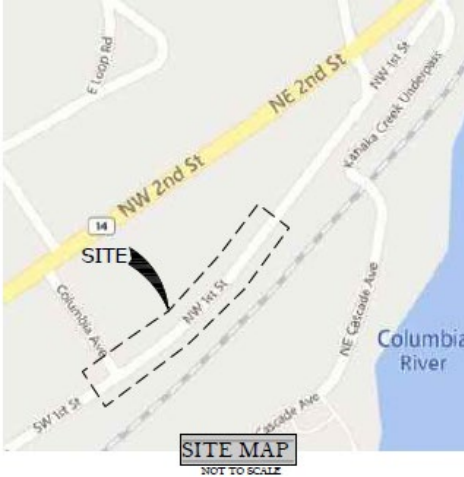
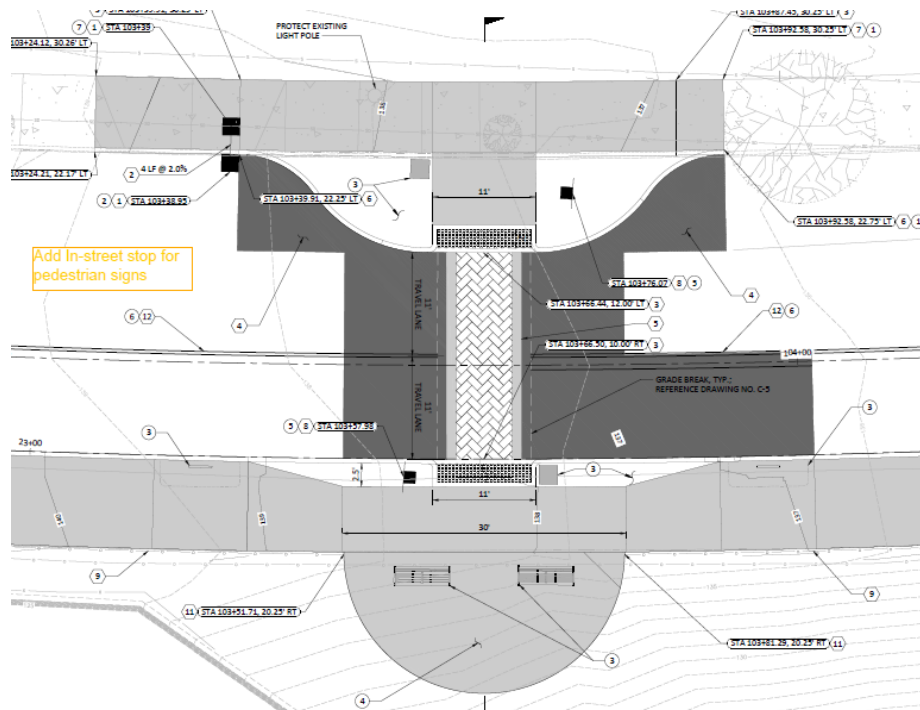
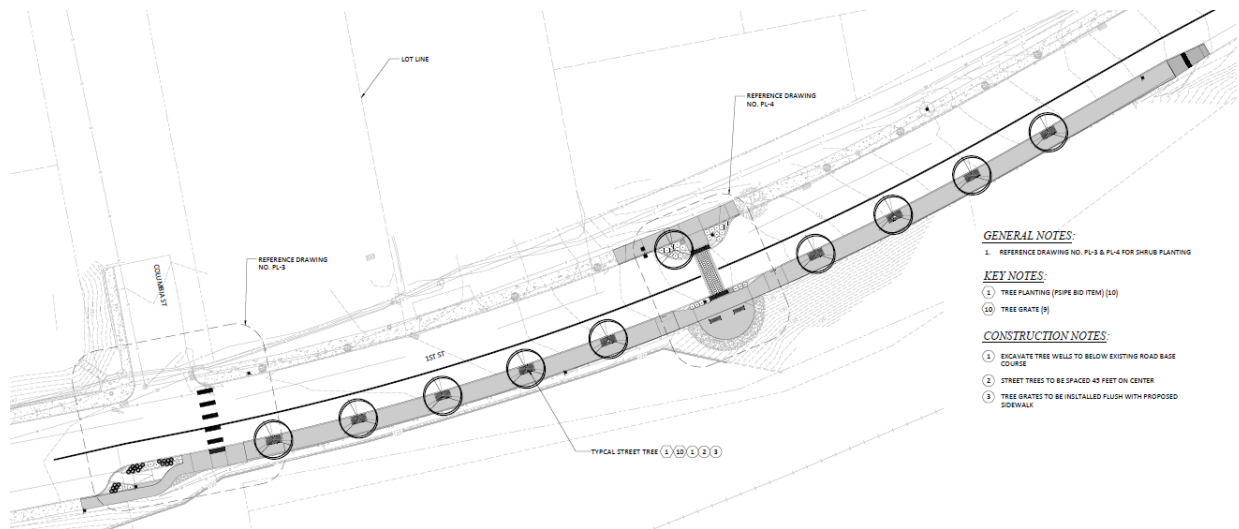


# First Street Overlook



This project consists of crosswalk striping, vegetated curb extensions (to slow traffic), new sidewalk, pedestrian overlook, trees, and streetscaping. This project was planned to be constructed in 2021, before it was discovered the right of way still belonged to WSDOT. This required additional design approval through WSDOT and agreement on what improvements were needed to the road before the city took back the right of way. This is moving forward and the city is reapplying for construction phase funding with the goal of constructing in 2023. More information on the project and complete plans are on the city's website at

<https://www.ci.stevenson.wa.us/publicworks/project/first-street-overlook>.



# Kanaka Creek Underpass



The City has prioritized maintaining a consistent access Level of Service (LOS) for all residents, government, and commercial partners of the City of Stevenson. The City currently has 8 unpaved streets.

The City has developed a plan to systematically convert our gravel streets to hot mix asphalt (pavement).

The longest of the City's gravel streets (at double the length of the next longest) is 0.15 miles. Roadway surface condition was also evaluated (compared to others) and existing geometry, as it relates to safety. The street that rose to the top as a priority for improvement was Kanaka Creek underpass (aka Cascade Ave).

The feasibility of reconstruction and realignment of Cascade Avenue to current city standards is being evaluated, however, given the other stakeholders (BNSF and

environmental regulators), both planning and construction would take considerable time and expense.

## Geometric deficiencies:

- Width (12 ft vs. 22 ft)
- Radius (25 ft vs. 165 ft)
- Sight Distance (210 ft req)

## Current Safety Concerns:

- Pedestrian/vehicle conflicts
- Vehicle/vehicle conflicts
- Vehicle/EMS conflicts

One interim safety mitigation is to close the road to vehicles and make it open to bikes, pedestrians, and emergency vehicles only. We welcome other options to come forward, keeping in mind future intersection improvements at SR-14.



Left-Entrance from Cascade Ave.

Right-From Cascade along Kanaka after the wide spot/turn around.





# Kanaka Creek Underpass



Left-Approach from Cascade to the underpass.



Below-View through the underpass from Cascade.



Left-View from the Underpass to the sharp corner before the bridge.



Below-View from Kanaka Creek Underpass of the intersection with SR-14.



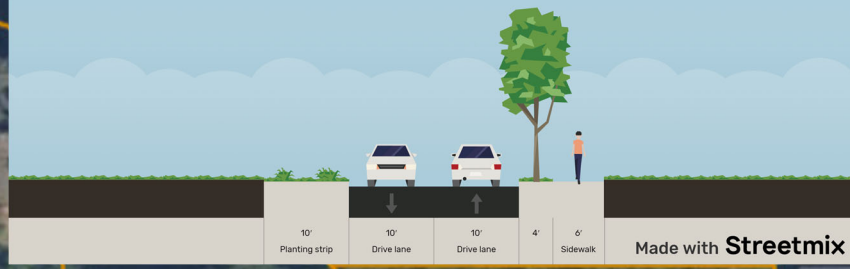
# Lasher Street Safe Routes to School 2022 Concept-Level Grant Proposal



**Sidewalk Rest Area**  
Bench/cement landing part way up hill.  
Incorporate water quality features as necessary

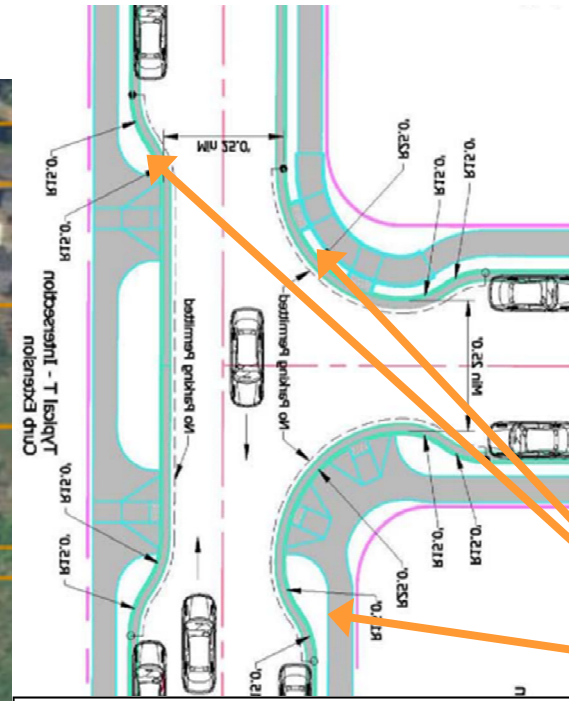
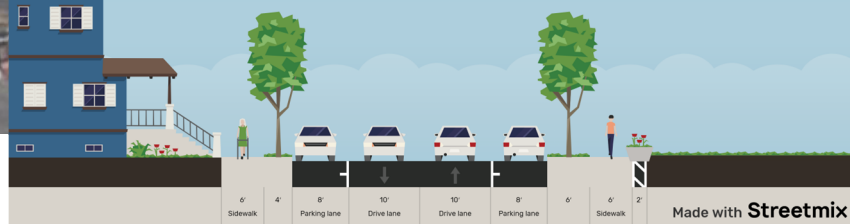
## Upper Lasher

Centerline: 20' from west ROW line



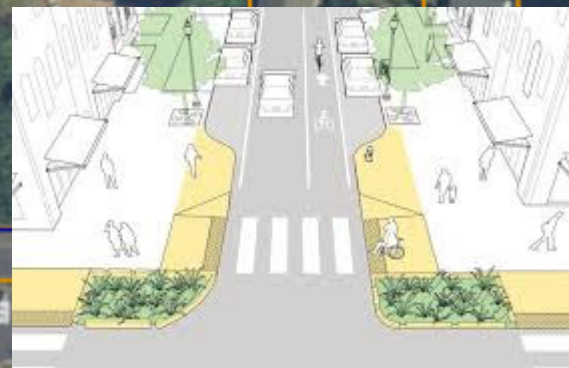
## Lower Lasher

Lateral Shift/Chicane to the east  
Centerline: 28' from west ROW line



**Lasher/Private Driveway, Jefferson West**  
Bulb-out/Pinch Point into Lasher  
Consider raised crosswalk at private driveway/  
Jefferson West  
Add water quality features as necessary

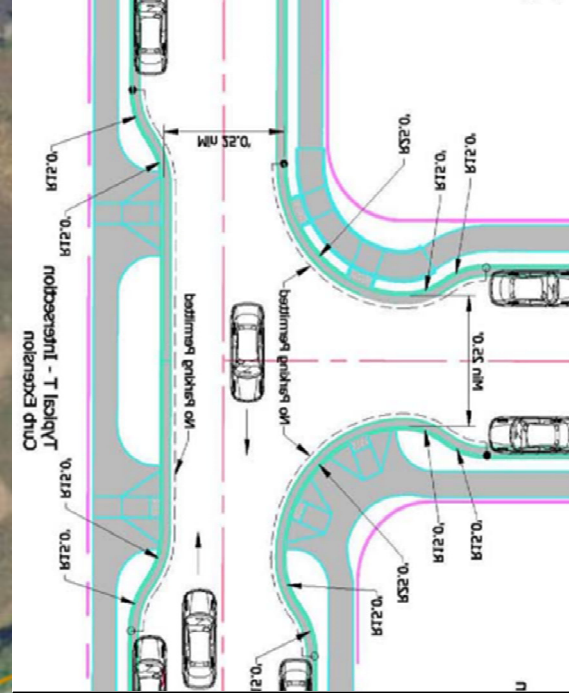
**Lasher/Jefferson East**  
Bulb-out into Lasher parking lane.  
Bulb-out into Jefferson/plan for sidewalks,  
planter strip, parking lane.  
Add water quality features as necessary.



**Lasher/Vancouver Intersection**  
Bulb-out into Lasher parking lanes.  
No bulb-out onto Vancouver.



**Water Quality Features**  
As necessary, based on impervious surface coverage.



**School Street/Stevenson Elementary School**  
Bulb-out/Pinch Point into School Street parking lane  
Raised crosswalk at SES driveway  
Extend ped island to reduce crossing distance

### Overall Project Benefits

- Serves low-income, historically overlooked community
- Calms traffic along a hilly route between apartments and elementary school
- Improves fire suppression and emergency response
- Rehabilitates areas with failing pavement
- Anticipates future development

### CDBG Project Overview

- Construct cul-de-sac at street end for fire safety
- Add fire hydrant for suppression in unserved area
- Construct ~250' half-street improvement for pedestrian safety
- Provide necessary stormwater filtration for new impervious surfaces

### Safe Routes to School Project Overview

- Narrows crosswalk distances
- Slows traffic at Jefferson and Vancouver Intersections
- Slows traffic along Lasher and School Street roadway
- Adds landscape features, a sidewalk rest area with views, and overlook

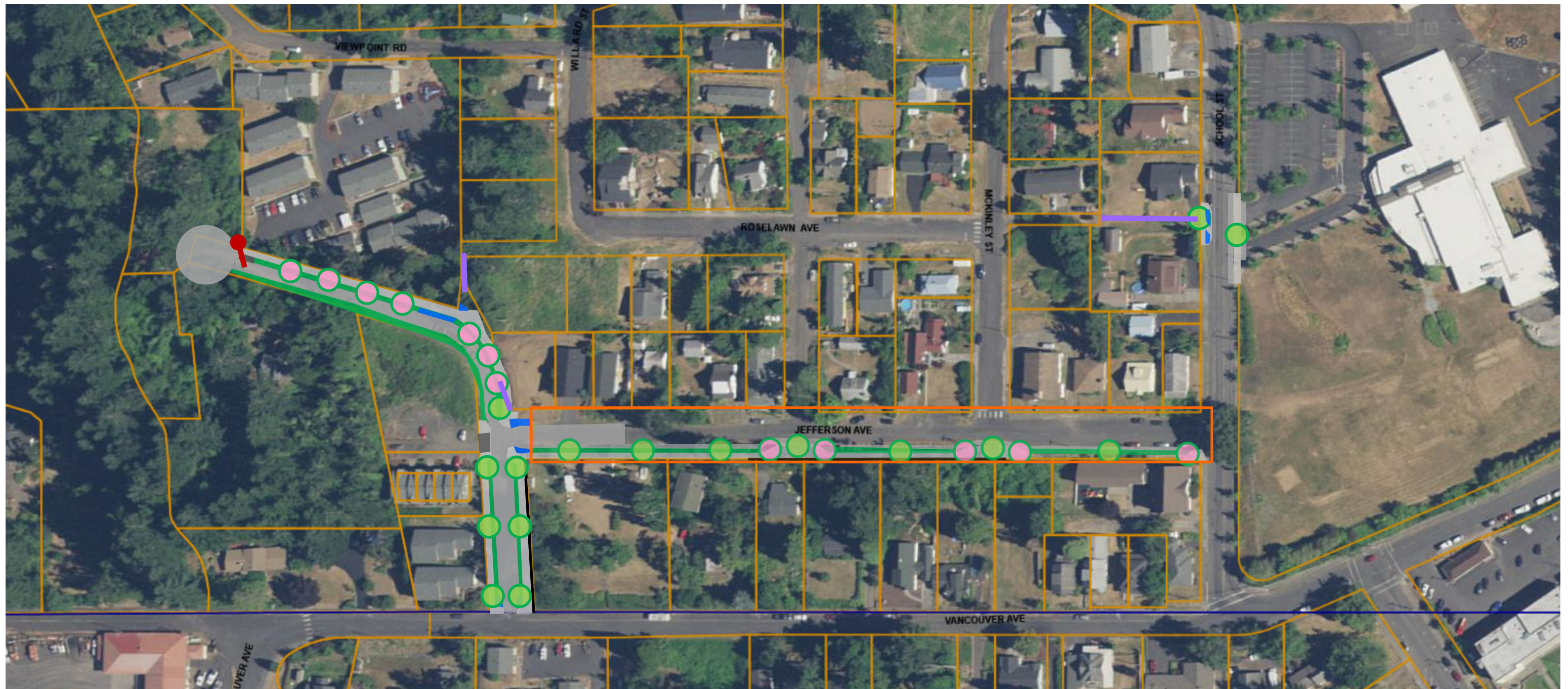
### Elementary School Entrance

- Adds pedestrian crossing, narrow crossing distance
- Slows traffic along School Street
- Slows turning movements into SES parking lot
- Adds landscape features
- Acquires ped easement/connection to Rose Lawn Street



# Lasher Street Safe Routes to School

## 2022 Concept-Level Grant Proposal Details



### Pavement

Cul-de-sac: 41' radius: ~5,300 sf  
 Upper Lasher: 475' long, 20' wide: ~9500 sf  
 Lower Lasher: 20' long, 36' wide: 7200 sf  
 Jefferson Intersection: 30' x 30': 900 sf  
 School Entrance: 90' x 20': 1800 sf

### Right-of-Way

Cul-de-sac: ??? 3000 sf, 2 to 3 owners  
 Upper Lasher: 150' long, 10' wide, 1 owner  
 School Entrance: 130' long, 15' wide, 2 owners

### Undergrounding

School Entrance: 250' communications

### Curb

Cul-de-sac: ~260 ft  
 Upper Lasher: ~1000 ft  
 Lower Lasher: ~400 ft  
 Jefferson Intersection: ~100 ft  
 School Entrance: ~100 ft

### Storm

Catch Basins/Curb Inlets: 11?  
 Storm Pipe: ~750 ft  
 Treatment Swales/Rain Gardens: 6???~1000 ft???

### Sidewalks

Upper Lasher: 475' long, 6' wide: 2850 sf  
 Lower Lasher: 400' long, 6' wide: 2400 sf  
 Jefferson Intersection: 100', 6' wide: 600 sf  
 School Entrance: 180' long, 8' wide: 1440 sf

### Retaining Wall

Upper Lasher: 25' long, 4' tall  
 Lower Lasher: 200' long, 4' tall

### Lighting

Upper Lasher: ?? 1 auto, 3 pedestrian  
 Lower Lasher: ?? 2 auto, 2 pedestrian, Decorative??  
 School Street: ?? 2 pedestrian, Decorative??

### Landscaping

Upper Lasher: 475' long, 6' wide: 2850 sf planter strip/grass, 8 trees (seek donation of 7 flowering cherries from Yoshida family), 1 rest area/bench, trashcan??, Railing?? 10'??  
 Lower Lasher: 400' long, 10' wide: 4000 sf planter strip/grass, 6 street trees  
 School Entrance: 2 street trees, 2 basalt pillars

### Fire Hydrant

Upper Lasher: 1 hydrant, 3 6" valves, 50' 6" ductile iron pipe

### Add-Ons

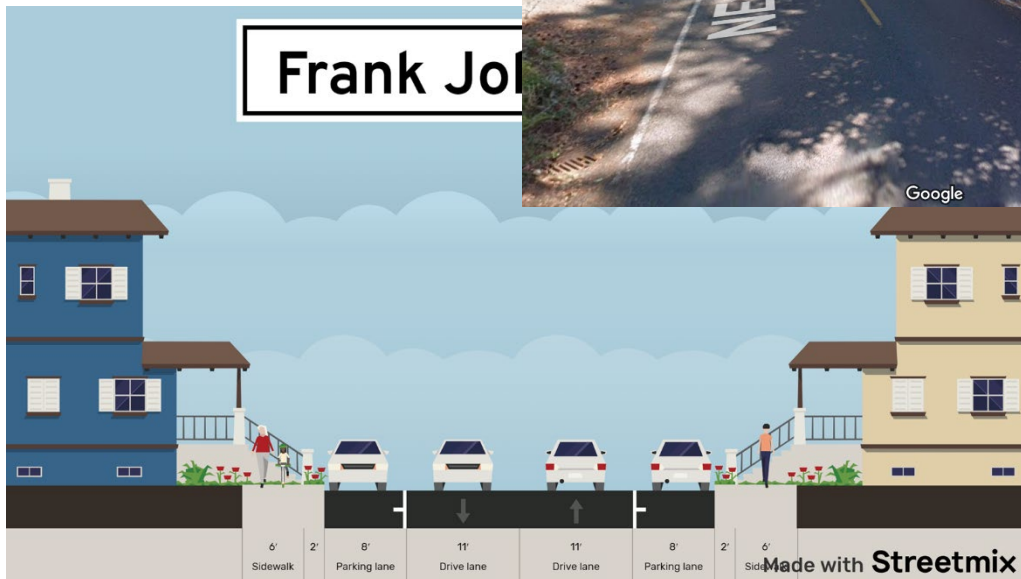
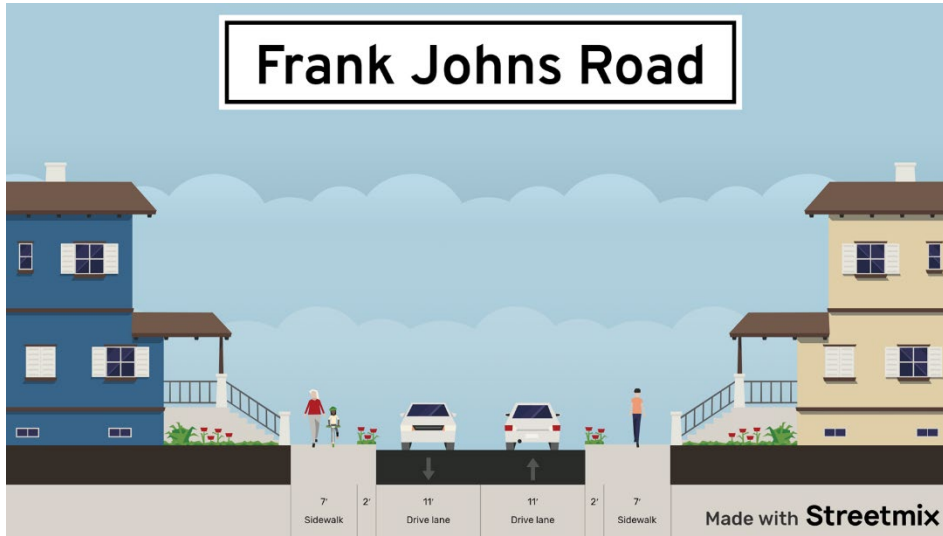
Jefferson Street East:  
 Curb: 950' long  
 Pavement: 200' long, 28' wide  
 750' long, 2' wide  
 Storm: 6?? Catch basins, ??? 500' pipe  
 Sidewalk: 650' long 6' wide: 3900 sf  
 Planter Strip: 900' long 4' wide: 3600 sf  
 Street Trees: 12 trees  
 Lighting: ?? 3 auto, 3 pedestrian, decorative?  
 Retaining Wall: ?? 400' long, 6' tall  
 Railing: 400' long  
 Right-of-Way: 400' long, 5' wide slope easement, 5 owners  
 Undergrounding: 700' power and comms



# Frank Johns Sidewalk

The City is working with residents along lower Frank Johns Road to improve pedestrian accessibility. This project was identified as early as 2006 and traffic has continued to increase along this corridor.

Concepts are currently being evaluated, engineering is proposed to start in 2024, and construction estimated to break ground in 2026. This project will include water system improvements, identified as a need in the 2017 water system plan update.

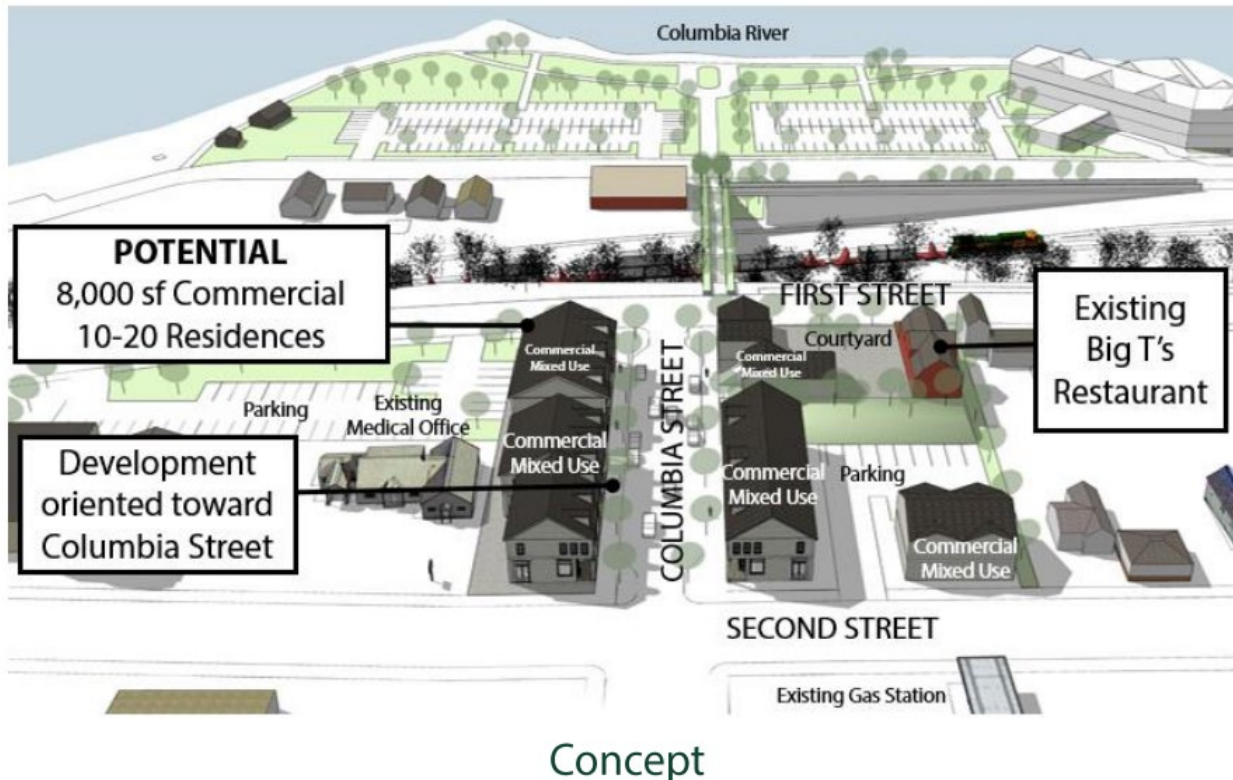


# Columbia Avenue Realignment

This project consists of a 2-lane asphalt roadway flanked by unconnected sections of sidewalk. Improvement of this corridor is intended as a catalyst project as outlined in the 2019 Downtown Plan. More information on this project can be found on the city website at <https://www.ci.stevenson.wa.us/planning/project/columbia-realignment>. The project is currently in the feasibility stage.



# Columbia Street Catalyst Project





## Improvement Concept: Kanaka Creek Road at School Street & Bull Dog Drive



### Description

Revise the intersection of Kanaka Creek Drive at School Street & Bulldog Drive using striping and flexible post delineators.

### Purpose

This improvement is intended to:

- Reduce intersection size
- Improve sight lines at pedestrian crossing across Kanaka Creek Road and shorten crossing distance
- Reduce intersection conflict points
- Better define roadway hierarchy

### Additional Considerations

Other factors to consider with this improvement include:

- Striping and post delineators will require additional maintenance

### Alternative Improvement

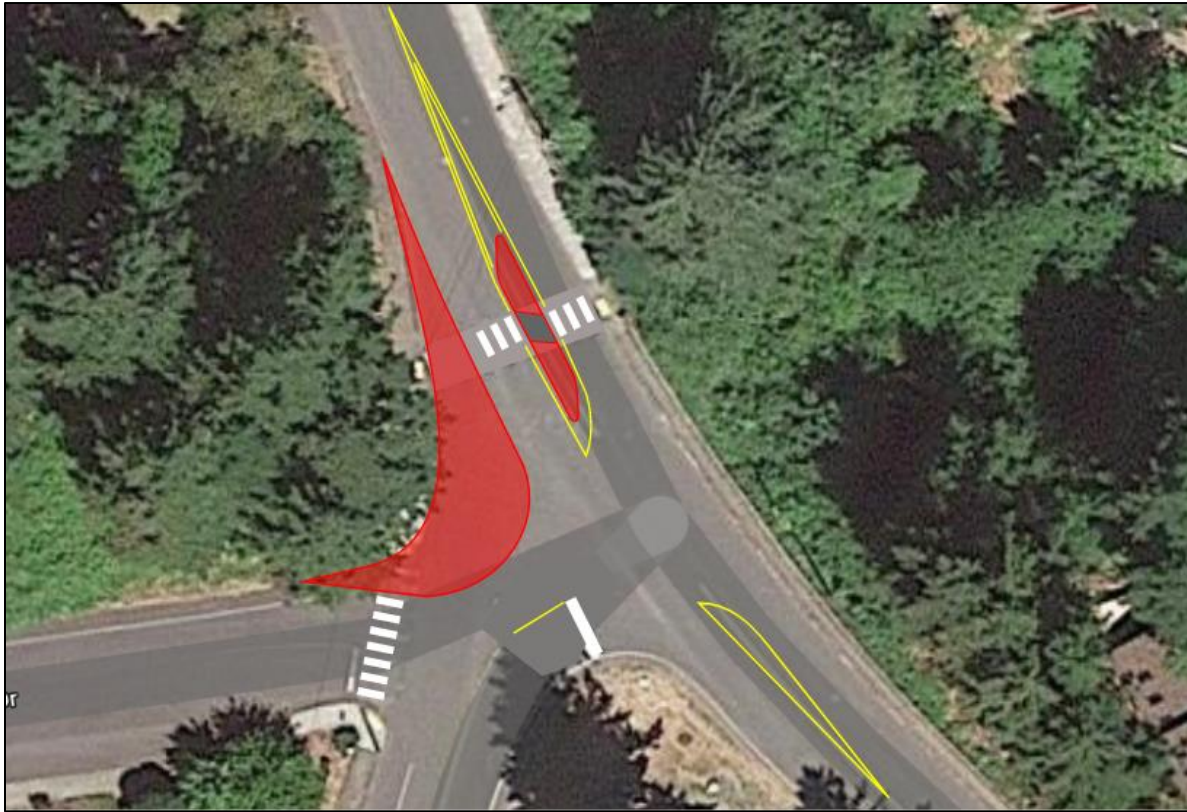
Consider more permanent improvements such as medians rather than striping and delineators.

### Cost Opinion

Less than \$20,000



## Improvement Concept: Kanaka Creek Road at School Street & Bull Dog Drive



### Description

Revise the intersection of Kanaka Creek Drive at School Street & Bulldog Drive by extending the northwest corner and adding a pedestrian crossing median island.

### Purpose

This improvement is intended to:

- Reduce intersection size
- Improve sight lines at pedestrian crossing across Kanaka Creek Road and allow two-stage crossing
- Better define roadway hierarchy
- Potentially slow speeds by narrowing travel lanes

### Additional Considerations

Other factors to consider with this improvement include:

- Corner could include planting feature
- Pedestrian median island can include angled crossing to turn pedestrians towards oncoming traffic
- Pedestrian crossing a Bulldog Drive can be shortened
- The project will increase impervious surface which can be minimized with planting area

### Alternative Improvement

Consider as using striping and delineators for corner with possible median island for crossing.

### Cost Opinion

Less than \$50,000



## Improvement Concept: Eastbound Acceleration Lane at SR-14 & Rock Creek Drive



### Description

Construct an eastbound acceleration lane on SR-14 at Rock Creek Drive. The lane illustrated above is approximately 1,200 feet in length.

### Purpose

This improvement is intended to:

- Provide increased capacity for the southbound left-turn movement
- Reduce the likelihood of rear-end and angle collisions in the eastbound direction
- Potentially Improve sight lines looking to the east

### Additional Considerations

Other factors to consider with this improvement include:

- Access to WSDOT yard south of the intersection would need to be addressed
- The project will increase impervious surface, inducing stormwater considerations
- Sight distance requirements to east will be longer with additional lane to cross
- Additional grading and possible structural wall may be needed on northeast corner
- Project is on a state highway and WSDOT will need to be engaged

### Alternative Improvement

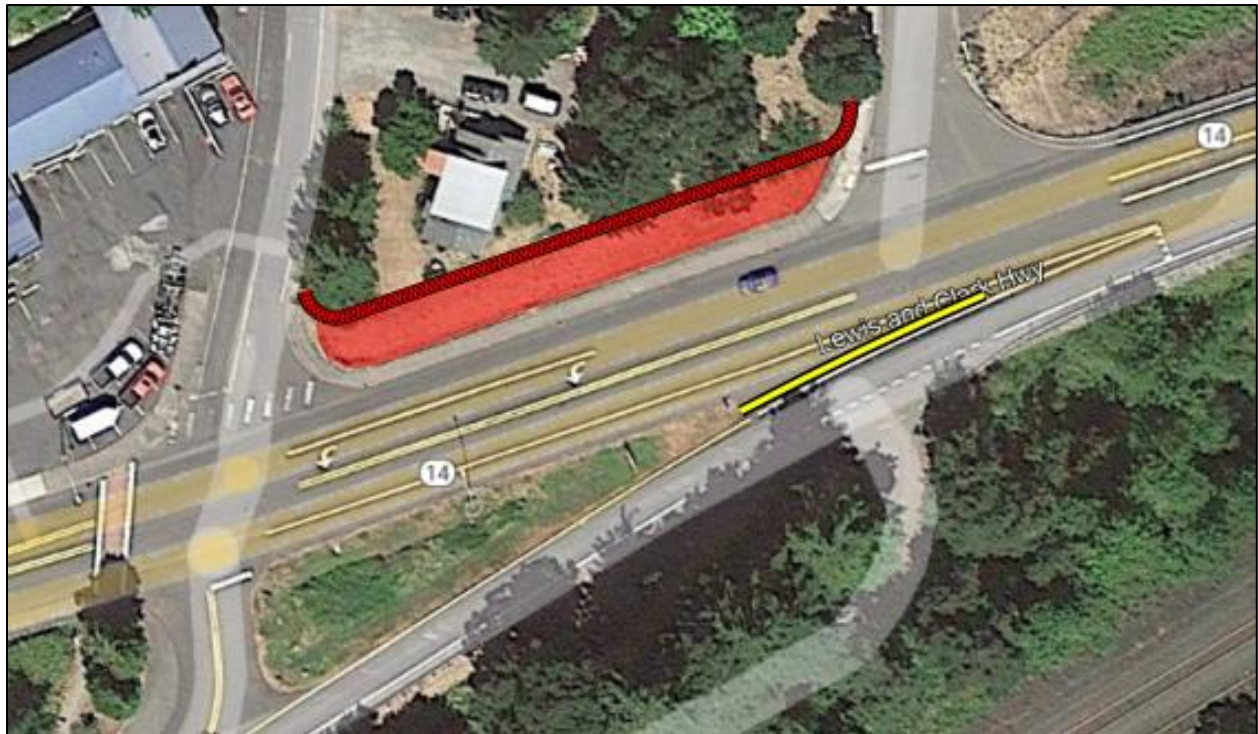
Sight distance could likely be addressed with removal of vegetation on the northeast corner of the intersection without need for greater improvement.

### Cost Opinion

\$1,050,000



## Improvement Concept: East SR-14 Safety Improvements



### Description

Relocate retaining wall to ROW line and regrade and landscape the property adjacent to the sidewalk to improve sight lines. Add a 1- to 2-foot-wide ribbon median with post delineators in the gore between SR-14 and 1<sup>st</sup> Street to prevent the illegal northbound left-turn movement from SW Cascade Avenue. Both improvements are illustrated above.

### Purpose

This improvement is intended to:

- Address sight distance issues at NE Frank Johns Road and Lutheran Church Road
- Prevent illegal left-turns from SW Cascade Avenue onto westbound SR-14

### Additional Considerations

Other factors to consider with these improvements include:

- The improvements could be fully constructed in the existing right-of-way
- Perceived impacts to private property
- Wall reconstruction would potentially impact trees on private property
- Projects are independent and could be constructed independently
- Project is on a state highway and WSDOT will need to be engaged

### Alternative Improvement

Physically prohibit southbound left turns at Lutheran Church Road at SR-14 concurrent with northern connection of Lutheran Church Road and NE Pine Street

### Cost Opinion

\$40,000 for ribbon median

\$50,000 for retaining wall



## Improvement Concept: 3-Lane Section SR-14 from 1<sup>st</sup> Street to SW Rock Creek Drive



### Description

Convert to 3-lane cross-section on SR-14 (2<sup>nd</sup> Street) between 1<sup>st</sup> Street and SW Rock Creek Drive. This project is expected to be a combination of roadway widening and restriping. Adding the center lane would provide the opportunity to include a median island refuge at the crosswalk east of SW Rock Creek Drive.

### Purpose

This improvement is intended to:

- Increase capacity for left-turn movements
- Reduce the likelihood of some types of collisions (rear end and angle)
- Improve pedestrian crossing with potential median island

### Additional Considerations

The image above is a conceptual layout only. Other factors to consider with this improvement include:

- Widening the roadway may require grading
- The project will increase impervious surface
- This project could be constructed in phases with left-turn striping at SW Rock Creek Drive and possible median island refuge constructed with the existing paved width and extension of two-way left-turn lane to 1<sup>st</sup> Street as a later phase
- Project is on a state highway and WSDOT will need to be engaged

### Alternative Improvement

The improvements could be limited to the SW Rock Creek Drive intersection with SR-14 (2<sup>nd</sup> Street)

### Cost Opinion

\$390,000



# Leavens Overlay

Leavens Street between First and Second will need leveling, grind and inlay to improve the road surface conditions. Sidewalk and stormwater improvements are also needed. Prior to this work, water/sewer utilities will need to be assessed to support current and potential development and utilities may need to be relocated underground. The plan is to match mid and lower Russell Avenue when completed.



Above-Leavens St. from First St.  
Left-Overhead view of Leavens  
Below-Map of location





# Paving Gravel Roads

The city has prioritized maintaining a consistent access Level of Service (LOS) for all residents, government, and commercial partners of the City of Stevenson. The city currently has 8 unpaved streets. Typically, roads are developed when lots are created as part of the subdivision process. Our current city standards do not require frontage improvements for properties adjacent to roads that are substandard.

The city has developed a plan to systematically convert our gravel streets to pavement. A list of the streets and information on each is below.

## Ash Alley (between Russell and Seymore) (.08 miles)

Currently there are multiple infill commercial developments proposed between 1st and 2nd street. As part of these projects, we anticipate public infrastructure improvements will be required. By combining improvements into one contract or a series of contracts within a short timeframe, we take advantage of potential cost savings as well as consistent aging of the infrastructure. Ash Alley is a secondary access for 6 residences as well as multiple commercial properties. It is tied for second longest section of unpaved roadway in the city, 0.08 miles. A stormwater catchment basin concern has been recently corrected and the urgency to address this alley is lessened.



Upper Left-Ash Alley at Seymore intersection looking east.

Above-Mid-Ash Alley looking west.

Lower Left-Ash Alley looking east at intersection with Russell.



# Paving Gravel Roads

## Del Rey (.02 miles)

This section of Del Rey serves one developed property and provides access to multiple undeveloped properties.



## Gropper Park Loop (.08 miles)

This road provides access to two residential properties, and surrounds Gropper Park. The photos below were taken before the sidewalks were installed along Gropper.





# Paving Gravel Roads

H&H Avenue (.05 miles)



Holly Street (.05 miles)

Holly Street is the access to Iman Cemetery. There are undeveloped lots on the east side of the street which may have alternative access on H&H when developed.





# Paving Gravel Roads

## Lakeview Road (.05 miles)

Lakeview Road provides primary access for 5 residences. Paving this currently unpaved City roadway would be the most impactful for residents on unpaved roadways.



## Maple Alameda (.08 miles)

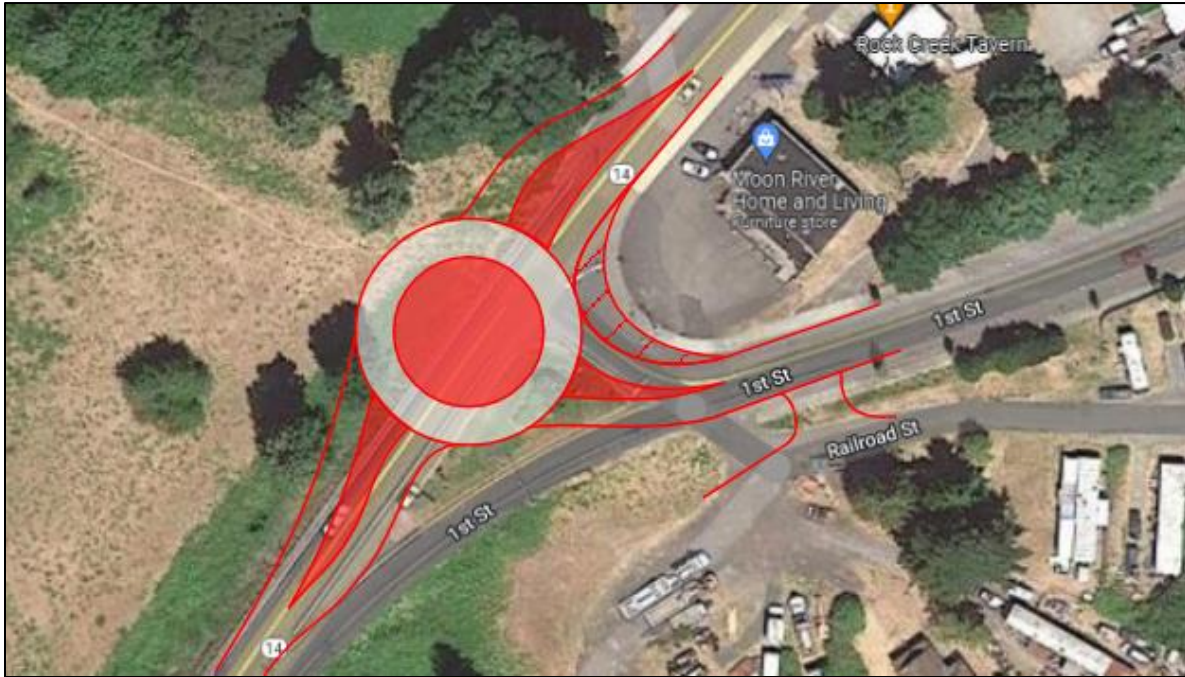
There are multiple reasons Maple Alameda should be considered priority in the 6 year TIP. Tied for second longest section of unpaved roadway, at 0.08 miles, Maple Alameda is a primary access



(currently) for 3 residences. It is also a secondary access for 2 residences. There are multiple buildable lots for which Maple Alameda is the primary access and property owners have indicated a desire for development. Lastly, the Catholic Church reservoir is one of the City's water reservoirs. Adequate access should be provided for this valuable and critical public asset.



## Improvement Concept: West Roundabout at SR-14 & 1<sup>st</sup> Street



### Description

Construct a three-legged roundabout at the west entrance to the City at the intersection of SR-14 (2<sup>nd</sup> Street) and 1<sup>st</sup> Street. The roundabout illustrated above is approximately 120-130 feet in diameter. The connection to Railroad Street would need to be relocated.

### Purpose

This improvement is intended to:

- Slow traffic as it enters town
- Reduce the number and severity of crashes
- Address the long-term need for a left-turn lane on westbound SR-14
- Create a gateway feature for the City of Stevenson

### Additional Considerations

The image above is a conceptual layout of a possible roundabout option; alternative alignments should be considered. Other factors to consider with this improvement include:

- Focused engineering study for the appropriateness of a westbound bypass lane
- Some right-of-way acquisition will likely be required
- Access could be limited for some properties
- The footprint of the project will be larger than the roundabout to accommodate necessary grading
- The project will increase impervious surface
- Project is on a state highway and WSDOT will need to be engaged

### Alternative Improvement

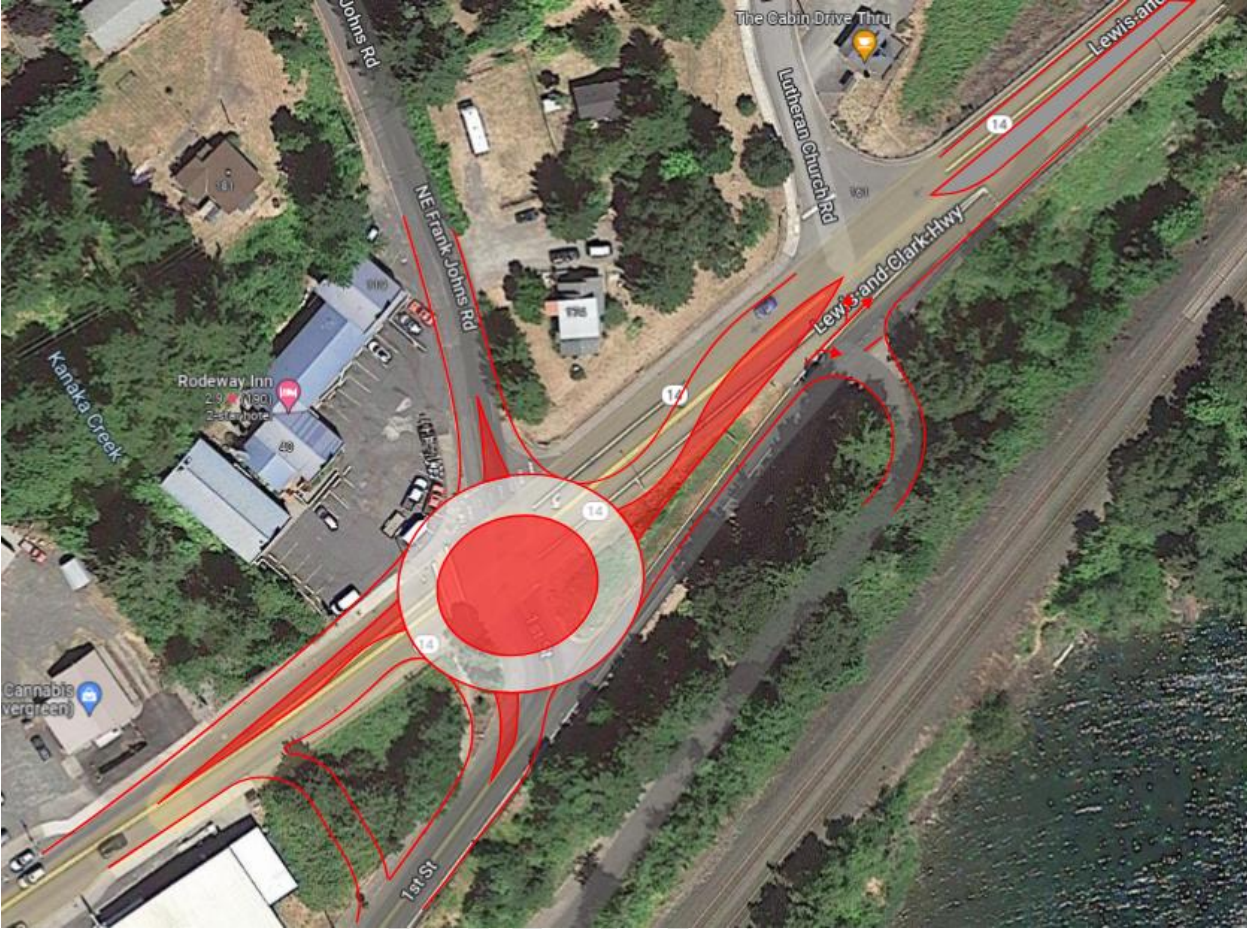
Consider westbound left-turn lane on SR-14 at 1<sup>st</sup> Street

### Cost Opinion

\$2,450,000 (Excludes right-of-way acquisition)



# Improvement Concept: Asymmetrical East Roundabout at SR-14 & 1<sup>st</sup> Street



### Description

Construct a four-legged roundabout at the east entrance to the City at the intersection of SR-14 (2<sup>nd</sup> Street) and NE Frank Johns Road/1<sup>st</sup> Street. The roundabout illustrated above is asymmetrical and approximately 120-140 feet in diameter. A possible connection between 2<sup>nd</sup> Street and 1<sup>st</sup> Street is included.

### Purpose

This improvement is intended to:

- Slow traffic as it enters town
- Reduce the number and severity of crashes
- Address sight distance issues at NE Frank Johns Road and Lutheran Church Road
- Address the long-term need for a left-turn lane at NE Frank Johns Road and Lutheran Church Road
- Prevent illegal left-turns from SW Cascade Avenue onto westbound SR-14
- Create a gateway feature for the City of Stevenson



## Improvement Concept: Asymmetrical East Roundabout at SR-14 & 1<sup>st</sup> Street (continued)

### **Additional Considerations**

The image above is a conceptual layout of a possible roundabout option; alternative alignments should be considered. Sidewalk would be included on the urban sections, which would widen the footprint from what is shown. Other factors to consider with this improvement include:

- Significant right-of-way acquisition will likely be required
- Access could be limited for some properties
- Parking at the hotel on the northwest corner would be affected
- Significant grading and structural retaining walls will be necessary; the footprint of the project will be larger than the roundabout itself
- The grades between 2<sup>nd</sup> Street and 1<sup>st</sup> Street may be too steep for connection shown
- Kanaka Creek could be affected, potentially requiring significant structural engineering of culvert (or bridge)
- The project will increase impervious surface
- Project is on a state highway and WSDOT will need to be engaged

### **Alternative Improvement**

Consider constructing a new retaining wall for the property north of SR-14 at the right-of-way line to improve sight lines at NE Frank Church Road and Lutheran Church Road and consider adding a 1- to 2-foot-wide ribbon median in the gore between SR-14 and 1<sup>st</sup> Street to prevent the illegal northbound left-turn movement from SW Cascade Avenue.

### **Cost Opinion**

\$4,200,000 (Excludes right-of-way acquisition and any environmental mitigation)