

# **TECHNICAL MEMORANDUM**

#### March 14, 2025

Project# 30088

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- From: Chris Brehmer & Julia Kuhn
  - CC: Andy Swanson & Kevin Miller, HSR Capital Bryce Hanson, AKS Engineering & Forestry, LLC
  - RE: SR 500/Everett Drive Roundabout Trip Information

This memorandum summarizes existing and forecast future traffic volumes at the proposed SR 500/Everett Drive Roundabout to help inform potential mitigation proportionality. The information provided herein is predicated in part on the technical analysis documented in the November 5, 2024 Camas Woods Transportation Impact Study (TIS) as well as additional site trip information associated with the currently proposed Camas Woods 2. Based on the initial review summarized in this memorandum, we recommend the City of Camas develop a comprehensive proportional share assessment methodology (or some other mechanism) to fund the SR 500/NE Everett Drive roundabout. The proportional share assessment methodology or some other financial mechanism could then be used as a basis to reimburse an appropriate portion of the design and construction cost assuming the Camas Woods development delivers the roundabout.

## ROUNDABOUT NEED

The TIS recommends the Camas Woods project reconstruct the SR 500 (NE Everett Street)/NE Everett Drive intersection to a three-approach single lane roundabout in conjunction with site development. The new roundabout is expected to include provisions for a planned future fourth (west) leg associated with North Shore Boulevard to be constructed by others to serve the Camas North Shore Subarea Plan. The TIS determined the roundabout should be in place prior to permitting the 39<sup>th</sup> weekday AM peak hour trip associated with Camas Woods site development (anticipated to be commensurate with the start of Camas Woods Phase 4B site development, reflecting a total of 89 or more townhomes on site).

## **TIS Traffic Volumes**

The TIS findings were based on analysis of year 2024 existing conditions as well as future year 2030 conditions assuming development of the site plus assumed 2% traffic volume growth and trips associated with the following approved in-process developments:

- Camas Heights, located on the north side of NE 28<sup>th</sup> Street at and west of NE 232<sup>nd</sup> Avenue; .
- Green Mountain Estates, located on the north side of NE 28<sup>th</sup> Street east of NE 222<sup>nd</sup> Avenue;

Page 2

- Green Mountain Planned Residential Development (PRD), located east of NE Ingle Road north of NE 28<sup>th</sup> Street;
- Lacamas Hills, located on the north side of Leadbetter Road west of Everett Road (formerly known as CJ Dens East Subdivision); and,
- Monte Verde Subdivision, located on the south side of NE 28<sup>th</sup> Street west of NE 232<sup>nd</sup> Avenue.

Since the TIS was prepared, an additional 78 townhomes have been proposed along the north side of NE 8<sup>th</sup> Street west of the Camas Woods project in Camas Woods 2.

## TRAFFIC VOLUMES & PROPORTIONALITY CONSIDERATIONS

Table 1 summarizes key traffic volume projections at the SR 500/NE Everett Drive intersection by movement and horizon year during the AM peak hour when the need for the roundabout was identified. The "Camas Woods Added" column in Table 1 reflects the sum of the Camas Wood trips from the TIS and from the currently proposed Camas Woods 2 assuming both developments can be accessed via NE 8<sup>th</sup> Street and NE Everett Drive.

Movement	2024 Existing	2030 Background	Background Growth (Background- Existing)	Camas Woods Added <sup>1</sup>	2030 Total <sup>1</sup>	Total Growth from Existing <sup>2</sup>
Southbound left	96	108	12	7	115	19
Southbound through	276	317	41	55	372	96
Northbound through	203	239	36	20	259	56
Northbound right	132	148	16	29	177	45
Westbound left	55	62	7	72 -	134	79
Westbound right	31	35	4	17	52	21
Total	793	909	116	200	1,109	316
East Approach Total <sup>3</sup>	314	353	39	125	478	164

### Table 1. SR 500/NE Everett Drive Intersection AM Peak Hour Turn Movement Projections

<sup>1</sup> Camas Woods Added trips = Camas Wood TIS trips + Camas Woods 2 trips

<sup>2</sup> Reflects "Background Growth" column + "Camas Woods Added" column

<sup>3</sup> Reflects southbound left + northbound right + westbound left + westbound right

Page 3

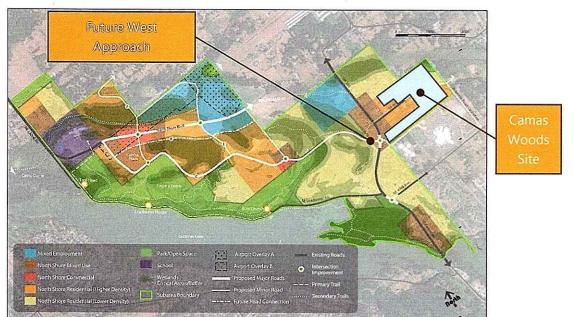
The following observations can be drawn about Camas Woods site-generated trips through the buildout horizon 2030 using the data presented in Table 1.

- They represent about 18% of the total AM peak hour volume projected at the intersection (200/1,109).
- They represent about 63% of the total AM peak hour growth projected at the intersection (200/316).
- They represent about 26% of the total AM peak hour volume projected on the east approach (125/478).
- They represent about 76% of the total AM peak hour volume growth projected on the east approach (125/478).

While the Camas Woods site-generated trips represent the majority of the near-term projected growth at the intersection, their percentage of overall growth is expected to be comparatively smaller when evaluated in the context of other planned long-term growth.

### Longer-term Future Travel Demand

The Camas North Shore Subarea Area Plan adopted by the City of Camas anticipates future construction of a fourth approach to the SR 500/NE Everett Drive roundabout as well as development of a substantial future land area as shown in Exhibit 1. The timing of the planned future North Shore Boulevard connection to the new roundabout is unknown and a traffic impact analysis for buildout of the Camas North Shore Subarea has not been prepared to date. Nonetheless, Exhibit 1 clearly suggests the future North Shore Boulevard will play a critical role in conveying North Shore Subarea vehicle trips to and from the SR 500 corridor via the SR 500/NE Everett Drive roundabout.



#### Exhibit 1. Camas North Shore Subarea Preferred Concept Plan

Image Source: City of Camas

To our knowledge, detailed long-term weekday AM peak hour traffic volume projections for the SR 500/NE Everett Drive roundabout have not yet been prepared that comprehensively consider buildout of the Camas North Shore Subarea plan, Camas Woods, and the surrounding area (in part because development plans are still being formulated by others and final road alignments/connections are not yet determined).

The land use and transportation connectivity depicted in Exhibit 1, future traffic volume projections in the Everett Street Corridor study, and preliminarily trip estimates for the Camas North Shore Subarea collectively suggest that the future west roundabout approach at the SR 500/NE Everett Drive intersection could carry in excess of 350 weekday AM peak hour trips. Compared to the 164 eastbound AM peak hour trip growth projected by 2030 on the east (Everett Drive) approach to the roundabout shown in Table 1, we conclude that future growth of the Camas North Shore Subarea and surrounding community could more than double the AM peak hour volumes at the roundabout associated with Camas Woods.

### **Other Considerations & Next Steps**

There is a significant cost difference between design and construction of a signalized intersection and a roundabout. Although the City made a policy determination through its Everett Street Corridor Study to require roundabouts along Everett Street (including the conversion of existing signals), installation of a traffic signal at the SR 500/NE Everett Drive intersection in conjunction with appropriate turn lanes would adequately mitigate the impacts of the proposed Camas Woods development from a purely capacity-based standpoint.

Accordingly, we recommend the City of Camas develop a comprehensive proportional share assessment methodology (or some other mechanism) to fund the SR 500/NE Everett Drive roundabout that accounts for a four-legged configuration and the difference in cost between a signalized intersection and a roundabout. The cost share assessment methodology could then be used as a basis to reimburse an appropriate portion of the design and construction cost assuming the Camas Woods development delivers the roundabout.