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Existing 2023  
 AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	405	5	5	510	1
Future Vol, veh/h	5	1	10	10	1	5	5	405	5	5	510	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	494	6	6	622	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	895	1147	312	833	1144	250	623	0	0	500	0	0
Stage 1	635	635	-	509	509	-	-	-	-	-	-	-
Stage 2	260	512	-	324	635	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	239	201	690	214	188	756	968	-	-	871	-	-
Stage 1	438	476	-	442	519	-	-	-	-	-	-	-
Stage 2	728	540	-	583	454	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	234	198	690	207	186	756	968	-	-	871	-	-
Mov Cap-2 Maneuver	234	198	-	207	186	-	-	-	-	-	-	-
Stage 1	435	473	-	439	516	-	-	-	-	-	-	-
Stage 2	716	537	-	567	451	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.7		19.7		0.1		0.1	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	968	-	-	391	265	871	-	-
HCM Lane V/C Ratio	0.006	-	-	0.05	0.074	0.007	-	-
HCM Control Delay (s)	8.7	-	-	14.7	19.7	9.2	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	30	410	10	0	520
Future Vol, veh/h	0	30	410	10	0	520
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	8	2	5	2
Mvmt Flow	0	33	446	11	0	565

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	229	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	774	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	774	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	774
HCM Lane V/C Ratio	-	-	0.042
HCM Control Delay (s)	-	-	9.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings  
3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023  
AM Peak Hour

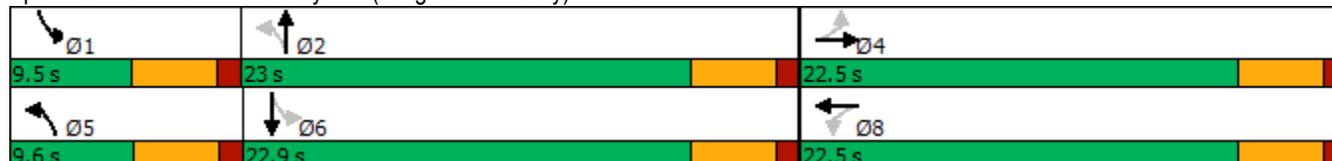


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (vph)	65	25	115	40	30	25	60	325	15	15	460	45
Future Volume (vph)	65	25	115	40	30	25	60	325	15	15	460	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40				40
Link Distance (ft)		675			318			615				184
Travel Time (s)		18.4			8.7			10.5				3.1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt		NA
Protected Phases		4			8		5	2		1		6
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5		22.5
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5		22.9
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%		41.6%
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0		18.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5		4.5
Lead/Lag							Lead	Lag		Lead		Lag
Lead-Lag Optimize?							Yes	Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	None		None	None		None	Min		None		Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0

Intersection Summary

Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 36.5  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	65	25	115	40	30	25	60	325	15	15	460	45
Future Volume (veh/h)	65	25	115	40	30	25	60	325	15	15	460	45
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	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	75	29	132	46	34	29	69	374	17	17	529	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	446	51	232	347	167	143	469	1058	48	523	877	86
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.07	0.35	0.35	0.02	0.30	0.30
Sat Flow, veh/h	1297	251	1143	1206	825	703	1667	3037	138	1667	2939	288
Grp Volume(v), veh/h	75	0	161	46	0	63	69	191	200	17	287	294
Grp Sat Flow(s),veh/h/ln	1297	0	1394	1206	0	1528	1667	1559	1616	1667	1598	1630
Q Serve(g_s), s	1.6	0.0	3.3	1.1	0.0	1.1	0.9	2.9	2.9	0.2	4.9	4.9
Cycle Q Clear(g_c), s	2.7	0.0	3.3	4.4	0.0	1.1	0.9	2.9	2.9	0.2	4.9	4.9
Prop In Lane	1.00		0.82	1.00		0.46	1.00		0.09	1.00		0.18
Lane Grp Cap(c), veh/h	446	0	283	347	0	310	469	543	563	523	477	486
V/C Ratio(X)	0.17	0.00	0.57	0.13	0.00	0.20	0.15	0.35	0.35	0.03	0.60	0.60
Avail Cap(c_a), veh/h	922	0	794	789	0	870	618	912	946	750	930	949
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	11.4	13.3	0.0	10.5	6.9	7.7	7.7	7.4	9.5	9.5
Incr Delay (d2), s/veh	0.2	0.0	1.8	0.2	0.0	0.3	0.1	0.4	0.4	0.0	1.2	1.2
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	0.4	0.0	0.9	0.3	0.0	0.3	0.2	0.6	0.6	0.0	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.2	13.5	0.0	10.8	7.1	8.0	8.0	7.4	10.7	10.7
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		236			109			460			598	
Approach Delay, s/veh		12.7			11.9			7.9			10.6	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	15.5		10.9	6.8	13.9		10.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.2	4.9		5.3	2.9	6.9		6.4				
Green Ext Time (p_c), s	0.0	1.7		1.0	0.0	2.5		0.3				

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Existing 2023  
AM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	25	15	10	55	5	25	5	5	5	5	15
Future Vol, veh/h	15	25	15	10	55	5	25	5	5	5	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	17	28	17	11	62	6	28	6	6	6	6	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	45	0	0	170	161	37	164	166	65
Stage 1	-	-	-	-	-	-	71	71	-	87	87	-
Stage 2	-	-	-	-	-	-	99	90	-	77	79	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1546	-	-	1576	-	-	774	731	953	805	730	1005
Stage 1	-	-	-	-	-	-	917	836	-	926	827	-
Stage 2	-	-	-	-	-	-	886	820	-	937	833	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1546	-	-	1576	-	-	746	718	953	785	717	1005
Mov Cap-2 Maneuver	-	-	-	-	-	-	746	718	-	785	717	-
Stage 1	-	-	-	-	-	-	907	827	-	916	821	-
Stage 2	-	-	-	-	-	-	859	814	-	915	824	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2			1			10			9.2		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	765	1546	-	-	1576	-	-	884
HCM Lane V/C Ratio	0.051	0.011	-	-	0.007	-	-	0.032
HCM Control Delay (s)	10	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC  
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Existing 2023  
PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	630	15	5	615	5
Future Vol, veh/h	1	5	15	10	1	5	10	630	15	5	615	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	750	18	6	732	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1147	1539	369	1164	1533	384	738	0	0	768	0	0
Stage 1	747	747	-	783	783	-	-	-	-	-	-	-
Stage 2	400	792	-	381	750	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	156	117	634	152	118	620	795	-	-	855	-	-
Stage 1	376	423	-	357	407	-	-	-	-	-	-	-
Stage 2	603	404	-	619	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	151	114	634	140	115	620	795	-	-	855	-	-
Mov Cap-2 Maneuver	151	114	-	140	115	-	-	-	-	-	-	-
Stage 1	370	420	-	352	401	-	-	-	-	-	-	-
Stage 2	586	398	-	589	419	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	27.2	0.1	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	795	-	-	283	181	855	-	-
HCM Lane V/C Ratio	0.015	-	-	0.088	0.105	0.007	-	-
HCM Control Delay (s)	9.6	-	-	19	27.2	9.2	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	25	660	10	0	645
Future Vol, veh/h	0	25	660	10	0	645
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	0	27	717	11	0	701

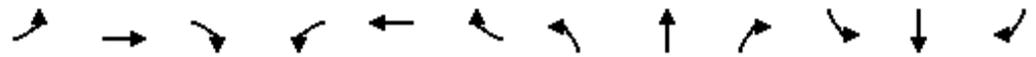
Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	364	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	633	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	633	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	633
HCM Lane V/C Ratio	-	-	0.043
HCM Control Delay (s)	-	-	10.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings  
3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023  
PM Peak Hour

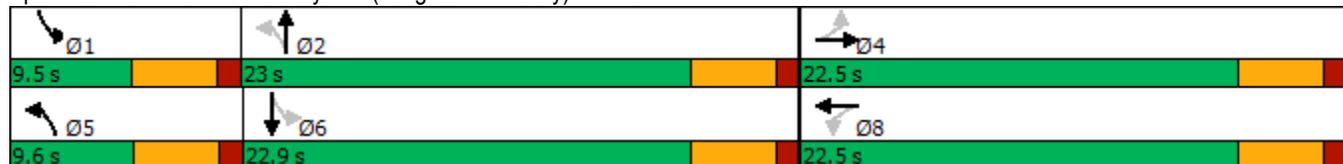


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↕	↗
Traffic Volume (vph)	90	40	110	40	35	25	95	540	40	30	570	45
Future Volume (vph)	90	40	110	40	35	25	95	540	40	30	570	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 41.9  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Existing 2023  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↗	
Traffic Volume (veh/h)	90	40	110	40	35	25	95	540	40	30	570	45
Future Volume (veh/h)	90	40	110	40	35	25	95	540	40	30	570	45
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	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	107	48	131	48	42	30	113	643	48	36	679	54
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	419	84	229	320	192	137	455	1187	89	438	1004	80
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.38	0.38	0.04	0.33	0.33
Sat Flow, veh/h	1328	415	1132	1224	950	678	1654	3112	232	1667	3047	242
Grp Volume(v), veh/h	107	0	179	48	0	72	113	340	351	36	362	371
Grp Sat Flow(s),veh/h/ln	1328	0	1546	1224	0	1628	1654	1650	1695	1667	1624	1665
Q Serve(g_s), s	2.6	0.0	3.8	1.3	0.0	1.3	1.5	5.8	5.8	0.5	6.9	6.9
Cycle Q Clear(g_c), s	4.0	0.0	3.8	5.1	0.0	1.3	1.5	5.8	5.8	0.5	6.9	6.9
Prop In Lane	1.00		0.73	1.00		0.42	1.00		0.14	1.00		0.15
Lane Grp Cap(c), veh/h	419	0	313	320	0	330	455	629	646	438	535	549
V/C Ratio(X)	0.26	0.00	0.57	0.15	0.00	0.22	0.25	0.54	0.54	0.08	0.68	0.68
Avail Cap(c_a), veh/h	813	0	771	682	0	812	533	846	869	599	828	849
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	13.0	15.3	0.0	12.0	7.2	8.7	8.7	7.5	10.4	10.4
Incr Delay (d2), s/veh	0.3	0.0	1.6	0.2	0.0	0.3	0.3	0.7	0.7	0.1	1.5	1.5
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	0.7	0.0	1.2	0.3	0.0	0.4	0.3	1.4	1.4	0.1	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	0.0	14.6	15.5	0.0	12.3	7.5	9.4	9.4	7.6	11.9	11.9
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		286			120			804			769	
Approach Delay, s/veh		14.4			13.6			9.2			11.7	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	18.3		11.8	7.9	16.4		11.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.5	7.8		6.0	3.5	8.9		7.1				
Green Ext Time (p_c), s	0.0	3.0		1.1	0.0	2.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Existing 2023  
PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	65	35	10	50	1	30	5	10	1	5	15
Future Vol, veh/h	15	65	35	10	50	1	30	5	10	1	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	16	71	38	11	54	1	33	5	11	1	5	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	55	0	0	109	0	0	209	199	90	207	218	55
Stage 1	-	-	-	-	-	-	122	122	-	77	77	-
Stage 2	-	-	-	-	-	-	87	77	-	130	141	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1563	-	-	1494	-	-	753	700	908	755	684	1018
Stage 1	-	-	-	-	-	-	887	799	-	937	835	-
Stage 2	-	-	-	-	-	-	926	835	-	878	784	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1563	-	-	1494	-	-	726	687	908	731	671	1018
Mov Cap-2 Maneuver	-	-	-	-	-	-	726	687	-	731	671	-
Stage 1	-	-	-	-	-	-	877	790	-	927	828	-
Stage 2	-	-	-	-	-	-	898	828	-	852	775	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.2			10.1			9.1		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	755	1563	-	-	1494	-	-	892
HCM Lane V/C Ratio	0.065	0.01	-	-	0.007	-	-	0.026
HCM Control Delay (s)	10.1	7.3	0	-	7.4	0	-	9.1
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC  
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 without Project  
AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	415	5	5	515	1
Future Vol, veh/h	5	1	10	10	1	5	5	415	5	5	515	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	506	6	6	628	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	907	1165	315	848	1162	256	629	0	0	512	0	0
Stage 1	641	641	-	521	521	-	-	-	-	-	-	-
Stage 2	266	524	-	327	641	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	234	196	687	209	184	749	963	-	-	861	-	-
Stage 1	434	473	-	434	513	-	-	-	-	-	-	-
Stage 2	722	533	-	581	451	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	229	193	687	202	182	749	963	-	-	861	-	-
Mov Cap-2 Maneuver	229	193	-	202	182	-	-	-	-	-	-	-
Stage 1	431	470	-	431	510	-	-	-	-	-	-	-
Stage 2	710	530	-	565	448	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.8	20	0.1	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	963	-	-	385	259	861	-	-
HCM Lane V/C Ratio	0.006	-	-	0.051	0.075	0.007	-	-
HCM Control Delay (s)	8.8	-	-	14.8	20	9.2	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕↗			↕↗
Traffic Vol, veh/h	0	30	420	10	0	540
Future Vol, veh/h	0	30	420	10	0	540
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	8	2	5	2
Mvmt Flow	0	33	457	11	0	587

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	234	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	768	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	768	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	768
HCM Lane V/C Ratio	-	-	0.042
HCM Control Delay (s)	-	-	9.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project  
 AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	25	130	40	30	25	65	330	15	15	465	45
Future Volume (vph)	70	25	130	40	30	25	65	330	15	15	465	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

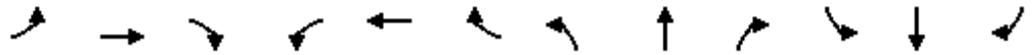
Intersection Summary  
 Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 36.6  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project  
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	25	130	40	30	25	65	330	15	15	465	45
Future Volume (veh/h)	70	25	130	40	30	25	65	330	15	15	465	45
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	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	80	29	149	46	34	29	75	379	17	17	534	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	455	49	249	338	177	151	464	1063	48	515	871	85
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.35	0.35	0.02	0.30	0.30
Sat Flow, veh/h	1297	227	1164	1187	825	703	1667	3039	136	1667	2942	286
Grp Volume(v), veh/h	80	0	178	46	0	63	75	194	202	17	289	297
Grp Sat Flow(s),veh/h/ln	1297	0	1390	1187	0	1528	1667	1559	1616	1667	1598	1630
Q Serve(g_s), s	1.8	0.0	3.8	1.2	0.0	1.1	1.0	3.0	3.0	0.2	5.1	5.1
Cycle Q Clear(g_c), s	2.9	0.0	3.8	4.9	0.0	1.1	1.0	3.0	3.0	0.2	5.1	5.1
Prop In Lane	1.00		0.84	1.00		0.46	1.00		0.08	1.00		0.18
Lane Grp Cap(c), veh/h	455	0	298	338	0	327	464	545	565	515	473	483
V/C Ratio(X)	0.18	0.00	0.60	0.14	0.00	0.19	0.16	0.36	0.36	0.03	0.61	0.61
Avail Cap(c_a), veh/h	893	0	768	739	0	844	599	885	917	734	902	920
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	11.5	13.8	0.0	10.5	7.2	7.9	7.9	7.7	9.9	9.9
Incr Delay (d2), s/veh	0.2	0.0	1.9	0.2	0.0	0.3	0.2	0.4	0.4	0.0	1.3	1.3
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	0.4	0.0	1.1	0.3	0.0	0.3	0.2	0.6	0.6	0.1	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	0.0	13.5	13.9	0.0	10.8	7.3	8.3	8.3	7.7	11.2	11.2
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		258			109			471			603	
Approach Delay, s/veh		13.0			12.1			8.1			11.1	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	15.9		11.5	7.0	14.1		11.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.2	5.0		5.8	3.0	7.1		6.9				
Green Ext Time (p_c), s	0.0	1.8		1.1	0.0	2.5		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.5								
HCM 6th LOS				B								

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Projected 2024 without Project  
AM Peak Hour

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	25	15	10	60	5	25	5	5	5	5	15
Future Vol, veh/h	15	25	15	10	60	5	25	5	5	5	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	17	28	17	11	67	6	28	6	6	6	6	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	45	0	0	175	166	37	169	171	70
Stage 1	-	-	-	-	-	-	71	71	-	92	92	-
Stage 2	-	-	-	-	-	-	104	95	-	77	79	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1576	-	-	768	727	953	799	726	998
Stage 1	-	-	-	-	-	-	917	836	-	920	823	-
Stage 2	-	-	-	-	-	-	880	816	-	937	833	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1540	-	-	1576	-	-	740	714	953	779	713	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	740	714	-	779	713	-
Stage 1	-	-	-	-	-	-	907	827	-	910	817	-
Stage 2	-	-	-	-	-	-	853	810	-	915	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1	10	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	760	1540	-	-	1576	-	-	878
HCM Lane V/C Ratio	0.052	0.011	-	-	0.007	-	-	0.032
HCM Control Delay (s)	10	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC  
 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 without Project  
 PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	640	15	5	625	5
Future Vol, veh/h	1	5	15	10	1	5	10	640	15	5	625	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	762	18	6	744	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1165	1563	375	1182	1557	390	750	0	0	780	0	0
Stage 1	759	759	-	795	795	-	-	-	-	-	-	-
Stage 2	406	804	-	387	762	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	152	113	628	147	114	614	786	-	-	846	-	-
Stage 1	369	418	-	351	402	-	-	-	-	-	-	-
Stage 2	598	398	-	614	416	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	147	111	628	135	111	614	786	-	-	846	-	-
Mov Cap-2 Maneuver	147	111	-	135	111	-	-	-	-	-	-	-
Stage 1	363	415	-	346	396	-	-	-	-	-	-	-
Stage 2	581	392	-	584	413	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.3		28.1		0.1		0.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	786	-	-	277	175	846	-	-
HCM Lane V/C Ratio	0.015	-	-	0.09	0.109	0.007	-	-
HCM Control Delay (s)	9.7	-	-	19.3	28.1	9.3	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	25	685	10	0	660
Future Vol, veh/h	0	25	685	10	0	660
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	0	27	745	11	0	717

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	378	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	620	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	620	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	620
HCM Lane V/C Ratio	-	-	0.044
HCM Control Delay (s)	-	-	11.1
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

Lanes, Volumes, Timings  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

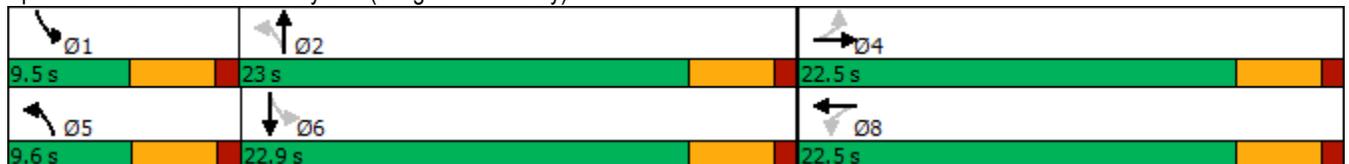
Projected 2024 without Project  
 PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	40	120	40	35	25	110	555	40	30	575	55
Future Volume (vph)	95	40	120	40	35	25	110	555	40	30	575	55
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

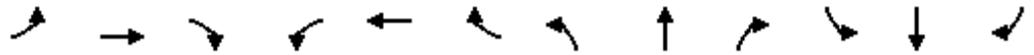
Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 42.3  
 Natural Cycle: 60  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 without Project  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	95	40	120	40	35	25	110	555	40	30	575	55
Future Volume (veh/h)	95	40	120	40	35	25	110	555	40	30	575	55
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	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	113	48	143	48	42	30	131	661	48	36	685	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	421	81	241	310	198	142	452	1211	88	430	991	94
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1328	388	1155	1211	950	678	1654	3119	226	1667	2997	284
Grp Volume(v), veh/h	113	0	191	48	0	72	131	349	360	36	371	379
Grp Sat Flow(s),veh/h/ln	1328	0	1542	1211	0	1628	1654	1650	1696	1667	1624	1658
Q Serve(g_s), s	2.9	0.0	4.2	1.4	0.0	1.4	1.8	6.1	6.2	0.5	7.4	7.4
Cycle Q Clear(g_c), s	4.2	0.0	4.2	5.6	0.0	1.4	1.8	6.1	6.2	0.5	7.4	7.4
Prop In Lane	1.00		0.75	1.00		0.42	1.00		0.13	1.00		0.17
Lane Grp Cap(c), veh/h	421	0	322	310	0	340	452	640	658	430	537	548
V/C Ratio(X)	0.27	0.00	0.59	0.15	0.00	0.21	0.29	0.55	0.55	0.08	0.69	0.69
Avail Cap(c_a), veh/h	784	0	743	640	0	784	513	816	839	584	799	816
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	13.4	15.9	0.0	12.2	7.5	8.9	8.9	7.8	10.9	10.9
Incr Delay (d2), s/veh	0.3	0.0	1.7	0.2	0.0	0.3	0.4	0.7	0.7	0.1	1.6	1.6
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	0.8	0.0	1.4	0.4	0.0	0.4	0.4	1.5	1.5	0.1	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	15.1	16.1	0.0	12.5	7.8	9.6	9.6	7.8	12.5	12.4
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		304			120			840			786	
Approach Delay, s/veh		14.8			14.0			9.3			12.2	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.0		12.3	8.2	16.9		12.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.5	8.2		6.2	3.8	9.4		7.6				
Green Ext Time (p_c), s	0.0	3.0		1.2	0.0	2.9		0.3				

Intersection Summary

HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Projected 2024 without Project  
PM Peak Hour

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	65	35	10	55	1	30	5	10	1	5	15
Future Vol, veh/h	15	65	35	10	55	1	30	5	10	1	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	16	71	38	11	60	1	33	5	11	1	5	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	109	0	0	215	205	90	213	224	61
Stage 1	-	-	-	-	-	-	122	122	-	83	83	-
Stage 2	-	-	-	-	-	-	93	83	-	130	141	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1494	-	-	746	695	908	748	678	1010
Stage 1	-	-	-	-	-	-	887	799	-	930	830	-
Stage 2	-	-	-	-	-	-	919	830	-	878	784	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1494	-	-	719	682	908	724	665	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	719	682	-	724	665	-
Stage 1	-	-	-	-	-	-	877	790	-	920	823	-
Stage 2	-	-	-	-	-	-	891	823	-	852	775	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.1			10.1			9.2		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	749	1555	-	-	1494	-	-	884
HCM Lane V/C Ratio	0.065	0.01	-	-	0.007	-	-	0.026
HCM Control Delay (s)	10.1	7.3	0	-	7.4	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC  
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 with Project  
AM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	5	1	10	10	1	5	5	420	5	5	520	1
Future Vol, veh/h	5	1	10	10	1	5	5	420	5	5	520	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	33	9	0	0	0	0	33	5	2
Mvmt Flow	6	1	12	12	1	6	6	512	6	6	634	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	916	1177	318	857	1174	259	635	0	0	518	0	0
Stage 1	647	647	-	527	527	-	-	-	-	-	-	-
Stage 2	269	530	-	330	647	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	8.16	6.68	6.9	4.1	-	-	4.76	-	-
Critical Hdwy Stg 1	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	7.16	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.83	4.09	3.3	2.2	-	-	2.53	-	-
Pot Cap-1 Maneuver	230	193	684	205	180	746	958	-	-	856	-	-
Stage 1	431	470	-	431	509	-	-	-	-	-	-	-
Stage 2	719	530	-	578	448	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	225	190	684	198	178	746	958	-	-	856	-	-
Mov Cap-2 Maneuver	225	190	-	198	178	-	-	-	-	-	-	-
Stage 1	428	467	-	428	506	-	-	-	-	-	-	-
Stage 2	707	527	-	562	445	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	20.3	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	958	-	-	380	255	856	-	-
HCM Lane V/C Ratio	0.006	-	-	0.051	0.077	0.007	-	-
HCM Control Delay (s)	8.8	-	-	15	20.3	9.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	35	420	20	0	545
Future Vol, veh/h	0	35	420	20	0	545
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	8	2	5	2
Mvmt Flow	0	38	457	22	0	592

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	240	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	761	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	761	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	761
HCM Lane V/C Ratio	-	-	0.05
HCM Control Delay (s)	-	-	10
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Lanes, Volumes, Timings  
3: US Hwy 101 (Oregon Coast Hwy) & 35th St

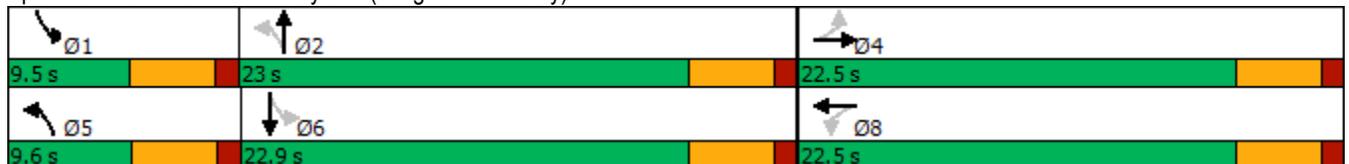
Projected 2024 with Project  
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	25	130	45	35	25	65	335	15	25	465	45
Future Volume (vph)	75	25	130	45	35	25	65	335	15	25	465	45
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40				40
Link Distance (ft)		675			318			615				184
Travel Time (s)		18.4			8.7			10.5				3.1
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt		NA
Protected Phases		4			8		5	2		1		6
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5		22.5
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5		22.9
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%		41.6%
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0		18.4
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5		4.5
Lead/Lag							Lead	Lag		Lead		Lag
Lead-Lag Optimize?							Yes	Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		3.0
Recall Mode	None	None		None	None		None	Min		None		Min
Walk Time (s)	7.0	7.0		7.0	7.0			7.0				7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0				11.0
Pedestrian Calls (#/hr)	0	0		0	0			0				0

Intersection Summary

Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 36.9  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project  
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	25	130	45	35	25	65	335	15	25	465	45
Future Volume (veh/h)	75	25	130	45	35	25	65	335	15	25	465	45
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	1668	1600	1723	1695	1654	1614	1750	1641	1668	1750	1682	1545
Adj Flow Rate, veh/h	86	29	149	52	40	29	75	385	17	29	534	52
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	11	2	4	7	10	0	8	6	0	5	15
Cap, veh/h	455	50	256	344	196	142	460	1018	45	515	867	84
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.33	0.33	0.04	0.29	0.29
Sat Flow, veh/h	1290	227	1164	1187	892	646	1667	3041	134	1667	2942	286
Grp Volume(v), veh/h	86	0	178	52	0	69	75	197	205	29	289	297
Grp Sat Flow(s),veh/h/ln	1290	0	1390	1187	0	1538	1667	1559	1617	1667	1598	1630
Q Serve(g_s), s	1.9	0.0	3.8	1.3	0.0	1.2	1.0	3.2	3.2	0.4	5.1	5.2
Cycle Q Clear(g_c), s	3.1	0.0	3.8	5.1	0.0	1.2	1.0	3.2	3.2	0.4	5.1	5.2
Prop In Lane	1.00		0.84	1.00		0.42	1.00		0.08	1.00		0.18
Lane Grp Cap(c), veh/h	455	0	306	344	0	338	460	522	541	515	471	480
V/C Ratio(X)	0.19	0.00	0.58	0.15	0.00	0.20	0.16	0.38	0.38	0.06	0.61	0.62
Avail Cap(c_a), veh/h	876	0	760	732	0	841	593	876	908	709	893	911
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	0.0	11.5	13.8	0.0	10.5	7.3	8.3	8.3	7.6	10.0	10.0
Incr Delay (d2), s/veh	0.2	0.0	1.8	0.2	0.0	0.3	0.2	0.5	0.4	0.0	1.3	1.3
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	0.5	0.0	1.1	0.3	0.0	0.3	0.2	0.7	0.7	0.1	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	0.0	13.2	14.0	0.0	10.8	7.5	8.8	8.8	7.6	11.3	11.3
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	B	B
Approach Vol, veh/h		264			121			477			615	
Approach Delay, s/veh		12.8			12.2			8.6			11.1	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	15.5		11.7	7.0	14.2		11.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.4	5.2		5.8	3.0	7.2		7.1				
Green Ext Time (p_c), s	0.0	1.8		1.1	0.0	2.5		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.7								
HCM 6th LOS				B								

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Projected 2024 with Project  
AM Peak Hour

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	25	15	10	60	5	25	5	5	5	5	20
Future Vol, veh/h	20	25	15	10	60	5	25	5	5	5	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	5	8	0	2	0	11	2	33	0	0	0
Mvmt Flow	22	28	17	11	67	6	28	6	6	6	6	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	45	0	0	187	176	37	179	181	70
Stage 1	-	-	-	-	-	-	81	81	-	92	92	-
Stage 2	-	-	-	-	-	-	106	95	-	87	89	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.21	6.52	6.53	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.21	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.599	4.018	3.597	3.5	4	3.3
Pot Cap-1 Maneuver	1540	-	-	1576	-	-	754	717	953	787	717	998
Stage 1	-	-	-	-	-	-	906	828	-	920	823	-
Stage 2	-	-	-	-	-	-	878	816	-	926	825	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1540	-	-	1576	-	-	720	701	953	765	701	998
Mov Cap-2 Maneuver	-	-	-	-	-	-	720	701	-	765	701	-
Stage 1	-	-	-	-	-	-	892	816	-	906	817	-
Stage 2	-	-	-	-	-	-	846	810	-	900	813	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.5	1	10.1	9.2
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	743	1540	-	-	1576	-	-	890
HCM Lane V/C Ratio	0.053	0.015	-	-	0.007	-	-	0.038
HCM Control Delay (s)	10.1	7.4	0	-	7.3	0	-	9.2
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

HCM 6th TWSC  
1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Projected 2024 with Project  
PM Peak Hour

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	1	5	15	10	1	5	10	650	15	5	635	5
Future Vol, veh/h	1	5	15	10	1	5	10	650	15	5	635	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	13	2	0	0	4	0
Mvmt Flow	1	6	18	12	1	6	12	774	18	6	756	6

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1183	1587	381	1200	1581	396	762	0	0	792	0	0
Stage 1	771	771	-	807	807	-	-	-	-	-	-	-
Stage 2	412	816	-	393	774	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.36	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.33	-	-	2.2	-	-
Pot Cap-1 Maneuver	147	109	623	143	110	609	778	-	-	838	-	-
Stage 1	363	413	-	346	397	-	-	-	-	-	-	-
Stage 2	593	393	-	609	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	142	107	623	131	108	609	778	-	-	838	-	-
Mov Cap-2 Maneuver	142	107	-	131	108	-	-	-	-	-	-	-
Stage 1	358	410	-	341	391	-	-	-	-	-	-	-
Stage 2	576	387	-	579	408	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.7		28.7		0.1		0.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	778	-	-	270	171	838	-	-
HCM Lane V/C Ratio	0.015	-	-	0.093	0.111	0.007	-	-
HCM Control Delay (s)	9.7	-	-	19.7	28.7	9.3	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	40	680	30	0	670
Future Vol, veh/h	0	40	680	30	0	670
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	0	43	739	33	0	728

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	386	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	612	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	612	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	612
HCM Lane V/C Ratio	-	-	0.071
HCM Control Delay (s)	-	-	11.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Lanes, Volumes, Timings  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project  
 PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	40	120	55	40	25	110	565	40	45	570	55
Future Volume (vph)	95	40	120	55	40	25	110	565	40	45	570	55
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Storage Length (ft)	125		0	150		0	150		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		675			318			615			184	
Travel Time (s)		18.4			8.7			10.5			3.1	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.6	23.0		9.5	22.9	
Total Split (%)	40.9%	40.9%		40.9%	40.9%		17.5%	41.8%		17.3%	41.6%	
Maximum Green (s)	18.0	18.0		18.0	18.0		5.1	18.5		5.0	18.4	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	

Intersection Summary

Area Type: Other  
 Cycle Length: 55  
 Actuated Cycle Length: 42.2  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated

Splits and Phases: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St



HCM 6th Signalized Intersection Summary  
 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Projected 2024 with Project  
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↗	
Traffic Volume (veh/h)	95	40	120	55	40	25	110	565	40	45	570	55
Future Volume (veh/h)	95	40	120	55	40	25	110	565	40	45	570	55
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	1723	1750	1736	1750	1750	1750	1736	1736	1750	1750	1709	1668
Adj Flow Rate, veh/h	113	48	143	65	48	30	131	673	48	54	679	65
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	0	1	0	0	0	1	1	0	0	3	6
Cap, veh/h	430	86	255	324	223	139	444	1147	82	428	976	93
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.10	0.37	0.37	0.06	0.33	0.33
Sat Flow, veh/h	1321	388	1155	1211	1007	629	1654	3123	223	1667	2995	286
Grp Volume(v), veh/h	113	0	191	65	0	78	131	355	366	54	368	376
Grp Sat Flow(s),veh/h/ln	1321	0	1542	1211	0	1637	1654	1650	1696	1667	1624	1657
Q Serve(g_s), s	2.9	0.0	4.2	1.9	0.0	1.5	1.9	6.6	6.6	0.8	7.5	7.5
Cycle Q Clear(g_c), s	4.4	0.0	4.2	6.1	0.0	1.5	1.9	6.6	6.6	0.8	7.5	7.5
Prop In Lane	1.00		0.75	1.00		0.38	1.00		0.13	1.00		0.17
Lane Grp Cap(c), veh/h	430	0	341	324	0	362	444	606	623	428	529	540
V/C Ratio(X)	0.26	0.00	0.56	0.20	0.00	0.22	0.29	0.59	0.59	0.13	0.69	0.70
Avail Cap(c_a), veh/h	761	0	728	628	0	773	503	801	824	551	784	800
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	13.2	15.9	0.0	12.1	7.8	9.7	9.7	7.9	11.2	11.2
Incr Delay (d2), s/veh	0.3	0.0	1.4	0.3	0.0	0.3	0.4	0.9	0.9	0.1	1.7	1.6
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	0.8	0.0	1.4	0.5	0.0	0.5	0.4	1.7	1.7	0.2	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	14.6	16.2	0.0	12.4	8.1	10.6	10.6	8.0	12.8	12.8
LnGrp LOS	B	A	B	B	A	B	A	B	B	A	B	B
Approach Vol, veh/h		304			143			852			798	
Approach Delay, s/veh		14.5			14.1			10.2			12.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	18.5		12.9	8.3	16.9		12.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	18.5		18.0	5.1	18.4		18.0				
Max Q Clear Time (g_c+I1), s	2.8	8.6		6.4	3.9	9.5		8.1				
Green Ext Time (p_c), s	0.0	3.0		1.2	0.0	2.9		0.4				

Intersection Summary

HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

HCM 6th TWSC  
4: Redwood St/Site Driveway & 35th St

Projected 2024 with Project  
PM Peak Hour

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	65	35	10	55	1	30	5	10	1	5	35
Future Vol, veh/h	30	65	35	10	55	1	30	5	10	1	5	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	3	0	0	0	25	0	0	0
Mvmt Flow	33	71	38	11	60	1	33	5	11	1	5	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	109	0	0	260	239	90	247	258	61
Stage 1	-	-	-	-	-	-	156	156	-	83	83	-
Stage 2	-	-	-	-	-	-	104	83	-	164	175	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.45	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.525	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1494	-	-	697	666	908	711	650	1010
Stage 1	-	-	-	-	-	-	851	772	-	930	830	-
Stage 2	-	-	-	-	-	-	907	830	-	843	758	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1494	-	-	651	645	908	682	630	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	645	-	682	630	-
Stage 1	-	-	-	-	-	-	831	754	-	909	823	-
Stage 2	-	-	-	-	-	-	860	823	-	808	741	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			1.1			10.6			9.1		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1555	-	-	1494	-	-	931
HCM Lane V/C Ratio	0.07	0.021	-	-	0.007	-	-	0.048
HCM Control Delay (s)	10.6	7.4	0	-	7.4	0	-	9.1
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Queuing and Blocking Report  
Existing 2023

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	35	64	30	38
Average Queue (ft)	11	14	2	2
95th Queue (ft)	35	46	12	18
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	48	11	6
Average Queue (ft)	20	0	0
95th Queue (ft)	47	8	6
Link Distance (ft)	179	121	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	70	111	60	78	52	94	66	49	116	106
Average Queue (ft)	32	46	21	28	24	43	22	9	62	43
95th Queue (ft)	64	84	53	61	49	78	54	34	104	89
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0			3	
Queuing Penalty (veh)		0				0			0	

Queuing and Blocking Report  
Existing 2023

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	23	62	39
Average Queue (ft)	1	25	16
95th Queue (ft)	11	55	41
Link Distance (ft)	241	628	85
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report  
Existing 2023

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	31	47	34	12
Average Queue (ft)	15	11	5	1
95th Queue (ft)	39	36	25	11
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	65	38	12
Average Queue (ft)	21	3	1
95th Queue (ft)	52	21	8
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	105	100	64	66	77	105	82	76	135	124
Average Queue (ft)	43	44	24	26	36	57	38	19	75	59
95th Queue (ft)	83	79	54	57	64	99	69	51	125	111
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									3	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0							6	
Queuing Penalty (veh)	0	0							2	

Queuing and Blocking Report  
Existing 2023

PM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	10	17	54	39
Average Queue (ft)	1	1	25	15
95th Queue (ft)	7	7	51	40
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 6

Queuing and Blocking Report  
Existing 2023

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	35	64	30	38
Average Queue (ft)	11	14	2	2
95th Queue (ft)	35	46	12	18
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	48	11	6
Average Queue (ft)	20	0	0
95th Queue (ft)	47	8	6
Link Distance (ft)	179	121	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	70	111	60	78	52	94	66	49	116	106
Average Queue (ft)	32	46	21	28	24	43	22	9	62	43
95th Queue (ft)	64	84	53	61	49	78	54	34	104	89
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									0	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0			3	
Queuing Penalty (veh)		0				0			0	

Queuing and Blocking Report  
Existing 2023

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	23	62	39
Average Queue (ft)	1	25	16
95th Queue (ft)	11	55	41
Link Distance (ft)	241	628	85
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report  
 Projected 2024 without Project

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	31	40	49	30
Average Queue (ft)	15	12	5	2
95th Queue (ft)	39	36	26	14
Link Distance (ft)	617	622		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	62	36	19
Average Queue (ft)	20	3	1
95th Queue (ft)	49	22	13
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	91	109	64	60	91	116	82	92	131	122
Average Queue (ft)	41	50	22	26	38	55	38	20	75	58
95th Queue (ft)	71	87	53	53	69	93	70	58	120	106
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									2	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)		0				0		0	6	
Queuing Penalty (veh)		0				0		0	2	

Queuing and Blocking Report  
Projected 2024 without Project

PM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	12	18	58	39
Average Queue (ft)	1	1	26	15
95th Queue (ft)	7	8	52	40
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 5

Queuing and Blocking Report  
 Projected 2024 with Project

AM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	T	L
Maximum Queue (ft)	40	69	24	4	39
Average Queue (ft)	13	18	2	0	2
95th Queue (ft)	38	55	14	3	16
Link Distance (ft)	617	622		393	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB
Directions Served	R	T
Maximum Queue (ft)	54	16
Average Queue (ft)	21	1
95th Queue (ft)	49	8
Link Distance (ft)	179	393
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	88	100	69	83	57	96	65	61	125	106
Average Queue (ft)	39	43	25	25	26	44	25	13	63	45
95th Queue (ft)	76	80	57	59	51	81	56	41	106	94
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									0	0
Queuing Penalty (veh)									1	0
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0				0			4	
Queuing Penalty (veh)	0	0				0			1	

Queuing and Blocking Report  
Projected 2024 with Project

AM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	23	12	61	39
Average Queue (ft)	2	0	25	19
95th Queue (ft)	12	6	56	44
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 2

Queuing and Blocking Report  
 Projected 2024 with Project

PM Peak Hour

Intersection: 1: US Hwy 101 (Oregon Coast Hwy) & 37th St

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	31	39	34	4	31
Average Queue (ft)	16	13	6	0	3
95th Queue (ft)	40	38	25	3	19
Link Distance (ft)	617	622		393	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: US Hwy 101 (Oregon Coast Hwy) & Site Driveway

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	57	27	6
Average Queue (ft)	26	3	0
95th Queue (ft)	50	20	4
Link Distance (ft)	179	393	393
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: US Hwy 101 (Oregon Coast Hwy) & 35th St

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	101	116	82	72	92	109	90	72	134	138
Average Queue (ft)	43	47	31	29	39	60	44	28	75	61
95th Queue (ft)	82	84	64	60	69	98	80	62	123	110
Link Distance (ft)		629		241		581	581		121	121
Upstream Blk Time (%)									1	0
Queuing Penalty (veh)									2	1
Storage Bay Dist (ft)	125		150		150			75		
Storage Blk Time (%)	0	0						0	6	
Queuing Penalty (veh)	0	0						0	3	

Queuing and Blocking Report  
Projected 2024 with Project

PM Peak Hour

Intersection: 4: Redwood St/Site Driveway & 35th St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	33	23	63	51
Average Queue (ft)	2	1	27	24
95th Queue (ft)	15	11	53	48
Link Distance (ft)	241	364	628	85
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 6