

Lake Road and NE Everett Street Intersection Improvements Draft Alternative Analysis Report

Camas, Washington

Prepared for:

City of Camas

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1 PROJECT BACKGROUND

Project Description

The intersection of NE Everett Street (SR-500) and NE Lake Road is currently a signalized tee intersection. The surrounding area includes Lacamas Lake, forested lands owned by the City of Camas (City) and Clark County, and private property. To the north along SR-500 is a bridge over a body of water connecting Lacamas Lake and Round Lake. This intersection connects two arterial roads that are critical links between the south shore, north shore, and downtown areas of Camas. Average daily traffic through the intersection is well over 15,000. The current signalized intersection is congested, with reported backups exceeding 1/2 mile.

The project study limits extend from just south of the Fallen Leaf Lake Park driveway (located to the south of the intersection of Lake Road and Everett Street) to the Everett Street Bridge (WSDOT Bridge #500/016) to the north, and from the sidewalk terminus at the Lacamas Lake Lodge, to the intersection of Lake Road and Everett Street intersection. The project area also includes the City-owned property, east of the intersection, in its entirety.

This Alternative Analysis Report evaluates the benefits, challenges, and impacts associated with signalized and roundabout intersection improvements. Once the evaluation is completed and an alternative is selected, the design team will move forward with design. Potential design modifications will be evaluated in the design process, which may further reduce the project impacts.

Project Purpose and Need

The existing intersection of Lake Road and Everett Street is at or near failure and experiences substantial delay on all legs. The existing roadway is generally 40 feet wide with a bike lane in the northbound direction on Everett Street. There are some intermittent segments of sidewalk, primarily at the existing signal, but the majority of the project area does not have sidewalk.

The goal of this project is to reduce intersection congestion, improve pedestrian and motorist safety, and increase multimodal connectivity within the general vicinity of the project. The intersection improvements will be limited to the required length needed to safely taper and transition to and from the existing roadway to the intersection improvements. The pedestrian access route may be extended beyond the intersection improvements in order to provide an ADA-accessible route between the Round Lake Park driveway (north), Fallen Leaf Lake Park driveway (south), and Lacamas Lake Lodge (west).

2 ALTERNATIVE ANALYSIS GOALS

The project design team has worked with City staff, the Project Advisory Committee, City Council, and the public to establish the following goals for the alternative analysis:

- **2020 Construction.** This intersection is already a bottleneck and subject to substantial congestion. A solution that allows for a more immediate solution (1 to 2 years) would be preferred over an option that takes longer to implement.
- **Relieve Congestion.** Traffic congestion and level of service (LOS) are the driving factors that have made this a priority project. All alternatives that require construction will provide an appropriate LOS for the modeled 2040 traffic volumes.
- **Pedestrian Safety and Accessibility.** This intersection is located between multiple parking and recreation facilities, and has the only marked roadway crossings between Round Lake, Fallen Leaf Lake, the Lacamas Lake Lodge, and several trail heads. A higher level of consideration for pedestrian accessibility will be required on this project.
- **Minimize Environmental Impacts.** This project lies between three lakes and nearly 500 trees within the projects study limits. Complete avoidance of any environmental impact is not possible with any new intersection improvement options. The goal will be to best balance the impacts in order to satisfy the project needs with the least harmful impacts to the environment.
- **Community Engagement.** City staff and City Council have stated from the beginning of the project that a robust community outreach program will be essential to the project's success. Due to the high profile location of the project, the community needs to be informed about and throughout the design process. The intent is to empower and educate the public while allowing the community to contribute to the alternative analysis process for this project. This was accomplished through stakeholder interviews; signage near the intersection; social media posts; a dedicated project webpage; the establishment of a Project Advisory Committee; an online survey; multiple public open houses publicized through advertisements in local media, by an all-Camas resident mailer, on social media, and in website articles.

3 ALTERNATIVES

Seven alternatives have been analyzed in order to determine the best solution for this intersection. These alternatives include the following (see Appendix A for layout of each alternative):

- **No-Build Option (NB)**. This alternative involves doing nothing. This option can be selected if the impacts of doing nothing is determined to best satisfy the alternative analysis criteria over all other project options.
- **Signal Alternative 1 (S1)**. This alternative places the new signalized intersection at the same location as the existing signalized intersection. The western edge of pavement matches the existing edge of pavement along Lacamas Lake. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts the existing bridge (to the north of the intersection along Everett), the County's Round Lake Park parking lot, private properties, and the City-owned property east of the existing intersection.
- **Signal Alternative 2 (S2)**. This alternative places the new signalized intersection south and east of the existing signalized intersection in order to avoid bridge impacts. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts the County Park's parking lot, private properties, and the City-owned property east of the existing intersection.
- **Signal Alternative 3 (S3)**. This alternative places the new signalized intersection even farther south and east of the existing signalized intersection in order to avoid bridge impacts and the County Park's parking lot. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts private properties (including relocation of business and residences), and the City-owned property east of the existing intersection.
- **Roundabout Alternative 1 (RB1)**. This alternative places a roundabout to the south and east of the existing signalized intersection. The western edge of the circulatory roadway is located outside of the existing payment so that the majority of the intersection can be built outside of the existing travel lanes. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts the City-owned property east of the existing intersection.
- **Roundabout Alternative 2 (RB2)**. This alternative places a roundabout along Everett Street, just south of the existing signalized intersection in order to avoid impacts to the lake. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts the City-owned property east of the existing intersection and private property, and will have increased construction staging complexity.
- **Roundabout Alternative 3 (RB3)**. This alternative places a roundabout at the same location as the existing signalized intersection. Lane configurations and storage lengths are based on the traffic report (see Appendix C). This alternative impacts the City-owned property east of the existing intersection, Lacamas Lake, and private property, and will have increased construction staging complexity.

4 ANALYSIS CRITERIA AND WEIGHT

The seven above-mentioned alternatives were evaluated based on 17 criteria. These evaluation criteria were the result of design team input, Project Advisory Committee feedback, stakeholder interview results, City Council input, and feedback from the community as a whole. Each alternative was evaluated based on the potential to either positively or negatively impact the criteria being evaluated. These criteria include the following:

- Public impacts and benefits
 - Project schedule
 - Public parking
 - Accessibility to lake
 - Private property impacts
 - Aesthetics
- Traffic impacts and benefits
 - Short-term impacts (construction)
 - Long-term impacts (performance)
 - Pedestrian and bicycle safety
 - Vehicular safety
 - Access management
- Environmental impacts and benefits
 - Tree impacts
 - Lake and wetland impacts
 - Habitat impacts
 - Water and air quality
- Infrastructure impacts and benefits
 - Bridge impacts
 - Construction costs
 - Utility impacts

Each alternative received a score from 1 to 10 for each criterion (see below for a breakdown on each criterion and an explanation on how each alternative was scored). Due to the nature of these criteria, some of them are more important to the community than others. In order to account for the variance in value of each criterion, the community survey (posted online from February 22 to March 11, with 1,108 responses) was used to establish a priority multiplier. The multiplier is the sum of the percentages of people who checked a 1 or 2 on question number 6 of the community survey. This question asked the public to rate the importance of several criteria, 1 being the highest importance and 5 being the lowest importance. It was the City and design team's opinion that this would best capture the overall priorities of the community. Results from the community survey are provided in Appendix D.

Public Impacts and Benefits - Project Schedule

Criteria Description

Project schedule will be set by the project's permitting requirements and estimated length of construction time. In general:

- Major impact to the County Park property (RCO funded property) could take up to 5 years to get through permitting.
- Property acquisition and business or personal relocations could take up to 2 years.
- Permitting wetland and lake impacts could take up to 2 years.
- If the existing bridge were to be impacted, it would need to be reconstructed. Bridge reconstruction would likely take 2 years.
- Construction without reconstructing the bridge could take 1 year to build the project.

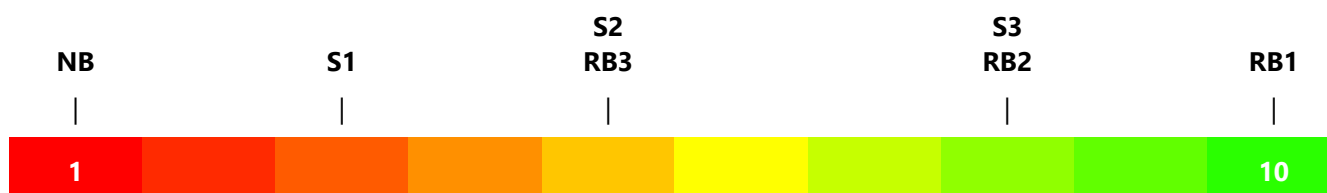
Note: Construction funding has not yet been acquired. The time it would take to procure the funding for these projects has been excluded from the schedule criteria analysis.

Criteria Scoring

- A score of 1 will be applied to the project with the longest schedule.
- A score of 10 will be applied to the shortest schedule.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	1	This alternative has an indefinite schedule as it will never resolve the issues with the intersection.
S1	3	This alternative will have a major impact to the County park and will impact the bridge. Permitting and construction for this alternative would likely take 7 years.
S2	5	This alternative will have a major impact to the County park. Permitting and construction for this alternative would likely take 6 years.
S3	8	This alternative will have major property and business impacts. Permitting and construction for this alternative would likely take 3 years.
RB1	10	This alternative does not require any right-of-way or federal permits and does not impact the County park property. Permitting and construction for this alternative would likely take 1.5 years.
RB2	8	This alternative will have minor private property and County park impacts. Permitting and construction for this alternative would likely take 3 years.
RB3	5	This alternative will have a major impact to the County park property (RCO funded). Permitting and construction for this alternative would likely take 6 years.

RATING SCALE



Public Impacts and Benefits – Public Parking

Criteria Description

Currently there is a very limited amount of legal parking spaces available to serve the park network in the vicinity of this intersection. Several people currently illegally park along the shoulder of the road. However, this will be eliminated with all construction options, as there will be a bike lane between the traveled lane and the curb line. All extra shoulder width will be eliminated.

The County park (where the current parking lot is located) is funded in part with RCO funds, which means that any physical impact to the parking lot will require replacement.

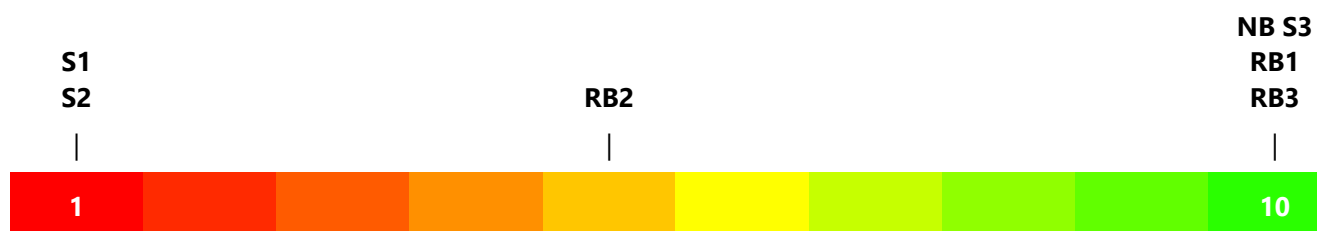
Required access management (removal of left turns) will not have a direct construction impact to the parking lot. However, it will not be feasible to have full access to the parking lot with some of the alternatives. This impact would not require mitigation with RCO.

Criteria Scoring

- Alternatives that require the reconstruction and or relocation of the parking lot will receive a score of 1.
- Alternatives that do not require reconstruction or relocation of the parking lot but will likely require right-in/right-out movements will receive a score of 5.
- Alternatives that do not require reconstruction or relocation of the parking lot and are not likely to require right-in/right-out movements will receive a score of 10.

Scoring		
Alt #	Score	Justification
NB	10	The no-build alternative will not have any impacts.
S1	1	This alternative will require the parking lot to be reconstructed.
S2	1	This alternative will require the parking lot to be reconstructed.
S3	10	This alternative will not impact the parking lot.
RB1	10	This alternative will not impact the parking lot.
RB2	5	This alternative will likely require the access to be converted to right-in/right-out access.
RB3	10	This alternative will not impact the parking lot.

RATING SCALE



V

Public Impacts and Benefits – Accessibility to Lake

Criteria Description

The current intersection does not have a clearly defined accessible route from the available overflow parking from the Lacamas Lake Lodge located west of the intersection.

All alternatives (except for the no-build alternative) will provide a clearly defined accessible route from the Lacamas Lake Lodge to the main park amenities. All alternatives have the potential to provide sidewalk connection to the Fallen Leaf Lake driveway. This additional connection is funding dependent.

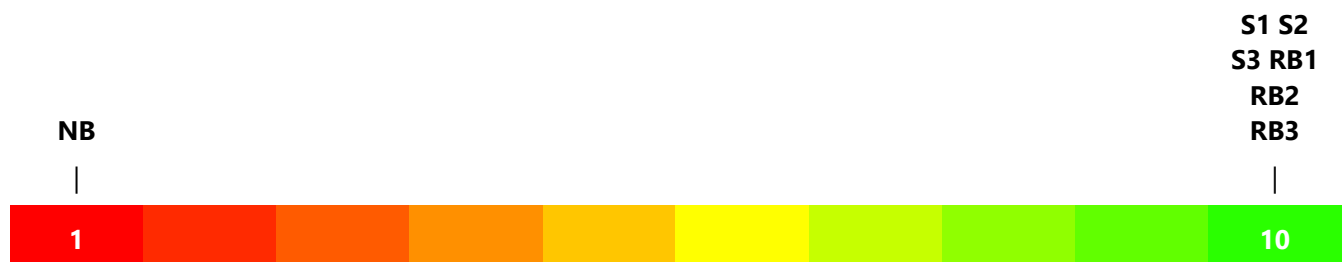
All alternatives that shift the intersection away from the park, which would cause out of direction travel, are anticipated to have an enhanced mid-block crossing installed to eliminate out of direction travel.

Criteria Scoring

- Alternatives that do not improve accessibility to the park will receive a score of 1.
- Alternatives that provide an accessible route from the extra parking at the Lacamas Lake Lodge to the main Round Lake amenities will receive a score of 10.

Scoring		
Alt #	Score	Justification
NB	1	The no-build alternative will not have any impacts.
S1	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.
S2	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.
S3	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.
RB1	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.
RB2	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.
RB3	10	This alternative will provide an accessible route from overflow parking to the Round Lake Park amenities.

RATING SCALE



Public Impacts and Benefits – Private Property Impacts

Criteria Description

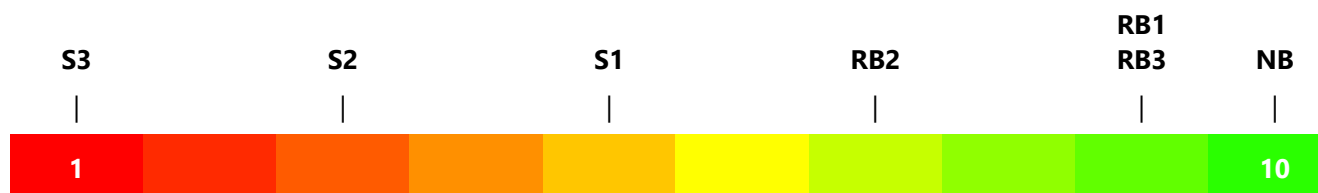
Several alternatives would require right-of-way acquisition from adjacent private properties. The amount of acquisition varies from minor impacts to relatively unused portions of a private property to residential and commercial relocations.

Criteria Scoring

- Alternatives that would require relocation of residences will receive a score of 1.
- Alternatives that would remove commercial parking will receive a score of 3.
- Alternatives that would require right-of-way acquisition from multiple properties but would not substantially impact use will receive a score of 5.
- Alternatives that would require right-of-way acquisition from a single private property will receive a score of 7.
- Alternatives that do not impact private property will receive a score of 10.

Scoring		
Alt #	Score	Justification
NB	10	The no-build alternative will not have any impacts.
S1	5	This alternative would likely require right-of-way acquisition from three parcels but is not anticipated to have substantial impacts to property use.
S2	3	This alternative would likely require right-of-way acquisition from four parcels and is anticipated to have substantial impacts to property use.
S3	1	This alternative will require multiple residences and businesses to be relocated.
RB1	9	This alternative is not likely to have any private property right-of-way acquisition but may require temporary construction easements on one property.
RB2	7	This alternative would likely require right-of-way acquisition from one parcel but is not anticipated to have substantial impacts to property use.
RB3	9	This alternative is not likely to have any private property right-of-way acquisition but may require temporary construction easements on one property.

RATING SCALE



Public Impacts and Benefits – Aesthetics

Criteria Description

City Council has expressed concerns pertaining to project aesthetics, stating that a substantial investment has been made in the area to enhance the aesthetics. This intersection is located along a Gateway Corridor which has been given precedence on aesthetics.

The existing intersection has utilitarian visual appeal and does not meet the aesthetic standards for a Gateway Corridor.

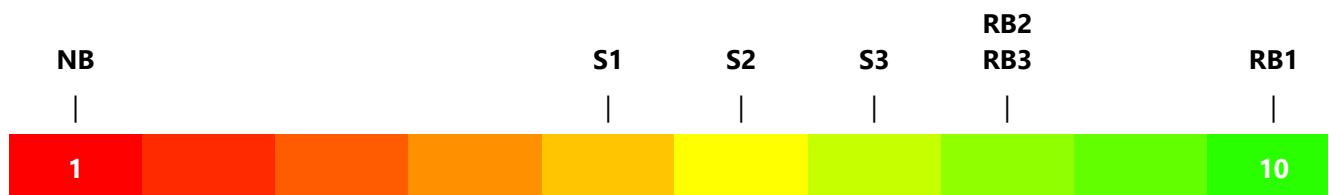
The potential to create an aesthetically appealing intersection is based on the available locations for enhanced landscaping and art features. Roundabouts generally have more potential for aesthetic enhancements as the central island has great “centerpiece” potential, and there is typically more adjacent landscaping that can be viewed from multiple angles.

Criteria Scoring

- Leaving the intersection as is will receive a score of 1.
- The remaining options have been assigned scores ranging from 5 to 10, based on the aesthetic potential. This potential is based on availability of landscape areas.

Scoring		
Alt #	Score	Justification
NB	1	No aesthetic improvements.
S1	5	Signalized intersection, with little area for landscaping.
S2	6	Signalized intersection, with moderate area for landscaping.
S3	7	Signalized intersection, with moderate area for landscaping.
RB1	10	Roundabout intersection, with substantial area for landscaping.
RB2	8	Roundabout intersection, with moderate area for landscaping.
RB3	8	Roundabout intersection, with moderate area for landscaping .

RATING SCALE



Traffic Impacts and Benefits – Short-Term Traffic Impacts (Construction)

Criteria Description

All construction-based alternatives will have an impact on the traveling public during construction. Impact may be the result of the following:

- Reduced speeds
- Single lane closures
- Temporary signals
- Flagging
- Traffic realignments
- Extended delays

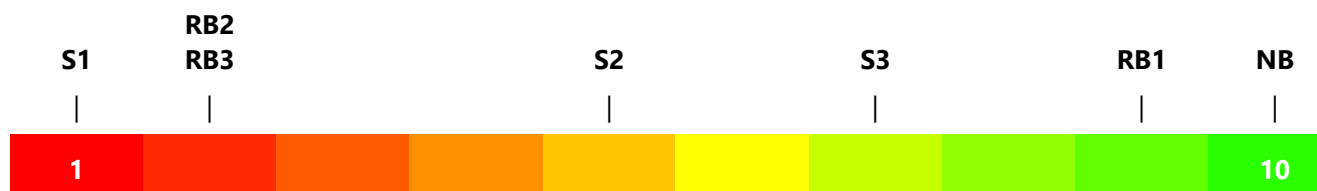
The extent of these impacts will be based on available room for construction, construction activities, and number of stages of construction. In general, any improvement that is needed to be constructed over the existing roadway will result in more traffic delay.

Criteria Scoring

- Alternatives requiring the existing bridge to be reconstructed are anticipated to span multiple years of construction and will result in a score of 1.
- Alternatives that can be built without any impact on the traveling public will result in a score of 10.
- Other alternatives that result in multiple stages of construction will be given a proportional score based on anticipated impact.

Scoring		
Alt #	Score	Justification
NB	10	The no-build alternative will not have any impacts.
S1	1	This alternative will require a bridge replacement and additional staging impacts.
S2	5	This alternative is anticipated to be generally constructed off line but will likely require a temporary signal.
S3	7	This alternative is anticipated to be almost completely constructed off line but will likely require a temporary signal.
RB1	9	This alternative is anticipated to be almost completely constructed off line.
RB2	2	This alternative is anticipated to have substantial delay as several stages of construction will be needed to build the project.
RB3	2	This alternative is anticipated to have substantial delay as several stages of construction will be needed to build the project.

RATING SCALE



Traffic Impacts and Benefits – Long-Term Traffic Impacts (Performance)

Criteria Description

The year 2040 projects the anticipated long-term traffic growth and potential transportation impacts in the City of Camas.

The alternative intersection performance impacts and benefits can be measured by the following:

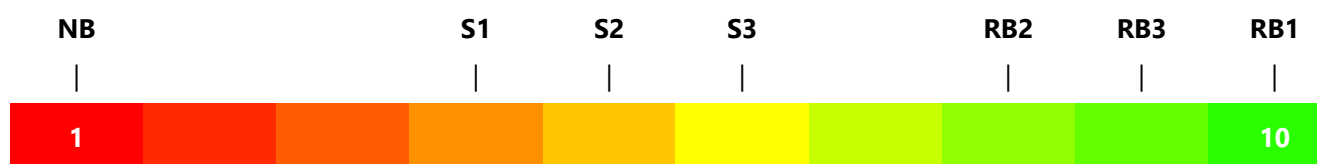
- Delay of the intersection when analyzed with the projected 2040 traffic volumes.
- Allowance of vehicle storage and queue lengths based on intersection geometry.

Criteria Scoring

- A score of 1 will be applied to the project with the longest delay for the projected 2040 volume.
- A score of 10 will be applied to the project with the shortest delay for the projected 2040 volumes.
- For intersections with the same delay, an evaluation of the roadway geometry was conducted on whether the alternative would provide adequate vehicle storage capacity and will be scored proportionally.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	1	Intersection failure (delay greater than 80 seconds).
S1	4	Delay of 34 seconds. Intersection geometry may limit vehicle queue storage.
S2	5	Delay of 34 seconds. This signal alternative would provide adequate queue storage for optimal performance of the signal.
S3	6	Delay of 34 seconds. This signal alternative would provide greatest queue storage for signal alternatives.
RB1	10	Delay of 17 seconds. This roundabout alternative would provide adequate queue storage.
RB2	8	Delay of 17 seconds. This roundabout alternative would provide adequate queue length storage. Geometry may limit southbound vehicle queue storage.
RB3	9	Delay of 17 seconds. This roundabout alternative would provide adequate queue storage. Geometry may limit southbound vehicle queue storage.

RATING SCALE



Traffic Impacts and Benefits – Pedestrian and Bicycle Safety

Criteria Description

Increase in pedestrian and bicyclist use is anticipated with improvements of the intersection by the year 2040, especially during peak seasons. Improvements to the intersection are anticipated to improve the existing pedestrian and bicycle facilities near the intersection.

The impacts and benefits of pedestrian and bicycle safety can be measured as follows:

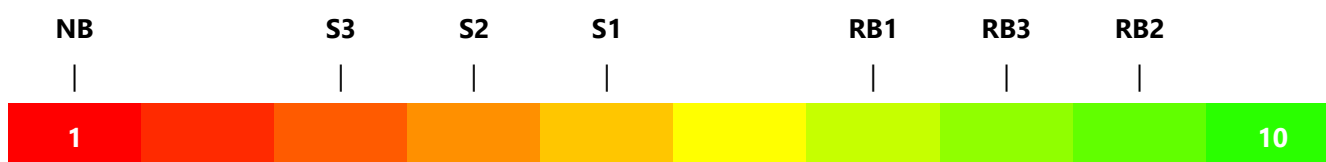
- Crossing distance for pedestrians when navigating the intersection.
- Adequate sight distance of pedestrians and bicyclists for motorists.
- Bicycle facility safety and connections in the vicinity of the intersection.

Criteria Scoring

- A score of 1 will be applied to the project that does not provide adequate pedestrian and bicycle facilities.
- A score of 10 will be applied to the project that provides adequate pedestrian and bicycle facilities, as well as the shortest crossing distance for pedestrians and longest sight distance of pedestrians and bicyclists for motorists.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	1	This alternative has no pedestrian facilities and minor bicycle facilities.
S1	5	This alternative provides larger crossing distances for pedestrians due to road widening.
S2	4	This alternative provides larger crossing distances for pedestrians due to road widening. The pedestrian crossings at the intersection are farther away from crossing locations preferred by community members.
S3	3	This alternative provides larger crossing distances for pedestrians due to road widening. The pedestrian crossings at the intersection are the farthest for signal alternatives away from crossing locations preferred by community members.
RB1	7	This alternative provides shorter crossing distances for pedestrians than a traditional signal. The pedestrian crossings at the intersection are farther away from crossing locations preferred by community members. This alternative relies on vehicles yielding for pedestrian/bicycle crossings.
RB2	9	This alternative provides shorter crossing distances for pedestrians than a traditional signal while also providing the longest sight distance of pedestrians. This alternative relies on vehicle yielding for pedestrian/bicycle crossings.
RB3	8	This alternative provides shorter crossing distances for pedestrians than a traditional signal. This alternative relies on vehicle yielding for pedestrian/bicycle crossings.

RATING SCALE



Traffic Impacts and Benefits – Vehicular Safety

Criteria Description

With the anticipated traffic growth by 2040, the number of vehicles entering the intersection will increase, thus resulting in a higher probability of vehicles crashes.

Vehicle safety impacts and benefits can be measured by the following:

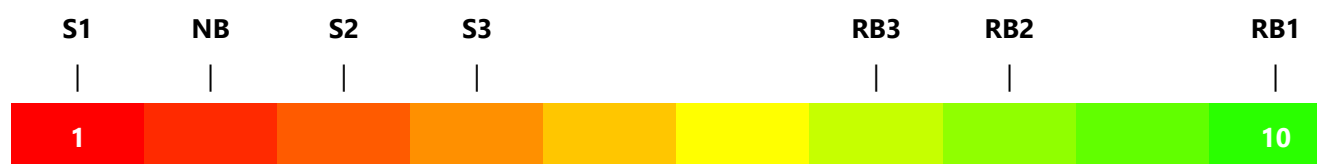
- Highest/lowest probability of fatal crashes at the intersection.
- Highest/lowest probability of overall crashes at the intersection.
- Vehicle speeds entering and exiting the intersection.
- Vehicle merging length when exiting the intersection.

Criteria Scoring

- A score of 1 will be applied to the project with the highest probability of fatal and overall crashes along with promoting higher vehicle speeds through the intersection.
- A score of 10 will be applied to the project with the lowest probability of fatal and overall crashes along with promoting lower vehicle speeds through the intersection.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	2	This alternative maintains a higher probability of fatal and overall crashes at the intersection. Due to anticipated congestion, rear-end crashes are a higher probability.
S1	1	This signal alternative has a higher probability of fatal crashes and overall crashes at the intersection compared to roundabouts. This roadway alignment promotes higher speeds.
S2	3	This signal alternative has a higher probability of fatal crashes and overall crashes at the intersection compared to roundabouts.
S3	4	This signal alternative has a higher probability of fatal crashes and overall crashes at the intersection compared to roundabouts.
RB1	10	This roundabout alternative has a lower probability of fatal crashes and overall crashes at the intersection compared to signals. Roundabout location and approach alignments promote slower speeds.
RB2	8	This roundabout alternative has a lower probability of fatal crashes and overall crashes at the intersection compared to signals. Approach alignments promote slower speeds.
RB3	7	This roundabout alternative has a lower probability of fatal crashes and overall crashes at the intersection compared to signals. Approach alignments promote slower speeds.

RATING SCALE



Traffic Impacts and Benefits – Access Management

Criteria Description

With the anticipated traffic growth by 2040, impacts and benefits should be evaluated for existing access to the local side streets, businesses at the intersection, and surrounding park facilities.

Access management impacts and benefits can be measured by:

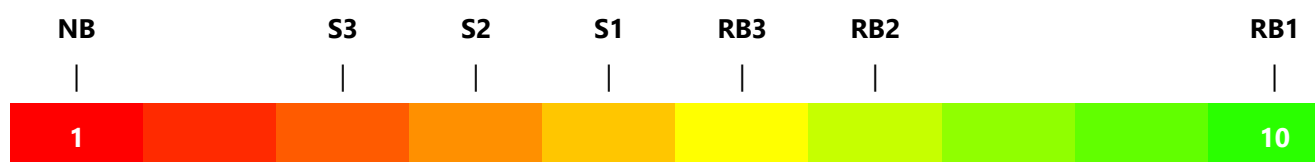
- Intersection queues impacting (blocking) access to local side streets, businesses at the intersection, and surrounding park facilities.
- Closures of access to local side streets, businesses at the intersection, and surrounding park facilities.
- Opportunities for connections to local side streets, businesses at the intersection, and surrounding park facilities.

Criteria Scoring

- A score of 1 will be applied to the project that would produce the longest queues that would impact access to local side streets, businesses, and park facilities, while not providing opportunities for future connections.
- A score of 10 will be applied to the project that would produce the shortest queues that would not impact access to local side streets, businesses, and park facilities, while providing opportunities for future connections.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	1	This alternative has the longest queues and would continue to impact access in the vicinity of the intersection.
S1	5	This alternative has longer queues while slightly impacting access to the Round Lake parking lot and Camas Produce.
S2	4	This alternative has longer queues while impacting access to Camas Produce by shifting the intersection south.
S3	3	This alternative has longer queues; however, the south leg impacts business significantly (Camas Produce), as well as their access.
RB1	10	This alternative has shorter queues and does not close or impact access surrounding the intersection.
RB2	7	This alternative has shorter queues; however, placement may impact access at the Round Lake parking lot.
RB3	6	This alternative has shorter queues; however, placement may impact access at the Round Lake parking lot.

RATING SCALE



Environmental Impacts and Benefits – Tree Impacts

Criteria Description

The intersection of Lake Road and Everett Street is located in the immediate proximity of several hundred trees (initial project studies identified nearly 500 trees). Each constructed alternative will impact some number of trees.

Although the community values all of the trees, the 42-inch American chestnut tree located just east of the existing intersection is native to the East Coast and was almost wiped out during a tree blight in the 19th century. At that time, people started planting seedlings of the American chestnut throughout the country. There are several groups dedicated to preserving this tree, such as The American Chestnut Foundation. The tree has a high cultural value.

Due to the nationwide value of the American chestnut tree, alternatives are being scored on both the number of anticipated trees that need to be removed as well as on the potential to save the American Chestnut tree.

Criteria Scoring

The anticipated tree impacts for each alternative have been quantified (see table below). The City classifies trees greater than 36-inch diameter at breast height (DBH) as significant trees. Therefore, a greater weight has been assigned to trees classified as significant. Based on the assigned impact/tree values, each alternative received a tree impact score. The alternatives were rated as follows:

- Alternative with the lowest score received a score of 10.
- Alternative with the highest score received a score of 1.
- Other alternatives were scored proportionally.

Tree Rating	Impact / Tree	NB	S1	S2	S3	RB1	RB2	RB3
GOOD (>36-in DBH)	6	0	3	2	3	3	2	2
GOOD (<36-in DBH)	4	0	11	15	10	13	14	12
FAIR (>36-in DBH)	3	0	3	7	8	10	1	1
FAIR (<36-in DBH)	2	0	26	28	24	27	24	21
POOR (>36-in DBH)	2	0	1	1	1	2	0	1
POOR (<36-in DBH)	1	0	50	81	70	59	32	43
HAZARD	0	0	16	30	44	27	12	15
American Chestnut	8	0	1	1	1	0	1	1
Total Trees Impacted		0	111	165	161	141	86	96
Tree Impact score		0	183	240	210	217	159	158

Criteria Scoring	10	5	1	3	2	7	7
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RATING SCALE



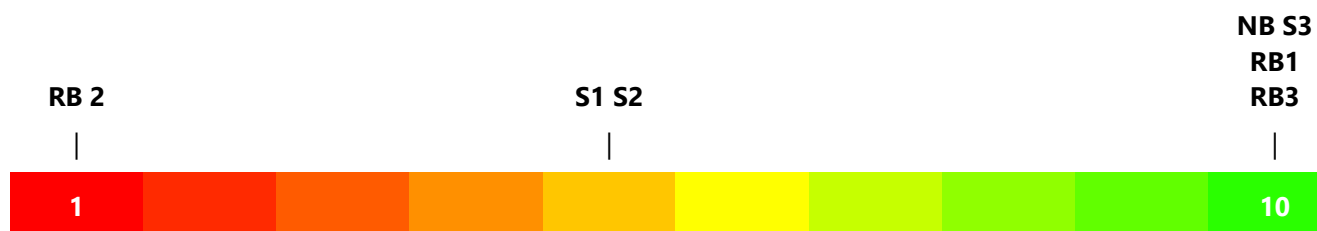
Criteria Description

Criteria Scoring

- A score of 1 will be applied to alternatives with the greatest lake and wetland impacts and include a US Army Corps of Engineer (USACE) Individual Wetland Permit or Nationwide Permit.
- A score of 5 will be applied to projects with some lake and wetlands impacts and may require a US Army Corps of Engineer Nationwide Wetland Permit.
- A score of 10 will be applied to projects that will have no impacts to lakes and wetlands.

Scoring		
Alt #	Score	Justification
NB	10	This alternative does not require construction and has no impact on the lakes or wetlands.
S1	5	For areas outside of the bridge, this alternative will have no direct impacts to the wetlands and the lake located adjacent to the study area. Bridge impacts are unknown, but could trigger USACE permitting.
S2	5	This alternative may have some temporary impacts to the lake located adjacent to the study area, but no direct impacts to wetlands.
S3	10	This alternative does not appear to have direct impacts to the lake or wetlands located adjacent to the study area.
RB1	10	This alternative does not appear to have direct impacts to the wetlands or the lake located adjacent to the study area.
RB2	1	This alternative will directly impact approximately 0.15 acre of the southeast shoreline of Lacamas Lake between the northern and western leg of the roundabout, and will have no direct wetland impacts.
RB3	10	This alternative does not appear to have direct impacts to the lake or wetlands located adjacent to the study area.

RATING SCALE



Environmental Impacts and Benefits – Habitat Impacts

Criteria Description

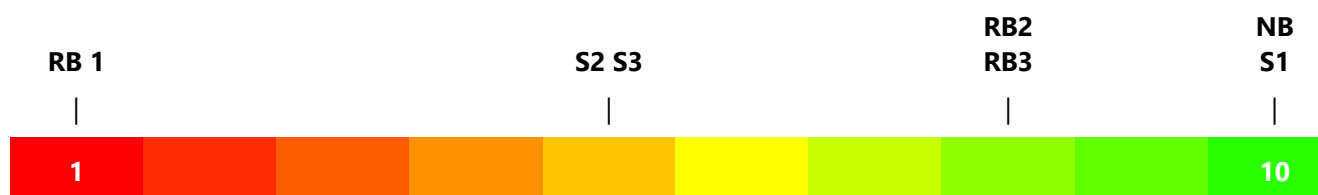
Habitat impacts vary for each alternative and assessment of impacts is related to percentage of canopy tree removal.

Criteria Scoring

- A score of 1 will be applied to alternatives with a tree canopy reduction of more than 30 percent.
- A score of 5 will be applied to alternatives with a tree canopy reduction of between 15 and 30 percent.
- A score of 8 will be applied to alternatives with a tree canopy reduction of less than 15 percent.
- A score of 10 will be applied to alternatives with a tree canopy reduction of less than 10 percent.

Scoring		
Alt #	Score	Justification
NB	10	This alternative does not require construction and has no impact to habitat areas.
S1	10	This alternative will have less than 10 percent tree canopy reduction in habitat area. The American chestnut tree would be impacted.
S2	5	This alternative will have between 15 and 30 percent tree canopy reduction in habitat area. The American chestnut tree would be impacted.
S3	5	This alternative will have between 15 and 30 percent tree canopy reduction in habitat area. The American chestnut tree would be impacted.
RB1	1	This alternative will have more than 30 percent tree canopy reduction in habitat area. May be possible to retain the American chestnut tree.
RB2	8	This alternative will have less than 15 percent tree canopy reduction in habitat area. The American chestnut tree would be impacted.
RB3	8	This alternative will have less than 15 percent tree canopy reduction in habitat area. The American chestnut tree would be impacted.

RATING SCALE



Environmental Impacts and Benefits – Water and Air Quality

Criteria Description

In this case, water and air quality are a direct result of pollutants discharged from vehicles idling at an intersection.

As vehicles brake, metal fragments are emitted from the vehicle and are transported through stormwater runoff to adjacent waterbodies. Washington State Department of Ecology has required treatment regulations to capture and treat these pollutants.

Vehicles also emit carbon monoxide while their engines are running. The longer a vehicle is spent idling, the more pollutants are discharged into the environment.

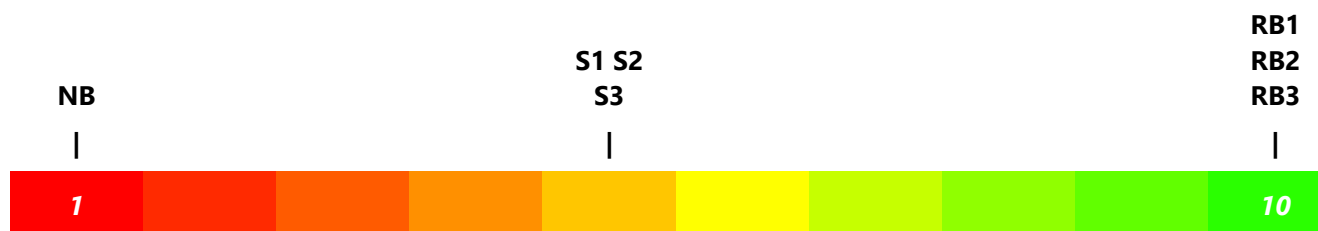
Roundabouts tend to have shorter storage lengths (compared to signalized intersections) as a result of how they directly correlate to the pollution potential of roundabouts.

Criteria Scoring

- The no-build alternative will result in the highest long-term pollution potential and will receive a score of 1.
- Signalized intersections will provide appropriate water quality but will have greater vehicular delay and will receive a score of 5.
- Roundabout intersections will provide appropriate water quality and have shorter vehicle delay, and will receive a score of 10.

Scoring		
Alt #	Score	Justification
NB	1	This alternative does not treat all project stormwater runoff to current Ecology standards and is subject to longer vehicular idling times.
S1	5	This alternative will treat stormwater runoff to current Ecology standards but is subject to longer vehicular idling times.
S2	5	This alternative will treat stormwater runoff to current Ecology standards but is subject to longer vehicular idling times.
S3	5	This alternative will treat stormwater runoff to current Ecology standards but is subject to longer vehicular idling times.
RB1	10	This alternative will treat stormwater to current Ecology standards and will result in shorter vehicular idling times.
RB2	10	This alternative will treat stormwater to current Ecology standards and will result in shorter vehicular idling times.
RB3	10	This alternative will treat stormwater to current Ecology standards and will result in shorter vehicular idling time.

RATING SCALE



Infrastructure Impacts and Benefits – Bridge Impacts

Criteria Description

The bridge north of the intersection of Lake Road and Everett Street is structurally sound but functionally obsolete. Currently there are no plans to replace this bridge by WSDOT and the Regional Traffic Council. If it were to be impacted by any project, it would need to be replaced with a new bridge.

This bridge does not have the required freeboard from the 100-year floodplain and is too narrow to accommodate the roadway standard section. If this bridge were to be replaced, it would need to be raised 7 to 8 feet in elevation and would require substantial roadway reconstruction (roughly 600 feet south of the bridge and 400 feet north of the bridge).

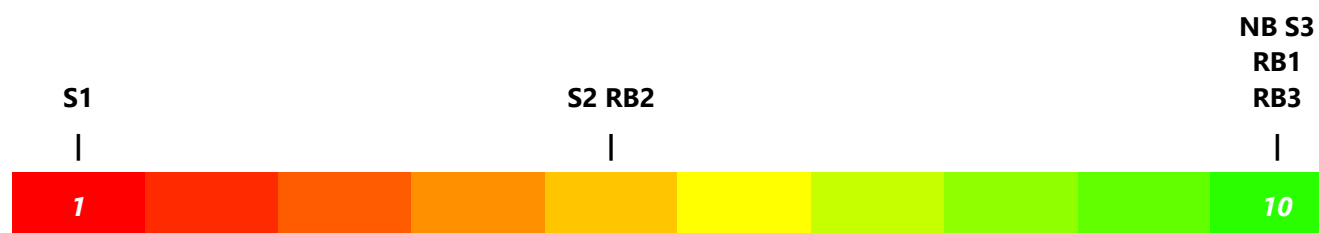
The bridge replacement is anticipated to cost \$8.4M.

Criteria Scoring

- Alternatives that are anticipated to require a minimal amount of reconstruction when the bridge is reconstructed will be given a score of 10.
- Alternatives that are anticipated to require a substantial amount of reconstruction when the bridge is reconstructed will be given a score of 5.
- Alternatives that impact the bridge will receive a score of 1.

Scoring		
Alt #	Score	Justification
NB	10	Does not impact the bridge.
S1	1	Impacts the bridge.
S2	5	A larger portion of this alternative will need to be reconstructed when the bridge is replaced in the future.
S3	10	Does not impact the bridge.
RB1	10	Does not impact the bridge.
RB2	5	A larger portion of this alternative will need to be reconstructed when the bridge is replaced in the future.
RB3	10	Does not impact the bridge.

RATING SCALE



Infrastructure Impacts and Benefits – Construction Costs

Criteria Description

The six construction-based alternatives have been conceptually costed out for the purposes of a cost comparison (see below and Appendix B).

Upon selection of a preferred alternative, the preferred alternative and its project additives will be refined to provide a more detailed construction cost estimate.

Criteria Scoring

- Lowest cost will receive a score of 10.
- Highest cost will receive a score of 1.
- Other alternatives will be scored proportionally.

Scoring		
Alt #	Score	Justification
NB	10	\$0
S1	1	\$19.9M
S2	4	\$9.8M
S3	2	\$11.5M
RB1	8	\$6.8M
RB2	4	\$10.0M
RB3	6	\$8.8M

Item	S1	S2	S3	RB1	RB2	RB3
Roadway Improvements*	\$6,430,000	\$6,430,000	\$6,430,000	\$5,850,000	\$5,850,000	\$5,850,000
Bridge Replacement*	\$9,740,000	\$0	\$0	\$0	\$0	\$0
Round Lake Parking Impacts*	\$660,000	\$0	\$0	\$0	\$0	\$0
Private Property Impact	\$330,000	\$681,000	\$3,240,000	\$26,000	\$34,000	\$104,000
City Property Impact	\$225,000	\$475,000	\$625,000	\$505,000	\$150,000	\$140,000
Utility Adjustment & Relocation*	\$1,170,000	\$1,220,000	\$270,000	\$270,000	\$1,090,000	\$1,120,000
Construction Staging/Traffic Control	\$1,330,000	\$900,000	\$900,000	\$180,000	\$1,160,000	\$1,160,000
Walls	\$0	\$0	\$0	\$0	\$1,630,000	\$380,000
Wetland Impacts (Direct)	\$0	\$43,000	\$0	\$0	\$110,000	\$0
Total Cost	\$19,890,000	\$9,750,000	\$11,470,000	\$6,830,000	\$10,020,000	\$8,750,000

Cost Add Alternatives	Additive Costs
Project Aesthetics	\$500,000 - \$1,000,000
Pedestrian Overpass	\$2,750,000
Additional Parking	\$660,000

RATING SCALE



Infrastructure Impacts and Benefits – Utility Impacts

Criteria Description

Aerial utilities are located along both the east and west sides of Everett Street and along the northern side of Lake Road. Some of the aerial utilities appear to be in an existing easement. If this is the case, the City may be responsible for compensating for portions of the relocations. (Potential city cost obligations have been incorporated into the cost estimate.)

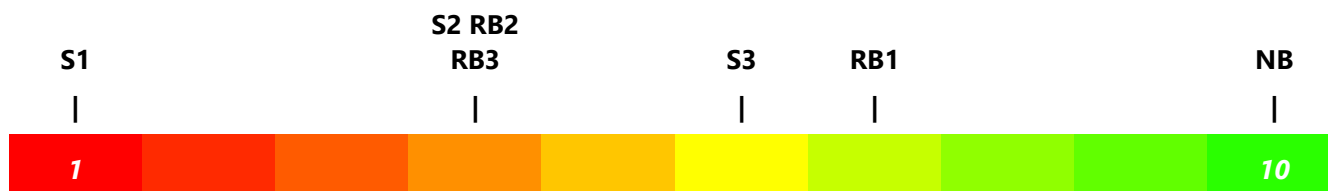
Some alternatives require the existing aerial utilities to be moved out of alignment. This type of relocation tends to be substantially more complicated and expensive than relocating poles in line with the existing aerial facilities.

Criteria Scoring

- Alternatives that are likely to require aerial utilities to be rerouted around the project will receive a score of 1.
- Alternatives that do not require aerial utilities to be relocated will receive a score of 10.
- All other alternatives will be scored based on their proportional impacts.

Scoring		
Alt #	Score	Justification
NB	10	This alternative does not require relocations.
S1	1	This alternative will require substantial rerouting of aerial utilities.
S2	4	This alternative will require some rerouting of aerial facilities.
S3	6	Poles should be able to be relocated in line with the existing aerial facilities.
RB1	7	Poles should be able to be relocated in line with the existing aerial facilities.
RB2	4	This alternative will require some rerouting of aerial facilities.
RB3	4	This alternative will require some rerouting of aerial facilities.

RATING SCALE



5 RESULTS

The following table summarizes the results from section 4, Analysis Criteria and Weight:

<i>Public Impacts and Benefits</i>	Priority	NB	S1	S2	S3	RB1	RB2	RB3
Project Schedule	64	1	3	5	8	10	8	5
Public Parking	58	10	1	1	10	10	5	10
Accessibility to Lake	58	1	10	10	10	10	10	10
Private Property Impacts	34	10	5	3	1	9	7	9
Aesthetics	49	1	5	6	7	10	8	8
Subtotal		1,091	1,245	1,354	2,049	2,596	2,012	2,178

<i>Traffic Impacts and benefits</i>	Priority	NB	S1	S2	S3	RB1	RB2	RB3
Short Term Traffic Impacts (Construction)	70	10	1	5	7	9	2	2
Long Term Traffic Impacts (Performance)	72	1	4	5	6	10	8	9
Pedestrian and Bicycle Safety	65	1	5	4	3	7	9	8
Vehicular Safety	65	2	1	3	4	10	8	7
Access Management	33	1	5	4	3	10	7	6
Subtotal		1,000	913	1,297	1,476	2,785	2,052	1,961

<i>Environmental Impacts and benefits</i>	Priority	NB	S1	S2	S3	RB1	RB2	RB3
Tree impacts	46	10	5	1	3	2	7	7
Lake and wetland impacts	44	10	5	5	10	10	1	10
Habitat Impacts	44	10	10	5	5	1	8	8
Water and Air Quality	44	1	5	5	5	10	10	10
Subtotal		1,384	1,110	706	1,018	1,016	1,066	1,554

<i>Infrastructure Impacts and Benefits</i>	Priority	NB	S1	S2	S3	RB1	RB2	RB3
Impacts to bridge	31	10	1	5	10	10	5	10
Construction Costs	40	10	1	4	2	8	4	6
Utility Impacts	40	10	1	4	6	7	4	4
Subtotal		1,110	111	475	630	910	515	710

<i>Summary</i>	NB	S1	S2	S3	RB1	RB2	RB3
Total Score (No Priority)	99	68	75	100	143	111	129
Total Score (Web Survey Priority)	4,585	3,379	3,832	5,173	7,307	5,697	6,403

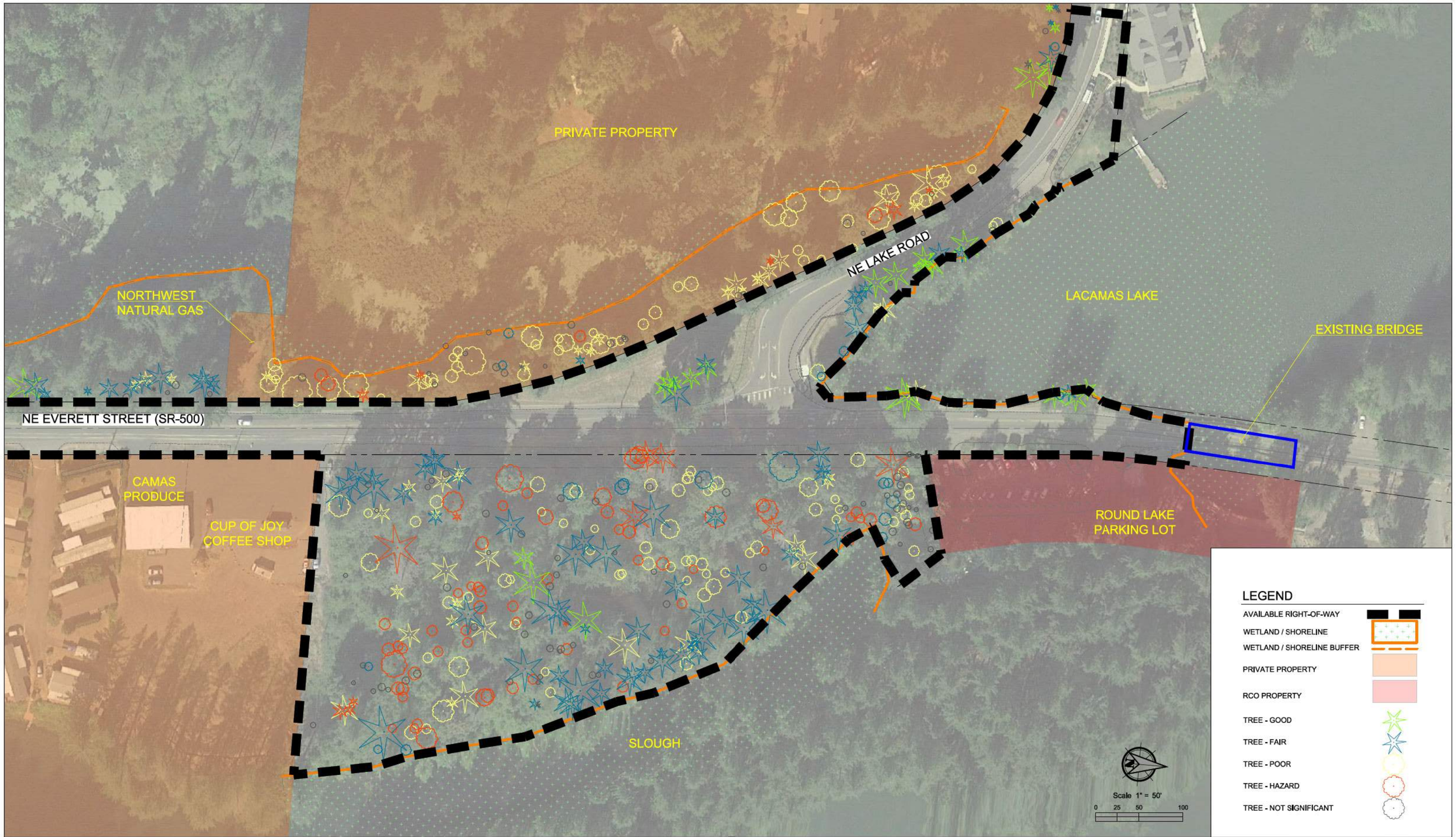
Priority is based on the percentage of people who selected #1 and #2 on question 6 of the online survey.

6 FINAL ALTERNATIVE

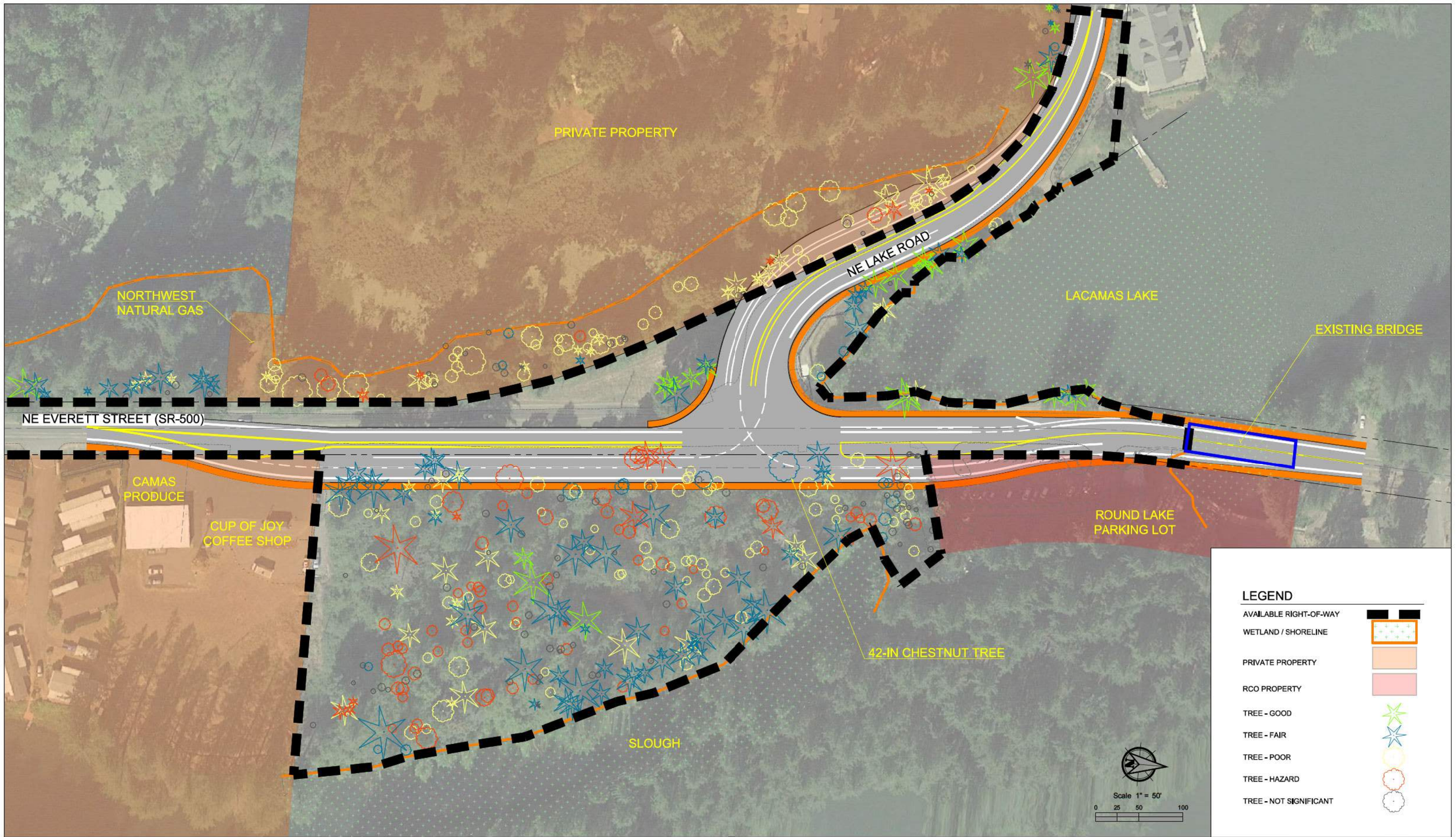
- Recommendations per Public outreach
- PAC member agreement
- Council agreement
- Preferred alternative
- Anticipated Costs
- Anticipated Challenges

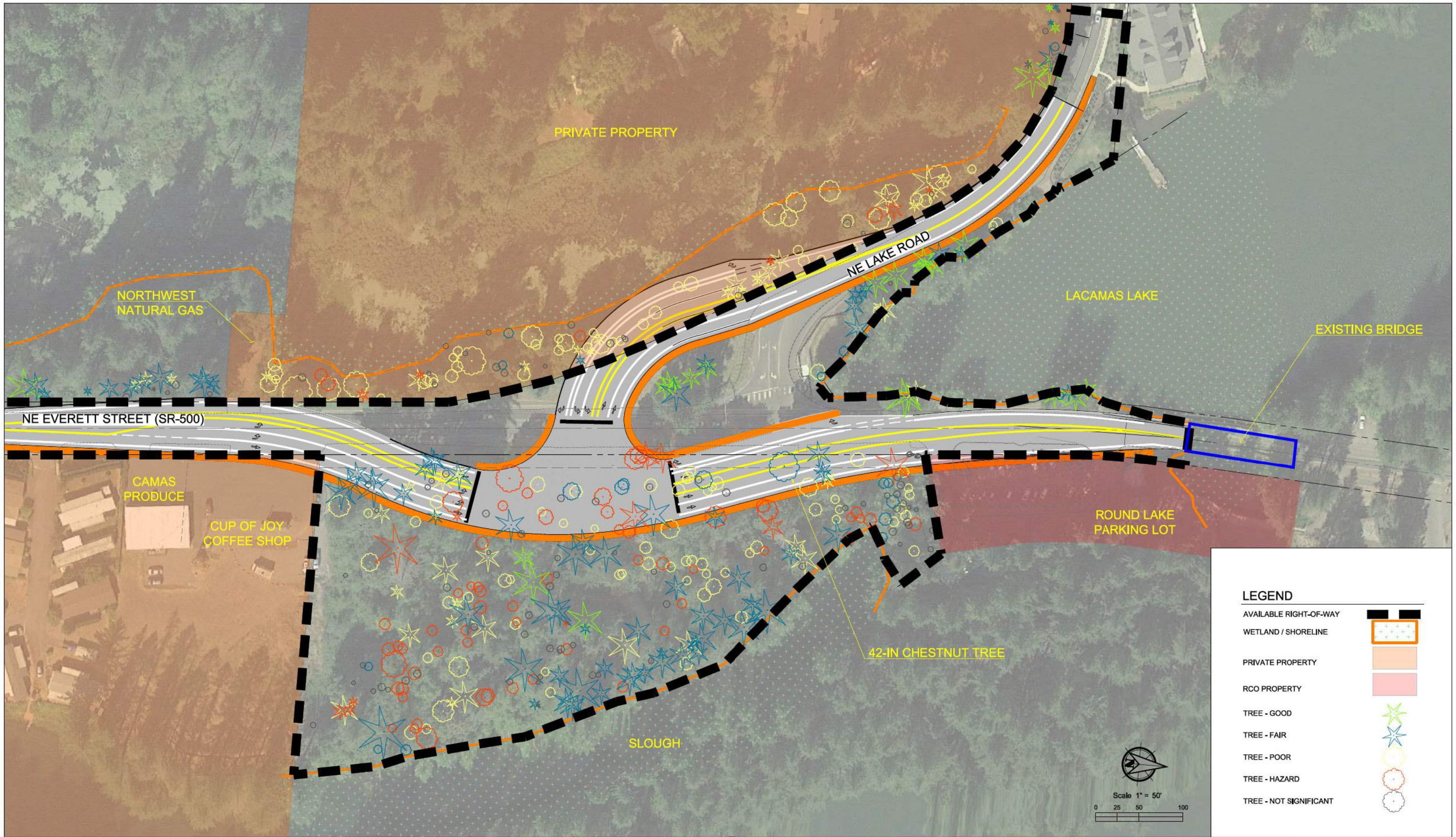
Appendix A

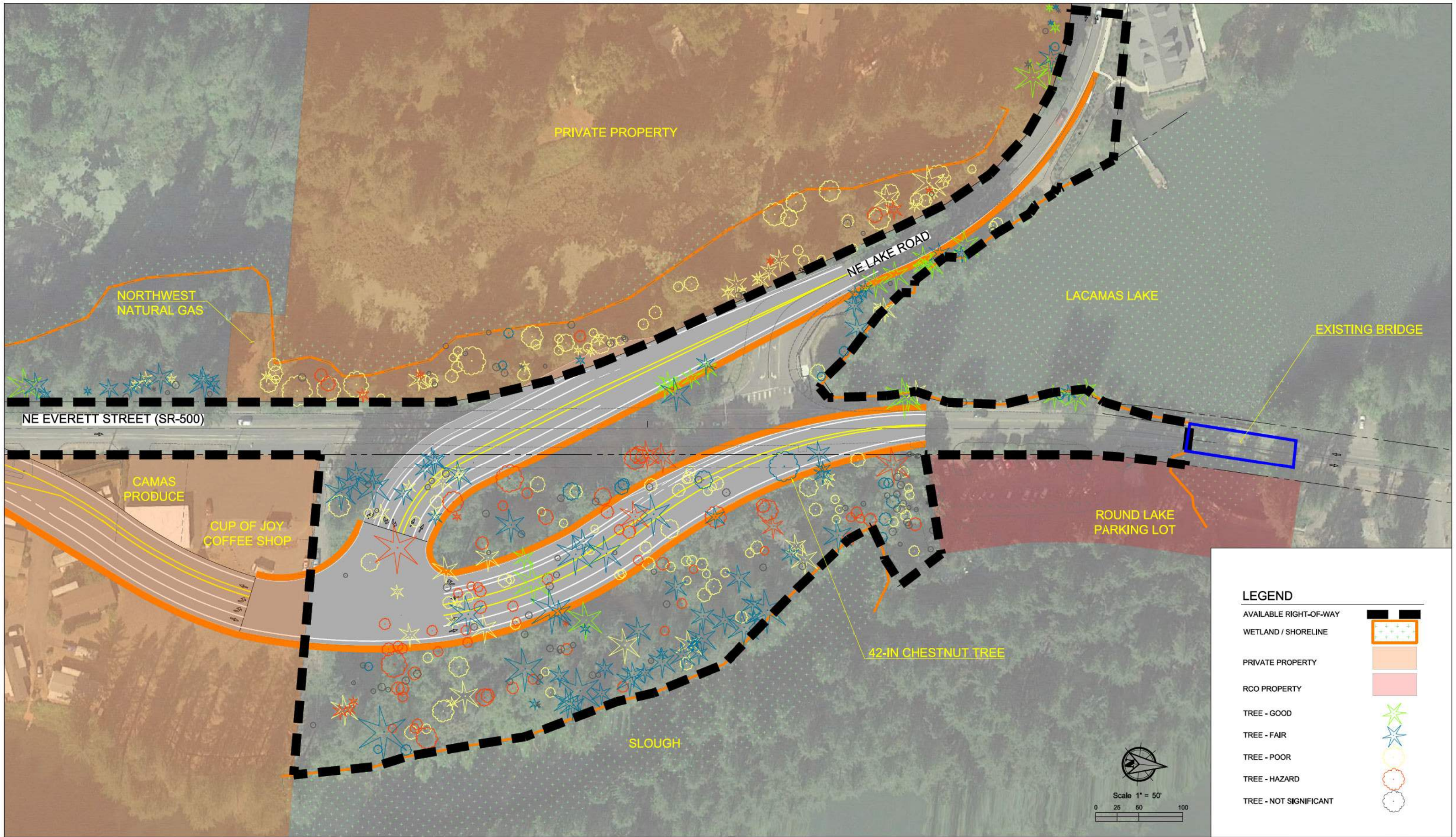
Alternative Layouts



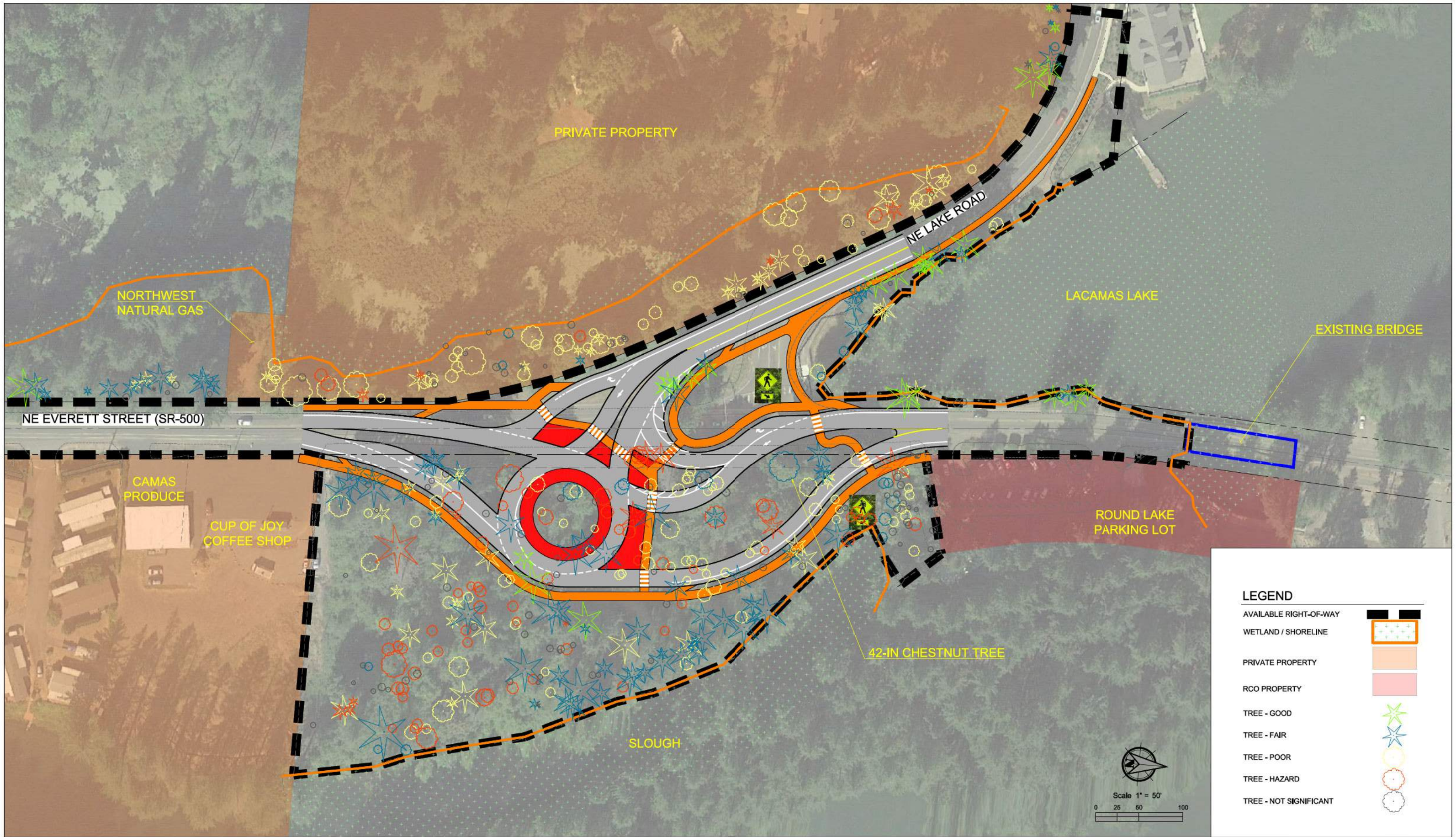
LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS SITE CONSTRAINTS



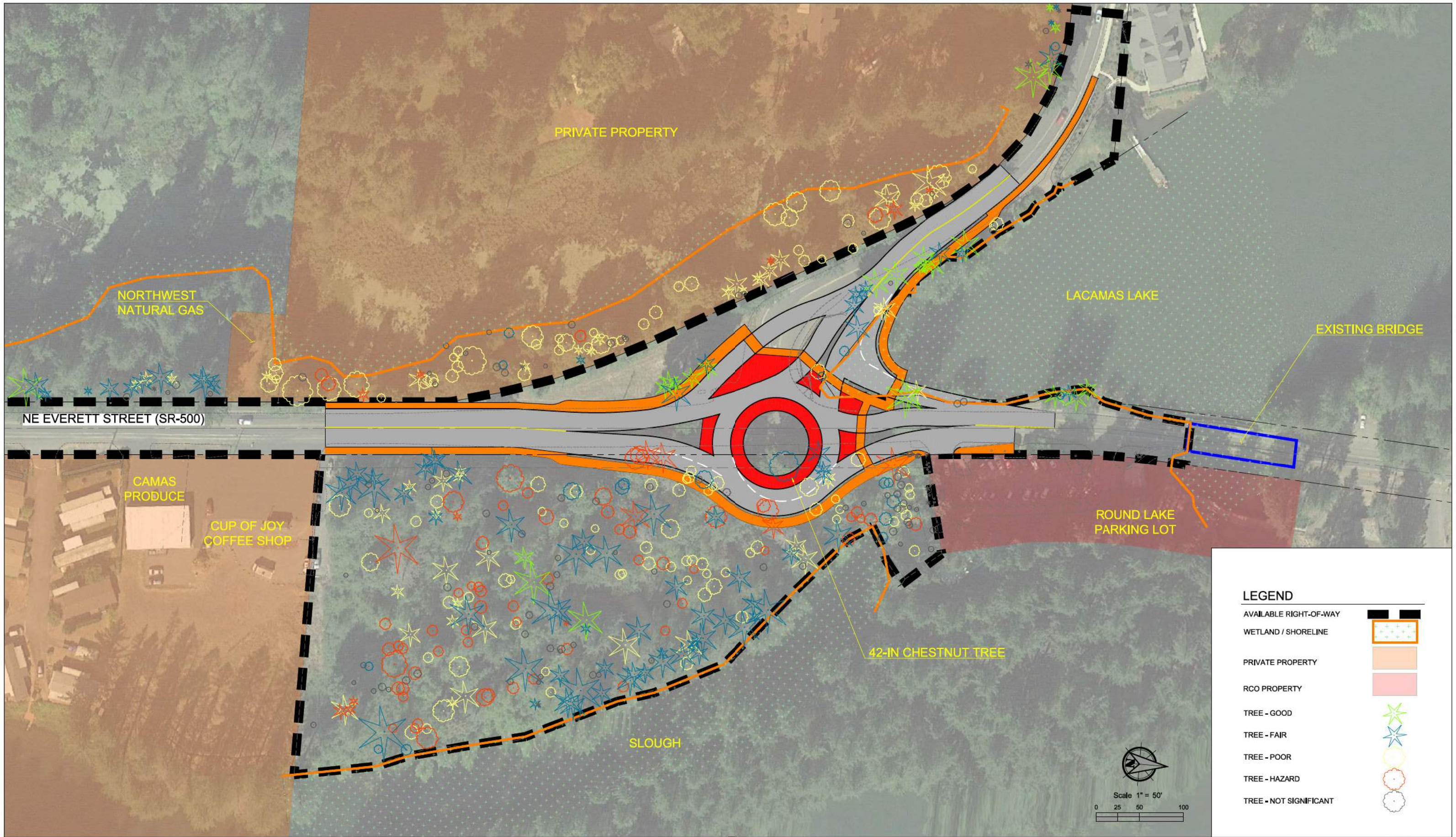




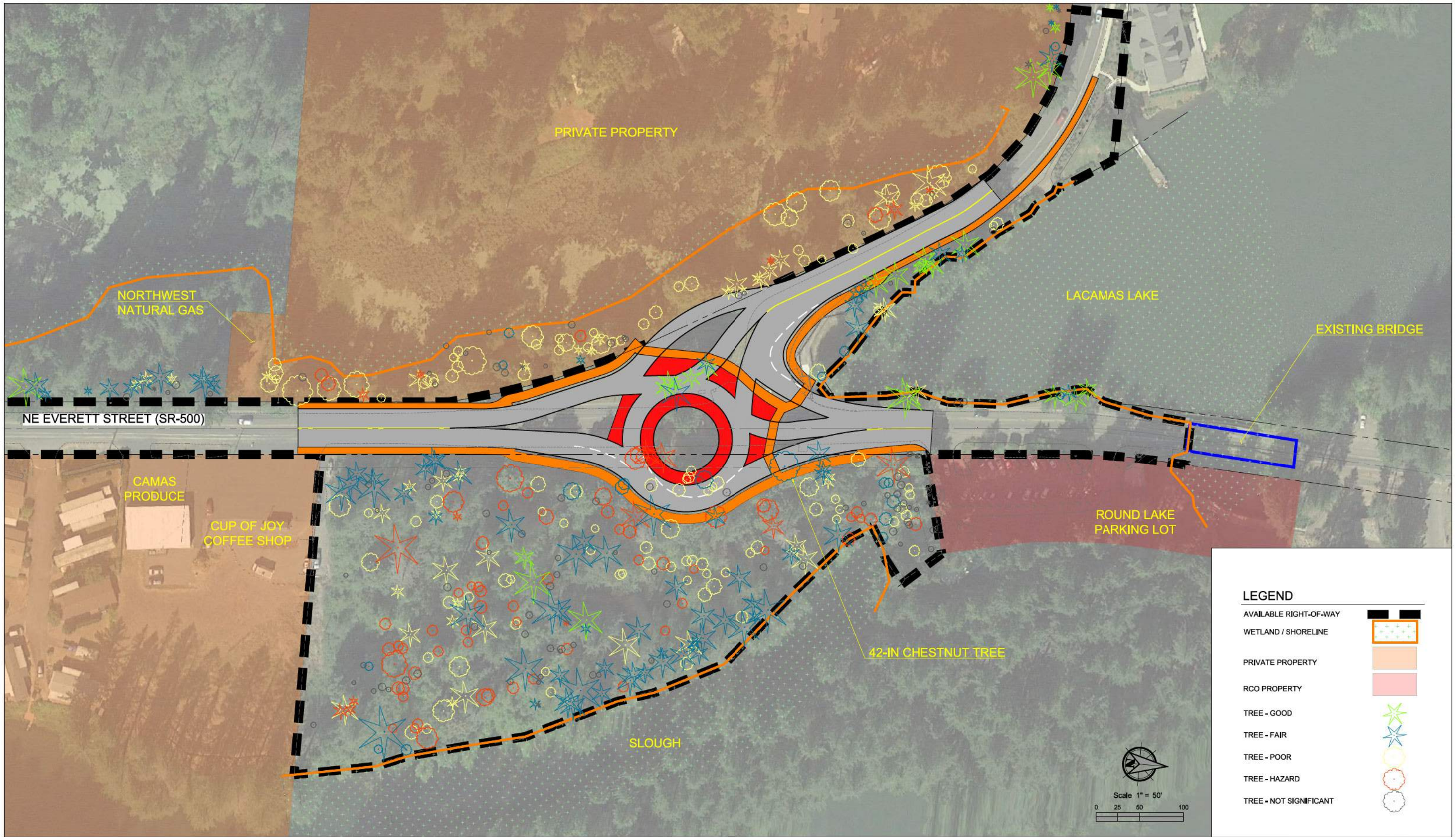
LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS SIGNALIZED INTERSECTION - ALTERNATIVE 3



LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS ROUNDBOUT ALTERNATIVE 1



LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS ROUNDBOUT ALTERNATIVE 2



LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS ROUNDABOUT ALTERNATIVE 3

Appendix B

Cost Estimates

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Cost Summary by Alternative
March 12, 2019

	Signal			Roundabout		
Item	Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3
Roadway Improvements*	\$6,430,000	\$6,430,000	\$6,430,000	\$5,850,000	\$5,850,000	\$5,850,000
Bridge Replacement*	\$9,470,000	\$0	\$0	\$0	\$0	\$0
Round Lake Parking Impacts*	\$660,000	\$0	\$0	\$0	\$0	\$0
Private Property Impact	\$330,000	\$680,000	\$3,240,000	\$25,000	\$35,000	\$105,000
City Property Impact	\$225,000	\$475,000	\$625,000	\$505,000	\$150,000	\$140,000
Utility Adjustment & Relocation*	\$1,170,000	\$1,220,000	\$270,000	\$270,000	\$1,090,000	\$1,120,000
Construction Staging/Traffic Control	\$1,330,000	\$900,000	\$900,000	\$180,000	\$1,160,000	\$1,160,000
Walls	\$0	\$0	\$0	\$0	\$1,630,000	\$390,000
Wetland Impacts (Direct)	\$0	\$45,000	\$0	\$0	\$110,000	\$0
Total Cost	\$19,620,000	\$9,750,000	\$11,470,000	\$6,830,000	\$10,030,000	\$8,770,000
Cost Add Alternatives			Additive Costs			
Project Aesthetics	\$500,000 - \$1,000,000					
Pedestrian Overpass	\$2,750,000					
Additional Parking	\$660,000					

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Baseline Signalized Alternative Roadway Improvement Cost
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 330,000.00	\$ 330,000
2	1	LS	Construction Surveying (1.5%)	\$ 50,000.00	\$ 50,000
Preparation					
3	1	LS	Clearing and Grubbing	\$ 20,000.00	\$ 20,000
4	1	LS	Removal of Structures and Obstructions	\$ 122,000.00	\$ 122,000
Grading					
5	14,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 350,000
6	14,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 280,000
Surfacing					
7	9,400	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 357,200
8	4,800	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 576,000
Storm Sewer					
9	2,150	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 172,000
10	22	EA	Catch Basin	\$ 2,000.00	\$ 44,000
11	13	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 45,500
12	1	LS	Water Quality	\$ 100,000.00	\$ 100,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 20,000.00	\$ 20,000
Roadside Restoration					
14	21,500	SF	Basic Landscaping	\$ 8.00	\$ 172,000
Other Items					
15	4,100	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 143,500
16	2,200	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 198,000
17	6	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 21,000
18	11	EA	Field Adjustment for Utility Crossings	\$ 5,000.00	\$ 55,000
19	17	EA	Existing Utility Structure Adjustment	\$ 2,500.00	\$ 42,500
20	1	LS	Illumination System	\$ 190,000.00	\$ 190,000
21	1	LS	Signal	\$ 350,000.00	\$ 350,000
21	1	LS	Permanent Signing	\$ 25,000.00	\$ 25,000
22	1	LS	Permanent Striping	\$ 20,000.00	\$ 20,000
23	2,150	LF	Joint Utility Trench	\$ 10.00	\$ 21,500
24	1	LS	RRFB	\$ 100,000.00	\$ 100,000
Total					\$ 3,805,000
Contingency (30%)					\$ 1,141,000
Construction Total					\$ 4,946,000
Engineering PS+E (15%)					\$ 742,000
Construction Management (15%)					\$ 742,000
Total					\$ 6,430,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Baseline Roundabout Alternative Roadway Improvement Cost
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 300,000.00	\$ 300,000
2	1	LS	Construction Surveying (1.5%)	\$ 45,000.00	\$ 45,000
Preparation					
3	1	LS	Clearing and Grubbing	\$ 20,000.00	\$ 20,000
4	1	LS	Removal of Structures and Obstructions	\$ 130,000.00	\$ 130,000
Grading					
5	10,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 250,000
6	10,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 200,000
Surfacing					
7	4,100	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 156,000
8	1,900	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 228,000
Storm Sewer					
9	1,500	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 120,000
10	15	EA	Catch Basin	\$ 2,000.00	\$ 30,000
11	10	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 35,000
12	1	LS	Water Quality	\$ 100,000.00	\$ 100,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 20,000.00	\$ 20,000
Roadside Restoration					
14	54,000	SF	Basic Landscaping	\$ 8.00	\$ 432,000
Other Items					
15	4,700	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 164,500
16	850	LF	Cement Conc. Roundabout Curb	\$ 50.00	\$ 42,500
17	750	CY	Cement Conc. Pavement	\$ 800.00	\$ 600,000
18	2,100	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 189,000
19	3	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 10,500
20	7	EA	Field Adjustment for Utility Crossings	\$ 5,000.00	\$ 35,000
21	9	EA	Existing Utility Structure Adjustment	\$ 2,500.00	\$ 22,500
22	1	LS	Illumination System	\$ 170,000.00	\$ 170,000
23	1	LS	Permanent Signing	\$ 25,000.00	\$ 25,000
24	1	LS	Permanent Striping	\$ 20,000.00	\$ 20,000
25	1,500	LF	Joint Utility Trench	\$ 10.00	\$ 15,000
26	1	LS	RRFB	\$ 100,000.00	\$ 100,000
Total					\$ 3,460,000
Contingency (30%)					\$ 1,040,000
Construction Total					\$ 4,500,000
Engineering PS+E (15%)					\$ 675,000
Construction Management (15%)					\$ 675,000
Total					\$ 5,850,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS

Round Lake Parking Lot Impact Cost

March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 34,000.00	\$ 34,000
2	1	LS	Construction Surveying (1.5%)	\$ 5,100.00	\$ 5,100
Traffic Control					
3	1	LS	Project Temporary Traffic Control (15%)	\$ 51,000.00	\$ 51,000
Preparation					
4	1	LS	Clearing and Grubbing	\$ 5,000.00	\$ 5,000
5	1	LS	Removal of Structures and Obstructions	\$ 15,000.00	\$ 15,000
Grading					
6	1,000	CY	Earthwork	\$ 25.00	\$ 25,000
Surfacing					
7	610	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 23,180
8	510	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 61,200
Storm Sewer					
9	300	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 24,000
10	4	EA	Catch Basin	\$ 2,000.00	\$ 8,000
11	3	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 10,500
12	1	LS	Water Quality	\$ 27,000.00	\$ 27,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 10,000.00	\$ 10,000
Other Items					
14	600	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 21,000
15	120	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 10,800
16	2	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 7,000
Total					\$ 338,000
Contingency (30%)					\$ 102,000
Construction Total					\$ 440,000
	15,000	SF	Property Acquisition	\$ 5.00	\$ 75,000
	1	EA	Property Acquisition Process	\$ 15,000.00	\$ 15,000
Engineering PS+E (15%)					\$ 65,000
Construction Management (15%)					\$ 65,000
Total					\$ 660,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS

Everett Street Bridge Replacement Cost

March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 560,000.00	\$ 560,000
2	1	LS	Construction Surveying (1.5%)	\$ 90,000.00	\$ 90,000
Traffic Control					
3	1	LS	Project Temporary Traffic Control (20%)	\$ 1,120,000.00	\$ 1,120,000
Preparation					
4	1	LS	Clearing and Grubbing	\$ 10,000.00	\$ 10,000
5	1	LS	Removal of Structures and Obstructions	\$ 5,000.00	\$ 5,000
Grading					
6	2,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 50,000
7	6,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 120,000
Surfacing					
8	1,650	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 62,700
9	790	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 94,800
Storm Sewer					
10	450	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 36,000
11	5	EA	Catch Basin	\$ 2,000.00	\$ 10,000
12	4	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 14,000
13	1	LS	Water Quality	\$ 32,000.00	\$ 32,000
Erosion Control and Water Pollution Control					
14	1	LS	Erosion Control and Water Pollution Control	\$ 50,000.00	\$ 50,000
Other Items					
15	1	LS	Temporary Bridge	\$ 2,420,000.00	\$ 2,420,000
16	1	LS	Retaining Walls	\$ 800,000.00	\$ 800,000
17	900	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 31,500
18	700	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 63,000
19	4	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 14,000
Total					\$ 5,590,000
Contingency (30%)					\$ 1,680,000
Construction Total					\$ 7,270,000
Engineering PS+E (15%)					\$ 1,100,000
Construction Management (15%)					\$ 1,100,000
Total					\$ 9,470,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 660,000.00	\$ 660,000
Traffic Control/Staging Subtotal					\$ 1,020,000
Contingency (30%)					\$ 310,000
Traffic Control/Staging Total					\$ 1,330,000
Private Property Impact Costs					
9	19,000	SF	Property Acquisition	\$ 10.00	\$ 190,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 250,000
Contingency (30%)					\$ 80,000
Private Property Impact Total					\$ 330,000
City Property Impact (Legacy Lands)					
13	32,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 160,000
City Property Subtotal					\$ 160,000
Contingency (30%)					\$ 50,000
1	EA		Property Acquisition Processing	\$ 15,000	\$ 15,000
City Property Total					\$ 225,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	13	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 130,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 630,000
Contingency (30%)					\$ 190,000
Construction Total					\$ 820,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 120,000
Construction Management (15%)					\$ 120,000
Utility Impact Total					\$ 1,170,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	0.02	Acre	Wetland Impact	\$ 300,000.00	\$ 5,000
2	1	LS	Wetland Impact Permitting	\$ 30,000.00	\$ 30,000
Wetland Impact Subtotal					\$ 35,000
Contingency (30%)					\$ 10,000
Wetland Impact Total					\$ 45,000
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 330,000.00	\$ 330,000
Traffic Control/Staging Subtotal					\$ 690,000
Contingency (30%)					\$ 210,000
Traffic Control/Staging Total					\$ 900,000
Private Property Impact Costs					
9	21,400	SF	Property Acquisition	\$ 10.00	\$ 214,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	1	EA	Relocation (Residential)	\$ 250,000.00	\$ 250,000
Private Property Impact Subtotal					\$ 524,000
Contingency (30%)					\$ 156,000
Private Property Impact Total					\$ 680,000
City Property Impact (Legacy Lands)					
13	70,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 350,000
City Property Subtotal					\$ 350,000
Contingency (30%)					\$ 110,000
	1	EA	Property Acquisition Processing		\$ 15,000
City Property Total					\$ 475,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	15	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 150,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 650,000
Contingency (30%)					\$ 200,000
Construction Total					\$ 850,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 130,000
Construction Management (15%)					\$ 130,000
Utility Impact Total					\$ 1,220,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 330,000.00	\$ 330,000
Traffic Control/Staging Subtotal					\$ 690,000
Contingency (30%)					\$ 210,000
Traffic Control/Staging Total					\$ 900,000
Private Property Impact Costs					
9	68,200	SF	Property Acquisition	\$ 10.00	\$ 682,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	1	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ 1,000,000
12	3	EA	Relocation (Residential)	\$ 250,000.00	\$ 750,000
Private Property Impact Subtotal					\$ 2,492,000
Contingency (30%)					\$ 748,000
Private Property Impact Total					\$ 3,240,000
City Property Impact (Legacy Lands)					
13	94,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 470,000
City Property Subtotal					\$ 470,000
Contingency (30%)					\$ 140,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 625,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	-	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ -
Utility Impact Subtotal					\$ 90,000
Contingency (30%)					\$ 30,000
Construction Total					\$ 120,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 20,000
Construction Management (15%)					\$ 20,000
Utility Impact Total					\$ 270,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	-	EA	Temp Signal	\$ 150,000.00	\$ -
8	-	LS	Staging	\$ 300,000.00	\$ -
Traffic Control/Staging Subtotal					\$ 139,000
Contingency (30%)					\$ 41,000
Traffic Control/Staging Total					\$ 180,000
Private Property Impact Costs					
9	500	SF	Property Acquisition	\$ 10.00	\$ 5,000
10	1	EA	Property Acquisition Processing	\$ 15,000.00	\$ 15,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 20,000
Contingency (30%)					\$ 5,000
Private Property Impact Total					\$ 25,000
City Property Impact (Legacy Lands)					
13	75,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 380,000
City Property Subtotal					\$ 380,000
Contingency (30%)					\$ 110,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 505,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	-	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ -
Utility Impact Subtotal					\$ 90,000
Contingency (30%)					\$ 30,000
Construction Total					\$ 120,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 20,000
Construction Management (15%)					\$ 20,000
Utility Impact Total					\$ 270,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	0.18	Acre	Wetland Impact	\$ 300,000.00	\$ 55,000
2	1	LS	Wetland Impact Permitting	\$ 30,000.00	\$ 30,000
Wetland Impact Subtotal					\$ 85,000
Contingency (30%)					\$ 25,000
Wetland Impact Total					\$ 110,000
Retaining Walls					
3	1	LS	Lake Retaining Wall	\$ 960,000.00	\$ 960,000
Retaining Wall Subtotal					\$ 960,000
Contingency (30%)					\$ 290,000
Construction Total					\$ 1,250,000
Engineering PS+E (15%)					\$ 190,000
Construction Management (15%)					\$ 190,000
Retaining Wall Total					\$ 1,630,000
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 600,000.00	\$ 600,000
Traffic Control/Staging Subtotal					\$ 890,000
Contingency (30%)					\$ 270,000
Traffic Control/Staging Total					\$ 1,160,000
Private Property Impact Costs					
9	1,200	SF	Property Acquisition	\$ 10.00	\$ 12,000
10	1	EA	Property Acquisition Processing	\$ 15,000.00	\$ 15,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 27,000
Contingency (30%)					\$ 8,000
Private Property Impact Total					\$ 35,000
City Property Impact (Legacy Lands)					
13	21,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 105,000
City Property Subtotal					\$ 105,000
Contingency (30%)					\$ 30,000
1	EA		Property Acquisition Processing	\$ 15,000	\$ 15,000
City Property Total					\$ 150,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	8	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 80,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 580,000
Contingency (30%)					\$ 180,000
Construction Total					\$ 760,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 110,000
Construction Management (15%)					\$ 110,000
Utility Impact Total					\$ 1,090,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	3,500	SF	Lake Retaining Wall	\$ 65.00	\$ 228,000
Retaining Wall Subtotal					\$ 228,000
Contingency (30%)					\$ 70,000
Construction Total					\$ 298,000
Engineering PS+E (15%)					\$ 46,000
Construction Management (15%)					\$ 46,000
Retaining Wall Total					\$ 390,000
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 600,000.00	\$ 600,000
Traffic Control/Staging Subtotal					\$ 890,000
Contingency (30%)					\$ 270,000
Traffic Control/Staging Total					\$ 1,160,000
Private Property Impact Costs					
9	5,000	SF	Property Acquisition	\$ 10.00	\$ 50,000
10	2	EA	Property Acquisition Processing	\$ 15,000.00	\$ 30,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 80,000
Contingency (30%)					\$ 25,000
Private Property Impact Total					\$ 105,000
City Property Impact (Legacy Lands)					
13	19,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 95,000
City Property Subtotal					\$ 95,000
Contingency (30%)					\$ 30,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 140,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 590,000
Contingency (30%)					\$ 180,000
Construction Total					\$ 770,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 120,000
Construction Management (15%)					\$ 120,000
Utility Impact Total					\$ 1,120,000

Appendix C

Draft Traffic Report

INTERSECTION CONTROL MEMORANDUM

NE Lake Road/SR500 (NE Everett Street) Intersection Traffic Operations Analysis

Date: February 7, 2019

KAI Project #:23377

To: City of Camas

From: Hermanus Steyn, PE & Jamestaun Kraupp, EI

cc: Greg Jellison, PE & Cory Kratovil, PE

The City of Camas is conducting a planning and design project to improve the capacity and traffic conditions at the intersection of NE Lake Road and SR500 (NE Everett Street). The planning portion of this project is an assessment of the existing and projected 2040 conditions at the intersection to inform the intersection control evaluation. Signal and roundabout treatments have been identified as part of an operations analysis to provide the advantages and disadvantages of each. This information will assist the City of Camas define the project improvements moving forward, as well as right-of-way needs to be determined.

This memorandum provides a summary of the planning methodology, analysis, and alternatives considered. Key topics include:

- Existing intersection facilities: pedestrian/bicycle facilities, transit routes, intersection lane configuration, surrounding infrastructure.
- Existing traffic conditions: traffic control, and peak hour conditions.
- Intersection operation analysis assuming 2040 Regional Transportation Council (RTC) traffic volumes for a “No Build” intersection condition.
- Intersection operation analysis assuming 2040 RTC traffic volumes for an improved signalized intersection configuration.
- Intersection operation analysis assuming 2040 RTC traffic volumes for a roundabout configuration.
- A summary of intersection improvement needs and outstanding considerations that should be further discussed with the City of Camas

SUMMARY OF STUDY RECOMMENDATIONS

Table 1 summarizes the intersection control alternatives considered along with detailed considerations for each alternative.

Table 1: Summary of NE Lake Road and NE Everett Street Alternatives

Intersection Alternative	Details/Considerations
No Build	Maintain the existing lane configuration and signal timing of the intersection, with no improvements to the roadway geometry, intersection, or signal timing.
Improved Signalized Intersection	Widen intersection to provide dual left turn lanes with extended pockets along the eastbound and northbound approaches to meet capacity needs in the 2040 condition. Signal retiming optimized for intersection efficiency.
Multilane Roundabout	Implement a multilane roundabout with channelized right turns on the southbound and eastbound approaches to meet capacity needs in the 2040 condition. A roundabout would also provide traffic calming along the SR500 corridor.

PROJECT BACKGROUND

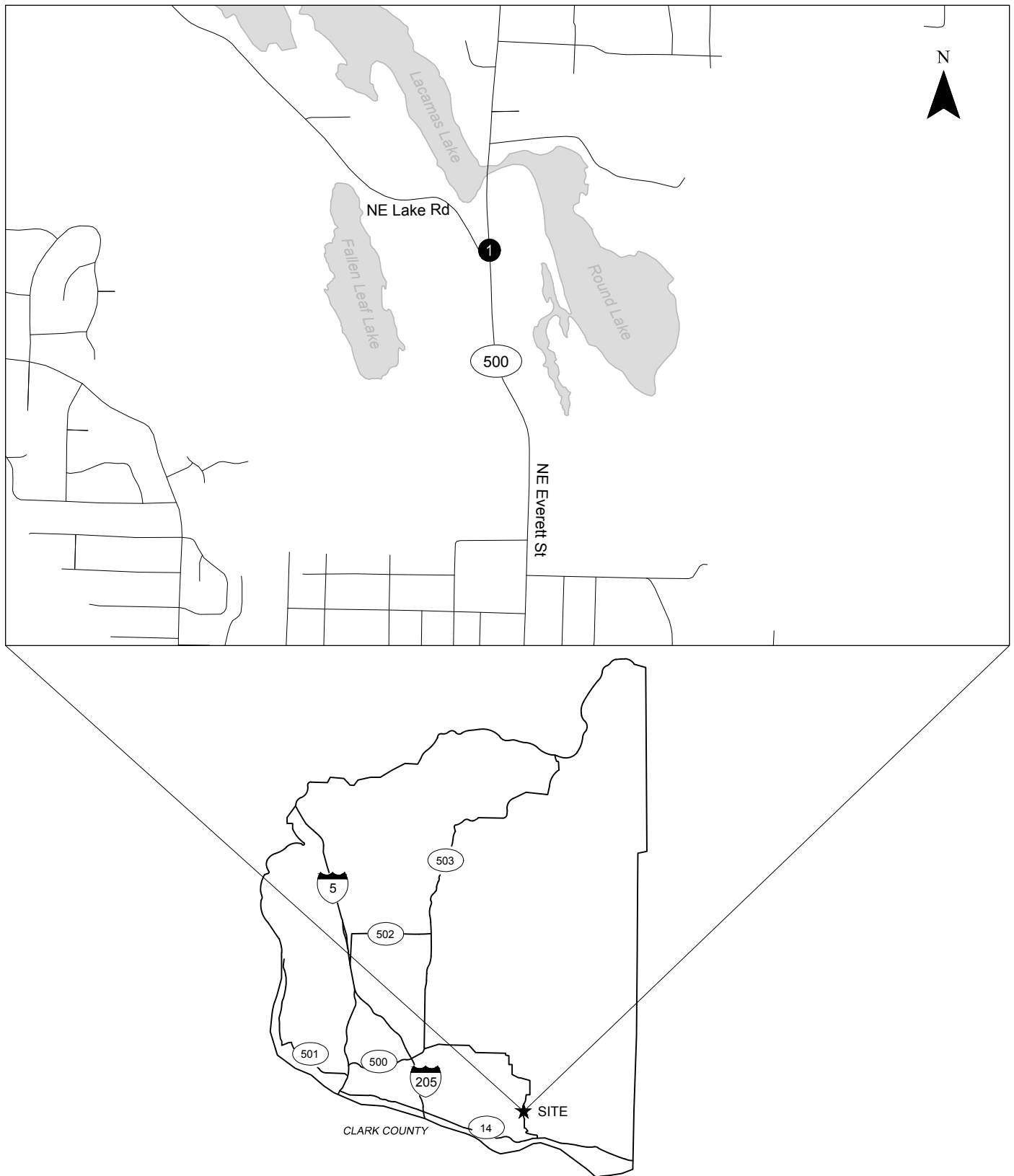
The study T-intersection of NE Lake Road and NE Everett Street is located south of to a pivotal bridge crossing surrounded by three large bodies of water and will be an essential intersection as areas to the north develop. This segment of SR500 is a regional connection to the City of Camas where there is limited access across the bodies of water. Both NE Lake Road and SR500 are classified as minor arterials according to the online Washington Department of Transportation (WSDOT) Functional Classification Map.

This portion of SR500 is a major north-south route connecting the center of downtown Camas to residential areas, educational facilities such as elementary schools, middle schools, and a high school, recreational areas and lodges along the lake, local hikes in the area, and local commercial developments. Figure 1 shows a general vicinity map and the study intersection.

2016 Study of NE Lake Road/SR500 Intersection

In 2016 a previous study, NW 6th Avenue / Everett Street (SR500) Corridor Study PBS Engineering and Environmental and DKS Associates, was completed for the NE Lake Road/SR500 intersection as part of a larger corridor study for the City of Camas. In this study, they defined improvements to intersections and segments of roadway within the city limits. The proposed improvements were based on an operational analysis of alternatives between a roundabout corridor and a signalized corridor with roundabouts at specific intersections.

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- Study Intersections

Site Vicinity Map
Camas, Washington

Figure
1

INTERSECTION ANALYSIS METHODOLOGY

The signalized stop controlled intersection analyses described in this memorandum were performed in accordance with the procedures stated in the *2000 Highway Capacity Manual* using Synchro 7. Analysis of intersection operations with roundabouts was conducted in accordance with the *Highway Capacity Manual 6th Editions* methodology using HCS7 and WSDOT roundabout methodology guidance.

To ensure the analyses were based on a reasonable worst-case scenario, the intersection evaluation used the weekday AM and PM peak hour volumes from traffic counts completed in January 2019, see Appendix A. The study times were expanded to include revised school start and end times that had been adjusted in the fall of 2018.

The 2040 future volumes were determined by following the National Cooperative Highway Research Program Report 255 (NCHRP 255) *Highway Traffic Data for Urbanized Project Planning and Design* and determining the growth rate based on the existing and 2040 RTC base models.

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and current operational and geometric characteristics of the intersection in the study area. Kittelson & Associates, Inc. (Kittelson) staff visited and inventoried the NE Lake Road/SR500 intersection in January 2019. At that time, Kittelson collected information regarding site conditions, adjacent land uses, existing traffic operations, pedestrian facilities, bicycle facilities, transit routes, and lane configuration in the study area.

Traffic Counts

Weekday AM and PM turning movement counts along with tube counts were collected at the intersection of NE Lake Road and NE Everett Street on January 15th, 2019.

- Weekday AM counts conducted from 7:00 - 9:00 AM, peak hour 7:50 - 8:50 AM
- Weekday PM counts conducted from 2:30 - 5:30 PM, peak hour 3:15 - 4:15 PM

Pedestrian Facilities, Bicycle Facilities, and Transit Routes

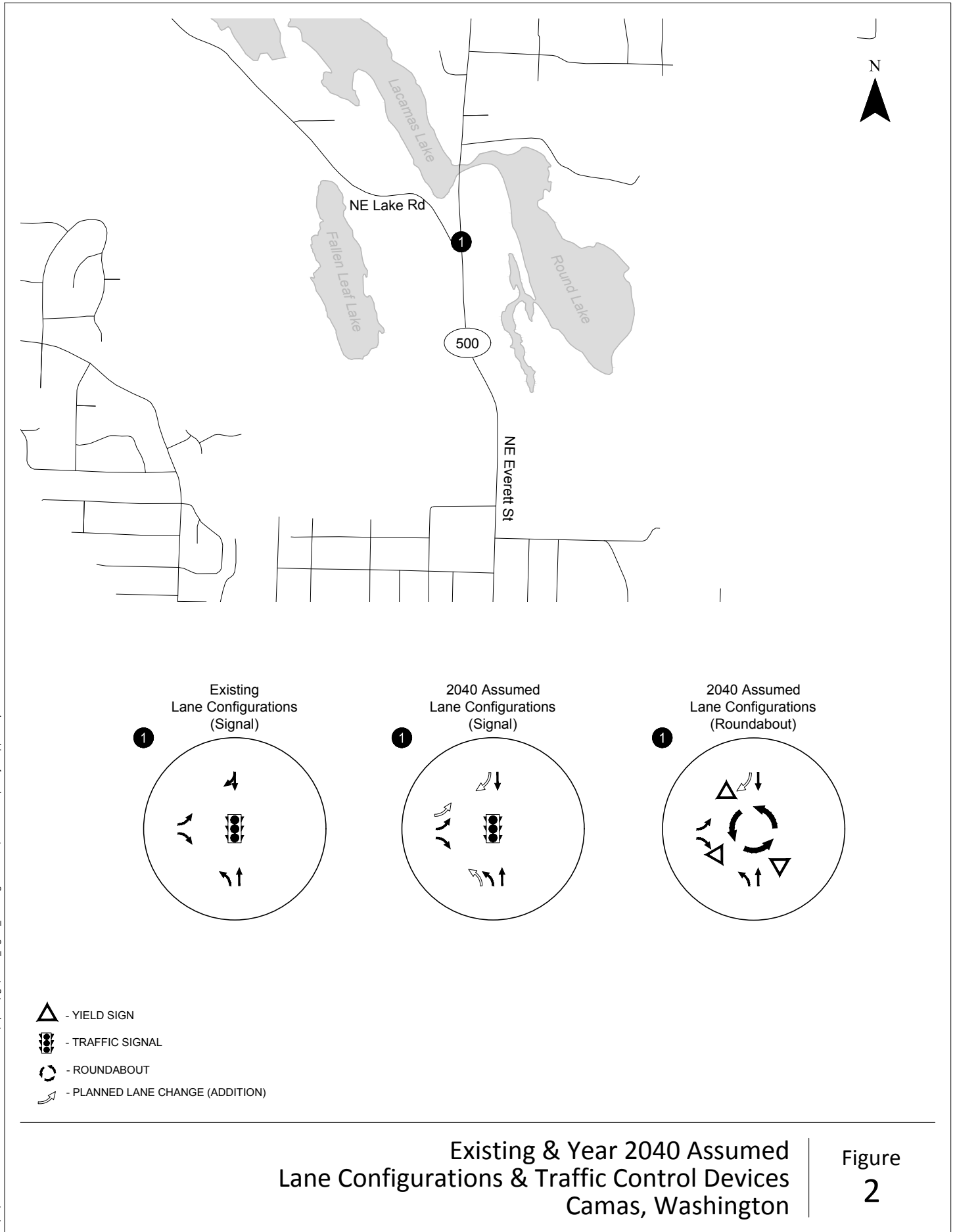
Currently, there are limited existing pedestrian and bicycle facilities at the intersection and approaching segments of roadway where there is a lack of active transportation facilities surrounding the study area.

Further, there are no designated transit routes along the corridor.

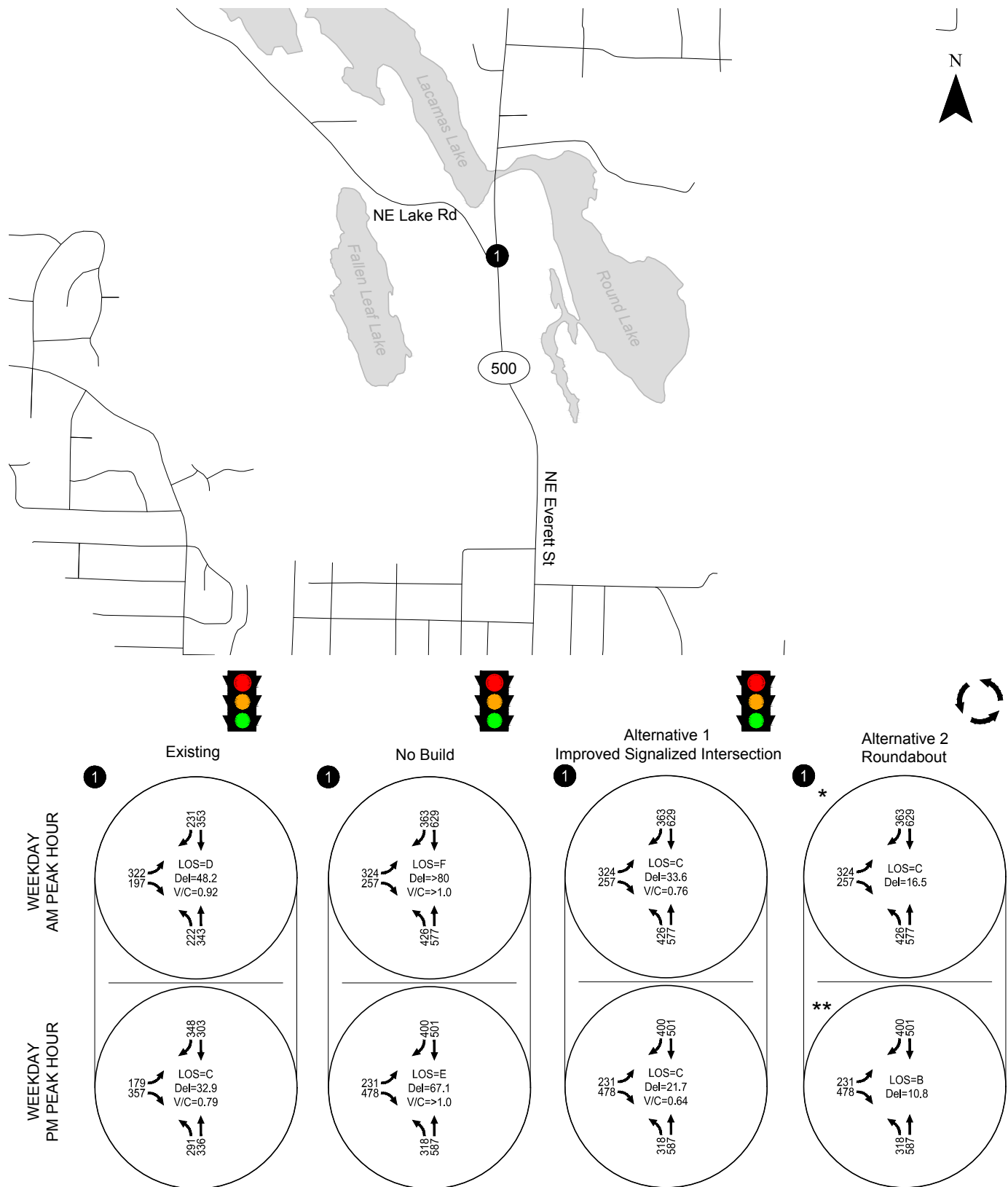
Traffic Operations Analysis

Figure 2 shows the existing lane configurations and traffic control devices at NE Lake Road/SR500 intersection. Figure 3 summarizes the existing intersection traffic volumes and operations. The two analysis periods in the weekday AM and PM were evaluated using signal timing data provided by Clark County, see Appendix B. The existing weekday AM peak hour represents the worst-case condition due to a higher Volume to Capacity Ratio (v/c). See Appendix C for the existing conditions Synchro 7 worksheets.

Figure 2 – Existing A.M. and P.M. peak hour turning movements figure



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* - Critical Southbound Approach LOS=C with 22.7 Seconds Delay
 ** - Critical Eastbound Approach LOS=B with 13.5 Seconds Delay

Existing & 2040 Traffic Conditions
 Weekday AM & PM Peak Hours
 Camas, Washington

Figure
 3

FUTURE CONDITIONS ANALYSIS

The 2040 RTC base model for the intersection of NE Lake Road and NE Everett accounts for the future residential, commercial, and industrial development of the City of Camas to the north. This will impact the travel demand patterns and capacity needs of the intersection.

With future development surrounding the study intersection and the existing community infrastructure such as educational facilities like an elementary school, a middle school, high schools, recreational areas and lodges along the lake, trails in the area, and local commercial developments. The future pedestrian volumes were assumed to increase (e.g., 20 pedestrians crossing each leg of the intersection during the peak hour) to reflect the anticipated activity and to be addressed as part of the intersection improvements.

See Appendix D for the 2015 and 2040 RTC Base Model projects for the Intersection.

Analysis Periods

The City of Camas seeks to provide sufficient intersection capacity to accommodate typical peak commuter travel demand. As was documented in the existing conditions analysis, peak travel demand in the study area currently occurs during the weekday AM peak hour. Weekday AM and PM peak hour travel demand model data provided by the RTC indicates that weekday AM peak hour volumes are generally expected to remain higher than the weekday PM peak hour volumes. The future conditions operations analysis focuses on both weekday AM and PM peak hour volumes at the study intersection.

Traffic Volume Development

Future year 2040 intersection turning movement volumes were developed using travel demand model information provided by RTC. Specifically, RTC provided travel demand modeling for base year 2015 and future year 2040 conditions reflecting on the planned regional transportation network for the weekday AM and PM peak hour.

Using the existing year 2019 intersection turn movement counts and the future year 2040 RTC traffic volume projections, year 2040 weekday AM and PM peak hour intersection turn movement projections were developed following the NCHRP 255 post-processing methodology. See Appendix E.

“No-Build” Future Intersection Operations

Future intersection operations were analyzed assuming no signal or other intersection improvements at the study intersection. Analysis of the future study intersection operations under this “No build” scenario found the existing intersection configurations yielded unacceptable conditions at the study intersection with the future 2040 traffic volumes.

The intersection is anticipated to operate at LOS F with a V/C ratio greater than one during the weekday AM peak hour and LOS E with a V/C ratio greater than one during the weekday PM peak hour.. Queue lengths at the 95th percentile is shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively.

Appendix F contains the 2040 No-Build weekday AM and PM peak hour analysis worksheets produced by Synchro 7.

EVALUATION OF INTERSECTION IMPROVEMENT ALTERNATIVES

A signalized intersection alternative and a multi-lane roundabout alternative were considered at the study intersection. A summary of the findings and implications at of the intersection is presented below.

Alternative #1 –Signalized Intersection Alternative

For this alternative, the study intersection was assumed to be improved by providing dual eastbound left turn lanes, dual northbound left turn lanes, and single southbound and eastbound right-turn lanes. The signal timing for the intersection was optimized.

With the widening of the intersection and projected 2040 vehicle volumes, the HCM 2000 analysis indicates that the intersection would operate at a LOS C in both the weekday AM and PM with V/C ratios of 0.76 and 0.64, respectively. Queue lengths at the 95th percentile are shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively. Appendix G shows the optimized signal analysis and queue analysis worksheets for the weekday AM and PM peak hour traffic conditions produced by Synchro 7.

Alternative #2 –Roundabout Alternative

This alternative evaluates a multi-lane roundabout with turn lanes based on the travel patterns.

With the intersection re-constructed as a roundabout and projected 2040 vehicle volumes, the HCM 6th Edition analysis provided by HCS7 indicates that the roundabout would operate at a LOS C and LOS B during the weekday AM and PM peak hour, respectively. Queue lengths at the 95th percentile are shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively. Appendix H shows the 2040 analysis of the roundabout configuration.

Queue Analysis

Queues are rounded to the nearest 25 foot interval for all movements. “+” indicated that the 95th percentile volume may exceed the capacity of the intersection, resulting in a longer queue.

Table 2: NE Lake Road/SR500 Intersection, Weekday AM Peak Hour Queue Lengths

Direction	Lane Group	95th Percentile Queue Length (feet)			
		Existing	“No Build”	Alternative #1 Signalized Intersection	Alternative #2 Multilane Roundabout
Eastbound	Left	400	425	275+	100
	Right	50	75	175	75
Northbound	Left	300	775+	350+	75
	Thru	200	400	475	125
Southbound	thru	800+	1,675+	875	265
	Right	n/a	n/a	200	75

Table 3: NE Lake Road/SR500 intersection, Weekday PM Peak Hour Queue Lengths

Direction	Lane Group	95th Percentile Queue Length (feet)			
		Existing	“No Build”	Alternative #1 Signalized Intersection	Alternative #2 Multilane Roundabout
Eastbound	Left	225	275	175	50
	Right	100	175	300	125
Northbound	Left	350+	425+	225	50
	Thru	125	300	450	100
Southbound	thru	675+	1,225+	575	100
	Right	n/a	n/a	50	75

Performance of Intersection Improvement Options

Table 4 and Table 5 illustrate the weekday AM and PM peak hour intersection operational performance measures for the No-Build and two intersection alternatives for the study intersection.

Table 4: NE Lake Road/SR500 Intersection, 2040 Weekday AM Peak Hour Operations Comparison

Direction	Lane Group	Level-of-Service			Volume-to-Capacity Ratio			Total Delay (seconds)		
		No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2
Eastbound	Left	E	E	C	0.83	0.72	0.56	58.5	59.6	15.4
	Right	D	C	B	0.18	0.29	0.45	38.5	21.7	12.3
Northbound	Left	F	E	A	>1.0	0.77	0.48	181.1	58.6	9.4
	Thru	B	B	B	0.51	0.52	0.65	10.6	12.0	13.5
Southbound	Thru	F	D	D	>1.0	0.84	0.86	266.6	41.0	29.3
	Right	n/a	B	B	n/a	0.26	0.50	n/a	10.9	11.2
Intersection		F	C	C	>1.0	0.76	n/a	146.2	33.6	16.5

Table 5: NE Lake Road/SR500 Intersection, 2040 Weekday PM Peak Hour Operations Comparison

Direction	Lane Group	Level-of-Service			Volume-to-Capacity Ratio			Total Delay (seconds)		
		No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2
Eastbound	Left	E	D	A	0.75	0.43	0.36	55.4	40.0	9.1
	Right	D	B	C	0.45	0.51	0.65	44.4	19.0	16.0
Northbound	Left	D	D	A	0.81	0.55	0.31	54.2	40.4	6.4
	Thru	A	B	B	0.45	0.51	0.58	6.4	10.5	10.8
Southbound	Thru	F	C	B	>1.0	0.68	0.55	126.2	27.5	11.1
	Right	n/a	A	A	n/a	0.27	0.44	n/a	8.8	8.9
Intersection		E	C	B	>1.0	0.64	n/a	119.1	21.7	10.8

NEXT STEPS

Please review the traffic operations analysis information presented in this memorandum that will become part of the intersection control evaluation and let us know what questions or comments you may have. We would be pleased to further discuss the study findings and the two improvement alternatives as appropriate.

If you have questions as you review this material, please contact us at 503-535-7431.

APPENDIX

Appendix A: Quality Counts Traffic Counts

Appendix B: Clark County Existing Signal Timing

Appendix C: Existing 2019 Weekday AM and PM Synchro Analysis worksheets

Appendix D: 2015 and 2040 Southwest Regional Transportation Council Base Models

Appendix E: NCHRP 255 Analysis Worksheets

Appendix F: 2040 “No Build” Weekday AM and PM Synchro Worksheets and Queue Worksheets

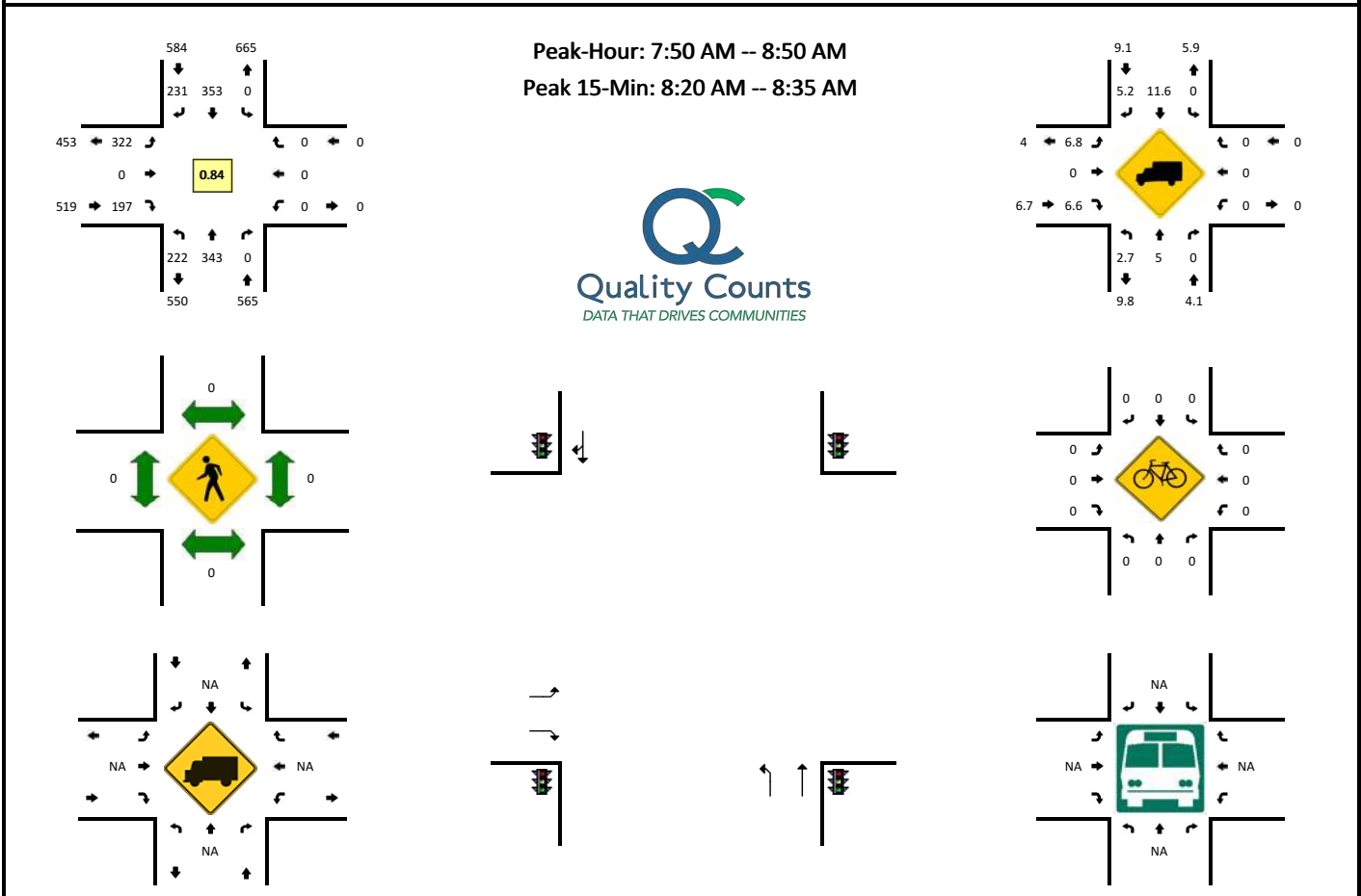
Appendix G: 2040 Improved Signalized Intersection Weekday AM and PM Synchro Worksheets and Queue Worksheets

Appendix H: 2040 Multilane Roundabout Weekday AM and PM HCS7 Worksheets

Appendix A – Quality Counts Traffic Counts

LOCATION: NE Everett St -- NE Lake Rd
CITY/STATE: Camas, WA

QC JOB #: 14881001
DATE: Tue, Jan 15 2019

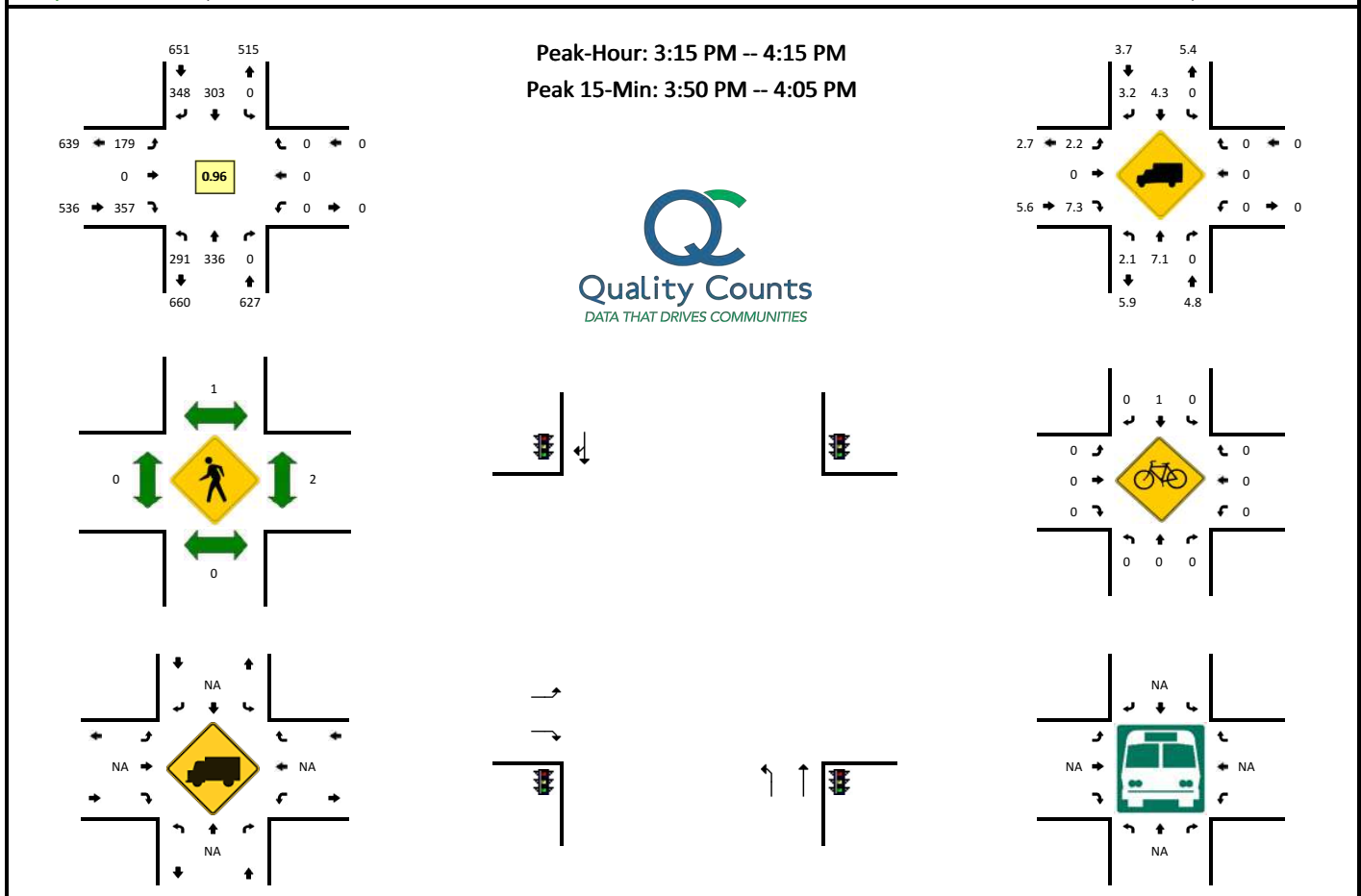


5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	12	15	0	0	0	18	9	0	21	0	12	0	0	0	0	0	87	
7:05 AM	13	12	0	0	0	23	11	0	11	0	11	0	0	0	0	0	81	
7:10 AM	7	11	0	0	0	16	10	0	13	0	9	0	0	0	0	0	66	
7:15 AM	15	18	0	0	0	19	12	0	27	0	11	0	0	0	0	0	102	
7:20 AM	11	24	0	0	0	16	11	0	47	0	10	0	0	0	0	0	119	
7:25 AM	11	15	0	0	0	25	26	0	23	0	15	0	0	0	0	0	115	
7:30 AM	9	18	0	0	0	19	15	0	12	0	8	0	0	0	0	0	81	
7:35 AM	10	17	0	0	0	21	14	0	5	0	9	0	0	0	0	0	76	
7:40 AM	11	13	0	0	0	24	12	0	20	0	7	0	0	0	0	0	87	
7:45 AM	23	15	0	0	0	26	10	0	13	0	20	0	0	0	0	0	107	
7:50 AM	28	25	0	0	0	22	10	0	21	0	27	0	0	0	0	0	133	
7:55 AM	17	24	0	0	0	27	13	0	18	0	21	0	0	0	0	0	120	1174
8:00 AM	23	28	0	0	0	24	13	0	29	0	10	0	0	0	0	0	127	1214
8:05 AM	19	25	0	0	0	20	13	0	43	0	5	0	0	0	0	0	125	1258
8:10 AM	9	34	0	0	0	26	18	0	41	0	11	0	0	0	0	0	139	1331
8:15 AM	9	39	0	0	0	23	27	0	37	0	7	0	0	0	0	0	142	1371
8:20 AM	18	38	0	0	0	31	22	0	42	0	12	0	0	0	0	0	163	1415
8:25 AM	25	53	0	0	0	29	22	0	32	0	14	0	0	0	0	0	175	1475
8:30 AM	15	34	0	0	0	43	26	0	26	0	13	0	0	0	0	0	157	1551
8:35 AM	23	14	0	0	0	30	26	0	10	0	15	0	0	0	0	0	118	1593
8:40 AM	13	17	0	0	0	48	23	0	8	0	23	0	0	0	0	0	132	1638
8:45 AM	23	12	0	0	0	30	18	0	15	0	39	0	0	0	0	0	137	1668
8:50 AM	30	19	0	0	0	23	15	0	12	0	23	0	0	0	0	0	122	1657
8:55 AM	33	27	0	0	0	17	14	0	5	0	19	0	0	0	0	0	115	1652
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	232	500	0	0	0	412	280	0	400	0	156	0	0	0	0	0	1980	
Heavy Trucks	4	40	0	0	0	80	20	0	32	0	12	0	0	0	0	0	188	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: NE Everett St -- NE Lake Rd
CITY/STATE: Camas, WA

QC JOB #: 14881003
DATE: Tue, Jan 15 2019



5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:30 PM	16	25	0	0	0	9	10	0	18	0	19	0	0	0	0	0	97	
2:35 PM	18	17	0	0	0	16	12	0	17	0	21	0	0	0	0	0	101	
2:40 PM	21	25	0	0	0	14	13	0	17	0	30	0	0	0	0	0	120	
2:45 PM	15	20	0	0	0	12	10	0	12	0	25	0	0	0	0	0	94	
2:50 PM	15	16	0	0	0	14	13	0	15	0	14	0	0	0	0	0	87	
2:55 PM	18	31	0	0	0	23	26	0	16	0	23	0	0	0	0	0	137	
3:00 PM	16	23	0	0	0	20	18	0	20	0	25	0	0	0	0	0	122	
3:05 PM	19	23	0	0	0	28	22	0	20	0	21	0	0	0	0	0	133	
3:10 PM	20	26	0	0	0	15	12	0	20	0	29	0	0	0	0	0	122	
3:15 PM	20	35	0	0	0	24	24	0	15	0	21	0	0	0	0	0	139	
3:20 PM	22	28	0	0	0	14	40	0	25	0	25	0	0	0	0	0	154	
3:25 PM	19	23	0	0	0	28	56	0	11	0	30	0	0	0	0	0	167	1473
3:30 PM	20	19	0	0	0	28	40	0	18	0	26	0	0	0	0	0	151	1527
3:35 PM	23	27	0	0	0	27	36	0	16	0	21	0	0	0	0	0	150	1576
3:40 PM	19	20	0	0	0	27	26	0	19	0	27	0	0	0	0	0	138	1594
3:45 PM	25	28	0	0	0	33	25	0	13	0	24	0	0	0	0	0	148	1648
3:50 PM	24	34	0	0	0	21	25	0	19	0	27	0	0	0	0	0	150	1711
3:55 PM	40	40	0	0	0	29	15	0	9	0	37	0	0	0	0	0	170	1744
4:00 PM	24	20	0	0	0	30	24	0	13	0	43	0	0	0	0	0	154	1776
4:05 PM	29	33	0	0	0	22	16	0	9	0	40	0	0	0	0	0	149	1792
4:10 PM	26	29	0	0	0	20	21	0	12	0	36	0	0	0	0	0	144	1814
4:15 PM	24	19	0	0	0	28	25	0	15	0	23	0	0	0	0	0	134	1809
4:20 PM	23	23	0	0	0	21	18	0	11	0	21	0	0	0	0	0	117	1772
4:25 PM	24	29	0	0	0	14	11	0	17	0	25	0	0	0	0	0	120	1725
4:30 PM	16	18	0	0	0	17	17	0	15	0	33	0	0	0	0	0	116	1690
4:35 PM	30	23	0	0	0	26	22	0	8	0	22	0	0	0	0	0	131	1671
4:40 PM	23	28	0	0	0	18	16	0	12	0	24	0	0	0	0	0	121	1654
4:45 PM	22	23	0	0	0	22	15	0	14	0	26	0	0	0	0	0	122	1628
4:50 PM	17	25	0	0	0	20	7	0	18	0	24	0	0	0	0	0	111	1589
4:55 PM	15	24	0	0	0	13	9	0	18	0	23	0	0	0	0	0	102	1521
5:00 PM	18	25	0	0	0	20	14	0	12	0	28	0	0	0	0	0	117	1484
5:05 PM	17	31	0	0	0	14	15	0	27	0	32	0	0	0	0	0	136	1471
5:10 PM	18	27	0	0	0	13	27	0	13	0	31	0	0	0	0	0	129	1456
5:15 PM	18	14	0	0	0	12	12	0	28	0	25	0	0	0	0	0	109	1431
5:20 PM	24	20	0	0	0	25	11	0	23	0	40	0	0	0	0	0	143	1457
5:25 PM	25	31	0	0	0	14	6	0	18	0	35	0	0	0	0	0	129	1466

5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:30 PM	16	27	0	0	0	18	15	0	11	0	22	0	0	0	0	0	109	1459
5:35 PM	17	19	0	0	0	14	9	0	21	0	26	0	0	0	0	0	106	1434
5:40 PM	14	26	0	0	0	13	7	0	15	0	21	0	0	0	0	0	96	1409
5:45 PM	20	22	0	0	0	8	16	0	21	0	28	0	0	0	0	0	115	1402
5:50 PM	12	25	0	0	0	25	14	0	16	0	22	0	0	0	0	0	114	1405
5:55 PM	12	15	0	0	0	15	12	0	20	0	24	0	0	0	0	0	98	1401
6:00 PM	23	19	0	0	0	6	6	0	14	0	19	0	0	0	0	0	87	1371
6:05 PM	12	24	0	0	0	19	12	0	14	0	19	0	0	0	0	0	100	1335
6:10 PM	18	21	0	0	0	11	15	0	13	0	22	0	0	0	0	0	100	1306
6:15 PM	12	16	0	0	0	11	9	0	11	0	17	0	0	0	0	0	76	1273
6:20 PM	9	24	0	0	0	15	17	0	18	0	9	0	0	0	0	0	92	1222
6:25 PM	16	22	0	0	0	14	9	0	17	0	14	0	0	0	0	0	92	1185
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	352	376	0	0	0	320	256	0	164	0	428	0	0	0	0	0	1896	
Heavy Trucks	16	56	0		0	16	0		0	0	48		0	0	0		136	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		
<i>Comments:</i>																		

Appendix B – Clark County Existing Signal Timing Sheets

Controller Database Timing Sheet



Station: 4051 - WSDOT - SR500 & Lake rd.(Standard File)

Type: NTCIP 76.x 2070 Ethernet

Firmware:

Created By: HagenR

Modified By:

Reviewed By:

NB EBR NBL SB EBL PED

Phase Times and Options(1.1.1/1.1.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green		5		4	4	5	4	4								
Gap Ext		4.5		3.5	3.5	4.5	3.5	3.5								
Max1		50		40	25 28	50 55	40	20								
Max2		25		18	12	25	18	20								
Yellow Clr	3	4	3	3	3	4	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		1		1	2	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Walk						7		7								
Ped Clearance						25		17								
Red Revert		2		2	2	2	2	2								
Added Initial		2				2										
Max Initial		20		4	4	20	4									
Time Before Reduce		20				25										
Cars Before Reduce																
Time To Reduce		10				10										
Reduce By																
Min Gap		3.5		3.5	3.5	3.5	3.5									
Dynamic Max Limit																
Dynamic Max Step																
Startup	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	.	X	.	X	X	X	X	X	.	.	.	.	.	.	.	.
Auto Flash Entry	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Auto Flash Exit	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Non-Actuated 1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Non-Actuated 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lock Calls	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Min Recall	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.













Phase Times and Options(1.1.1/1.1.2)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Soft Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dual Entry	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Sim Gap Enable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guarantd Passage	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rest In Walk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Added Init Calc	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ring	1	1	1	1	2	2	2	2								
Concur 1	5	5	7	7	1	1	3	3								
Concur 2	6	6	8	8	2	2	4	4								
Concur 3																
Concur 4																
Concur 5																
Concur 6																
Concur 7																
Concur 8																

Unit Parm(1.2.1)				
	Value			
StartUp Flash	7			
Auto Ped Clear	X			
Red Revert	2			
Local Flash Start	X			
Allow < 3 sec Yel	.			
Allow Skip Yel	.			
MCE Timeout				
Enable Run	X			
Start Red Time	8			
Phase Mode	STD8			
Startup Calls	.			
Diamond Mode	4PH			
Stop Time Over Preempt	.			
Free Ring Sequence	5			
Clearance Decide	.			
Min Ped Clear Time	.			
RingAlgo				
Ring Sequences(1.2.4)				
	1	2	3	4
Ring P1	1	5		
Ring P2	2	6		
Ring P3	3	8		
Ring P4	4	7		
Ring P5				
Ring P6				
Ring P7				
Ring P8				

Appendix C – Existing Weekday AM and PM Synchro Analysis Worksheets

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd






Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	322	197	222	343	353	231
Future Volume (vph)	322	197	222	343	353	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1687	1509	1752	1810	1647	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1687	1509	1752	1810	1647	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	383	235	264	408	420	275
RTOR Reduction (vph)	0	170	0	0	13	0
Lane Group Flow (vph)	383	65	264	408	682	0
Heavy Vehicles (%)	7%	7%	3%	5%	12%	5%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	35.9	35.9	25.2	85.5	55.3	
Effective Green, g (s)	35.9	35.9	25.2	85.5	55.3	
Actuated g/C Ratio	0.28	0.28	0.19	0.66	0.42	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	464	415	338	1186	698	
v/s Ratio Prot	c0.23	0.04	c0.15	0.23	c0.41	
v/s Ratio Perm						
v/c Ratio	0.83	0.16	0.78	0.34	0.98	
Uniform Delay, d1	44.3	35.8	50.0	10.0	36.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.7	0.2	11.4	0.3	28.4	
Delay (s)	56.0	36.0	61.4	10.3	65.3	
Level of Service	E	D	E	B	E	
Approach Delay (s)	48.4			30.4	65.3	
Approach LOS	D			C	E	
Intersection Summary						
HCM 2000 Control Delay			48.2		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.92			
Actuated Cycle Length (s)			130.4		Sum of lost time (s)	18.0
Intersection Capacity Utilization			74.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour

Queues

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	383	235	264	408	695
v/c Ratio	0.83	0.40	0.78	0.34	0.98
Control Delay	60.5	6.5	67.1	11.5	66.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	6.5	67.1	11.5	66.1
Queue Length 50th (ft)	313	0	220	154	~639
Queue Length 95th (ft)	400	47	299	198	#790
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	519	862	377	1226	710
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.74	0.27	0.70	0.33	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd






Weekday PM Peak Hour
HCM Signalized Intersection Capacity Analysis



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	179	357	291	336	303	348
Future Volume (vph)	179	357	291	336	303	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.93	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1509	1770	1776	1704	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1770	1509	1770	1776	1704	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	186	372	303	350	316	362
RTOR Reduction (vph)	0	315	0	0	20	0
Lane Group Flow (vph)	186	57	303	350	659	0
Confl. Peds. (#/hr)	2	2	1			
Heavy Vehicles (%)	2%	7%	2%	7%	4%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	17.6	17.6	27.6	87.7	55.1	
Effective Green, g (s)	17.6	17.6	27.6	87.7	55.1	
Actuated g/C Ratio	0.15	0.15	0.24	0.77	0.48	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	272	232	427	1362	821	
v/s Ratio Prot	c0.11	0.04	c0.17	0.20	c0.39	
v/s Ratio Perm						
v/c Ratio	0.68	0.25	0.71	0.26	0.80	
Uniform Delay, d1	45.7	42.5	39.7	3.9	25.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.2	0.6	5.5	0.2	6.3	
Delay (s)	52.9	43.1	45.2	4.0	31.3	
Level of Service	D	D	D	A	C	
Approach Delay (s)	46.4			23.1	31.3	
Approach LOS	D			C	C	
Intersection Summary						
HCM 2000 Control Delay			32.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			114.3		Sum of lost time (s)	18.0
Intersection Capacity Utilization			75.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

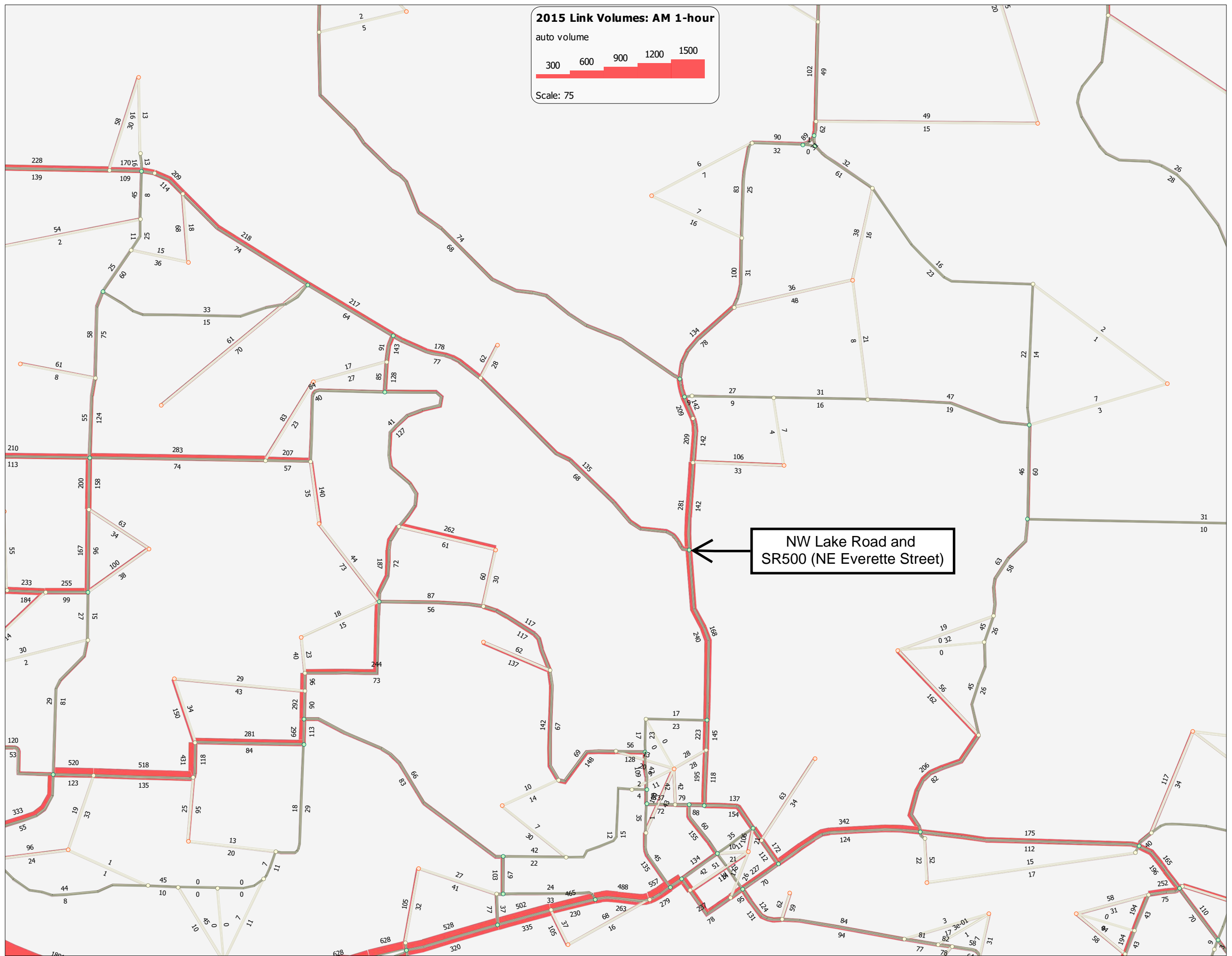
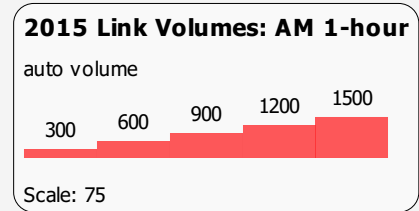
Weekday PM Peak Hour
Queues

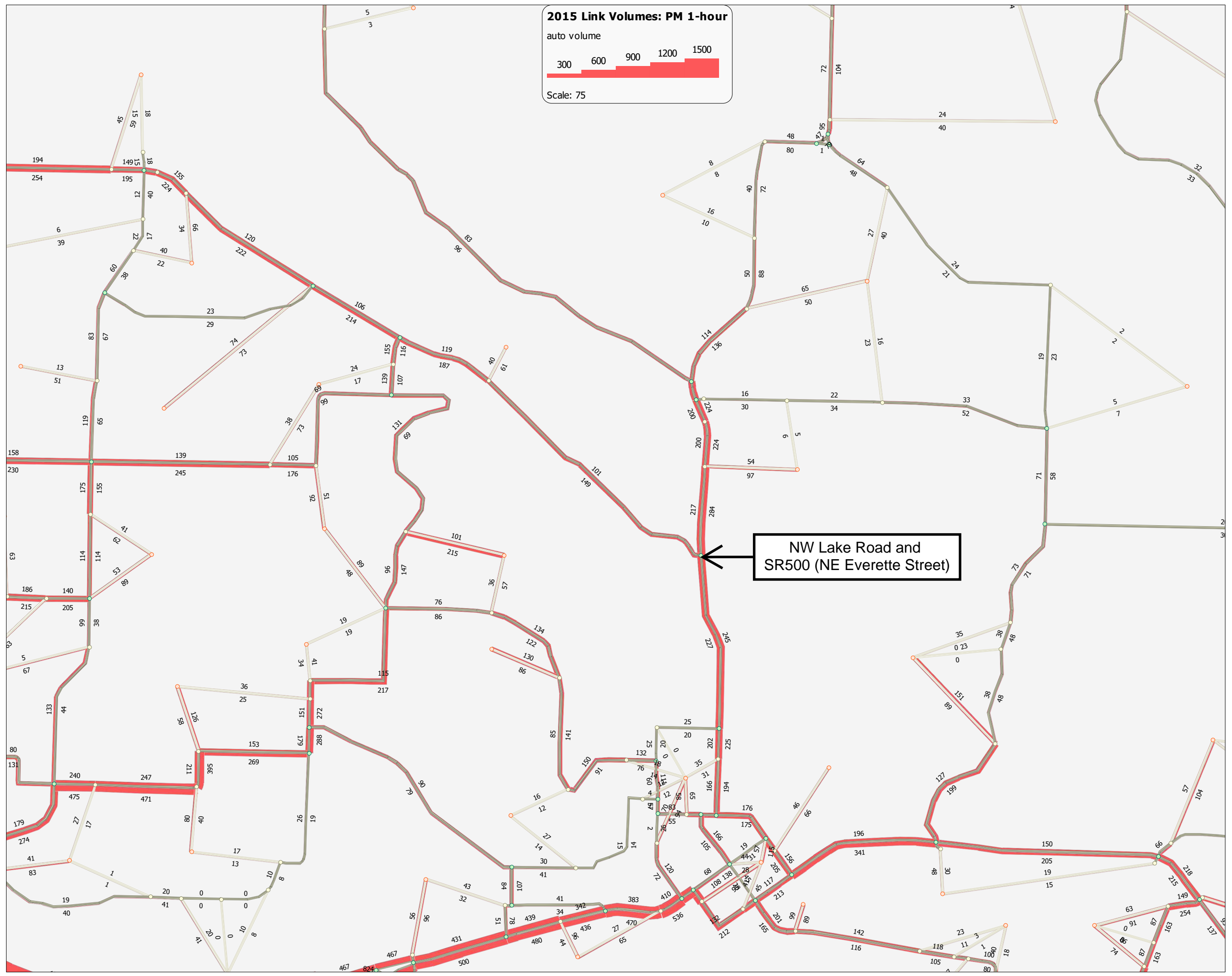
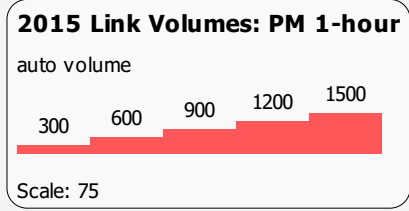
					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	186	372	303	350	679
v/c Ratio	0.68	0.68	0.71	0.26	0.81
Control Delay	58.8	11.2	50.8	4.8	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	11.2	50.8	4.8	33.5
Queue Length 50th (ft)	131	0	205	62	394
Queue Length 95th (ft)	207	89	#328	118	#670
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	620	1009	434	1369	841
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.37	0.70	0.26	0.81

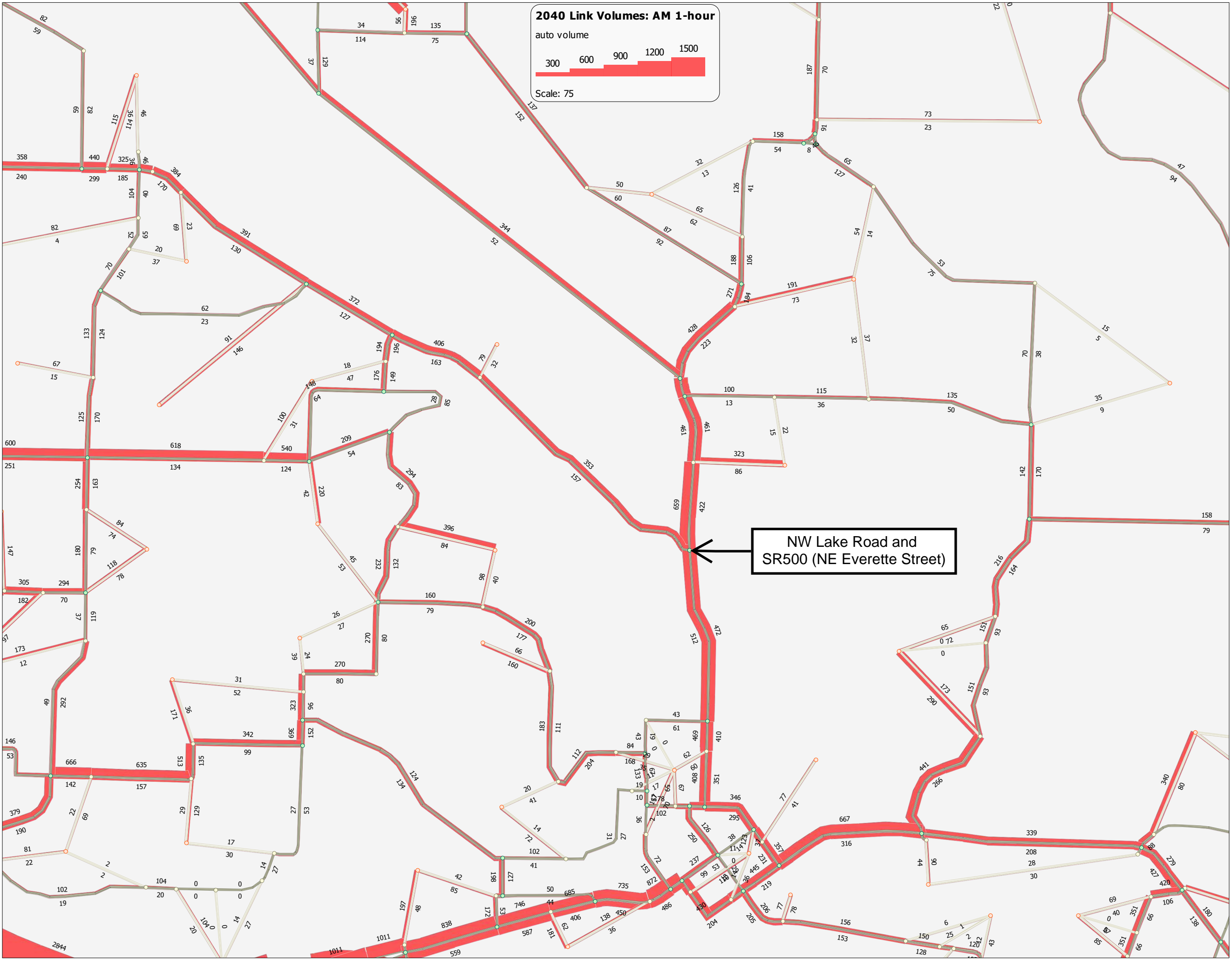
Intersection Summary

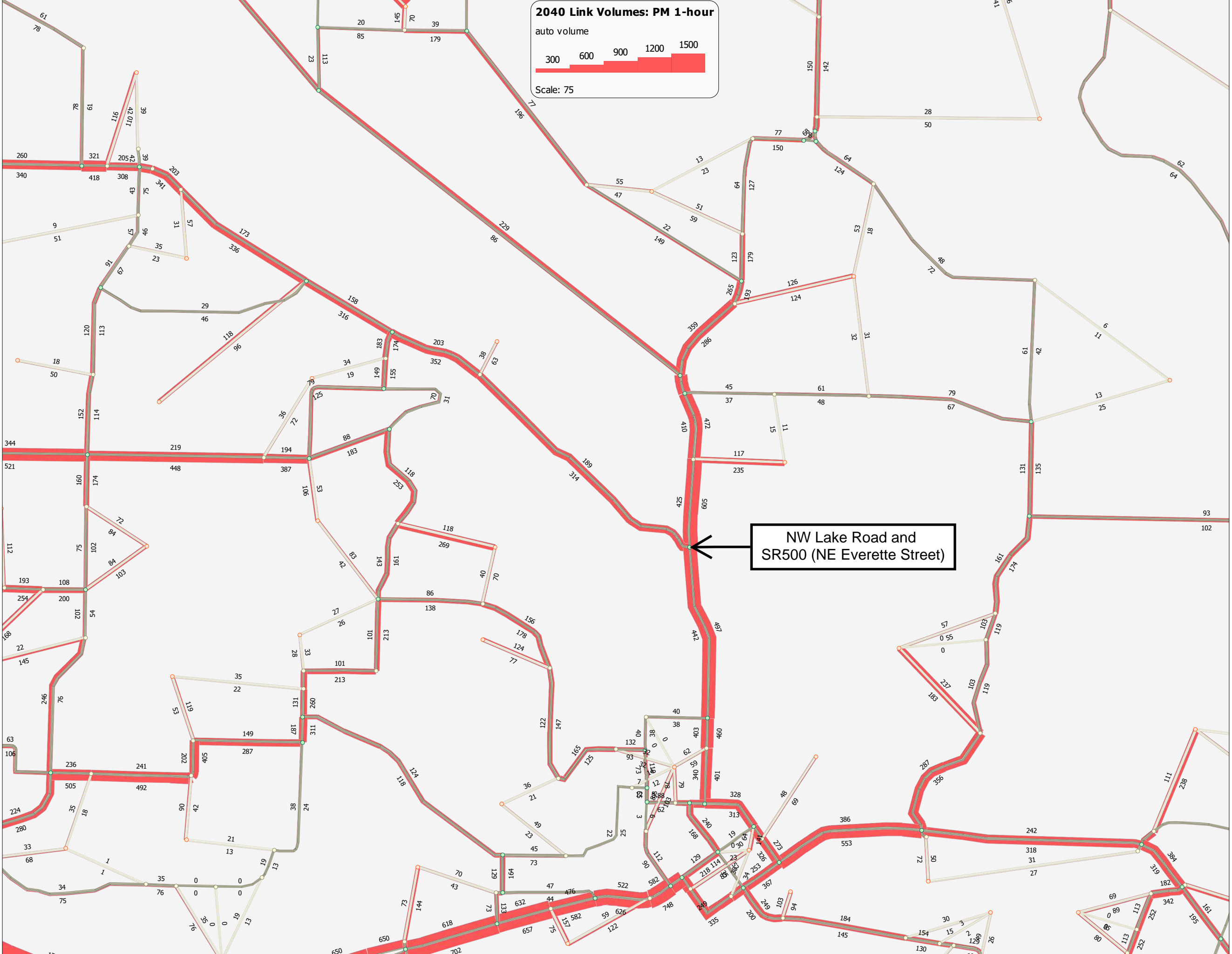
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix D – 2015 and 2040 Southwest Regional Transportation Council Base Models









Appendix E – NCHRP 255 Analysis Worksheets

Project #:	23377
Project Name:	Lake Rd and Everett St Roundabout
City, State:	Camas, Washington
Scenario:	Year 2019 Existing Traffic Conditions, Weekday AM Peak Hour
Date:	1/30/2019
Filename/Path	H:\23\23377 - Lake Rd and Everett St Roundabout\Synchro
Prepared By:	AR
Existing Count Year:	2019
Base Model Year	2015
Future Model Year	2040













1																			
Intersection Name	Leg	Movement	Left	Thru	Right	Existing Link Volume	Base Model Link Volume	Future Model Link volume	Base to	Adjusted Base	Base Model:	Ratio Method	Difference	Average of	Selected 255 Volume	Growth Factor	New Link Test	Removed Link Test	Check Summary
									Future Model Growth Factor	Model Volumes	Existing Volume	(Existing * Future/Base)	Method (Ex. + Future - Base)	Ratio & Difference Method		(From Ex. Count Year)			
NE Everett St / NW Lake Rd	South	In	222	343	1	566	168	472	0.0724	217	0.383	1233	821	1027	1027	181%	Okay	Okay	Okay
		Out	1	353	197	551	240	512	0.0453	284	0.515	995	779	887	887	161%	Okay	Okay	Okay
	West	In	322	1	197	520	68	157	0.0524	82	0.158	993	595	794	595	114%	Okay	Okay	Okay
		Out	222	1	231	454	135	353	0.0646	170	0.374	943	637	790	790	174%	Okay	Okay	Okay
	North	In	1	353	231	585	281	659	0.0538	341	0.584	1129	903	1016	1016	174%	Okay	Okay	Okay
		Out	322	343	1	666	142	422	0.0789	187	0.280	1505	901	1203	901	135%	Okay	Okay	Okay
	East	In	1	1	1	3	3	3	0.0000	3	1	3	3	3	3	100%	Okay	Okay	Okay
		Out	1	1	1	3	3	3	0.0000	3	1	3	3	3	3	100%	Okay	Okay	Okay
						3348	1040	2581	0	1287	0	6717	4642	5679	5679	170%	Okay	Okay	Okay

1											
Final Volumes											
Int. Name	Approach	Movement	Left	Thru	Right	Base Model Link Volume	Future Model Link Volume	Initial 255	Adjusted Link Volume	Volume Override	
								Future Volume			
NE Everett St / NW Lake Rd	South	In	426	577	0	168	472	1027	1004	1027	
		Out	0	629	257	240	512	887	887	887	
	West	In	324	0	257	68	157	595	581	595	
		Out	426	0	363	135	353	790	790	790	
	North	In	0	629	363	281	659	1016	993	1016	
		Out	324	577	1	142	422	901	901	901	
	East	In	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	
						1040	2581	5222	5163	5222	

Appendix F – 2040 “No Build” Weekday AM and PM Synchro
Worksheets and Queue Worksheets






No-Build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	324	257	426	577	629	363
Future Volume (vph)	324	257	426	577	629	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1752	1568	1752	1845	1715	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1752	1568	1752	1845	1715	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	360	286	473	641	699	403
RTOR Reduction (vph)	0	215	0	0	11	0
Lane Group Flow (vph)	360	71	473	641	1091	0
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	32.2	32.2	28.1	88.2	55.1	
Effective Green, g (s)	32.2	32.2	28.1	88.2	55.1	
Actuated g/C Ratio	0.25	0.25	0.22	0.68	0.43	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	435	390	380	1257	730	
v/s Ratio Prot	c0.21	0.05	c0.27	0.35	c0.64	
v/s Ratio Perm						
v/c Ratio	0.83	0.18	1.24	0.51	1.49	
Uniform Delay, d1	46.0	38.2	50.7	10.1	37.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	0.2	130.5	0.6	229.5	
Delay (s)	58.5	38.5	181.1	10.6	266.6	
Level of Service	E	D	F	B	F	
Approach Delay (s)	49.6			83.0	266.6	
Approach LOS	D			F	F	
Intersection Summary						
HCM 2000 Control Delay			146.2		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.29			
Actuated Cycle Length (s)			129.4		Sum of lost time (s)	18.0
Intersection Capacity Utilization			109.2%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						

No-Build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
Queues













					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	360	286	473	641	1102
v/c Ratio	0.83	0.47	1.24	0.51	1.49
Control Delay	62.3	6.8	173.1	12.7	257.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	62.3	6.8	173.1	12.7	257.1
Queue Length 50th (ft)	286	0	~496	244	~1283
Queue Length 95th (ft)	404	68	#759	394	#1657
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	542	921	380	1257	740
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.66	0.31	1.24	0.51	1.49

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.






No-build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday PM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	478	318	587	501	400
Future Volume (vph)	231	478	318	587	501	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.94	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1752	1568	1752	1845	1691	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1752	1568	1752	1845	1691	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	241	498	331	611	522	417
RTOR Reduction (vph)	0	367	0	0	14	0
Lane Group Flow (vph)	241	131	331	611	925	0
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	21.9	21.9	28.0	88.2	55.2	
Effective Green, g (s)	21.9	21.9	28.0	88.2	55.2	
Actuated g/C Ratio	0.18	0.18	0.24	0.74	0.46	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	322	288	411	1366	783	
v/s Ratio Prot	c0.14	0.08	c0.19	0.33	c0.55	
v/s Ratio Perm						
v/c Ratio	0.75	0.45	0.81	0.45	1.18	
Uniform Delay, d1	46.0	43.3	43.0	6.0	31.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.5	1.1	11.2	0.4	94.3	
Delay (s)	55.4	44.4	54.2	6.4	126.2	
Level of Service	E	D	D	A	F	
Approach Delay (s)	48.0			23.2	126.2	
Approach LOS	D			C	F	
Intersection Summary						
HCM 2000 Control Delay			67.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.03			
Actuated Cycle Length (s)			119.1		Sum of lost time (s)	18.0
Intersection Capacity Utilization			93.7%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

No-build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday PM Peak Hour
Queues

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	241	498	331	611	939
v/c Ratio	0.75	0.76	0.80	0.45	1.19
Control Delay	60.8	14.5	59.6	7.8	126.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	14.5	59.6	7.8	126.1
Queue Length 50th (ft)	177	31	240	158	~858
Queue Length 95th (ft)	266	153	#422	282	#1211
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	589	1052	412	1366	792
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.47	0.80	0.45	1.19


Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix G – 2040 Improved Signalized Intersection Weekday AM
and PM Synchro Worksheets and Queue Worksheets

Year 2040 Traffic Conditions
1: NE Everett St & NE Lake Rd

Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	RL	R	RL	U	U	R
Traffic Volume (vph)	324	257	426	577	629	363
Future Volume (vph)	324	257	426	577	629	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3400	1568	3400	1845	1845	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3400	1568	3400	1845	1845	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	360	286	473	641	699	403
RTOR Reduction (vph)	0	69	0	0	0	147
Lane Group Flow (vph)	360	217	473	641	699	256
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	7	4 5	5	2	6	6 7
Permitted Phases						
Actuated Green, G (s)	19.9	63.9	24.3	89.9	60.6	85.5
Effective Green, g (s)	19.9	63.9	24.3	89.9	60.6	85.5
Actuated g/C Ratio	0.15	0.48	0.18	0.67	0.45	0.64
Clearance Time (s)	4.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.5		3.5	4.5	4.5	
Lane Grp Cap (vph)	503	744	614	1233	831	996
v/s Ratio Prot	c0.11	c0.14	c0.14	0.35	c0.38	0.16
v/s Ratio Perm						
v/c Ratio	0.72	0.29	0.77	0.52	0.84	0.26
Uniform Delay, d1	54.6	21.5	52.4	11.3	32.7	10.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	0.2	6.1	0.6	8.3	0.2
Delay (s)	59.6	21.7	58.6	12.0	41.0	10.9
Level of Service	E	C	E	B	D	B
Approach Delay (s)	42.8			31.7	30.0	
Approach LOS	D			C	C	
Intersection Summary						
HCM 2000 Control Delay			33.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			134.5		Sum of lost time (s)	18.0
Intersection Capacity Utilization			66.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NE Everett St & NE Lake Rd







01/25/2019



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	←←	→	←←	→	→	←
Traffic Volume (vph)	231	478	318	587	501	400
Future Volume (vph)	231	478	318	587	501	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3400	1568	3400	1845	1845	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3400	1568	3400	1845	1845	1568
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	241	498	331	611	522	417
RTOR Reduction (vph)	0	113	0	0	0	153
Lane Group Flow (vph)	241	385	331	611	522	264
Confl. Peds. (#/hr)	20	20	20			20
Confl. Bikes (#/hr)						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	7	4 5	5	2	6	6 7
Permitted Phases						
Actuated Green, G (s)	17.5	51.1	18.8	67.9	44.1	66.6
Effective Green, g (s)	17.5	51.1	18.8	67.9	44.1	66.6
Actuated g/C Ratio	0.17	0.49	0.18	0.65	0.42	0.63
Clearance Time (s)	4.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.5		3.5	4.5	4.5	
Lane Grp Cap (vph)	565	761	607	1190	773	992
v/s Ratio Prot	0.07	c0.25	0.10	c0.33	c0.28	0.17
v/s Ratio Perm						
v/c Ratio	0.43	0.51	0.55	0.51	0.68	0.27
Uniform Delay, d1	39.3	18.4	39.3	9.9	24.7	8.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.5	1.1	0.6	2.8	0.2
Delay (s)	40.0	19.0	40.4	10.5	27.5	8.8
Level of Service	D	B	D	B	C	A
Approach Delay (s)	25.8			21.0	19.2	
Approach LOS	C			C	B	
Intersection Summary						
HCM 2000 Control Delay			21.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			105.2		Sum of lost time (s)	18.0
Intersection Capacity Utilization			66.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Year 2040 Traffic Conditions
1: NE Everett St & NE Lake Rd

Weekday AM Peak Hour
Queues

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	360	286	473	641	699	403
v/c Ratio	0.71	0.35	0.76	0.52	0.84	0.38
Control Delay	67.6	13.4	65.3	14.9	45.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	13.4	65.3	14.9	45.7	9.0
Queue Length 50th (ft)	193	92	254	362	665	119
Queue Length 95th (ft)	#258	165	#343	467	856	189
Internal Link Dist (ft)	381			511	417	
Turn Bay Length (ft)	70	70	175			100
Base Capacity (vph)	621	873	762	1453	1133	1153
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.33	0.62	0.44	0.62	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

2: NE Everett St & NE Lake Rd

01/25/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	241	498	331	611	522	417
v/c Ratio	0.42	0.58	0.54	0.51	0.68	0.37
Control Delay	48.4	13.8	47.7	13.2	32.5	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	13.8	47.7	13.2	32.5	2.2
Queue Length 50th (ft)	66	124	96	147	237	0
Queue Length 95th (ft)	169	298	219	439	566	45
Internal Link Dist (ft)	381			511	417	
Turn Bay Length (ft)	200	200	300			300
Base Capacity (vph)	839	1049	1030	1640	1388	1322
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.47	0.32	0.37	0.38	0.32
Intersection Summary						

Appendix H – 2040 Multilane Roundabout Weekday
AM and PM HCS7 Worksheets

HCS7 Roundabouts Report

General Information

Analyst	AR
Agency or Co.	KAI
Date Performed	1/15/2019
Analysis Year	2019
Time Analyzed	AM Peak Hour
Project Description	Year 2040 Traffic Conditions

Site Information

Intersection	NW Everett / NW Lake Rd
E/W Street Name	NW Lake Road
N/S Street Name	NW Everett Street
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.90
Jurisdiction	Camas, WA

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0
Lane Assignment			L						L		T				T	
Volume (V), veh/h	0	324		257					0	426	577		0		629	363
Percent Heavy Vehicles, %	0	3		3					0	3	3		0		3	3
Flow Rate (V_{PCE}), pc/h	0	371		294					0	488	660		0		720	415
Right-Turn Bypass	Yielding				None				None				Yielding			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	20								0				20			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763	4.9763				4.5436	4.5436			4.9763	4.9763
Follow-Up Headway (s)		2.6087	2.6087				2.5352	2.5352			2.6087	2.6087

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		371	294				488	660			720	415
Entry Volume veh/h		360	285				474	641			699	403
Circulating Flow (v_c), pc/h	720			1519			371			488		
Exiting Flow (v_{ex}), pc/h	0			488			1031			720		
Capacity (C_{PCE}), pc/h		662	662				1013	1013			839	839
Capacity (C), veh/h		641	641				984	984			812	812
v/c Ratio (x)		0.56	0.45				0.48	0.65			0.86	0.50

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		15.4	12.3				9.4	13.5			29.3	11.2
Lane LOS		C	B				A	B			D	B
95% Queue, veh		3.5	2.3				2.7	5.0			10.6	2.8
Approach Delay, s/veh	14.0						11.8			22.7		
Approach LOS	B						B			C		
Intersection Delay, s/veh | LOS	16.5						C					

HCS7 Roundabouts Report

General Information

Analyst	AR
Agency or Co.	KAI
Date Performed	1/15/2019
Analysis Year	2019
Time Analyzed	PM Peak Hour
Project Description	Year 2040 Traffic Conditions

Site Information

Intersection	NW Everett / NW Lake Rd
E/W Street Name	NW Lake Road
N/S Street Name	NW Everett Street
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.96
Jurisdiction	Camas, WA

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0
Lane Assignment			L						L		T				T	
Volume (V), veh/h	0	270		478					0	313	587		0		501	400
Percent Heavy Vehicles, %	0	3		3					0	3	3		0		3	3
Flow Rate (V_{PCE}), pc/h	0	290		513					0	336	630		0		538	429
Right-Turn Bypass	Yielding				None				None				Yielding			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	20								0				20			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763	4.9763				4.5436	4.5436			4.9763	4.9763
Follow-Up Headway (s)		2.6087	2.6087				2.5352	2.5352			2.6087	2.6087

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		290	513				336	630			538	429
Entry Volume veh/h		282	498				326	612			522	417
Circulating Flow (v_c), pc/h	538			1256			290			336		
Exiting Flow (v_{ex}), pc/h	0			336			920			538		
Capacity (C_{PCE}), pc/h		797	797				1091	1091			980	980
Capacity (c), veh/h		772	772				1059	1059			948	948
v/c Ratio (x)		0.36	0.65				0.31	0.58			0.55	0.44

Delay and Level of Service

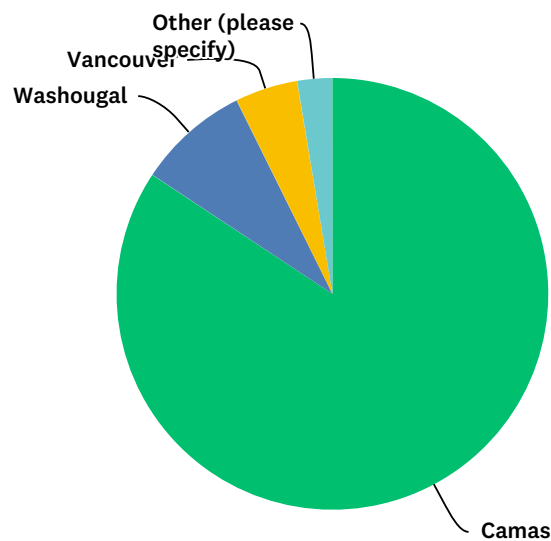
Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		9.1	16.0				6.4	10.8			11.1	8.9
Lane LOS		A	C				A	B			B	A
95% Queue, veh		1.7	4.8				1.3	3.8			3.5	2.3
Approach Delay, s/veh	13.5						9.3			10.1		
Approach LOS	B						A			B		
Intersection Delay, s/veh | LOS	10.8						B					

Appendix D

Online Survey Results

Q1 Where do you reside?

Answered: 1,108 Skipped: 0

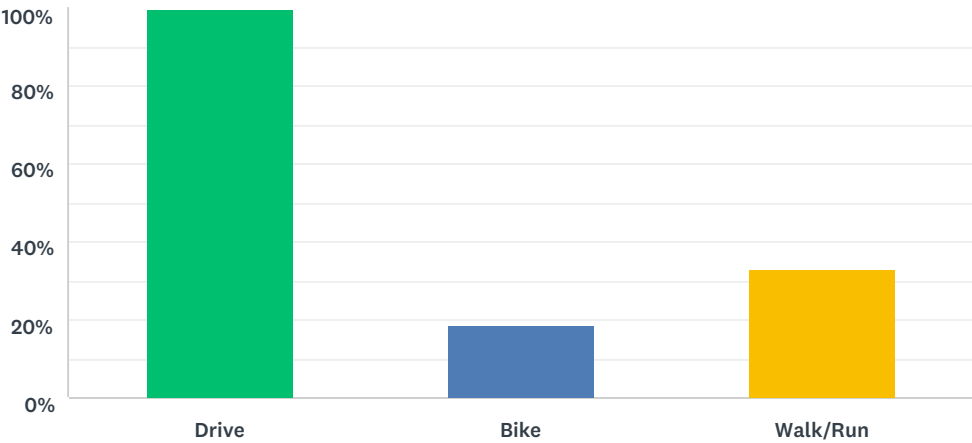


ANSWER CHOICES	RESPONSES	
Camas	84.30%	934
Washougal	8.39%	93
Vancouver	4.69%	52
Other (please specify)	2.62%	29
TOTAL		1,108

Where do you reside?	
Other (please specify)	
1	North of Camas but have Camas address and zip...
2	Livingston Mtn but I consider myself a resident of Camas
3	North Bonneville
4	Camas Produce
5	N. Bonneville
6	Just north of Camas city limits, north of Lacamas lake
7	Very East Clark County
8	Fern Prairie
9	Battle Ground was in Camas for 4 years
10	fern prairie
11	Portland
12	Livingston Mtn. area of Unincorporated Clark County
13	Clark County
14	Fern Prairie
15	hills north of washougal
16	outside Camas (Fern Prairie, near the airport)
17	Alaska
18	Boring
19	Reside in yacolt own house in Camas
20	Portland
21	Brush Prairie
22	Fern Prairie just outside "city limits"
23	Fern Prairie
24	Building home in Camas/Livingston Mtn; hope to finish by May
25	Portland
26	Camas Urban Growth Boundary - Clark County
27	Cowlitz County
28	Clark County
29	outside camas

Q2 Do you drive, bike, or walk/run through the intersection? (Select all that apply.)

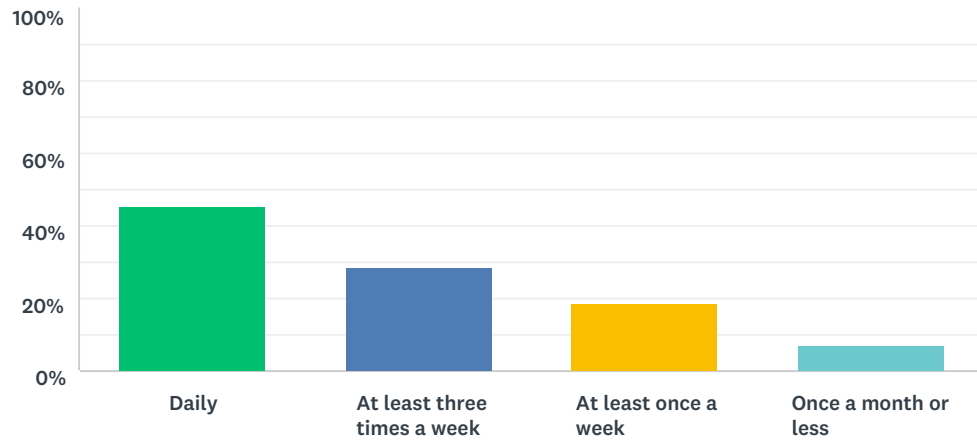
Answered: 1,108 Skipped: 0



ANSWER CHOICES		RESPONSES	
Drive		99.55%	1,103
Bike		18.68%	207
Walk/Run		32.85%	364
Total Respondents: 1,108			

Q3 How often do you use the Lake Road/Everett Street intersection?

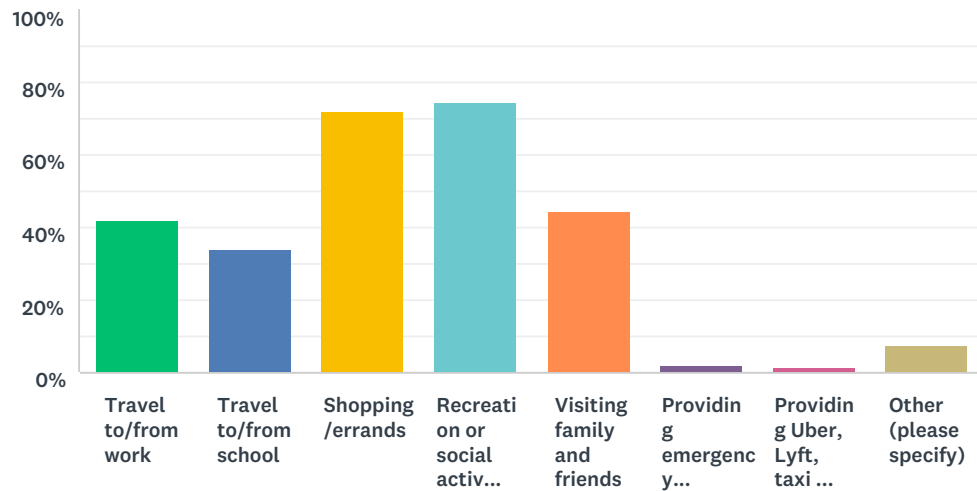
Answered: 1,108 Skipped: 0



ANSWER CHOICES	RESPONSES	
Daily	45.67%	506
At least three times a week	28.70%	318
At least once a week	18.50%	205
Once a month or less	7.13%	79
TOTAL		1,108

Q4 What reasons do you have for using the intersection? (Select all that apply.)

Answered: 1,108 Skipped: 0



ANSWER CHOICES	RESPONSES	
Travel to/from work	41.88%	464
Travel to/from school	33.75%	374
Shopping/errands	71.93%	797
Recreation or social activities	74.55%	826
Visiting family and friends	44.68%	495
Providing emergency response services or transport	2.08%	23
Providing Uber, Lyft, taxi or other rideshare services	1.35%	15
Other (please specify)	7.31%	81
Total Respondents: 1,108		

What reasons do you have for using the intersection? (Select all that apply.)	
Other (please specify)	
1	On way to recreate
2	Intersection lacks parking for recreation
3	Use it as an alternative route.
4	to and from Dr.
5	Preferred route throuh area. Pretty...
6	To and from doctor appt & Post Office
7	Travel multiple times daily through lake road and everette
8	Live around the corner from the Intersection
9	rides to medical appointments
10	owner of Camas Produce
11	Travel to my property, Travel to church
12	School bus driver for Camas Schools
13	Drive school bus for Camas
14	Dr appts
15	CSD activities, kid after-school activities downtown
16	Travel to and from church
17	Church and recreation
18	I choose to avoid intersection a certain times, when the high school let's out & rush hour
19	To get home
20	Getting son to swim team
21	I would love to drive this way but have found a different way because this traffic make me late.
22	I live there
23	Picking up from high school
24	biking (may be under Recreation)
25	Travel to soccer practice
26	Traveling to CHS to pick up student or attend an event
27	Church
28	Work
29	Library
30	Access to travel west into the gorge for roadtrips
31	Taking my daughter to preschool
32	Coast to Coast/ Camas Produce
33	Professional services
34	Attend Church
35	Travel to/from appointments
36	Picking up mail from Post Office
37	I want to
38	We use it daily multiple time only live a block away
39	Sunday to church
40	Drive school bus for Camas
41	High School activities
42	Camas school bus driver who lives on Everett very close to the intersection
43	Doctor & Dental appointments
44	For work
45	Main way in and out of town to hwy....

46	church
47	school bus driver
48	Going to the park
49	Going to church-related activities
50	It's 1 of only a couple means to connect Camas to East Vancouver.
51	Delivering products to customers, working with the deli to provide food for our business
52	I bike through the intersection 2-3 times per week as part of my training regimen
53	Church
54	travel to church & back several times weekly
55	Church
56	No particular reason
57	Doctor appointments
58	city of camas parks employee so frequent travel
59	to/from volunteer work
60	Selling real estate
61	travel to/from church
62	Walking my dogs
63	I teach in Camas and sometimes have meetings at the high school.
64	Charity work at community center
65	sports and to the freeway
66	Because it is a beautiful drive
67	church
68	Kid pickups/dropoffs
69	Church
70	To/from church
71	back and forth to town
72	Church
73	To hike the trails around Round Lake
74	Volunteering
75	Meetings at Lacamas Lodge
76	Volunteer at Lacamas park
77	Drive it for work multiple times a day. (School bus driver)
78	Going to the parks
79	Business trips
80	Library
81	Girl Scouts, Volunteering, Music lessons

Q5 What are some of the issues you've experienced with the current intersection?

818 responses

What are some of the issues you've experienced with the current intersection?	
I have a comment:	
1	Gets really backed up when the high school gets out.
2	Where is new parking
3	traffic
4	Long Backups in the morning. Long backups turning left on to lake road
5	Certain times of day traffic can back up well up Lake road
6	Back up and wait time
7	Traffic backup at current light is horrible
8	Long backup on lake road
9	Large amounts of traffic and backlog around school start/end hours
10	Park visitors park on the street create parking
11	Coming down lake road to shop at Camas produce making a left turn with traffic in the back is narrow, wider road to allow for left turn would be nice
12	Has no shoulders still people park at the stop light and go walking the park
13	Park entry by intersection does not have enough parking
14	Long waits to get through light, unable to turn out of LaCamas park
15	Traffic, lack of protected right onto lake road
16	Lots of traffic around school times
17	need to be able to left turn in to Camas Produce and Coast to Coast seafood cart!
18	Really long lines
19	Traffic back up
20	Traffic
21	Red light running to turn left
22	Long backups.
23	Traffic backed up. Not enough room for pedestrians or bikers on side of road.
24	Long wait times stopped at the light waiting for it to change and making left hand turns congestion. A round about might fix this. Also when you walk back and forth between the lakes parks it is scary because of all the traffic a pedestrian land bridge would be very beneficial for Walkers and bikers.
25	safety issue, need turn lane into Camas Produce.
26	HUGE backups! Also not always secure that oncoming cars will stop for my motorcycle.
27	Long waits to turn left from Lake. Difficulty getting in and out of the Round Lake parking lot. Parking insufficient in that lot.
28	Long wait times
29	long traffic delays...congestion
30	Traffic backups!!!
31	Long waits
32	Long wait.
33	Busy
34	Long backup on Lake Road to turn south onto Everett - turn lane is blocked by traffic turning north.
35	Mostly it is after or before school when the traffic is so heavy.
36	Significant traffic congestion.
37	Some days there are a line of cars on lake road trying to turn left.
38	The traffic gets really backed up, causing delays. There's too much traffic for so many people.

39	Opposing traffic sometimes doesn't yield to left green light vehicles
40	Large backups, especially around school start/end times
41	Occasional traffic (school time), otherwise no issues.
42	Long line of traffic going eastbound on Lake Rd at times
43	It can get pretty congested at times.
44	Traffic at beginning/end of school day
45	Too many people
46	I don't always make it through the light and need to wait for the next one.
47	it gets really clogged and backed up in the morning school commute times
48	No issues. Certain times of day the traffic backs up on lake road usually around 6pm. I turn right to go southbound on everette. The signal is good but if the right turnlane could be extended that will help
49	Extremely slow during school bus peak hours. and foot traffic crossing is difficult.
50	Trouble turning left from NE 35th onto Everett going south due to backup in traffic.
51	terrible backups during school commute. why don't they use busses we pay for?
52	Busy with highschool traffic in morning and afternoon, busy in evening when commuters come home
53	Crossing Everett as a pedestrian
54	I use my bike from neighborhood close to the high school to go use the park by the lodge or shop at Camas produce there is no safe way to get to Camas produce unless I go the wrong way from the stop light
55	intersection by a park limited legal parking, no access to local businessss
56	Congestion
57	safty issues for Camas Produce's customers traveling south and trying to make a left turn to shop at Camas Produce.
58	traffic backs up very quickly
59	Backups and delays
60	Long backups
61	At school start end times it can back up for a 1/2 mile at least
62	No issues, I'm patient!
63	Long waits during school dismissal times
64	Backed up, had to wait for more than one light cycle.
65	Not widen enough from Lake Rd to make a right to Everett, coupled with people not knowing they can make a right on red.
66	Is frequently backed up.
67	I walk at Lacamas Park (at Round Lake) several mornings a week. Turning left out of the parking lot is difficult at the best of times. It will be nearly impossible if a round about replaces the stop light.
68	Too small for volume of traffic.
69	Bad cross walk, congestion, poor sidewalk,
70	Congestion
71	Traffic backed up
72	Large backups in the morning and after school.
73	Actually, I have no problems with the intersection
74	There can be a lot of congestion build up. Also, people turning right from lake often get stuck behind the long line of cars turning left, making congestion worse.
75	Traffic backups at the light; concerns with people walking

76	No way to downtown if the traffic is backed up.
77	Traffic
78	Occasional major traffic delays; highly un-optimized walk signals
79	Speed of traffic, no sidewalks, flow
80	Congested flow of traffic.
81	It is a bottleneck for those turning right into Lake Rd as well as everyone coming from Lake Rd.
82	Extreme back ups during school hours. Unsafe for bicycles and pedestrians because of no sidewalks along Everett.
83	Poor bike crossing
84	Backups and extremely long waits.
85	Very long waits after school and in the afternoon
86	hard to cross the road as a pedestrian; hard to use bike lane as a biker
87	It can back up during school related times, beginning of school day or sports events.
88	Long delays
89	Excessive traffic during morning and afternoon commute times and special events
90	Long lines at peak times
91	Traffic congestion
92	Long wait times to make a right turn from Lake onto Everett.
93	A lot of traffic after school
94	Backup of traffic in all directions, long delays
95	During certain times traffic can be backed up making a wall of vehicles.
96	Long lines backing up Lake Road
97	Back up issues in the morning and afternoon school commute
98	Traffic delays
99	Unsafe u turns when traffic backs up on lake road
100	Long delays. Especially frustrating when there is a huge line of traffic on one road and little traffic on the other and yet the signal doesn't seem able to adapt to the changing traffic patterns.
101	Excessively long wait times to pass through the intersection at various peak times of the day, e.g. before and after high school begins/ends.
102	Congestion, limited visibility
103	the light takes a long time, and is pretty chaotic. people make many illegal turns
104	There are too many cars coming into town from both the lake road and out of from the high school area
105	Would be nice to have a pedestrian bridge.
106	It takes forever and causes traffic and is constantly super congested and it sucks and I want it GONE
107	Long waits
108	Vehicles are backed up too long at the Lights
109	When I was a nanny in the 1st neighborhood to the left on Lake Rd. I would see almost on a daily basis Camas High School teenage drivers run red lights. Also the congestion from people going to and from the schools from those neighborhoods off of Lake Rd. is awful. One time it took me 45 minutes to get from there to my house in the Goot Park neighborhood where I have lived for 20+ years. That's when I started taking the long way home.
110	Everett is not 4 lanes. That's really is the biggest issue here. All else would work itself out

111	Long lines/wait times. Trying to take a right onto Everett is a nightmare, especially getting stuck behind everyone waiting to take a left.
112	Long waits during school hours
113	Wait is too long
114	Congestion during peak school commute hours
115	Usually none, except when school gets out at the high school or other times when traffic is higher, it gets backed up.
116	I walk Round Lake & can't get out for many minutes if the school traffic is occurring. Young drivers often make poor choices from what I've seen (high school kids.)
117	Long waits
118	no right turn lanes
119	Difficult for pedestrians or people on bikes on the side near the lake and lacamas lodge
120	Traffic during school opening and let out time is bad.
121	Roundabout would keep traffic moving smoothly. Left hand turn from downtown West is should not be blinking; too much traffic.
122	It gets extremely backed up before school/when school lets out.
123	Major congestion backing up on Lake street. A right turn lane there would alleviate some of the problem.
124	Morning and afternoon traffic to/from Camas High causes major delays.
125	heavy traffic during school start and end times
126	Traffic - bad backups on Lake Road when there are activities at the high school.
127	back up because of turn,extra cars due to schools
128	Very backed up in the morning commute
129	Long wait at stop sign
130	Too many cars trying to go in one direction and not enough lanes.
131	I live not far from this intersection. We cannot get out of our street during congestion. The wait times can be very long.
132	Delays during heavy traffic times.
133	Too much congestion during school hours. Too much congestion and not enough planning/parking or code enforcement during the Lake's Spring/Summer recreational months. It is out of control!
134	Narrow Road, long waits due to highschool traffic and no room for bicycles.
135	I don't have any issues.
136	Back up on Lake Road and the back up on Everett from the high school
137	Long lines to turn left onto Everett from lake road.
138	Before and after school hours it becomes very congested. It also very hard during anytime of the day to enter or exit round lake parking lot.
139	Extensive traffic that lacks effective flow. There is also significant mixed congestion between cars, buses, pedestrians, runners and cyclists. I think that a way to separate non motorized traffic and pedestrians in crossing the road and lake is essential. Perhaps a separate bridge but certainly not using the same road or roundabout. That is inviting accidents.
140	The back up on lake road from the school is the challenge - from the backup of the light turning from high school, then getting backed up onto Everett. Maybe a turn lane onto lake would help? Or a updated light sequence? Thank you for asking
141	Not much

142	If it is when school is letting out, I will get caught up in a masjid traffic jam. I try to leave the area before then.
143	Long delays
144	Delays
145	The intersection has always been perfectly fine with the exception of when there has been construction. However, I never travel this route during morning rush hours.
146	Lack of sidewalks on BOTH SIDES of Everett Street. Look where people already walk. Sidewalks should go all the way from high school to downtown Camas.
147	The backups on lake road heading towards Everett can be lengthy causing traffic to wait through several lights to turn north on to Everett.
148	Get's crowded during school commute but never too bad unless there is construction.
149	Hoping roundabout is strongly considered. For either option, hope most effective design to create safe travel is used, even if private property needs to be acquired. Now is the time to make this intersection effective for the heavy traffic flow. It is not going to decrease, only grow.
150	No parking, to much traffic always backed up, to many people on bike and no sidewalks, people going around other cars in not a lane waiting for the light, need wider turn lanes
151	Traffic can often be backed up west of Everett all the way to lacamas lane in the morning. I have seen it backed up all the way to Sierra.
152	We live off 35th and the congestion that happens in the morning and evening makes it almost impossible to get out onto Everett. Please keep that in mind for those visiting the lake and the 30 homes that must use 35th to get to and from home daily.
153	Lots of backed up traffic.
154	To many cars, not enough lanes, short lights
155	Traffic backs up. Confused drivers.
156	left turn from NE Lake Rd. to NE Everett is so long on waiting during peak hours in morning
157	Traffic congestion, long waits on lights
158	Waiting too long at that intersection, especially between 3 p.m. and 5 p.m.
159	Congestion @ long wait times to get through the light
160	Long waits to get on Everett from Lake
161	Long lines of traffic when high school lets out.
162	Long wait to turn
163	stay away b4 school and after. traffic backed up past light to high school
164	Lake Road gets backed up too far
165	There is congestion and backup at certain busy times but I'm not sure a roundabout would solve the issue. I see potential for more accidents plus all the trees and beauty that would be destroyed in the process.
166	Traffic
167	Long wait times at the i tee section during rush hour: school start times and after school, Friday night event times.
168	Blind spots. Crossing the streets is not safe for cyclists and Pedestrians
169	I often cannot safely turn left on to Everett from 35th in the morning going to work. Its then very difficult to turn right on to lake road b/c there is no turn lane. I cannot get home easily because in the afternoon cars/traffic is backed all the way up lake road because the intersection is so busy. It's not safe for drivers, hikers or bikers. Please do something.

170	When the high school lets kids out at the end of the day, traffic between Leadbetter and Lake is horribly backed up. Also in the evening when people are getting off of work, there is a lot of congestion.
171	Safety issue...Turn Lane needed for Camas Produce.....you have to understand and respect that all who shop there deserve to be safe...also that we support local business...THAT is key to our area.
172	Excessive traffic, especially weekend and after 3:00pm
173	Congestion during school commutes
174	Sharp turn in narrow area without enough warning. Long wait times.
175	Lots of traffic
176	Congestion
177	Heavy traffic
178	Traffic Congestion
179	Really long line on Lake to turn onto Everett
180	Traffic congestion
181	Turning left onto Lake road can be tricky
182	Cars parked along road bc parking lot too small for the lake. Narrow road and too many vehicles
183	WAAAY too many cars coming/going from the schools. They should use the buses, since taxpayers are paying for the buses. This would alleviate 80 percent of morning and afternoon traffic. Then we wouldn't have to waste money on "improvements".
184	Long wait times dictated by Camas High School schedule.
185	Very long delays when school is letting out
186	The school traffic
187	Illegal street parking causes unsafe conditions need more parking by the intersection
188	the amount of traffic during school times.
189	Traffic backed up long distances on Lake Rd. Blind right hand curve by Lacamas Lake Lodge. Long waits at traffic lights.
190	Traffic backs up
191	Long lines of traffic - people not paying attention when it's their turn to go.
192	The back up waiting for a green light
193	Traffic backs up pass turn to CHS in the afternoon as late as 25 minutes after school dismissal. When warm weather kids running and having fun by the lakes, but not paying attention to traffic.
194	It gets pretty backed up with traffic in the am and afternoon due to school, events, etc. I'm concerned about the environmental effects of the traffic.
195	I have had no issues
196	Backed up traffic
197	Long waits, stupid congestion for our once small town...frustrating
198	Traffic
199	Common answer: traffic delay. A roundabout won't solve it! People needing to go north on Everett from lake will NEVER yield during busy times! It will be worse then the light.
200	Long wait times in am and pm
201	Mostly backups. Hard to cross.
202	Long back up during school starts/dismissals
203	Ability to leave the parking lot at Round lake safely heading towards the Everett/Lake Road Intersection

204	Excessive wait times at certain hours. Also bike and pedestrian access takes time and requires care.
205	Traffic
206	Several times I've almost been side-swiped while on my bike by a car entering the bike lane. I try not to drive to Lacamas Park for several reasons but this is a dangerous intersection for cyclists. Also, I've gotten stuck in traffic on Lake Rd. like many other motorists.
207	Coming in from Lake Rd is congested.
208	Long delays during school pick up/drop off.
209	Traffic backed up from CHS to Lake road during school start/end times, also long back ups on early evening when people are coming home from work
210	It's terribly hard to ever turn out if the park lot because of the intersection. Also, there is an extreme backup every morning due to Camas HS traffic and the fact that it's a one lane road! It is far too long of a wait and is a dangerous intersection for new teenaged drivers to have to try to rush through to get to school since the wait is so long!
211	Large backups during school to and from hours.
212	Backed up traffic and unsafe running/biking conditions for high school athletes or commuting students.
213	Slow traffic (from Camas High School) and construction slow downs
214	impatient drivers on red light rt turns, inability to see approaching traffic
215	Heavy traffic before and after high school.
216	Heavy congestion.
217	Long waits, usually coming down Lake Rd
218	the backup at the intersection goes all directions. Time has to be added on to any trip to that area. Getting onto Everett from side roads is a pain and is dependent on someone (s) being nice enough to let you onto the road.
219	Long waits at the light during peak travel hours.
220	Such congestion now especially since Camas High was built. I lived in the area for 25 years, never seen it so bad. Round about may just work good.
221	None really. A little busy at peak hours.
222	I have experienced long delays because of traffic in almost all directions of the current T traffic layout. Long delays when taking my son to the high school (going North) and longer delays when returning home (going South) I have experienced delays when going west on lake road from Everett and going east on lake road during "rush hour" trying to get to Everett. Using the Lacamas lake recreation parking area is not easy during these hours.
223	Long traffic delays. Tight spaces for cyclists.
224	Too long of wait for lights because of usually school buses
225	There needs to be a right hand turning lane at the very least. (Going from lake road onto Everett). Really needs to be a three lane road but I dunno of that's possible in that small space.
226	There are no problems except to avoid between 3:10 and 3:40. Otherwise fine.
227	long back ups on lake rd turning south onto Everett.
228	Traffic jam
229	Long delays on Lake Road, backed up traffic both ways
230	Traffic before/after school
231	Long delays during CHS start & end times. Accidents often increase during that time frame. Weekends are difficult with park access and parking along the road.

232	Need easy access to camas produce form the roundabout
233	Traffic
234	Turning through busy traffic. Trying to exit the park lot is difficult as well.
235	Heavy traffic. Come to a complete stop. A roundabout would be more efficient
236	Need defined turn lane from south bound to west bound
237	I want to make sure that there is continued easy access to Camas Produce as I have to turn there for work in my truck.
238	Cars being backed up in ridiculously long lines waiting for the light
239	Long wait, heavy traffic
240	"Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce".
241	Heavy traffic
242	I avoid it if it's around or after 5pm
243	I work at Camas High School. It is very crowded in the morning when students are arriving. Sometimes it backs up Lake Road past the boat ramp parking lot at Lacamas Lake. I think I've had to cycle through 5-6 light changes to get through.
244	Traffic congestion.
245	People trying to turn right from lake road to everett get caught up with people turning left onto everett bc the right turn lane isnt long enough
246	Heavy traffic
247	Many of the issues with this intersection stem from stupid drivers.
248	Traffic backed up on lake road
249	Long lines waiting for light to turn at traffic times.
250	Occasional conjection at peak times, but it's not that bad.
251	Long backups at the light.
252	Sometimes it's ambiguous for drivers to know that I am there as a cyclist and that I should have a turn, too.
253	Longer lines of cars backed up onto Lake around curves; people aren't expecting to stop suddenly; too many cars parked on Lake and Everett in summer for park parking; too many pedestrians and bicyclists on roads where there isn't space
254	During peak times the wait is excessive
255	Impossible to turn left from lake rd onto Everett unless a car is doing the same. Also, Everett is backed up all the way to the stoplight when the high school gets released.
256	Traffic flow is an issue
257	Back up on Lake Road
258	Extreme traffic backups
259	Long wait time on stop light when people cross the road. It seems 10 seconds too long. Line moves slowly due to congestion. No right hand turn lane onto Lake Rd coming from the high school so have to wait for car in front who is heading south to move forward.
260	Long wait times at signal
261	Often there is a backup but coming around the curve makes it hard to see.
262	Very busy during school hours
263	Severe back ups during school start and finish times.
264	Enhance entrances at the park and Camas Produce
265	Cars are backed up past 43rd intersection
266	heavy congestion with school traffic twice daily
267	Congestion from high school traffic before school starts and after students are released

268	Long waits in all directions especially during rush hour and the high school start and end times.
269	Extreme traffic congestion. Trouble accessing back onto either Lake or Everett from parking lots due to heavy traffic and traffic backups.
270	Traffic congestion
271	Waiting when there shouldn't be a wait if turn lanes existed. Not being able to easily get from round Lake to lacamas lake by way of walking.
272	Traffic Jams
273	Back up onto Lake road having to wait 5+ minutes
274	Worried about getting into Camas Produce without a turn lane, please consider it for everyone's safety!
275	congestion
276	Gridlock during bus route activity
277	Traffic and backup in morning
278	The light at the high school is not synchronized and causes problems. There is no sidewalk for folks walking up. There is no bike lane when coming down lake road and I am forced to use the pedestrian crosswalk because cars do not respect a bike in this intersection
279	hard to turn into and out of Camas Produce
280	Not many issues, but occasionally some backups during peak times
281	Increased congestion. Speeding.
282	Whenever CHS have events, the intersection gets congested and it could take 30 min to get through. Morning and after school traffic is really bad. Also, we could use a pedestrian/bike bridge instead of pedestrian Cross walk so it does not disturb the traffic flows.
283	Safety Issue: Please provide a turning lane for us to turn into and out of Camas Produce. Thank you
284	high traffic volume in the morning afternoon. I've seen cars backed up all the way up the hill, by the old Lacamas Heights school.
285	Difficult to turn right onto Everett due to traffic backing up on Lake Road, many of whom are waiting to turn left.
286	major back ups especially when the schools let out
287	Not safe and not enough room for cars, walkers/runners and bikers to use it safely
288	Mainly I have issues trying to turn left onto Lake Rd from the Heritage Parking Lot. I also think there should be more trail hiking car parking there.
289	very high traffic volumes in morning and at mid afternoon when high school lets out. Also, there needs to be a right turn lane for the transition from 500 to lake road. A good portion of the traffic on 500 at that intersection turns onto Lake Road, without a turn lane traffic backs up significantly. I think the volume of peak traffic will make a round about unsafe and will result in a higher accident level. I've noticed that since the population has increased drivers are more impatient and tend to drive more recklessly than a few years ago. I think a round about at that location is the wrong solution. Given the traffic levels and the lake access by pedestrians crossing 500, a positive control traffic light intersection with a right turn lane onto Lake from 500 south bound is the only safe solution to the increasing traffic at that location.
290	Long waits at the light, especially when there is road work going on.
291	Traffic backed way up in both directions. After HS gets out it's a mess.

292	The left turn lane going from Lake Road to Everett has a disproportionately slow light, and it backs up traffic. The design of the road also makes it so that very few cars can turn left at a time. Meanwhile, the light that goes straight on Everett is green for too long when there's much fewer traffic on that side.
293	Green light time from lake road is disproportionate to the green light time on Everett from downtown to the high school
294	A lot of traffic
295	Traffic waiting to turn left onto Everett block traffic turning right.
296	Traffic
297	Very long waits, anxiety crossing the intersection by foot
298	Long traffic lines producing a wait that last de real cycles. Traffic turning into Camas Produce creating backups. It is very difficult to turn south out of Camas Produce, a popular store.
299	Concern for pedestrians and cyclists
300	no problem other than long wait at light
301	"Safety issue. Please provide turning lane for customers coming to Camas Produce through the roundabout.
302	Long delays and no turn lane into the produce store
303	to much traffic, mostly when the high school lets out, you can't get through the intersection for several lights, then evening rush hour is the same thing again..
304	Traffic backup
305	People not knowing where they are going and change lanes at last second.
306	Left turn going to Lake Road if your coming from NE Everett St. is very difficult especially if lots of vehicles coming from the other way.
307	Delays at certain times of the day.
308	It is so backed up it takes triple the time to get where I'm going
309	the largest impact currently is when you are turning left off of Lake Rd and are unable to since the pedestrian light has stopped traffic. I understand this is for safety but it really backs up travel and I have seen too many people get impatient about waiting, then they make poor choices.
310	Traffic. Longer than desired wait at lights especially pre and post school times.
311	Overall it's pretty smooth. Big backups during school drop off times.
312	Major traffic jams similar to a large metropolitan city which is where most of the people causing the traffic and problems have come from
313	Very high traffic at certain times-related to school it seems
314	Backup on lake road past the park area. Delays during Camas High school start and end of day.
315	safety. need turn lane to Camas produce.
316	Slow traffic at times, like commuting hours and when when school gets out.
317	Long waits to turn left primarily from Lake Road to Northbound Everett and vice versa. Seems to be most problematic during school start and end times and 5:00 PM commute
318	Long wait times during certain times of day
319	Long line- back up when coming down Lake, turning into Camas Produce - please provide a turn lane into the store.
320	Delays
321	Safety. Turning lane for camas produce
322	Long lines at signal

323	Traffic congestion due to Camas High School.
324	no problems ever at this intersection, and ive delivered mail on this route. i hate roundabouts though. ive been nearly hit many many times in the dumb Washougal roundabouts. if you install that terrible looking roundabout, traffic on everett will never stop for lake road trafic, creating a traffic nightmare and many accidents.theres a place for traffic lights, and this is one of them.
325	Please provide turning lane to Camas Produce for people coming from the roundabout to shop at Camas Produce. This is a serious safety issue and should not be ignored.
326	Traffic gets backed up especially on lake road when there is extra traffic from schools just getting out
327	Please provide safety studies on roundabout use versus traffic signals.
328	Please provide a turning lane into and out of the Camas Produce packing lot.
329	City did not think ahead about moving the high school, increase in population, and the volume of traffic on a 2 lane road. Bad planning on the city's part. I suggest widening 500 from Leadbetter rd to 14th and making it 2 lanes in both directions. Let's not do the same mistake as the slough bridge over the Columbia and say that you are winding it then "runout of money", then settle for 2 lanes again. No improvement in traffic flow.
330	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce
331	Traffic and bad pedestrian & bike access. Dangerous Shoulders.
332	Cross walks not be available around the entire perimeter of the intersection.
333	I have to allow extra time during school hours, but it didn't bother me, since the traffic is fairly short lived.
334	Grid lock at certain times
335	Safety- please make a turn lane for camas produce
336	Delays in the morning due to heavy traffic. Weekends and other times seem to be fine
337	There needs to be a turning lane. When traffic is busy, I can't get out of my driveway.
338	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce". P
339	congestion
340	Traffic, unsafe for pedestrians and bicycles
341	Long wait times. Overall poor planning by those who decide on the infrastructure.
342	Back up when school is let out
343	Long lines at light
344	I live by Camas high School and travel South for work and visit Camas produce for my daily food run, current left turn is a pain, wider road with a left Turn to enter Camas Produce would make me feel safer, and more parking for the park would be awesome to have
345	it is very conjested
346	Long lines get through the intersection or getting in and out of the parks.
347	At peak times, the light only lets 7 cars through at a time and it's not fast enough. People turning left off of Everett onto Lake Road usually cut the corner
348	Walking space is very limited in general
349	Vehicle congestion. Too many vehicles for the area. Bike riders going around vehicles to get where they are going faster. This is Not safe for drivers or riders.
350	Traffic being backed up and unable to turn left on Everette from Lake
351	Busy during school commute
352	Long backups during school start and end times.

353	Too many parents drive kids to school instead of using buses provided by school.
354	Certain times of day the delays are very long.
355	excessive wait times during morning school rush
356	Traffic backed up; pedestrian access
357	Extremely congested at school let out time
358	Noticeable increase in congestion during school days, before and after school hours.
359	Congestion during school commute is sometimes a 20 min wait
360	Heavy traffic when the high school begins and ends and heavy traffic about 4:30-5
361	Cars backed up on Lake Rd. past Lacamas Lane to get through the left hand lane. Pedestrian/bicycle congestion and parking lot overload which creates unsafe driving due to visual obstructions (parked cars at intersections)
362	While Camas doesn't really have a congestion problem, this intersection is severely impacted by school traffic on weekdays.
363	Waiting in long lines to turn onto either Lake Rd or Everette especially before and after school. Why wasn't something done when the schools were built that are causing the traffic issues. Plus all the home construction has made Everett a very busy road.
364	Long wait times and congestion
365	At the stoplight, the left turn lane fills up (especially when a bus is present) so that all southbound traffic is held up as far back as the intersection uphill.....a continual problem. Cars wanting to make a right turn at light are waiting for as long as 9 signal light cycles.
366	back up around the lodge during school drop off and pick up hours
367	Long delays - backup of traffic
368	Long delays
369	Too much traffic.
370	Too much congestion
371	Traffic
372	Long back-ups on Lake. Long wait for left turn from Everett to Lake. People running the light on Everett.
373	No pedestrian crossing at Fallen leaf park entrance
374	500 coming from the north gets backed up
375	Can be very crowded during school arrival and release hours. Also in the warmer months when people are using the facilities at Lacamas.
376	too narrow, needs a right turn lane for south bound Everett. Sometimes light is red for my direction for long time and there are no cars crossing through green lights
377	Get behind the school kids and it is a long, long wait
378	Back up traffic.
379	Long wait times and traffic backups on Lake Road.
380	Living in the Lacamas Summit development it can be difficult getting on to Everett when the high school students are arriving for or departing from school.
381	what ever you do don't put in a round about they are dangerous I have seen first hand accidents on those roundabouts
382	Long waits, hard to get out of Round Lake Parking Lot
383	Lack of sidewalk for safe pedestrian access. Hard to pull out of Lacamas Park parking lot heading south due to long strings of traffic coming from the high school. Large back ups in the morning on Lake Road and in the afternoon on Everett due to kids trying to get to and from HS. Difficulty getting to the right hand turn lane from Lake to Everett (southbound) due to too many cars wanting to turn left.

384	Getting to school and getting home from school it is very crowded.
385	When approaching from the west on Lake road I find the turn lane for going south often blocked by cars wanting to go south on Everett.
386	Not adequate enough to handle volume of traffic - long waits at light due to backups, congestion
387	I bike through the park and if you hit traffic it takes a long time to cross and go towards lake road
388	Traffic backed up all directions certain times of day
389	Long backups at peak time
390	No problems
391	Traffic backups on Lake Rd and along Everett north of the intersection. 7-9 a.m. and 2-4 p.m.
392	Blinking left turn signal is a great idea
393	Delays due to traffic volume and the light signal cycle.
394	I plan around peak traffic times to avoid congestion.
395	Unsafe for the growing population. Long wait times at lights.
396	congestion from school traffic
397	Traffic jam during school drop off/pick up
398	No issues
399	Too many speeders!
400	traffic backed up before and after school weekdays
401	Traffic and long lines at the light.
402	I am retired so it doesn't bother me to wait at the intersection "at this time". My concern is the lack of infrastructure in this area for the hundreds of existing homes and the hundreds more in the planning. No matter what is planned for the intersection, it will never solve the future problems that are inevitable, unless the matter of infrastructure is addressed. That said, I would be more in favor of the signalized intersection because the round about seems a bit large and confusing for the area and the signalized intersection appears to leave more of the tree canopy to the east. I would hate to lose the beautiful forest ambiance.
403	Long backups on Everett heading south and on Lake rd turning left onto Everett.
404	Long waits in traffic during certain parts of the day.
405	Obviously it gets very backed up before and after school every day. Before I was a school bus driver I'd go all the way around the lake via ledbetter because that was still fast than dealing with the traffic
406	Traffic backup
407	Vehicles cutting the corner from Evertt onto Lake Road
408	Traffic is horrible before/after school, as well as during Summer months in morning and late afternoon/evenings
409	long delay from Lake to Everett north or southbound
410	heavy traffic, related to High school, Lake road and Everett
411	Cars not entitled to go through the interdection on Everett coming from the North drive through the intersection against their red light when they see northbound cars are turning left on their green arrow.
412	Heavy traffic at times. Especially when everyone is heading to the high school
413	Long delays heading from lake to southbound on Everett due to long line of cars in line to turn left onto northbound everett.
414	Crowded, long lines

415	Congestion
416	long traffic queues eastbound and southbound into the intersection
417	traffic
418	Long waits during busy commute times.
419	Long waits for lights lots of traffic thanks to the schools and neighborhoods being put out here....
420	Long wait time to get through light
421	At release time for CHS, I have frequently experienced extremely congested,slow traffic.
422	Hard to turn into produce store . Needs turn lane . Long line from lake road to 500
423	Back up of traffic during high school start and end
424	Long wait times during peak times
425	Crowded; long lines at light
426	the line up of traffic is horrible, and it is a dead stop. I have almost been in an accident because the traffic is stopped without any warning.
427	Congestion, poor access to & for parking in the area, delays
428	Traffic delays and congestion
429	Turning left/right on Everett Am/pm with school traffic
430	long lines turning south onto Everett from Lake Road eastbound
431	Major traffic back up at light
432	Many vehicles, long waits, difficulty getting into right lane to turn right, failure of vehicles to wait for pedestrians, risky left turning for bicyclists
433	Traffic at school travel times.
434	Lots of congestion...especially with school events and start/stop times of school
435	Traffic backed up when school is starting or ending
436	long lines at times
437	Terrible for pedestrians and bikes.
438	Mainly crossing as a pedestrian or bike rider. Going S. from the intersection on Everett there is not a good way. Traffic can be a little backed up as well.
439	Backups during busy times of the day
440	Traffic backs up all the way to CHS after school lets out. Traffic is backed up Lake Rd before school and during rush hours. I often use alternative routes which are longer, just to avoid long waits to get through the light.
441	Long wait times at the light when High School is about to start or end.
442	I have no issues with this intersection
443	When coming into Camas on Lake Rd. and trying to turn right there is a massive pile up because the right hand lane is blocked when more than 3 cars are in the left hand turning lane.
444	Hard for bikes and walkers to cross
445	S bound Everett gets very backed up - most of the traffic turns right onto Lake Road, but because the turn lane is so small, they must wait at the light with the rest of the south bound traffic. This is also an incredibly unsafe intersection for pedestrians, especially during the summer with high traffic flow and high pedestrian usage. Needs to be a better separate pedestrian path from round lake parking to lacamas lake parking.
446	Lane needed to make right turn from Everett onto Lake
447	Backed up on a regular basis in General, especially during CHS hours. Cannot turn right onto Everett from Lake Rd when congested.

448	Traffic backs up before and after school. The intersection also lacks sidewalks as a walker heads towards downtown Camas on 500, which can be dangerous for a walker.
449	Left turners cutting corners, all running red lights (true of all intersections not just this one)
450	excessively long lines of traffic, especially when the schools get out. Lots of potholes... everywhere!
451	Traffic can be backed up almost to the Lake Point neighborhood at times on Lake Rd. Causes you to be late to events.
452	It gets extremely backed up during the school commute—both to and from.
453	extensive congestion in morning and afternoon
454	Long lines. Long waits. Speeding on lake road.
455	Traffic back up. School related.
456	There are only issues during school-related events (when school is starting or getting out, or big events held at CHS).
457	Always backed up and difficult to get through while school is starting and over
458	Major delays during school start/stop times. I try to avoid making appointments that require travel thru this area (N shore is my only other option) during these times. Also the park parking lot does not serve its needs. Move it to Crown Road !!!
459	Complete congestion during high school pick up and drop off
460	Long waits, especially before and after school.
461	During High School Start/End times the traffic is horrible. Also during high summer the amount of people going to the lake increases. During rush hour there are also more cars coming from Lake Rd which can back up pretty good.
462	The turn lane is not long enough to hold all of the vehicles which creates a huge backup very quickly when traffic is heavy.
463	Traffic backups during mornings and late afternoons when driving on Lake Road headed toward Everett.
464	Clogged during HS drive times and big sporting events
465	Congestion
466	Currently the intersection is fairly safe for all users. Traffic does seem to back up more than what I'd expect for a town of our size.
467	That the road is always being worked on.
468	Too much traffic and speed!
469	Traffic bottleneck and biking walking between heritage and lacamas park
470	Traffic backs up. Trails need connections so pedestrians don't walk on road
471	Nothing is wide enough for capacity needed.
472	Taking Left from the Round Lake parking lot can be tricky with intersection and cars/traffic heading south on Everett.
473	Tremendous backup particularly at times when school is starting/ending
474	It gets super backed up with students before school and after.
475	Traffic buildup, needs better pedestrian access.
476	Grid lock during school hours. Feels unsafe to use exit park.
477	Long wait time to get to CHS in the morning!! Long wait!!
478	Only feel effected at high traffic times. A bike path or sidewalk seems would be helpful
479	Bottle neck at stop light. Long waits to turn North from lake road onto Everett
480	Lake Road should be widened so you can take a right onto Everett when waiting at the light.
481	General congestion

482	Heavy congestion
483	Long delays and back-ups to the Heritage Trail parking lot or north half way to the light at the high school, people running red lights
484	Depending on time of day, it can be pretty bad.
485	Long delays mornings and evening
486	backup of traffic up Lake and up Everett during peak hours
487	None really
488	Very busy. Risk for accidents due to speed, visibility, and need to cross traffic to turn on to Lake from Everett.
489	Ridiculously long backups during school start and release times or special events at the high school.
490	Long traffic lines, waiting for light to change
491	Excessive delays when high school lets out
492	Too much traffic. And when people crossing no traffic is moving. Lake road needs a lane to turn right but the left turn lands is backed up. Student drivers.
493	Too much backup on to Lake Road & Everett during peak hours
494	Long waits.
495	Traffic congestion
496	Traffic back ups;
497	Hard to turn right when heavy traffic going left from Lake onto Everett
498	Congestion
499	I did not feel safe walking along the street where there was no sidewalk. The cars speed around the turns.
500	Traffic backed up halfway around Lake Rd during certain times and very limited parking by Round Lake. Hard to pull out left from the first neighborhood across from the auto repair shop when there's traffic. No safe walkways!
501	Long wait to get thru intersection, usually due to chs traffic, occasionally due to work commuters
502	Congestion, tight spacing
503	Long delays during commutes and other times
504	I grew up in camas and cannot think of a time I've ever had an issue there.
505	In the mornings and evenings the traffic backs up onto Lake Road and it can rake up to 20 min to get thru the light.
506	Back up down lake road because of the turn lanes at the light
507	NO ROUNDABOUT Please!
508	The traffic is really backed up do to the high school traffic
509	Extended traffic & safety
510	Congestion
511	Traffic will get backed-up frequently as students, teachers and parents travel to Camas High school in the AM, during lunch break and again when school lets-out in the late afternoon
512	Congestion
513	long backups at the light, used get stuck trying to take my daughter to the high school and back.
514	Extreme congestion, walking light that lasts too long, left and right turns onto Everett are often blocked by an excess of cars turning the opposite direction

515	Long waits during school hours or after 5:00 pm. It can also get super busy with pedestrians during the summer months.
516	Long backups
517	There aren't enough lanes to handle the amount of cars using the road on a daily basis.
518	Difficulty crossing as a pedestrian in a safe manner. Long back ups when I drive during rush hour
519	Congestion during summer
520	Traffic backup at light
521	When sitting at the light to turn left onto Everett, vehicles making a left turn onto Lake Rd. try to cut the corner too close and nearly hitting the front end of the first car. If there were a way to change the lines or something to have those drivers take the time to make a wider turn and not cut the corner would be good.
522	traffic stopped not moving
523	Lots of traffic during hs start and end time
524	Long, long lines
525	Really busy certain times of the day. So I plan my activity around that. Same as going to Portland.
526	I avoid the intersection during peak school hours or during high school events, but I would otherwise use the intersection 7-14 x /week if the traffic flow was more predictable. Also not a safe bike/ped corridor
527	Huge backups at start and end of school. Almost impossible at times to make left turn from side streets - 21st during those times
528	Red light runners; congestion; bicyclists; pedestrians
529	Back up during school starts & ends
530	With one lane in both directions, the line of cars backs up past 43rd during key travel hours
531	traffic lights cause a gridlock back up at certain times
532	Traffic is horrible at several times of the day. With Camas High School and all the new houses that have/are going in there was not enough planning done ahead of time.
533	Occasional backups
534	excessive wait time during school start and end times.
535	Long backup in the morning and at pm rush hour. Pedestrians, bikers, runners are becoming a hazard when they don't use the cross walk. Pedestrian crosswalk causes more delays to traffic because all directions are stopped. Need bridge for pedestrians and bike lanes.
536	Backed up traffic
537	Everyday before and after school (Camas High School) this intersection becomes extremely congested all the way down Lake road.
538	Too blind. People speed to make the light and coming from the lodge shoot through the curve turning left with reckless disregard. Also the second road you can turn off (38th) isn't a smooth turn off and can cause traffic backup. Speeding cars on your tail force a tight right turn, coverings into an oncoming car inching forward because the street is obstructed by power pole or parked cars for those turning left off 38th onto Everett/500 so they inch forward which creates more collision risk
539	Likely consistent with other responses I've experienced traffic congestion, long back-up on Lake and Everett St. This results in aggressive driving styles and frustrated people.
540	Not easy for pedestrian use. Causes lots of jaywalking
541	At odd times of day, traffic back-ups occur

542	Lights not working. Back up during after school hours
543	High traffic
544	Long wait times
545	Long wait times at the light
546	Major congestion's at certain times of the day
547	Works fine, can't imagine why you would want to waste taxpayer dollars on an intersection that works fine when you have SO many other issues that truly need attention and are currently exposing citizens to danger
548	Very long wait along Lake Road at high traffic times. When running through that intersection, drivers often don't pay close attention when turning right onto Lake Rd and will nearly hit me or running group members.
549	Only one lane trying to turn left onto another single lane road, backs up cars almost to Sierra. Makes kids late to school.
550	Traffic backs up with school hours
551	at peak hours (school pick up/drop off hours) the traffic gets so backed up also the wild life have been startling at times
552	Poor timing of lights and back up of traffic during peak commuting hours
553	no turn lane traveling south when turning right on Lake right from Everett/500. Also back up of cars on Lake Rd prevents those turning right onto Everett/500 from doing so when light is red.
554	Large backups and unsafe conditions for pedestrians.
555	My biggest concern is past the intersection towards the bridge- people are parked everywhere and jutting out- a lot of chaos.
556	Trying to take my son to preschool at the district of daily has been challenging with all the high school traffic. Lake is completely backed up and trying to cross Everett is just a feat in itself.
557	Traffic that backs up in all directions.
558	The road is not wide enough, traffic is heavy at times of the day and backs all the way up Lake Road, and I don't think it's safe for walkers were runners on the side of the road.
559	LONG LINES, no turn lanes to turn right from Everett onto lake road or any for that matter. No bike lanes - very narrow roads, especially when backed up, very unsafe. LONG LINES affecting travel time.
560	CONGESTION!!! Also on warmer days the increased number of pedestrians walking along the road/crossing where there is not a designated cross-walk
561	Long wait lines when the high school lets out. I do not like roundabouts
562	A very long back up during school times and school events.
563	horrible back up just trying to drive from one school to another at specific hours. This forces me to drive through neighborhoods, the long way around
564	Long wait times.
565	Long wait times when nearby schools are starting the day or ending their day. Occasionally, someone will run a red light.
566	Long lines at the stop light.
567	Long wait times
568	Huge line-up of traffic on Lake Road
569	Signal transition is long. Lack of sidewalks is dangerous. Traffic congestion is horrible.
570	Long waits in the mornings and evenings

571	Huge back ups during commute times (am school start, afternoon release, and evening work commute)
572	Large backups coming down to the intersection from lake rd.
573	Too much traffic.
574	Intersection gets backed up during rush and school transit times.
575	Traffic gets really backed up in an attempt to get to the high school.
576	I really haven't experienced many troubles. On my way home from work, sometimes I have to wait for a light cycle, but other than that, I usually don't experience any slow downs or problems.
577	School time is a bitch
578	Major back up
579	Traffic and long wait times at light
580	Not enough space to right turn when traveling south on Everett and turning onto lake. The crosswalk signal supercedes turning left on Everett from lake, causing significant delays on lake. Signalling seems to be slow and no responsive to increased traffic.
581	Long waits. Unsafe. The state should help pay for any improvements
582	takes too long coming down the hill on Lake and also turning onto Everett from any side streets during peak times can be sketchy
583	Long lines if traffic during school and work commutes. Hazardous responses for emergency vehicles
584	Long wait times coming off of Lake and turning left
585	When I walk or jog , I do not feel safe since there is no sidewalk
586	Waiting for walkers/bikes to cross street before I can turn. The right turn onto Lake coming south on Everett is a bit sharp.
587	Traffic delays and backup
588	Traffic can be high in that area.
589	Long wait times through the intersection. Cars backed up forever
590	long lines on lake road to get through the lights
591	Long waits, backups.
592	No sidewalk, no lanes to turn right
593	awful back up at peak times
594	Long waits in the morning
595	big traffic back up and delays
596	Bottleneck during high school release times and in the evening when Lake Road backs up.
597	A lot of drivers aren't looking for pedestrians in the crosswalks before making a turn. I've seen quite a few bicyclists and pedestrians nearly get hit, as well as the risk of a car collision from sudden stops.
598	It gets very backed up before and after school between the two stop lights.
599	CHS events often result in back-ups all the way up to Sierra!
600	well on my way back home from work leaving the high school the congestion is so bad most of the drivers are making a right turn. road is to small for how busy it gets. it should be three or four lanes at least
601	People not paying attention
602	backed up traffic
603	Huge line of cars backed up on lake road waiting for light, if you want to turn right you have to wait for the cars turning left to get green light because of backup
604	Long delays. Traffic really accumulates during specific periods of the day.

605	Lack of pedestrian facilities
606	Very long walk signal for joggers/bikes
607	long line of cars waiting for light to turn green on 500
608	Lack of continuous sidewalk connecting parks and trails
609	Long waits when the high school has gotten out.
610	Long waits
611	Heavily congested. Long wait times. Unsafe pedestrian crossing.
612	busy around high school beginning/end times
613	Extreme traffic back up when headed south
614	Bad traffic at certain times of the day
615	Pedestrian crossings and cars not watching for those pedestrians
616	The traffic light backs up during times when people are trying to get to the h.s. or leaving the H.s. AM and PM. Also, I work for the school district and cannot get to after school meetings on time if I go that route. I teach at Fox and if I need to be at the H.S. or ZAC- I don't have enough time.-If I get out at 2:40 and trying to make a 3:00 meeting-it is stressful. Problems I've had specifically are turning left off Lake Road and going south on Everett. Wholly inadequate infrastructure. Trying to get into Lakeside, houses, other businesses or the park during high traffic times is too hard and unsafe. No sidewalks or walking paths along that road. Are their bike paths?
617	Traffic congestion/delays.
618	Delays at the intersection due to cars heading straight instead of turning. Lights do not change due to me being on a bicycle and unable to trigger the system to change.
619	Congested.
620	Heavy traffic with wait lines
621	Long back ups. Getting stuck behind cars turning left from lake to Everett when I go right.
622	- long delays due to being a bottleneck in and out of residential subdivisions, especially around school bus time or road construction. - Inadequate/unsafe bicycle/pedestrians lane/sidewalk. - Short distance visibility of the traffic light when going north. - Limited left turn lane merging from Lake rd.
623	Backs up too far
624	Slow traffic
625	Long wait times getting through the light
626	Congestion on Lake
627	Long back ups on Lake Road approaching the intersection. Inability to turn right when there a long back ups
628	Large volumes of traffic related to school start and stop times
629	It only has back up issues when school is let it. I think it would be more helpful to have more ways leaving the school.
630	Red arrow. I grew up learning it's illegal to go on a red arrow but everyone treats it as a yield.
631	Long wait at light to get to CHS
632	Huge backups
633	Long back up can't turn right at light
634	Horrible traffic
635	Terribly backed up during school start/end times and summer time (recreation at or by the lake seems to back traffic up too)
636	Bikers and traffic in the morning because of schools

637	Delays on Lake Road traveling west. Too long of ped crossing timers.
638	Traffic backed up lake road
639	During summer, the Lake would become very crowded with cars parking on both sides of Everett which can cause heavy traffic at times and also poses danger to both pedestrians and drivers as well.
640	No right turn lane onto Lake Road (headed south). Backs up terribly when high school let's out. Need free righturn and merge lane when turning right from Lake Road to Everett.
641	Terrible bike routes here, broken glass, terrible bike lanes. Need bike path along hwy 14 to vancouver. I bike to E vanc businesses instead as Camas bike access is terrible
642	Long backup to turn left onto Everett from Lake. Right turn lane gets blocked by all the left turn traffic.
643	Long lines and delays
644	Heavy Traffic and slow flow due to business of pedestrians and cars
645	Long waits during peak travel time
646	Traffic, distracted bikers, distracted drivers, long waits.
647	Waiting to turn left onto 500 (from lacamas lane). And waiting to turn right onto lacamas lane (from 500)
648	It takes a long time to get through the light when the high school is starting or ending. There are no sidewalks. The area is generally unsafe for pedestrians and children, which is sad since it is on the way to school, parks and recreation areas. Connecting round lake, fallen leaf lake, and Lacamas Lake area trails would be amazing! A side walk or boardwalk along the south top of Lacamas Lake would be amazing.
649	Safety when walking/running/biking by myself and with children.
650	Really long wait times after camas high school releases for the day
651	I can't turn right going into Everett when I am like the 4th car back. I can't go around due to the cars blocking. There should be a longer turn lane!
652	Traffic congestion, not safe for pedestrians nor bicyclists
653	Traffics backed up in the morning before school or after schook
654	Traffic backed up in every direction several times a day. Also, unsafe for pedestrians.
655	Increased backup during high school commute time.
656	It backs up a lot during High School release times. Left turn off Lake backs up and those who are turning right can't get through which causes more back up of traffic.
657	Long wait times to clear the traffic on Lake Rd.
658	Waiting at a red in the middle of the night with no one around
659	Regularly congested
660	Decreasing LOS during rush hour
661	Traffic backed up at the light but creating traffic jams as traffic continues to build at the light (during school year)
662	Morning and afternoonschool traffic
663	The intersection light needs to be improved for the flow of traffic coming and going during school release hours.
664	Traffic
665	15 minute wait, witnessed several fender benders, always fearful that someone is going to come flying around the corner and rear end me while stuck in traffic
666	The lights are set on timers instead of sensors.

667	Coming down Lake in the morning or after work in the evenings, the left turn lane is small with little room for those individuals turning right so the entire lane can back up, sometimes to Sierra. If the right turn lane was expanded to past the community center, the flow of traffic would be greatly increased.
668	Traffic on Lake Road
669	Pedestrians and parking in the area during the summer months. Safety is a concern for crossing & visibility. Backup during school starting and ending.
670	There is not a good time of day when this intersection is not busy
671	Long lines and no way to take a right onto lake with our waiting in the line. Ancillary streets stuck for 10 minutes (minimum) trying to merge into Everett. Lights are way too random in how long they stay on green /yello/red. Very dangerous for pedestrians and bikers, with no real shoulder.
672	Traffic back ups. High school and commute times.
673	Traffic does back up during bus pick up and drop off times. The increase in traffic from parent drop off also contributes to the congestion.
674	traffic backs up in evenings due to turning lanes being too short, not enough room to get into lane
675	Extreme backup during school transportation hours! It was also a mess when they were doing construction on the bridge this summer!
676	Backed up traffic on school days when CHS begins/ends the day
677	Turning the right curve, on-coming traffic, icy conditions, long lines of traffic
678	Long Que lengths caused by left turn blocking the right turn lane.
679	Congestion. Cars parked on the sides of the road during the summer months. Back-ups due to traffic.
680	Congestion between 7am-9am and 3pm-6pm
681	Lights are not synched to deal with traffic at busy times of day.
682	Long wait to turn off lake road. Safety for runners, not a lot of space for bikers either
683	Long waits, no to little shoulder
684	Long back ups when the high school lets out.
685	No sidewalk
686	There almost always seems to be a backup of cars, and unsafe conditions when trying to turn.
687	Lots of traffic when trying to turn right into Everett off of lake.
688	Delayed light to turn north when pedestrians are using
689	Long backs ups of vehicles, especially after the high school lets out in the afternoon.
690	Crowded
691	Obviously the back up during am/pm school times.
692	Traffic back up
693	Traffic congestion
694	Wait times are excessive at certain times of day. Pedestrian crossings with the light take a long time. People parking on the roads during certain months is also very problematic.
695	Lots of traffic especially during school opening/ closing.
696	Traffic backed up all the way up Lake Road at Rush Hour. Slow downs on Everett during school drop off time.
697	long wait to turn. narrow intersection.

698	During peak rush hours it can be backed way up all the way to top of lake road by UL/Leadbetter intersection area. The lanes are too narrow and right turn lane from Lake Road to Everett is so short it is ineffective as is. Cant get around people waiting to turn left most of the time. Just a bottleneck with single lanes.
699	No side walks!!!!
700	Excessive traffic, especially during CHS start/end time.
701	Long back ups
702	The lines backing all the way up Lake Road.
703	backup at Lake Road around beginning and end of CHS school day
704	Traffic backed up to lacamas shores
705	Congestion with prolonged waits
706	Backed up traffic all the way up the hill
707	Traffic back up at school dismissal time.
708	Light changes take a while to change
709	Very congested during CHS school opening and closing. Too many kids being driven or driving to school when they should take buses!
710	Long wait times at the light
711	Long lines of traffic. Lots of pedestrians, especially in summer, walking paths and crosswalks dont seem the safest
712	Severe backups during school hours due to the lack of a right turn lane from SB Everett onto WB Lake Rd. At least half of the traffic at this intersection is making a right-hand turn onto Lake Rd. Enabling this access would greatly improve traffic flow through that intersection and reduce the current backlog of traffic that is currently experienced every day during the work/school week. Additionally, there is poor pedestrian interface if you're running from the trails around Round Lake to the Heritage Trail. There is also poor accessibility for those using mobility-enhancing devices such as walkers or wheelchairs.
713	Currently during peak times related to CHS start/stop times or events, it may take 4 or more light cycles to get through the intersection.
714	Long backup certain times
715	Long wait at intersection. Speeding and driversbot paying attention to pedestrians.
716	Congestion coming down Lake road toward Everett. I've seen it back up past Lacamas park. Also, the right arrow on Lake Road should turn green when the left arrow on Everett turns green to turn onto Lake road.
717	Long back ups. Additional lane or right hand turn lane going from Everett to Lake would be helpful a lot of congestion w recreation visitors and parking for the lake and parks.
718	Very long lines of cars stuck at the light. Both from lake road and Everett from the high school and Livingston mountain area.
719	Gets very backed up in the mornings and evenings - no real turn lane which backs up the rest of traffic
720	Long waits during school time.
721	I live on 35th and often have to take a left onto Everett, which can take a while, depending on the time of day.
722	A lot of wait time at the lights because of the amount of traffic at certain times of the day
723	Congested and long line waiting for light on Lake Road, especially morning school time.
724	Heavy congestion, especially heading eastbound not being able to see stopped traffic around the bend
725	Backup of traffic.

726	Getting backed up on Lake road, traveling east towards Everett
727	Traffic congestion in the summer afternoons, seems to be correlated to number of pedestrians using the crosswalk.
728	Long wait times at the light.
729	Always backed up especially before and after school.
730	Traffic jam
731	Driving down NE Lake road towards the intersection and trying to make a left onto NE Everett. It's usually backed up from pedestrian traffic.
732	Same as everyone else - long backups during high traffic periods.
733	Waiting through several lights.
734	Soul-crushing backups
735	Drivers rolling across the crosswalk against red lights endangering pedestrians (me and my son).
736	Extremely congested
737	Turning north onto Everett from Lake - long backups
738	I've only noticed an issue w/the intersection when CHS dismisses
739	Heavy traffic during school transitions
740	Wait time but I'm ok with waiting.
741	Long waits at Everett to Lake Rd when Camas High lets out and long lines from Lake to Camas High in the morning. That can make my son late for school on bad mornings. We have planned accordingly, and often go left out of CHS to Crown and down to 3rd just to get around it altogether. It's just such a difficult spot with busses and parents and students all pouring in and out through here.
742	No round about
743	Can't handle traffic and bad light setup.
744	Long wait times.
745	Severe traffic jams, family member had a car accident, being cut off (almost hit) by a car when I was walking.
746	Can't turn right because of backup of drivers turning left on Everett. Need a wider area to pass left turning cars
747	Major back ups during peak hours
748	Heavy traffic before school hours and after school hours. Also heavy traffic during peak travel hours 3-5ish
749	Backs up terribly on Lake Road at start time and other activity times at the high school.
750	Long waits and backups
751	Usually on Lake, if taken during certain times, long lines. Avoided by going the other route via Forest Home to Everett. For to and from CHS.
752	I haven't experienced any issues
753	There is so much traffic there are times we can't leave our house its so bad. We are worried with a roundabout it will make it so there is even less of a break. I have see people on more the on occasion trying so hard to not let people out of there driveways they ended up rear ending the car in front of them. My kid wait for the bus on this road and people run the buses stop sign because the traffic is already so bad. I could go on all day with everything wrong with the road, traffic, unsafe, no side walks etc.
754	Extensive traffic, unsafe pedestrian crossing
755	To much traffic back up. Very unsafe interaction for cyclists and pedestrians.

756	The traffic can back up very quickly if a couple cars are waiting to turn left onto lake road and there isn't no space to turn right.
757	Congestion, wait time at light, speeding.
758	Flashing yellow left turn signal can be dangerous. Traffic backs up really far on lake. There's not a clear area for pedestrians. Parking gets jacked during summer.
759	Afternoon heavy traffic from the high school backed up at the traffic signal.
760	Not safe to cross. Long lines of traffic.
761	The left turning lane (from Lake Rd) chokes up the right turn possibility. Lane is too short. Also, not everybody knows they can turn right at red light. Especially when cars are turning left from Everett Rd and ongoing traffic is stopped (there is no green arrow turn light) Sensors are not sensing properly the amount of cars waiting at lights, therefore they don't adjust to traffic flow.
762	Congestion
763	Traffic back up
764	Traffic backed up onto Lake Road..and on Everett too
765	Long traffic lines during morning and evening peak commute times. Hard to cross the road when walking between lakes.
766	Long waits travelling N/S, poor visibility to south bound traffic from Lake Rd, very scary from a pedestrian and bicyclist perspective, insufficient bike lane and sidewalk, and on summer days the foot traffic of people recreating can cause dangerous traffic conditions.
767	Long wait/light times usually during peak school hours
768	Heavy traffic before/after school and at 5 pm
769	Long long LONG lines during school release/ drop off/ pickup.
770	Traffic backs up at the light, sometimes to astonishing distances especially on Lake Road and southbound Everett.
771	Long wait during inclement weather; Scary to walk from Lacamas Lake to the park...only did it once and would avoid it in the future;
772	Very busy at certain periods of the day, especially around school start and end times, backing up traffic.
773	Long wait times depending on school schedule
774	Extreme traffic
775	The backups at the lights
776	Backed up at the light
777	Backed up traffic down Lake Rd
778	Long wait times
779	Traffic backed up
780	Back up of traffic at peak hours
781	long wait times at the light during high traffic hours
782	delays during High School start times
783	No sidewalks
784	The lines heading east are way too long.
785	Long delay to go downtown at given times of the day.
786	Back up and congestion
787	Very long lines, abundance of pedestrians wandering around on warm, sunny days.
788	traffic delays, can't turn left from the round lake parking lot
789	Drivers going too fast with pedestrians moving around. Drivers making u-turns looking for parking. Drivers running red lights. Cars backed up for miles.

790	Summer traffic severely impacted by pedestrians on hot days. Traffic impact during start/end time for high school.
791	Wait time
792	I avoid Everett in the morning and afternoon. The HS traffic is terrible. Overcrowded school makes for overcrowded streets.
793	No safe way to turn left on Everett while on a bicycle. Waiting to turn right on lake road going south on Everett because of backed up cars.
794	long back-up on Lake road, confusing yellow light arrow on Everett, poor space for biking and walking/running.
795	Lake Road backs up during morning for high school & also in the evening for everyone going home from work. Also, so people still don't understand the blinking yellow arrow.
796	Long backup and wait to get thru light before/after school start/release
797	Cannot turn south on Everett cuz high school traffic backs it up so much you can't get to the intersection.
798	People trying to cross street
799	Making safe left turns while on a bike.
800	Congestion
801	Sitting at traffic backed way up the road past the park.
802	traffic backed up
803	Traffic backs up
804	Traffic congestion
805	People not understanding how to use a yellow light and turn. People not moving all the way into their lane to allow those turning south onto Everett from Lake. And it would be great if the intersection was polluted with all the signs for community events.
806	Traffic can get backed up when school is let out and during afternoon commute times.
807	Traffic backups beyond 35th Ave make it very difficult to enter Everett from 35th.
808	Trouble in the summer when everyone is at the Lake. A long wait when the high school starts and gets out each day.
809	Very busy and backed up at times.
810	Backs up
811	No issues
812	From Lake Road to Everett - long wait times during peak hours. Dangerous for pedestrians
813	Cement Trucks, that should use other roads. Intersection gets busy at rush hour times, garbage trucks block traffic and cause further delay.
814	Certain times it backs up, making it difficult to make a left from 35th
815	Traffic delays due to volume.
816	Long waits especially around school time.
817	Traffic heavy at CHS open & close
818	There seems little space for pedestrians to cross safely.

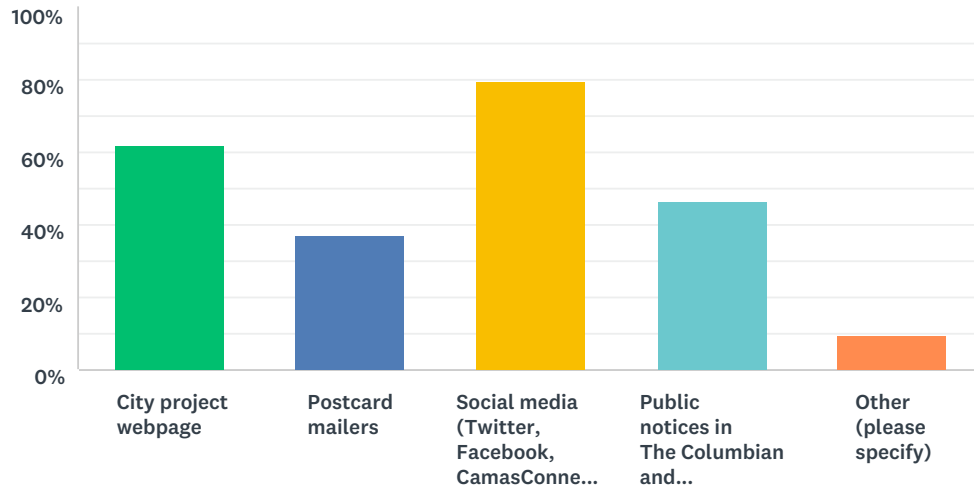
Q6 Below are broad categories of criteria for reviewing the two concepts for intersection improvements (shown above). Please rate their importance to you from 1 (highest importance) to 5 (lowest importance). Rate as many criteria as you like from 1 to 5.

Answered: 1,108 Skipped: 0

	1	2	3	4	5	N/A	TOTAL	WEIGHTED AVERAGE
Reduce traffic congestion	59.04% 650	13.08% 144	8.45% 93	5.18% 57	13.90% 153	0.36% 4	1,101	2.01
Improve traffic safety	47.89% 522	17.34% 189	14.22% 155	7.61% 83	12.39% 135	0.55% 6	1,090	2.19
Avoid impacts to the bridge north of the intersection	16.23% 172	14.34% 152	28.49% 302	14.62% 155	22.17% 235	4.15% 44	1,060	3.13
Minimize impacts to wetlands	25.88% 278	18.25% 196	19.74% 212	12.10% 130	22.25% 239	1.77% 19	1,074	2.86
Minimize impacts to trees	26.97% 291	18.72% 202	19.28% 208	12.60% 136	20.76% 224	1.67% 18	1,079	2.81
Minimize impacts to adjacent property	18.32% 196	15.79% 169	27.29% 292	15.70% 168	20.09% 215	2.80% 30	1,070	3.04
Accommodate pedestrian and bicycle access	34.62% 378	23.63% 258	18.04% 197	10.07% 110	12.91% 141	0.73% 8	1,092	2.43
Provide access to adjoining property	15.74% 167	16.87% 179	26.86% 285	16.12% 171	17.06% 181	7.35% 78	1,061	3.02
Provide a functional and aesthetic design	26.15% 284	22.56% 245	22.84% 248	12.43% 135	14.09% 153	1.93% 21	1,086	2.65
Reasonable construction schedule (within 1 to 3 years)	42.75% 463	20.87% 226	14.77% 160	8.03% 87	12.65% 137	0.92% 10	1,083	2.26
Maintain traffic flow during construction	54.04% 588	15.90% 173	11.12% 121	5.42% 59	13.14% 143	0.37% 4	1,088	2.07
Overall cost of the project	20.83% 225	19.17% 207	30.65% 331	13.24% 143	13.43% 145	2.69% 29	1,080	2.79

Q7 There will be many informational updates and participation opportunities during this project. What do you think are the best ways to keep everyone informed about these updates and opportunities? (Select all that apply.)

Answered: 1,097 Skipped: 11



ANSWER CHOICES	RESPONSES	
City project webpage	61.99%	680
Postcard mailers	36.92%	405
Social media (Twitter, Facebook, CamasConnect app)	79.31%	870
Public notices in The Columbian and Camas-Washougal Post-Record	46.67%	512
Other (please specify)	9.57%	105
Total Respondents: 1,097		

There will be many informational updates and participation opportunities during this project. What do you think are the best ways to keep everyone informed about these updates and opportunities?

Other (please specify)

1	Signboards
2	Signs posted near that area.
3	Email
4	Next Door app
5	Signs at the intersection, directing people to the city project webpage, social media
6	Update notices in Prune Hill Next Door
7	The notification should say that the city is not planning on constructing a roundabout in this area
8	River Talk Weekly
9	mailed newsletters
10	NextDoor neighborhood emails
11	email updates
12	Links posted in next door camas
13	Instagram
14	Email distribution
15	Emails
16	Next Door
17	Email, NextDoor postings
18	Email group if you wish to join.
19	Signage at parks next to site; Round Lake & Lodge
20	The billboard posted at the intersection now is great!
21	Email
22	Neighborhood app
23	Signage
24	email distribution list - this worked well with the BPA project
25	Please use all available lines of communication so as many residents are informed as possible.
26	Email list
27	Send info to Camas High School for distribution to students/staff
28	Nextdoor
29	The school district could send out a message, as they have a list of high school students and families that will be impacted.
30	Project website that you share on social media
31	Email to interested parties
32	Automatic emailers
33	Email group for those that sign up and website
34	Websites such as this one (Livingston Mountain)
35	Opportunity to meet with decision makers
36	Nextdoor
37	Personal communication to all the residents who live in the area on what is going and what kind of impact it will have on their daily use of using the roads to go around from school, work and life in general.
38	Sending news through CHS to keep students informed, since the intersection impacts nearly all CHS students
39	Nextdoor app

40	Notices/releases in the small weeklies ie rivertalk weekly, lacamas magazine. Also, signage at the intersection as was put up for the public meeting
41	Signage at construction area
42	Email
43	Everything you can.
44	Nextdoor
45	Instagram. A quick update with a picture of the progress would be a nice reminder as the process continues
46	Email blasts
47	Postings on Camas Library bulletin board
48	News print
49	Email updates
50	Email
51	<i>[This comment is included in the responses to Question 8]</i> #8 Isn't letting me write a comment and is only accepting "no Comment" box check. My comment for #8 is that I like the roundabout solution as it will accommodate the growth that is already in action in our town and the traffic is only going to increase
52	an email listserve that we can sign up for to get periodic updates
53	No paper communication please. Digital only or public posting like city hall or the library.
54	NextDoor
55	Opt-in email
56	https://lacamasmagazine.com/
57	Further meetings
58	Email
59	Signage like current one at that location
60	emails
61	email option - residents can opt in if they'd like
62	Email
63	Sign at intersection
64	The sign that was installed on Everett could have a section that gets an updated when new meetings are scheduled.
65	Nextdoor app
66	Non-Camas social media - Nextdoor, Instagram - it is extremely important the City goes to the citizens where they consume media. Don't make them only go to the city channels.
67	Nextdoor
68	email notice opt-in?
69	next door
70	Post signs in neighborhoods & main streets.
71	Updated meeting signage at intersection
72	next-door app
73	Email for those who opt in
74	NextDoor
75	Nextdoor NW
76	NextDoor
77	an email list where people can sign up with their email to receive updates

78	Dedicated Nextdoor posts on inner community and detailed signage by the road (In a safe place where it's readable for pedestrians, not drivers) that updates progress. Maybe for drivers a large, roughly recognizable "thermometer" style progress bar signage that updates (I.e. 50% complete. Projected finish: July 2020
79	Smoke signals
80	Signage at intersection was great to let me know about the info meeting.
81	Through the School District like this as well
82	Camas High School
83	email list
84	email
85	Nextdoor app, which is how I saw this survey was available
86	Email
87	Opt-in e-mail list
88	Online Camas-based magazines.
89	Email
90	Email
91	Road signs
92	Text message notifications for bulk groups. Similar to the schools process for notifications.
93	In person updates at town meetings
94	Public Alerts
95	EMAIL!! Continuing to update the sign currently placed at that intersection with the next steps so that the public can know when to check in.
96	Text
97	Email updates?
98	Email (people can subscribe)
99	Signs at the intersection
100	Email
101	Public meetings or hearings with project managers.
102	Signs hung up around town (Crown Park, Forest Home Park, the Everett/Lake Rd Intersection
103	email list
104	Note - this survey was hard to find. It is not linked on the project page.
105	email list for those expressing interest

Q8 Is there anything else you would like to add?

329 responses

Is there anything else you would like to add?	
I have a comment:	
1	I drive from Lacamas Summit past this intersection to turn left to shop at Camas Produce, with this design please provide the local residents like me a Left Turn lane to make a safe turn in this growing city
2	I Drive this intersection daily for school and shopping at Camas Produce in modernizing the change why is there not a Turn lane for local residents to make Left Turn at Camas Produce, a must needed feature.
3	I drive from Lakeridge to Camas Produce and find the left turn from intersection difficult, left turn lane must be in this design for long term safety
4	I drive down to the intersection from Lakeshore to go shop at Camas Produce, why does the design not include a Left Turn lane to help local shoppers ? Left Turn lane from Everett to Camas Produce is a good safety feature and I do not see it on your drawings, That is very bad !!!
5	My issue with RoundABOUTs in Washington, drivers here don't seem to know to signal they are exiting. In the particular location, in the mornings when school is in session, Southbound Everett from North competes with North from Lake. Not sure if a Roundabout will achieve the goal.
6	Maybe an elevated footbridge for pedestrian traffic crossing Everett
7	I drive past the intersection twice a day and try to make a left turn to Cup of Joy for coffee if there is traffic behind me it honks so a left turn setup will be less invasive and safer to traffic
8	I come down Lake RD on my way home to shop at Camas Produce and making left turn with traffic following me is not comfortable, a left turn like Safeway has in front of the building dept of the city hall will be a great addition to this plan
9	I live, shop and work in Camas and commute to intersection everyday 3 times a day, turning left to get coffee at cup of joy should be made easier with a middle left turn lane
10	I shop at camas produce and making a left turn during with traffic behind me makes me nervous, a left turn of some kind would be appreciated Thank you
11	LEFT TURN LANE for turning into CAMAS PRODUCE SHOULD BE A MUST HAVE IMPROVEMENT GOAL
12	I live close to the high school and drive to and past Camas Produce daily, a middle left turn lane will be a good improvement in that area to help local shoppers
13	I travel south to shop at Camas Produce, a left turn island is needed for vehicle safety
14	They need to account for present amount of traffic as well as future amounts of traffic and provide pedestrian access. Parking should be limited to designated parking lots and not on the side of the roads. They need to be conscious of the people who live down the streets off of Everett near round lake.
15	please make sure there is a way to get into the Camas Produce store and the Seafood food cart! Left turn in without holding up through traffic would be great. Need to be able to get in, and right turn back out to go through intersection/roundabout (roundabout favored)
16	Worried about ped/bike conflict with a round about intersection.
17	Appreciate the opportunity to review and have some input. Great job!
18	safety first.
19	Do a roundabout! Also make lanes wide enough for bicycles to be comfortable. The ride the streets .

20	The signal lane round about on Brady east of 192nd is too small so it unnecessarily slow traffic. All European roundabouts are two lanes so traffic can move in and out of the circle without stopping. The bridge on Everett needs to be as many lanes as the intersection or that bottleneck will negate everything. Protect the size of the parking lot for Round Lake. Protect camas produce so they can stay in business during the construction and afterwards as they are very important to the health of our community.
21	you probably need a wider bridge for signalized versions; be sure roundabout circumference is much wider than one on Brady and be SURE the distance between Everett thru entry southbound and Lake Rd entry is as large as possible or you will be exchanging one problem for another...European roundabouts are mostly two lanes on a wider circle...this keeps traffic moving
22	Do a roundabout! It makes the most sense. Keep traffic moving. And make it bigger to anticipate growth.
23	Is this going to be like the pool survey? You ask our opinions and then don't chose either option that was presented?
24	Split start & end school schedule to reduce high impact
25	Please add a separate turn lane (safety reasons) for Camas Produce. Please also add a separate sidewalk along Everett from NE 22nd Ave to/from Lacamas Park. People walk/run along the main road which is such a huge risk for getting hit by a car - this should've been done eons ago.
26	Looking forward to the improvements.
27	Roundabouts are not difficult to navigate with a little experience and common sense.
28	It seems like the new round-about entering Camas is working well because it is a larger size. Sometimes the roundabouts that are smaller get too tight and they are awkward to navigate.
29	A round about will disrupt the area greatly. I travel to work. And while at work travel through in a ready mix concrete truck. It will be very difficult to head north or go back to plant via lake road in the roundabout the trucks do not turn well. And it will change the image of camas. Its change drastically already that i am considering moving away also due to political climate. I also travel to safe fire and walmart /costco through the area. I have seem mild congestion during certain times. A roundabout is not necessary and will increase congestion.
30	My concern with roundabouts is the great amunt of attention a driver must give to other incoming traffic so as not to assume they are planning to exit at a given location. At the current new roundabout at HWY 14 I've had many close calls because there is no way to know a vehicle is continuing around the roundabout rather than exiting where I expect them to. I always have to come to a complete stop to make sure before proceeding. Also I would highly encourage an overpass or other option for foot traffic so they do not have to cross the busy road. If you put up a crosswalk with alight it also stops traffic
31	Preserve as many large trees as possible. Perhaps add an additional bridge across the slough from the new bike path adjacent to Lacamas Park.
32	I don't use the intersection during busy hours because of the backup. Would be more convenient for me if I could. I don't shop at Camas Produce anymore because of the timing.
33	I have doubts about either alternative. I know roundabouts supposed to be there best, but with bumper to bumper traffic from the highschool, I envision times when the traffic from lake will not be able to get into the circle for some time

34	I work at Cup of Joy and turning Left is difficult (coming from intersection) with morning traffic on my tail, and see and hear my customers complain about difficulty making left turn, please give us a left turn lane
35	Provide safe access to Camas Produce with this design change
36	A Traffic Circle would be confusing and cause more congestion than the current levels, as well as make it more difficult for pedestrians to cross Everett. The intersection really is only congested 2-3 times a day (morning/evening commutes and when schools begin/end), the rest of the time the intersection is lightly used. The current traffic signal works fine. What I would like to see are sidewalks and increased lighting along Everett, as well as a light at the intersection of NE 38th Ave and NE Everett (it is very hard to see the 38th Ave road sign from Everett).
37	Close to intersection is a wonderful produce store my hope with new design would be to provide access for shoppers like me
38	Allow Mor time for the survey.
39	As a business owner (Camas Produce) I was not notified.
40	It would be great if traffic could move thru there during construction as there isn't really another way thru camas but the priority should be on the project completion
41	Improved traffic light is my preference. I have experienced more congestion and safety hazards at the roundabout entering Camas from Hwy 14 than before. I see a roundabout making both worse at the lake intersection as well.
42	I don't want the big beautiful trees taken down. Work around them.
43	Regarding the trees that are taken out, I have an extensive background in environmental restoration, and I believe that the number of trees to be taken out is not substantial relative to the benefits gained from reducing the amount of fuel burned by idling cars. Regarding the traffic congestion, my concern is that people arriving at the roundabout from Lake Rd. and trying to turn left will have a hard time getting a chance to enter the roundabout when the high school ends each day, and will subsequently block up those trying to turn right at that roundabout from Lake Rd.
44	I believe Everett St requires widening.
45	Please consider the safety of the customers coming to and from camas produce. I am a frequent patron and want to be allowed safe and easy access.
46	Sidewalks from high school intersection on Everett to left turn intersection to doc Harris stadium
47	There are a lot of people moving here, and the backups during rush hour and before/after school are the worst. The street north of the intersection needs improved also, especially when you get stuck sitting for long periods, all the way back to 15th & Leadbetter Road.
48	A traffic circle design that allows for smooth flow of northbound Everett traffic past Lake Rd and dedicated right turn only lanes for southbound Everett to Lake and eastbound Lake to southbound Everett would alleviate much of the congestion. Traffic circles have been proven to be much safer than signaled intersections as well.
49	This is a City of Camas created issue. Continued overdevelopment without a properly supported infrastructure has brought us to this. The burden of expense should come from the many developers who've been allowed to build in all areas of the city, which has led us to this congestion.
50	Can any lanes be designated as through or turn lanes that do not have to stop unless there is pedestrian at a controlled signal. Thinking of the main road in Oregon City

51	The information given to the community in regards to traffic has always been that the roads could handle the traffic of the growing amount of housing and population in the area. Why have these surveys been so inaccurate?
52	I am glad you are tackling this. It's a mess! Sidewalks please!!
53	I live by two of the three roundabouts in Camas, I have been almost hit several times. I even had a lady coming at me going the wrong way. People do not know how to drive thru roundabouts, more times than not I have witnessed people not even looking and driving into the roundabout without even looking. Again I have watched many kids run red lights at this intersection and don't see where if they can't handle a red light how are they going to yield the right away properly at a roundabout. Plus to not to mention how many trees would have to come out of that area to do this properly.
54	Stop building 2 lanes and roundabouts in Camas. The city is growing at 25% per year. 4 lanes everywhere!
55	With Camas high school, and so many new drivers coming in and out of the school I think a roundabout would be a horrible idea
56	Have you considered just adding an additional traffic light north of the intersection on Everett? The problem is the high school traffic that backs up a considerable distance. If they had to stop at a light programmed for that time of day, it would allow residents, Round Lake parking lot users, etc to get out AND it would reduce young drivers' speed. Just a thought.
57	not a fan of roundabouts
58	Thanks for including community in this decision process.
59	Widening the bridge and adding a center turn lane up through the high school turn off would help tremendously. A dedicated turn lane on Lake Road for at least 1/8 mile to allow flow from Lake Road to downtown Camas would be easy to build and very effective at reducing congestion. Your option one appears to just be status quo.
60	A round-about is a terrible idea and would make traffic flow worse. Any improvement needs a right turn only lane south bound on Everett turning onto Lake. Going east on Lake could have 2 separate lanes to accommodate both right & left hand turns at the intersection so traffic can flow better onto Lake (later merging back to one lane). I'm also disappointed the bridge is not being addressed because it needs to be improved and widened to at least accommodate a bike lane as it too is a bottleneck.
61	I do not like the roundabout concept. In theory these are more efficient but Americans do not know how to use them. And it would involve what looks to be a larger impact to trees and wetlands.
62	don't displace 55 & older community
63	You've already made up your mind to put in a roundabout and this survey is a waste of time.
64	Signal Alt #3 is UNACCEPTABLE! People love Camas Produce and cup of joy. Destroying their businesses should not be an option at all!
65	Simply widening the lanes is not going to relieve congestion much on the busiest of times. Right now, I cannot get out of our street during back ups. And this will do little as more neighborhoods are built and the extra lanes will quickly be overwhelmed and we will be right back where we started. The roundabout will be an adjustment, but in my experience, the traffic will continue to flow, even if at a slower pace. The extra lanes with lights will not only be overwhelmed in the next years, but it will make the area look more city like. At least the traffic circle can keep a less city-like appearance.

66	A single lane roundabout is a bad idea. Judging by the other local roundabouts, people are not kind or respectful in allowing cars into the line, and this intersection is heavily travelled by new high school drivers. It would be safer and more efficient to have a traffic signal.
67	It would be helpful to provide alternate routes to avoid the construction area during the project time frame
68	With how congested the intersection already is, I feel if replacing with a roundabout it will become more congested and more accidents will happen. I also feel that drivers will be less aware of pedestrians and bicyclists and it will not be safe.
69	Public comment is critical as is getting the word out on this to the community
70	Leave it as is! I see no advantage to any of the plans!
71	Not a fan of round about and the space they require!
72	Why aren't developers and new homes paying for this? Do not destroy the wetlands, TREES, and nature bc over-populated Camas has a problem. Too bad. Should have thought about that before jamming way too many houses in the area.
73	I don't see how a round about will slice the congestion on the 2 roads. I prefer traffic signals.
74	Please put in sidewalks & Street Lamps
75	It would be great to have more detailed information at the next open house about current and future expected traffic flows.
76	Need bike lanes and crosswalks all the way up and down Lake Road
77	We do not live in Europe. We live in the United States. Driver do not know how to use round abouts, please quit building them.
78	The biggest issue are the turning lanes. Option one would be the lease expensive, evasive and would meet the needs of future traffic
79	There needs to be a way to turn right off Lake Rd. onto Everett, without waiting in a long line. Right now there is not enough room on the road, once 4 cars are waiting to turn left.
80	as long as the city continues to allow property to be developed w/o thinking about repercussions 'down the road' this will be the tip of the iceberg. this problem should have been addressed long time ago.
81	Round-a-bouts are horrible and would impact the greenery around the intersection far too much. No to the round-a-bout!
82	Construction during off hours, nights or certain plan ahead advertised days
83	It is important for public safety that a turn lane is made for customers going to the Camas Produce.
84	If a roundabout is chosen can we give it two lanes.
85	Double lanes on round about
86	I HATE ROUNDABOUTS!!!!!! STOP THAT!!!!!!
87	Effects on existing business DURING construction should be a primary concern. For example, people need to be able to access Camas Produce EASILY during construction.
88	I am worried about the trails at Round Lake continually losing mature trees and the green belt that allows users to feel they have actually escaped the city. There are many areas along the trails where you can now see houses, roads, etc. My vote would be to build a roundabout using as much of the existing paved area as possible, and pushing west onto the private property instead of east into the park.
89	After walking at the park I like to stop at the local produce market where traffic is obnoxious and a left turn would be awesome

90	Please keep in mind the city's newest, least experienced drivers will be flooding this intersection twice daily.
91	If you have a bottle neck at the bridge and just south of the intersection traffic will still back up at intersection
92	There needs to be a balance between tree/wetland mitigation and the need to get drivers where they are going. Traffic is only increasing and there are extremely limited alternate routes. We may need to do some unpopular things for the greater good and future development.
93	If you decide on the roundabout (which I don't prefer or think addresses the pedestrian issue) please don't landscape the middle so you can't see across it. This seems to occur on every roundabout in Camas,
94	This intersection better be epic. We have had to endure so much construction over the last two years...
95	Bike lane along Lake Road and speed control for cars.
96	Please keep bicyclists in mind while planning this new intersection.
97	The roundabout needs an interactive T-Rex statue with optional jet pack.
98	Thank you for working on this. It would be much easier to just ignore the problem like Portland does. I appreciate that you don't do that.
99	We need improved traffic flow at the intersection, but we also need increased capacity on Everett all the way to 43rd Ave.
100	I don't think the intersection is that bad as it is. I think a roundabout would make the left turn more difficult from 500 on to lake road, maybe....
101	About 120 Camas High school runners will need to cross this intersection on a daily bases to get to Heritage trail where they do distance running. We should consider pedestrian traffic that may be attempting to connect from Round Lake Park to Heritage Trail Park as well as the needs of cars and daily school traffic when planning for this busy intersection.
102	In either selection, a left turn lane needs to be included for existing businesses i.e. Camas Produce
103	Consider a hybrid design that incorporates lights and continuous right turn lanes vs the roundabout. The roundabout design is a complex traffic and pedestrian flow and would likely increase the probably of incidents. One to three years is way too long for construction and citizens should not be subject to that kind of cost and traffic congestion. Thank you the opportunity to voice my opinions.

104	<p>I have concerns for either of the options that are being presented. The current intersection is signalized and is not functional as we know. The new roundabout on 6th Ave has only partially solved the problem, during peak traffic times the traffic backs up under highway 14 not to mention drivers not knowing how to use a roundabout. I experience many people stopping at the yield sign daily. Throw in 1000ish high school students "new drivers" and that could be a recipe for disaster. The bottleneck of the current bridge is a part of the problem and in my opinion will still be an issue with either option presented. With the growth that Camas has seen in recent years and appears we will continue to see based on the successes of our school system, the new home construction in the area and our recent exposure in being in the top 6 of the small business revolution. These successes are not going to slow down our growth. I am in real estate and I have many many clients call asking about the Camas area based on school scores alone. Many of those same people like the proximity to Portland and to PDX for business travel. Not to mention our quaint small town feel=) It seems to me that there should be a long term solution. So here is my opinion... I think that the existing bridge should be converted to a one way bridge and that the place where is the new red pedestrian bridge is should be another one way bridge going the opposite direction. This would likely mean that the parking lot would be taken for use by traffic. I don't think that this would be horrible as it is hard to get in and out of the parking lot in its current location during peak traffic times. That is my 2 cents, I said long term solution not cheap=)</p>
105	<p>While I am all about saving the trees (stop letting builders squish houses in and shave the land), near a road I have the opposite opinion. Flow of traffic is extremely important for the safety of our citizens. People get frustrated and cause wrecks. Emergency vehicles need access. Pedestrian s need a safe way to access that recreational area.</p>
106	<p>There is absolutely nothing wrong with the intersection now. Save the money and the inconvenience by leaving the intersection as is.</p>
107	<p>I have concerns for the businesses located within the construction corridor. Access needs to be maintained and exven improved.</p>
108	<p>Hate the idea of a roundabout. There is a lot of traffic a times going through that intersection especially with young drivers! I am visualizing the insane roundabouts in Europe!</p>
109	<p>I do not like round-a-bouts and I think one in that area, unless it is very well planned out, will be very dangerous. Too many high school drivers for a round-a-bout.</p>
110	<p>I really don't want a roundabout. I think a lot of the problem could be solved with some sort of intelligent signal light that gets real time data on how backed up the traffic is on Lake Road.</p>
111	<p>Expand from two lanes to four in all sections</p>
112	<p>This intersection is along a major Clark County bicycle route, and I see cyclists and pedestrians of all ages navigating this intersection, all the time to access all of the amenities in the areas surrounding this intersection. Vulnerable road users must be of higher priority than moving vehicles. And I also don't want to see trees removed. Btw, the majority of the time that I pass through this intersection it is as a car driver.</p>
113	<p>Above all else I really want it to be safe.</p>
114	<p>Roundabouts are hazards in the area. Adding one here should increase congestion, confusion, and safety concerns for all involved. It requires increased awareness on the driver's part, bicyclists and pedestrians. The simplest, quickest, solution is the best.</p>

115	Provide access to Camas Produce!
116	Enforcing parking on Everett and lake road during peak usage times. As a walker / biker having to swerve in to traffic around cars is unsafe. I worry about kids who aren't as aware.
117	I think that Option 1 is superior.
118	Access to Camas Produce.
119	I was at the informational meeting and thought it would of been nice to have question and answers at the end of the presentation.
120	Access to Round Lake parking should be part of consideration.
121	I think the long term fix needs to be the goal, not something that needs to be readdressed or fixed in 5-10 years. Thank you for including community input :)
122	I think a roundabout would be a great improvement to the intersection.
123	Has continuing the right turn lane from Lake Road to Everett been considered? It was like that years ago and maybe needs to be addressed again
124	I prefer a roundabout style. The proposed design is too complex, expensive and will be unsafe.
125	Is this the best use of our money? I travel through there at least once a day and i don't have an issue. Those that don't plan well do have an issue. Not my problem!
126	The roundabouts are bad options. aggressive flow takes over and will cause more congestion.
127	You should condemn the property to the south, mobile park and produce and combine with the park for parking
128	I live just off 35th street and it is extremely dangerous currently making a left turn on Everett. I am concerned a round about will have a heavy stream of drivers and no breaks created by the light. We know the traffic for highschool is a huge part of this problem and that stream us extremely difficult with these drivers! My elementary son's school bus had to change their route as not able to turn left in the morning with current traffic- it is really concerning! The while corridor needs a published plan before we do this. Also, I do not want a round about as this appears to take too many trees.
129	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce
130	Keep the residents involved in the process.
131	I wish we would have been kept this informed with all the new developments going in that I feel are wrecking our quality of living in the community.
132	I believe option one will meet the control and safety requirements for this intersection now and for the foreseeable future given the increasingly heavy use from both vehicles and pedestrians. A round about works for lower traffic levels, this intersection is too heavily used for that solution.
133	PLEASE MAKE SURE THERE IS SAFE ACCESS TO CAMAS PRODUCE AND THE LOBSTER TRUCK. I GO THERE SEVERAL TIMES A WEEK. THERE SHOULD BE A TURNING LANE THERE!
134	No roundabouts
135	Safety issues, turn lane for Camas Produce.
136	Important To minimize the impact to the small business that operate in the area. Please consider a turning lane for the camas produce parking lot
137	Add a turn in to Camas Produce
138	There should be safe access to camas produce

139	People do not know how to use the roundabouts. Please keep the lights. I see close accidents happen daily in camas roundabouts.
140	To have a better traffic flow would be amazing!
141	Make the accessibility to business easy
142	Turn lane into Camas Produce
143	The roundabout is good for safety... but will NOT relieve traffic congestion. There are many examples of this throughout Portland.
144	You must slow this growth within and surrounding Camas. When is enough.... enough? This little town of ours is not little any longer. There will come a time very soon where Camas is not a place you want to live and raise a family. After all, all these folks moved (from larger overcrowded places) for small town Camas. And their ruining it by trying to make it like the dumps they came from. Stop giving out permit after permit and saying yes to everything for the right amount of \$\$\$\$ You have achieved your growth and national recognition now it's time to take care of the residents. Especially those of us that were born and raised here and are now raising our own families in Camas.
145	I understand times have changed and we have more people and vehicles, but I miss the old camas, the friendly camas. I'm not happy with what its turned into..
146	Allow for easy access to local business
147	changing this one intersection is not going to reduce the amount of traffic here
148	The bridge is too small for this project to work efficiently. I canthe can see the city of Camas agreeing with my comment 5 years from know. It will be wise to do it right the first time and save money. I understand widening the bridge is very expensive.
149	Lets ensure pedestrians safety as a priority! So many on foot all year long
150	I have lived behind the lake store for over 30 years. Please take into consideration that the pedestrian traffic is just as bad as the cars. This is a family gathering , summer fun, marathon, track meet, wedding, dogwalking, daily jogging destinaion for a lot of people. Emergency rescue , fire trucks go through daily, sometimes many times a day. It needs to be wider, even if the bridge has to be replaced. There also needs to be sidewalks and crosswalks near the businesses. People run across the street to and from the store. There needs to be a pedestrian trail on the corner of 35th and Everett. Take down the two trees that are damaged and back that fence up! round it out to make a SAFE side walk that connects to the trail. People trip over those cables and walk out onto the road all the time. Some one is going to get seriously hurt. Especially if the traffic is moving faster. Thank you.
151	Avoid impact on businesses and trees
152	Use land fill in the SE corner of the lake where it looks like an ugly swamp anyway. Place the round a bout right there and keep traffic flowing during the construction
153	I have lived in the specifically for 25 years and the growth was a foregone conclusion. The fact you have waited this long to correct it is laughable. I hope all the transplants roast you every step of the way for your "improvements".
154	Slow the growth down.doesnt seem like there is much planning just doing
155	more parking near the interchange would be great
156	This needs to happen as soon as possible. Traffic isn't getting any less in the future. P
157	I think a roundabout is a great idea and with the amount of people going through that intersection, it would be nice to be proud of how it looks and of our town
158	Thanks for all of your work for the community!

159	A round about would be a congested nightmare as well as a safety hazard. Too much traffic and impatient people who don't "play well" with others. Why encourage MORE road rage? I have seen vehicles run up on the high spot at the Camas entrance, several near crashes and a boat on a trailer tip over. If a round about is your solution, I would rather the city just leave the intersection and stop lights as they are!
160	Both alternatives appear to sacrifice motorist safety to the cyclists and runners who don't pay for roads. Option 1 with dual turn lanes to get more cars through that then immediately merge together will promote aggressive driving. Option 2 of a non standard roundabout will be very confusing to occasional non daily users and watching for crossing motor traffic tends to distract from seeing pedestrians. Many drivers run without headlights in dark or bad weather and look like a gap in traffic.
161	i'd like to see an easy way to run/walk from Lacamas Lake to Round Lake - like a small pedestrian bridge over Everett
162	Factor congestion added by those parents who drive children to school rather than bus. This could add hundreds of cars that would generally not travel through at that time. What role is the school helping with awareness on their end?
163	As a former Portland resident, I appreciate the the rural setting that Camas offers. I trust that you will be good stewards to our community. Thank you, [REDACTED] <i>Name removed for privacy.</i>
164	Roundabouts not practical for all the teenage drivers going to the HS. too dangerous. Most adults don't even know how to drive through them.
165	A round about would work better as long as drivers understand how to use it. We have driven in busy cities in Europe and they work very well there.
166	This project is way overdue...more important than the other 2 roundabouts put in Camas in the last couple of years.
167	PLEASE DO NOT put a round-about at this intersection, there is way too much traffic for that to work properly!
168	Camas will screw the citizens on this too.
169	Thank you
170	Thanks for including more than just the nearby residents in this project! (PS I had to check the No Comment box in order for the survey to accept my comment!)
171	Please include traffic calming measures. Traffic usually speeds through and is dangerous to pedestrians
172	I like the roundabout design. Since developers seem to continue to add more residential homes this solution looks to accommodate growth.
173	Ensure that this does not impact kids getting to school. Have hours worked on the project take into consideration the high volume traffic times of our kids driving to/from the high school.
174	I strongly vote in favor of the roundabout option, provided any barriers are kept to a minimal height and do not obstruct vision in the intersection. It will be imperative to have maximum visibility in this area.
175	Stop letting developers add subdivisions, that would help our traffic problem. Build another high school for God's sake.
176	I do not like the roundabout idea
177	well, I did have a comment and typed it in here, but the system won't accept it. How can I give written input? [REDACTED] <i>Name removed for privacy.</i>

178	If you put in a roundabout - keeping the construction to a limited height so that folks can see what is happening on the other side of the roundabout would be a vast improvement over the roundabouts with tall constructs.
179	Roundabout is the max benefit for traffic congestion and control
180	Maybe just stop approving housing developments that continue to put strain on the road?? Common Sense solution. :)
181	Roundabouts are great. This conceptual drawing seems complicated which concerns me with all the new drivers passing through that intersection. I prefer the roundabout because intersection with light has only a limited benefit. We just need to make sure the roundabout isn't too "creative"
182	Thank you!
183	I think a roundabout is perfect in the afternoon when almost every car is turning right from Everett to lake the biggest issue is all those cars turning left from lake to Everett to the high school they could potentially block cars trying to go straight on Everett. The fork in the road before the roundabout looks like a good idea. If not a traffic signal assisted roundabout could be helpful if the signal was only in use in the morning to allow both avenues of approach a chance to get to the high school.
184	Neither of your options will reduce traffic. You have allowed the over population of a city that does not have the infrastructure to support the growing population. Roundabouts only work in less congested areas. Adding a second lane for an 1/8th of a mile and cutting into the already small round lake parking lot is a waste of money. Youve allowed this problem to happen because of greed and over development. Now you're going to have to deal with consequences.
185	I think the roundabout option is the best.
186	No round abouts please... people do not understand them and will not help this situation.
187	I hate roundabouts!
188	Yes prefer traffic lights with turn lanes
189	I am so happy this if finally being addressed! This is the most frustrating part of my commute DAILY, and I think a roundabout is genius!!
190	Replace the darn bridge & quit screwing around with it! Your plans only only continue to create a funneling effect north of the bridge wii h still slows traffic & impacts the neighborhood negatively.
191	I'd like to be able to get to work and get my kids in a timely manor
192	No more stupid roundabouts!
193	With the increase of roundabouts being used in the camas/Washougal area, I've noticed the lack of proper use by motorists...stopping instead of merging, no signal for exit, hesitant drivers interrupting the flow. With so many inexperienced/new drivers using this intersection because of its proximity to the high school, I believe average driver experience (target driver) should be given strong consideration when making a decision about improvements for this intersection.
194	It doesn't appear that option 1 will change anything...need long turn lanes for those headed south on Everett over bridge and headed east on Lake Rd to keep traffic from backing up.
195	I would prefer the option that maximizes traffic flow and saftey for pedestrians and bikes. I assume the city will make a decision based on research over the "feelings" of citizens.

196	Please consider improving the crossing for peds/bikers as that seems to be lacking in either plan
197	With the amount of people moving through there during school hours it almost should be an over pass. As of now the turn circle looked like a better option
198	Explore a pedestrian bridge over the roadway and end of lake linking Round Lake trails to Lacamas trail - connect near lodge. Would get bikes and pedestrians out of that intersection.
199	I would hope the city lets stastical evidence guide their decision rather than anecdotal opinions from citizens. Input is important but evidence should rule. Thank you.
200	Please don't put a round about there. That is really going to confuse people more.
201	I HATE the roundabout on Brady (my neighborhood) for its ridiculous small size. It's going to be a future problem. Whereas I LOVE the size and functionality of the roundabout at HWY 14 entrance! Please don't build anymore small roundabouts like Brady. Perhaps I ought to blame Vancouver City for that miserable foresight.
202	Not clear how the signalized intersection is different from current intersection. Is an extra land added?
203	I like the round-about design
204	PLEASE SAVE THE TREES AS MUCH AS POSSIBLE. Camas rips out trees at every turn. Round Lake is so sad. So much is destroyed. Please protect the natural lands for the animals, birds, trees, plants and the ecosystem.
205	The narrowness of the lake road at the Everett intersection cause a bottle neck. If 3 or 4 cars are waiting to turn left they end up blocking the people who could be making a free right turn causing major congestion and traffic that sometimes backs up all the way to Sierra
206	Adding 50% more traffic not adding lanes is not an acceptable solution.
207	Ensure city webpage is quick and easy to use. Project information needs to be immediately accessible in a user friendly way.
208	The roundabout would appear to help more with congestion but why not split the traffic going south on Everett earlier so people can turn where the road is currently on Lake. Also, a big push about how to use it!
209	Keeping traffic flowing and time to complete to s minimum is important given that it is the only convenient north/south connection and there are schools on both sides impacted.
210	We are growing so hopefully by time this is done it's not out dated with traffic. We got more then 400 + home going in camas.
211	Roundabouts are the best option!
212	An 'over the road' walking bridge from the Lacamas lake side over to Round Lake would be nice!
213	Don't put a roundabout there.
214	The round about will only work if it's big enough. The one at the freeway on 6th causes back up because it's too small so people don't feel like they have enough time to get in before a car comes. Also people don't know how to use it.
215	Should of fix the intersection prior to building city office on the lake Rd
216	Please don't ruin the trees
217	Should have made these adjustments before allowing the huge population growth and new subdivisions.

218	NO ROUNDABOUTS! Will hugely impact the amount of room required to construct, and the area has limited driving area. You add Bicycle access as well, and it will destroy the aesthetics of that area.
219	Lost cause 3 roads too many cars
220	What about the rest of Everette and city, this is the result of the unrestrained growth the city is embacked on.
221	I wasn't clear about the impacts of the project on the bridge from initial info meant...
222	A roundabout would be a nightmare. Nobody lets anybody in when its peak time
223	I feel the roundabout coming into Camas isn't big enough. I use it daily and have witnessed big trucks don't have enough room to make the curve. Same for school buses. That should be considered if the roundabout choice is made
224	Roundabouts will not work for pedestrian and bike safety
225	This should be done before any more houses are approved that would add traffic.
226	Bike Lanes and Pedestrian Traffic needs focus.
227	Don't underestimate the impact of turnoffs north and south of the intersection (e.g. Camas Produce, Round Lake parking, 38th street
228	Thank you for addressing this issue.
229	This project needs to take priority, especially since Camas City Council has approved so many building permits and developments in the past 10 years. Also, I am concerned that currently this project does not also address bridge between Lacamas & Round Lakes. This bridge and its narrowness also impacts flow of traffic.
230	Thank you for working to improve the intersection!
231	I sat at the roundabout at 6th and hwy 14 exit for over 5 min at 5:30 the other day. I'm NOT a fan of roundabouts.
232	I realize roundabouts are not a popular idea comment, but I have been impressed with the new roundabouts in Camas/Washougal because traffic flow continues.
233	I do not care for roundabouts
234	There are a lot of new drivers that drive through the intersection. I don't believe roundabouts are the best option for new drivers. They tend to be confusing to those who have been driving for years, let alone new teen drivers.
235	I rated the impact on trees have a high rating...I'm not as concerned about the number of trees as I am saving the chestnut tree. I like the roundabout option for saving the chestnut tree (assuming I'm reading the map correctly?)
236	I'm finding the biggest back up is directly associated with the school schedule.
237	I think a roundabout is the best option.
238	His should have been done 3 years ago!
239	there should be left turns lanes through there.
240	Is it possible to add a bridge for turning right from southbound Everett onto Lake that would merge further west from the intersection? This would make a less sharp turn than currently exists and may help ease congestion at the intersection as well.
241	Please don't cut down a bunch of trees and ruin the wetlands
242	Do it right, do it once. More time and cost (within reason) is well spent if it solves the problem.
243	plan for construction to be sensitive to school hours/schedule
244	With the current congestion and projected growth, neither idea seems like a long term plan. An overpass seems like the only option to keep the flow of traffic moving while keeping walkers/runners/bikers safe.

245	When construction starts, please avoid working in that area right before (7:30-9:00 a.m.) school and right after (3:00-4:00 p.m.) the congestion is already bad during those times.
246	One of the biggest problems of this intersection is the insane amount of high schoolers who drive and use their phones for talking and texting. When I am on my home from round lake on late start days for Camas High School I consistently see between 5-10 high schoolers backed up all the way to Sierra texting on their phones. Then they speed through the intersection. It is dangerous and illegal. I do not believe a roundabout will provide the level of traffic control that is required at this intersection for the bikers and other recreational users. Roundabouts do move traffic efficiently, but they create unsafe situations for those not in autos. I also believe it would negatively impact the round lake parking lot if there was a roundabout. The current light stops traffic just long enough so that you can exit the parking lot. Thank you for soliciting feedback.
247	I don't believe either of the two options will reduce the backup on lake road you must widen lake road further up than those two plans show so when the cars are backed up making a left of entering the traffic circle right hand turns don't get affected
248	I have concerns about the future traffic running through Everett due to increasing numbers of homes being built towards Fern Prairie and near CHS. Is there any consideration of somehow expanding the number of lanes to Everett? It's a bottleneck!
249	If a roundabout is selected then the City should use this as an opportunity to create a landmark for the City.
250	Looking forward to see this improvement. There also needs to be better sidewalks and ped crossing north of this intersection
251	You must widen 500 north of the proposed intersection. Widening 500 at the same time is financially responsible, efficient and proactive. This oversight would be poor planning and a gross oversight. I'm glad you are looking at an intersection improvement, but you also need to widen 500. If that does not happen, why bother with the intersection? Yes, trees, land, wetlands are important, but the city should have thought about that before allowing so many houses and development. Increase in population and housing DEMANDS infrastructure for livability for all. It's the wrong time to talk about these wetlands, property, bridges and trees. You could have predicted the need of infrastructure improvements and decided upon allowing development the development was worth more to the city than the trees where infrastructure improvements were obvious. Think of that in the future when you continue to allow development. Widen 500 as an addition to this intersection proposal. This does not go far enough for this area and without widening 500, will not allow the maximization of this new intersection-limiting its overall cost effectiveness. We want infrastructure improvements simultaneous, or prior to, to increased housing
252	The maps are a bit challenging to decipher. Glad to know there will be another informational opportunity in March, as I was unable to attend the meeting on Feb. 26th.
253	Stop studying the issue and spending ridiculous amounts of money on traffic studies...it's messed up and everyone knows it and a roundabout is the best solution. Do it now.
254	Bridge is the real bottleneck. Explore solutions to expand rather than ignoring the root cause.

255	The congestion at the intersection is caused not by the intersection itself but by the Lake Road approach to the intersection and the Everett Road south approach to the intersection. Neither appear capable of having two lanes that would allow right turns to move out of the intersection and not have to wait for the other drivers. Unless those two approaches can have double lanes, nothing that you do to the intersection will improve congestion
256	Please have construction done at NIGHT. It's not a big enough area now to have construction during any rush hour or school.
257	Thank you for surveying the residents!
258	Before building permits are approved, large construction projects should have to include footing the bill for infrastructure improvements necessary to accommodate it. And we need to limit construction - keep Camas small-town!!
259	Please do not add any more roundabouts. They are the most absurd things ever.
260	Shift proposed roundabout west and south to maintain relative alignment of Everett. Please select roundabout but shift west.
261	I would vote for the traffic light option. Especially with all the young drivers headed to the high school and the lakes. It appears less trees and wetlands would be disturbed. I feel it would be safer.
262	I think the roundabout is a great idea. Split the southbound traffic into two lanes as soon as you can beyond the bridge (or widen the bridge), one lane turning right to Lake Road and one lane into the roundabout.
263	I prefer roads to be shut down and construction done quickly. Keeping the traffic access really slows the progress.
264	Thanks for taking this on! Also, roundabouts are awesome. Don't listen to the haters.
265	The chestnut tree should be preserved. Additionally, trees should be planted to make up for trees removed to preserve the greenery in Camas.
266	Just take a small piece of the lake where the water recedes. The roundabout will create more of a congestion and cause accidents due to the amount of traffic and buses! Please do not do this!
267	I hope this extends just past the existing bridge to the area by Lakeside Chalet to create a safer space for pedestrians.
268	Don't build a roundabout! Too many people can't drive on one correctly.
269	I prefer roundabouts, they're safer and help flow.
270	Tunnel or walking path to connect the parks. Keep the water access between the 2 parks or improve it.
271	Make the back parking lot behind the store more visible and take out the parking lot in the front of round lake. It's very dangerous during the summer and use that space for widening the road. Put up no parking signs and enforce them. Have school routes for high school drivers utilizing crown road more.
272	Just my opinion, maintaining the natural setting is my priority. I would rather see nothing done and deal with traffic every day to work than see the natural parts of our city reduced or harmed. Thank you
273	I would like a solution that would provide separation of pedestrian traffic from car traffic to Lacamas Lake and Round Lake. Pedestrian tunnels or bridges would be great.
274	No roundabout please!

275	I hope that Everett will also get sidewalks. It is so unsafe to walk and I see so many students walking to school. We have more traffic than ever now and it's time to put in sidewalks.
276	I Prefer the roundabout makes more sense
277	I have heard rumors about other projects (widening 500/Everett, changes to the bridge by Round Lake, etc. Please be sure to consider all impacts of these projects together in this project. We sometimes seem to be short sighted with our projects and have major impacts just a couple years after completion.
278	that bridge north of the intersection needs to be widened. I can't really understand the push to preserve it.
279	Crown road and the road by the new high school needs side walks. We are endangering our children by not having any!
280	The intersection is in a very important nature area in town. Please be thoughtful about the trees, wildlife, wetlands, and lakes when considering the options for construction.
281	Please protect as many trees as possible!
282	I see the movement of pedestrians and cyclists to be very important.
283	Nice the round about to the produce store locatio. Make it large enough to merge gracefully. If you feel you have to make a round about you should also feel obligated to create a commercial to air on tv so that users know how to use a round about!
284	No roundabout. I have to drive through the roundabout @ 6th and sr 14 daily, and I dread having to go through there. Its awful.
285	For starters, I cannot tell what the picture in "Option 1" is trying to portray. It is not as clear as the second one, which is why I chose the second one. I'm not sure why there just can't be a right-turn lane placed on SB Everett to facilitate traffic flow onto WB Lake Rd. I'm not a fan of the roundabout that the city placed on the west end of town by Hwy 14 / Chevron Station. A more successful roundabout design can be seen in Ridgefield, where it accommodates more than one lane of traffic (one for turns, one for through-traffic). The one on the west end might work for that particular intersection on Lake Rd., but seems ill-suited for where it was placed in West Camas. Please be more thoughtful about how they're designed for the future. Additionally, I'm unsure as to how a Roundabout is going to ensure the safety of pedestrians, joggers and cyclists as they attempt to cross from Round Lake to access the Heritage Trail?
286	I like the round about
287	NO ROUNDABOUTS!!!
288	Increase the bridge lanes
289	Thank you for addressing this issue.
290	I usually like roundabouts - they're good for traffic flow. But this intersection will be a crucial area in what should be a very pedestrian and bike-friendly node in Camas' overall plan. Roundabouts are not great for bikes and horrible for pedestrians. This area should be full of people walking, jogging, carrying kayaks, etc. - this recreational activity is what can really set Camas apart, and we need to encourage it. Thanks for all your good work!
291	How are you going to accommodate walkers and bikers if you do a round-a-bout? The whole purpose of a round-a-bout is for traffic to keep moving. If you have the walkers and bikers cross the round-a-bout, I foresee big safety issues.
292	The intersection is already signalized so the only viable flow and queuing improvement is a round about.

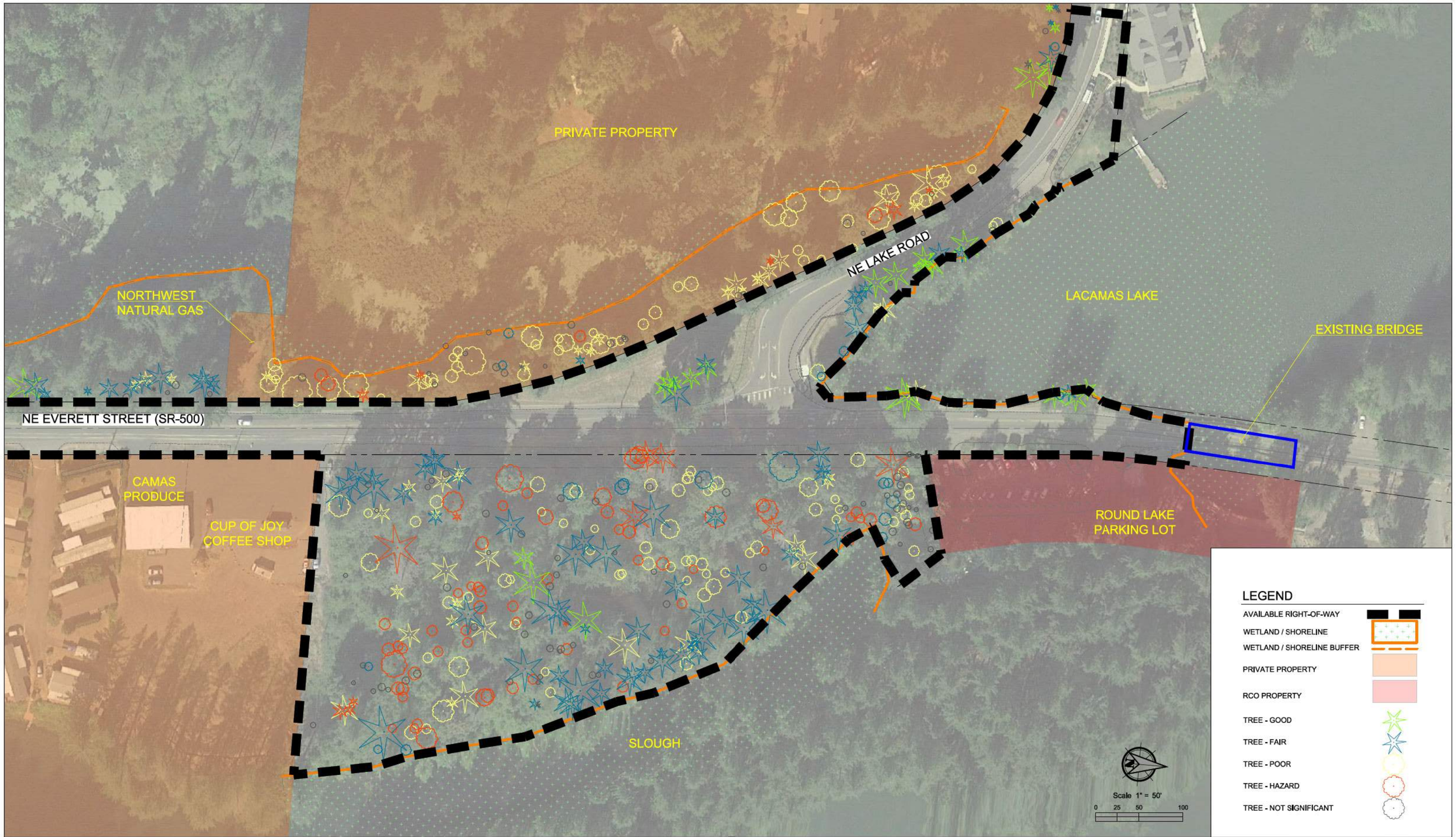
293	Best of luck. I don't see an easy fix and with more drivers coming this will be hard to fix quickly
294	I wish those running last night's meeting had allowed for a time of question and answer as a group after the presentation.
295	Round about is my preference. They are most efficient and safe. They are used in other communities with long term positive effects.
296	We've removed enough trees! I don't mind waiting a light or two to get through the intersection. Increased traffic is something the city should consider PRIOR to blindly approve building projects.
297	Transparency about how City will use a Bidding Process and how it will decide which company to give the business to.
298	Thank you!
299	Several years ago I sent a leaf sample from one of the large chestnut trees near here to the American Chestnut Foundation for identification to see if it was an American chestnut. They said it was in fact a European chestnut. I am pretty sure that the largest chestnut trees in this area were planted by the Pittock family circa 1890, and the smaller chestnuts are seedlings from the originals. It is neat to have a few living remnants of the Pittock family's time spent in this area.
300	Sad not to see the information that was presented at the open house. I would like to know more about impact on private property, lake and trees if they are affected by this project. Would like to see also other people's questions and concerns and be able to anonymously add to them if I have any.
301	I thing the roundabout would be the very best solution!
302	Roundabout. Just do it. Ignore the haters. They have proven effective and the local citizens are getting accustomed to using them.
303	I would like to understand the potential savings if the road isn't kept open during construction; how would pedestrian traffic be safely managed with a roundabout?; Prefer function over aesthetic unless it grows significantly as shown in the roundabout sketch.;
304	If a round about is put in then it needs monitoring by police so that people who do not use the yield signs are ticketed with a high fine of 200+ dollars so that they are utilized correctly.
305	Biggest worry is the traffic issues DURING construction as I drive through the intersection at least 2 times a day to get to/from work to home. We already dealt with extensive traffic delays during sewer and re paving work. Not looking for more!
306	need to add a sidewalk on the south side
307	NO ROUNDABOUT. PEOPLE DO NOT KNOW HOW TO USE THEM AND THEY HAVE RUINED GETTING ON AND OFF OF SW 6TH..
308	Reduce congestion. The lines are awful during school times.
309	Would like roundabout circle to be a little bit larger with single feed on the circle, and not double feed going to and from Lake Road.
310	Would love to see some real thought put into the aesthetics of this - keep as many trees up as possible and make this a beautiful entrance to the historic side of Camas!
311	I wonder what the foot traffic plan would be with a roundabout. Summer foot traffic is very heavy on hot weekends.
312	Don't cut down any more trees. I moved my family to Camas for the beauty and greenery. Stop cutting down trees.

313	A roundabout is a terrible idea. These are high schoolers. The majority of people don't do roundabouts correctly
314	If it's a roundabout I would like the safety of the pedestrians & CHS runners to be strongly taken into consideration during the design phase & the public to be CLEARLY shown how to maneuver correctly
315	Thanks for listening
316	I'm not convinced that either project will reduce traffic congestion. There are so many new housing developments being built that the number of cars using that intersection has tripled. Camas needs to stop growing unless the roads can handle all the new growth.
317	I prefer alternative 2 with Roundabout - blue line configuration with minimal impact top Round Lake parking. Impact to private property on lake. Minimal impact to Lake
318	Please provide a venue that is large enough to accommodate the public. I went to the first meeting and had to leave. There was not enough seats and I could not get into the room to see the presentation. The person speaking was also way too soft spoken so I could not hear what was being said. There were displays at the back of the room which I could not view since it was SRO and access was completely blocked. Overall, a highly disappointing experience.
319	I am very concerned about the difficulty for motorists entering Everett from 35th Ave. During busy times, we must rely on the short gaps in northbound traffic caused by the traffic light switching. While I think a roundabout will improve traffic flow, it will cause more issues (and accidents) at 35th Ave.
320	My concern is for the trees and surrounding environment. The choice should protect these things as much as possible.
321	Im not sure I see how the signal option,#1, will improve flow. Bottle neck at the bridge. I really like the roundabout version as it will improve traffic flow but don't see how either plan will improve safety for pedestrian movement from the two paths around the lakes. Is a pedestrian bridge at all in the concepts?
322	No traffic circles!
323	Please no roundabout. Traffic is too congested and dense in small time frames for this to work. It would be a nightmare during the school year. These only work if traffic is spaced out a bit.
324	Rectrict trucks and things should greatly improve.
325	I live right there and use that intersection several times a day. I don't think it's awful. Yes, traffic gets congested at times, but overall it's not a horrible interesection. I would like to see park and other natural property preserved. Should a roundabout be chosen, I would like to see ahead of time how pedestrian safety will be addressed.
326	Roundabout seems like the most efficient proposal. Not sure from the traffic what the bold orange line is, but assume the thinner orange line is pedestrian crossing. I like that it is moved away from the circle so traffic can continue during the limited times pedestrian traffic is present.
327	No roundabout. No widening of Everett south of Lake Rd. Use signals during peak hours uphill of Lacamas Lake Park & south of 21st Ave
328	I abhor roundabouts, especially in this area as roundabouts are difficult for pedestrians to cross. A flyover walkway from the round table parking lot would work. As far as communication, I don't use my cell phone for anything but texts and phone calls. So, I think in the mail notices and email notices are very helpful.

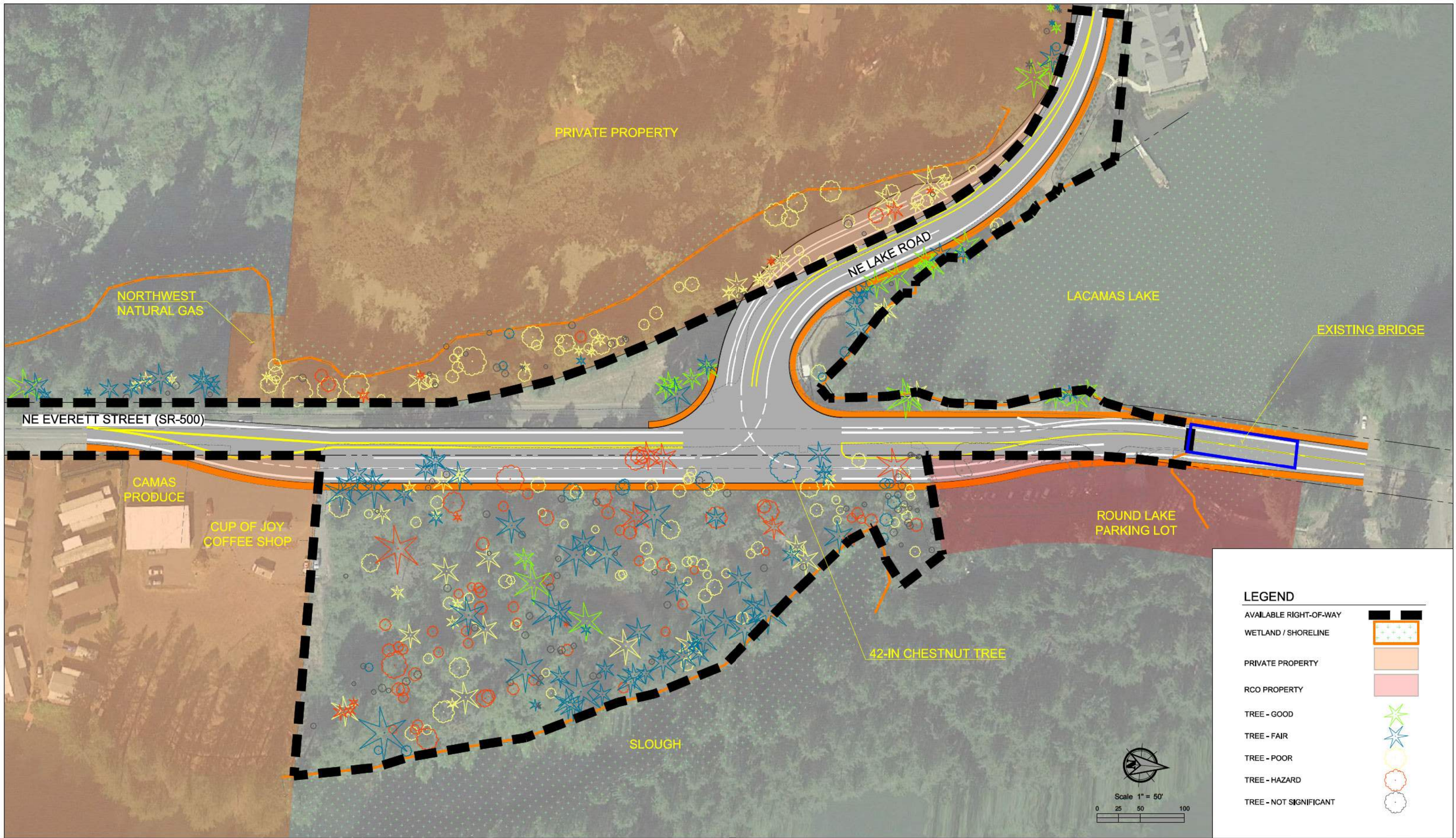
329	<i>[This comment was moved from the responses to Question 5]</i> #8 Isn't letting me write a comment and is only accepting "no Comment" box check. My comment for #8 is that I like the roundabout solution as it will accommodate the growth that is already in action in our town and the traffic is only going to increase
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Appendix A

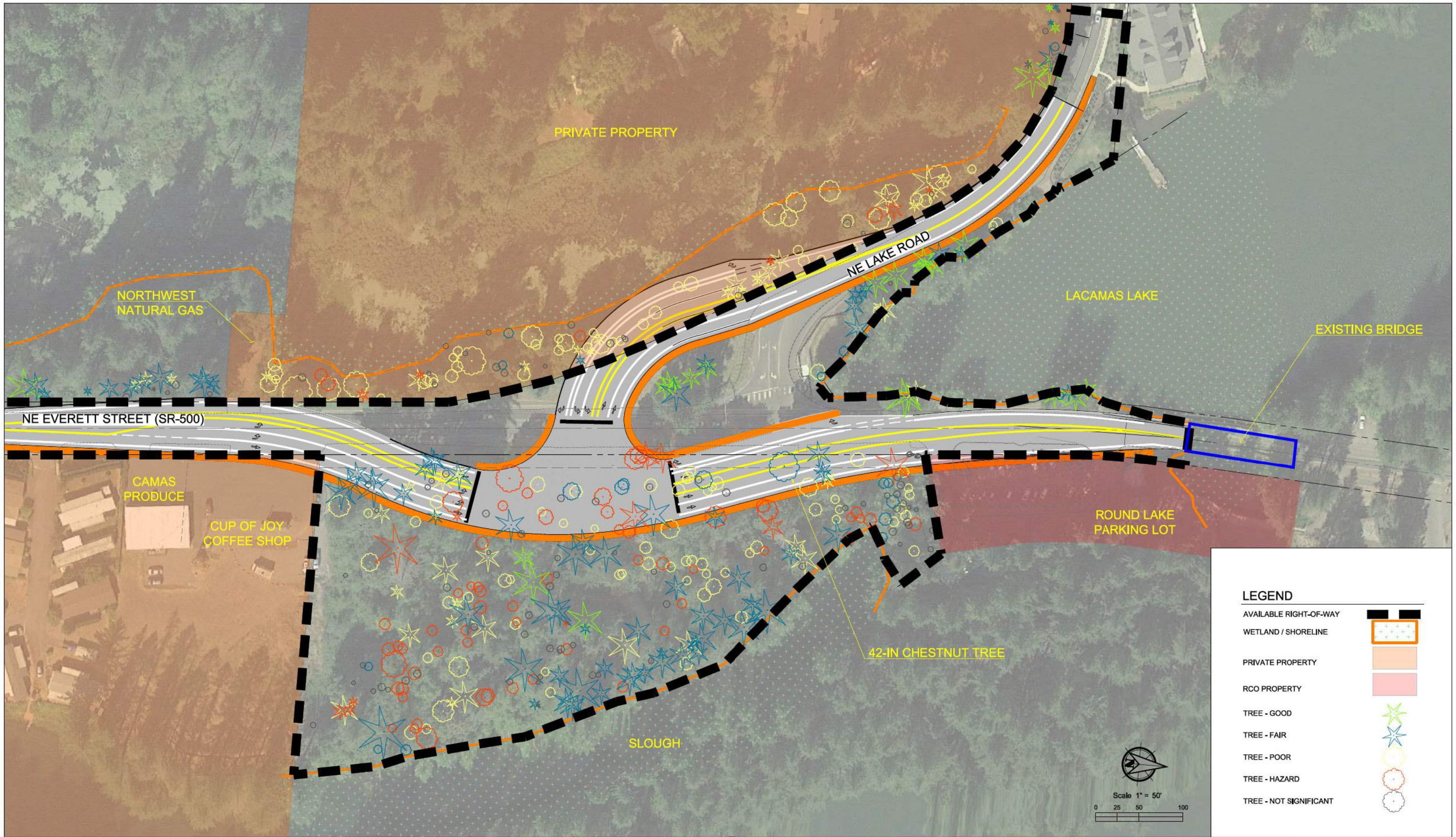
Alternative Layouts

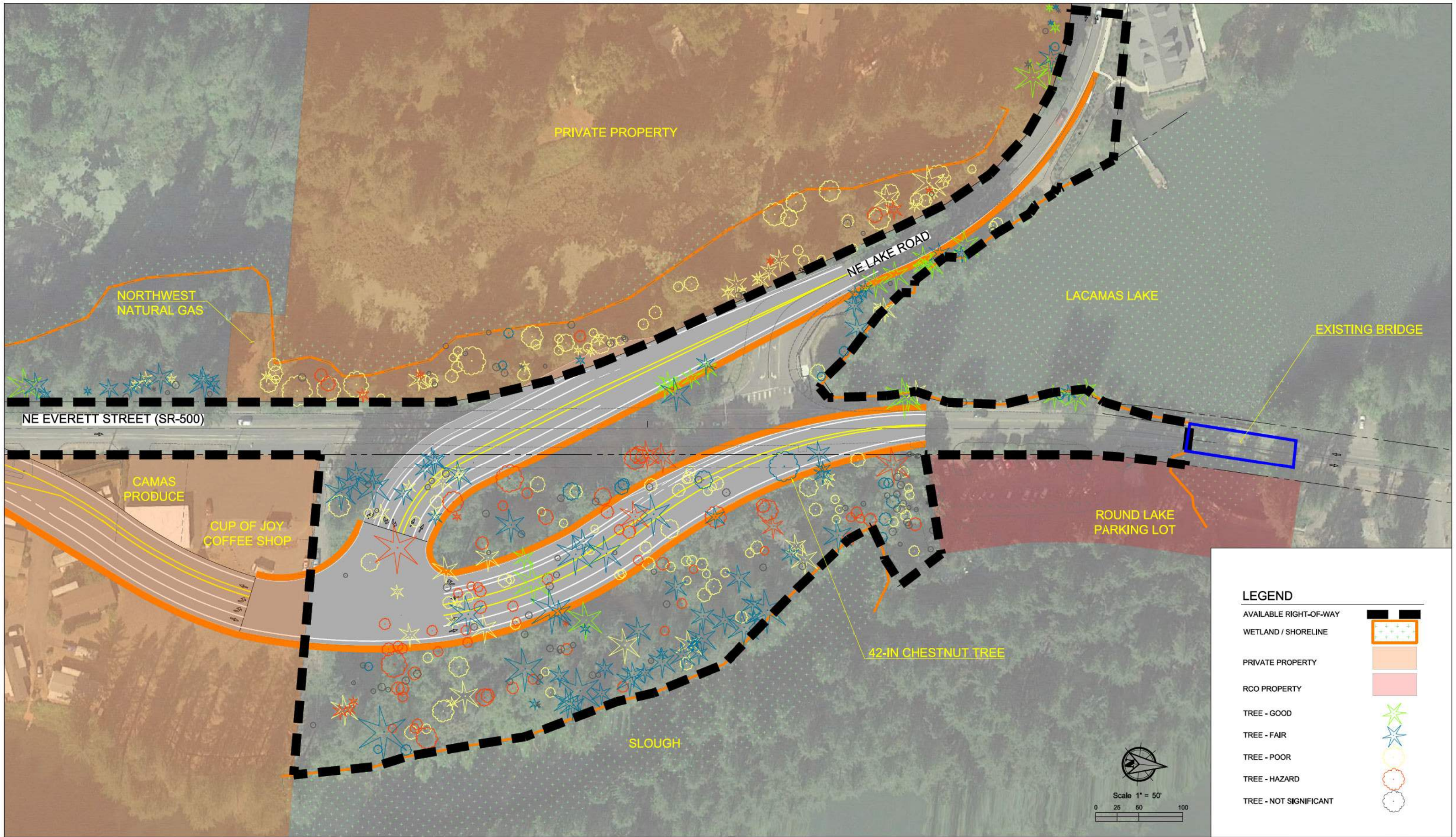


LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS SITE CONSTRAINTS

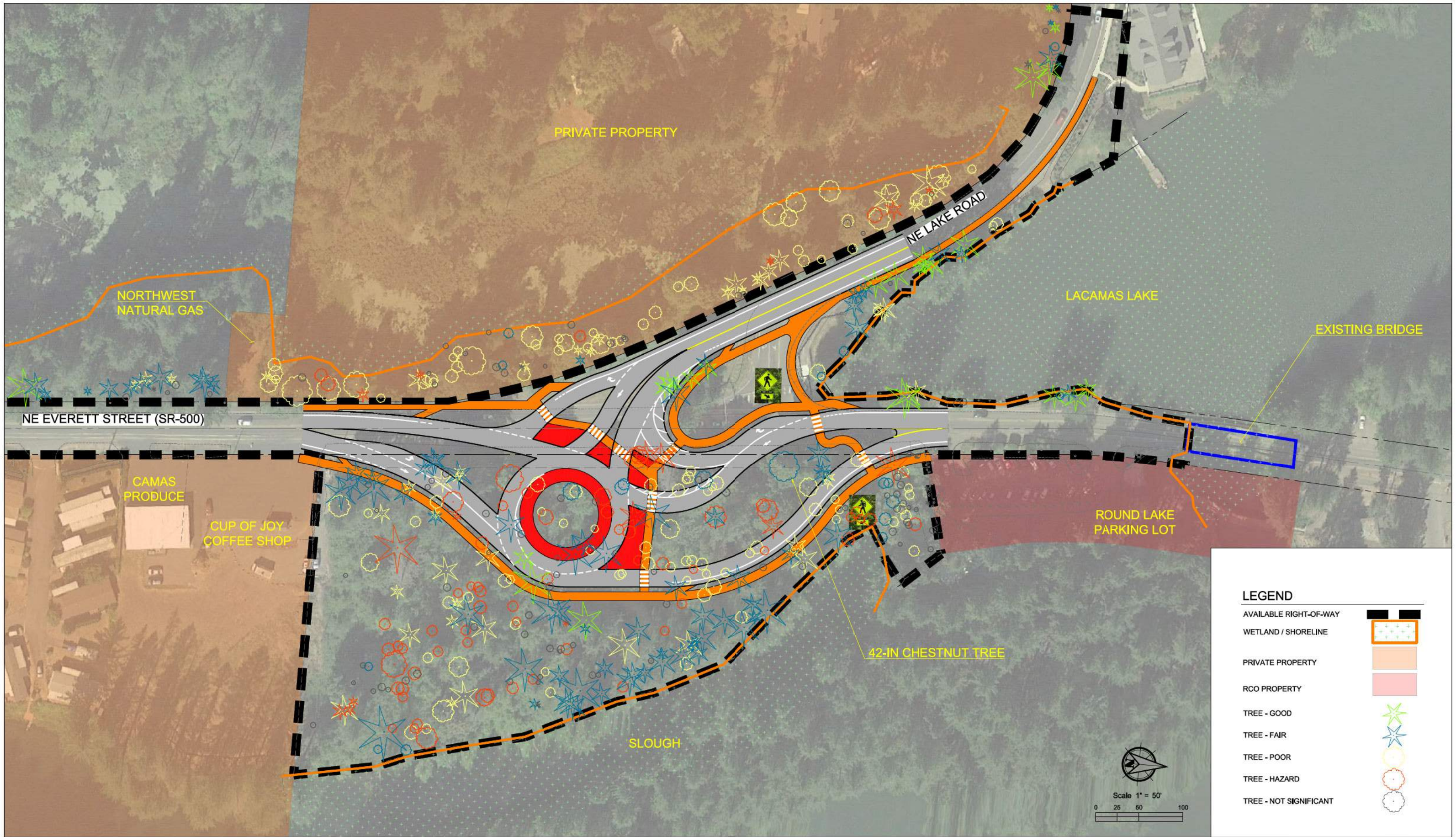


LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS SIGNALIZED INTERSECTION - ALTERNATIVE 1

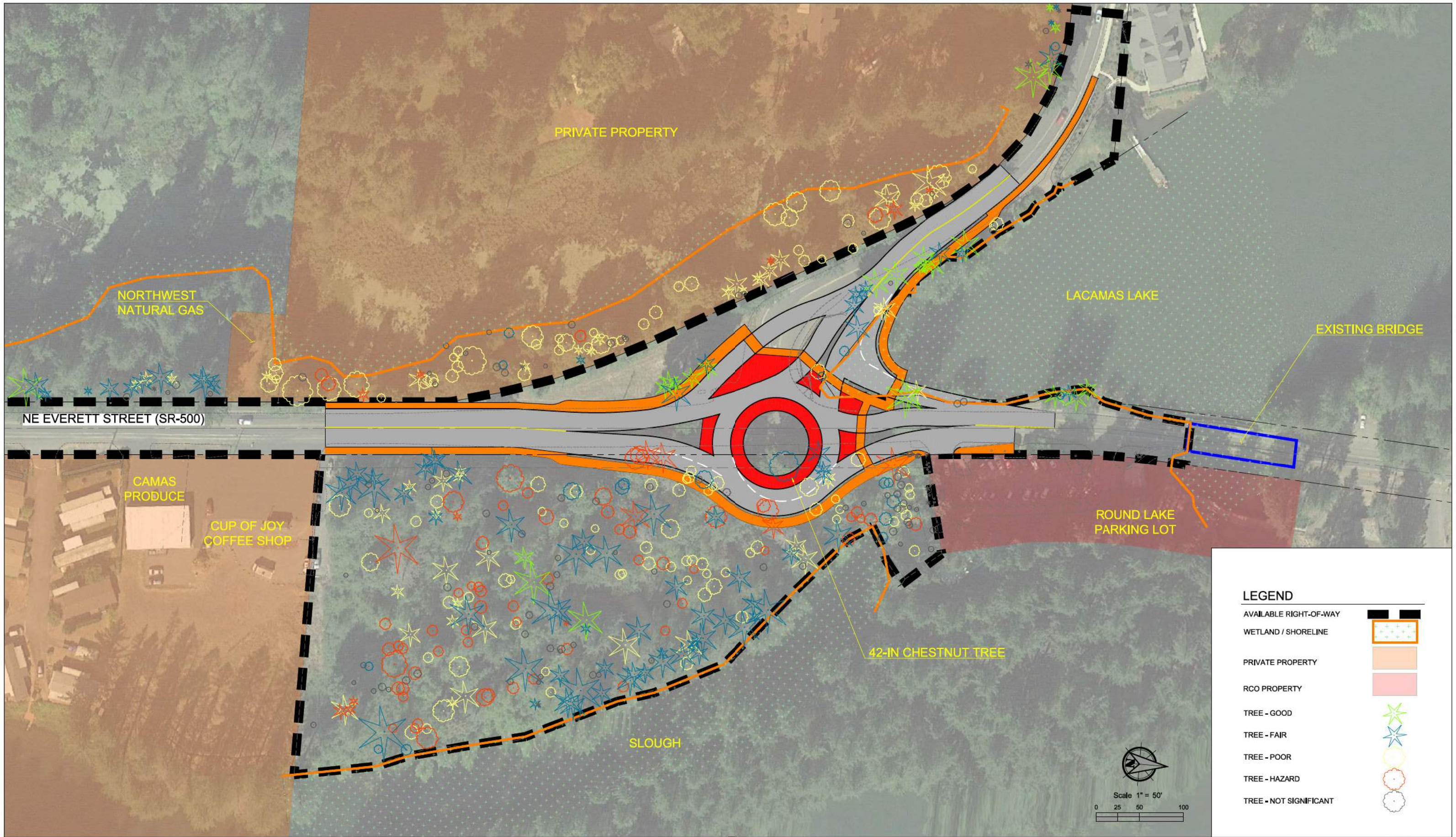




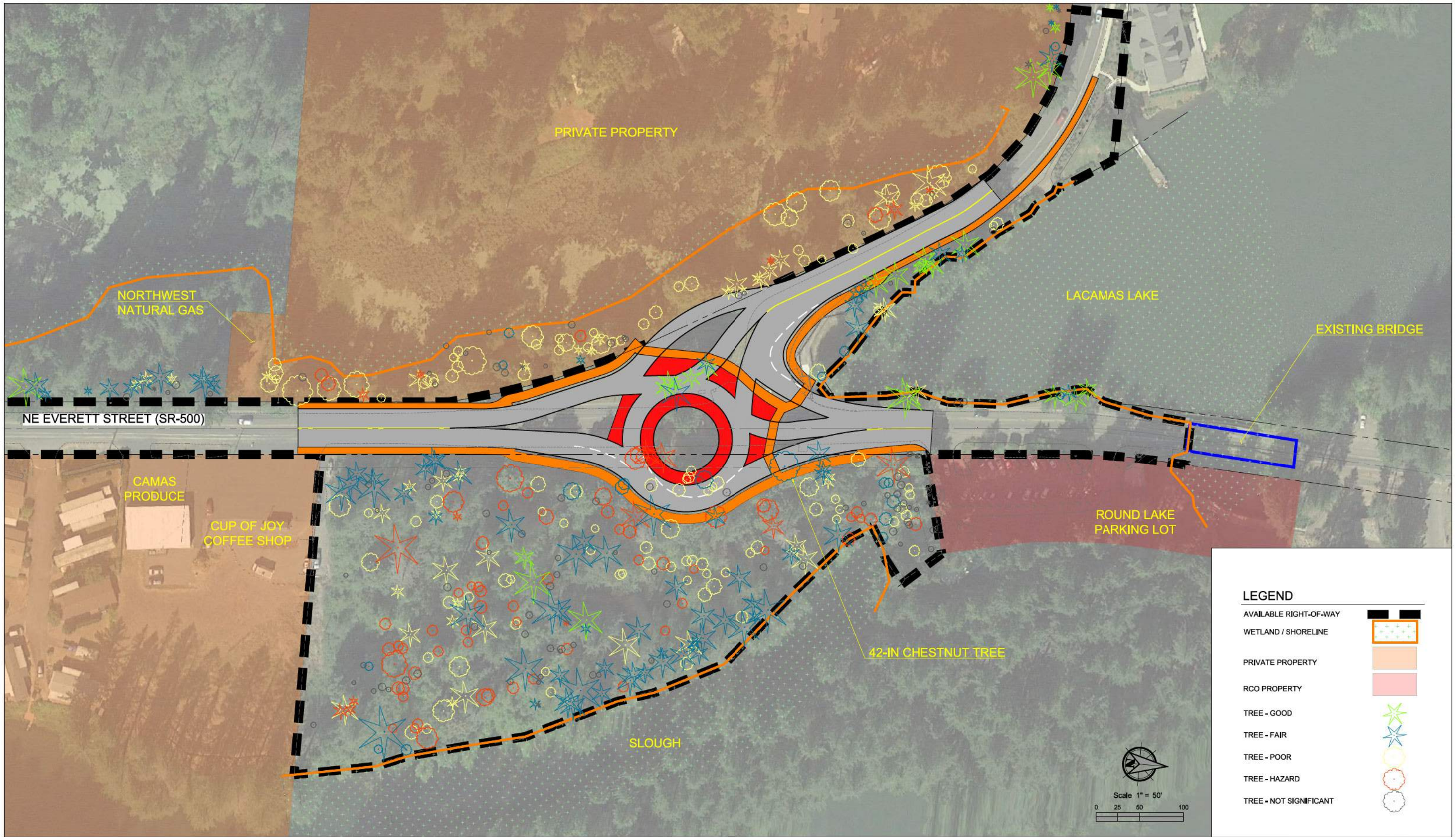
LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS SIGNALIZED INTERSECTION - ALTERNATIVE 3



LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS ROUNDBOUT ALTERNATIVE 1



LAKE RD & EVERETT ST INTERSECTION IMPROVEMENTS ROUNDBOUT ALTERNATIVE 2



Appendix B

Cost Estimates

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Cost Summary by Alternative
March 12, 2019

	Signal			Roundabout		
Item	Alt 1	Alt 2	Alt 3	Alt 1	Alt 2	Alt 3
Roadway Improvements*	\$6,430,000	\$6,430,000	\$6,430,000	\$5,850,000	\$5,850,000	\$5,850,000
Bridge Replacement*	\$9,470,000	\$0	\$0	\$0	\$0	\$0
Round Lake Parking Impacts*	\$660,000	\$0	\$0	\$0	\$0	\$0
Private Property Impact	\$330,000	\$680,000	\$3,240,000	\$25,000	\$35,000	\$105,000
City Property Impact	\$225,000	\$475,000	\$625,000	\$505,000	\$150,000	\$140,000
Utility Adjustment & Relocation*	\$1,170,000	\$1,220,000	\$270,000	\$270,000	\$1,090,000	\$1,120,000
Construction Staging/Traffic Control	\$1,330,000	\$900,000	\$900,000	\$180,000	\$1,160,000	\$1,160,000
Walls	\$0	\$0	\$0	\$0	\$1,630,000	\$390,000
Wetland Impacts (Direct)	\$0	\$45,000	\$0	\$0	\$110,000	\$0
Total Cost	\$19,620,000	\$9,750,000	\$11,470,000	\$6,830,000	\$10,030,000	\$8,770,000
Cost Add Alternatives			Additive Costs			
Project Aesthetics	\$500,000 - \$1,000,000					
Pedestrian Overpass	\$2,750,000					
Additional Parking	\$660,000					

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Baseline Signalized Alternative Roadway Improvement Cost
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 330,000.00	\$ 330,000
2	1	LS	Construction Surveying (1.5%)	\$ 50,000.00	\$ 50,000
Preparation					
3	1	LS	Clearing and Grubbing	\$ 20,000.00	\$ 20,000
4	1	LS	Removal of Structures and Obstructions	\$ 122,000.00	\$ 122,000
Grading					
5	14,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 350,000
6	14,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 280,000
Surfacing					
7	9,400	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 357,200
8	4,800	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 576,000
Storm Sewer					
9	2,150	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 172,000
10	22	EA	Catch Basin	\$ 2,000.00	\$ 44,000
11	13	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 45,500
12	1	LS	Water Quality	\$ 100,000.00	\$ 100,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 20,000.00	\$ 20,000
Roadside Restoration					
14	21,500	SF	Basic Landscaping	\$ 8.00	\$ 172,000
Other Items					
15	4,100	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 143,500
16	2,200	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 198,000
17	6	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 21,000
18	11	EA	Field Adjustment for Utility Crossings	\$ 5,000.00	\$ 55,000
19	17	EA	Existing Utility Structure Adjustment	\$ 2,500.00	\$ 42,500
20	1	LS	Illumination System	\$ 190,000.00	\$ 190,000
21	1	LS	Signal	\$ 350,000.00	\$ 350,000
21	1	LS	Permanent Signing	\$ 25,000.00	\$ 25,000
22	1	LS	Permanent Striping	\$ 20,000.00	\$ 20,000
23	2,150	LF	Joint Utility Trench	\$ 10.00	\$ 21,500
24	1	LS	RRFB	\$ 100,000.00	\$ 100,000
Total					\$ 3,805,000
Contingency (30%)					\$ 1,141,000
Construction Total					\$ 4,946,000
Engineering PS+E (15%)					\$ 742,000
Construction Management (15%)					\$ 742,000
Total					\$ 6,430,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Baseline Roundabout Alternative Roadway Improvement Cost
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 300,000.00	\$ 300,000
2	1	LS	Construction Surveying (1.5%)	\$ 45,000.00	\$ 45,000
Preparation					
3	1	LS	Clearing and Grubbing	\$ 20,000.00	\$ 20,000
4	1	LS	Removal of Structures and Obstructions	\$ 130,000.00	\$ 130,000
Grading					
5	10,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 250,000
6	10,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 200,000
Surfacing					
7	4,100	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 156,000
8	1,900	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 228,000
Storm Sewer					
9	1,500	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 120,000
10	15	EA	Catch Basin	\$ 2,000.00	\$ 30,000
11	10	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 35,000
12	1	LS	Water Quality	\$ 100,000.00	\$ 100,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 20,000.00	\$ 20,000
Roadside Restoration					
14	54,000	SF	Basic Landscaping	\$ 8.00	\$ 432,000
Other Items					
15	4,700	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 164,500
16	850	LF	Cement Conc. Roundabout Curb	\$ 50.00	\$ 42,500
17	750	CY	Cement Conc. Pavement	\$ 800.00	\$ 600,000
18	2,100	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 189,000
19	3	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 10,500
20	7	EA	Field Adjustment for Utility Crossings	\$ 5,000.00	\$ 35,000
21	9	EA	Existing Utility Structure Adjustment	\$ 2,500.00	\$ 22,500
22	1	LS	Illumination System	\$ 170,000.00	\$ 170,000
23	1	LS	Permanent Signing	\$ 25,000.00	\$ 25,000
24	1	LS	Permanent Striping	\$ 20,000.00	\$ 20,000
25	1,500	LF	Joint Utility Trench	\$ 10.00	\$ 15,000
26	1	LS	RRFB	\$ 100,000.00	\$ 100,000
Total					\$ 3,460,000
Contingency (30%)					\$ 1,040,000
Construction Total					\$ 4,500,000
Engineering PS+E (15%)					\$ 675,000
Construction Management (15%)					\$ 675,000
Total					\$ 5,850,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS

Round Lake Parking Lot Impact Cost

March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 34,000.00	\$ 34,000
2	1	LS	Construction Surveying (1.5%)	\$ 5,100.00	\$ 5,100
Traffic Control					
3	1	LS	Project Temporary Traffic Control (15%)	\$ 51,000.00	\$ 51,000
Preparation					
4	1	LS	Clearing and Grubbing	\$ 5,000.00	\$ 5,000
5	1	LS	Removal of Structures and Obstructions	\$ 15,000.00	\$ 15,000
Grading					
6	1,000	CY	Earthwork	\$ 25.00	\$ 25,000
Surfacing					
7	610	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 23,180
8	510	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 61,200
Storm Sewer					
9	300	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 24,000
10	4	EA	Catch Basin	\$ 2,000.00	\$ 8,000
11	3	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 10,500
12	1	LS	Water Quality	\$ 27,000.00	\$ 27,000
Erosion Control and Water Pollution Control					
13	1	LS	Erosion Control and Water Pollution Control	\$ 10,000.00	\$ 10,000
Other Items					
14	600	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 21,000
15	120	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 10,800
16	2	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 7,000
Total					\$ 338,000
Contingency (30%)					\$ 102,000
Construction Total					\$ 440,000
	15,000	SF	Property Acquisition	\$ 5.00	\$ 75,000
	1	EA	Property Acquisition Process	\$ 15,000.00	\$ 15,000
Engineering PS+E (15%)					\$ 65,000
Construction Management (15%)					\$ 65,000
Total					\$ 660,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS

Everett Street Bridge Replacement Cost

March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
1	1	LS	Mobilization (10%)	\$ 560,000.00	\$ 560,000
2	1	LS	Construction Surveying (1.5%)	\$ 90,000.00	\$ 90,000
Traffic Control					
3	1	LS	Project Temporary Traffic Control (20%)	\$ 1,120,000.00	\$ 1,120,000
Preparation					
4	1	LS	Clearing and Grubbing	\$ 10,000.00	\$ 10,000
5	1	LS	Removal of Structures and Obstructions	\$ 5,000.00	\$ 5,000
Grading					
6	2,000	CY	Roadway Excavation Incl. Haul	\$ 25.00	\$ 50,000
7	6,000	CY	Gravel Borrow Incl. Haul	\$ 20.00	\$ 120,000
Surfacing					
8	1,650	TON	Crushed Surfacing Base Course	\$ 38.00	\$ 62,700
9	790	TON	HMA CL 1/2" PG 70-22	\$ 120.00	\$ 94,800
Storm Sewer					
10	450	LF	Schedule A Storm Sewer Pipe	\$ 80.00	\$ 36,000
11	5	EA	Catch Basin	\$ 2,000.00	\$ 10,000
12	4	EA	Manhole 48 In. Diam	\$ 3,500.00	\$ 14,000
13	1	LS	Water Quality	\$ 32,000.00	\$ 32,000
Erosion Control and Water Pollution Control					
14	1	LS	Erosion Control and Water Pollution Control	\$ 50,000.00	\$ 50,000
Other Items					
15	1	LS	Temporary Bridge	\$ 2,420,000.00	\$ 2,420,000
16	1	LS	Retaining Walls	\$ 800,000.00	\$ 800,000
17	900	LF	Cement Conc. Traffic Curb	\$ 35.00	\$ 31,500
18	700	SY	Cement Conc. Sidewalk	\$ 90.00	\$ 63,000
19	4	EA	Cement Conc. Curb Ramp	\$ 3,500.00	\$ 14,000
Total					\$ 5,590,000
Contingency (30%)					\$ 1,680,000
Construction Total					\$ 7,270,000
Engineering PS+E (15%)					\$ 1,100,000
Construction Management (15%)					\$ 1,100,000
Total					\$ 9,470,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 660,000.00	\$ 660,000
Traffic Control/Staging Subtotal					\$ 1,020,000
Contingency (30%)					\$ 310,000
Traffic Control/Staging Total					\$ 1,330,000
Private Property Impact Costs					
9	19,000	SF	Property Acquisition	\$ 10.00	\$ 190,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 250,000
Contingency (30%)					\$ 80,000
Private Property Impact Total					\$ 330,000
City Property Impact (Legacy Lands)					
13	32,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 160,000
City Property Subtotal					\$ 160,000
Contingency (30%)					\$ 50,000
1	EA		Property Acquisition Processing	\$ 15,000	\$ 15,000
City Property Total					\$ 225,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	13	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 130,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 630,000
Contingency (30%)					\$ 190,000
Construction Total					\$ 820,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 120,000
Construction Management (15%)					\$ 120,000
Utility Impact Total					\$ 1,170,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	0.02	Acre	Wetland Impact	\$ 300,000.00	\$ 5,000
2	1	LS	Wetland Impact Permitting	\$ 30,000.00	\$ 30,000
Wetland Impact Subtotal					\$ 35,000
Contingency (30%)					\$ 10,000
Wetland Impact Total					\$ 45,000
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 330,000.00	\$ 330,000
Traffic Control/Staging Subtotal					\$ 690,000
Contingency (30%)					\$ 210,000
Traffic Control/Staging Total					\$ 900,000
Private Property Impact Costs					
9	21,400	SF	Property Acquisition	\$ 10.00	\$ 214,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	1	EA	Relocation (Residential)	\$ 250,000.00	\$ 250,000
Private Property Impact Subtotal					\$ 524,000
Contingency (30%)					\$ 156,000
Private Property Impact Total					\$ 680,000
City Property Impact (Legacy Lands)					
13	70,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 350,000
City Property Subtotal					\$ 350,000
Contingency (30%)					\$ 110,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 475,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	15	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 150,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 650,000
Contingency (30%)					\$ 200,000
Construction Total					\$ 850,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 130,000
Construction Management (15%)					\$ 130,000
Utility Impact Total					\$ 1,220,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	2,100	LF	Barrier	\$ 40.00	\$ 84,000
5	16	Week	Flagging	\$ 4,800.00	\$ 76,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 330,000.00	\$ 330,000
Traffic Control/Staging Subtotal					\$ 690,000
Contingency (30%)					\$ 210,000
Traffic Control/Staging Total					\$ 900,000
Private Property Impact Costs					
9	68,200	SF	Property Acquisition	\$ 10.00	\$ 682,000
10	4	EA	Property Acquisition Processing	\$ 15,000.00	\$ 60,000
11	1	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ 1,000,000
12	3	EA	Relocation (Residential)	\$ 250,000.00	\$ 750,000
Private Property Impact Subtotal					\$ 2,492,000
Contingency (30%)					\$ 748,000
Private Property Impact Total					\$ 3,240,000
City Property Impact (Legacy Lands)					
13	94,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 470,000
City Property Subtotal					\$ 470,000
Contingency (30%)					\$ 140,000
	1	EA	Property Acquisition Processing	\$ 15,000	\$ 15,000
City Property Total					\$ 625,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Signal Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	-	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ -
Utility Impact Subtotal					\$ 90,000
Contingency (30%)					\$ 30,000
Construction Total					\$ 120,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 20,000
Construction Management (15%)					\$ 20,000
Utility Impact Total					\$ 270,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	-	SF	Retaining Walls	\$ 65.00	\$ -
Retaining Wall Subtotal					\$ -
Contingency (30%)					\$ -
Construction Total					\$ -
Engineering PS+E (15%)					\$ -
Construction Management (15%)					\$ -
Retaining Wall Total					\$ -
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	-	EA	Temp Signal	\$ 150,000.00	\$ -
8	-	LS	Staging	\$ 300,000.00	\$ -
Traffic Control/Staging Subtotal					\$ 139,000
Contingency (30%)					\$ 41,000
Traffic Control/Staging Total					\$ 180,000
Private Property Impact Costs					
9	500	SF	Property Acquisition	\$ 10.00	\$ 5,000
10	1	EA	Property Acquisition Processing	\$ 15,000.00	\$ 15,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 20,000
Contingency (30%)					\$ 5,000
Private Property Impact Total					\$ 25,000
City Property Impact (Legacy Lands)					
13	75,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 380,000
City Property Subtotal					\$ 380,000
Contingency (30%)					\$ 110,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 505,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 1)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	-	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ -
Utility Impact Subtotal					\$ 90,000
Contingency (30%)					\$ 30,000
Construction Total					\$ 120,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 20,000
Construction Management (15%)					\$ 20,000
Utility Impact Total					\$ 270,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	0.18	Acre	Wetland Impact	\$ 300,000.00	\$ 55,000
2	1	LS	Wetland Impact Permitting	\$ 30,000.00	\$ 30,000
Wetland Impact Subtotal					\$ 85,000
Contingency (30%)					\$ 25,000
Wetland Impact Total					\$ 110,000
Retaining Walls					
3	1	LS	Lake Retaining Wall	\$ 960,000.00	\$ 960,000
Retaining Wall Subtotal					\$ 960,000
Contingency (30%)					\$ 290,000
Construction Total					\$ 1,250,000
Engineering PS+E (15%)					\$ 190,000
Construction Management (15%)					\$ 190,000
Retaining Wall Total					\$ 1,630,000
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 600,000.00	\$ 600,000
Traffic Control/Staging Subtotal					\$ 890,000
Contingency (30%)					\$ 270,000
Traffic Control/Staging Total					\$ 1,160,000
Private Property Impact Costs					
9	1,200	SF	Property Acquisition	\$ 10.00	\$ 12,000
10	1	EA	Property Acquisition Processing	\$ 15,000.00	\$ 15,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 27,000
Contingency (30%)					\$ 8,000
Private Property Impact Total					\$ 35,000
City Property Impact (Legacy Lands)					
13	21,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 105,000
City Property Subtotal					\$ 105,000
Contingency (30%)					\$ 30,000
1	EA		Property Acquisition Processing		\$ 15,000
City Property Total					\$ 150,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 2)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	8	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 80,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 580,000
Contingency (30%)					\$ 180,000
Construction Total					\$ 760,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 110,000
Construction Management (15%)					\$ 110,000
Utility Impact Total					\$ 1,090,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
OTHER COSTS FOR SIGNAL ALTERNATIVE 1					
Wetland Impacts					
1	-	Acre	Wetland Impact	\$ 300,000.00	\$ -
2	-	LS	Wetland Impact Permitting	\$ 30,000.00	\$ -
Wetland Impact Subtotal					\$ -
Contingency (30%)					\$ -
Wetland Impact Total					\$ -
Retaining Walls					
3	3,500	SF	Lake Retaining Wall	\$ 65.00	\$ 228,000
Retaining Wall Subtotal					\$ 228,000
Contingency (30%)					\$ 70,000
Construction Total					\$ 298,000
Engineering PS+E (15%)					\$ 46,000
Construction Management (15%)					\$ 46,000
Retaining Wall Total					\$ 390,000
Traffic Control/Staging					
4	775	LF	Barrier	\$ 40.00	\$ 31,000
5	12	Week	Flagging	\$ 4,800.00	\$ 58,000
6	1	LS	Misc Traffic Control	\$ 50,000.00	\$ 50,000
7	1	EA	Temp Signal	\$ 150,000.00	\$ 150,000
8	1	LS	Staging	\$ 600,000.00	\$ 600,000
Traffic Control/Staging Subtotal					\$ 890,000
Contingency (30%)					\$ 270,000
Traffic Control/Staging Total					\$ 1,160,000
Private Property Impact Costs					
9	5,000	SF	Property Acquisition	\$ 10.00	\$ 50,000
10	2	EA	Property Acquisition Processing	\$ 15,000.00	\$ 30,000
11	-	EA	Relocation (Commercial)	\$ 1,000,000.00	\$ -
12	-	EA	Relocation (Residential)	\$ 250,000.00	\$ -
Private Property Impact Subtotal					\$ 80,000
Contingency (30%)					\$ 25,000
Private Property Impact Total					\$ 105,000
City Property Impact (Legacy Lands)					
13	19,000	SF	Legacy Lands Acquisition	\$ 5.00	\$ 95,000
City Property Subtotal					\$ 95,000
Contingency (30%)					\$ 30,000
1	EA		Property Acquisition Processing	\$ 15,000	\$ 15,000
City Property Total					\$ 140,000

NE Everett Street and NW Lake Road Roundabout

City of Camas

Concept Engineer's Estimate Prepared by PBS
Alternative-Dependent Cost Summary (Roundabout Alternative 3)
March 12, 2019

Item No.	Quantity	Unit	Description	Unit Price	Combined Total
Utility Impact Costs					
14	9	EA	Overhead Utility Pole Relocations (by Others)	\$ 10,000.00	\$ 90,000
15	1	LS	Overhead Realignment (by Others)	\$ 500,000.00	\$ 500,000
Utility Impact Subtotal					\$ 590,000
Contingency (30%)					\$ 180,000
Construction Total					\$ 770,000
	11,000	SF	Easement	\$ 10.00	\$ 110,000
Engineering PS+E (15%)					\$ 120,000
Construction Management (15%)					\$ 120,000
Utility Impact Total					\$ 1,120,000

Appendix C

Draft Traffic Report

INTERSECTION CONTROL MEMORANDUM

NE Lake Road/SR500 (NE Everett Street) Intersection Traffic Operations Analysis

Date: February 7, 2019

KAI Project #:23377

To: City of Camas

From: Hermanus Steyn, PE & Jamestaun Kraupp, EI

cc: Greg Jellison, PE & Cory Kratovil, PE

The City of Camas is conducting a planning and design project to improve the capacity and traffic conditions at the intersection of NE Lake Road and SR500 (NE Everett Street). The planning portion of this project is an assessment of the existing and projected 2040 conditions at the intersection to inform the intersection control evaluation. Signal and roundabout treatments have been identified as part of an operations analysis to provide the advantages and disadvantages of each. This information will assist the City of Camas define the project improvements moving forward, as well as right-of-way needs to be determined.

This memorandum provides a summary of the planning methodology, analysis, and alternatives considered. Key topics include:

- Existing intersection facilities: pedestrian/bicycle facilities, transit routes, intersection lane configuration, surrounding infrastructure.
- Existing traffic conditions: traffic control, and peak hour conditions.
- Intersection operation analysis assuming 2040 Regional Transportation Council (RTC) traffic volumes for a “No Build” intersection condition.
- Intersection operation analysis assuming 2040 RTC traffic volumes for an improved signalized intersection configuration.
- Intersection operation analysis assuming 2040 RTC traffic volumes for a roundabout configuration.
- A summary of intersection improvement needs and outstanding considerations that should be further discussed with the City of Camas

SUMMARY OF STUDY RECOMMENDATIONS

Table 1 summarizes the intersection control alternatives considered along with detailed considerations for each alternative.

Table 1: Summary of NE Lake Road and NE Everett Street Alternatives

Intersection Alternative	Details/Considerations
No Build	Maintain the existing lane configuration and signal timing of the intersection, with no improvements to the roadway geometry, intersection, or signal timing.
Improved Signalized Intersection	Widen intersection to provide dual left turn lanes with extended pockets along the eastbound and northbound approaches to meet capacity needs in the 2040 condition. Signal retiming optimized for intersection efficiency.
Multilane Roundabout	Implement a multilane roundabout with channelized right turns on the southbound and eastbound approaches to meet capacity needs in the 2040 condition. A roundabout would also provide traffic calming along the SR500 corridor.

PROJECT BACKGROUND

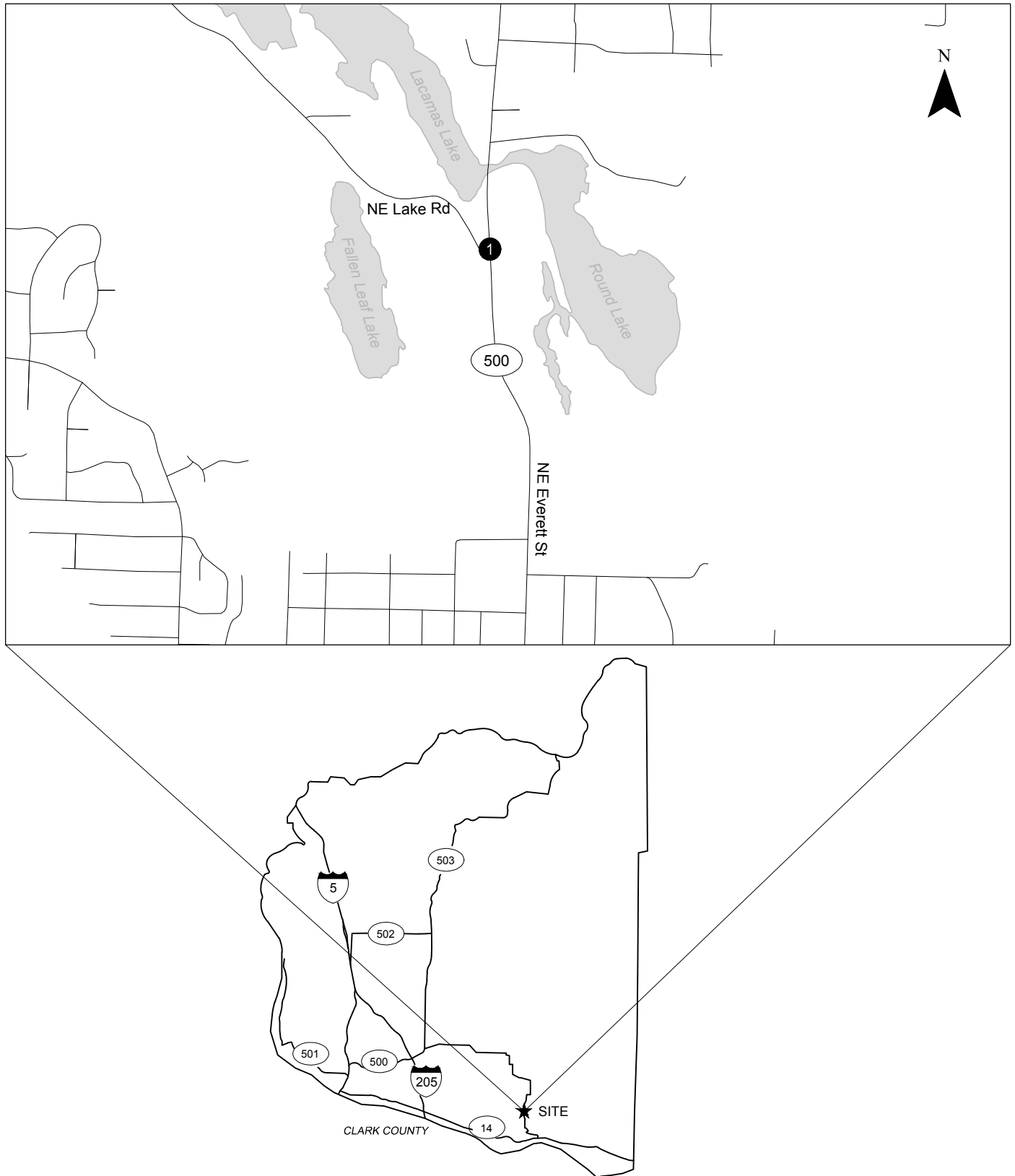
The study T-intersection of NE Lake Road and NE Everett Street is located south of to a pivotal bridge crossing surrounded by three large bodies of water and will be an essential intersection as areas to the north develop. This segment of SR500 is a regional connection to the City of Camas where there is limited access across the bodies of water. Both NE Lake Road and SR500 are classified as minor arterials according to the online Washington Department of Transportation (WSDOT) Functional Classification Map.

This portion of SR500 is a major north-south route connecting the center of downtown Camas to residential areas, educational facilities such as elementary schools, middle schools, and a high school, recreational areas and lodges along the lake, local hikes in the area, and local commercial developments. Figure 1 shows a general vicinity map and the study intersection.

2016 Study of NE Lake Road/SR500 Intersection

In 2016 a previous study, NW 6th Avenue / Everett Street (SR500) Corridor Study PBS Engineering and Environmental and DKS Associates, was completed for the NE Lake Road/SR500 intersection as part of a larger corridor study for the City of Camas. In this study, they defined improvements to intersections and segments of roadway within the city limits. The proposed improvements were based on an operational analysis of alternatives between a roundabout corridor and a signalized corridor with roundabouts at specific intersections.

H:\23\23377 - Lake Rd and Everett St Roundabout\report\figs\23377_Figure_001.dwg Mar 12, 2019 - 2:02pm - jkraupp Layout Tab: Site Vicinity Map



- Study Intersections

Site Vicinity Map
Camas, Washington

Figure
1

INTERSECTION ANALYSIS METHODOLOGY

The signalized stop controlled intersection analyses described in this memorandum were performed in accordance with the procedures stated in the *2000 Highway Capacity Manual* using Synchro 7. Analysis of intersection operations with roundabouts was conducted in accordance with the *Highway Capacity Manual 6th Editions* methodology using HCS7 and WSDOT roundabout methodology guidance.

To ensure the analyses were based on a reasonable worst-case scenario, the intersection evaluation used the weekday AM and PM peak hour volumes from traffic counts completed in January 2019, see Appendix A. The study times were expanded to include revised school start and end times that had been adjusted in the fall of 2018.

The 2040 future volumes were determined by following the National Cooperative Highway Research Program Report 255 (NCHRP 255) *Highway Traffic Data for Urbanized Project Planning and Design* and determining the growth rate based on the existing and 2040 RTC base models.

EXISTING CONDITIONS

The existing conditions analysis identifies the site conditions and current operational and geometric characteristics of the intersection in the study area. Kittelson & Associates, Inc. (Kittelson) staff visited and inventoried the NE Lake Road/SR500 intersection in January 2019. At that time, Kittelson collected information regarding site conditions, adjacent land uses, existing traffic operations, pedestrian facilities, bicycle facilities, transit routes, and lane configuration in the study area.

Traffic Counts

Weekday AM and PM turning movement counts along with tube counts were collected at the intersection of NE Lake Road and NE Everett Street on January 15th, 2019.

- Weekday AM counts conducted from 7:00 - 9:00 AM, peak hour 7:50 - 8:50 AM
- Weekday PM counts conducted from 2:30 - 5:30 PM, peak hour 3:15 - 4:15 PM

Pedestrian Facilities, Bicycle Facilities, and Transit Routes

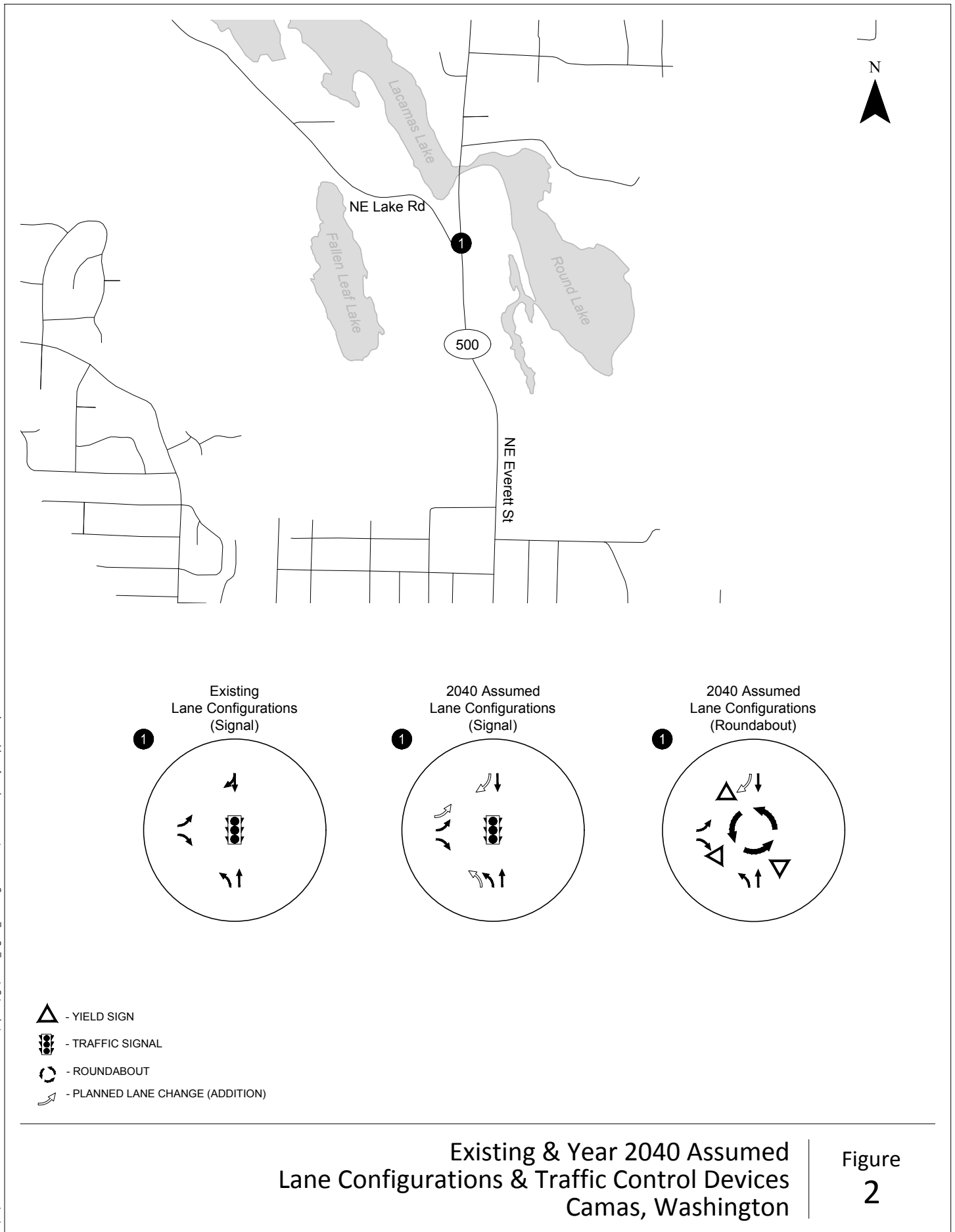
Currently, there are limited existing pedestrian and bicycle facilities at the intersection and approaching segments of roadway where there is a lack of active transportation facilities surrounding the study area.

Further, there are no designated transit routes along the corridor.

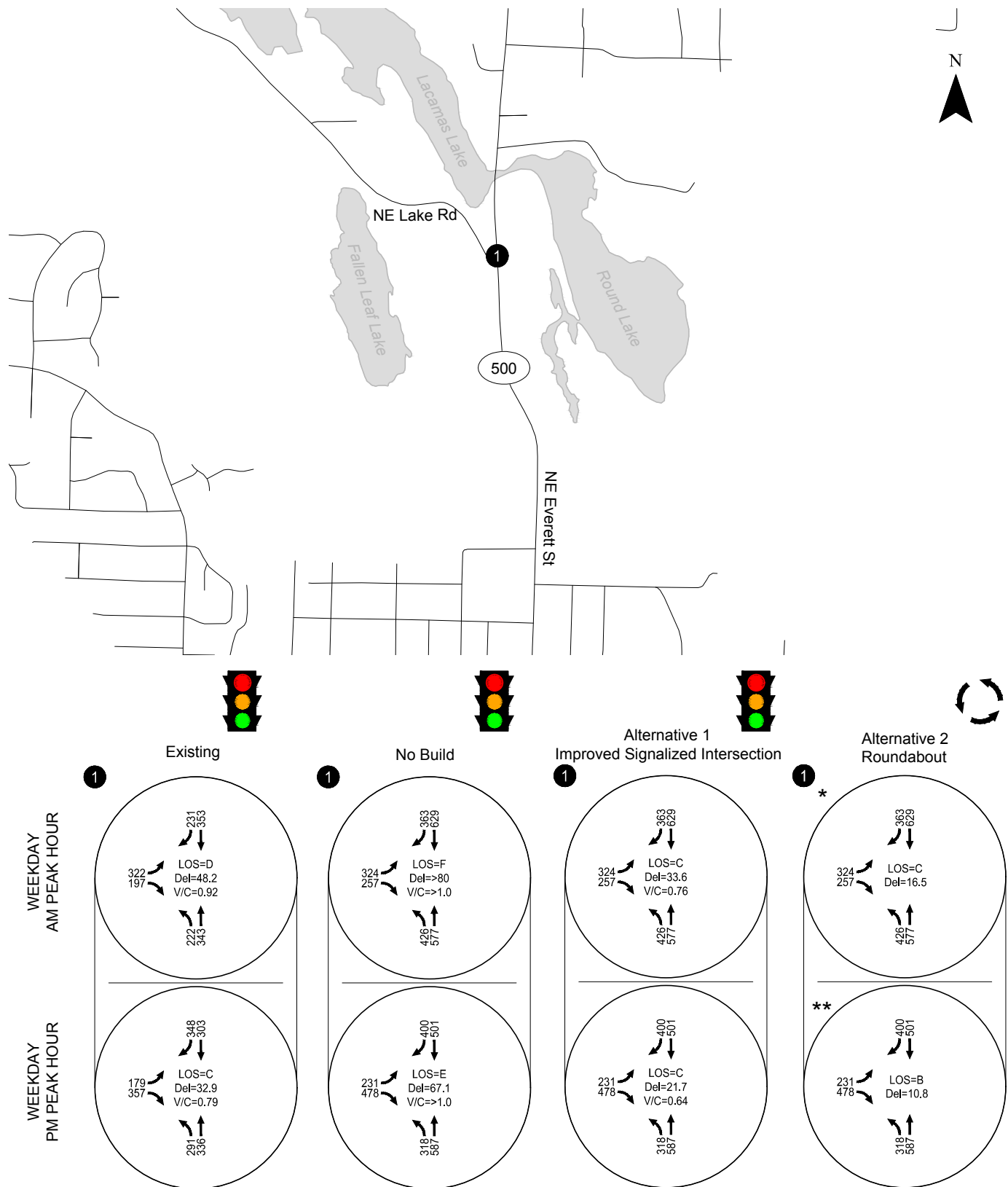
Traffic Operations Analysis

Figure 2 shows the existing lane configurations and traffic control devices at NE Lake Road/SR500 intersection. Figure 3 summarizes the existing intersection traffic volumes and operations. The two analysis periods in the weekday AM and PM were evaluated using signal timing data provided by Clark County, see Appendix B. The existing weekday AM peak hour represents the worst-case condition due to a higher Volume to Capacity Ratio (v/c). See Appendix C for the existing conditions Synchro 7 worksheets.

Figure 2 – Existing A.M. and P.M. peak hour turning movements figure



H:\23\23377 - Lake Rd and Everett St Roundabout\report\figs\23377_Figure_001.dwg Mar 12, 2019 - 2:04pm - jkraupp Layout Tab: 2040 TTI Traf



* - Critical Southbound Approach LOS=C with 22.7 Seconds Delay
 ** - Critical Eastbound Approach LOS=B with 13.5 Seconds Delay

Existing & 2040 Traffic Conditions
 Weekday AM & PM Peak Hours
 Camas, Washington

Figure
 3

FUTURE CONDITIONS ANALYSIS

The 2040 RTC base model for the intersection of NE Lake Road and NE Everett accounts for the future residential, commercial, and industrial development of the City of Camas to the north. This will impact the travel demand patterns and capacity needs of the intersection.

With future development surrounding the study intersection and the existing community infrastructure such as educational facilities like an elementary school, a middle school, high schools, recreational areas and lodges along the lake, trails in the area, and local commercial developments. The future pedestrian volumes were assumed to increase (e.g., 20 pedestrians crossing each leg of the intersection during the peak hour) to reflect the anticipated activity and to be addressed as part of the intersection improvements.

See Appendix D for the 2015 and 2040 RTC Base Model projects for the Intersection.

Analysis Periods

The City of Camas seeks to provide sufficient intersection capacity to accommodate typical peak commuter travel demand. As was documented in the existing conditions analysis, peak travel demand in the study area currently occurs during the weekday AM peak hour. Weekday AM and PM peak hour travel demand model data provided by the RTC indicates that weekday AM peak hour volumes are generally expected to remain higher than the weekday PM peak hour volumes. The future conditions operations analysis focuses on both weekday AM and PM peak hour volumes at the study intersection.

Traffic Volume Development

Future year 2040 intersection turning movement volumes were developed using travel demand model information provided by RTC. Specifically, RTC provided travel demand modeling for base year 2015 and future year 2040 conditions reflecting on the planned regional transportation network for the weekday AM and PM peak hour.

Using the existing year 2019 intersection turn movement counts and the future year 2040 RTC traffic volume projections, year 2040 weekday AM and PM peak hour intersection turn movement projections were developed following the NCHRP 255 post-processing methodology. See Appendix E.

“No-Build” Future Intersection Operations

Future intersection operations were analyzed assuming no signal or other intersection improvements at the study intersection. Analysis of the future study intersection operations under this “No build” scenario found the existing intersection configurations yielded unacceptable conditions at the study intersection with the future 2040 traffic volumes.

The intersection is anticipated to operate at LOS F with a V/C ratio greater than one during the weekday AM peak hour and LOS E with a V/C ratio greater than one during the weekday PM peak hour.. Queue lengths at the 95th percentile is shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively.

Appendix F contains the 2040 No-Build weekday AM and PM peak hour analysis worksheets produced by Synchro 7.

EVALUATION OF INTERSECTION IMPROVEMENT ALTERNATIVES

A signalized intersection alternative and a multi-lane roundabout alternative were considered at the study intersection. A summary of the findings and implications at of the intersection is presented below.

Alternative #1 –Signalized Intersection Alternative

For this alternative, the study intersection was assumed to be improved by providing dual eastbound left turn lanes, dual northbound left turn lanes, and single southbound and eastbound right-turn lanes. The signal timing for the intersection was optimized.

With the widening of the intersection and projected 2040 vehicle volumes, the HCM 2000 analysis indicates that the intersection would operate at a LOS C in both the weekday AM and PM with V/C ratios of 0.76 and 0.64, respectively. Queue lengths at the 95th percentile are shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively. Appendix G shows the optimized signal analysis and queue analysis worksheets for the weekday AM and PM peak hour traffic conditions produced by Synchro 7.

Alternative #2 –Roundabout Alternative

This alternative evaluates a multi-lane roundabout with turn lanes based on the travel patterns.

With the intersection re-constructed as a roundabout and projected 2040 vehicle volumes, the HCM 6th Edition analysis provided by HCS7 indicates that the roundabout would operate at a LOS C and LOS B during the weekday AM and PM peak hour, respectively. Queue lengths at the 95th percentile are shown in Table 2 and Table 3 for the weekday AM and PM peak hours, respectively. Appendix H shows the 2040 analysis of the roundabout configuration.

Queue Analysis

Queues are rounded to the nearest 25 foot interval for all movements. “+” indicated that the 95th percentile volume may exceed the capacity of the intersection, resulting in a longer queue.

Table 2: NE Lake Road/SR500 Intersection, Weekday AM Peak Hour Queue Lengths

Direction	Lane Group	95th Percentile Queue Length (feet)			
		Existing	“No Build”	Alternative #1 Signalized Intersection	Alternative #2 Multilane Roundabout
Eastbound	Left	400	425	275+	100
	Right	50	75	175	75
Northbound	Left	300	775+	350+	75
	Thru	200	400	475	125
Southbound	thru	800+	1,675+	875	265
	Right	n/a	n/a	200	75

Table 3: NE Lake Road/SR500 intersection, Weekday PM Peak Hour Queue Lengths

Direction	Lane Group	95th Percentile Queue Length (feet)			
		Existing	“No Build”	Alternative #1 Signalized Intersection	Alternative #2 Multilane Roundabout
Eastbound	Left	225	275	175	50
	Right	100	175	300	125
Northbound	Left	350+	425+	225	50
	Thru	125	300	450	100
Southbound	thru	675+	1,225+	575	100
	Right	n/a	n/a	50	75

Performance of Intersection Improvement Options

Table 4 and Table 5 illustrate the weekday AM and PM peak hour intersection operational performance measures for the No-Build and two intersection alternatives for the study intersection.

Table 4: NE Lake Road/SR500 Intersection, 2040 Weekday AM Peak Hour Operations Comparison

Direction	Lane Group	Level-of-Service			Volume-to-Capacity Ratio			Total Delay (seconds)		
		No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2
Eastbound	Left	E	E	C	0.83	0.72	0.56	58.5	59.6	15.4
	Right	D	C	B	0.18	0.29	0.45	38.5	21.7	12.3
Northbound	Left	F	E	A	>1.0	0.77	0.48	181.1	58.6	9.4
	Thru	B	B	B	0.51	0.52	0.65	10.6	12.0	13.5
Southbound	Thru	F	D	D	>1.0	0.84	0.86	266.6	41.0	29.3
	Right	n/a	B	B	n/a	0.26	0.50	n/a	10.9	11.2
Intersection		F	C	C	>1.0	0.76	n/a	146.2	33.6	16.5

Table 5: NE Lake Road/SR500 Intersection, 2040 Weekday PM Peak Hour Operations Comparison

Direction	Lane Group	Level-of-Service			Volume-to-Capacity Ratio			Total Delay (seconds)		
		No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2	No-Build	Alt #1	Alt #2
Eastbound	Left	E	D	A	0.75	0.43	0.36	55.4	40.0	9.1
	Right	D	B	C	0.45	0.51	0.65	44.4	19.0	16.0
Northbound	Left	D	D	A	0.81	0.55	0.31	54.2	40.4	6.4
	Thru	A	B	B	0.45	0.51	0.58	6.4	10.5	10.8
Southbound	Thru	F	C	B	>1.0	0.68	0.55	126.2	27.5	11.1
	Right	n/a	A	A	n/a	0.27	0.44	n/a	8.8	8.9
Intersection		E	C	B	>1.0	0.64	n/a	119.1	21.7	10.8

NEXT STEPS

Please review the traffic operations analysis information presented in this memorandum that will become part of the intersection control evaluation and let us know what questions or comments you may have. We would be pleased to further discuss the study findings and the two improvement alternatives as appropriate.

If you have questions as you review this material, please contact us at 503-535-7431.

APPENDIX

Appendix A: Quality Counts Traffic Counts

Appendix B: Clark County Existing Signal Timing

Appendix C: Existing 2019 Weekday AM and PM Synchro Analysis worksheets

Appendix D: 2015 and 2040 Southwest Regional Transportation Council Base Models

Appendix E: NCHRP 255 Analysis Worksheets

Appendix F: 2040 “No Build” Weekday AM and PM Synchro Worksheets and Queue Worksheets

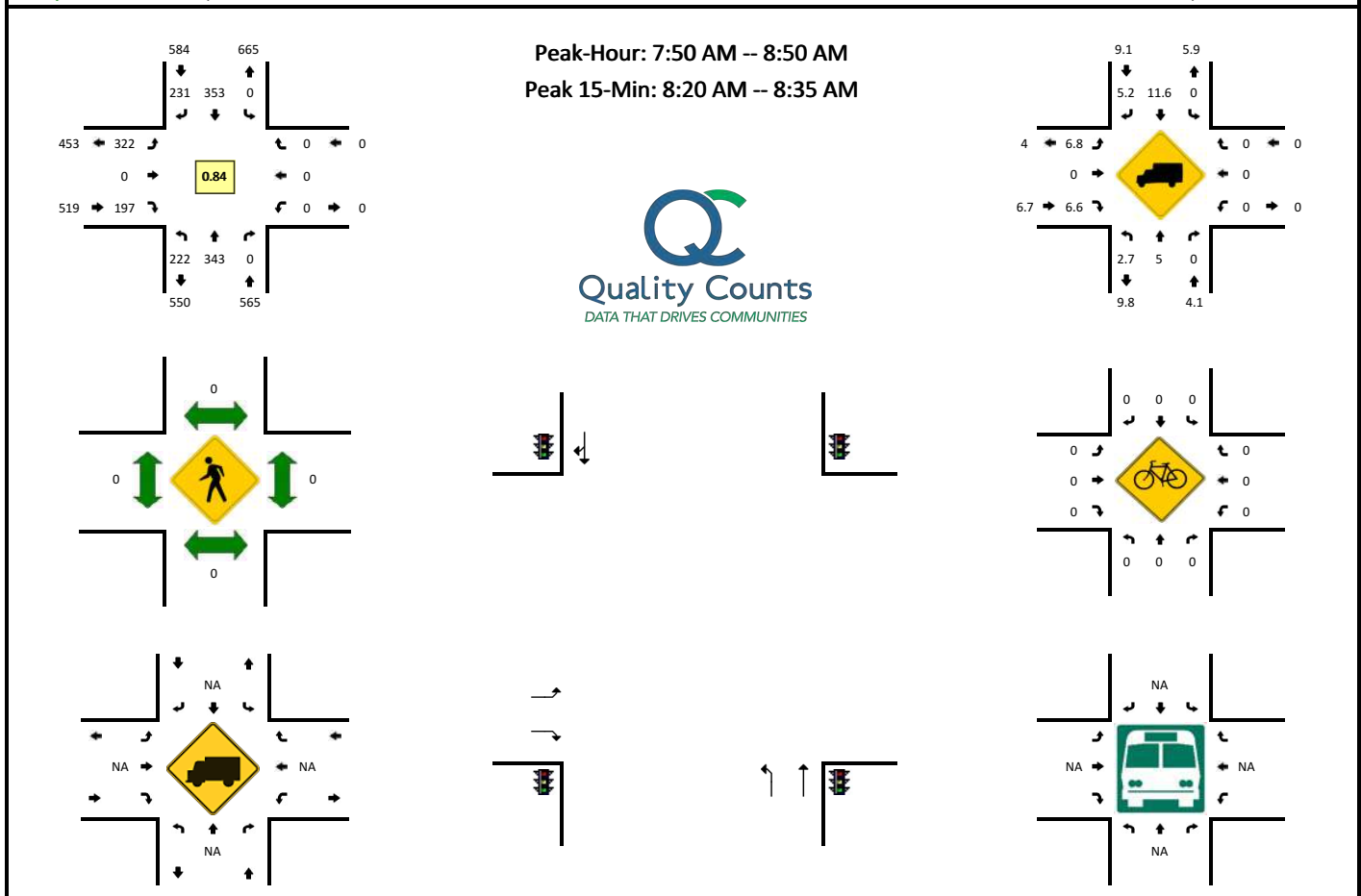
Appendix G: 2040 Improved Signalized Intersection Weekday AM and PM Synchro Worksheets and Queue Worksheets

Appendix H: 2040 Multilane Roundabout Weekday AM and PM HCS7 Worksheets

Appendix A – Quality Counts Traffic Counts

LOCATION: NE Everett St -- NE Lake Rd
CITY/STATE: Camas, WA

QC JOB #: 14881001
DATE: Tue, Jan 15 2019



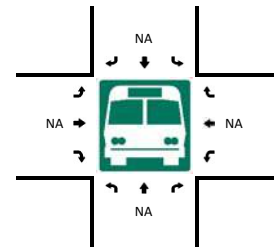
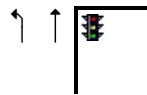
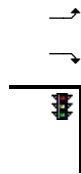
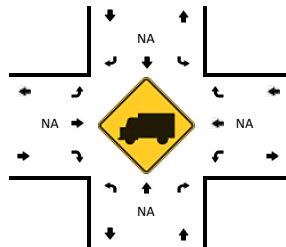
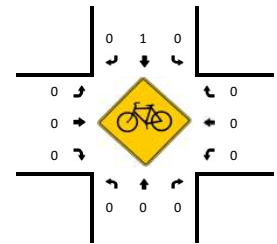
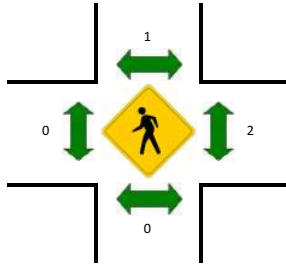
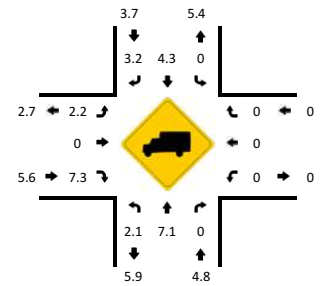
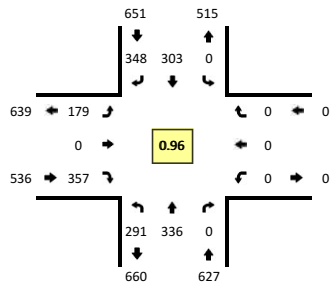
5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	12	15	0	0	0	18	9	0	21	0	12	0	0	0	0	0	87	
7:05 AM	13	12	0	0	0	23	11	0	11	0	11	0	0	0	0	0	81	
7:10 AM	7	11	0	0	0	16	10	0	13	0	9	0	0	0	0	0	66	
7:15 AM	15	18	0	0	0	19	12	0	27	0	11	0	0	0	0	0	102	
7:20 AM	11	24	0	0	0	16	11	0	47	0	10	0	0	0	0	0	119	
7:25 AM	11	15	0	0	0	25	26	0	23	0	15	0	0	0	0	0	115	
7:30 AM	9	18	0	0	0	19	15	0	12	0	8	0	0	0	0	0	81	
7:35 AM	10	17	0	0	0	21	14	0	5	0	9	0	0	0	0	0	76	
7:40 AM	11	13	0	0	0	24	12	0	20	0	7	0	0	0	0	0	87	
7:45 AM	23	15	0	0	0	26	10	0	13	0	20	0	0	0	0	0	107	
7:50 AM	28	25	0	0	0	22	10	0	21	0	27	0	0	0	0	0	133	
7:55 AM	17	24	0	0	0	27	13	0	18	0	21	0	0	0	0	0	120	1174
8:00 AM	23	28	0	0	0	24	13	0	29	0	10	0	0	0	0	0	127	1214
8:05 AM	19	25	0	0	0	20	13	0	43	0	5	0	0	0	0	0	125	1258
8:10 AM	9	34	0	0	0	26	18	0	41	0	11	0	0	0	0	0	139	1331
8:15 AM	9	39	0	0	0	23	27	0	37	0	7	0	0	0	0	0	142	1371
8:20 AM	18	38	0	0	0	31	22	0	42	0	12	0	0	0	0	0	163	1415
8:25 AM	25	53	0	0	0	29	22	0	32	0	14	0	0	0	0	0	175	1475
8:30 AM	15	34	0	0	0	43	26	0	26	0	13	0	0	0	0	0	157	1551
8:35 AM	23	14	0	0	0	30	26	0	10	0	15	0	0	0	0	0	118	1593
8:40 AM	13	17	0	0	0	48	23	0	8	0	23	0	0	0	0	0	132	1638
8:45 AM	23	12	0	0	0	30	18	0	15	0	39	0	0	0	0	0	137	1668
8:50 AM	30	19	0	0	0	23	15	0	12	0	23	0	0	0	0	0	122	1657
8:55 AM	33	27	0	0	0	17	14	0	5	0	19	0	0	0	0	0	115	1652
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	232	500	0	0	0	412	280	0	400	0	156	0	0	0	0	0	1980	
Heavy Trucks	4	40	0	0	0	80	20	0	32	0	12	0	0	0	0	0	188	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: NE Everett St -- NE Lake Rd
CITY/STATE: Camas, WA

QC JOB #: 14881003
DATE: Tue, Jan 15 2019

Peak-Hour: 3:15 PM -- 4:15 PM
Peak 15-Min: 3:50 PM -- 4:05 PM



5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:30 PM	16	25	0	0	0	9	10	0	18	0	19	0	0	0	0	0	97	
2:35 PM	18	17	0	0	0	16	12	0	17	0	21	0	0	0	0	0	101	
2:40 PM	21	25	0	0	0	14	13	0	17	0	30	0	0	0	0	0	120	
2:45 PM	15	20	0	0	0	12	10	0	12	0	25	0	0	0	0	0	94	
2:50 PM	15	16	0	0	0	14	13	0	15	0	14	0	0	0	0	0	87	
2:55 PM	18	31	0	0	0	23	26	0	16	0	23	0	0	0	0	0	137	
3:00 PM	16	23	0	0	0	20	18	0	20	0	25	0	0	0	0	0	122	
3:05 PM	19	23	0	0	0	28	22	0	20	0	21	0	0	0	0	0	133	
3:10 PM	20	26	0	0	0	15	12	0	20	0	29	0	0	0	0	0	122	
3:15 PM	20	35	0	0	0	24	24	0	15	0	21	0	0	0	0	0	139	
3:20 PM	22	28	0	0	0	14	40	0	25	0	25	0	0	0	0	0	154	
3:25 PM	19	23	0	0	0	28	56	0	11	0	30	0	0	0	0	0	167	1473
3:30 PM	20	19	0	0	0	28	40	0	18	0	26	0	0	0	0	0	151	1527
3:35 PM	23	27	0	0	0	27	36	0	16	0	21	0	0	0	0	0	150	1576
3:40 PM	19	20	0	0	0	27	26	0	19	0	27	0	0	0	0	0	138	1594
3:45 PM	25	28	0	0	0	33	25	0	13	0	24	0	0	0	0	0	148	1648
3:50 PM	24	34	0	0	0	21	25	0	19	0	27	0	0	0	0	0	150	1711
3:55 PM	40	40	0	0	0	29	15	0	9	0	37	0	0	0	0	0	170	1744
4:00 PM	24	20	0	0	0	30	24	0	13	0	43	0	0	0	0	0	154	1776
4:05 PM	29	33	0	0	0	22	16	0	9	0	40	0	0	0	0	0	149	1792
4:10 PM	26	29	0	0	0	20	21	0	12	0	36	0	0	0	0	0	144	1814
4:15 PM	24	19	0	0	0	28	25	0	15	0	23	0	0	0	0	0	134	1809
4:20 PM	23	23	0	0	0	21	18	0	11	0	21	0	0	0	0	0	117	1772
4:25 PM	24	29	0	0	0	14	11	0	17	0	25	0	0	0	0	0	120	1725
4:30 PM	16	18	0	0	0	17	17	0	15	0	33	0	0	0	0	0	116	1690
4:35 PM	30	23	0	0	0	26	22	0	8	0	22	0	0	0	0	0	131	1671
4:40 PM	23	28	0	0	0	18	16	0	12	0	24	0	0	0	0	0	121	1654
4:45 PM	22	23	0	0	0	22	15	0	14	0	26	0	0	0	0	0	122	1628
4:50 PM	17	25	0	0	0	20	7	0	18	0	24	0	0	0	0	0	111	1589
4:55 PM	15	24	0	0	0	13	9	0	18	0	23	0	0	0	0	0	102	1521
5:00 PM	18	25	0	0	0	20	14	0	12	0	28	0	0	0	0	0	117	1484
5:05 PM	17	31	0	0	0	14	15	0	27	0	32	0	0	0	0	0	136	1471
5:10 PM	18	27	0	0	0	13	27	0	13	0	31	0	0	0	0	0	129	1456
5:15 PM	18	14	0	0	0	12	12	0	28	0	25	0	0	0	0	0	109	1431
5:20 PM	24	20	0	0	0	25	11	0	23	0	40	0	0	0	0	0	143	1457
5:25 PM	25	31	0	0	0	14	6	0	18	0	35	0	0	0	0	0	129	1466

5-Min Count Period Beginning At	NE Everett St (Northbound)				NE Everett St (Southbound)				NE Lake Rd (Eastbound)				NE Lake Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:30 PM	16	27	0	0	0	18	15	0	11	0	22	0	0	0	0	0	109	1459
5:35 PM	17	19	0	0	0	14	9	0	21	0	26	0	0	0	0	0	106	1434
5:40 PM	14	26	0	0	0	13	7	0	15	0	21	0	0	0	0	0	96	1409
5:45 PM	20	22	0	0	0	8	16	0	21	0	28	0	0	0	0	0	115	1402
5:50 PM	12	25	0	0	0	25	14	0	16	0	22	0	0	0	0	0	114	1405
5:55 PM	12	15	0	0	0	15	12	0	20	0	24	0	0	0	0	0	98	1401
6:00 PM	23	19	0	0	0	6	6	0	14	0	19	0	0	0	0	0	87	1371
6:05 PM	12	24	0	0	0	19	12	0	14	0	19	0	0	0	0	0	100	1335
6:10 PM	18	21	0	0	0	11	15	0	13	0	22	0	0	0	0	0	100	1306
6:15 PM	12	16	0	0	0	11	9	0	11	0	17	0	0	0	0	0	76	1273
6:20 PM	9	24	0	0	0	15	17	0	18	0	9	0	0	0	0	0	92	1222
6:25 PM	16	22	0	0	0	14	9	0	17	0	14	0	0	0	0	0	92	1185
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	352	376	0	0	0	320	256	0	164	0	428	0	0	0	0	0	1896	
Heavy Trucks	16	56	0		0	16	0		0	0	48		0	0	0		136	
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		
<i>Comments:</i>																		

Appendix B – Clark County Existing Signal Timing Sheets

Controller Database Timing Sheet



Station: 4051 - WSDOT - SR500 & Lake rd.(Standard File)

Type: NTCIP 76.x 2070 Ethernet

Firmware:

Created By: HagenR

Modified By:

Reviewed By:

NB EBR NBL SB EBL PED

Phase Times and Options(1.1.1/1.1.2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Min Green		5		4	4	5	4	4								
Gap Ext		4.5		3.5	3.5	4.5	3.5	3.5								
Max1		50		40	25 28	50 55	40	20								
Max2		25		18	12	25	18	20								
Yellow Clr	3	4	3	3	3	4	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		1		1	2	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Walk						7		7								
Ped Clearance						25		17								
Red Revert		2		2	2	2	2	2								
Added Initial		2				2										
Max Initial		20		4	4	20	4									
Time Before Reduce		20				25										
Cars Before Reduce																
Time To Reduce		10				10										
Reduce By																
Min Gap		3.5		3.5	3.5	3.5	3.5									
Dynamic Max Limit																
Dynamic Max Step																
Startup	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED
Enable	.	X	.	X	X	X	X	X	.	.	.	.	.	.	.	.
Auto Flash Entry	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Auto Flash Exit	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Non-Actuated 1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Non-Actuated 2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lock Calls	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Min Recall	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.













Phase Times and Options(1.1.1/1.1.2)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Soft Recall	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dual Entry	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Sim Gap Enable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guarantd Passage	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rest In Walk	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Added Init Calc	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ring	1	1	1	1	2	2	2	2								
Concur 1	5	5	7	7	1	1	3	3								
Concur 2	6	6	8	8	2	2	4	4								
Concur 3																
Concur 4																
Concur 5																
Concur 6																
Concur 7																
Concur 8																

Unit Parm(1.2.1)				
	Value			
StartUp Flash	7			
Auto Ped Clear	X			
Red Revert	2			
Local Flash Start	X			
Allow < 3 sec Yel	.			
Allow Skip Yel	.			
MCE Timeout				
Enable Run	X			
Start Red Time	8			
Phase Mode	STD8			
Startup Calls	.			
Diamond Mode	4PH			
Stop Time Over Preempt	.			
Free Ring Sequence	5			
Clearance Decide	.			
Min Ped Clear Time	.			
RingAlgo				
Ring Sequences(1.2.4)				
	1	2	3	4
Ring P1	1	5		
Ring P2	2	6		
Ring P3	3	8		
Ring P4	4	7		
Ring P5				
Ring P6				
Ring P7				
Ring P8				

Appendix C – Existing Weekday AM and PM Synchro Analysis Worksheets






Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	322	197	222	343	353	231
Future Volume (vph)	322	197	222	343	353	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1687	1509	1752	1810	1647	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1687	1509	1752	1810	1647	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	383	235	264	408	420	275
RTOR Reduction (vph)	0	170	0	0	13	0
Lane Group Flow (vph)	383	65	264	408	682	0
Heavy Vehicles (%)	7%	7%	3%	5%	12%	5%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	35.9	35.9	25.2	85.5	55.3	
Effective Green, g (s)	35.9	35.9	25.2	85.5	55.3	
Actuated g/C Ratio	0.28	0.28	0.19	0.66	0.42	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	464	415	338	1186	698	
v/s Ratio Prot	c0.23	0.04	c0.15	0.23	c0.41	
v/s Ratio Perm						
v/c Ratio	0.83	0.16	0.78	0.34	0.98	
Uniform Delay, d1	44.3	35.8	50.0	10.0	36.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.7	0.2	11.4	0.3	28.4	
Delay (s)	56.0	36.0	61.4	10.3	65.3	
Level of Service	E	D	E	B	E	
Approach Delay (s)	48.4			30.4	65.3	
Approach LOS	D			C	E	
Intersection Summary						
HCM 2000 Control Delay			48.2		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.92			
Actuated Cycle Length (s)			130.4		Sum of lost time (s)	18.0
Intersection Capacity Utilization			74.5%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
Queues








					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	383	235	264	408	695
v/c Ratio	0.83	0.40	0.78	0.34	0.98
Control Delay	60.5	6.5	67.1	11.5	66.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	6.5	67.1	11.5	66.1
Queue Length 50th (ft)	313	0	220	154	~639
Queue Length 95th (ft)	400	47	299	198	#790
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	519	862	377	1226	710
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.74	0.27	0.70	0.33	0.98

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.






Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday PM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	179	357	291	336	303	348
Future Volume (vph)	179	357	291	336	303	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.93	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1509	1770	1776	1704	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1770	1509	1770	1776	1704	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	186	372	303	350	316	362
RTOR Reduction (vph)	0	315	0	0	20	0
Lane Group Flow (vph)	186	57	303	350	659	0
Confl. Peds. (#/hr)	2	2	1			
Heavy Vehicles (%)	2%	7%	2%	7%	4%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	17.6	17.6	27.6	87.7	55.1	
Effective Green, g (s)	17.6	17.6	27.6	87.7	55.1	
Actuated g/C Ratio	0.15	0.15	0.24	0.77	0.48	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	272	232	427	1362	821	
v/s Ratio Prot	c0.11	0.04	c0.17	0.20	c0.39	
v/s Ratio Perm						
v/c Ratio	0.68	0.25	0.71	0.26	0.80	
Uniform Delay, d1	45.7	42.5	39.7	3.9	25.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.2	0.6	5.5	0.2	6.3	
Delay (s)	52.9	43.1	45.2	4.0	31.3	
Level of Service	D	D	D	A	C	
Approach Delay (s)	46.4			23.1	31.3	
Approach LOS	D			C	C	
Intersection Summary						
HCM 2000 Control Delay			32.9		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.79			
Actuated Cycle Length (s)			114.3		Sum of lost time (s)	18.0
Intersection Capacity Utilization			75.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Existing Traffic Conditions
3: NE Everett St & NW Lake Rd

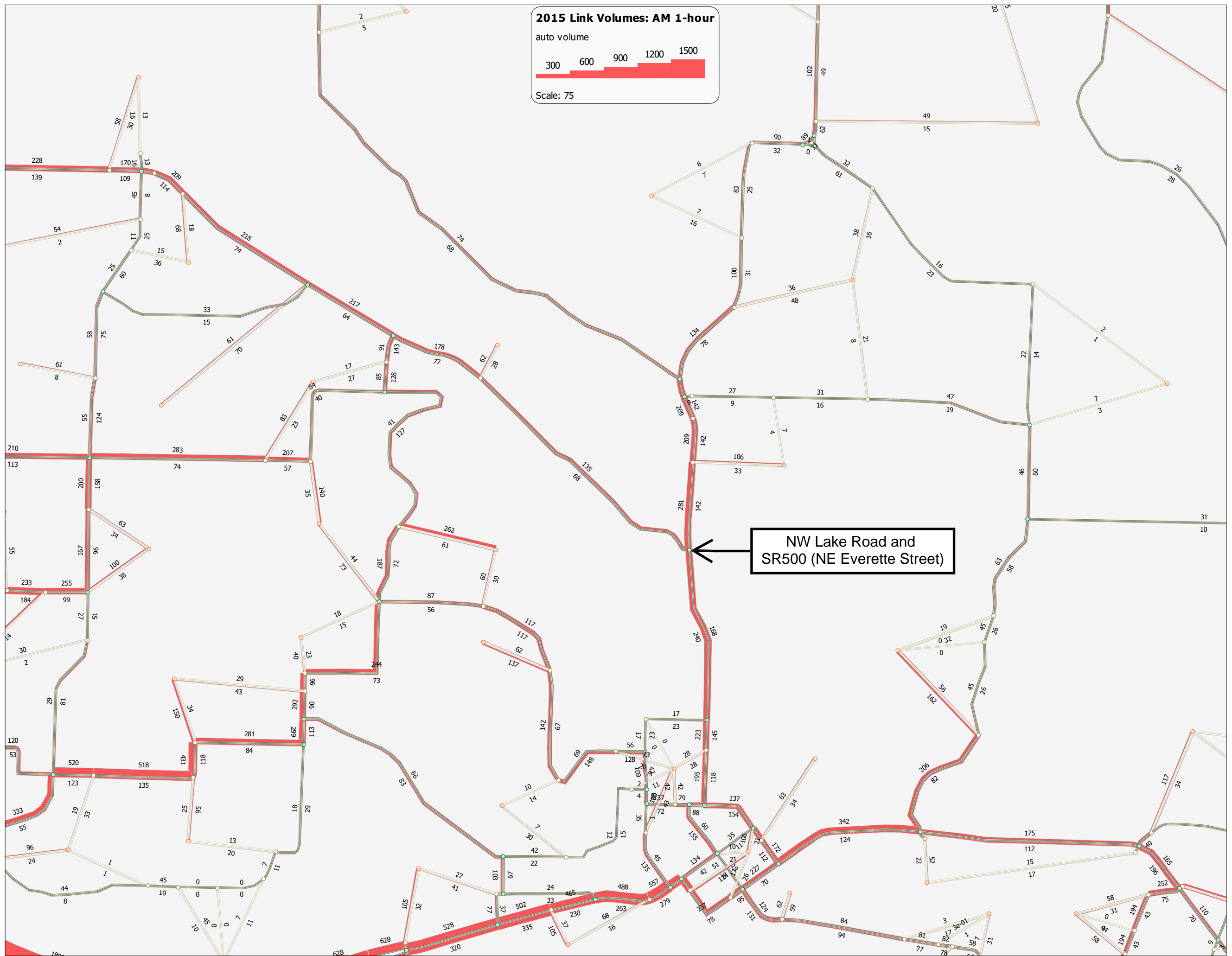
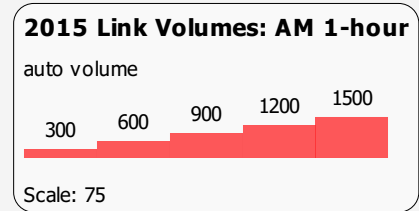
Weekday PM Peak Hour
Queues

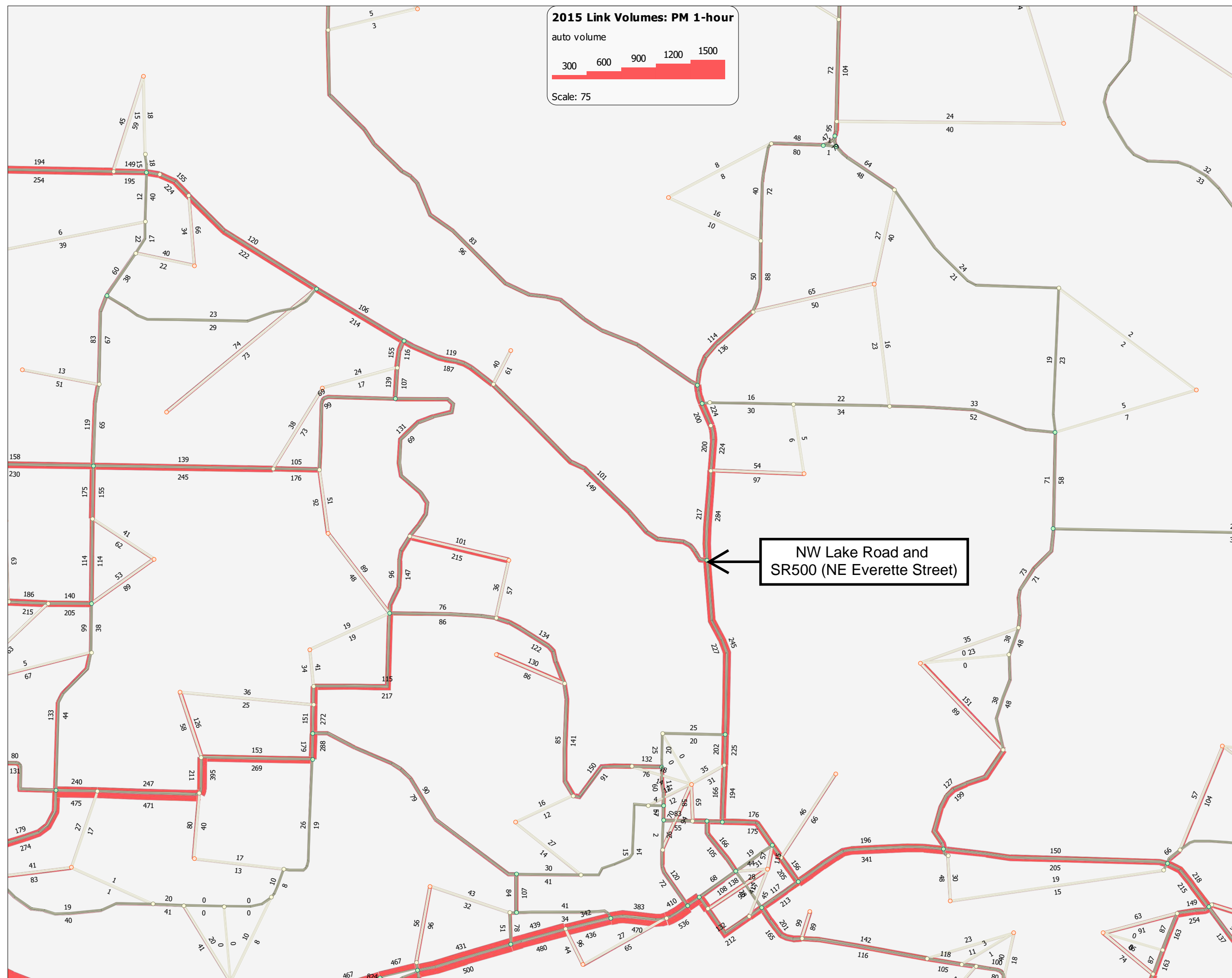
					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	186	372	303	350	679
v/c Ratio	0.68	0.68	0.71	0.26	0.81
Control Delay	58.8	11.2	50.8	4.8	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	11.2	50.8	4.8	33.5
Queue Length 50th (ft)	131	0	205	62	394
Queue Length 95th (ft)	207	89	#328	118	#670
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	620	1009	434	1369	841
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.37	0.70	0.26	0.81

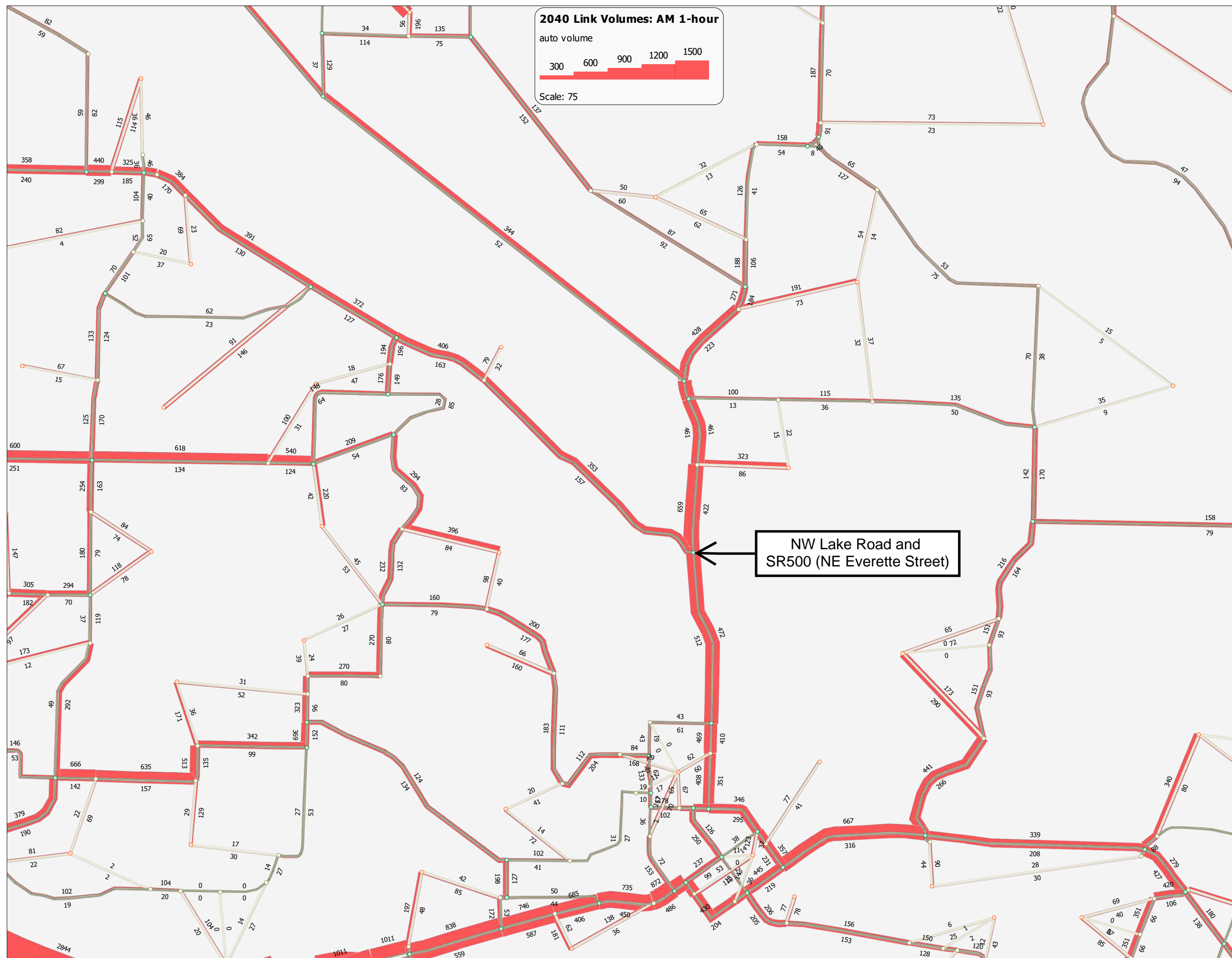
Intersection Summary

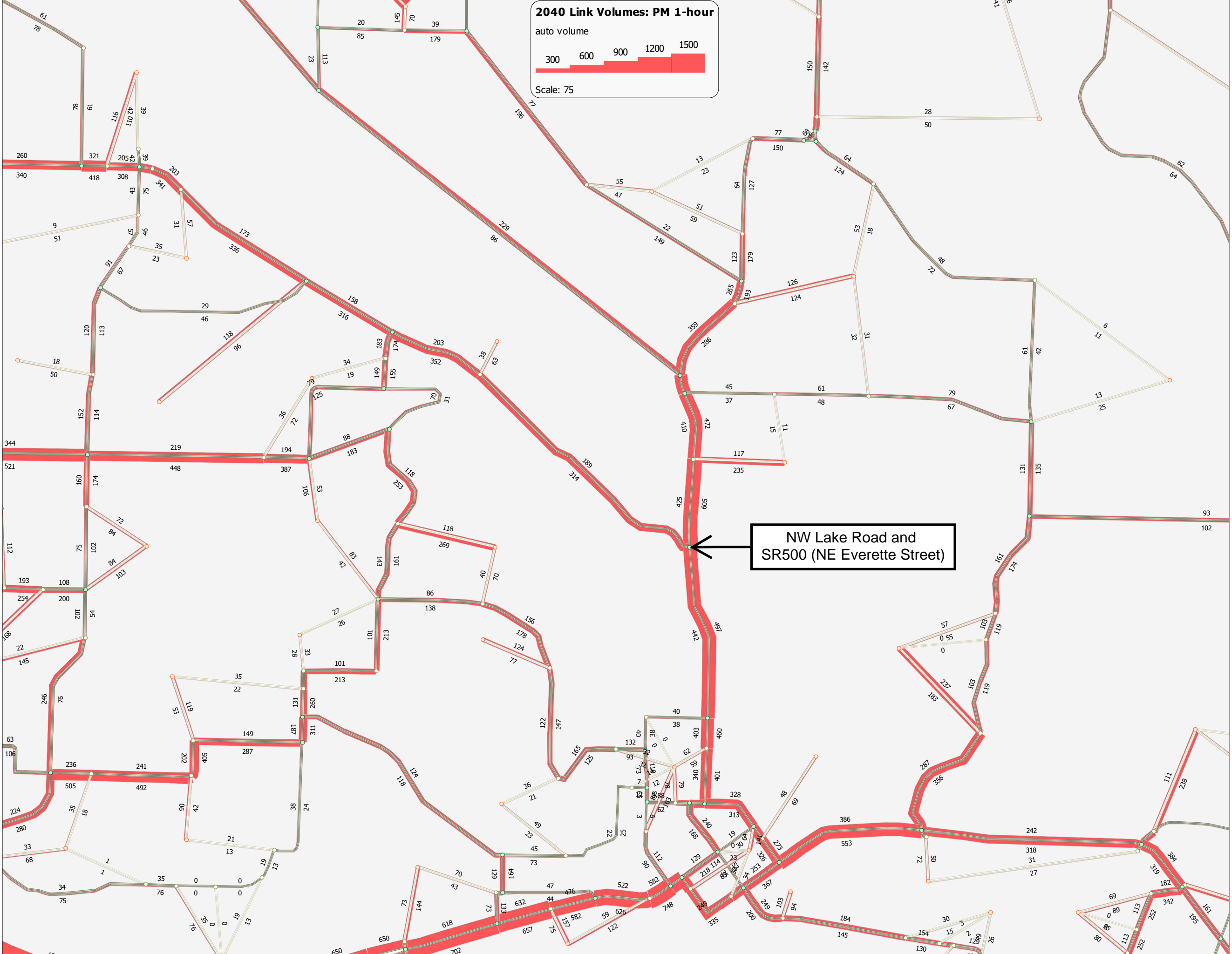
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix D – 2015 and 2040 Southwest Regional Transportation Council Base Models









Appendix E – NCHRP 255 Analysis Worksheets

Project #:	23377
Project Name:	Lake Rd and Everett St Roundabout
City, State:	Camas, Washington
Scenario:	Year 2019 Existing Traffic Conditions, Weekday AM Peak Hour
Date:	1/30/2019
Filename/Path	H:\23\23377 - Lake Rd and Everett St Roundabout\Synchro
Prepared By:	AR
Existing Count Year:	2019
Base Model Year	2015
Future Model Year	2040












1																	New Link Test	Removed Link Test	Check Summary
Intersection Name	Leg	Movement	Left	Thru	Right	Existing Link Volume	Base Model Link Volume	Future Model Link volume	Base to Future Model Growth Factor	Adjusted Base Model Volumes	Base Model: Existing Volume	Ratio Method (Existing * Future/Base)	Difference Method (Ex. + Future - Base)	Average of Ratio & Difference Method	Selected 255 Volume	Growth Factor (From Ex. Count Year)			
NE Everett St / NW Lake Rd	South	In	222	343	1	566	168	472	0.0724	217	0.383	1233	821	1027	1027	181%	Okay	Okay	Okay
		Out	1	353	197	551	240	512	0.0453	284	0.515	995	779	887	887	161%	Okay	Okay	Okay
	West	In	322	1	197	520	68	157	0.0524	82	0.158	993	595	794	595	114%	Okay	Okay	Okay
		Out	222	1	231	454	135	353	0.0646	170	0.374	943	637	790	790	174%	Okay	Okay	Okay
	North	In	1	353	231	585	281	659	0.0538	341	0.584	1129	903	1016	1016	174%	Okay	Okay	Okay
		Out	322	343	1	666	142	422	0.0789	187	0.280	1505	901	1203	901	135%	Okay	Okay	Okay
	East	In	1	1	1	3	3	3	0.0000	3	1	3	3	3	3	100%	Okay	Okay	Okay
		Out	1	1	1	3	3	3	0.0000	3	1	3	3	3	3	100%	Okay	Okay	Okay
						3348	1040	2581	0	1287	0	6717	4642	5679	5679	170%	Okay	Okay	Okay

1			Final Volumes							Volume Override
Int. Name	Approach	Movement	Left	Thru	Right	Base Model	Future Model	Initial 255	Adjusted Link	
						Link Volume	Link Volume	Future Volume			Volume
NE Everett St / NW Lake Rd	South	In	426	577	0	168	472	1027	1004	1027
		Out	0	629	257	240	512	887	887	887
	West	In	324	0	257	68	157	595	581	595
		Out	426	0	363	135	353	790	790	790
	North	In	0	629	363	281	659	1016	993	1016
		Out	324	577	1	142	422	901	901	901
	East	In	0	0	0	0	0	0	0	0
		Out	0	0	0	0	0	0	0	0
							1040	2581	5222	5163	5222

Appendix F – 2040 “No Build” Weekday AM and PM Synchro
Worksheets and Queue Worksheets






No-Build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	324	257	426	577	629	363
Future Volume (vph)	324	257	426	577	629	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1752	1568	1752	1845	1715	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1752	1568	1752	1845	1715	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	360	286	473	641	699	403
RTOR Reduction (vph)	0	215	0	0	11	0
Lane Group Flow (vph)	360	71	473	641	1091	0
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	32.2	32.2	28.1	88.2	55.1	
Effective Green, g (s)	32.2	32.2	28.1	88.2	55.1	
Actuated g/C Ratio	0.25	0.25	0.22	0.68	0.43	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	435	390	380	1257	730	
v/s Ratio Prot	c0.21	0.05	c0.27	0.35	c0.64	
v/s Ratio Perm						
v/c Ratio	0.83	0.18	1.24	0.51	1.49	
Uniform Delay, d1	46.0	38.2	50.7	10.1	37.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	0.2	130.5	0.6	229.5	
Delay (s)	58.5	38.5	181.1	10.6	266.6	
Level of Service	E	D	F	B	F	
Approach Delay (s)	49.6			83.0	266.6	
Approach LOS	D			F	F	
Intersection Summary						
HCM 2000 Control Delay			146.2		HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			1.29			
Actuated Cycle Length (s)			129.4		Sum of lost time (s)	18.0
Intersection Capacity Utilization			109.2%		ICU Level of Service	H
Analysis Period (min)			15			
c Critical Lane Group						

No-Build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday AM Peak Hour
Queues












					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	360	286	473	641	1102
v/c Ratio	0.83	0.47	1.24	0.51	1.49
Control Delay	62.3	6.8	173.1	12.7	257.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	62.3	6.8	173.1	12.7	257.1
Queue Length 50th (ft)	286	0	~496	244	~1283
Queue Length 95th (ft)	404	68	#759	394	#1657
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	542	921	380	1257	740
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.66	0.31	1.24	0.51	1.49

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.






No-build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday PM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	478	318	587	501	400
Future Volume (vph)	231	478	318	587	501	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.97	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.94	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1752	1568	1752	1845	1691	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (perm)	1752	1568	1752	1845	1691	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	241	498	331	611	522	417
RTOR Reduction (vph)	0	367	0	0	14	0
Lane Group Flow (vph)	241	131	331	611	925	0
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Prot	Prot	NA	NA	
Protected Phases	7	4	5	2	6	
Permitted Phases						
Actuated Green, G (s)	21.9	21.9	28.0	88.2	55.2	
Effective Green, g (s)	21.9	21.9	28.0	88.2	55.2	
Actuated g/C Ratio	0.18	0.18	0.24	0.74	0.46	
Clearance Time (s)	4.0	4.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.5	3.0	3.5	4.5	4.5	
Lane Grp Cap (vph)	322	288	411	1366	783	
v/s Ratio Prot	c0.14	0.08	c0.19	0.33	c0.55	
v/s Ratio Perm						
v/c Ratio	0.75	0.45	0.81	0.45	1.18	
Uniform Delay, d1	46.0	43.3	43.0	6.0	31.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.5	1.1	11.2	0.4	94.3	
Delay (s)	55.4	44.4	54.2	6.4	126.2	
Level of Service	E	D	D	A	F	
Approach Delay (s)	48.0			23.2	126.2	
Approach LOS	D			C	F	
Intersection Summary						
HCM 2000 Control Delay			67.1		HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.03			
Actuated Cycle Length (s)			119.1		Sum of lost time (s)	18.0
Intersection Capacity Utilization			93.7%		ICU Level of Service	F
Analysis Period (min)			15			
c Critical Lane Group						

No-build Traffic Conditions
3: NE Everett St & NW Lake Rd

Weekday PM Peak Hour
Queues

					
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	241	498	331	611	939
v/c Ratio	0.75	0.76	0.80	0.45	1.19
Control Delay	60.8	14.5	59.6	7.8	126.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	14.5	59.6	7.8	126.1
Queue Length 50th (ft)	177	31	240	158	~858
Queue Length 95th (ft)	266	153	#422	282	#1211
Internal Link Dist (ft)	381			511	417
Turn Bay Length (ft)	70		175		
Base Capacity (vph)	589	1052	412	1366	792
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.47	0.80	0.45	1.19


Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix G – 2040 Improved Signalized Intersection Weekday AM
and PM Synchro Worksheets and Queue Worksheets

Year 2040 Traffic Conditions
1: NE Everett St & NE Lake Rd

Weekday AM Peak Hour
HCM Signalized Intersection Capacity Analysis

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	RL	R	RL	U	U	RL
Traffic Volume (vph)	324	257	426	577	629	363
Future Volume (vph)	324	257	426	577	629	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3400	1568	3400	1845	1845	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3400	1568	3400	1845	1845	1568
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	360	286	473	641	699	403
RTOR Reduction (vph)	0	69	0	0	0	147
Lane Group Flow (vph)	360	217	473	641	699	256
Confl. Peds. (#/hr)	20	20	20			20
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	7	4 5	5	2	6	6 7
Permitted Phases						
Actuated Green, G (s)	19.9	63.9	24.3	89.9	60.6	85.5
Effective Green, g (s)	19.9	63.9	24.3	89.9	60.6	85.5
Actuated g/C Ratio	0.15	0.48	0.18	0.67	0.45	0.64
Clearance Time (s)	4.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.5		3.5	4.5	4.5	
Lane Grp Cap (vph)	503	744	614	1233	831	996
v/s Ratio Prot	c0.11	c0.14	c0.14	0.35	c0.38	0.16
v/s Ratio Perm						
v/c Ratio	0.72	0.29	0.77	0.52	0.84	0.26
Uniform Delay, d1	54.6	21.5	52.4	11.3	32.7	10.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	0.2	6.1	0.6	8.3	0.2
Delay (s)	59.6	21.7	58.6	12.0	41.0	10.9
Level of Service	E	C	E	B	D	B
Approach Delay (s)	42.8			31.7	30.0	
Approach LOS	D			C	C	
Intersection Summary						
HCM 2000 Control Delay			33.6		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.76			
Actuated Cycle Length (s)			134.5		Sum of lost time (s)	18.0
Intersection Capacity Utilization			66.2%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

2: NE Everett St & NE Lake Rd







01/25/2019



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	←←	→	←←	→	→	←
Traffic Volume (vph)	231	478	318	587	501	400
Future Volume (vph)	231	478	318	587	501	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3400	1568	3400	1845	1845	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3400	1568	3400	1845	1845	1568
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	241	498	331	611	522	417
RTOR Reduction (vph)	0	113	0	0	0	153
Lane Group Flow (vph)	241	385	331	611	522	264
Confl. Peds. (#/hr)	20	20	20			20
Confl. Bikes (#/hr)						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	pt+ov	Prot	NA	NA	pt+ov
Protected Phases	7	4 5	5	2	6	6 7
Permitted Phases						
Actuated Green, G (s)	17.5	51.1	18.8	67.9	44.1	66.6
Effective Green, g (s)	17.5	51.1	18.8	67.9	44.1	66.6
Actuated g/C Ratio	0.17	0.49	0.18	0.65	0.42	0.63
Clearance Time (s)	4.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.5		3.5	4.5	4.5	
Lane Grp Cap (vph)	565	761	607	1190	773	992
v/s Ratio Prot	0.07	c0.25	0.10	c0.33	c0.28	0.17
v/s Ratio Perm						
v/c Ratio	0.43	0.51	0.55	0.51	0.68	0.27
Uniform Delay, d1	39.3	18.4	39.3	9.9	24.7	8.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.5	1.1	0.6	2.8	0.2
Delay (s)	40.0	19.0	40.4	10.5	27.5	8.8
Level of Service	D	B	D	B	C	A
Approach Delay (s)	25.8			21.0	19.2	
Approach LOS	C			C	B	
Intersection Summary						
HCM 2000 Control Delay			21.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			105.2		Sum of lost time (s)	18.0
Intersection Capacity Utilization			66.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Year 2040 Traffic Conditions
1: NE Everett St & NE Lake Rd

Weekday AM Peak Hour
Queues

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	360	286	473	641	699	403
v/c Ratio	0.71	0.35	0.76	0.52	0.84	0.38
Control Delay	67.6	13.4	65.3	14.9	45.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	13.4	65.3	14.9	45.7	9.0
Queue Length 50th (ft)	193	92	254	362	665	119
Queue Length 95th (ft)	#258	165	#343	467	856	189
Internal Link Dist (ft)	381			511	417	
Turn Bay Length (ft)	70	70	175			100
Base Capacity (vph)	621	873	762	1453	1133	1153
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.33	0.62	0.44	0.62	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

2: NE Everett St & NE Lake Rd

01/25/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	241	498	331	611	522	417
v/c Ratio	0.42	0.58	0.54	0.51	0.68	0.37
Control Delay	48.4	13.8	47.7	13.2	32.5	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	13.8	47.7	13.2	32.5	2.2
Queue Length 50th (ft)	66	124	96	147	237	0
Queue Length 95th (ft)	169	298	219	439	566	45
Internal Link Dist (ft)	381			511	417	
Turn Bay Length (ft)	200	200	300			300
Base Capacity (vph)	839	1049	1030	1640	1388	1322
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.47	0.32	0.37	0.38	0.32
Intersection Summary						

Appendix H – 2040 Multilane Roundabout Weekday
AM and PM HCS7 Worksheets

HCS7 Roundabouts Report

General Information

Analyst	AR
Agency or Co.	KAI
Date Performed	1/15/2019
Analysis Year	2019
Time Analyzed	AM Peak Hour
Project Description	Year 2040 Traffic Conditions

Site Information

Intersection	NW Everett / NW Lake Rd
E/W Street Name	NW Lake Road
N/S Street Name	NW Everett Street
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.90
Jurisdiction	Camas, WA

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0
Lane Assignment			L						L		T				T	
Volume (V), veh/h	0	324		257					0	426	577		0		629	363
Percent Heavy Vehicles, %	0	3		3					0	3	3		0		3	3
Flow Rate (V_{PCE}), pc/h	0	371		294					0	488	660		0		720	415
Right-Turn Bypass	Yielding				None				None				Yielding			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	20								0				20			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763	4.9763				4.5436	4.5436			4.9763	4.9763
Follow-Up Headway (s)		2.6087	2.6087				2.5352	2.5352			2.6087	2.6087

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		371	294				488	660			720	415
Entry Volume veh/h		360	285				474	641			699	403
Circulating Flow (v_c), pc/h	720			1519			371			488		
Exiting Flow (v_{ex}), pc/h	0			488			1031			720		
Capacity (C_{PCE}), pc/h		662	662				1013	1013			839	839
Capacity (C), veh/h		641	641				984	984			812	812
v/c Ratio (x)		0.56	0.45				0.48	0.65			0.86	0.50

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		15.4	12.3				9.4	13.5			29.3	11.2
Lane LOS		C	B				A	B			D	B
95% Queue, veh		3.5	2.3				2.7	5.0			10.6	2.8
Approach Delay, s/veh	14.0						11.8			22.7		
Approach LOS	B						B			C		
Intersection Delay, s/veh | LOS	16.5						C					

HCS7 Roundabouts Report

General Information

Analyst	AR
Agency or Co.	KAI
Date Performed	1/15/2019
Analysis Year	2019
Time Analyzed	PM Peak Hour
Project Description	Year 2040 Traffic Conditions

Site Information

Intersection	NW Everett / NW Lake Rd
E/W Street Name	NW Lake Road
N/S Street Name	NW Everett Street
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.96
Jurisdiction	Camas, WA

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0
Lane Assignment			L						L		T				T	
Volume (V), veh/h	0	270		478					0	313	587		0		501	400
Percent Heavy Vehicles, %	0	3		3					0	3	3		0		3	3
Flow Rate (V_{PCE}), pc/h	0	290		513					0	336	630		0		538	429
Right-Turn Bypass	Yielding				None				None				Yielding			
Conflicting Lanes	1								1				1			
Pedestrians Crossing, p/h	20								0				20			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)		4.9763	4.9763				4.5436	4.5436			4.9763	4.9763
Follow-Up Headway (s)		2.6087	2.6087				2.5352	2.5352			2.6087	2.6087

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h		290	513				336	630			538	429
Entry Volume veh/h		282	498				326	612			522	417
Circulating Flow (v_c), pc/h	538			1256			290			336		
Exiting Flow (v_{ex}), pc/h	0			336			920			538		
Capacity (C_{PCE}), pc/h		797	797				1091	1091			980	980
Capacity (c), veh/h		772	772				1059	1059			948	948
v/c Ratio (x)		0.36	0.65				0.31	0.58			0.55	0.44

Delay and Level of Service

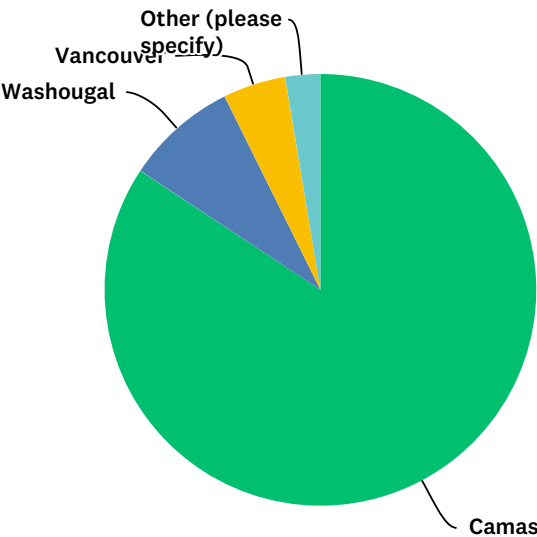
Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh		9.1	16.0				6.4	10.8			11.1	8.9
Lane LOS		A	C				A	B			B	A
95% Queue, veh		1.7	4.8				1.3	3.8			3.5	2.3
Approach Delay, s/veh	13.5						9.3			10.1		
Approach LOS	B						A			B		
Intersection Delay, s/veh | LOS	10.8						B					

Appendix D

Online Survey Results

Q1 Where do you reside?

Answered: 1,108 Skipped: 0

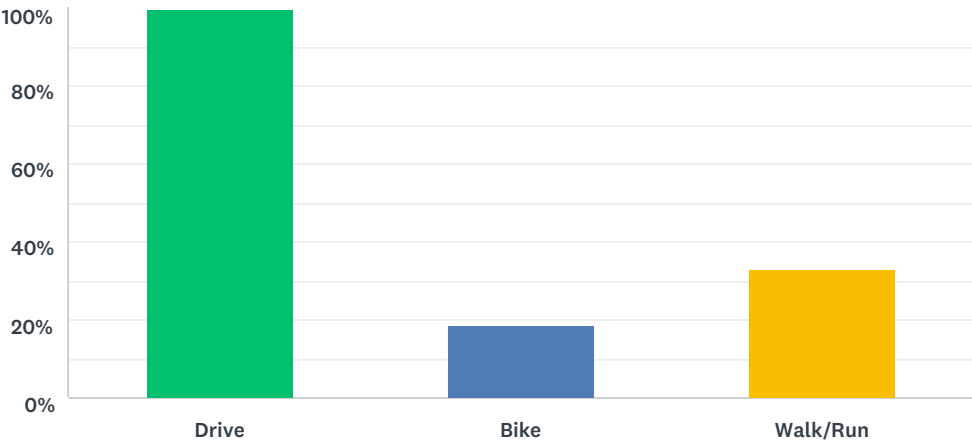


ANSWER CHOICES	RESPONSES	
Camas	84.30%	934
Washougal	8.39%	93
Vancouver	4.69%	52
Other (please specify)	2.62%	29
TOTAL		1,108

Where do you reside?	
Other (please specify)	
1	North of Camas but have Camas address and zip...
2	Livingston Mtn but I consider myself a resident of Camas
3	North Bonneville
4	Camas Produce
5	N. Bonneville
6	Just north of Camas city limits, north of Lacamas lake
7	Very East Clark County
8	Fern Prairie
9	Battle Ground was in Camas for 4 years
10	fern prairie
11	Portland
12	Livingston Mtn. area of Unincorporated Clark County
13	Clark County
14	Fern Prairie
15	hills north of washougal
16	outside Camas (Fern Prairie, near the airport)
17	Alaska
18	Boring
19	Reside in yacolt own house in Camas
20	Portland
21	Brush Prairie
22	Fern Prairie just outside "city limits"
23	Fern Prairie
24	Building home in Camas/Livingston Mtn; hope to finish by May
25	Portland
26	Camas Urban Growth Boundary - Clark County
27	Cowlitz County
28	Clark County
29	outside camas

Q2 Do you drive, bike, or walk/run through the intersection? (Select all that apply.)

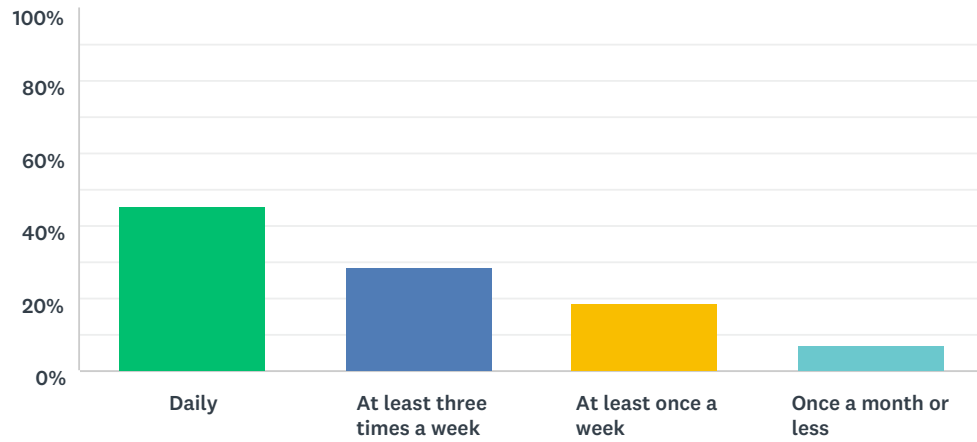
Answered: 1,108 Skipped: 0



ANSWER CHOICES		RESPONSES	
Drive		99.55%	1,103
Bike		18.68%	207
Walk/Run		32.85%	364
Total Respondents: 1,108			

Q3 How often do you use the Lake Road/Everett Street intersection?

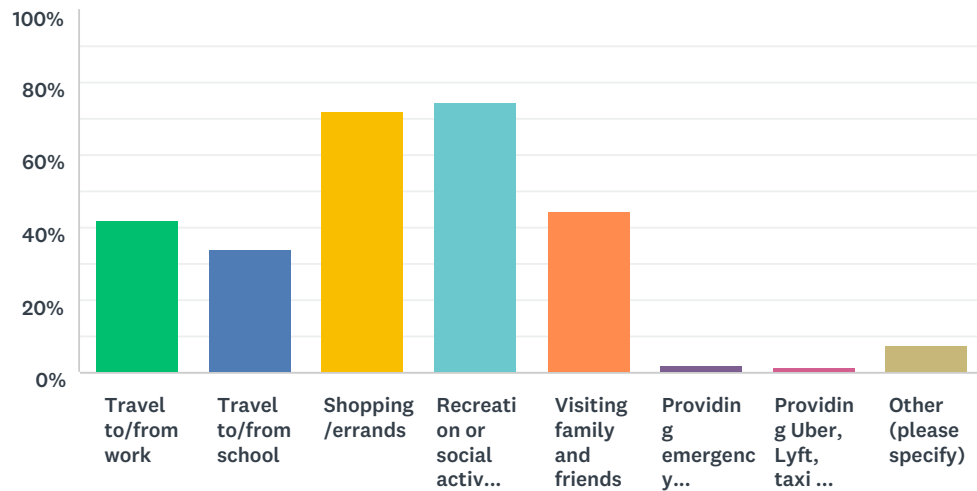
Answered: 1,108 Skipped: 0



ANSWER CHOICES	RESPONSES	
Daily	45.67%	506
At least three times a week	28.70%	318
At least once a week	18.50%	205
Once a month or less	7.13%	79
TOTAL		1,108

Q4 What reasons do you have for using the intersection? (Select all that apply.)

Answered: 1,108 Skipped: 0



ANSWER CHOICES	RESPONSES	
Travel to/from work	41.88%	464
Travel to/from school	33.75%	374
Shopping/errands	71.93%	797
Recreation or social activities	74.55%	826
Visiting family and friends	44.68%	495
Providing emergency response services or transport	2.08%	23
Providing Uber, Lyft, taxi or other rideshare services	1.35%	15
Other (please specify)	7.31%	81
Total Respondents: 1,108		

What reasons do you have for using the intersection? (Select all that apply.)	
Other (please specify)	
1	On way to recreate
2	Intersection lacks parking for recreation
3	Use it as an alternative route.
4	to and from Dr.
5	Preferred route through area. Pretty...
6	To and from doctor appt & Post Office
7	Travel multiple times daily through lake road and everette
8	Live around the corner from the Intersection
9	rides to medical appointments
10	owner of Camas Produce
11	Travel to my property, Travel to church
12	School bus driver for Camas Schools
13	Drive school bus for Camas
14	Dr appts
15	CSD activities, kid after-school activities downtown
16	Travel to and from church
17	Church and recreation
18	I choose to avoid intersection a certain times, when the high school let's out & rush hour
19	To get home
20	Getting son to swim team
21	I would love to drive this way but have found a different way because this traffic make me late.
22	I live there
23	Picking up from high school
24	biking (may be under Recreation)
25	Travel to soccer practice
26	Traveling to CHS to pick up student or attend an event
27	Church
28	Work
29	Library
30	Access to travel west into the gorge for roadtrips
31	Taking my daughter to preschool
32	Coast to Coast/ Camas Produce
33	Professional services
34	Attend Church
35	Travel to/from appointments
36	Picking up mail from Post Office
37	I want to
38	We use it daily multiple time only live a block away
39	Sunday to church
40	Drive school bus for Camas
41	High School activities
42	Camas school bus driver who lives on Everett very close to the intersection
43	Doctor & Dental appointments
44	For work
45	Main way in and out of town to hwy....

46	church
47	school bus driver
48	Going to the park
49	Going to church-related activities
50	It's 1 of only a couple means to connect Camas to East Vancouver.
51	Delivering products to customers, working with the deli to provide food for our business
52	I bike through the intersection 2-3 times per week as part of my training regimen
53	Church
54	travel to church & back several times weekly
55	Church
56	No particular reason
57	Doctor appointments
58	city of camas parks employee so frequent travel
59	to/from volunteer work
60	Selling real estate
61	travel to/from church
62	Walking my dogs
63	I teach in Camas and sometimes have meetings at the high school.
64	Charity work at community center
65	sports and to the freeway
66	Because it is a beautiful drive
67	church
68	Kid pickups/dropoffs
69	Church
70	To/from church
71	back and forth to town
72	Church
73	To hike the trails around Round Lake
74	Volunteering
75	Meetings at Lacamas Lodge
76	Volunteer at Lacamas park
77	Drive it for work multiple times a day. (School bus driver)
78	Going to the parks
79	Business trips
80	Library
81	Girl Scouts, Volunteering, Music lessons

Q5 What are some of the issues you've experienced with the current intersection?

818 responses

What are some of the issues you've experienced with the current intersection?	
I have a comment:	
1	Gets really backed up when the high school gets out.
2	Where is new parking
3	traffic
4	Long Backups in the morning. Long backups turning left on to lake road
5	Certain times of day traffic can back up well up Lake road
6	Back up and wait time
7	Traffic backup at current light is horrible
8	Long backup on lake road
9	Large amounts of traffic and backlog around school start/end hours
10	Park visitors park on the street create parking
11	Coming down lake road to shop at Camas produce making a left turn with traffic in the back is narrow, wider road to allow for left turn would be nice
12	Has no shoulders still people park at the stop light and go walking the park
13	Park entry by intersection does not have enough parking
14	Long waits to get through light, unable to turn out of LaCamas park
15	Traffic, lack of protected right onto lake road
16	Lots of traffic around school times
17	need to be able to left turn in to Camas Produce and Coast to Coast seafood cart!
18	Really long lines
19	Traffic back up
20	Traffic
21	Red light running to turn left
22	Long backups.
23	Traffic backed up. Not enough room for pedestrians or bikers on side of road.
24	Long wait times stopped at the light waiting for it to change and making left hand turns congestion. A round about might fix this. Also when you walk back and forth between the lakes parks it is scary because of all the traffic a pedestrian land bridge would be very beneficial for Walkers and bikers.
25	safety issue, need turn lane into Camas Produce.
26	HUGE backups! Also not always secure that oncoming cars will stop for my motorcycle.
27	Long waits to turn left from Lake. Difficulty getting in and out of the Round Lake parking lot. Parking insufficient in that lot.
28	Long wait times
29	long traffic delays...congestion
30	Traffic backups!!!
31	Long waits
32	Long wait.
33	Busy
34	Long backup on Lake Road to turn south onto Everett - turn lane is blocked by traffic turning north.
35	Mostly it is after or before school when the traffic is so heavy.
36	Significant traffic congestion.
37	Some days there are a line of cars on lake road trying to turn left.
38	The traffic gets really backed up, causing delays. There's too much traffic for so many people.

39	Opposing traffic sometimes doesn't yield to left green light vehicles
40	Large backups, especially around school start/end times
41	Occasional traffic (school time), otherwise no issues.
42	Long line of traffic going eastbound on Lake Rd at times
43	It can get pretty congested at times.
44	Traffic at beginning/end of school day
45	Too many people
46	I don't always make it through the light and need to wait for the next one.
47	it gets really clogged and backed up in the morning school commute times
48	No issues. Certain times of day the traffic backs up on lake road usually around 6pm. I turn right to go southbound on everette. The signal is good but if the right turnlane could be extended that will help
49	Extremely slow during school bus peak hours. and foot traffic crossing is difficult.
50	Trouble turning left from NE 35th onto Everett going south due to backup in traffic.
51	terrible backups during school commute. why don't they use busses we pay for?
52	Busy with highschool traffic in morning and afternoon, busy in evening when commuters come home
53	Crossing Everett as a pedestrian
54	I use my bike from neighborhood close to the high school to go use the park by the lodge or shop at Camas produce there is no safe way to get to Camas produce unless I go the wrong way from the stop light
55	intersection by a park limited legal parking, no access to local businessss
56	Congestion
57	safty issues for Camas Produce's customers traveling south and trying to make a left turn to shop at Camas Produce.
58	traffic backs up very quickly
59	Backups and delays
60	Long backups
61	At school start end times it can back up for a 1/2 mile at least
62	No issues, I'm patient!
63	Long waits during school dismissal times
64	Backed up, had to wait for more than one light cycle.
65	Not widen enough from Lake Rd to make a right to Everett, coupled with people not knowing they can make a right on red.
66	Is frequently backed up.
67	I walk at Lacamas Park (at Round Lake) several mornings a week. Turning left out of the parking lot is difficult at the best of times. It will be nearly impossible if a round about replaces the stop light.
68	Too small for volume of traffic.
69	Bad cross walk, congestion, poor sidewalk,
70	Congestion
71	Traffic backed up
72	Large backups in the morning and after school.
73	Actually, I have no problems with the intersection
74	There can be a lot of congestion build up. Also, people turning right from lake often get stuck behind the long line of cars turning left, making congestion worse.
75	Traffic backups at the light; concerns with people walking

76	No way to downtown if the traffic is backed up.
77	Traffic
78	Occasional major traffic delays; highly un-optimized walk signals
79	Speed of traffic, no sidewalks, flow
80	Congested flow of traffic.
81	It is a bottleneck for those turning right into Lake Rd as well as everyone coming from Lake Rd.
82	Extreme back ups during school hours. Unsafe for bicycles and pedestrians because of no sidewalks along Everett.
83	Poor bike crossing
84	Backups and extremely long waits.
85	Very long waits after school and in the afternoon
86	hard to cross the road as a pedestrian; hard to use bike lane as a biker
87	It can back up during school related times, beginning of school day or sports events.
88	Long delays
89	Excessive traffic during morning and afternoon commute times and special events
90	Long lines at peak times
91	Traffic congestion
92	Long wait times to make a right turn from Lake onto Everett.
93	A lot of traffic after school
94	Backup of traffic in all directions, long delays
95	During certain times traffic can be backed up making a wall of vehicles.
96	Long lines backing up Lake Road
97	Back up issues in the morning and afternoon school commute
98	Traffic delays
99	Unsafe u turns when traffic backs up on lake road
100	Long delays. Especially frustrating when there is a huge line of traffic on one road and little traffic on the other and yet the signal doesn't seem able to adapt to the changing traffic patterns.
101	Excessively long wait times to pass through the intersection at various peak times of the day, e.g. before and after high school begins/ends.
102	Congestion, limited visibility
103	the light takes a long time, and is pretty chaotic. people make many illegal turns
104	There are too many cars coming into town from both the lake road and out of from the high school area
105	Would be nice to have a pedestrian bridge.
106	It takes forever and causes traffic and is constantly super congested and it sucks and I want it GONE
107	Long waits
108	Vehicles are backed up too long at the Lights
109	When I was a nanny in the 1st neighborhood to the left on Lake Rd. I would see almost on a daily basis Camas High School teenage drivers run red lights. Also the congestion from people going to and from the schools from those neighborhoods off of Lake Rd. is awful. One time it took me 45 minutes to get from there to my house in the Goot Park neighborhood where I have lived for 20+ years. That's when I started taking the long way home.
110	Everett is not 4 lanes. That's really is the biggest issue here. All else would work itself out

111	Long lines/wait times. Trying to take a right onto Everett is a nightmare, especially getting stuck behind everyone waiting to take a left.
112	Long waits during school hours
113	Wait is too long
114	Congestion during peak school commute hours
115	Usually none, except when school gets out at the high school or other times when traffic is higher, it gets backed up.
116	I walk Round Lake & can't get out for many minutes if the school traffic is occurring. Young drivers often make poor choices from what I've seen (high school kids.)
117	Long waits
118	no right turn lanes
119	Difficult for pedestrians or people on bikes on the side near the lake and lacamas lodge
120	Traffic during school opening and let out time is bad.
121	Roundabout would keep traffic moving smoothly. Left hand turn from downtown West is should not be blinking; too much traffic.
122	It gets extremely backed up before school/when school lets out.
123	Major congestion backing up on Lake street. A right turn lane there would alleviate some of the problem.
124	Morning and afternoon traffic to/from Camas High causes major delays.
125	heavy traffic during school start and end times
126	Traffic - bad backups on Lake Road when there are activities at the high school.
127	back up because of turn,extra cars due to schools
128	Very backed up in the morning commute
129	Long wait at stop sign
130	Too many cars trying to go in one direction and not enough lanes.
131	I live not far from this intersection. We cannot get out of our street during congestion. The wait times can be very long.
132	Delays during heavy traffic times.
133	Too much congestion during school hours. Too much congestion and not enough planning/parking or code enforcement during the Lake's Spring/Summer recreational months. It is out of control!
134	Narrow Road, long waits due to highschool traffic and no room for bicycles.
135	I don't have any issues.
136	Back up on Lake Road and the back up on Everett from the high school
137	Long lines to turn left onto Everett from lake road.
138	Before and after school hours it becomes very congested. It also very hard during anytime of the day to enter or exit round lake parking lot.
139	Extensive traffic that lacks effective flow. There is also significant mixed congestion between cars, buses, pedestrians, runners and cyclists. I think that a way to separate non motorized traffic and pedestrians in crossing the road and lake is essential. Perhaps a separate bridge but certainly not using the same road or roundabout. That is inviting accidents.
140	The back up on lake road from the school is the challenge - from the backup of the light turning from high school, then getting backed up onto Everett. Maybe a turn lane onto lake would help? Or a updated light sequence? Thank you for asking
141	Not much

142	If it is when school is letting out, I will get caught up in a masjid traffic jam. I try to leave the area before then.
143	Long delays
144	Delays
145	The intersection has always been perfectly fine with the exception of when there has been construction. However, I never travel this route during morning rush hours.
146	Lack of sidewalks on BOTH SIDES of Everett Street. Look where people already walk. Sidewalks should go all the way from high school to downtown Camas.
147	The backups on lake road heading towards Everett can be lengthy causing traffic to wait through several lights to turn north on to Everett.
148	Get's crowded during school commute but never too bad unless there is construction.
149	Hoping roundabout is strongly considered. For either option, hope most effective design to create safe travel is used, even if private property needs to be acquired. Now is the time to make this intersection effective for the heavy traffic flow. It is not going to decrease, only grow.
150	No parking, to much traffic always backed up, to many people on bike and no sidewalks, people going around other cars in not a lane waiting for the light, need wider turn lanes
151	Traffic can often be backed up west of Everett all the way to lacamas lane in the morning. I have seen it backed up all the way to Sierra.
152	We live off 35th and the congestion that happens in the morning and evening makes it almost impossible to get out onto Everett. Please keep that in mind for those visiting the lake and the 30 homes that must use 35th to get to and from home daily.
153	Lots of backed up traffic.
154	To many cars, not enough lanes, short lights
155	Traffic backs up. Confused drivers.
156	left turn from NE Lake Rd. to NE Everett is so long on waiting during peak hours in morning
157	Traffic congestion, long waits on lights
158	Waiting too long at that intersection, especially between 3 p.m. and 5 p.m.
159	Congestion @ long wait times to get through the light
160	Long waits to get on Everett from Lake
161	Long lines of traffic when high school lets out.
162	Long wait to turn
163	stay away b4 school and after. traffic backed up past light to high school
164	Lake Road gets backed up too far
165	There is congestion and backup at certain busy times but I'm not sure a roundabout would solve the issue. I see potential for more accidents plus all the trees and beauty that would be destroyed in the process.
166	Traffic
167	Long wait times at the i tee section during rush hour: school start times and after school, Friday night event times.
168	Blind spots. Crossing the streets is not safe for cyclists and Pedestrians
169	I often cannot safely turn left on to Everett from 35th in the morning going to work. Its then very difficult to turn right on to lake road b/c there is no turn lane. I cannot get home easily because in the afternoon cars/traffic is backed all the way up lake road because the intersection is so busy. It's not safe for drivers, hikers or bikers. Please do something.

170	When the high school lets kids out at the end of the day, traffic between Leadbetter and Lake is horribly backed up. Also in the evening when people are getting off of work, there is a lot of congestion.
171	Safety issue...Turn Lane needed for Camas Produce.....you have to understand and respect that all who shop there deserve to be safe...also that we support local business...THAT is key to our area.
172	Excessive traffic, especially weekend and after 3:00pm
173	Congestion during school commutes
174	Sharp turn in narrow area without enough warning. Long wait times.
175	Lots of traffic
176	Congestion
177	Heavy traffic
178	Traffic Congestion
179	Really long line on Lake to turn onto Everett
180	Traffic congestion
181	Turning left onto Lake road can be tricky
182	Cars parked along road bc parking lot too small for the lake. Narrow road and too many vehicles
183	WAAAY too many cars coming/going from the schools. They should use the buses, since taxpayers are paying for the buses. This would alleviate 80 percent of morning and afternoon traffic. Then we wouldn't have to waste money on "improvements".
184	Long wait times dictated by Camas High School schedule.
185	Very long delays when school is letting out
186	The school traffic
187	Illegal street parking causes unsafe conditions need more parking by the intersection
188	the amount of traffic during school times.
189	Traffic backed up long distances on Lake Rd. Blind right hand curve by Lacamas Lake Lodge. Long waits at traffic lights.
190	Traffic backs up
191	Long lines of traffic - people not paying attention when it's their turn to go.
192	The back up waiting for a green light
193	Traffic backs up pass turn to CHS in the afternoon as late as 25 minutes after school dismissal. When warm weather kids running and having fun by the lakes, but not paying attention to traffic.
194	It gets pretty backed up with traffic in the am and afternoon due to school, events, etc. I'm concerned about the environmental effects of the traffic.
195	I have had no issues
196	Backed up traffic
197	Long waits, stupid congestion for our once small town...frustrating
198	Traffic
199	Common answer: traffic delay. A roundabout won't solve it! People needing to go north on Everett from lake will NEVER yield during busy times! It will be worse then the light.
200	Long wait times in am and pm
201	Mostly backups. Hard to cross.
202	Long back up during school starts/dismissals
203	Ability to leave the parking lot at Round lake safely heading towards the Everett/Lake Road Intersection

204	Excessive wait times at certain hours. Also bike and pedestrian access takes time and requires care.
205	Traffic
206	Several times I've almost been side-swiped while on my bike by a car entering the bike lane. I try not to drive to Lacamas Park for several reasons but this is a dangerous intersection for cyclists. Also, I've gotten stuck in traffic on Lake Rd. like many other motorists.
207	Coming in from Lake Rd is congested.
208	Long delays during school pick up/drop off.
209	Traffic backed up from CHS to Lake road during school start/end times, also long back ups on early evening when people are coming home from work
210	It's terribly hard to ever turn out if the park lot because of the intersection. Also, there is an extreme backup every morning due to Camas HS traffic and the fact that it's a one lane road! It is far too long of a wait and is a dangerous intersection for new teenaged drivers to have to try to rush through to get to school since the wait is so long!
211	Large backups during school to and from hours.
212	Backed up traffic and unsafe running/biking conditions for high school athletes or commuting students.
213	Slow traffic (from Camas High School) and construction slow downs
214	impatient drivers on red light rt turns, inability to see approaching traffic
215	Heavy traffic before and after high school.
216	Heavy congestion.
217	Long waits, usually coming down Lake Rd
218	the backup at the intersection goes all directions. Time has to be added on to any trip to that area. Getting onto Everett from side roads is a pain and is dependent on someone (s) being nice enough to let you onto the road.
219	Long waits at the light during peak travel hours.
220	Such congestion now especially since Camas High was built. I lived in the area for 25 years, never seen it so bad. Round about may just work good.
221	None really. A little busy at peak hours.
222	I have experienced long delays because of traffic in almost all directions of the current T traffic layout. Long delays when taking my son to the high school (going North) and longer delays when returning home (going South) I have experienced delays when going west on lake road from Everett and going east on lake road during "rush hour" trying to get to Everett. Using the Lacamas lake recreation parking area is not easy during these hours.
223	Long traffic delays. Tight spaces for cyclists.
224	Too long of wait for lights because of usually school buses
225	There needs to be a right hand turning lane at the very least. (Going from lake road onto Everett). Really needs to be a three lane road but I dunno if that's possible in that small space.
226	There are no problems except to avoid between 3:10 and 3:40. Otherwise fine.
227	long back ups on lake rd turning south onto Everett.
228	Traffic jam
229	Long delays on Lake Road, backed up traffic both ways
230	Traffic before/after school
231	Long delays during CHS start & end times. Accidents often increase during that time frame. Weekends are difficult with park access and parking along the road.

232	Need easy access to camas produce form the roundabout
233	Traffic
234	Turning through busy traffic. Trying to exit the park lot is difficult as well.
235	Heavy traffic. Come to a complete stop. A roundabout would be more efficient
236	Need defined turn lane from south bound to west bound
237	I want to make sure that there is continued easy access to Camas Produce as I have to turn there for work in my truck.
238	Cars being backed up in ridiculously long lines waiting for the light
239	Long wait, heavy traffic
240	"Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce".
241	Heavy traffic
242	I avoid it if it's around or after 5pm
243	I work at Camas High School. It is very crowded in the morning when students are arriving. Sometimes it backs up Lake Road past the boat ramp parking lot at Lacamas Lake. I think I've had to cycle through 5-6 light changes to get through.
244	Traffic congestion.
245	People trying to turn right from lake road to everett get caught up with people turning left onto everett bc the right turn lane isnt long enough
246	Heavy traffic
247	Many of the issues with this intersection stem from stupid drivers.
248	Traffic backed up on lake road
249	Long lines waiting for light to turn at traffic times.
250	Occasional conjection at peak times, but it's not that bad.
251	Long backups at the light.
252	Sometimes it's ambiguous for drivers to know that I am there as a cyclist and that I should have a turn, too.
253	Longer lines of cars backed up onto Lake around curves; people aren't expecting to stop suddenly; too many cars parked on Lake and Everett in summer for park parking; too many pedestrians and bicyclists on roads where there isn't space
254	During peak times the wait is excessive
255	Impossible to turn left from lake rd onto Everett unless a car is doing the same. Also, Everett is backed up all the way to the stoplight when the high school gets released.
256	Traffic flow is an issue
257	Back up on Lake Road
258	Extreme traffic backups
259	Long wait time on stop light when people cross the road. It seems 10 seconds too long. Line moves slowly due to congestion. No right hand turn lane onto Lake Rd coming from the high school so have to wait for car in front who is heading south to move forward.
260	Long wait times at signal
261	Often there is a backup but coming around the curve makes it hard to see.
262	Very busy during school hours
263	Severe back ups during school start and finish times.
264	Enhance entrances at the park and Camas Produce
265	Cars are backed up past 43rd intersection
266	heavy congestion with school traffic twice daily
267	Congestion from high school traffic before school starts and after students are released

268	Long waits in all directions especially during rush hour and the high school start and end times.
269	Extreme traffic congestion. Trouble accessing back onto either Lake or Everett from parking lots due to heavy traffic and traffic backups.
270	Traffic congestion
271	Waiting when there shouldn't be a wait if turn lanes existed. Not being able to easily get from round Lake to lacamas lake by way of walking.
272	Traffic Jams
273	Back up onto Lake road having to wait 5+ minutes
274	Worried about getting into Camas Produce without a turn lane, please consider it for everyone's safety!
275	congestion
276	Gridlock during bus route activity
277	Traffic and backup in morning
278	The light at the high school is not synchronized and causes problems. There is no sidewalk for folks walking up. There is no bike lane when coming down lake road and I am forced to use the pedestrian crosswalk because cars do not respect a bike in this intersection
279	hard to turn into and out of Camas Produce
280	Not many issues, but occasionally some backups during peak times
281	Increased congestion. Speeding.
282	Whenever CHS have events, the intersection gets congested and it could take 30 min to get through. Morning and after school traffic is really bad. Also, we could use a pedestrian/bike bridge instead of pedestrian Cross walk so it does not disturb the traffic flows.
283	Safety Issue: Please provide a turning lane for us to turn into and out of Camas Produce. Thank you
284	high traffic volume in the morning afternoon. I've seen cars backed up all the way up the hill, by the old Lacamas Heights school.
285	Difficult to turn right onto Everett due to traffic backing up on Lake Road, many of whom are waiting to turn left.
286	major back ups especially when the schools let out
287	Not safe and not enough room for cars, walkers/runners and bikers to use it safely
288	Mainly I have issues trying to turn left onto Lake Rd from the Heritage Parking Lot. I also think there should be more trail hiking car parking there.
289	very high traffic volumes in morning and at mid afternoon when high school lets out. Also, there needs to be a right turn lane for the transition from 500 to lake road. A good portion of the traffic on 500 at that intersection turns onto Lake Road, without a turn lane traffic backs up significantly. I think the volume of peak traffic will make a round about unsafe and will result in a higher accident level. I've noticed that since the population has increased drivers are more impatient and tend to drive more recklessly than a few years ago. I think a round about at that location is the wrong solution. Given the traffic levels and the lake access by pedestrians crossing 500, a positive control traffic light intersection with a right turn lane onto Lake from 500 south bound is the only safe solution to the increasing traffic at that location.
290	Long waits at the light, especially when there is road work going on.
291	Traffic backed way up in both directions. After HS gets out it's a mess.

292	The left turn lane going from Lake Road to Everett has a disproportionately slow light, and it backs up traffic. The design of the road also makes it so that very few cars can turn left at a time. Meanwhile, the light that goes straight on Everett is green for too long when there's much fewer traffic on that side.
293	Green light time from lake road is disproportionate to the green light time on Everett from downtown to the high school
294	A lot of traffic
295	Traffic waiting to turn left onto Everett block traffic turning right.
296	Traffic
297	Very long waits, anxiety crossing the intersection by foot
298	Long traffic lines producing a wait that last de real cycles. Traffic turning into Camas Produce creating backups. It is very difficult to turn south out of Camas Produce, a popular store.
299	Concern for pedestrians and cyclists
300	no problem other than long wait at light
301	"Safety issue. Please provide turning lane for customers coming to Camas Produce through the roundabout.
302	Long delays and no turn lane into the produce store
303	to much traffic, mostly when the high school lets out, you can't get through the intersection for several lights, then evening rush hour is the same thing again..
304	Traffic backup
305	People not knowing where they are going and change lanes at last second.
306	Left turn going to Lake Road if your coming from NE Everett St. is very difficult especially if lots of vehicles coming from the other way.
307	Delays at certain times of the day.
308	It is so backed up it takes triple the time to get where I'm going
309	the largest impact currently is when you are turning left off of Lake Rd and are unable to since the pedestrian light has stopped traffic. I understand this is for safety but it really backs up travel and I have seen too many people get impatient about waiting, then they make poor choices.
310	Traffic. Longer than desired wait at lights especially pre and post school times.
311	Overall it's pretty smooth. Big backups during school drop off times.
312	Major traffic jams similar to a large metropolitan city which is where most of the people causing the traffic and problems have come from
313	Very high traffic at certain times-related to school it seems
314	Backup on lake road past the park area. Delays during Camas High school start and end of day.
315	safety. need turn lane to Camas produce.
316	Slow traffic at times, like commuting hours and when when school gets out.
317	Long waits to turn left primarily from Lake Road to Northbound Everett and vice versa. Seems to be most problematic during school start and end times and 5:00 PM commute
318	Long wait times during certain times of day
319	Long line- back up when coming down Lake, turning into Camas Produce - please provide a turn lane into the store.
320	Delays
321	Safety. Turning lane for camas produce
322	Long lines at signal

323	Traffic congestion due to Camas High School.
324	no problems ever at this intersection, and ive delivered mail on this route. i hate roundabouts though. ive been nearly hit many many times in the dumb Washougal roundabouts. if you install that terrible looking roundabout, traffic on everett will never stop for lake road trafic, creating a traffic nightmare and many accidents.theres a place for traffic lights, and this is one of them.
325	Please provide turning lane to Camas Produce for people coming from the roundabout to shop at Camas Produce. This is a serious safety issue and should not be ignored.
326	Traffic gets backed up especially on lake road when there is extra traffic from schools just getting out
327	Please provide safety studies on roundabout use versus traffic signals.
328	Please provide a turning lane into and out of the Camas Produce packing lot.
329	City did not think ahead about moving the high school, increase in population, and the volume of traffic on a 2 lane road. Bad planning on the city's part. I suggest widening 500 from Leadbetter rd to 14th and making it 2 lanes in both directions. Let's not do the same mistake as the slough bridge over the Columbia and say that you are winding it then "runout of money", then settle for 2 lanes again. No improvement in traffic flow.
330	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce
331	Traffic and bad pedestrian & bike access. Dangerous Shoulders.
332	Cross walks not be available around the entire perimeter of the intersection.
333	I have to allow extra time during school hours, but it didn't bother me, since the traffic is fairly short lived.
334	Grid lock at certain times
335	Safety- please make a turn lane for camas produce
336	Delays in the morning due to heavy traffic. Weekends and other times seem to be fine
337	There needs to be a turning lane. When traffic is busy, I can't get out of my driveway.
338	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce". P
339	congestion
340	Traffic, unsafe for pedestrians and bicycles
341	Long wait times. Overall poor planning by those who decide on the infrastructure.
342	Back up when school is let out
343	Long lines at light
344	I live by Camas high School and travel South for work and visit Camas produce for my daily food run, current left turn is a pain, wider road with a left Turn to enter Camas Produce would make me feel safer, and more parking for the park would be awesome to have
345	it is very conjested
346	Long lines get through the intersection or getting in and out of the parks.
347	At peak times, the light only lets 7 cars through at a time and it's not fast enough. People turning left off of Everett onto Lake Road usually cut the corner
348	Walking space is very limited in general
349	Vehicle congestion. Too many vehicles for the area. Bike riders going around vehicles to get where they are going faster. This is Not safe for drivers or riders.
350	Traffic being backed up and unable to turn left on Everette from Lake
351	Busy during school commute
352	Long backups during school start and end times.

353	Too many parents drive kids to school instead of using buses provided by school.
354	Certain times of day the delays are very long.
355	excessive wait times during morning school rush
356	Traffic backed up; pedestrian access
357	Extremely congested at school let out time
358	Noticeable increase in congestion during school days, before and after school hours.
359	Congestion during school commute is sometimes a 20 min wait
360	Heavy traffic when the high school begins and ends and heavy traffic about 4:30-5
361	Cars backed up on Lake Rd. past Lacamas Lane to get through the left hand lane. Pedestrian/bicycle congestion and parking lot overload which creates unsafe driving due to visual obstructions (parked cars at intersections)
362	While Camas doesn't really have a congestion problem, this intersection is severely impacted by school traffic on weekdays.
363	Waiting in long lines to turn onto either Lake Rd or Everette especially before and after school. Why wasn't something done when the schools were built that are causing the traffic issues. Plus all the home construction has made Everett a very busy road.
364	Long wait times and congestion
365	At the stoplight, the left turn lane fills up (especially when a bus is present) so that all southbound traffic is held up as far back as the intersection uphill.....a continual problem. Cars wanting to make a right turn at light are waiting for as long as 9 signal light cycles.
366	back up around the lodge during school drop off and pick up hours
367	Long delays - backup of traffic
368	Long delays
369	Too much traffic.
370	Too much congestion
371	Traffic
372	Long back-ups on Lake. Long wait for left turn from Everett to Lake. People running the light on Everett.
373	No pedestrian crossing at Fallen leaf park entrance
374	500 coming from the north gets backed up
375	Can be very crowded during school arrival and release hours. Also in the warmer months when people are using the facilities at Lacamas.
376	too narrow, needs a right turn lane for south bound Everett. Sometimes light is red for my direction for long time and there are no cars crossing through green lights
377	Get behind the school kids and it is a long, long wait
378	Back up traffic.
379	Long wait times and traffic backups on Lake Road.
380	Living in the Lacamas Summit development it can be difficult getting on to Everett when the high school students are arriving for or departing from school.
381	what ever you do don't put in a round about they are dangerous I have seen first hand accidents on those roundabouts
382	Long waits, hard to get out of Round Lake Parking Lot
383	Lack of sidewalk for safe pedestrian access. Hard to pull out of Lacamas Park parking lot heading south due to long strings of traffic coming from the high school. Large back ups in the morning on Lake Road and in the afternoon on Everett due to kids trying to get to and from HS. Difficulty getting to the right hand turn lane from Lake to Everett (southbound) due to too many cars wanting to turn left.

384	Getting to school and getting home from school it is very crowded.
385	When approaching from the west on Lake road I find the turn lane for going south often blocked by cars wanting to go south on Everett.
386	Not adequate enough to handle volume of traffic - long waits at light due to backups, congestion
387	I bike through the park and if you hit traffic it takes a long time to cross and go towards lake road
388	Traffic backed up all directions certain times of day
389	Long backups at peak time
390	No problems
391	Traffic backups on Lake Rd and along Everett north of the intersection. 7-9 a.m. and 2-4 p.m.
392	Blinking left turn signal is a great idea
393	Delays due to traffic volume and the light signal cycle.
394	I plan around peak traffic times to avoid congestion.
395	Unsafe for the growing population. Long wait times at lights.
396	congestion from school traffic
397	Traffic jam during school drop off/pick up
398	No issues
399	Too many speeders!
400	traffic backed up before and after school weekdays
401	Traffic and long lines at the light.
402	I am retired so it doesn't bother me to wait at the intersection "at this time". My concern is the lack of infrastructure in this area for the hundreds of existing homes and the hundreds more in the planning. No matter what is planned for the intersection, it will never solve the future problems that are inevitable, unless the matter of infrastructure is addressed. That said, I would be more in favor of the signalized intersection because the round about seems a bit large and confusing for the area and the signalized intersection appears to leave more of the tree canopy to the east. I would hate to lose the beautiful forest ambiance.
403	Long backups on Everett heading south and on Lake rd turning left onto Everett.
404	Long waits in traffic during certain parts of the day.
405	Obviously it gets very backed up before and after school every day. Before I was a school bus driver I'd go all the way around the lake via ledbetter because that was still fast than dealing with the traffic
406	Traffic backup
407	Vehicles cutting the corner from Evertt onto Lake Road
408	Traffic is horrible before/after school, as well as during Summer months in morning and late afternoon/evenings
409	long delay from Lake to Everett north or southbound
410	heavy traffic, related to High school, Lake road and Everett
411	Cars not entitled to go through the interdection on Everett coming from the North drive through the intersection against their red light when they see northbound cars are turning left on their green arrow.
412	Heavy traffic at times. Especially when everyone is heading to the high school
413	Long delays heading from lake to southbound on Everett due to long line of cars in line to turn left onto northbound everett.
414	Crowded, long lines

415	Congestion
416	long traffic queues eastbound and southbound into the intersection
417	traffic
418	Long waits during busy commute times.
419	Long waits for lights lots of traffic thanks to the schools and neighborhoods being put out here....
420	Long wait time to get through light
421	At release time for CHS, I have frequently experienced extremely congested,slow traffic.
422	Hard to turn into produce store . Needs turn lane . Long line from lake road to 500
423	Back up of traffic during high school start and end
424	Long wait times during peak times
425	Crowded; long lines at light
426	the line up of traffic is horrible, and it is a dead stop. I have almost been in an accident because the traffic is stopped without any warning.
427	Congestion, poor access to & for parking in the area, delays
428	Traffic delays and congestion
429	Turning left/right on Everett Am/pm with school traffic
430	long lines turning south onto Everett from Lake Road eastbound
431	Major traffic back up at light
432	Many vehicles, long waits, difficulty getting into right lane to turn right, failure of vehicles to wait for pedestrians, risky left turning for bicyclists
433	Traffic at school travel times.
434	Lots of congestion...especially with school events and start/stop times of school
435	Traffic backed up when school is starting or ending
436	long lines at times
437	Terrible for pedestrians and bikes.
438	Mainly crossing as a pedestrian or bike rider. Going S. from the intersection on Everett there is not a good way. Traffic can be a little backed up as well.
439	Backups during busy times of the day
440	Traffic backs up all the way to CHS after school lets out. Traffic is backed up Lake Rd before school and during rush hours. I often use alternative routes which are longer, just to avoid long waits to get through the light.
441	Long wait times at the light when High School is about to start or end.
442	I have no issues with this intersection
443	When coming into Camas on Lake Rd. and trying to turn right there is a massive pile up because the right hand lane is blocked when more than 3 cars are in the left hand turning lane.
444	Hard for bikes and walkers to cross
445	S bound Everett gets very backed up - most of the traffic turns right onto Lake Road, but because the turn lane is so small, they must wait at the light with the rest of the south bound traffic. This is also an incredibly unsafe intersection for pedestrians, especially during the summer with high traffic flow and high pedestrian usage. Needs to be a better separate pedestrian path from round lake parking to lacamas lake parking.
446	Lane needed to make right turn from Everett onto Lake
447	Backed up on a regular basis in General, especially during CHS hours. Cannot turn right onto Everett from Lake Rd when congested.

448	Traffic backs up before and after school. The intersection also lacks sidewalks as a walker heads towards downtown Camas on 500, which can be dangerous for a walker.
449	Left turners cutting corners, all running red lights (true of all intersections not just this one)
450	excessively long lines of traffic, especially when the schools get out. Lots of potholes... everywhere!
451	Traffic can be backed up almost to the Lake Point neighborhood at times on Lake Rd. Causes you to be late to events.
452	It gets extremely backed up during the school commute—both to and from.
453	extensive congestion in morning and afternoon
454	Long lines. Long waits. Speeding on lake road.
455	Traffic back up. School related.
456	There are only issues during school-related events (when school is starting or getting out, or big events held at CHS).
457	Always backed up and difficult to get through while school is starting and over
458	Major delays during school start/stop times. I try to avoid making appointments that require travel thru this area (N shore is my only other option) during these times. Also the park parking lot does not serve its needs. Move it to Crown Road !!!
459	Complete congestion during high school pick up and drop off
460	Long waits, especially before and after school.
461	During High School Start/End times the traffic is horrible. Also during high summer the amount of people going to the lake increases. During rush hour there are also more cars coming from Lake Rd which can back up pretty good.
462	The turn lane is not long enough to hold all of the vehicles which creates a huge backup very quickly when traffic is heavy.
463	Traffic backups during mornings and late afternoons when driving on Lake Road headed toward Everett.
464	Clogged during HS drive times and big sporting events
465	Congestion
466	Currently the intersection is fairly safe for all users. Traffic does seem to back up more than what I'd expect for a town of our size.
467	That the road is always being worked on.
468	Too much traffic and speed!
469	Traffic bottleneck and biking walking between heritage and lacamas park
470	Traffic backs up. Trails need connections so pedestrians don't walk on road
471	Nothing is wide enough for capacity needed.
472	Taking Left from the Round Lake parking lot can be tricky with intersection and cars/traffic heading south on Everett.
473	Tremendous backup particularly at times when school is starting/ending
474	It gets super backed up with students before school and after.
475	Traffic buildup, needs better pedestrian access.
476	Grid lock during school hours. Feels unsafe to use exit park.
477	Long wait time to get to CHS in the morning!! Long wait!!
478	Only feel effected at high traffic times. A bike path or sidewalk seems would be helpful
479	Bottle neck at stop light. Long waits to turn North from lake road onto Everett
480	Lake Road should be widened so you can take a right onto Everett when waiting at the light.
481	General congestion

482	Heavy congestion
483	Long delays and back-ups to the Heritage Trail parking lot or north half way to the light at the high school, people running red lights
484	Depending on time of day, it can be pretty bad.
485	Long delays mornings and evening
486	backup of traffic up Lake and up Everett during peak hours
487	None really
488	Very busy. Risk for accidents due to speed, visibility, and need to cross traffic to turn on to Lake from Everett.
489	Ridiculously long backups during school start and release times or special events at the high school.
490	Long traffic lines, waiting for light to change
491	Excessive delays when high school lets out
492	Too much traffic. And when people crossing no traffic is moving. Lake road needs a lane to turn right but the left turn lands is backed up. Student drivers.
493	Too much backup on to Lake Road & Everett during peak hours
494	Long waits.
495	Traffic congestion
496	Traffic back ups;
497	Hard to turn right when heavy traffic going left from Lake onto Everett
498	Congestion
499	I did not feel safe walking along the street where there was no sidewalk. The cars speed around the turns.
500	Traffic backed up halfway around Lake Rd during certain times and very limited parking by Round Lake. Hard to pull out left from the first neighborhood across from the auto repair shop when there's traffic. No safe walkways!
501	Long wait to get thru intersection, usually due to chs traffic, occasionally due to work commuters
502	Congestion, tight spacing
503	Long delays during commutes and other times
504	I grew up in camas and cannot think of a time I've ever had an issue there.
505	In the mornings and evenings the traffic backs up onto Lake Road and it can rake up to 20 min to get thru the light.
506	Back up down lake road because of the turn lanes at the light
507	NO ROUNDABOUT Please!
508	The traffic is really backed up do to the high school traffic
509	Extended traffic & safety
510	Congestion
511	Traffic will get backed-up frequently as students, teachers and parents travel to Camas High school in the AM, during lunch break and again when school lets-out in the late afternoon
512	Congestion
513	long backups at the light, used get stuck trying to take my daughter to the high school and back.
514	Extreme congestion, walking light that lasts too long, left and right turns onto Everett are often blocked by an excess of cars turning the opposite direction

515	Long waits during school hours or after 5:00 pm. It can also get super busy with pedestrians during the summer months.
516	Long backups
517	There aren't enough lanes to handle the amount of cars using the road on a daily basis.
518	Difficulty crossing as a pedestrian in a safe manner. Long back ups when I drive during rush hour
519	Congestion during summer
520	Traffic backup at light
521	When sitting at the light to turn left onto Everett, vehicles making a left turn onto Lake Rd. try to cut the corner too close and nearly hitting the front end of the first car. If there were a way to change the lines or something to have those drivers take the time to make a wider turn and not cut the corner would be good.
522	traffic stopped not moving
523	Lots of traffic during hs start and end time
524	Long, long lines
525	Really busy certain times of the day. So I plan my activity around that. Same as going to Portland.
526	I avoid the intersection during peak school hours or during high school events, but I would otherwise use the intersection 7-14 x /week if the traffic flow was more predictable. Also not a safe bike/ped corridor
527	Huge backups at start and end of school. Almost impossible at times to make left turn from side streets - 21st during those times
528	Red light runners; congestion; bicyclists; pedestrians
529	Back up during school starts & ends
530	With one lane in both directions, the line of cars backs up past 43rd during key travel hours
531	traffic lights cause a gridlock back up at certain times
532	Traffic is horrible at several times of the day. With Camas High School and all the new houses that have/are going in there was not enough planning done ahead of time.
533	Occasional backups
534	excessive wait time during school start and end times.
535	Long backup in the morning and at pm rush hour. Pedestrians, bikers, runners are becoming a hazard when they don't use the cross walk. Pedestrian crosswalk causes more delays to traffic because all directions are stopped. Need bridge for pedestrians and bike lanes.
536	Backed up traffic
537	Everyday before and after school (Camas High School) this intersection becomes extremely congested all the way down Lake road.
538	Too blind. People speed to make the light and coming from the lodge shoot through the curve turning left with reckless disregard. Also the second road you can turn off (38th) isn't a smooth turn off and can cause traffic backup. Speeding cars on your tail force a tight right turn, coverings into an oncoming car inching forward because the street is obstructed by power pole or parked cars for those turning left off 38th onto Everett/500 so they inch forward which creates more collision risk
539	Likely consistent with other responses I've experienced traffic congestion, long back-up on Lake and Everett St. This results in aggressive driving styles and frustrated people.
540	Not easy for pedestrian use. Causes lots of jaywalking
541	At odd times of day, traffic back-ups occur

542	Lights not working. Back up during after school hours
543	High traffic
544	Long wait times
545	Long wait times at the light
546	Major congestion's at certain times of the day
547	Works fine, can't imagine why you would want to waste taxpayer dollars on an intersection that works fine when you have SO many other issues that truly need attention and are currently exposing citizens to danger
548	Very long wait along Lake Road at high traffic times. When running through that intersection, drivers often don't pay close attention when turning right onto Lake Rd and will nearly hit me or running group members.
549	Only one lane trying to turn left onto another single lane road, backs up cars almost to Sierra. Makes kids late to school.
550	Traffic backs up with school hours
551	at peak hours (school pick up/drop off hours) the traffic gets so backed up also the wild life have been startling at times
552	Poor timing of lights and back up of traffic during peak commuting hours
553	no turn lane traveling south when turning right on Lake right from Everett/500. Also back up of cars on Lake Rd prevents those turning right onto Everett/500 from doing so when light is red.
554	Large backups and unsafe conditions for pedestrians.
555	My biggest concern is past the intersection towards the bridge- people are parked everywhere and jutting out- a lot of chaos.
556	Trying to take my son to preschool at the district of daily has been challenging with all the high school traffic. Lake is completely backed up and trying to cross Everett is just a feat in itself.
557	Traffic that backs up in all directions.
558	The road is not wide enough, traffic is heavy at times of the day and backs all the way up Lake Road, and I don't think it's safe for walkers were runners on the side of the road.
559	LONG LINES, no turn lanes to turn right from Everett onto lake road or any for that matter. No bike lanes - very narrow roads, especially when backed up, very unsafe. LONG LINES affecting travel time.
560	CONGESTION!!! Also on warmer days the increased number of pedestrians walking along the road/crossing where there is not a designated cross-walk
561	Long wait lines when the high school lets out. I do not like roundabouts
562	A very long back up during school times and school events.
563	horrible back up just trying to drive from one school to another at specific hours. This forces me to drive through neighborhoods, the long way around
564	Long wait times.
565	Long wait times when nearby schools are starting the day or ending their day. Occasionally, someone will run a red light.
566	Long lines at the stop light.
567	Long wait times
568	Huge line-up of traffic on Lake Road
569	Signal transition is long. Lack of sidewalks is dangerous. Traffic congestion is horrible.
570	Long waits in the mornings and evenings

571	Huge back ups during commute times (am school start, afternoon release, and evening work commute)
572	Large backups coming down to the intersection from lake rd.
573	Too much traffic.
574	Intersection gets backed up during rush and school transit times.
575	Traffic gets really backed up in an attempt to get to the high school.
576	I really haven't experienced many troubles. On my way home from work, sometimes I have to wait for a light cycle, but other than that, I usually don't experience any slow downs or problems.
577	School time is a bitch
578	Major back up
579	Traffic and long wait times at light
580	Not enough space to right turn when traveling south on Everett and turning onto lake. The crosswalk signal supercedes turning left on Everett from lake, causing significant delays on lake. Signalling seems to be slow and no responsive to increased traffic.
581	Long waits. Unsafe. The state should help pay for any improvements
582	takes too long coming down the hill on Lake and also turning onto Everett from any side streets during peak times can be sketchy
583	Long lines if traffic during school and work commutes. Hazardous responses for emergency vehicles
584	Long wait times coming off of Lake and turning left
585	When I walk or jog , I do not feel safe since there is no sidewalk
586	Waiting for walkers/bikes to cross street before I can turn. The right turn onto Lake coming south on Everett is a bit sharp.
587	Traffic delays and backup
588	Traffic can be high in that area.
589	Long wait times through the intersection. Cars backed up forever
590	long lines on lake road to get through the lights
591	Long waits, backups.
592	No sidewalk, no lanes to turn right
593	awful back up at peak times
594	Long waits in the morning
595	big traffic back up and delays
596	Bottleneck during high school release times and in the evening when Lake Road backs up.
597	A lot of drivers aren't looking for pedestrians in the crosswalks before making a turn. I've seen quite a few bicyclists and pedestrians nearly get hit, as well as the risk of a car collision from sudden stops.
598	It gets very backed up before and after school between the two stop lights.
599	CHS events often result in back-ups all the way up to Sierra!
600	well on my way back home from work leaving the high school the congestion is so bad most of the drivers are making a right turn. road is to small for how busy it gets. it should be three or four lanes at least
601	People not paying attention
602	backed up traffic
603	Huge line of cars backed up on lake road waiting for light, if you want to turn right you have to wait for the cars turning left to get green light because of backup
604	Long delays. Traffic really accumulates during specific periods of the day.

605	Lack of pedestrian facilities
606	Very long walk signal for joggers/bikes
607	long line of cars waiting for light to turn green on 500
608	Lack of continuous sidewalk connecting parks and trails
609	Long waits when the high school has gotten out.
610	Long waits
611	Heavily congested. Long wait times. Unsafe pedestrian crossing.
612	busy around high school beginning/end times
613	Extreme traffic back up when headed south
614	Bad traffic at certain times of the day
615	Pedestrian crossings and cars not watching for those pedestrians
616	The traffic light backs up during times when people are trying to get to the h.s. or leaving the H.s. AM and PM. Also, I work for the school district and cannot get to after school meetings on time if I go that route. I teach at Fox and if I need to be at the H.S. or ZAC- I don't have enough time.-If I get out at 2:40 and trying to make a 3:00 meeting-it is stressful. Problems I've had specifically are turning left off Lake Road and going south on Everett. Wholly inadequate infrastructure. Trying to get into Lakeside, houses, other businesses or the park during high traffic times is too hard and unsafe. No sidewalks or walking paths along that road. Are their bike paths?
617	Traffic congestion/delays.
618	Delays at the intersection due to cars heading straight instead of turning. Lights do not change due to me being on a bicycle and unable to trigger the system to change.
619	Congested.
620	Heavy traffic with wait lines
621	Long back ups. Getting stuck behind cars turning left from lake to Everett when I go right.
622	- long delays due to being a bottleneck in and out of residential subdivisions, especially around school bus time or road construction. - Inadequate/unsafe bicycle/pedestrians lane/sidewalk. - Short distance visibility of the traffic light when going north. - Limited left turn lane merging from Lake rd.
623	Backs up too far
624	Slow traffic
625	Long wait times getting through the light
626	Congestion on Lake
627	Long back ups on Lake Road approaching the intersection. Inability to turn right when there a long back ups
628	Large volumes of traffic related to school start and stop times
629	It only has back up issues when school is let it. I think it would be more helpful to have more ways leaving the school.
630	Red arrow. I grew up learning it's illegal to go on a red arrow but everyone treats it as a yield.
631	Long wait at light to get to CHS
632	Huge backups
633	Long back up can't turn right at light
634	Horrible traffic
635	Terribly backed up during school start/end times and summer time (recreation at or by the lake seems to back traffic up too)
636	Bikers and traffic in the morning because of schools

637	Delays on Lake Road traveling west. Too long of ped crossing timers.
638	Traffic backed up lake road
639	During summer, the Lake would become very crowded with cars parking on both sides of Everett which can cause heavy traffic at times and also poses danger to both pedestrians and drivers as well.
640	No right turn lane onto Lake Road (headed south). Backs up terribly when high school let's out. Need free righturn and merge lane when turning right from Lake Road to Everett.
641	Terrible bike routes here, broken glass, terrible bike lanes. Need bike path along hwy 14 to vancouver. I bike to E vanc businesses instead as Camas bike access is terrible
642	Long backup to turn left onto Everett from Lake. Right turn lane gets blocked by all the left turn traffic.
643	Long lines and delays
644	Heavy Traffic and slow flow due to business of pedestrians and cars
645	Long waits during peak travel time
646	Traffic, distracted bikers, distracted drivers, long waits.
647	Waiting to turn left onto 500 (from lacamas lane). And waiting to turn right onto lacamas lane (from 500)
648	It takes a long time to get through the light when the high school is starting or ending. There are no sidewalks. The area is generally unsafe for pedestrians and children, which is sad since it is on the way to school, parks and recreation areas. Connecting round lake, fallen leaf lake, and Lacamas Lake area trails would be amazing! A side walk or boardwalk along the south top of Lacamas Lake would be amazing.
649	Safety when walking/running/biking by myself and with children.
650	Really long wait times after camas high school releases for the day
651	I can't turn right going into Everett when I am like the 4th car back. I can't go around due to the cars blocking. There should be a longer turn lane!
652	Traffic congestion, not safe for pedestrians nor bicyclists
653	Traffics backed up in the morning before school or after schook
654	Traffic backed up in every direction several times a day. Also, unsafe for pedestrians.
655	Increased backup during high school commute time.
656	It backs up a lot during High School release times. Left turn off Lake backs up and those who are turning right can't get through which causes more back up of traffic.
657	Long wait times to clear the traffic on Lake Rd.
658	Waiting at a red in the middle of the night with no one around
659	Regularly congested
660	Decreasing LOS during rush hour
661	Traffic backed up at the light but creating traffic jams as traffic continues to build at the light (during school year)
662	Morning and afternoonschool traffic
663	The intersection light needs to be improved for the flow of traffic coming and going during school release hours.
664	Traffic
665	15 minute wait, witnessed several fender benders, always fearful that someone is going to come flying around the corner and rear end me while stuck in traffic
666	The lights are set on timers instead of sensors.

667	Coming down Lake in the morning or after work in the evenings, the left turn lane is small with little room for those individuals turning right so the entire lane can back up, sometimes to Sierra. If the right turn lane was expanded to past the community center, the flow of traffic would be greatly increased.
668	Traffic on Lake Road
669	Pedestrians and parking in the area during the summer months. Safety is a concern for crossing & visibility. Backup during school starting and ending.
670	There is not a good time of day when this intersection is not busy
671	Long lines and no way to take a right onto lake with our waiting in the line. Ancillary streets stuck for 10 minutes (minimum) trying to merge into Everett. Lights are way too random in how long they stay on green /yello/red. Very dangerous for pedestrians and bikers, with no real shoulder.
672	Traffic back ups. High school and commute times.
673	Traffic does back up during bus pick up and drop off times. The increase in traffic from parent drop off also contributes to the congestion.
674	traffic backs up in evenings due to turning lanes being too short, not enough room to get into lane
675	Extreme backup during school transportation hours! It was also a mess when they were doing construction on the bridge this summer!
676	Backed up traffic on school days when CHS begins/ends the day
677	Turning the right curve, on-coming traffic, icy conditions, long lines of traffic
678	Long Que lengths caused by left turn blocking the right turn lane.
679	Congestion. Cars parked on the sides of the road during the summer months. Back-ups due to traffic.
680	Congestion between 7am-9am and 3pm-6pm
681	Lights are not synced to deal with traffic at busy times of day.
682	Long wait to turn off lake road. Safety for runners, not a lot of space for bikers either
683	Long waits, no to little shoulder
684	Long back ups when the high school lets out.
685	No sidewalk
686	There almost always seems to be a backup of cars, and unsafe conditions when trying to turn.
687	Lots of traffic when trying to turn right into Everett off of lake.
688	Delayed light to turn north when pedestrians are using
689	Long backs ups of vehicles, especially after the high school lets out in the afternoon.
690	Crowded
691	Obviously the back up during am/pm school times.
692	Traffic back up
693	Traffic congestion
694	Wait times are excessive at certain times of day. Pedestrian crossings with the light take a long time. People parking on the roads during certain months is also very problematic.
695	Lots of traffic especially during school opening/ closing.
696	Traffic backed up all the way up Lake Road at Rush Hour. Slow downs on Everett during school drop off time.
697	long wait to turn. narrow intersection.

698	During peak rush hours it can be backed way up all the way to top of lake road by UL/Leadbetter intersection area. The lanes are too narrow and right turn lane from Lake Road to Everett is so short it is ineffective as is. Cant get around people waiting to turn left most of the time. Just a bottleneck with single lanes.
699	No side walks!!!!
700	Excessive traffic, especially during CHS start/end time.
701	Long back ups
702	The lines backing all the way up Lake Road.
703	backup at Lake Road around beginning and end of CHS school day
704	Traffic backed up to lacamas shores
705	Congestion with prolonged waits
706	Backed up traffic all the way up the hill
707	Traffic back up at school dismissal time.
708	Light changes take a while to change
709	Very congested during CHS school opening and closing. Too many kids being driven or driving to school when they should take buses!
710	Long wait times at the light
711	Long lines of traffic. Lots of pedestrians, especially in summer, walking paths and crosswalks dont seem the safest
712	Severe backups during school hours due to the lack of a right turn lane from SB Everett onto WB Lake Rd. At least half of the traffic at this intersection is making a right-hand turn onto Lake Rd. Enabling this access would greatly improve traffic flow through that intersection and reduce the current backlog of traffic that is currently experienced every day during the work/school week. Additionally, there is poor pedestrian interface if you're running from the trails around Round Lake to the Heritage Trail. There is also poor accessibility for those using mobility-enhancing devices such as walkers or wheelchairs.
713	Currently during peak times related to CHS start/stop times or events, it may take 4 or more light cycles to get through the intersection.
714	Long backup certain times
715	Long wait at intersection. Speeding and driversbot paying attention to pedestrians.
716	Congestion coming down Lake road toward Everett. I've seen it back up past Lacamas park. Also, the right arrow on Lake Road should turn green when the left arrow on Everett turns green to turn onto Lake road.
717	Long back ups. Additional lane or right hand turn lane going from Everett to Lake would be helpful a lot of congestion w recreation visitors and parking for the lake and parks.
718	Very long lines of cars stuck at the light. Both from lake road and Everett from the high school and Livingston mountain area.
719	Gets very backed up in the mornings and evenings - no real turn lane which backs up the rest of traffic
720	Long waits during school time.
721	I live on 35th and often have to take a left onto Everett, which can take a while, depending on the time of day.
722	A lot of wait time at the lights because of the amount of traffic at certain times of the day
723	Congested and long line waiting for light on Lake Road, especially morning school time.
724	Heavy congestion, especially heading eastbound not being able to see stopped traffic around the bend
725	Backup of traffic.

726	Getting backed up on Lake road, traveling east towards Everett
727	Traffic congestion in the summer afternoons, seems to be correlated to number of pedestrians using the crosswalk.
728	Long wait times at the light.
729	Always backed up especially before and after school.
730	Traffic jam
731	Driving down NE Lake road towards the intersection and trying to make a left onto NE Everett. It's usually backed up from pedestrian traffic.
732	Same as everyone else - long backups during high traffic periods.
733	Waiting through several lights.
734	Soul-crushing backups
735	Drivers rolling across the crosswalk against red lights endangering pedestrians (me and my son).
736	Extremely congested
737	Turning north onto Everett from Lake - long backups
738	I've only noticed an issue w/the intersection when CHS dismisses
739	Heavy traffic during school transitions
740	Wait time but I'm ok with waiting.
741	Long waits at Everett to Lake Rd when Camas High lets out and long lines from Lake to Camas High in the morning. That can make my son late for school on bad mornings. We have planned accordingly, and often go left out of CHS to Crown and down to 3rd just to get around it altogether. It's just such a difficult spot with busses and parents and students all pouring in and out through here.
742	No round about
743	Can't handle traffic and bad light setup.
744	Long wait times.
745	Severe traffic jams, family member had a car accident, being cut off (almost hit) by a car when I was walking.
746	Can't turn right because of backup of drivers turning left on Everett. Need a wider area to pass left turning cars
747	Major back ups during peak hours
748	Heavy traffic before school hours and after school hours. Also heavy traffic during peak travel hours 3-5ish
749	Backs up terribly on Lake Road at start time and other activity times at the high school.
750	Long waits and backups
751	Usually on Lake, if taken during certain times, long lines. Avoided by going the other route via Forest Home to Everett. For to and from CHS.
752	I haven't experienced any issues
753	There is so much traffic there are times we can't leave our house its so bad. We are worried with a roundabout it will make it so there is even less of a break. I have see people on more the on occasion trying so hard to not let people out of there driveways they ended up rear ending the car in front of them. My kid wait for the bus on this road and people run the buses stop sign because the traffic is already so bad. I could go on all day with everything wrong with the road, traffic, unsafe, no side walks etc.
754	Extensive traffic, unsafe pedestrian crossing
755	To much traffic back up. Very unsafe interaction for cyclists and pedestrians.

756	The traffic can back up very quickly if a couple cars are waiting to turn left onto lake road and there isn't no space to turn right.
757	Congestion, wait time at light, speeding.
758	Flashing yellow left turn signal can be dangerous. Traffic backs up really far on lake. There's not a clear area for pedestrians. Parking gets jacked during summer.
759	Afternoon heavy traffic from the high school backed up at the traffic signal.
760	Not safe to cross. Long lines of traffic.
761	The left turning lane (from Lake Rd) chokes up the right turn possibility. Lane is too short. Also, not everybody knows they can turn right at red light. Especially when cars are turning left from Everett Rd and ongoing traffic is stopped (there is no green arrow turn light) Sensors are not sensing properly the amount of cars waiting at lights, therefore they don't adjust to traffic flow.
762	Congestion
763	Traffic back up
764	Traffic backed up onto Lake Road..and on Everett too
765	Long traffic lines during morning and evening peak commute times. Hard to cross the road when walking between lakes.
766	Long waits travelling N/S, poor visibility to south bound traffic from Lake Rd, very scary from a pedestrian and bicyclist perspective, insufficient bike lane and sidewalk, and on summer days the foot traffic of people recreating can cause dangerous traffic conditions.
767	Long wait/light times usually during peak school hours
768	Heavy traffic before/after school and at 5 pm
769	Long long LONG lines during school release/ drop off/ pickup.
770	Traffic backs up at the light, sometimes to astonishing distances especially on Lake Road and southbound Everett.
771	Long wait during inclement weather; Scary to walk from Lacamas Lake to the park...only did it once and would avoid it in the future;
772	Very busy at certain periods of the day, especially around school start and end times, backing up traffic.
773	Long wait times depending on school schedule
774	Extreme traffic
775	The backups at the lights
776	Backed up at the light
777	Backed up traffic down Lake Rd
778	Long wait times
779	Traffic backed up
780	Back up of traffic at peak hours
781	long wait times at the light during high traffic hours
782	delays during High School start times
783	No sidewalks
784	The lines heading east are way too long.
785	Long delay to go downtown at given times of the day.
786	Back up and congestion
787	Very long lines, abundance of pedestrians wandering around on warm, sunny days.
788	traffic delays, can't turn left from the round lake parking lot
789	Drivers going too fast with pedestrians moving around. Drivers making u-turns looking for parking. Drivers running red lights. Cars backed up for miles.

790	Summer traffic severely impacted by pedestrians on hot days. Traffic impact during start/end time for high school.
791	Wait time
792	I avoid Everett in the morning and afternoon. The HS traffic is terrible. Overcrowded school makes for overcrowded streets.
793	No safe way to turn left on Everett while on a bicycle. Waiting to turn right on lake road going south on Everett because of backed up cars.
794	long back-up on Lake road, confusing yellow light arrow on Everett, poor space for biking and walking/running.
795	Lake Road backs up during morning for high school & also in the evening for everyone going home from work. Also, so people still don't understand the blinking yellow arrow.
796	Long backup and wait to get thru light before/after school start/release
797	Cannot turn south on Everett cuz high school traffic backs it up so much you can't get to the intersection.
798	People trying to cross street
799	Making safe left turns while on a bike.
800	Congestion
801	Sitting at traffic backed way up the road past the park.
802	traffic backed up
803	Traffic backs up
804	Traffic congestion
805	People not understanding how to use a yellow light and turn. People not moving all the way into their lane to allow those turning south onto Everett from Lake. And it would be great if the intersection was polluted with all the signs for community events.
806	Traffic can get backed up when school is let out and during afternoon commute times.
807	Traffic backups beyond 35th Ave make it very difficult to enter Everett from 35th.
808	Trouble in the summer when everyone is at the Lake. A long wait when the high school starts and gets out each day.
809	Very busy and backed up at times.
810	Backs up
811	No issues
812	From Lake Road to Everett - long wait times during peak hours. Dangerous for pedestrians
813	Cement Trucks, that should use other roads. Intersection gets busy at rush hour times, garbage trucks block traffic and cause further delay.
814	Certain times it backs up, making it difficult to make a left from 35th
815	Traffic delays due to volume.
816	Long waits especially around school time.
817	Traffic heavy at CHS open & close
818	There seems little space for pedestrians to cross safely.

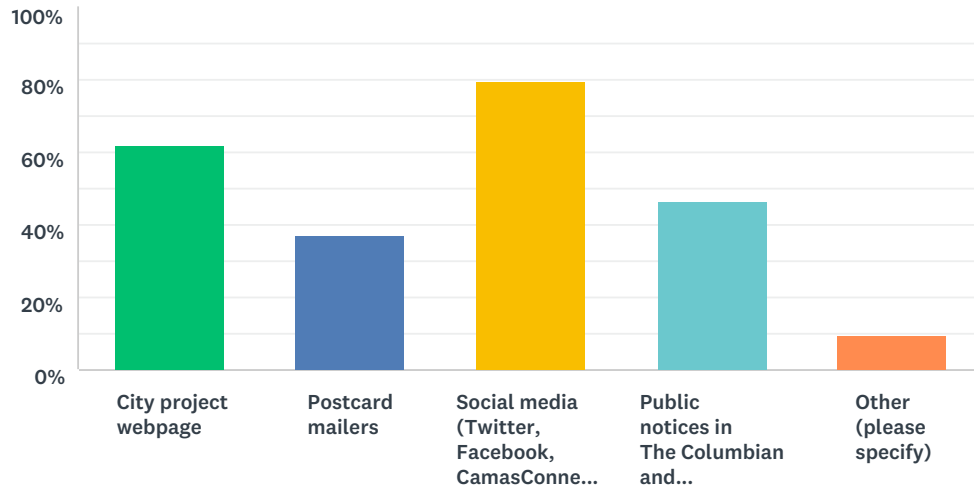
Q6 Below are broad categories of criteria for reviewing the two concepts for intersection improvements (shown above). Please rate their importance to you from 1 (highest importance) to 5 (lowest importance). Rate as many criteria as you like from 1 to 5.

Answered: 1,108 Skipped: 0

	1	2	3	4	5	N/A	TOTAL	WEIGHTED AVERAGE
Reduce traffic congestion	59.04% 650	13.08% 144	8.45% 93	5.18% 57	13.90% 153	0.36% 4	1,101	2.01
Improve traffic safety	47.89% 522	17.34% 189	14.22% 155	7.61% 83	12.39% 135	0.55% 6	1,090	2.19
Avoid impacts to the bridge north of the intersection	16.23% 172	14.34% 152	28.49% 302	14.62% 155	22.17% 235	4.15% 44	1,060	3.13
Minimize impacts to wetlands	25.88% 278	18.25% 196	19.74% 212	12.10% 130	22.25% 239	1.77% 19	1,074	2.86
Minimize impacts to trees	26.97% 291	18.72% 202	19.28% 208	12.60% 136	20.76% 224	1.67% 18	1,079	2.81
Minimize impacts to adjacent property	18.32% 196	15.79% 169	27.29% 292	15.70% 168	20.09% 215	2.80% 30	1,070	3.04
Accommodate pedestrian and bicycle access	34.62% 378	23.63% 258	18.04% 197	10.07% 110	12.91% 141	0.73% 8	1,092	2.43
Provide access to adjoining property	15.74% 167	16.87% 179	26.86% 285	16.12% 171	17.06% 181	7.35% 78	1,061	3.02
Provide a functional and aesthetic design	26.15% 284	22.56% 245	22.84% 248	12.43% 135	14.09% 153	1.93% 21	1,086	2.65
Reasonable construction schedule (within 1 to 3 years)	42.75% 463	20.87% 226	14.77% 160	8.03% 87	12.65% 137	0.92% 10	1,083	2.26
Maintain traffic flow during construction	54.04% 588	15.90% 173	11.12% 121	5.42% 59	13.14% 143	0.37% 4	1,088	2.07
Overall cost of the project	20.83% 225	19.17% 207	30.65% 331	13.24% 143	13.43% 145	2.69% 29	1,080	2.79

Q7 There will be many informational updates and participation opportunities during this project. What do you think are the best ways to keep everyone informed about these updates and opportunities? (Select all that apply.)

Answered: 1,097 Skipped: 11



ANSWER CHOICES	RESPONSES	
City project webpage	61.99%	680
Postcard mailers	36.92%	405
Social media (Twitter, Facebook, CamasConnect app)	79.31%	870
Public notices in The Columbian and Camas-Washougal Post-Record	46.67%	512
Other (please specify)	9.57%	105
Total Respondents: 1,097		

There will be many informational updates and participation opportunities during this project. What do you think are the best ways to keep everyone informed about these updates and opportunities?

Other (please specify)

1	Signboards
2	Signs posted near that area.
3	Email
4	Next Door app
5	Signs at the intersection, directing people to the city project webpage, social media
6	Update notices in Prune Hill Next Door
7	The notification should say that the city is not planning on constructing a roundabout in this area
8	River Talk Weekly
9	mailed newsletters
10	NextDoor neighborhood emails
11	email updates
12	Links posted in next door camas
13	Instagram
14	Email distribution
15	Emails
16	Next Door
17	Email, NextDoor postings
18	Email group if you wish to join.
19	Signage at parks next to site; Round Lake & Lodge
20	The billboard posted at the intersection now is great!
21	Email
22	Neighborhood app
23	Signage
24	email distribution list - this worked well with the BPA project
25	Please use all available lines of communication so as many residents are informed as possible.
26	Email list
27	Send info to Camas High School for distribution to students/staff
28	Nextdoor
29	The school district could send out a message, as they have a list of high school students and families that will be impacted.
30	Project website that you share on social media
31	Email to interested parties
32	Automatic emailers
33	Email group for those that sign up and website
34	Websites such as this one (Livingston Mountain)
35	Opportunity to meet with decision makers
36	Nextdoor
37	Personal communication to all the residents who live in the area on what is going and what kind of impact it will have on their daily use of using the roads to go around from school, work and life in general.
38	Sending news through CHS to keep students informed, since the intersection impacts nearly all CHS students
39	Nextdoor app

40	Notices/releases in the small weeklies ie rivertalk weekly, lacamas magazine. Also, signage at the intersection as was put up for the public meeting
41	Signage at construction area
42	Email
43	Everything you can.
44	Nextdoor
45	Instagram. A quick update with a picture of the progress would be a nice reminder as the process continues
46	Email blasts
47	Postings on Camas Library bulletin board
48	News print
49	Email updates
50	Email
51	<i>[This comment is included in the responses to Question 8]</i> #8 Isn't letting me write a comment and is only accepting "no Comment" box check. My comment for #8 is that I like the roundabout solution as it will accommodate the growth that is already in action in our town and the traffic is only going to increase
52	an email listserve that we can sign up for to get periodic updates
53	No paper communication please. Digital only or public posting like city hall or the library.
54	NextDoor
55	Opt-in email
56	https://lacamasmagazine.com/
57	Further meetings
58	Email
59	Signage like current one at that location
60	emails
61	email option - residents can opt in if they'd like
62	Email
63	Sign at intersection
64	The sign that was installed on Everett could have a section that gets an updated when new meetings are scheduled.
65	Nextdoor app
66	Non-Camas social media - Nextdoor, Instagram - it is extremely important the City goes to the citizens where they consume media. Don't make them only go to the city channels.
67	Nextdoor
68	email notice opt-in?
69	next door
70	Post signs in neighborhoods & main streets.
71	Updated meeting signage at intersection
72	next-door app
73	Email for those who opt in
74	NextDoor
75	Nextdoor NW
76	NextDoor
77	an email list where people can sign up with their email to receive updates

78	Dedicated Nextdoor posts on inner community and detailed signage by the road (In a safe place where it's readable for pedestrians, not drivers) that updates progress. Maybe for drivers a large, roughly recognizable "thermometer" style progress bar signage that updates (I.e. 50% complete. Projected finish: July 2020
79	Smoke signals
80	Signage at intersection was great to let me know about the info meeting.
81	Through the School District like this as well
82	Camas High School
83	email list
84	email
85	Nextdoor app, which is how I saw this survey was available
86	Email
87	Opt-in e-mail list
88	Online Camas-based magazines.
89	Email
90	Email
91	Road signs
92	Text message notifications for bulk groups. Similar to the schools process for notifications.
93	In person updates at town meetings
94	Public Alerts
95	EMAIL!! Continuing to update the sign currently placed at that intersection with the next steps so that the public can know when to check in.
96	Text
97	Email updates?
98	Email (people can subscribe)
99	Signs at the intersection
100	Email
101	Public meetings or hearings with project managers.
102	Signs hung up around town (Crown Park, Forest Home Park, the Everett/Lake Rd Intersection
103	email list
104	Note - this survey was hard to find. It is not linked on the project page.
105	email list for those expressing interest

Q8 Is there anything else you would like to add?

329 responses

Is there anything else you would like to add?	
I have a comment:	
1	I drive from Lacamas Summit past this intersection to turn left to shop at Camas Produce, with this design please provide the local residents like me a Left Turn lane to make a safe turn in this growing city
2	I Drive this intersection daily for school and shopping at Camas Produce in modernizing the change why is there not a Turn lane for local residents to make Left Turn at Camas Produce, a must needed feature.
3	I drive from Lakeridge to Camas Produce and find the left turn from intersection difficult, left turn lane must be in this design for long term safety
4	I drive down to the intersection from Lakeshore to go shop at Camas Produce, why does the design not include a Left Turn lane to help local shoppers ? Left Turn lane from Everett to Camas Produce is a good safety feature and I do not see it on your drawings, That is very bad !!!
5	My issue with RoundABOUTs in Washington, drivers here don't seem to know to signal they are exiting. In the particular location, in the mornings when school is in session, Southbound Everett from North competes with North from Lake. Not sure if a Roundabout will achieve the goal.
6	Maybe an elevated footbridge for pedestrian traffic crossing Everett
7	I drive past the intersection twice a day and try to make a left turn to Cup of Joy for coffee if there is traffic behind me it honks so a left turn setup will be less invasive and safer to traffic
8	I come down Lake RD on my way home to shop at Camas Produce and making left turn with traffic following me is not comfortable, a left turn like Safeway has in front of the building dept of the city hall will be a great addition to this plan
9	I live, shop and work in Camas and commute to intersection everyday 3 times a day, turning left to get coffee at cup of joy should be made easier with a middle left turn lane
10	I shop at camas produce and making a left turn during with traffic behind me makes me nervous, a left turn of some kind would be appreciated Thank you
11	LEFT TURN LANE for turning into CAMAS PRODUCE SHOULD BE A MUST HAVE IMPROVEMENT GOAL
12	I live close to the high school and drive to and past Camas Produce daily, a middle left turn lane will be a good improvement in that area to help local shoppers
13	I travel south to shop at Camas Produce, a left turn island is needed for vehicle safety
14	They need to account for present amount of traffic as well as future amounts of traffic and provide pedestrian access. Parking should be limited to designated parking lots and not on the side of the roads. They need to be conscious of the people who live down the streets off of Everett near round lake.
15	please make sure there is a way to get into the Camas Produce store and the Seafood food cart! Left turn in without holding up through traffic would be great. Need to be able to get in, and right turn back out to go through intersection/roundabout (roundabout favored)
16	Worried about ped/bike conflict with a round about intersection.
17	Appreciate the opportunity to review and have some input. Great job!
18	safety first.
19	Do a roundabout! Also make lanes wide enough for bicycles to be comfortable. The ride the streets .

20	The signal lane round about on Brady east of 192nd is too small so it unnecessarily slow traffic. All European roundabouts are two lanes so traffic can move in and out of the circle without stopping. The bridge on Everett needs to be as many lanes as the intersection or that bottleneck will negate everything. Protect the size of the parking lot for Round Lake. Protect camas produce so they can stay in business during the construction and afterwards as they are very important to the health of our community.
21	you probably need a wider bridge for signalized versions; be sure roundabout circumference is much wider than one on Brady and be SURE the distance between Everett thru entry southbound and Lake Rd entry is as large as possible or you will be exchanging one problem for another...European roundabouts are mostly two lanes on a wider circle...this keeps traffic moving
22	Do a roundabout! It makes the most sense. Keep traffic moving. And make it bigger to anticipate growth.
23	Is this going to be like the pool survey? You ask our opinions and then don't chose either option that was presented?
24	Split start & end school schedule to reduce high impact
25	Please add a separate turn lane (safety reasons) for Camas Produce. Please also add a separate sidewalk along Everett from NE 22nd Ave to/from Lacamas Park. People walk/run along the main road which is such a huge risk for getting hit by a car - this should've been done eons ago.
26	Looking forward to the improvements.
27	Roundabouts are not difficult to navigate with a little experience and common sense.
28	It seems like the new round-about entering Camas is working well because it is a larger size. Sometimes the roundabouts that are smaller get too tight and they are awkward to navigate.
29	A round about will disrupt the area greatly. I travel to work. And while at work travel through in a ready mix concrete truck. It will be very difficult to head north or go back to plant via lake road in the roundabout the trucks do not turn well. And it will change the image of camas. Its change drastically already that i am considering moving away also due to political climate. I also travel to safe fire and walmart /costco through the area. I have seem mild congestion during certain times. A roundabout is not necessary and will increase congestion.
30	My concern with roundabouts is the great amunt of attention a driver must give to other incoming traffic so as not to assume they are planning to exit at a given location. At the current new roundabout at HWY 14 I've had many close calls because there is no way to know a vehicle is continuing around the roundabout rather than exiting where I expect them to. I always have to come to a complete stop to make sure before proceeding. Also I would highly encourage an overpass or other option for foot traffic so they do not have to cross the busy road. If you put up a crosswalk with alight it also stops traffic
31	Preserve as many large trees as possible. Perhaps add an additional bridge across the slough from the new bike path adjacent to Lacamas Park.
32	I don't use the intersection during busy hours because of the backup. Would be more convenient for me if I could. I don't shop at Camas Produce anymore because of the timing.
33	I have doubts about either alternative. I know roundabouts supposed to be there best, but with bumper to bumper traffic from the highschool, I envision times when the traffic from lake will not be able to get into the circle for some time

34	I work at Cup of Joy and turning Left is difficult (coming from intersection) with morning traffic on my tail, and see and hear my customers complain about difficulty making left turn, please give us a left turn lane
35	Provide safe access to Camas Produce with this design change
36	A Traffic Circle would be confusing and cause more congestion than the current levels, as well as make it more difficult for pedestrians to cross Everett. The intersection really is only congested 2-3 times a day (morning/evening commutes and when schools begin/end), the rest of the time the intersection is lightly used. The current traffic signal works fine. What I would like to see are sidewalks and increased lighting along Everett, as well as a light at the intersection of NE 38th Ave and NE Everett (it is very hard to see the 38th Ave road sign from Everett).
37	Close to intersection is a wonderful produce store my hope with new design would be to provide access for shoppers like me
38	Allow Mor time for the survey.
39	As a business owner (Camas Produce) I was not notified.
40	It would be great if traffic could move thru there during construction as there isn't really another way thru camas but the priority should be on the project completion
41	Improved traffic light is my preference. I have experienced more congestion and safety hazards at the roundabout entering Camas from Hwy 14 than before. I see a roundabout making both worse at the lake intersection as well.
42	I don't want the big beautiful trees taken down. Work around them.
43	Regarding the trees that are taken out, I have an extensive background in environmental restoration, and I believe that the number of trees to be taken out is not substantial relative to the benefits gained from reducing the amount of fuel burned by idling cars. Regarding the traffic congestion, my concern is that people arriving at the roundabout from Lake Rd. and trying to turn left will have a hard time getting a chance to enter the roundabout when the high school ends each day, and will subsequently block up those trying to turn right at that roundabout from Lake Rd.
44	I believe Everett St requires widening.
45	Please consider the safety of the customers coming to and from camas produce. I am a frequent patron and want to be allowed safe and easy access.
46	Sidewalks from high school intersection on Everett to left turn intersection to doc Harris stadium
47	There are a lot of people moving here, and the backups during rush hour and before/after school are the worst. The street north of the intersection needs improved also, especially when you get stuck sitting for long periods, all the way back to 15th & Leadbetter Road.
48	A traffic circle design that allows for smooth flow of northbound Everett traffic past Lake Rd and dedicated right turn only lanes for southbound Everett to Lake and eastbound Lake to southbound Everett would alleviate much of the congestion. Traffic circles have been proven to be much safer than signaled intersections as well.
49	This is a City of Camas created issue. Continued overdevelopment without a properly supported infrastructure has brought us to this. The burden of expense should come from the many developers who've been allowed to build in all areas of the city, which has led us to this congestion.
50	Can any lanes be designated as through or turn lanes that do not have to stop unless there is pedestrian at a controlled signal. Thinking of the main road in Oregon City

51	The information given to the community in regards to traffic has always been that the roads could handle the traffic of the growing amount of housing and population in the area. Why have these surveys been so inaccurate?
52	I am glad you are tackling this. It's a mess! Sidewalks please!!
53	I live by two of the three roundabouts in Camas, I have been almost hit several times. I even had a lady coming at me going the wrong way. People do not know how to drive thru roundabouts, more times than not I have witnessed people not even looking and driving into the roundabout without even looking. Again I have watched many kids run red lights at this intersection and don't see where if they can't handle a red light how are they going to yield the right away properly at a roundabout. Plus to not to mention how many trees would have to come out of that area to do this properly.
54	Stop building 2 lanes and roundabouts in Camas. The city is growing at 25% per year. 4 lanes everywhere!
55	With Camas high school, and so many new drivers coming in and out of the school I think a roundabout would be a horrible idea
56	Have you considered just adding an additional traffic light north of the intersection on Everett? The problem is the high school traffic that backs up a considerable distance. If they had to stop at a light programmed for that time of day, it would allow residents, Round Lake parking lot users, etc to get out AND it would reduce young drivers' speed. Just a thought.
57	not a fan of roundabouts
58	Thanks for including community in this decision process.
59	Widening the bridge and adding a center turn lane up through the high school turn off would help tremendously. A dedicated turn lane on Lake Road for at least 1/8 mile to allow flow from Lake Road to downtown Camas would be easy to build and very effective at reducing congestion. Your option one appears to just be status quo.
60	A roundabout is a terrible idea and would make traffic flow worse. Any improvement needs a right turn only lane south bound on Everett turning onto Lake. Going east on Lake could have 2 separate lanes to accommodate both right & left hand turns at the intersection so traffic can flow better onto Lake (later merging back to one lane). I'm also disappointed the bridge is not being addressed because it needs to be improved and widened to at least accommodate a bike lane as it too is a bottleneck.
61	I do not like the roundabout concept. In theory these are more efficient but Americans do not know how to use them. And it would involve what looks to be a larger impact to trees and wetlands.
62	don't displace 55 & older community
63	You've already made up your mind to put in a roundabout and this survey is a waste of time.
64	Signal Alt #3 is UNACCEPTABLE! People love Camas Produce and cup of joy. Destroying their businesses should not be an option at all!
65	Simply widening the lanes is not going to relieve congestion much on the busiest of times. Right now, I cannot get out of our street during back ups. And this will do little as more neighborhoods are built and the extra lanes will quickly be overwhelmed and we will be right back where we started. The roundabout will be an adjustment, but in my experience, the traffic will continue to flow, even if at a slower pace. The extra lanes with lights will not only be overwhelmed in the next years, but it will make the area look more city like. At least the traffic circle can keep a less city-like appearance.

66	A single lane roundabout is a bad idea. Judging by the other local roundabouts, people are not kind or respectful in allowing cars into the line, and this intersection is heavily travelled by new high school drivers. It would be safer and more efficient to have a traffic signal.
67	It would be helpful to provide alternate routes to avoid the construction area during the project time frame
68	With how congested the intersection already is, I feel if replacing with a roundabout it will become more congested and more accidents will happen. I also feel that drivers will be less aware of pedestrians and bicyclists and it will not be safe.
69	Public comment is critical as is getting the word out on this to the community
70	Leave it as is! I see no advantage to any of the plans!
71	Not a fan of round about and the space they require!
72	Why aren't developers and new homes paying for this? Do not destroy the wetlands, TREES, and nature bc over-populated Camas has a problem. Too bad. Should have thought about that before jamming way too many houses in the area.
73	I don't see how a round about will slice the congestion on the 2 roads. I prefer traffic signals.
74	Please put in sidewalks & Street Lamps
75	It would be great to have more detailed information at the next open house about current and future expected traffic flows.
76	Need bike lanes and crosswalks all the way up and down Lake Road
77	We do not live in Europe. We live in the United States. Driver do not know how to use round abouts, please quit building them.
78	The biggest issue are the turning lanes. Option one would be the least expensive, evasive and would meet the needs of future traffic
79	There needs to be a way to turn right off Lake Rd. onto Everett, without waiting in a long line. Right now there is not enough room on the road, once 4 cars are waiting to turn left.
80	as long as the city continues to allow property to be developed w/o thinking about repercussions 'down the road' this will be the tip of the iceberg. this problem should have been addressed long time ago.
81	Round-a-bouts are horrible and would impact the greenery around the intersection far too much. No to the round-a-bout!
82	Construction during off hours, nights or certain plan ahead advertised days
83	It is important for public safety that a turn lane is made for customers going to the Camas Produce.
84	If a roundabout is chosen can we give it two lanes.
85	Double lanes on round about
86	I HATE ROUNDABOUTS!!!!!! STOP THAT!!!!!!
87	Effects on existing business DURING construction should be a primary concern. For example, people need to be able to access Camas Produce EASILY during construction.
88	I am worried about the trails at Round Lake continually losing mature trees and the green belt that allows users to feel they have actually escaped the city. There are many areas along the trails where you can now see houses, roads, etc. My vote would be to build a roundabout using as much of the existing paved area as possible, and pushing west onto the private property instead of east into the park.
89	After walking at the park I like to stop at the local produce market where traffic is obnoxious and a left turn would be awesome

90	Please keep in mind the city's newest, least experienced drivers will be flooding this intersection twice daily.
91	If you have a bottle neck at the bridge and just south of the intersection traffic will still back up at intersection
92	There needs to be a balance between tree/wetland mitigation and the need to get drivers where they are going. Traffic is only increasing and there are extremely limited alternate routes. We may need to do some unpopular things for the greater good and future development.
93	If you decide on the roundabout (which I don't prefer or think addresses the pedestrian issue) please don't landscape the middle so you can't see across it. This seems to occur on every roundabout in Camas,
94	This intersection better be epic. We have had to endure so much construction over the last two years...
95	Bike lane along Lake Road and speed control for cars.
96	Please keep bicyclists in mind while planning this new intersection.
97	The roundabout needs an interactive T-Rex statue with optional jet pack.
98	Thank you for working on this. It would be much easier to just ignore the problem like Portland does. I appreciate that you don't do that.
99	We need improved traffic flow at the intersection, but we also need increased capacity on Everett all the way to 43rd Ave.
100	I don't think the intersection is that bad as it is. I think a roundabout would make the left turn more difficult from 500 on to lake road, maybe....
101	About 120 Camas High school runners will need to cross this intersection on a daily bases to get to Heritage trail where they do distance running. We should consider pedestrian traffic that may be attempting to connect from Round Lake Park to Heritage Trail Park as well as the needs of cars and daily school traffic when planning for this busy intersection.
102	In either selection, a left turn lane needs to be included for existing businesses i.e. Camas Produce
103	Consider a hybrid design that incorporates lights and continuous right turn lanes vs the roundabout. The roundabout design is a complex traffic and pedestrian flow and would likely increase the probably of incidents. One to three years is way too long for construction and citizens should not be subject to that kind of cost and traffic congestion. Thank you the opportunity to voice my opinions.

104	<p>I have concerns for either of the options that are being presented. The current intersection is signalized and is not functional as we know. The new roundabout on 6th Ave has only partially solved the problem, during peak traffic times the traffic backs up under highway 14 not to mention drivers not knowing how to use a roundabout. I experience many people stopping at the yield sign daily. Throw in 1000ish high school students "new drivers" and that could be a recipe for disaster. The bottleneck of the current bridge is a part of the problem and in my opinion will still be an issue with either option presented. With the growth that Camas has seen in recent years and appears we will continue to see based on the successes of our school system, the new home construction in the area and our recent exposure in being in the top 6 of the small business revolution. These successes are not going to slow down our growth. I am in real estate and I have many many clients call asking about the Camas area based on school scores alone. Many of those same people like the proximity to Portland and to PDX for business travel. Not to mention our quaint small town feel=) It seems to me that there should be a long term solution. So here is my opinion... I think that the existing bridge should be converted to a one way bridge and that the place where is the new red pedestrian bridge is should be another one way bridge going the opposite direction. This would likely mean that the parking lot would be taken for use by traffic. I don't think that this would be horrible as it is hard to get in and out of the parking lot in its current location during peak traffic times. That is my 2 cents, I said long term solution not cheap=)</p>
105	<p>While I am all about saving the trees (stop letting builders squish houses in and shave the land), near a road I have the opposite opinion. Flow of traffic is extremely important for the safety of our citizens. People get frustrated and cause wrecks. Emergency vehicles need access. Pedestrian s need a safe way to access that recreational area.</p>
106	<p>There is absolutely nothing wrong with the intersection now. Save the money and the inconvenience by leaving the intersection as is.</p>
107	<p>I have concerns for the businesses located within the construction corridor. Access needs to be maintained and exven improved.</p>
108	<p>Hate the idea of a roundabout. There is a lot of traffic a times going through that intersection especially with young drivers! I am visualizing the insane roundabouts in Europe!</p>
109	<p>I do not like round-a-bouts and I think one in that area, unless it is very well planned out, will be very dangerous. Too many high school drivers for a round-a-bout.</p>
110	<p>I really don't want a roundabout. I think a lot of the problem could be solved with some sort of intelligent signal light that gets real time data on how backed up the traffic is on Lake Road.</p>
111	<p>Expand from two lanes to four in all sections</p>
112	<p>This intersection is along a major Clark County bicycle route, and I see cyclists and pedestrians of all ages navigating this intersection, all the time to access all of the amenities in the areas surrounding this intersection. Vulnerable road users must be of higher priority than moving vehicles. And I also don't want to see trees removed. Btw, the majority of the time that I pass through this intersection it is as a car driver.</p>
113	<p>Above all else I really want it to be safe.</p>
114	<p>Roundabouts are hazards in the area. Adding one here should increase congestion, confusion, and safety concerns for all involved. It requires increased awareness on the driver's part, bicyclists and pedestrians. The simplest, quickest, solution is the best.</p>

115	Provide access to Camas Produce!
116	Enforcing parking on Everett and lake road during peak usage times. As a walker / biker having to swerve in to traffic around cars is unsafe. I worry about kids who aren't as aware.
117	I think that Option 1 is superior.
118	Access to Camas Produce.
119	I was at the informational meeting and thought it would of been nice to have question and answers at the end of the presentation.
120	Access to Round Lake parking should be part of consideration.
121	I think the long term fix needs to be the goal, not something that needs to be readdressed or fixed in 5-10 years. Thank you for including community input :)
122	I think a roundabout would be a great improvement to the intersection.
123	Has continuing the right turn lane from Lake Road to Everett been considered? It was like that years ago and maybe needs to be addressed again
124	I prefer a roundabout style. The proposed design is too complex, expensive and will be unsafe.
125	Is this the best use of our money? I travel through there at least once a day and i don't have an issue. Those that don't plan well do have an issue. Not my problem!
126	The roundabouts are bad options. aggressive flow takes over and will cause more congestion.
127	You should condemn the property to the south, mobile park and produce and combine with the park for parking
128	I live just off 35th street and it is extremely dangerous currently making a left turn on Everett. I am concerned a round about will have a heavy stream of drivers and no breaks created by the light. We know the traffic for highschool is a huge part of this problem and that stream us extremely difficult with these drivers! My elementary son's school bus had to change their route as not able to turn left in the morning with current traffic- it is really concerning! The while corridor needs a published plan before we do this. Also, I do not want a round about as this appears to take too many trees.
129	Safety issue. Please provide turning lane for customers coming the roundabout to Camas Produce
130	Keep the residents involved in the process.
131	I wish we would have been kept this informed with all the new developments going in that I feel are wrecking our quality of living in the community.
132	I believe option one will meet the control and safety requirements for this intersection now and for the foreseeable future given the increasingly heavy use from both vehicles and pedestrians. A round about works for lower traffic levels, this intersection is too heavily used for that solution.
133	PLEASE MAKE SURE THERE IS SAFE ACCESS TO CAMAS PRODUCE AND THE LOBSTER TRUCK. I GO THERE SEVERAL TIMES A WEEK. THERE SHOULD BE A TURNING LANE THERE!
134	No roundabouts
135	Safety issues, turn lane for Camas Produce.
136	Important To minimize the impact to the small business that operate in the area. Please consider a turning lane for the camas produce parking lot
137	Add a turn in to Camas Produce
138	There should be safe access to camas produce

139	People do not know how to use the roundabouts. Please keep the lights. I see close accidents happen daily in camas roundabouts.
140	To have a better traffic flow would be amazing!
141	Make the accessibility to business easy
142	Turn lane into Camas Produce
143	The roundabout is good for safety... but will NOT relieve traffic congestion. There are many examples of this throughout Portland.
144	You must slow this growth within and surrounding Camas. When is enough.... enough? This little town of ours is not little any longer. There will come a time very soon where Camas is not a place you want to live and raise a family. After all, all these folks moved (from larger overcrowded places) for small town Camas. And their ruining it by trying to make it like the dumps they came from. Stop giving out permit after permit and saying yes to everything for the right amount of \$\$\$\$ You have achieved your growth and national recognition now it's time to take care of the residents. Especially those of us that were born and raised here and are now raising our own families in Camas.
145	I understand times have changed and we have more people and vehicles, but I miss the old camas, the friendly camas. I'm not happy with what its turned into..
146	Allow for easy access to local business
147	changing this one intersection is not going to reduce the amount of traffic here
148	The bridge is too small for this project to work efficiently. I canthe can see the city of Camas agreeing with my comment 5 years from know. It will be wise to do it right the first time and save money. I understand widening the bridge is very expensive.
149	Lets ensure pedestrians safety as a priority! So many on foot all year long
150	I have lived behind the lake store for over 30 years. Please take into consideration that the pedestrian traffic is just as bad as the cars. This is a family gathering , summer fun, marathon, track meet, wedding, dogwalking, daily jogging destinaion for a lot of people. Emergency rescue , fire trucks go through daily, sometimes many times a day. It needs to be wider, even if the bridge has to be replaced. There also needs to be sidewalks and crosswalks near the businesses.People run across the street to and from the store. There needs to be a pedestrian trail on the corner of 35th and Everett. Take down the two trees that are damaged and back that fence up! round it out to make a SAFE side walk that connects to the trail. People trip over those cables and walk out onto the road all the time. Some one is going to get seriously hurt. Especially if the traffic is moving faster. Thank you.
151	Avoid impact on businesses and trees
152	Use land fill in the SE corner of the lake where it looks like an ugly swamp anyway. Place the round a bout right there and keep traffic flowing during the construction
153	I have lived in the specifically for 25 years and the growth was a foregone conclusion. The fact you have waited this long to correct it is laughable. I hope all the transplants roast you every step of the way for your "improvements".
154	Slow the growth down.doesnt seem like there is much planning just doing
155	more parking near the interchange would be great
156	This needs to happen as soon as possible. Traffic isn't getting any less in the future. P
157	I think a roundabout is a great idea and with the amount of people going through that intersection, it would be nice to be proud of how it looks and of our town
158	Thanks for all of your work for the community!

159	A round about would be a congested nightmare as well as a safety hazard. Too much traffic and impatient people who don't "play well" with others. Why encourage MORE road rage? I have seen vehicles run up on the high spot at the Camas entrance, several near crashes and a boat on a trailer tip over. If a round about is your solution, I would rather the city just leave the intersection and stop lights as they are!
160	Both alternatives appear to sacrifice motorist safety to the cyclists and runners who don't pay for roads. Option 1 with dual turn lanes to get more cars through that then immediately merge together will promote aggressive driving. Option 2 of a non standard roundabout will be very confusing to occasional non daily users and watching for crossing motor traffic tends to distract from seeing pedestrians. Many drivers run without headlights in dark or bad weather and look like a gap in traffic.
161	i'd like to see an easy way to run/walk from Lacamas Lake to Round Lake - like a small pedestrian bridge over Everett
162	Factor congestion added by those parents who drive children to school rather than bus. This could add hundreds of cars that would generally not travel through at that time. What role is the school helping with awareness on their end?
163	As a former Portland resident, I appreciate the the rural setting that Camas offers. I trust that you will be good stewards to our community. Thank you, [REDACTED] <i>Name removed for privacy.</i>
164	Roundabouts not practical for all the teenage drivers going to the HS. too dangerous. Most adults don't even know how to drive through them.
165	A round about would work better as long as drivers understand how to use it. We have driven in busy cities in Europe and they work very well there.
166	This project is way overdue...more important than the other 2 roundabouts put in Camas in the last couple of years.
167	PLEASE DO NOT put a round-about at this intersection, there is way too much traffic for that to work properly!
168	Camas will screw the citizens on this too.
169	Thank you
170	Thanks for including more than just the nearby residents in this project! (PS I had to check the No Comment box in order for the survey to accept my comment!)
171	Please include traffic calming measures. Traffic usually speeds through and is dangerous to pedestrians
172	I like the roundabout design. Since developers seem to continue to add more residential homes this solution looks to accommodate growth.
173	Ensure that this does not impact kids getting to school. Have hours worked on the project take into consideration the high volume traffic times of our kids driving to/from the high school.
174	I strongly vote in favor of the roundabout option, provided any barriers are kept to a minimal height and do not obstruct vision in the intersection. It will be imperative to have maximum visibility in this area.
175	Stop letting developers add subdivisions, that would help our traffic problem. Build another high school for God's sake.
176	I do not like the roundabout idea
177	well, I did have a comment and typed it in here, but the system won't accept it. How can I give written input? [REDACTED] <i>Name removed for privacy.</i>

178	If you put in a roundabout - keeping the construction to a limited height so that folks can see what is happening on the other side of the roundabout would be a vast improvement over the roundabouts with tall constructs.
179	Roundabout is the max benefit for traffic congestion and control
180	Maybe just stop approving housing developments that continue to put strain on the road?? Common Sense solution. :)
181	Roundabouts are great. This conceptual drawing seems complicated which concerns me with all the new drivers passing through that intersection. I prefer the roundabout because intersection with light has only a limited benefit. We just need to make sure the roundabout isn't too "creative"
182	Thank you!
183	I think a roundabout is perfect in the afternoon when almost every car is turning right from Everett to lake the biggest issue is all those cars turning left from lake to Everett to the high school they could potentially block cars trying to go straight on Everett. The fork in the road before the roundabout looks like a good idea. If not a traffic signal assisted roundabout could be helpful if the signal was only in use in the morning to allow both avenues of approach a chance to get to the high school.
184	Neither of your options will reduce traffic. You have allowed the over population of a city that does not have the infrastructure to support the growing population. Roundabouts only work in less congested areas. Adding a second lane for an 1/8th of a mile and cutting into the already small round lake parking lot is a waste of money. Youve allowed this problem to happen because of greed and over development. Now you're going to have to deal with consequences.
185	I think the roundabout option is the best.
186	No round abouts please... people do not understand them and will not help this situation.
187	I hate roundabouts!
188	Yes prefer traffic lights with turn lanes
189	I am so happy this if finally being addressed! This is the most frustrating part of my commute DAILY, and I think a roundabout is genius!!
190	Replace the darn bridge & quit screwing around with it! Your plans only only continue to create a funneling effect north of the bridge wii h still slows traffic & impacts the neighborhood negatively.
191	I'd like to be able to get to work and get my kids in a timely manor
192	No more stupid roundabouts!
193	With the increase of roundabouts being used in the camas/Washougal area, I've noticed the lack of proper use by motorists...stopping instead of merging, no signal for exit, hesitant drivers interrupting the flow. With so many inexperienced/new drivers using this intersection because of its proximity to the high school, I believe average driver experience (target driver) should be given strong consideration when making a decision about improvements for this intersection.
194	It doesn't appear that option 1 will change anything...need long turn lanes for those headed south on Everett over bridge and headed east on Lake Rd to keep traffic from backing up.
195	I would prefer the option that maximizes traffic flow and saftey for pedestrians and bikes. I assume the city will make a decision based on research over the "feelings" of citizens.

196	Please consider improving the crossing for peds/bikers as that seems to be lacking in either plan
197	With the amount of people moving through there during school hours it almost should be an over pass. As of now the turn circle looked like a better option
198	Explore a pedestrian bridge over the roadway and end of lake linking Round Lake trails to Lacamas trail - connect near lodge. Would get bikes and pedestrians out of that intersection.
199	I would hope the city lets stastical evidence guide their decision rather than anecdotal opinions from citizens. Input is important but evidence should rule. Thank you.
200	Please don't put a round about there. That is really going to confuse people more.
201	I HATE the roundabout on Brady (my neighborhood) for its ridiculous small size. It's going to be a future problem. Whereas I LOVE the size and functionality of the roundabout at HWY 14 entrance! Please don't build anymore small roundabouts like Brady. Perhaps I ought to blame Vancouver City for that miserable foresight.
202	Not clear how the signalized intersection is different from current intersection. Is an extra land added?
203	I like the round-about design
204	PLEASE SAVE THE TREES AS MUCH AS POSSIBLE. Camas rips out trees at every turn. Round Lake is so sad. So much is destroyed. Please protect the natural lands for the animals, birds, trees, plants and the ecosystem.
205	The narrowness of the lake road at the Everett intersection cause a bottle neck. If 3 or 4 cars are waiting to turn left they end up blocking the people who could be making a free right turn causing major congestion and traffic that sometimes backs up all the way to Sierra
206	Adding 50% more traffic not adding lanes is not an acceptable solution.
207	Ensure city webpage is quick and easy to use. Project information needs to be immediately accessible in a user friendly way.
208	The roundabout would appear to help more with congestion but why not split the traffic going south on Everett earlier so people can turn where the road is currently on Lake. Also, a big push about how to use it!
209	Keeping traffic flowing and time to complete to s minimum is important given that it is the only convenient north/south connection and there are schools on both sides impacted.
210	We are growing so hopefully by time this is done it's not out dated with traffic. We got more then 400 + home going in camas.
211	Roundabouts are the best option!
212	An 'over the road' walking bridge from the Lacamas lake side over to Round Lake would be nice!
213	Don't put a roundabout there.
214	The round about will only work if it's big enough. The one at the freeway on 6th causes back up because it's too small so people don't feel like they have enough time to get in before a car comes. Also people don't know how to use it.
215	Should of fix the intersection prior to building city office on the lake Rd
216	Please don't ruin the trees
217	Should have made these adjustments before allowing the huge population growth and new subdivisions.

218	NO ROUNDABOUTS! Will hugely impact the amount of room required to construct, and the area has limited driving area. You add Bicycle access as well, and it will destroy the aesthetics of that area.
219	Lost cause 3 roads too many cars
220	What about the rest of Everett and city, this is the result of the unrestrained growth the city is embacked on.
221	I wasn't clear about the impacts of the project on the bridge from initial info meant...
222	A roundabout would be a nightmare. Nobody lets anybody in when its peak time
223	I feel the roundabout coming into Camas isn't big enough. I use it daily and have witnessed big trucks don't have enough room to make the curve. Same for school buses. That should be considered if the roundabout choice is made
224	Roundabouts will not work for pedestrian and bike safety
225	This should be done before any more houses are approved that would add traffic.
226	Bike Lanes and Pedestrian Traffic needs focus.
227	Don't underestimate the impact of turnoffs north and south of the intersection (e.g. Camas Produce, Round Lake parking, 38th street
228	Thank you for addressing this issue.
229	This project needs to take priority, especially since Camas City Council has approved so many building permits and developments in the past 10 years. Also, I am concerned that currently this project does not also address bridge between Lacamas & Round Lakes. This bridge and its narrowness also impacts flow of traffic.
230	Thank you for working to improve the intersection!
231	I sat at the roundabout at 6th and hwy 14 exit for over 5 min at 5:30 the other day. I'm NOT a fan of roundabouts.
232	I realize roundabouts are not a popular idea comment, but I have been impressed with the new roundabouts in Camas/Washougal because traffic flow continues.
233	I do not care for roundabouts
234	There are a lot of new drivers that drive through the intersection. I don't believe roundabouts are the best option for new drivers. They tend to be confusing to those who have been driving for years, let alone new teen drivers.
235	I rated the impact on trees have a high rating...I'm not as concerned about the number of trees as I am saving the chestnut tree. I like the roundabout option for saving the chestnut tree (assuming I'm reading the map correctly?)
236	I'm finding the biggest back up is directly associated with the school schedule.
237	I think a roundabout is the best option.
238	His should have been done 3 years ago!
239	there should be left turns lanes through there.
240	Is it possible to add a bridge for turning right from southbound Everett onto Lake that would merge further west from the intersection? This would make a less sharp turn than currently exists and may help ease congestion at the intersection as well.
241	Please don't cut down a bunch of trees and ruin the wetlands
242	Do it right, do it once. More time and cost (within reason) is well spent if it solves the problem.
243	plan for construction to be sensitive to school hours/schedule
244	With the current congestion and projected growth, neither idea seems like a long term plan. An overpass seems like the only option to keep the flow of traffic moving while keeping walkers/runners/bikers safe.

245	When construction starts, please avoid working in that area right before (7:30-9:00 a.m.) school and right after (3:00-4:00 p.m.) the congestion is already bad during those times.
246	One of the biggest problems of this intersection is the insane amount of high schoolers who drive and use their phones for talking and texting. When I am on my home from round lake on late start days for Camas High School I consistently see between 5-10 high schoolers backed up all the way to Sierra texting on their phones. Then they speed through the intersection. It is dangerous and illegal. I do not believe a roundabout will provide the level of traffic control that is required at this intersection for the bikers and other recreational users. Roundabouts do move traffic efficiently, but they create unsafe situations for those not in autos. I also believe it would negatively impact the round lake parking lot if there was a roundabout. The current light stops traffic just long enough so that you can exit the parking lot. Thank you for soliciting feedback.
247	I don't believe either of the two options will reduce the backup on lake road you must widen lake road further up than those two plans show so when the cars are backed up making a left of entering the traffic circle right hand turns don't get affected
248	I have concerns about the future traffic running through Everett due to increasing numbers of homes being built towards Fern Prairie and near CHS. Is there any consideration of somehow expanding the number of lanes to Everett? It's a bottleneck!
249	If a roundabout is selected then the City should use this as an opportunity to create a landmark for the City.
250	Looking forward to see this improvement. There also needs to be better sidewalks and ped crossing north of this intersection
251	You must widen 500 north of the proposed intersection. Widening 500 at the same time is financially responsible, efficient and proactive. This oversight would be poor planning and a gross oversight. I'm glad you are looking at an intersection improvement, but you also need to widen 500. If that does not happen, why bother with the intersection? Yes, trees, land, wetlands are important, but the city should have thought about that before allowing so many houses and development. Increase in population and housing DEMANDS infrastructure for livability for all. It's the wrong time to talk about these wetlands, property, bridges and trees. You could have predicted the need of infrastructure improvements and decided upon allowing development the development was worth more to the city than the trees where infrastructure improvements were obvious. Think of that in the future when you continue to allow development. Widen 500 as an addition to this intersection proposal. This does not go far enough for this area and without widening 500, will not allow the maximization of this new intersection-limiting its overall cost effectiveness. We want infrastructure improvements simultaneous, or prior to, to increased housing
252	The maps are a bit challenging to decipher. Glad to know there will be another informational opportunity in March, as I was unable to attend the meeting on Feb. 26th.
253	Stop studying the issue and spending ridiculous amounts of money on traffic studies...it's messed up and everyone knows it and a roundabout is the best solution. Do it now.
254	Bridge is the real bottleneck. Explore solutions to expand rather than ignoring the root cause.

255	The congestion at the intersection is caused not by the intersection itself but by the Lake Road approach to the intersection and the Everett Road south approach to the intersection. Neither appear capable of having two lanes that would allow right turns to move out of the intersection and not have to wait for the other drivers. Unless those two approaches can have double lanes, nothing that you do to the intersection will improve congestion
256	Please have construction done at NIGHT. It's not a big enough area now to have construction during any rush hour or school.
257	Thank you for surveying the residents!
258	Before building permits are approved, large construction projects should have to include footing the bill for infrastructure improvements necessary to accommodate it. And we need to limit construction - keep Camas small-town!!
259	Please do not add any more roundabouts. They are the most absurd things ever.
260	Shift proposed roundabout west and south to maintain relative alignment of Everett. Please select roundabout but shift west.
261	I would vote for the traffic light option. Especially with all the young drivers headed to the high school and the lakes. It appears less trees and wetlands would be disturbed. I feel it would be safer.
262	I think the roundabout is a great idea. Split the southbound traffic into two lanes as soon as you can beyond the bridge (or widen the bridge), one lane turning right to Lake Road and one lane into the roundabout.
263	I prefer roads to be shut down and construction done quickly. Keeping the traffic access really slows the progress.
264	Thanks for taking this on! Also, roundabouts are awesome. Don't listen to the haters.
265	The chestnut tree should be preserved. Additionally, trees should be planted to make up for trees removed to preserve the greenery in Camas.
266	Just take a small piece of the lake where the water recedes. The roundabout will create more of a congestion and cause accidents due to the amount of traffic and buses! Please do not do this!
267	I hope this extends just past the existing bridge to the area by Lakeside Chalet to create a safer space for pedestrians.
268	Don't build a roundabout! Too many people can't drive on one correctly.
269	I prefer roundabouts, they're safer and help flow.
270	Tunnel or walking path to connect the parks. Keep the water access between the 2 parks or improve it.
271	Make the back parking lot behind the store more visible and take out the parking lot in the front of round lake. It's very dangerous during the summer and use that space for widening the road. Put up no parking signs and enforce them. Have school routes for high school drivers utilizing crown road more.
272	Just my opinion, maintaining the natural setting is my priority. I would rather see nothing done and deal with traffic every day to work than see the natural parts of our city reduced or harmed. Thank you
273	I would like a solution that would provide separation of pedestrian traffic from car traffic to Lacamas Lake and Round Lake. Pedestrian tunnels or bridges would be great.
274	No roundabout please!

275	I hope that Everett will also get sidewalks. It is so unsafe to walk and I see so many students walking to school. We have more traffic than ever now and it's time to put in sidewalks.
276	I Prefer the roundabout makes more sense
277	I have heard rumors about other projects (widening 500/Everett, changes to the bridge by Round Lake, etc. Please be sure to consider all impacts of these projects together in this project. We sometimes seem to be short sighted with our projects and have major impacts just a couple years after completion.
278	that bridge north of the intersection needs to be widened. I can't really understand the push to preserve it.
279	Crown road and the road by the new high school needs side walks. We are endangering our children by not having any!
280	The intersection is in a very important nature area in town. Please be thoughtful about the trees, wildlife, wetlands, and lakes when considering the options for construction.
281	Please protect as many trees as possible!
282	I see the movement of pedestrians and cyclists to be very important.
283	Nice the round about to the produce store locatio. Make it large enough to merge gracefully. If you feel you have to make a round about you should also feel obligated to create a commercial to air on tv so that users know how to use a round about!
284	No roundabout. I have to drive through the roundabout @ 6th and sr 14 daily, and I dread having to go through there. Its awful.
285	For starters, I cannot tell what the picture in "Option 1" is trying to portray. It is not as clear as the second one, which is why I chose the second one. I'm not sure why there just can't be a right-turn lane placed on SB Everett to facilitate traffic flow onto WB Lake Rd. I'm not a fan of the roundabout that the city placed on the west end of town by Hwy 14 / Chevron Station. A more successful roundabout design can be seen in Ridgefield, where it accommodates more than one lane of traffic (one for turns, one for through-traffic). The one on the west end might work for that particular intersection on Lake Rd., but seems ill-suited for where it was placed in West Camas. Please be more thoughtful about how they're designed for the future. Additionally, I'm unsure as to how a Roundabout is going to ensure the safety of pedestrians, joggers and cyclists as they attempt to cross from Round Lake to access the Heritage Trail?
286	I like the round about
287	NO ROUNDABOUTS!!!
288	Increase the bridge lanes
289	Thank you for addressing this issue.
290	I usually like roundabouts - they're good for traffic flow. But this intersection will be a crucial area in what should be a very pedestrian and bike-friendly node in Camas' overall plan. Roundabouts are not great for bikes and horrible for pedestrians. This area should be full of people walking, jogging, carrying kayaks, etc. - this recreational activity is what can really set Camas apart, and we need to encourage it. Thanks for all your good work!
291	How are you going to accommodate walkers and bikers if you do a round-a-bout? The whole purpose of a round-a-bout is for traffic to keep moving. If you have the walkers and bikers cross the round-a-bout, I foresee big safety issues.
292	The intersection is already signalized so the only viable flow and queuing improvement is a round about.

293	Best of luck. I don't see an easy fix and with more drivers coming this will be hard to fix quickly
294	I wish those running last night's meeting had allowed for a time of question and answer as a group after the presentation.
295	Round about is my preference. They are most efficient and safe. They are used in other communities with long term positive effects.
296	We've removed enough trees! I don't mind waiting a light or two to get through the intersection. Increased traffic is something the city should consider PRIOR to blindly approve building projects.
297	Transparency about how City will use a Bidding Process and how it will decide which company to give the business to.
298	Thank you!
299	Several years ago I sent a leaf sample from one of the large chestnut trees near here to the American Chestnut Foundation for identification to see if it was an American chestnut. They said it was in fact a European chestnut. I am pretty sure that the largest chestnut trees in this area were planted by the Pittock family circa 1890, and the smaller chestnuts are seedlings from the originals. It is neat to have a few living remnants of the Pittock family's time spent in this area.
300	Sad not to see the information that was presented at the open house. I would like to know more about impact on private property, lake and trees if they are affected by this project. Would like to see also other people's questions and concerns and be able to anonymously add to them if I have any.
301	I thing the roundabout would be the very best solution!
302	Roundabout. Just do it. Ignore the haters. They have proven effective and the local citizens are getting accustomed to using them.
303	I would like to understand the potential savings if the road isn't kept open during construction; how would pedestrian traffic be safely managed with a roundabout?; Prefer function over aesthetic unless it grows significantly as shown in the roundabout sketch.;
304	If a round about is put in then it needs monitoring by police so that people who do not use the yield signs are ticketed with a high fine of 200+ dollars so that they are utilized correctly.
305	Biggest worry is the traffic issues DURING construction as I drive through the intersection at least 2 times a day to get to/from work to home. We already dealt with extensive traffic delays during sewer and re paving work. Not looking for more!
306	need to add a sidewalk on the south side
307	NO ROUNDABOUT. PEOPLE DO NOT KNOW HOW TO USE THEM AND THEY HAVE RUINED GETTING ON AND OFF OF SW 6TH..
308	Reduce congestion. The lines are awful during school times.
309	Would like roundabout circle to be a little bit larger with single feed on the circle, and not double feed going to and from Lake Road.
310	Would love to see some real thought put into the aesthetics of this - keep as many trees up as possible and make this a beautiful entrance to the historic side of Camas!
311	I wonder what the foot traffic plan would be with a roundabout. Summer foot traffic is very heavy on hot weekends.
312	Don't cut down any more trees. I moved my family to Camas for the beauty and greenery. Stop cutting down trees.

313	A roundabout is a terrible idea. These are high schoolers. The majority of people don't do roundabouts correctly
314	If it's a roundabout I would like the safety of the pedestrians & CHS runners to be strongly taken into consideration during the design phase & the public to be CLEARLY shown how to maneuver correctly
315	Thanks for listening
316	I'm not convinced that either project will reduce traffic congestion. There are so many new housing developments being built that the number of cars using that intersection has tripled. Camas needs to stop growing unless the roads can handle all the new growth.
317	I prefer alternative 2 with Roundabout - blue line configuration with minimal impact top Round Lake parking. Impact to private property on lake. Minimal impact to Lake
318	Please provide a venue that is large enough to accommodate the public. I went to the first meeting and had to leave. There was not enough seats and I could not get into the room to see the presentation. The person speaking was also way too soft spoken so I could not hear what was being said. There were displays at the back of the room which I could not view since it was SRO and access was completely blocked. Overall, a highly disappointing experience.
319	I am very concerned about the difficulty for motorists entering Everett from 35th Ave. During busy times, we must rely on the short gaps in northbound traffic caused by the traffic light switching. While I think a roundabout will improve traffic flow, it will cause more issues (and accidents) at 35th Ave.
320	My concern is for the trees and surrounding environment. The choice should protect these things as much as possible.
321	Im not sure I see how the signal option,#1, will improve flow. Bottle neck at the bridge. I really like the roundabout version as it will improve traffic flow but don't see how either plan will improve safety for pedestrian movement from the two paths around the lakes. Is a pedestrian bridge at all in the concepts?
322	No traffic circles!
323	Please no roundabout. Traffic is too congested and dense in small time frames for this to work. It would be a nightmare during the school year. These only work if traffic is spaced out a bit.
324	Rectrict trucks and things should greatly improve.
325	I live right there and use that intersection several times a day. I don't think it's awful. Yes, traffic gets congested at times, but overall it's not a horrible interesection. I would like to see park and other natural property preserved. Should a roundabout be chosen, I would like to see ahead of time how pedestrian safety will be addressed.
326	Roundabout seems like the most efficient proposal. Not sure from the traffic what the bold orange line is, but assume the thinner orange line is pedestrian crossing. I like that it is moved away from the circle so traffic can continue during the limited times pedestrian traffic is present.
327	No roundabout. No widening of Everett south of Lake Rd. Use signals during peak hours uphill of Lacamas Lake Park & south of 21st Ave
328	I abhor roundabouts, especially in this area as roundabouts are difficult for pedestrians to cross. A flyover walkway from the round table parking lot would work. As far as communication, I don't use my cell phone for anything but texts and phone calls. So, I think in the mail notices and email notices are very helpful.

329	<i>[This comment was moved from the responses to Question 5]</i> #8 Isn't letting me write a comment and is only accepting "no Comment" box check. My comment for #8 is that I like the roundabout solution as it will accommodate the growth that is already in action in our town and the traffic is only going to increase
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