



CITY OF OREGON CITY NATURAL RESOURCE AND PARKS AND RECREATION JOINT ADVISORY MEETING AGENDA

Community Room, Community Development Building
695 Warner Parrott Rd, Oregon City, OR
Wednesday, October 9, 2024 at 6:30 PM

Ways to participate in this public meeting:

- Attend in person, location listed above. Please see the public comment guidelines below.
- Attend the livestream of the meeting on the City's YouTube Channel:

<https://www.youtube.com/user/CityofOregonCity>

- Register to provide electronic testimony (email pwalter@orc.org by 3:00 PM on the day of the meeting to register)
 - Email pwalter@orc.org (deadline to submit written testimony via email is 3:00 PM on the day of the meeting)
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1. CALL TO ORDER AND ROLL CALL

2. ADOPTION OF THE AGENDA

3. PUBLIC COMMENTS

Please see the public comment guidelines below.

4. OLD BUSINESS

4.a. Public Works Amendments to Street Tree Maintenance Requirements

5. DISCUSSION ITEMS

5.a. McLoughlin Boulevard Enhancement Project Update

5.b. Public Tree Inventory and Tree Canopy Policy Recommendation Letter

6. COMMUNICATIONS

7. FUTURE AGENDA ITEMS

8. ADJOURNMENT

PUBLIC COMMENT GUIDELINES

Complete a Comment Card prior to the meeting and submit it to the clerk. When the Chair calls your name, proceed to the speaker table, and state your name and city of residence. Each speaker is given 3 minutes to speak. As a general practice, the committee does not engage in discussion with those making comments. Complaints shall be addressed at the department level prior to addressing the committee.

ADA NOTICE

The location is ADA accessible. Hearing devices may be requested from the City Recorder prior to the meeting. Individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503-657-0891.

Agenda Posted at City Hall, Pioneer Community Center, Library, City Website.

Video Streaming & Broadcasts: The meeting is streamed live on the [Oregon City's website](#) and available on demand following the meeting. The meeting can be viewed on Willamette Falls Television channel 28 for Oregon City area residents as a rebroadcast. Please contact WFMC at 503-650-0275 for a programming schedule.

Chapter 12.08 PUBLIC AND STREET TREES¹

12.08.010 Purpose.

The purpose of this chapter is to:

- A. Develop tree-lined streets to protect the living quality and beautify the city;
- B. Establish physical separation between pedestrians and vehicular traffic;
- C. Create opportunities for solar shading;
- D. Improve air and water quality; and
- E. Increase the community tree canopy and resource.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

12.08.015 Street tree selection, planting and maintenance requirements.

All development shall provide street trees adjacent to all street frontages. Species and locations of trees shall be selected based upon vision clearance requirements, but shall in all cases be selected from the Oregon City Street Tree List, an approved street tree list for a jurisdiction in the Metropolitan region, or be approved by a certified arborist unless otherwise approved pursuant to this section. If a setback sidewalk has already been constructed or the public works department determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip or within tree wells. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed according to OCMC 12.08.035.C.

- A. One street tree shall be planted for every thirty-five feet of property frontage. The tree spacing shall be evenly distributed throughout the total development frontage to meet the clearance distances required in subsection B below. The community development director may approve an alternative street tree plan, or accept fee-in-lieu of planting pursuant to OCMC 12.08.035, if site or other constraints prevent meeting the required total number of tree plantings.
- B. The following clearance distances shall be maintained when planting trees:
 - 1. Fifteen feet from streetlights;
 - 2. Five feet from fire hydrants;
 - 3. Twenty feet from intersections;
 - 4. Five feet from all public utilities (i.e. sewer, storm and water lines, utility meters, etc.).
- C. All street trees planted in conjunction with development shall be a minimum of two inches in caliper at six inches above the root crown and installed to city specifications. Larger caliper size trees may be approved if recommended by a certified arborist or registered landscape architect.

¹Editor's note(s)—Ord. No. 18-1009, § 1(Exh. A), adopted July 3, 2019, amended Chapter 12.08 in its entirety to read as herein set out. Former Chapter 12.08, §§ 12.08.010—12.08.050, pertained to similar subject matter, and derived from Ord. No. 08-1014, adopted July 1, 2009.

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- D. All established trees shall be pruned tight to the trunk to a height that provides adequate clearance for street cleaning equipment and ensures ADA complaint clearance for pedestrians.
 - E. All trees planted within the right-of-way shall be planted with root barriers at least eighteen inches in depth adjacent to the sidewalk and curb to ensure proper root growth and reduce potential damage to sidewalks, curbs and gutters.
 - F. All trees planted beneath powerlines shall be selected based on what is appropriate for the location. In addition, the tree species shall be approved by the associated franchise powerline utility company.
 - G. Tree species, spacing and selection for stormwater facilities in the public right-of-way and in storm water facilities shall conform to requirements of OCMC 13.12 and the adopted stormwater and grading design standards and be approved by the city engineer.
 - H. Any public or street trees planted within the natural resource overlay district shall conform to the applicable requirements of OCMC 17.49, Natural Resources Overlay District (NROD).

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

12.08.025 General tree maintenance.

Abutting property owners shall be responsible for the maintenance and replacement of street trees and planting strips. Topping of trees is prohibited, unless under recommendation of a certified arborist. Trees shall be trimmed appropriately. Maintenance shall include watering during dry periods, trimming of established trees to remove dead branches and dangerous limbs and to maintain a minimum ~~eightseven~~-foot clearance above all sidewalks, ~~teneight~~-foot clearance in clear vision areas pursuant to OCMC 10.32, and ~~fourteenten~~-foot clearance above the street. Planter strips shall be kept clear of weeds, obstructing vegetation and trash.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 2023-1004, § 1(Exh. A), 5-3-2023)

12.08.030 Public property tree maintenance.

The city shall have the right to plant, prune, maintain and remove trees, plants and shrubs in all public rights-of-way and public grounds, as may be necessary to ensure public safety or to preserve and enhance the symmetry or other desirable characteristics of such public areas. The public works department and parks and recreation department may recommend to the community development director the removal of any tree or part thereof which is in an unsafe condition or may be injurious to above or below-ground public utilities, structures or other public improvements. Removed trees shall be replaced in accordance with this chapter or the mitigation requirements of the OCMC 17.49, Natural Resources Overlay District (NROD), if the tree to be removed is within the NROD.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

12.08.035 Tree removal and replacement.

Existing street trees, trees in the right-of-way, and trees on public property shall be retained and protected during development unless removal is specified as part of a land use approval or in conjunction with a public capital improvement project, in accordance with OCMC 17.41. Tree removal shall be mitigated by the following:

- A. A dead, diseased, or hazardous street tree, as determined by a certified arborist and approved by the city manager or designee, may be removed if replaced with one new tree for each dead, diseased, or hazardous tree that is removed.

1. Hazardous trees which have raised the adjacent sidewalk in a manner which does not comply with the Americans with Disabilities Act may be removed and replaced without a report from a certified arborist, as defined in OCMC 17.04.082.
 2. All replacement street trees under this section shall have a minimum one and one-half inch caliper trunk measured six inches above the root crown.
- B. Removed trees that are not determined to be dead, diseased, or hazardous shall be replaced in accordance with Table 12.08.035. All replaced street trees shall have a minimum one and one-half inch caliper trunk measured six inches above the root crown.

Table 12.08.035

| Replacement Schedule for Trees Determined to be Dead, Diseased or Hazardous by a Certified Arborist | | Replacement Schedule for Trees Not Determined to be Dead, Diseased or Hazardous by a Certified Arborist | |
|---|---|---|---|
| Diameter of tree to be Removed (Inches of diameter at 4-ft. height) | Number of Replacement Trees to be Planted | Diameter of tree to be Removed (Inches of diameter at 4-ft. height) | Number of Replacement Trees to be Planted |
| Any Diameter | 1 Tree | Less than 6" | 1 Tree |
| | | 6" to 12" | 2 Trees |
| | | 13" to 18" | 3 Trees |
| | | 19" to 24" | 4 Trees |
| | | 25" to 30" | 5 Trees |
| | | 31" and over | 8 Trees |

- C. Removed trees shall be replaced by approved tree species:
1. Within the right-of-way abutting the same frontage; and
 2. Subject to the requirements under OCMC 12.08.015.
- D. If an applicant can demonstrate to the satisfaction of the city manager or designee that a sufficient location to replant tree(s) according to subsection C is not available, the city manager or designee may allow:
1. Installation of replacement tree(s) in one of the following alternative locations:
 - a. Within the right-of-way abutting another property, with abutting property owner approval; or
 - b. On public property, with city manager or designee approval; or
 - c. Within ten feet of the right-of-way in the abutting private yard; or
 2. As a last resort, a fee in lieu of replacing the tree(s), subject to the following:
 - a. The applicant must demonstrate, to the satisfaction of the city manager or designee, that none of the alternative replanting options in section D.1 is sufficient for replanting.

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- b. Is to be placed into a city fund dedicated to obtaining trees, planting trees, and/or tree education in Oregon City.

E. Exceptions:

1. Trees that are listed as invasive non-native, nuisance, prohibited, or noxious vegetation species as defined in OCMC 17.04.605, may be removed without replacement or fee in lieu of replacement.
2. Trees in planter strips three feet or less in width may be removed without replacement or fee in lieu of replacement.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019; Ord. No. 2023-1004, § 1(Exh. B), 5-3-2023)

12.08.045 Gifts, fee-in-lieu of planting, and funding.

The city of Oregon City may accept gifts, which are specifically designated for the purpose of planting or maintaining trees within the city. The community development director may allow a fee-in-lieu of planting the tree(s) to be placed into a city fund dedicated to planting trees in Oregon City. The community development director may determine the type, caliper and species of the trees purchased with the fund. The cost of each tree may be adjusted annually based upon current market prices for materials and labor as calculated by the community development director. A separate fund shall be established and maintained for revenues and expenditures created by activities specified in this chapter. The natural resources committee shall have authority on behalf of the city to seek grants and alternative funding for tree projects. Funds from such grant awards shall be administered by the city pursuant to this section.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

12.08.050 Violation—Penalty.

The violation of any provision of this chapter shall constitute a civil infraction, subject to code enforcement procedures of OCMC 1.16 and/or OCMC 1.20.

(Ord. No. 18-1009, § 1(Exh. A), 7-3-2019)

McLoughlin Boulevard Enhancements

10th Street to tumwata village

(K22142 Willamette Falls Path/OR99E Enhancement: 10th St. to Railroad Ave)



DRAFT

September 2024



Source: ODOT

Acknowledgments

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Chapter 1: Background

Connecting downtown Oregon City to the waterfront for people walking and biking is a dream that has been several decades in the making. Two segments of a waterfront path have already been built, connecting downtown Oregon City with the pathway along the Clackamas River. The last critical gap is McLoughlin Boulevard (OR99E) between 10th Street and Railroad Avenue.

The City of Oregon City and the Oregon Department of Transportation (ODOT) have partnered to investigate alternatives for developing a shared-use path along this stretch of McLoughlin Boulevard. This shared-use path would complete the third and final phase of the McLoughlin Boulevard Enhancement Plan.

This shared-use path is intended to contribute to the sense of place and community identity while providing recreational access and closing a critical gap in the region's active transportation network for people walking, biking, and rolling. It will allow people to visit the future Willamette Falls Riverwalk and tumwata village without having to mix with traffic.

The Project also presents an opportunity to enhance the McLoughlin Boulevard streetscape to invite more activity along the waterfront, encourage travel to downtown Oregon City, and complement the shared-use path.

Making Connections

The McLoughlin Boulevard shared-use path will connect to and complement other development efforts on Oregon City's waterfront:

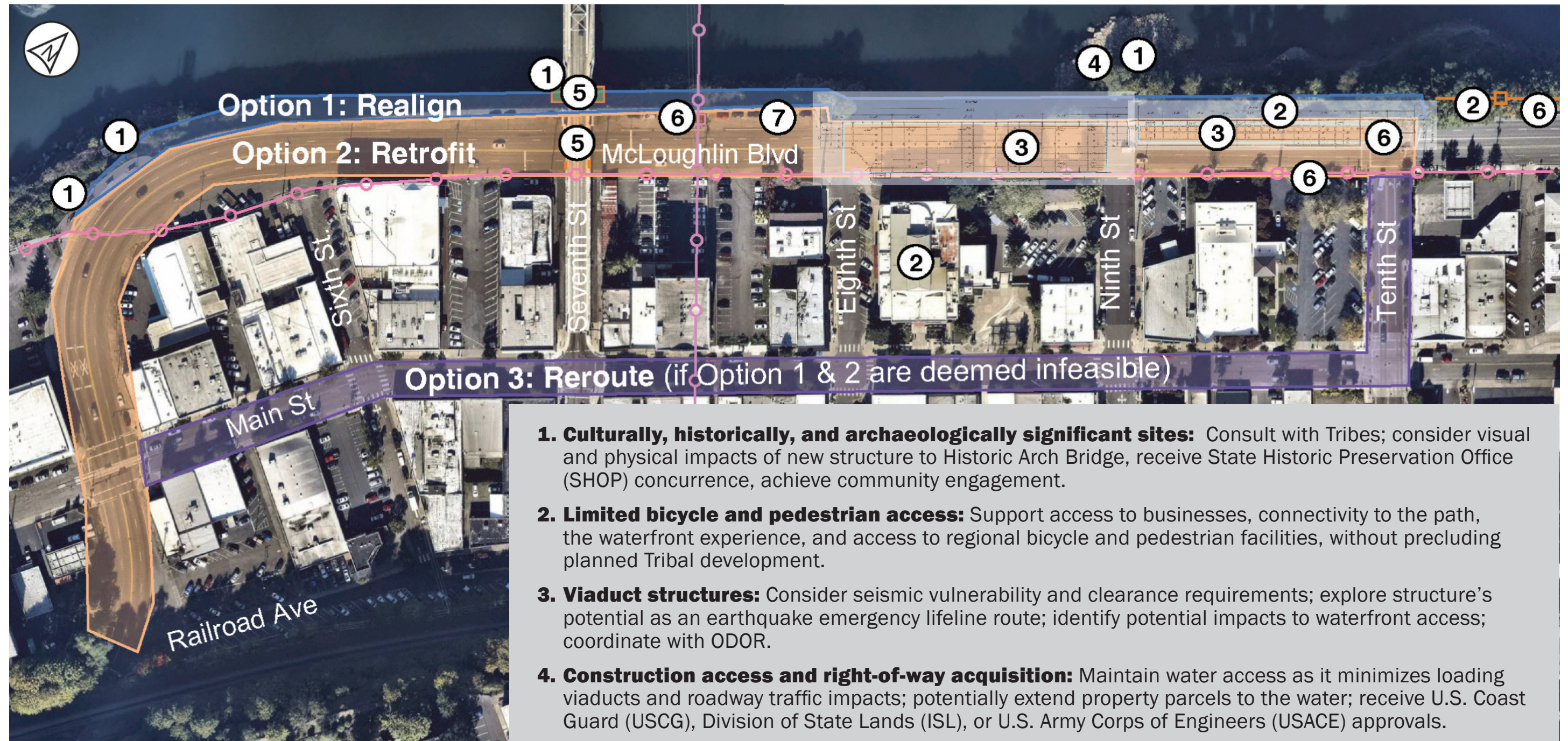
- **tumwata village** is the planned redevelopment of the 23-acre former Blue Heron Paper Mill site at Willamette Falls. The current plans for this property feature a **Willamette Falls Riverwalk**, trails, a public plaza, gathering space, habitat restoration, and redevelopment of industrial uses along the Oregon City waterfront. The proposed shared-use path would connect directly to this development and the riverwalk.
- The unadopted **Oregon City–West Linn Pedestrian–Bicycle Bridge Concept Plan** details potential alignments for a dedicated pedestrian–bicycle bridge across the Willamette River between Willamette Falls and the I-205 Abernethy Bridge.



Study Area

The study area focuses on McLoughlin Boulevard between 10th Street and Railroad Avenue in downtown Oregon City and a parallel route on Main Street between 10th Street and McLoughlin Boulevard. The study area is classified as Mixed-Use-Downtown, according to the Oregon City Comprehensive Plan land use designations. McLoughlin Boulevard runs northeast-southwest along the Willamette River, connecting Oregon City to Portland through Milwaukie and Gladstone to the north and Canby to the south. McLoughlin Boulevard connects to I-205, providing regional connections throughout Oregon. Figure 1 illustrates the study area, critical design considerations, and potential design alternatives.

Figure 1. Critical Elements and Potential Design Option Solution Sets



- 1. Culturally, historically, and archaeologically significant sites:** Consult with Tribes; consider visual and physical impacts of new structure to Historic Arch Bridge, receive State Historic Preservation Office (SHOP) concurrence, achieve community engagement.
- 2. Limited bicycle and pedestrian access:** Support access to businesses, connectivity to the path, the waterfront experience, and access to regional bicycle and pedestrian facilities, without precluding planned Tribal development.
- 3. Viaduct structures:** Consider seismic vulnerability and clearance requirements; explore structure's potential as an earthquake emergency lifeline route; identify potential impacts to waterfront access; coordinate with ODOR.
- 4. Construction access and right-of-way acquisition:** Maintain water access as it minimizes loading viaducts and roadway traffic impacts; potentially extend property parcels to the water; receive U.S. Coast Guard (USCG), Division of State Lands (ISL), or U.S. Army Corps of Engineers (USACE) approvals.
- 5. Structural challenges:** Limited clearance water and roadway clearance under Historic Arch Bridge; varying water levels.
- 6. Existing utilities, retaining walls, and signals:** Identify cost impacts of impacts to utilities, retaining walls, and signals.
- 7. Existing parking:** Identify potential impacts to existing parking.

Previous Planning Efforts

Planning documents dated as early as 1999 have identified a desire for a shared-use path in this area. These plans highlight some key considerations for the Project.

- The **Oregon City Comprehensive Plan** includes land use and economic development policies that encourage higher density, walkable neighborhoods, infill development and redevelopment, and more mixed-use land use types within neighborhoods that would benefit from greater availability of active transportation facilities.
- The **Oregon City Transportation System Plan (TSP)** includes a project for a shared-use path (Project S3; page 87 of TSP Volume 2-2) on the segment of McLoughlin Boulevard within the study area and various bicycle improvements nearby (Projects B1, B2, B3, and B5; page 56 of TSP Volume 1). It also includes goals and policies related to envisioned modal priorities, which include improving the comfort and convenience of walking, biking, and transit options and ensuring that land development policies support these modes.
- The **McLoughlin Boulevard Enhancement Plan** provides initial recommendations for the cross-section of McLoughlin Boulevard from the railroad underpass to the Clackamas River Bridge, which includes a waterfront promenade.
- The **Oregon City Downtown Circulation Plan** and **Oregon City Downtown Community Plan** provide visions and recommendations for downtown Oregon City, including enhancements to McLoughlin Boulevard.
- The unadopted **Oregon City–West Linn Pedestrian–Bicycle Bridge Concept Plan** highlights alignments for a pedestrian–bicycle bridge and details a vision for pedestrian, bicycle, and transit connectivity to the Willamette Falls Downtown District.

- The **Willamette Falls Riverwalk Master Plan** outlines a long-term vision to guide development of the Willamette Falls Riverwalk, which includes a promenade, trails, public plaza, gathering space, habitat restoration, and redevelopment of industrial uses along the Oregon City waterfront. The shared-use path along the segment of McLoughlin Boulevard within the study area would be a key connector to the Willamette Falls Riverwalk.
- The **Visioning for Blue Heron and Redevelopment Plans** (tumwata village) detail concepts from the Confederated Tribes of Grand Ronde for an enhanced riverbank at the former Blue Heron site, which is directly west of the segment of McLoughlin Boulevard within the study area.



Source: ODOT

Chapter 2: Purpose, Need, and Vision

Corridor Vision

“The proposed Willamette Falls Path extension and streetscape enhancements contribute to the sense of place and community identity as an urban corridor and community gateway. The chosen design will promote safety through context-sensitive design that discourages speeding and improves the walking and biking experience along the corridor. The path provides a regional link accessible to users of all ages and abilities, filling a key active transportation gap and providing a continuous link to existing and planned open spaces along the Willamette and Clackamas Rivers, including the tumwata village development, and connections to other transportation links such as a future recreational/commuter river ferry and the Oregon City–West Linn pedestrian–bicycle bridge. The proposed path is representative of the local needs and priorities of the Oregon City community and has been developed as an implementable and fundable alternative.”

Purpose and Need Statement

The purpose of the Project is to create a shared-use path and streetscape that enhances safety for all transportation modes and bridges the missing link for pedestrian and cyclists on McLoughlin Boulevard between 10th Street and Railroad Avenue through well-considered design. The Project should also be viewed as a crucial component of the larger community facility and a destination that connects users to various amenities and open spaces along the Willamette River.



Within the Project area, the following transportation needs have been identified in consultation with the City of Oregon City, ODOT, and the Project Development Team to guide the development of an active transportation solution:

- **There is a gap in safe, comfortable, and accessible facilities for people of all ages and abilities who are walking and biking on McLoughlin Boulevard.** The cross-section along McLoughlin Boulevard between 10th Street and the proposed tumwata village and riverwalk consists of curb-tight sidewalks and four vehicle lanes. This cross-section does not meet the current ODOT Highway Design Manual or City of Oregon City design standards and creates an imbalance between how the needs of non-motorized and motorized users are being addressed in the corridor. The Project location has been determined to result in a Level of Traffic Stress of 4.¹ People of most ages and abilities do not feel comfortable and/or able to walk, bike, or roll along this segment, creating a barrier in the regional active transportation link between Oregon City and Portland.
- **Oregon City's waterfront is currently disjointed and not seen as a contiguous amenity.** Locally, active transportation facilities along McLoughlin Boulevard are needed to provide connections to the planned tumwata village and riverwalk, historic downtown Oregon City, envisioned pedestrian and bicycle bridge, and recreation opportunities along the Willamette River. The Willamette River is a culturally significant site, and the Historic Arch Bridge is a historically significant structure. This active transportation connection will create additional opportunities for people to access, experience, and visually imagine the historic significance of the river, falls, and adjacent lands, while honoring the indigenous connections to the land and acknowledging traditional ways of movement along waterways.
- **The chosen design will support Oregon City's tourism, economic, and community development goals by improving walking and biking facilities to better integrate and reorient the downtown area's relationship with the Willamette River.** Active transportation facilities are shown to improve economic conditions by creating attractive and walkable business districts and providing access to various destinations, local businesses, and jobs.² Active transportation facilities contribute to redevelopment and other investments along the corridor. Vehicle congestion and parking limitations discourage travel in downtown Oregon City and are therefore a barrier to businesses and expanded economic development. Beyond the proposed McLoughlin Boulevard corridor, congestion leads to neighborhood spillback and cut-through traffic and detracts from the sense of place and community identity desired by residents, business and property owners, and visitors to Oregon City. The lack of complete walking and biking facilities, including the gap represented by the termination of the current Willamette Falls path, also discourages travel to downtown Oregon City as a regional destination. A complete connection for people walking, biking, and rolling along McLoughlin Boulevard and to historic downtown Oregon City, Oregon City Transit Center, and the municipal elevator is needed to encourage mode shift,³ support transportation demand management efforts, minimize impacts to adjacent residential areas, and support the Oregon City 2040 Comprehensive Plan policies related to multimodal connectivity and transportation demand management.

1. According to the City of Oregon City's Downtown Bicycle and Pedestrian Needs Inventory and Action Plan, the segment of OR99E between 12th Street and Railroad Avenue is at an LTS of 4. LTS 4 facilities are high stress routes and are only suitable for experienced and skilled cyclists or able-bodied adults with limited route choices.
 2. Source: Portland State University. Metro Active Transportation Return on Investment Study. May 2022.
 3. Mode shift is the opportunity to change how people move, particularly the shift from single occupancy vehicles (SOV) to sustainable modes of active transportation (i.e., walking, biking, rolling, or taking transit) to reduce greenhouse gas emissions and improve quality of life.

- **Vehicular congestion impacts the historical, cultural, and environmental aspects of the site.** Vehicular congestion creates noise and emissions that detract from the historic, cultural, and environmental aspects of the site. A continuous shared-use path connection is needed to create an opportunity for transportation mode shifts consistent with the region's climate goals, and ensure that historical, cultural, and environmental resources are preserved for future generations. The physical design of the shared-use path needs to address the function of the facility in a way that minimizes or eliminates local environmental impacts and does not inflict harm on the river or nearby communities. Any work done in the study area needs to recognize the special role and voice of tribes in the Willamette Falls area of both land and water and emphasize tribal and community involvement in decision-making.

Establishing the Urban Context

The ODOT Highway Design Manual approach to context-sensitive design should be considered when planning and designing state roadways. Identifying the study area's urban context provides design guidance to inform roadway characteristics, roadway user types, and travel demand expectations. According to this guidance, the selected urban context is Urban Mix. However, based on existing land uses, planning documents, the community vision, desired outcomes for the Project, and the envisioned modal priorities for Oregon City, a Traditional Downtown/Central Business District (CBD) is recommended as the Highway Design Manual context that is most appropriate and best aligns with the community vision.



Traditional Downtown/CBD

A Traditional Downtown/CBD classification according to the ODOT Highway Design Manual includes mixed land uses, shallow building setbacks, and high building coverage. Roadways within this context should have lower vehicle speeds (25 miles per hour [mph] or less), wide and comfortable bicycle and pedestrian facilities, and appropriate landscaping and street trees. The priority users are people walking and biking.

Photo: Downtown Oregon City in 1866.
 Source: Oregon Historical Society Library (OrgLot500_A_270)

Chapter 3: Existing Conditions

OR99E (McLoughlin Boulevard) is a state highway that runs between Junction City just south of the Oregon/Washington border in Portland. Within the study area, McLoughlin Boulevard is a four-lane principal arterial with a posted speed limit of 30 miles per hour (mph). The intersections of 10th Street and Main Street are full signals, while 7th Street includes a pedestrian signal for crossing McLoughlin Boulevard to the Willamette River seawall. All other intersections in the study area are stop-controlled on the minor approach.

McLoughlin Boulevard carries between 17,500 and 20,000 bi-directional daily vehicles. Between 2018 and 2022, there were 40 reported crashes in the study area, with 25 being injury crashes. In this 5-year period, there was one pedestrian-involved crash and no reported fatal crashes.

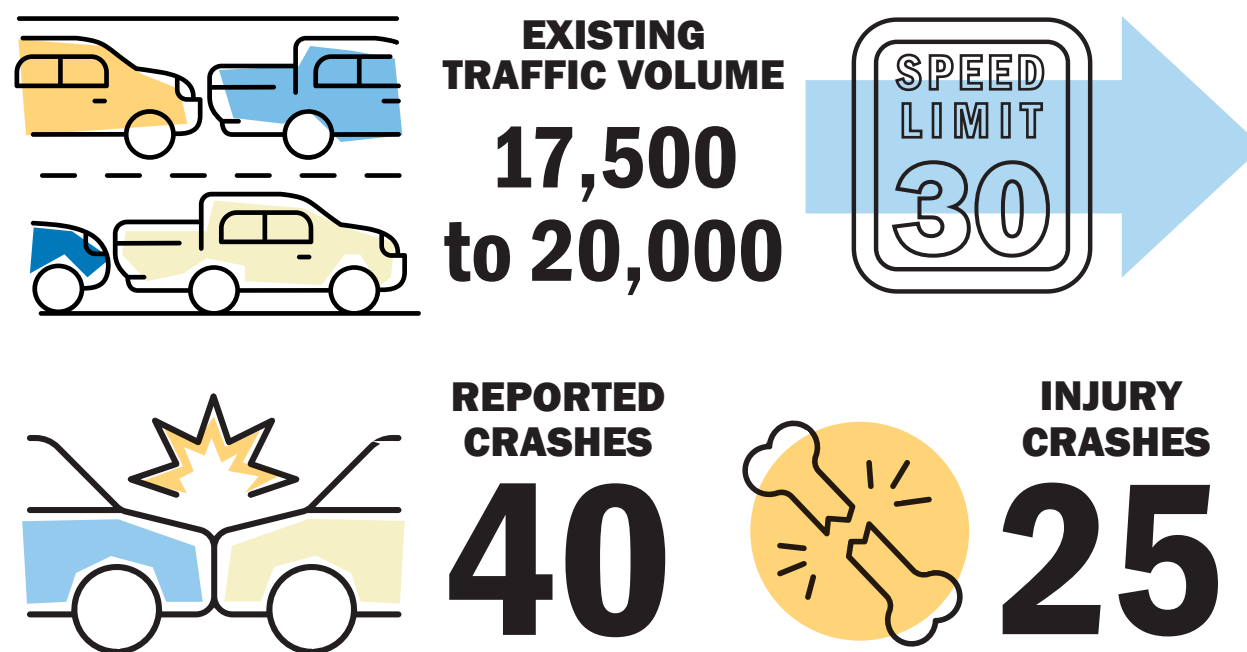
The section of McLoughlin Boulevard between 10th Street and 8th Street is horizontally constrained by the existing viaduct structure and Historic Arch Bridge (see Figure 2). Neither facility is expected to be replaced with an expanded structure to support streetscape widening, which is necessary to provide the needed width for safe bicycle and pedestrian access.

Attaching a new path to the existing viaduct is also not feasible due to its age and structural design. As described in Chapter 5: Design Alternative Development, a road reorganization on McLoughlin Boulevard is not feasible due to high vehicular volumes. Therefore, an externally supported structure parallel to McLoughlin Boulevard is the only feasible solution for a shared-use path within the study area.

Figure 2. Historic Arch Bridge (top) and Viaduct (bottom) Constraints



Source: Google Maps



5 Year (2018 - 2022) Crash Statistics

Chapter 4: Public Involvement

Public involvement has been included throughout the Project process. Along with general outreach and advertisement, the project team has conducted an online open house and City-led outreach.

The first opportunity for the public to provide input on this plan began in December 2023 with an open house. The primary purpose of this initial outreach was to create awareness about the Project, its benefits, and potential burdens or impacts, as well as to solicit public input on the initial design alternatives.

After this open house, the project team reported that none of the designs presented were feasible due to the complexity of the area. The Oregon City Commission directed the project team to continue investigating an external long-span approach parallel to McLoughlin Boulevard with streetscape improvements. The City continued

outreach with various groups and committees through 2024 to collect feedback on the preferred design.

Details on the public outreach program are summarized in the following sections.

Overarching Materials and Notifications

Tools used to convey Project information and publicize outreach opportunities include the following:

- **Web page:** A Project web page, hosted on the City’s website was launched and updated regularly.
- **Community database and comment log:** Documented public comments, correspondence, and updates to Project mailing list.

- **Project fact sheet:** One-pagers provided updates and opportunities for engagement.
- **Direct mail:** Postcards notified neighboring residents about public engagement opportunities.
- **Social media:** Project announcements shared on the City’s social media channels.
- **Advertising:** Digital advertisements used to promote the Project and public engagement opportunities.
- **Email:** Email newsletters provided Project information and engagement opportunities.

alternatives and priorities for the McLoughlin Boulevard corridor (Figure 3). The web page also included a general comment form where users could submit other feedback regarding the Project.

Overall, the majority of community members preferred Alternative 1B: High Route, a design with a new pathway structure at street level next to McLoughlin Boulevard. Participants also preferred a pathway design that traversed through the Historic Arch Bridge columns.

City-Conducted Outreach

The City conducted targeted outreach to promote the open house and collect feedback during various phases of the Project. City staff attended outreach meetings and briefings with the Planning Commission; Transportation Advisory Committee, Parks and Recreation Advisory Committee, Citizen Involvement Committee, Clackamas County Pedestrian and Bikeway Advisory Committee. City staff also briefed the Oregon City Commission during six key decision points and Project milestones.

City staff leveraged several communication channels to share information about the Project. These channels include social media posts, a monthly “e-trail” news update in the City’s Winter Trail News publication, and coordination for a December 2023 earned media article in Oregon City News.

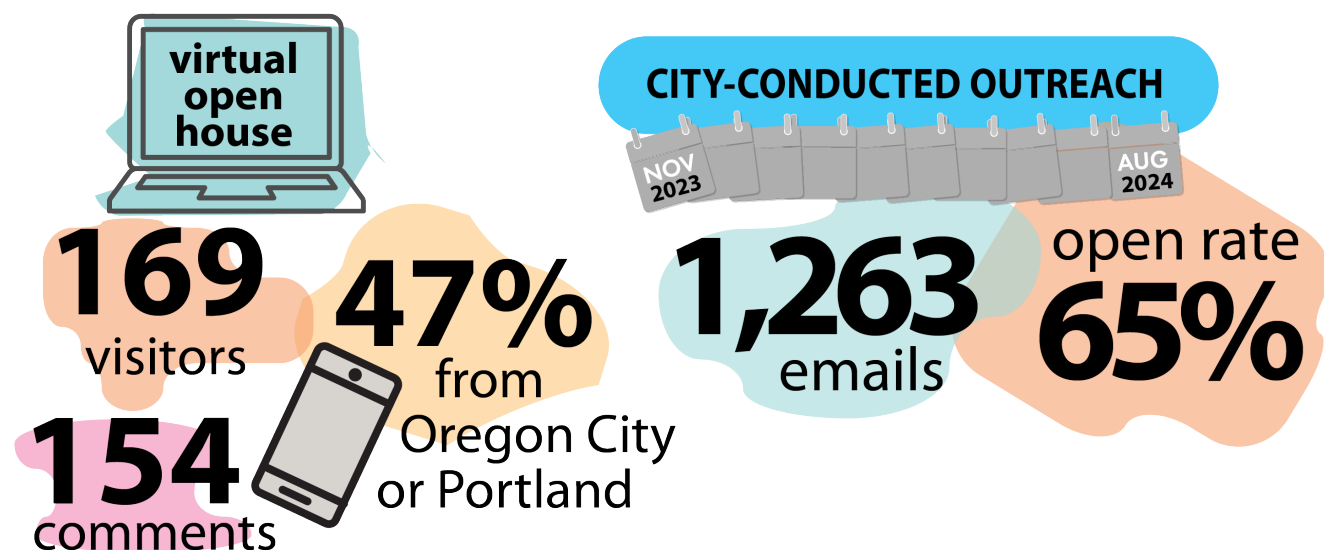
Interested Party Interviews and Briefings

The project team held three interviews with interested parties in early November 2023 to collect feedback on the corridor’s issues and potential alignments. These interested parties represented transportation, education, and housing sectors in Clackamas County and Oregon City, and included The Street Trust, Oregon City School District, and Housing Authority of Clackamas County.

Online Open House

The Project’s online open house was launched on the Project web page on December 6, 2023. The online platform provided informational stations to learn about the Project and provide feedback via the embedded survey, which closed on December 22, 2023. Users were invited to provide feedback on the proposed design

Figure 3. Online Open House



Chapter 5: Design Alternative Development

Prior to exploring separate shared-use pathway structures paralleling McLoughlin Boulevard, the project team examined a No-Build Alternative and potential McLoughlin Boulevard Lane Reorganization Alternative.

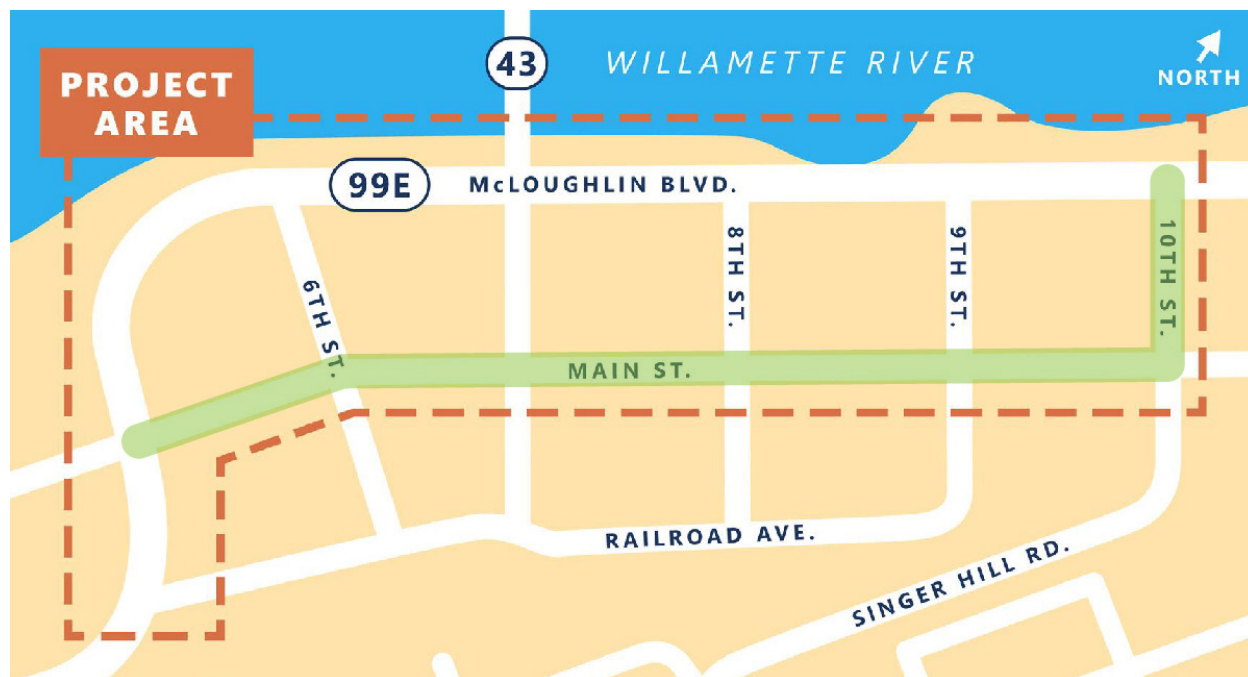
Main Street has a right-of-way that is approximately 60 feet and includes two travel lanes, two parking lanes (totaling about 40 feet), and 10-foot sidewalks on each side abutting 0-foot building setbacks. There are currently curb extensions at most intersections and shared-lane markings, or “sharrows.”

No-Build Alternative

As part of alternative development and evaluation, the project team also examined a reroute, or no-build, Main Street alternative. The No-Build alternative provides a parallel alignment through downtown Oregon City via 10th Street and Main Street, as shown in Figure 4.

The project team explored and evaluated two primary options for improving bicycle access on Main Street as part of the No-Build Main Street alternative. Based on this evaluation, conversations with Oregon City staff, and a review of background documents, the team it was determined that the No-Build Main Street alternative does not adequately address the Project’s Purpose and Need.

Figure 4. No-Build Main Street Alternative Alignment



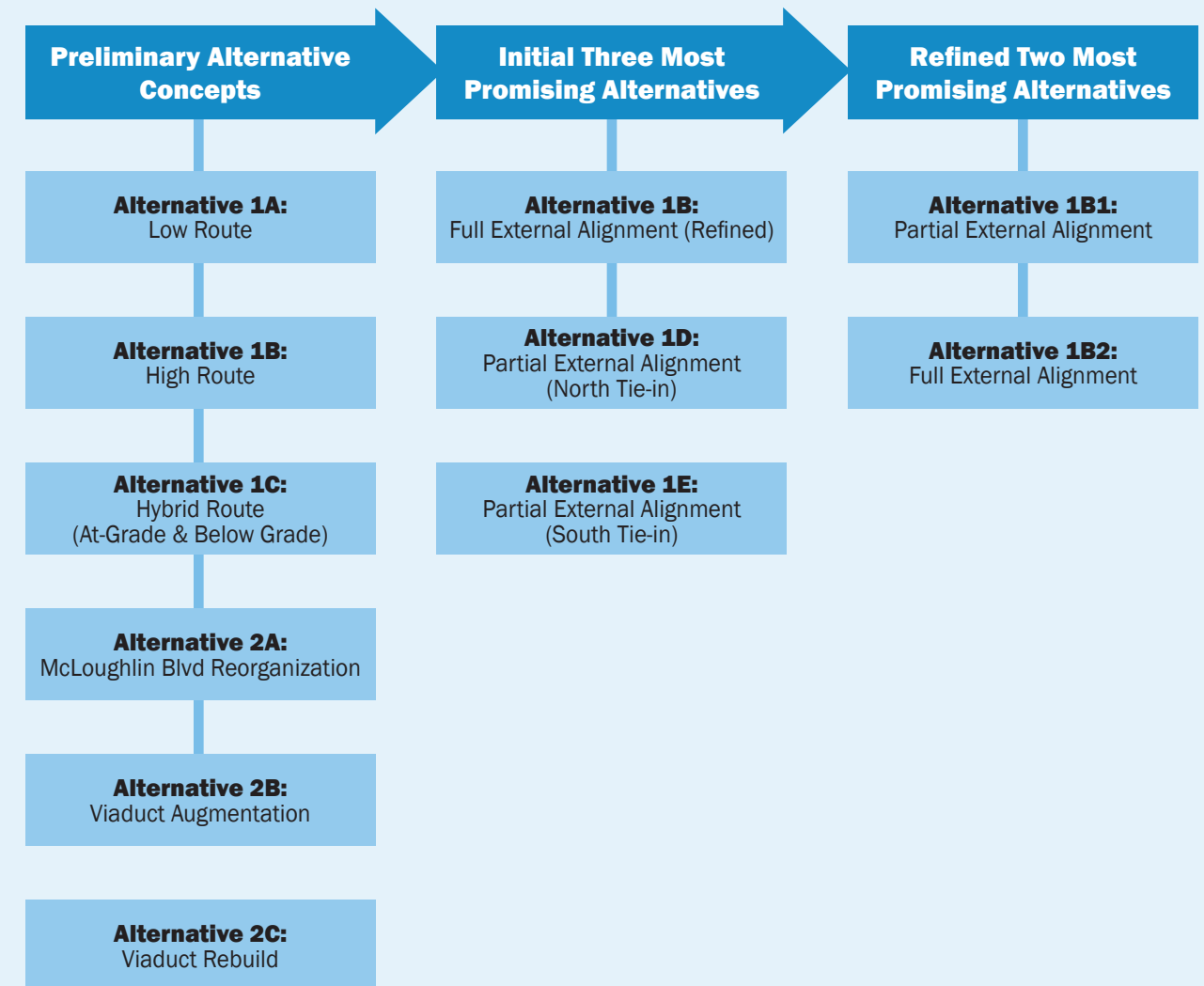
McLoughlin Boulevard Lane Reorganization Alternative

A potential road reorganization (removing one lane southbound or northbound) on McLoughlin Boulevard was considered to potentially create space for a shared-use path. Based on the ODOT Highway Design Manual “Estimating Capacity for Highways” methodology, a road reorganization would not be appropriate based on current or future projected traffic volumes. As such, a reorganization of McLoughlin Boulevard does not meet the Project’s Purpose and Need.

McLoughlin Boulevard Parallel Structure Alternatives

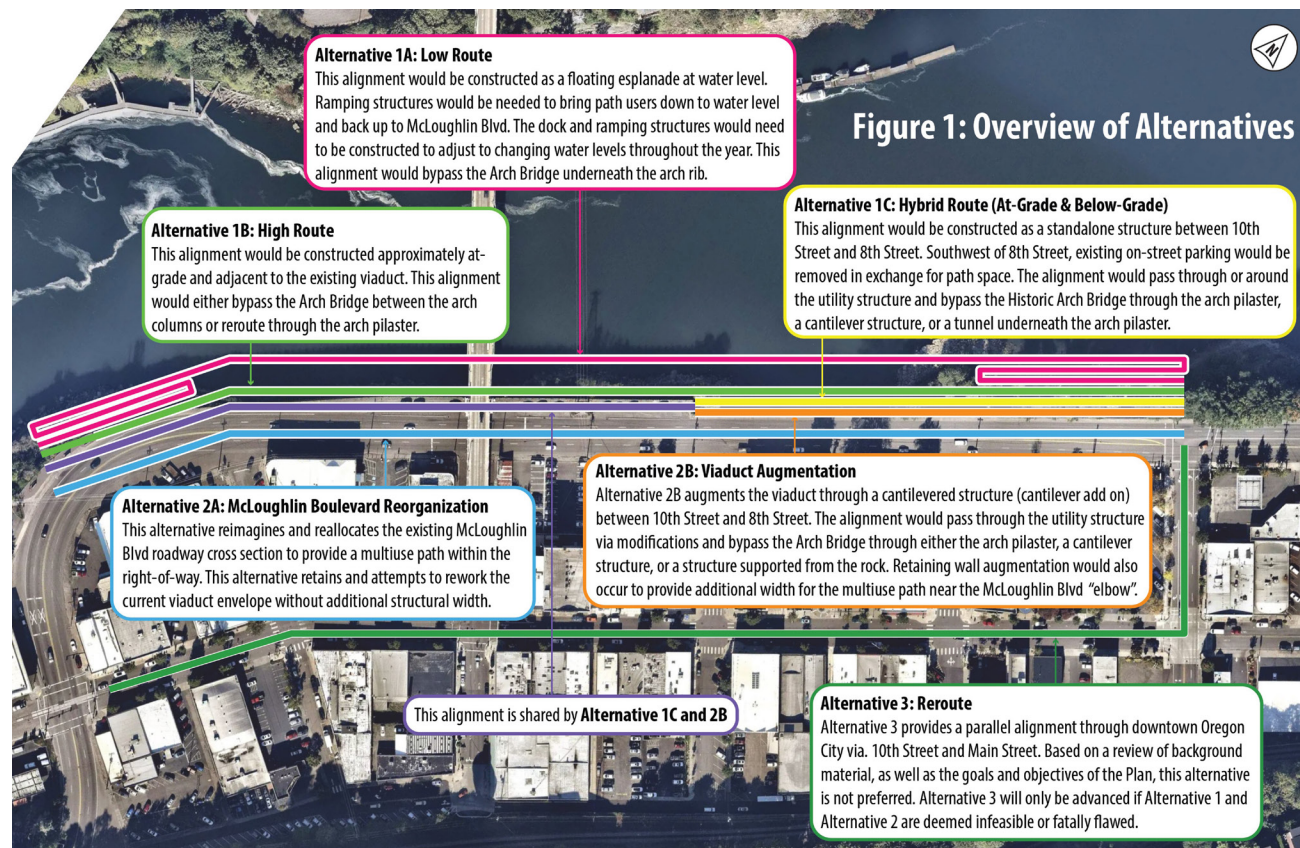
After confirming that the No-Build and McLoughlin Boulevard Roadway Reorganization alternatives did not support the Purpose and Need, the project team developed several parallel structure alternatives to McLoughlin Boulevard. Figure 5 summarizes the primary alternatives and most promising refined alternatives.

Figure 5. McLoughlin Boulevard Shared-Use Path Development



Initially, the team developed six alternatives along with a No-Build (Main Street) alternative. Three of the alternatives included a stand-alone, separate structure, and three required structural support from the McLoughlin Boulevard viaduct and/or seawall. Based on coordination with

ODOT and further structural analysis, the three viaduct alternatives were deemed infeasible. In addition, Alternative 1A (which ramped the structure down to water level) was deemed infeasible due to user comfort, water level fluctuation, and constructability concerns.



Initial Three Most Promising Alternatives

Based on this analysis, three initial most promising alternatives were then developed, all providing a stand-alone, separate structures parallel to McLoughlin Boulevard but with different tie-ins to the seawall near the Historic Arch Bridge. The project team evaluated these alternatives to determine their structural viability by considering aspects ranging from ground support to span options.

First, an analysis of possible foundation locations and geotechnical conditions was performed and indicated that there was little to no opportunity for external foundation support on the western portion of the alignment (south of the Historic Arch Bridge). There was a practical lack of available ground, steep vertical rock surfaces, and a steep ground drop-off at the base of the seawall extending below water, where depths extend up to 90 feet. Anticipated ground-support constructability challenges and risks associated with most of the 18 potential foundation locations would require complicated structural solutions that may have limited construction timing windows. Therefore, a structure that relies on consistent foundations would be difficult to construct and be high-risk in nature.

Structural requirements for the initial three alternatives were evaluated at a conceptual level to assess feasibility and the viability of structure type and materials. The project team first evaluated a conventional viaduct, consisting of conventional span-length structures as external viaduct elements providing physical separation between the existing viaduct and seawall. The analysis showed numerous risks to the existing seawall, adjacent utilities, and constructability of the foundation in front of or behind the seawall.

In addition, the project team evaluated a long-span cable-supported alternative, which provides a structure that requires only two foundation locations, leveraging the location of better ground conditions at either end of the alignment. The reduced number of foundations significantly reduced the risk, improved opportunities to

avoid excavation issues, minimized in-water and permitting risks, and lowered chances of cultural or archaeological impacts.

Given the site constraints and challenges, the project team introduced two structural configurations (i.e., "partial external" and "full external") as feasible approaches to supporting the alignment. These refined two most promising alternatives are summarized below and conceptually illustrated in Figure 6 and Figure 7.

- **Alternative 1B1:** Partial External Alignment: Conventional beam elements on the northern portion and a long-span superstructure on the southern portion.
- **Alternative 1B2:** Full External Alignment: Long-span, cable-supported structure with two foundations.

Figure 6. Alternative 1B1: Partial External Alignment



Figure 7. Alternative 1B2: Full External Alignment



Refined Two Most Promising Alternatives

To identify a recommended alternative, the refined two most promising alternatives were further evaluated based on structural feasibility and constructability; geotechnical and archaeological constraints; and cultural and historical criteria. Alternative 1B1: Partial External Alignment raised several challenges, including:

- Creating the need for the maximum number of foundations, which could lead to construction and geotechnical challenges and risks.
- Needing to build foundations in variable topography, requiring wide-ranging specialty footings.
- Requiring temporary access bridge needs.
- Requiring traffic disruption to McLoughlin Boulevard during construction.
- Requiring hydraulic/in-water work.
- Raising potential conflicts with the existing structures and utilities.
- Exposing the Project to numerous subsurface conditions and unknowns.
- Increasing the potential for inadvertent archaeological discoveries.
- Competing visually with the Historic Arch Bridge with a two-arch design.
- Requiring two signature long spans.
- Requiring seismic weight and heights to be perched above foundations.
- Raising constructability concerns.

Due to these challenges, the partial external alignment was eliminated, and the Project Management Team selected **Alternative 1B2: Full External Alignment** as the recommended alternative. This long-span, cable-supported structure avoids deepwater footings and leverages more accessible footing space at either end of the most promising alignment, minimizing risk and increasing constructability of the Project.

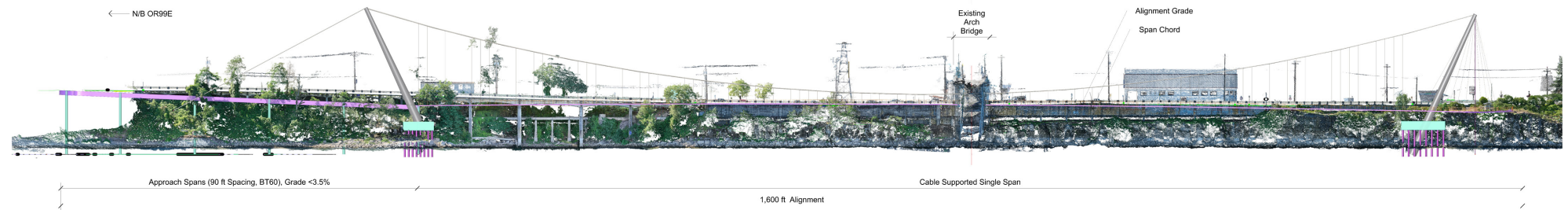
Chapter 6: Recommended Shared-Use Path Alternative

A Fully External Alignment

Alternative 1B2: Full External Alignment (see Figure 8) is efficient and effective at connecting the extremities of the Project, staying clear of many challenges and constraints by providing the most direct alignment. This alternative threads through the eastside approach to the Historic Arch Bridge, supported by the most structurally and visually lightweight structure available. The following describes one potential layout and structure type that was used to evaluate the recommended alternative's feasibility. The type, size and location (TS&L) for the recommended alternative will be determined in a future phase of Project work.

As shown in an elevation view (Figure 9), this alignment could be supported by a long-span suspension bridge consisting of a cable-supported structure with its north foundation located north of 9th Street and the south foundation south of 6th Street. This structure, supporting the fully external alignment, could provide maximum clearance below the deck for utilities and river water levels, including the 100-year flood level. This structure would require cable support from above the deck superstructure, which is both a design feature and a benefit for river flood and debris clearance in addition to fewer ground-supported piers. The cable support also provides the ability for the

Figure 9. The Long-Span Concept/Alternative, Elevation of Structure Type



structure to pass through the existing Historic Arch Bridge with minimal visual and construction-related impacts (see Figure 10)

The design of a long-span bridge would require a specialist engineer and contractor. Conceptually, support towers could be inclined, tapered steel sections encased in concrete. These would support the required geometry for the catenary mainlines, which support the deck along the alignment profile and provide the strength to resist structural loading on the towers into the foundations. This form has structural advantages in resisting the applied loads while also providing a symmetrical structural configuration in elevation along with improved alignment features (e.g., a viewing area).

A long-span, cable-supported suspension bridge's segments can be erected "in the dry," as shown in Figure 11 and 12. By utilizing a highline connected to the main towers, this type of structural solution may also reduce construction challenges. Avoiding in-water work eliminates impacts associated with the river, flooding, and other associated hydraulic considerations. Any required in-water work could be scheduled during low water levels or located out of ordinary high-water levels.

Figure 8. Alternative 1B2: Full External Alternative, Plan View

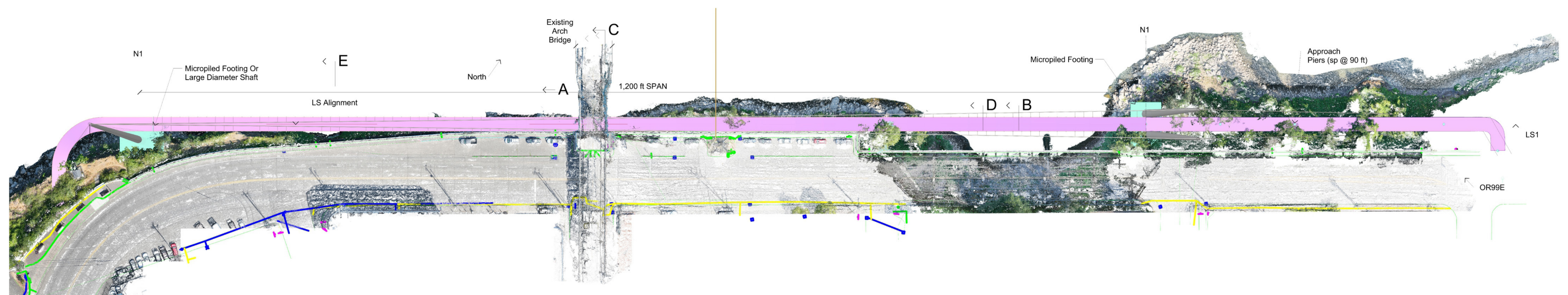


Figure 10. The Fully External Alignment Threading Through the Historic Arch Bridge



Figure 11. Highline Access Example, Columbia Skywalk



Figure 12. Columbia River Skywalk (Source: City of Trail, British Columbia, Canada)



Figure 13. Bulb-Out Viewing Area



Placemaking Opportunities

The full external alignment layout also provides opportunities for significant placemaking and views of both Willamette Falls and the Historic Arch Bridge from the south end. A bulb-out at this location, as shown in Figure 13, could be a landmark with appropriate design elements and enhance views.

Tower foundations to support the full external alignment could be developed with public and tribal input to include community features, such as lookouts. Foundations could also integrate platforms at the tower for fishing and improved waterfall viewing. Instead of minimizing their aesthetic impact, the towers can be designed to be prominent and visible from multiple locations beyond downtown Oregon City. Such designs may enhance tourism and increase economic development on the waterfront path, in tumwata village, and in downtown Oregon City.

Additional waterfront development of the existing seawall parking areas also is available with the recommended alternative. Parking can be transformed into open spaces with landscaping, benches, picnic tables, and bike parking. The parking area flanking the Historic Arch Bridge could also serve as a community space and programming opportunity for summer events or special occasions, such as art markets, concerts, and holiday celebrations. The park would allow people on the shared-use path and from McLoughlin Boulevard and Main Street to easily access and enjoy the space.

Design Elements for Continued Refinement

The recommended alternative will be refined in structural design and development during the TS&L phase. Continued design refinements are identified in Figure 14 and detailed below.

- **A - North approach** – Span configuration, materials selection, ground supports to provide alignment support over available ground and connection to the existing shared-use path.
- **B - North tower** – Geometric configuration that meets materials, structural, and aesthetic goals.
- **C - Underpass** – Span configuration, materials, and ground-support configuration to effectively bridge the gap from 8th Street to a viable tie-in location meeting geometric requirements and structural capabilities. In addition to evaluating geometry that meets acceptable horizontal alignments and vertical grades, design refinements include verifying clearance envelopes can be met, noting the availability for footings, and validating constructability below the viaduct and near major utilities.
- **D - Existing seawall** – Connectivity, materials, and methodology meeting geometric and structural requirements.
- **E - Existing Historic Arch Bridge** – Interaction/pass-through of the historic structure and the development of horizontal and vertical supports providing improved stability and support.
- **F - Deck section** – Development of materials and a system to meet geometrical and structural functionality that considers constructability and operations and maintenance aspects.
- **G - South tower** – Similar to the north tower with additional consideration for physical placement, configuration, and contextual integration of the footing and pylon at a key location.
- **H - South approach** – Configuration to improve waterfront views and pathway tie-ins while meeting structural and geometric requirements.
- **I - Contextual** – Development of the overall structure for local fit and form at the site while meeting programmatic objectives.

Figure 14. Full External Alignment Schematic Identifying Design Elements for Continued Refinement



Preliminary Cost Opinions

The recommended alternative would be supported by a structure designed to meet a minimum service life of 75 years and incorporate materials durable enough for this anticipated service life. A service life longer than 75 years could be evaluated and addressed during the design phase and applied to an asset management plan, although there may be additional costs associated with materials capable of providing a longer service life.

Proposed materials would be selected for corrosion resistance to metals (i.e., aluminum, stainless steel, and zinc coated elements) or to improve structural durability, such as reinforced, post-tensioned concrete decking and other materials, such as carbon fiber.

Planning-Level Maintenance

Maintenance would be influenced by how frequently the structure requires upkeep and the availability of stakeholder resources (e.g., City of Oregon City, ODOT) to provide maintenance. Annual costs for maintenance could range between \$10,000 and \$60,000, depending on the structure's age and upkeep levels.

An asset management program consisting of inspections to occasionally evaluate corrosion-resistant coatings on hangers, railings, mainlines, and deck elements would improve service life and ensure that deterioration does not affect safety. Inspection and maintenance of bearings and decking overlays would also be expected at regular intervals.

Planning-Level Cost Opinion

The project team prepared a planning-level cost estimate, shown in Table 1.

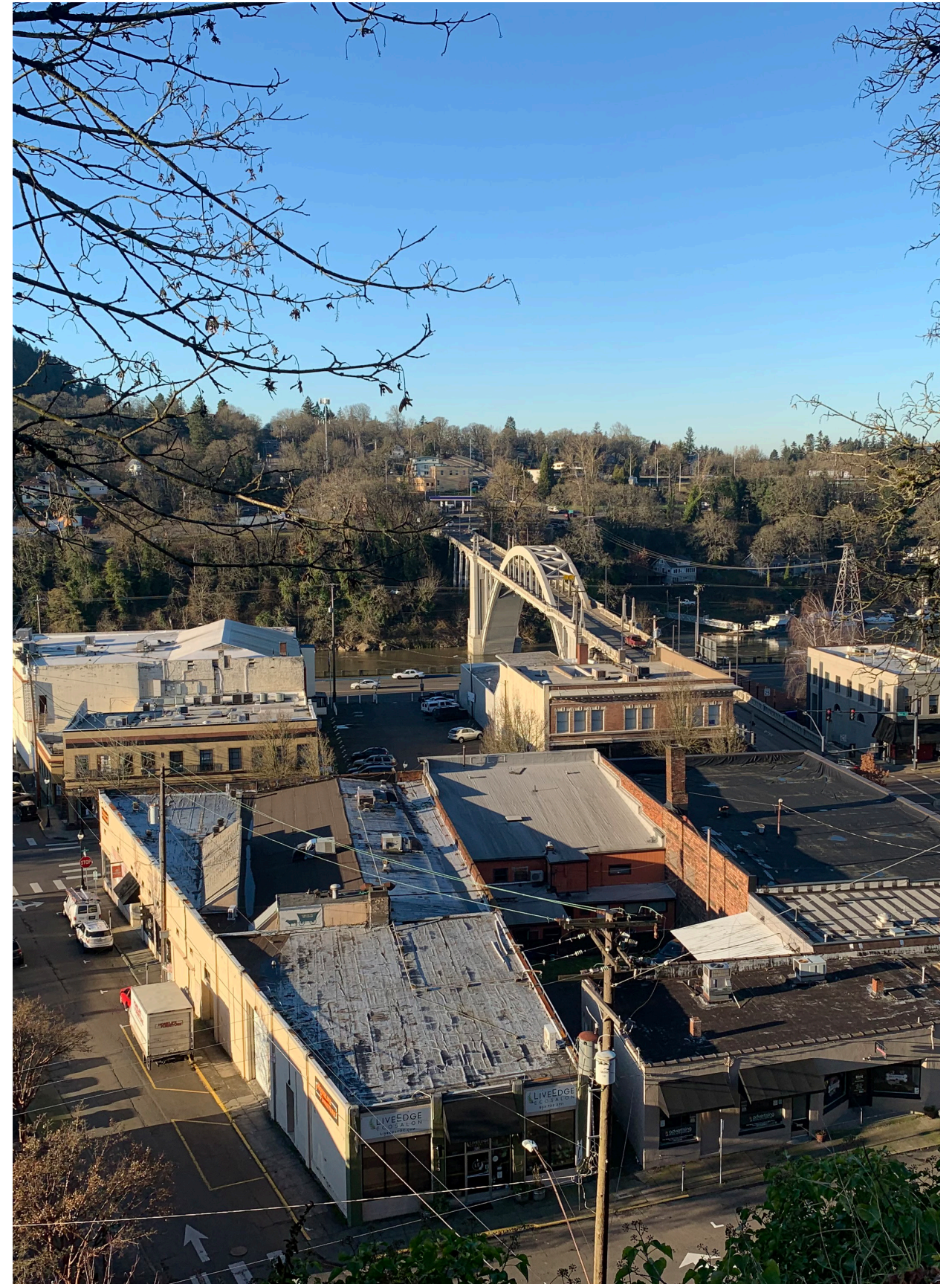
The base construction cost opinion was derived from material quantity and associated bid pricing based on a concept-level design configuration and similar Project costs for each alternative. The project team applied adjustments for aspects ranging from supply chain availability to an assumed level of architectural input, in addition to factors such as inflation and additional allowances (i.e., contractor mobilization, traffic, and containment) to produce a conservative, concept-level construction cost estimate of about \$2,080 per square foot of deck area, or approximately \$51 million.

The project team further developed the conservative estimate to include assumed planning-level contingencies for design engineering, construction, and project management. They included an allowance for a site-specific wind study to assess pedestrian comfort with a long-span structure to ensure that design refinements are aligned with the expectations of the long-span structure type. The cost after these allowances were added was approximately \$3,693 per square foot of deck, or approximately \$90 million.

Finally, escalation and design refinement cost allowances for a 2030 construction year were added, resulting in a planning-level construction cost estimate of \$5,043 per square foot of deck, or approximately \$123 million.

Table 1. Alternative 1B2 Full External Alignment Planning- Level Cost Opinion

| | | |
|--|-----------------|------------------|
| Base construction cost | Total estimate | \$50.77 million |
| | Per square foot | \$2,080 |
| Base construction cost + planning-level contingencies | Total estimate | \$90.12 million |
| | Per square foot | \$3,693 |
| Total project cost, including escalation and design refinements | Total estimate | \$123.05 million |
| | Per square foot | \$5,043 |



Key Considerations

The project team identified the following permitting, design, and constructability considerations associated with future development of the recommended shared-use path alternative.

Permitting and Design Considerations

- **Cultural and historical impacts:** The configuration of bridge structure types may physically and aesthetically impact the Historic Arch Bridge superstructure and associated foundations/footings. Context-sensitive design elements can be integrated into structural support configurations for the recommended alignment to help minimize these impacts, complement the Historic Arch Bridge, and provide additional Willamette Falls viewpoints. These risks can be minimized by differentiating conceptual structural aspects considered for support of the recommended (fully external) alignment.
- **Archaeological impacts:** Archaeological remains or artifacts may be encountered during site preparation or excavation efforts for structure foundation/footing construction near the existing seawall and Historic Arch Bridge. The cost of preserving discovered remains cannot be determined in advance and could impact any ground construction works at this site. Context-sensitive approaches that would impacts to undocumented subsurface unknowns are a high-priority consideration in the recommended alignment and intended to minimize design changes and timeline extensions.
- **Design:** Addressing key site challenges would require a context-sensitive structural configuration to support the recommended alignment that conventional bridge solutions cannot fully meet. While conventional bridge design approaches pose significant constructability risks at the site, a specialized bridge structure could include additional technical challenges and construction risks. The design risks can be managed through

appropriate design expertise and the application of long-span, cable-supported bridge construction expertise in conjunction with a site-specific wind and vibration study. A specialist engineer and contractor with sufficient applied design expertise and construction know-how would be required.

- **Foundations:** The structural configuration proposes significantly fewer foundations, including two major foundations at key locations of ground-support availability to significantly minimize risks associated with subsurface unknowns. The two major foundations can be constructed using footing design configurations to mitigate subsurface unknowns and balance constructability risks. Geotechnical and hydraulic risks can be mitigated through expertise and recommendations based on topography and subsurface investigations.
- **Materials:** Structural support for the alignment alternative selected through the TS&L process may require specialty engineering materials (towers, anchorages, cables, hangers, and deck sections) that would require appropriate design and advance planning to mitigate lead time and supply chain availability challenges.

Constructability Considerations

- **Historic Arch Bridge:** The recommended alternatives pass through the Historic Arch Bridge between vertical columns below the deck level. Concept-level assumptions would need to be verified that the chosen structure can pass through the available opening and provide adequate clearance under operational conditions. Sequencing and methodologies necessary for initial placement of primary load-carrying support elements through the Historic Arch Bridge would need to be carefully designed and planned to eliminate technical risks impacting both the Historic Arch Bridge and proposed structure. These aspects may be managed through design and construction expertise with specialty cable-supported bridge types.

- **Deck stability:** A site-specific study focused on deck stability and operational performance while sustaining vibrations produced by wind and users during both construction and operation can supply appropriate mitigation measures. This site-specific wind and vibration study would parallel design development.
- **Traffic disruption:** The construction and placement of a structure parallel to McLoughlin Boulevard would require roadway-based access that is directly influenced by structure type and configuration. A long-span, cable-supported bridge would minimize construction concerns and reduce traffic disruption to McLoughlin Boulevard. For instance, the delivery of prefabricated deck segments to temporary locations before they are placed on a cable-supported superstructure improves the construction process and can minimize traffic disruption on McLoughlin Boulevard. However, construction material delivery and access may still require some closures of McLoughlin Boulevard at key locations.
- **Hydraulic impacts:** The Willamette River poses a significant constructability risk due to stream flow and significant water level variations. Limiting in-water construction work mitigates hydraulic risks and can eliminate impacts directly associated with the river that affect design, budget, and schedule (i.e., flooding, scour, and permitting). This approach will be particularly important when constructing the primary foundations for the recommended alignment. Scheduling construction activities during low water levels and locating the foundations in areas that do not ordinarily experience high-water levels will help mitigate risk.
- **Utilities:** Overhead catenary cables pose geometric and coordination challenges. These need to be addressed during design and planning to mitigate risks and determine setback distances. The geometric form of the proposed structural support configuration is intended to provide adequate setback distance for utilities above (aerial) and below

the alignment. This will minimize conflicts with overhead utility catenaries, provide safe separations, and ease utility operation and maintenance activities.

- **Integration:** The southeast landing of the shared-use path will need to be integrated with tumwata village and Willamette Falls Riverwalk, which have not yet been fully designed. Project efforts adjacent to the shared-use path's recommended alignment may reveal structural configuration efficiencies that are not evident in the current Project footprint and boundary (e.g., anchorages, towers, and observation and viewpoint locations/interactions).

Chapter 7: Streetscape Enhancements

There is an opportunity to enhance the streetscape along McLoughlin Boulevard to complement the recommended shared-use path alternative, calm vehicular speeds along McLoughlin Boulevard, and better integrate downtown Oregon City with the waterfront. Sidewalk, landscaping, and placemaking improvements can be incorporated to calm traffic and create a sense of place, consistent with the Traditional Downtown/CBD urban context.

The **McLoughlin Boulevard Enhancement Plan**, completed in 2005, recommends streetscape improvements, including wider sidewalks, landscaped medians, and improved signalized intersections and pedestrian crossings between the Clackamas River Bridge and Railroad Avenue

The City has successfully completed the first two phases of the McLoughlin Boulevard Enhancement Plan, including a shared-use path on the river side of the roadway. The segment from 10th Street north to Dunes Drive, completed in 2009 (Phase 1), includes wide sidewalks with tree-lined buffers on the south side of the roadway, landscaped medians with trees where space is available, and additional pedestrian crossing opportunities and signalized intersections.

The McLoughlin Boulevard Enhancement Plan recommends continued treatments and similar streetscape elements for the study segment of McLoughlin Boulevard between 10th Street and Main Street, including:

- Narrowing travel lane widths consistent with the ODOT Highway Design Manual to calm traffic and increase opportunities for additional modal considerations.
- Installing a median from 8th to 10th Streets.
- Incorporating and increasing the presence of landscaping and vegetation where possible.
- Providing wide sidewalks along the east side of the roadway. The recommended sidewalk width is 10 feet or greater; the minimum sidewalk width is 8 feet.
- Adding bicycle wayfinding signage.
- Retaining and enhancing the existing pedestrian-activated traffic signal at 7th Street.

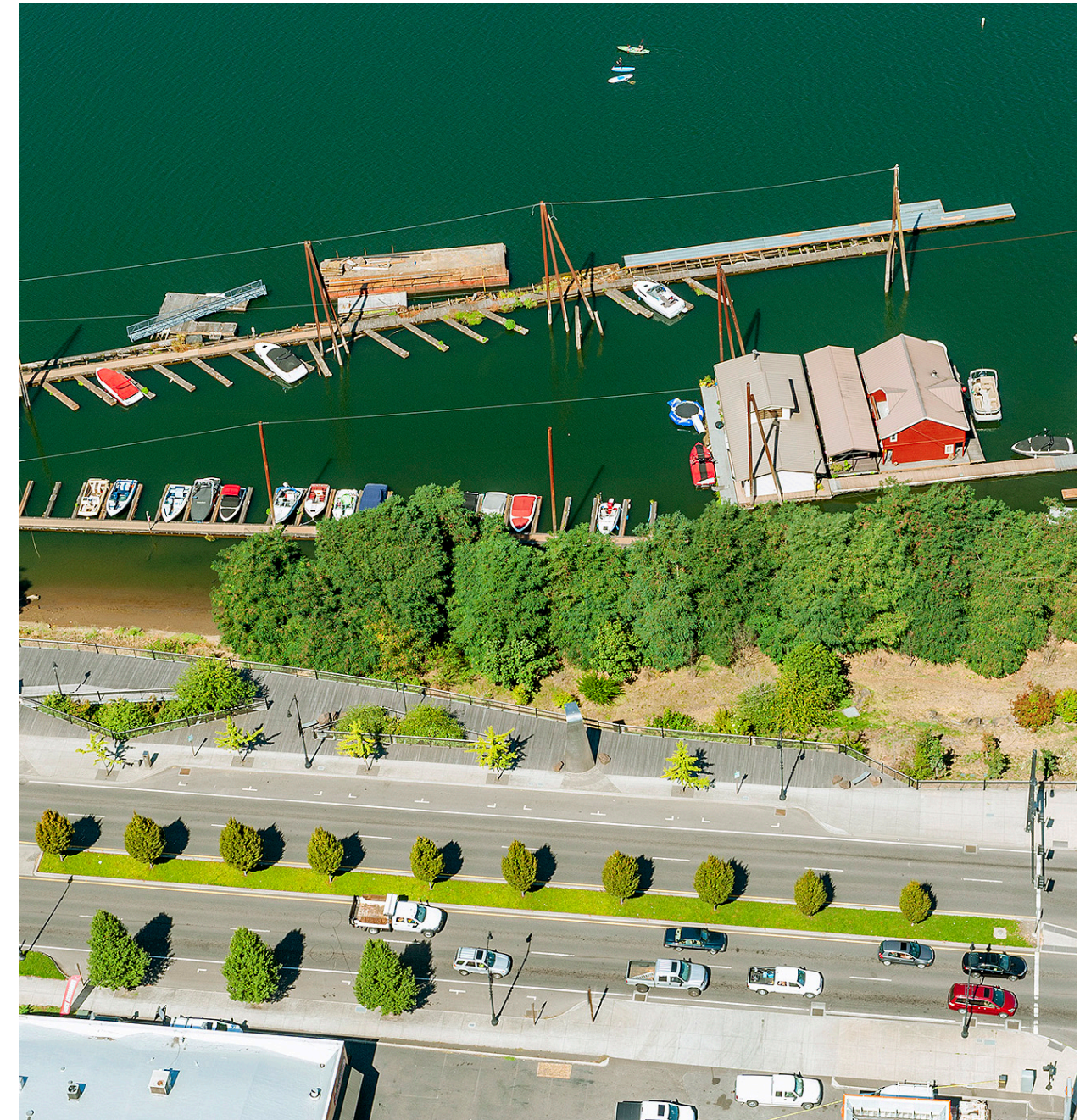
To achieve the corridor vision and desired streetscape enhancements, the project team recommended two primary streetscape enhancement opportunities for consideration:

1. Reconfigure the roadway to provide additional space for sidewalk and landscaping improvements while increasing consistency with ODOT Highway Design Manual recommendations for the travelway realm—the area between the curb lines reserved for automobile traffic—based on the Traditional Downtown/CBD urban context.
2. Provide open spaces in the areas currently used for on-street parking along the river, under the Historic Arch Bridge, and along the curve area of McLoughlin Boulevard.

Recommended Streetscape Enhancement Concept

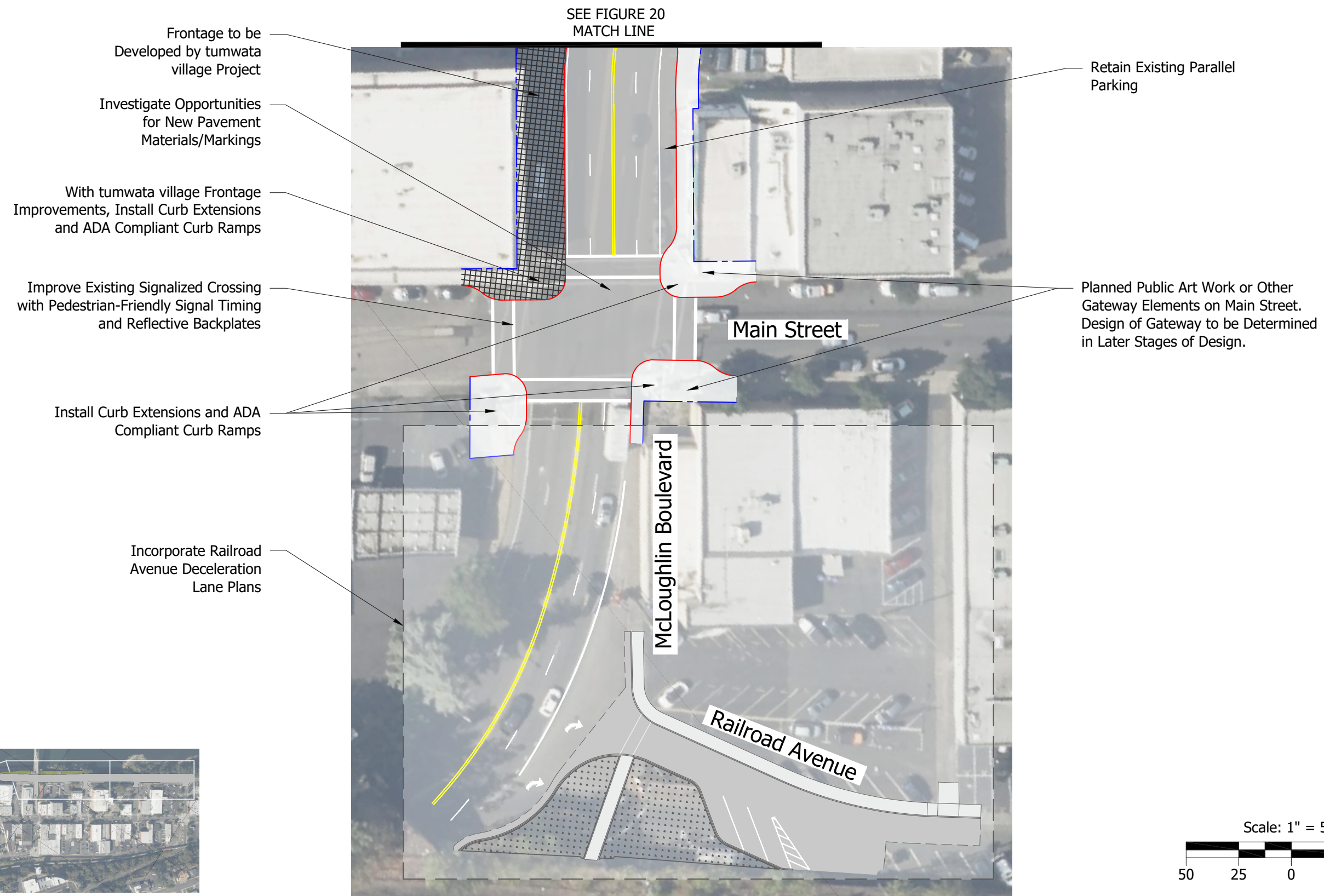
The recommended streetscape enhancement concept for McLoughlin Boulevard between 10th Street and Main Street is shown in Figure 15 through Figure 20.

Per ODOT HDM guidance, the cross-sections generally include 11-foot travel lanes with a 2-foot shy from the guard rail (river side) and a 1-foot shy from curbs.¹ The provided sidewalk is 10 feet with a 4.5-foot buffer zone and 0.5-foot curb zone. Where space is limited on the viaduct, this width is reduced. Additional shy distance is also provided to meet pinch points per Oregon Revised Statute (ORS) 366.215.



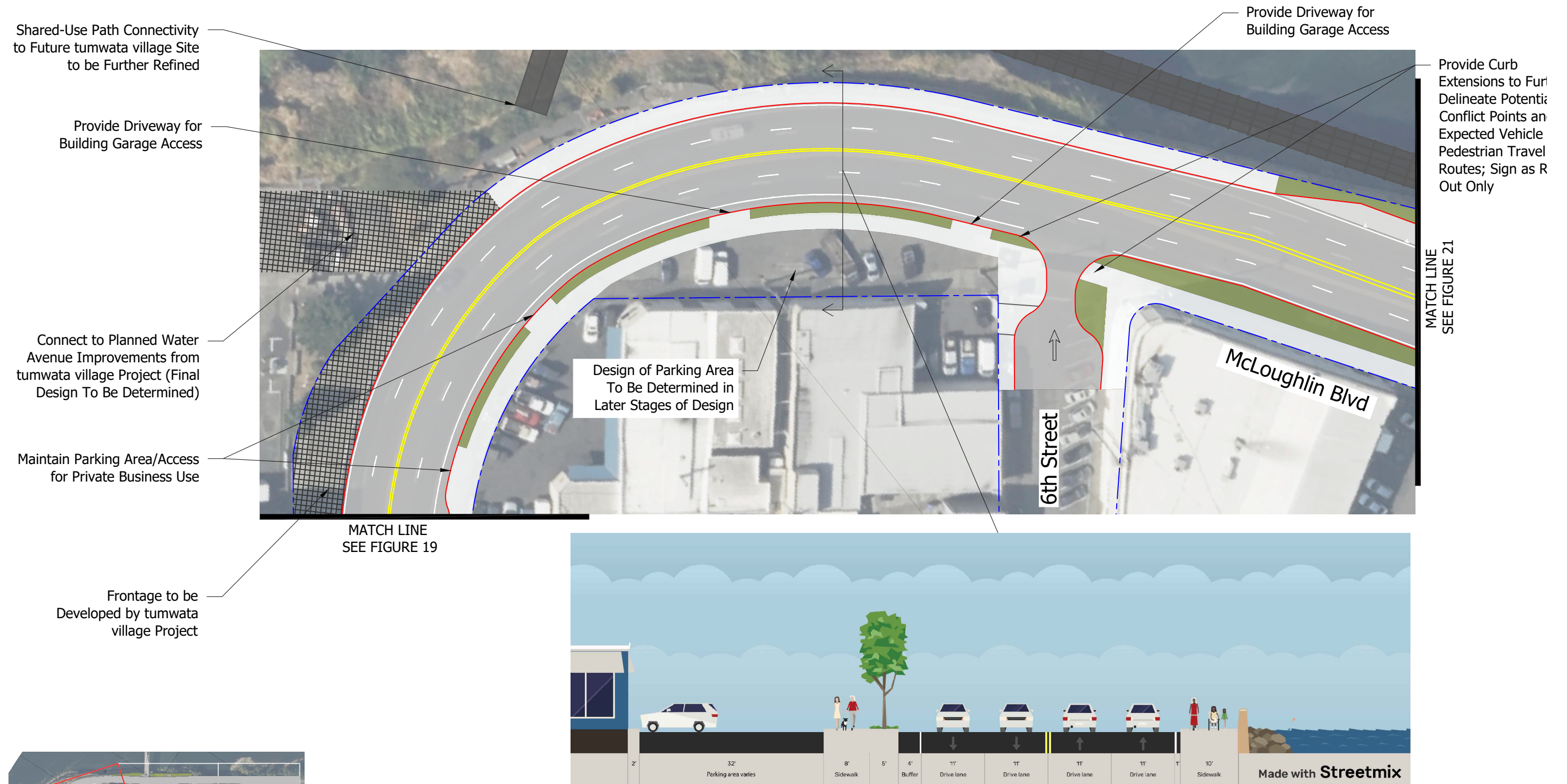
1. A hydro analysis will be conducted during the final design to confirm that 1 foot is an acceptable width.

Figure 15. Streetscape Improvements McLoughlin Blvd: Railroad Avenue to Main Street

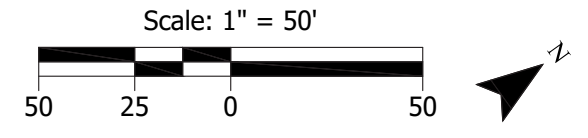


NOTE: Concept design subject to change per future planning, analysis, and design.

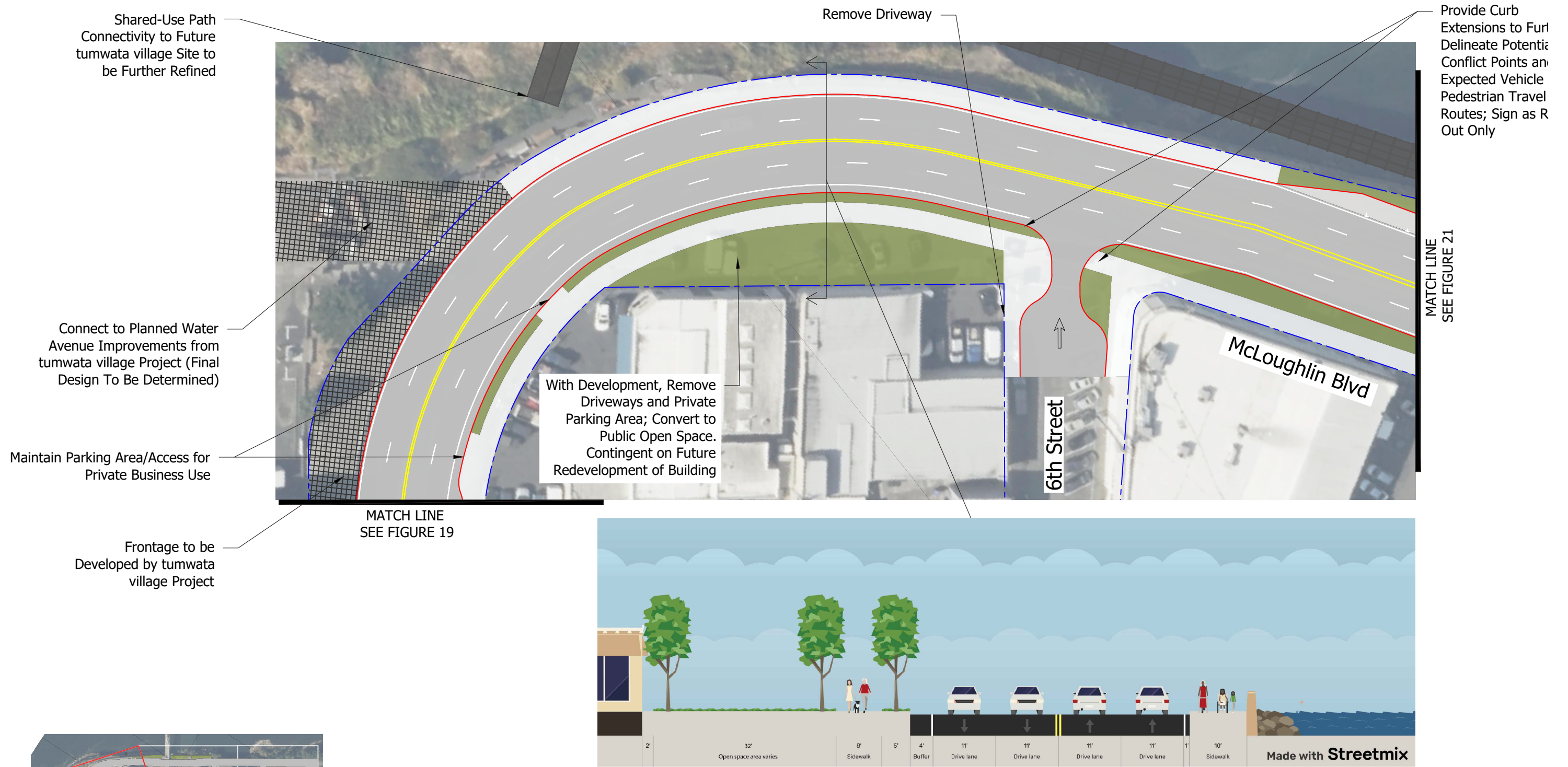
Figure 16. Streetscape Improvements (Option A)
McLoughlin Blvd: Main Street to Historic Arch Bridge



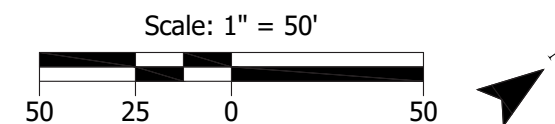
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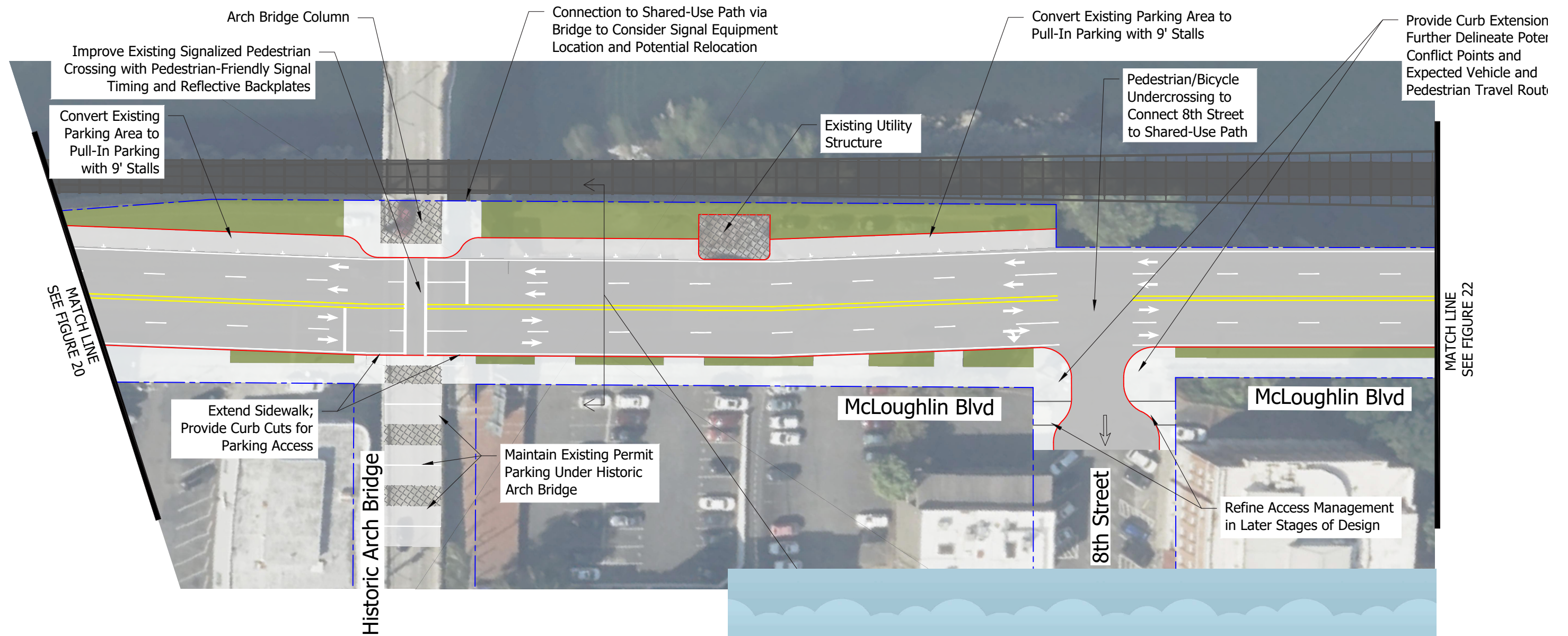
**Figure 17. Streetscape Improvements (Option B)
McLoughlin Blvd: Main Street to Historic Arch Bridge**



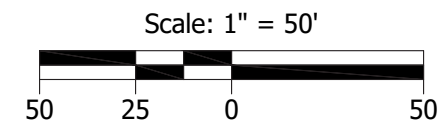
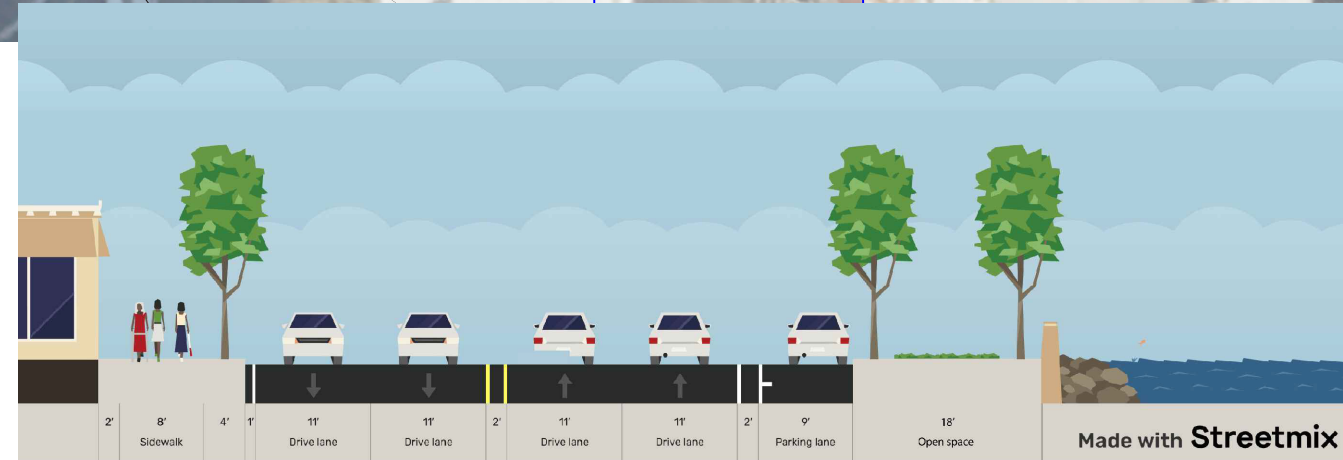
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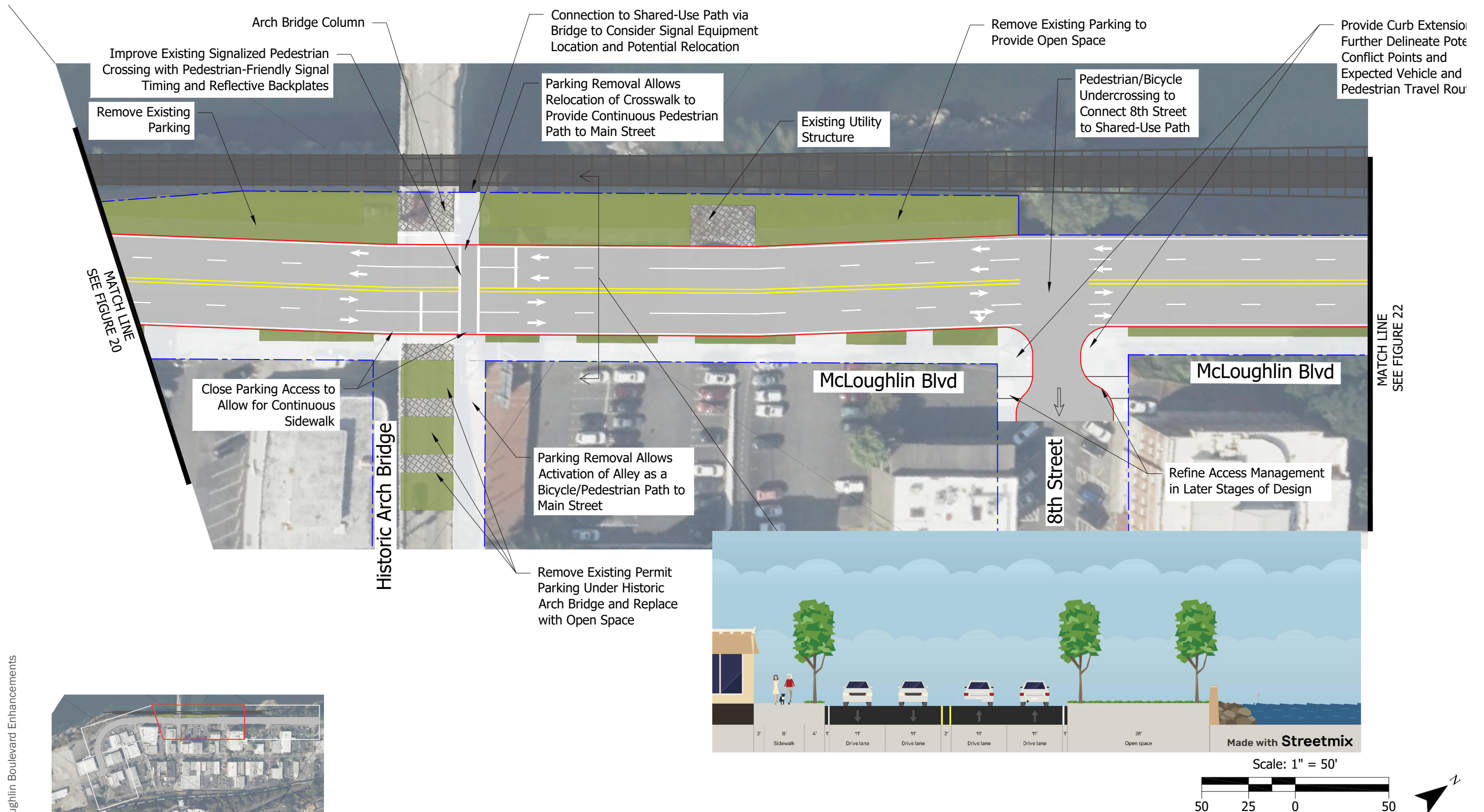
**Figure 18. Streetscape Improvements (Option A)
McLoughlin Blvd: Historic Arch Bridge to 8th Street**



NOTE: Concept design subject to change per future planning, analysis, and design.

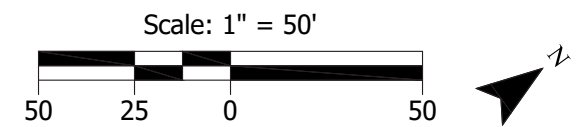
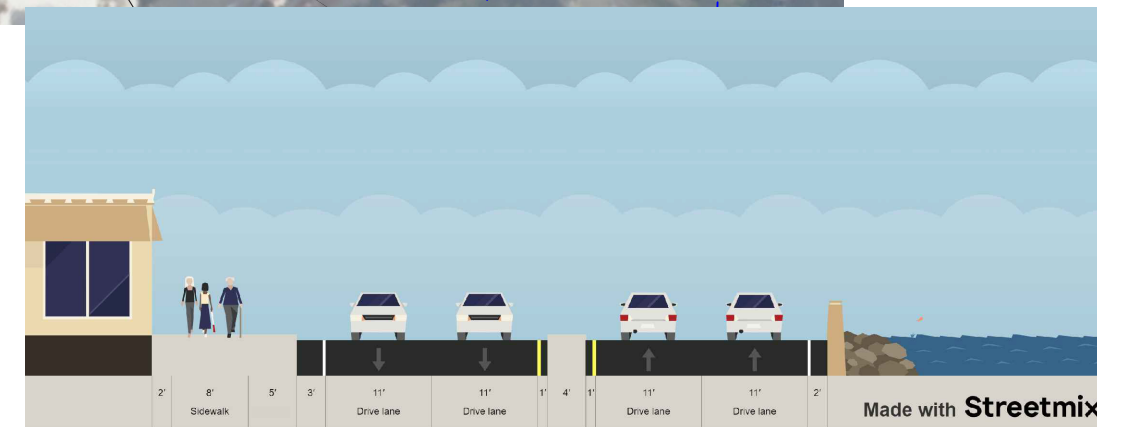
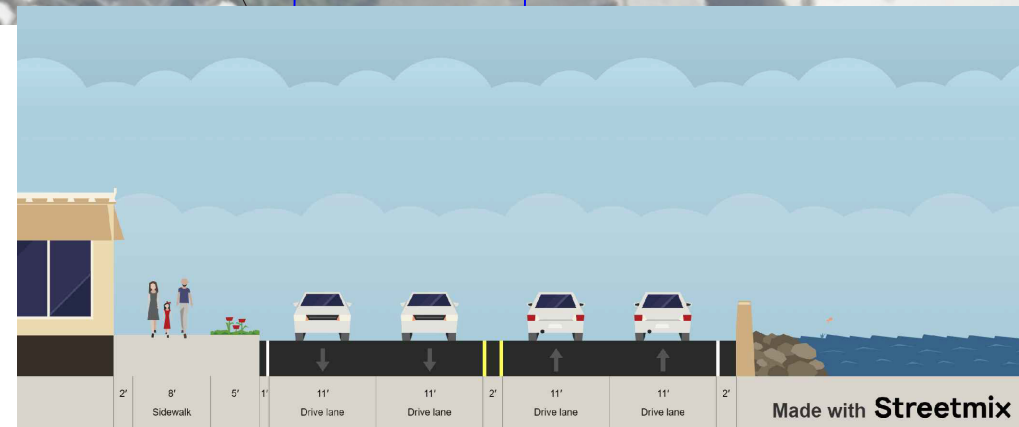
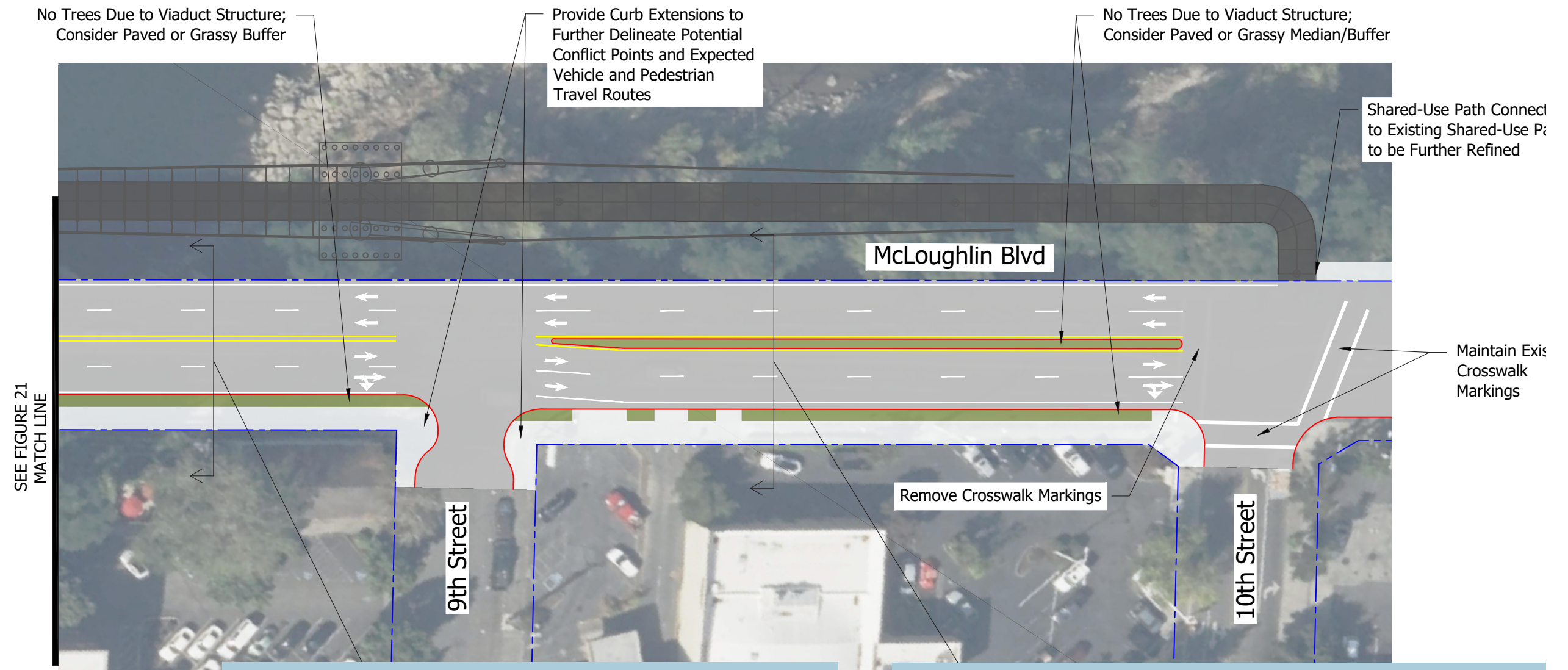


**Figure 19. Streetscape Improvements (Option B)
McLoughlin Blvd: Historic Arch Bridge to 8th Street**



NOTE: Concept design subject to change per future planning, analysis, and design.

**Figure 20. Streetscape Improvements
McLoughlin Blvd: 9th Street to 10th Street**



NOTE: Concept design subject to change per future planning, analysis, and design.

NOTE: Concept design subject to change per future planning, analysis, and design.

McLoughlin Boulevard Enhancements

McLoughlin Boulevard Enhancements

Design Considerations

The following section describes design considerations that the project team has incorporated into the concept layout for McLoughlin Boulevard.

McLoughlin Boulevard “Elbow”

Currently, the area in the McLoughlin Boulevard “elbow”—the curve northeast of Main Street—is used by a private business for parking and access. The existing sidewalk runs in front of the building but has frequent curb cuts due to several garages from the private business. This configuration raises several safety challenges, especially if the sidewalk is widened per ODOT Highway Design Manual guidance to 8 feet with a 2-foot frontage zone and a 5-foot buffer zone. Drivers backing vehicles out of the driveways/garages may not have enough room or sight distance to maneuver and may back into the curve portion of McLoughlin Boulevard. Retaining all the accesses as-is maintains the many conflict points between people walking and vehicles entering and exiting the garages. The existing configuration is shown in Figure 21. The project team developed two alternatives to address safety concerns in this area, described below.

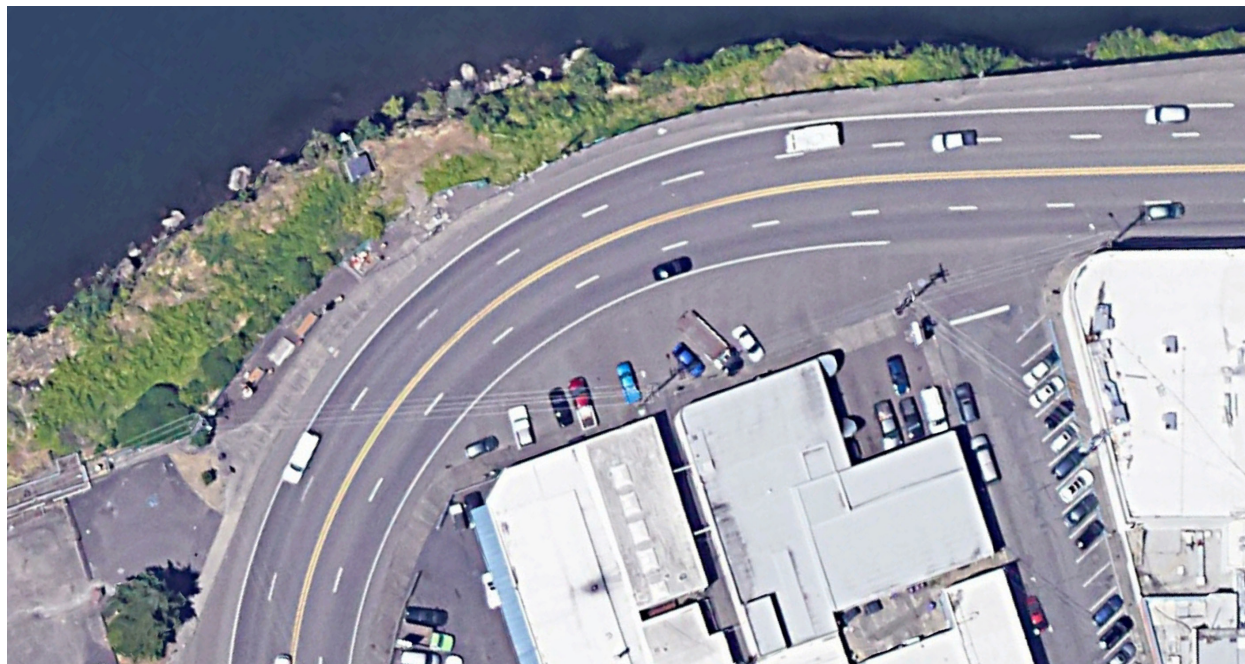
Option A: Retain Accesses

In the first option, an 8-foot sidewalk and 5-foot buffer would be provided along the fog line, continuous with the sidewalks on either side of this section. No frontage zone is provided, as the sidewalk will not be in front of a building. Two driveways are provided to allow access to the existing garages and alley. Additional analysis would be needed in later design stages to determine how to configure driveway accesses to allow for safe maneuvering in and out of the garages. All other accesses to the property (two on McLoughlin Boulevard and one on 6th Street) would remain as shown in Figure 16 (Option A).

Option B: Open Space

Alternatively, with future redevelopment of the existing building, the garage and alley accesses could be closed to provide an open space in the “elbow.” This open space would include a continuous sidewalk and buffer, but would also have space for additional landscaping, seating, street furniture, or public artwork. This option would eliminate any vehicles making turns at this portion of the curve and vehicular conflicts with people walking. The additional two driveway accesses on McLoughlin Boulevard could remain, if desired, but the access on 6th Street should be closed. Note that this is a long-term option and requires redevelopment of the property as shown in Figure 17 (Option B).

Figure 21. Existing “Elbow” Configuration



Open Space

There is a parking area on the river side of McLoughlin Boulevard between 6th and 8th Streets with about 20 spaces. Just south of this parking area, there are six additional parking spots under the Historic Arch Bridge, accessed by two alleys. These alleys create curb cuts on McLoughlin Boulevard, which reduce the space available for Americans with Disabilities Act (ADA)-compliant curb ramps and a continuous pedestrian route. The project team developed two alternative options to integrate the streetscape enhancements with the parking areas while ensuring the inclusion of ADA-compliant facilities.

Option A: Retain Parking

In the first option, the parking to the north can be retained, but converted to tuck-in parking to provide more room for open space. The McLoughlin Boulevard crossing would remain as is at the center of 7th Street, and a connection to the shared-use path would be provided just east of the Historic Arch Bridge column. For the south parking area, alley accesses are recommended to be reconfigured into driveways to provide a more continuous sidewalk. However, due to the need for a curb ramp for the 7th Street crossing, the additional driveways will lead to a “roller coaster” effect, in which sidewalk grading travels downward for curb ramps and driveways. The tuck-in parking includes 9’ wide stalls and a 2’ shy distance. A sidewalk would be provided under the Historic Arch Bridge, similar to the existing conditions as shown in Figure 18 (Option A).

Option B: Open Space

There is also an opportunity to create an open space in the northern existing parking area with additional landscaping and placemaking opportunities to provide a strong pedestrian and bicycle connection from the shared-use path to Main Street as shown in Figure 19 (Option B). This open space could connect to the recommended shared-use path with a short transition zone just east of the Historic Arch Bridge. The open space could provide a walking

path, viewpoints of the shared-use path and river, and opportunities for seating and other street furniture.

In addition, closing the parking spaces underneath the Historic Arch Bridge would allow the two driveway access points to close, providing a continuous sidewalk for people walking along on the south side of McLoughlin Boulevard with no conflicts with vehicles. This arrangement also allows the 7th Street crosswalk to be shifted to the east, providing continuous bicycle and pedestrian travel on the shared-use path, through the open space, across McLoughlin Boulevard, and down the eastern alley to Main Street. This would provide a much-needed active transportation connection between the shared-use path and downtown. Further, the alley could be activated with landscaping, art, lighting, and/or street furniture.

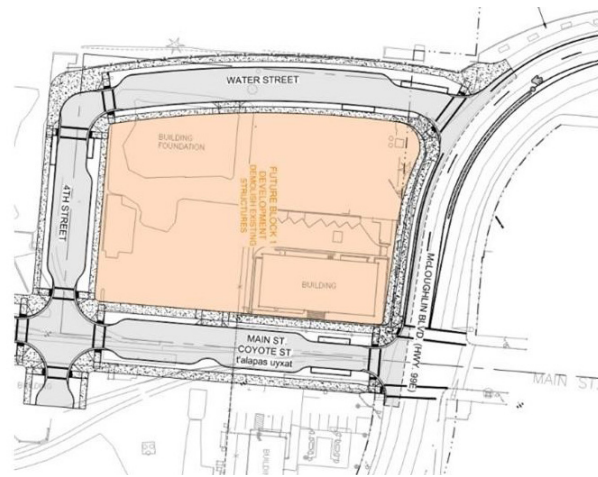
Including these described open spaces would require the removal of approximately 26 on-street parking spaces and necessitates further analysis. Note that the open space adjacent to the shared-use path would be designed around the Historic Arch Bridge column and the existing utility structure, which are both placed within the existing parking area. Furthermore, the sidewalk under the Historic Arch Bridge is retained.

tumwata village

The western frontage of McLoughlin Boulevard north of Main Street will be developed by the tumwata village project. This process is ongoing, and the McLoughlin Boulevard Shared-Use Path project team is coordinating with the tumwata village project team.

The tumwata village team is also developing a project for an improved Water Street connection to McLoughlin Boulevard. While the design is still in progress, any future changes to Water Street should be incorporated with the proposed improvements to McLoughlin Boulevard. Figure 22 provides a schematic of the preliminary proposed improvements.

Figure 22. Water Street Improvements (Preliminary)



McLoughlin Boulevard Crossings

There are three existing signalized crossings along McLoughlin Boulevard in the study area:

- McLoughlin Boulevard/10th Street – Signal
- McLoughlin Boulevard/7th Street – Pedestrian signal
- McLoughlin Boulevard/Main Street – Signal

These signals will be retained. For all signalized crossings, reflective backplates should be considered where not provided, as well as adequate pedestrian-friendly signal timing strategies (such as leading pedestrian intervals).

At 10th Street, the eastern crosswalk should be aligned to the previous shared-use path, while the western crosswalk should be removed as there is no proposed riverside sidewalk on this portion of the roadway.

For Option A at 7th Street, the crosswalk will tie into the proposed open space to the north and the improved sidewalk to the south. No changes are proposed to the crossing, except for ensuring ADA-compliant sidewalks and curb ramps. Note that the 2005 McLoughlin Boulevard Enhancements Plan recommended a raised, textured concrete crosswalk with a special scoring pattern to match the sidewalks at this location.

For Option B at 7th Street, the project team recommends moving the crosswalk to the east to align with the proposed shared-use path connection just east of the Historic Arch Bridge. A continuous sidewalk on the south side will allow for ADA-compliant curb ramps and a pedestrian and bicycle path down the alley. This adjustment should consider signal equipment location and potential relocation in later design stages.

Finally, at Main Street, crosswalks will tie into improved sidewalks on the east side of McLoughlin Boulevard and to the tumwata village frontage. All curb ramps should be updated to be ADA-compliant, and curb extensions should be provided where there is room (i.e., in parking lanes). In addition, the design should incorporate future planned public artwork or other gateway elements on Main Street. The design of this gateway will be determined in later design stages.

Opportunity for New Undercrossing

The public, City, and other interested parties have expressed a strong desire for a grade-separated pedestrian and bicycle crossing of McLoughlin Boulevard within the study area. This connection would increase connectivity from downtown Oregon City to the riverfront and could provide access to a future Frog Ferry dock and other recreational amenities on the river.

The project team explored the concept of a crossing in the vicinity of the existing 8th Street stairwell under the McLoughlin Boulevard viaduct. The 8th Street undercrossing concept is not precluded by the recommended alternative (Alternative 1B2: Full External Alignment) nor the

streetscape improvements along McLoughlin Boulevard. The 8th Street undercrossing requires further refinement to determine cost and feasibility. Figure 23 illustrates a conceptual rendering of the 8th Street undercrossing.

Curb Extensions

Curb extensions shorten pedestrian crossing distances, reduce vehicular turning radii, and provide more space for landscaping or other placemaking elements. The project team recommends curb extensions at 6th Street, 8th Street, 9th Street, and Main Street. Note that only McLoughlin Boulevard is a truck route in the study area.

Figure 23. Conceptual Rendering of 8th Street Undercrossing



Chapter 8: Implementation

Implementation procedures for the shared-use path and McLoughlin Boulevard streetscape enhancements will vary. The ownership and responsibility of these two projects are different: the City of Oregon City is primarily responsible for the shared-use path, while ODOT is primarily responsible for the McLoughlin Boulevard streetscape enhancements. However, both agencies will need to collaborate, as well as bring in other partners, as shown in Table 2.

Table 2. Responsible Agencies for the Shared-Use Path and McLoughlin Boulevard Streetscape Enhancements

| | City of Oregon City | ODOT | Oregon City Parks |
|-----------------------------------|--|---|---------------------------------|
| Shared-use path | Design, construction, and maintenance of path. | Complete environmental review in conjunction with the FHWA Federal Highway Administration. Possible design and construction responsibilities depending on funding. Coordination on viaduct maintenance. | |
| McLoughlin Boulevard enhancements | Maintenance of new trees and medians. | Design, construction, and maintenance of most elements. | Maintenance of new open spaces. |

In addition, the shared-use path, as a standalone, bridge-like structure, will require a more extensive environmental review and design phase.

Ideally, both the shared-use path and McLoughlin Boulevard Enhancements would be implemented at the same time. However, the two Project elements may be implemented asynchronously depending on funding.

Shared-Use Path Implementation Plan

The implementation process for the shared-use path is as follows:

- 1. TSP adoption:** Adopt the recommended shared-use path into the Oregon City TSP.
 - a. Through this action, the community would:
 - i. Reconfirm the need for a shared-use path connection on McLoughlin Boulevard between 10th Street and tumwata village.
 - ii. Recognize the complex and integrated benefits, burdens, and unknowns at this time.
 - iii. Preserve the alignment design.
 - iv. Demonstrate the public support necessary to seek and secure funding to conduct the design and construct the new shared-use path connection.
- 2. Partner agency coordination and interim actions:** Prior to identifying funding, the partner agencies led by Oregon City should:
 - a. Identify any specific upfront agency commitments.
 - b. Emphasize ongoing coordination with associated government entities.
 - c. Confirm ultimate shared-use path ownership, capital funding responsibilities, and maintenance responsibilities.
- 4. Funding:** Seek funding for the environmental review and permitting process, design, and construction phases of the Project.
 - a. For some competitive grants, a project team may choose to advance a TS&L or higher design development to improve opportunities to secure construction funding. In these cases, the construction funding could be secured after the TS&L, described in Step 5.
- 5. Environmental review:** The federal nexus resulting from either funding or permits from a federal agency will require a National Environmental Policy Act (NEPA) review to be complete. Partner agencies should initiate coordination with the lead federal action agency to complete NEPA-level scoping and technical resource impact evaluations. Final NEPA clearance, in addition to Environmental Site Assessments consultation, related permits, and Section 4(f) analysis (if FHWA is the federal nexus) can be completed at the conclusion of the impact evaluation.
- 6. Design:** Improved development for the definition of the type and configuration of a proposed structure supporting the recommended alignment alternative is necessary to confirm and validate conceptual designs, provide content and clarity for grant applications, and improve programmatic construction cost estimates.
 - a. Project development phase (design acceptance phase, or DAP) including bridge TS&L phase deliverables:
 - i. Provides information required by FHWA for review and approvals and improves grant funding competitiveness.
 - ii. Provides preliminary hydraulic, geotechnical, and environmental recommendations.
 - iii. Documents the structure type alternatives studied and advanced.
 - iv. Rationalizes the geometry and identifies the primary structure type and configuration.
 - v. Improves construction costing estimates and addresses risks identified in earlier planning phases.
 - b. Project final plans, specifications, and estimate (PS&E) phase deliverables:

- i. Provides construction documents and aligns the Project for construction implementation.
 - ii. Provides final hydraulic, geotechnical, and environmental recommendations.
- c. PS&E to award (construction):
- i. Bid documentation is provided to qualified contractors to bid for the Project and construct the design.

6. Construction: Using PS&E materials, the City or ODOT will advertise the construction contract for competitive bids. Once the contracting mechanism is determined (e.g., traditional design-bid-build or an alternative delivery method), the Project will be advertised for construction bidding and constructed. If an alternative delivery method is selected, Steps 5 and 6 may be combined.

Shared-Use Path Implementation Plan Environmental Review and Design

Completing an environmental review and design of the shared-use path will require the advancement of conceptual-level designs assumed in the feasibility and preliminary conceptual design phase to validate the designs and help narrow down practical solutions that achieve Project goals. A wide range of expertise will be necessary to develop the conceptual configuration and validate initial assumptions. The following list summarizes the expertise considered key to advancing the conceptual structural aspects:

- **Geotechnical engineering** – Advancement of concept-level approaches and assumptions considered for the foundations/footings.
- **Hydraulic engineering** – Determination of river-based implications on the design, planning, and construction of the proposed structural configuration.
- **Wind and vibration engineering** – Identification of site-specific and structure-specific mitigation measures following an initial desktop study in the early stages of design development, leading to more refined and detailed efforts as design is progressed.

- **Durability/life cycle engineering** – Site-specific considerations for appropriate corrosion prevention and service life expectations to be met while considering operation and maintenance aspects of the proposed structure.
- **Specialty construction cost estimating** – Structure-specific costing that leverages historical and anticipated costs associated with specialty structure-type concepts meeting an assumed configuration capable of supporting the recommended alignment assumed in the planning phase, subsequently verified in the TS&L phase (i.e., a long-span, cable-supported bridge).
- **Specialty construction and risk management** – Structure-specific construction expertise to identify, assess, and proposed mitigation for technical risks.
- **Community/cultural/aesthetic** – Development and degree of integration of community goals for the structure in meeting the local site-specific context aesthetics and appeal.
- **Structural engineering design** – Development of assumed concepts identified in Phase 1A and reflect the results, findings, and recommendations from other expertise as documentation and data provides.

McLoughlin Boulevard Streetscape Enhancements Implementation Plan

The implementation process for the McLoughlin Boulevard streetscape enhancements is as follows:

- 1. TSP adoption:** Adopt the recommended enhancements (Main Street to 10th Street) into the Oregon City TSP. Through this action, the community would:
 - a. Confirm the need for cross-section changes along McLoughlin Boulevard to support the shared-use path and realize the vision of the McLoughlin Boulevard Enhancements Plan.
 - a. Demonstrate the public support necessary to seek and secure funding to design and construct the recommended improvements on McLoughlin Boulevard.
- 2. Partner agency coordination and interim actions:** Prior to identifying funding, the partner agencies led by ODOT should:
 - a. Identify any specific upfront agency commitments.
 - b. Emphasize ongoing coordination with associated government entities.
- 3. Funding:** Seek funding for the design and construction phases of the Project.
 - a. Explore opportunities for federal, state, and regional grant funding opportunities.
- 4. Design:** Following Steps 1–3, the project team will prepare plans, specifications, and cost estimates.
- 5. Construction:** Using the plans, specifications, and estimates, the City or ODOT can advertise the construction contract for competitive bids. Once the contracting mechanism is determined (e.g., traditional design-bid-build or an alternative delivery method), the Project will be advertised for construction bidding and constructed. If an alternative delivery method is selected, Steps 4 and 5 may be combined.



Supporting Documents

The following memoranda have more information on all the subjects discussed in this report.

| | |
|---|---|
| Technical Memorandum #1: Corridor Vision | This memorandum presents the Corridor Vision Statement, crafted based on a review of City of Oregon City plans and policy documents. |
| Purpose & Need Statement | This memorandum describes the Purpose and Need for the Project, serving as the basis for developing methods and criteria for narrowing the range of alternatives. |
| Technical Memorandum #2: Evaluation Criteria and Performance Measures | This memorandum articulates the evaluation criteria and performance measures developed to fulfill the Corridor Vision Statement and the Purpose and Need Statement for the Project. |
| Technical Memorandum #3: Plans and Policies Review | This memorandum summarizes the existing plans, regulations and policies that are relevant to the McLoughlin Boulevard Enhancements - 10th Street to tumwata village Project (Project). The summary describes the relevance of each document to the Project, identifying potential issues and considerations that will guide the development and evaluation of the alternative concepts. |
| Technical Memorandum #4: Alternative Development and Analysis | This memorandum serves as an overview of the preliminary six alternative concepts developed for the Project. |
| Technical Memorandum #5: Alternative Safety and Active Transportation Analysis | This memorandum provides technical analyses and summarizes key considerations for integrating the design alternatives developed in Technical Memorandum #4 into adjacent active transportation networks. |
| Technical Memorandum #6: Most Promising Alternatives | This memorandum assesses and identifies three alternatives to further develop through conceptual design and screening. |
| Technical Memorandum #7: Preferred Shared-Use Path Alternative | This memorandum presents the recommended shared-use path alternative, its alignment, and the streetscape improvements along McLoughlin Boulevard between 10th Street and tumwata village. |

| | |
|---|---|
| Technical Memorandum #8: Implementation Plan | This memorandum presents the implementation plan for the recommended alternative. It identifies potential roles for different agencies and stakeholders; outlines appropriate next steps; and details City and agency responsibilities. |
| Planning-Level Cost Opinion | This report documents the planning-level cost opinion, including key assumptions and considerations. |
| Public Involvement Report | This report outlines the public outreach activities conducted as part of the Project. |





To: Samantha Wolf, Chairman Natural Resource Committee

From: Jerry Herrmann and others mentioned in the attached memo from August 13th

Subject: McLoughlin Blvd. Enhancement Project River Trail

Dear Members:

Attached is an overall project diagram of a walking experience adjacent to Highway 99E from Riverview Terrace Deck to 99E turn and Tumwata Village. We support the concept of this project but are very concerned about the loss of established riparian forest and habitat.

There is 2,000 feet of established riparian forest starting at Riverview Terrace Deck (by 14th Street) and proceeding south to 10th Street and thereafter in lesser amounts to 8th Street by the Courthouse.

The Natural Resource Committee a decade or so ago was very concerned about the removal of up to 100 trees from the Abernethy Bridge to and beyond Riverview Terrace Deck. We weighed in with our then Chairman Betsy Terril because of the possible impacts to endangered species (fisheries movement of juveniles) and the loss of mature trees with established nests for Great Horned Owls and other raptors. We would ask your Committee to weigh in and voice your support for the retention of riparian habitat of which this forest is the only multi-layered forest along the river (Clackamette Park has been drastically changed) so that that important function be considered as important and not just mitigatable by new plantings which would take twenty or more years to mature. In this age of climate change, every assemblage of plant material especially trees, understory and their actively functioning soils we feel must be considered important. Thank you for your consideration.

Willamette Falls and River Walking Corridor

(2,000-foot-long established riparian forest from 14th Street through 10th Street and then diminishing at 8th Street)



99E Walk Project Comments – August 13th, 2024 Memo

This memo is formulated after talking to members of the Natural Resource Committee and the Cove Environment Water Quality Task Force. We are excited about the opportunity that is being provided possibly to the city to create a better connection to the river from the city. The work done on phase 1 of McLoughlin Blvd Improvements definitely created a beautiful landscape with a beautiful promenade and truly interesting art statement where nature, basaltic salt specimens and natural elements were protected.

There was a major incident wherein a good deal of forest was going to be removed from what is now Riverview Terrace and Deck which included the removal of a very dense forest clear up to 10th street. Members of NRC over a dozen years ago asked the city to take protective measures and then the US Fish and Wildlife got involved because it was a riparian forest next to the river.

Riparian forests are extremely important because listed steelheads and lamprey eels move along the shoreline as juveniles. We hope you Commissioners, the staff and consultants will consider the following:

1. Stewardship and retention of the 2,000-foot-long riparian forest from Riverview Terrace Deck all the way to 8th Street.
2. We would ask you to consider elevation changes if it is possible where the walkway can be nested below 99E occasionally because the enjoyment and education value of a “quiet experience” would be measurable
3. As you consider this project, we would ask that you involve those of us involved in natural resource planning, protection, and improvements early on and not at the end of a design cycle.

We don't plan to attend your meeting on August 13 but hope you will consider these factors which taken into account can also support greater funding opportunities because of the environmental showcase nature of the project. Several members of our group have experience with those significant types of grants. Thanks for your consideration

Those involved in this simple memo include: Samantha Wolf, John Borden, Jerry Herrmann, Nancy Broshot, and Richard Craven



CITY OF OREGON CITY

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Oregon City, OR 97045
503-657-0891

Staff Report

To: Natural Resources Committee **Agenda Date:** October 9, 2024
From: Pete Walter, Planning Manager
Thomas Kissinger, Assistant Parks and Recreation Director

SUBJECT:

Public Tree Inventory and Tree Canopy Policy Recommendation Letter

STAFF RECOMMENDATION:

At the August 14, 2024 NRC meeting staff discussed a draft letter of specific recommendations from the NRC to the City Commission regarding ways to enhance the City's tree canopy management. At the end of the meeting the committee wished to move the following ideas ahead:

1. Meet with PRAC to discuss a stronger, joint recommendation letter to the City Commission for a city arborist / city forester position in the next biennial budget.
2. Seek PRAC / NRC support for a grant through the Inflation Reduction Act / ODF grant program to support a public park and right-of-way tree inventory.
3. Discuss with PRAC other ideas to support maintenance of tree canopy on city-owned lands, including possible amendments to the city's tree codes.

The NRC and PRAC have both discussed tree management efforts by the city separately. However, this is the first time that the two committees have the opportunity to have a joint discussion regarding issues of mutual concern.

EXECUTIVE SUMMARY:

Please refer to the attached draft letter. The letter specifies recommendations for improving the City's approach to urban forestry, particularly to address the problem of tree canopy loss. The letter is structured around the following five questions, with specific recommendations in response to each question.

- To what extent do we understand our current tree canopy?
 - What are the City's current policies and plans for managing tree canopy?
 - Does the current code support preservation of mature trees which provide the most substantial canopy?
 - How can the City best update codes for better tree canopy protection?
 - What are the relevant funding needs and prospects?
- The City does not currently have a comprehensive inventory of public trees. Individual developments reviewed by the Planning division are required to provide tree plans at the time of application, such as for residential subdivisions.

The city's existing codes that contain tree regulations or policies include the following chapters of the [Oregon City Municipal Code](#):

Chapter 12.08 - Public and Street Trees

Chapter 12.32 - Heritage Trees and Stands

Chapter 17.41 - Tree Protection, Preservation, Removal and Replanting Standards

Chapter 17.44 - Geologic Hazards Overlay District

Chapter 17.49 - Natural Resources Overlay District

The NRC and PRAC have both discussed tree management efforts by the city separately. However, this is the first time that the two committees have the opportunity to have a joint discussion regarding issues of mutual concern.

Parks and Planning Staff will be available to answer any questions that may come up in the course of the discussion.

Next Steps / Options:

1. Discuss and recommend any changes to the letter.
2. Do not make any changes to the letter and vote to forward to the City Commission.
3. Other suggestions at the consensus of the group.

BACKGROUND:

Review the attached draft letter before the meeting and be prepared to provide comments. See Next Steps for Options.

NEXT STEPS:

OPTIONS:

To the Oregon City Commission:

The Natural Resources Committee and Parks and Recreation Advisory Committee together endorse this letter, which specifies recommendations for improving the City's approach to urban forestry, particularly to address the problem of tree canopy loss.

A healthy tree canopy brings not only environmental benefits but also supports economic concerns, public health, community development, equity, and much more. For the sake of brevity, this letter will not go into those details. Please direct any questions as to the extensive benefits of urban canopy to members of the Natural Resources Committee, the Oregon Department of Forestry, or OSU Extension Office. Note that in addition to the City Commission's Goal #7, the OC2040 Community Vision explicitly calls for supporting our "extensive tree canopy". The justification for prioritizing this topic is not in question. We are focusing here on recommendations for next steps.

The issues at hand involve what to do to improve our tree canopy.

1. To what extent do we understand our current tree canopy?

Recent reports of planting and removal in the City indicate a loss rate that far exceeds current efforts to replace tree canopy let alone increase it. That said, these reports only cover the number of trees removed and planted. We currently lack basic assessment tools and records for tree canopy. A public tree canopy assessment or inventory is essential. We need that information to support the work of determining realistic goals and priorities. Common tools are available to help with this process, and City staff can start with basic GIS tools.

We cannot manage that which we don't know. A basic canopy assessment can be conducted by City staff using GIS and aerial imagery already available. Comparing canopy extent across the city over time will enable City administrators and City Commissioners to quantify and evaluate trends of canopy growth or loss and the status of meeting canopy goals. To preserve, and hopefully grow our extensive tree canopy, we must be able to define this goal to ensure that this important resource can be measured, tracked, and thus better managed. Based on this information, we can determine if our city's tree canopy meets the national average of a healthy canopy of at least 33%.

2. What are the City's current policies and plans for managing tree canopy?

We currently have no policies or plans that directly address managing city trees or the tree canopy. Current mentions of trees in city code are predominantly discussed in Title 12 sidewalk, Right-of-way, and public space regulations and Title 17 Zoning regulations. More references to trees are discussed in protected areas regulated by the state or federal government. But, trees are shrouded within language that preserves habitat in riparian corridors and adjacent natural resource overlays, which are cumbersome to update and subject to interpretation when no clear standards are provided. We do not have a city policy or code that specifically speaks to the protection and maintenance of trees and their canopy as a city asset. Additionally, the current City code cannot guide development or redevelopment to preserve trees without protections for trees of specific sizes and density. Thus, a proposed development would choose the easiest course of cleared lot for a generic project rather than tailor a development around existing trees. A comprehensive tree code is important to validate urban forestry management and practices that support an extensive tree

canopy. After we have basic assessment tools in place, we can develop a proactive urban forestry plan with public input. We can then use that plan as a basis for updating city code, policies, management, and resource allocation for our urban tree canopy.

2. Does the current code support preservation of mature trees which provide the most substantial canopy?

Current code has four chapters that discuss tree preservation and mitigation. Oregon City's Heritage Tree program recognizes special mature trees but the designation is honorary and does not provide additional protections beyond those provided for other trees in the city. The city code does not specify protections for large mature trees on public or private property. Chapter 12.08.35 speaks to protecting all city owned trees during development if those trees are planned for retention. If a CIP requires removal, then the city would replant according to OCMC 17.41 (Tree Protection, Preservation, Removal and Replanting Standards). Chapter 17.41 discusses trees in development and requirements for mitigation for trees within or beyond the construction area. Chapter 17.41.060.E Existing trees within a tract shall be protected by a permanent restrictive covenant or easement. Chapter 17.40 discusses tree preservation and mitigation during development within Natural Resource Overlay Districts to meet Metro Titles 3, 13 and Statewide Planning Goal 5.

Despite the stated goals listed at the beginning of these chapters, proactive tree or canopy retention is not sufficiently supported. Existing code and supporting maps or data that guide preservation must be updated to reflect new city boundaries and the natural resources present. Careful adherence to the code is also important to ensure canopy coverage across sensitive habitats. Failure to preserve canopy in these sensitive natural resource overlay areas reduces the city's ability to meet local and statewide goals as well as harming native wildlife among other ecological benefits we cannot afford to lose.

The same impact of canopy from mature large-form trees can provide benefits for our homes, streets, and parks. Except for small planting spaces or the presence of overhead wires or other infrastructure, large-form trees should be intentionally planted in large planting areas.

3. How can the City best update codes for better tree canopy protection?

The NRC has identified the following as ways to better align City code with the goal of supporting a healthy tree canopy:

- A. To best protect Oregon City's tree canopy, a **city forester and a robust tree code** is necessary to create goals of overall canopy across the city, assist the development of sound tree management policies, and provide technical expertise. An urban forester can review development applications to ensure city code is properly implemented and guide projects to meet community tree goals. Much like the staff in Public Works care for our streets, lights, and utility infrastructure, an urban forester can facilitate better tree maintenance that promotes healthier, and safer, trees for the community. This staff position is charged to oversee and maintain the urban forest holistically and provide clarity to how trees in the city are managed for the benefit of the community.

Commented [SW1]: Curious how often this occurs. When does it occur? Development plans can change during construction and initial tree preservation plans seem flexible to remove more trees than planned.

- B. An **urban forest management plan** is also needed. This document outlines city wide canopy goals set by community and informed by industry best practices. Like any master plan, this document provides direction for the maintenance and improvement of an important resource, in this context, our urban forest. An urban forest master plan responds to environmental mandates, clarifies confusion about resource management and authority, and coordinates the roles of the different agencies and city departments. An urban forest management plan anticipates changes to tree codes and communicates to the public how and when updates would occur. This document is the community guidance for tree canopy preservation and growth. It would support and be implemented by an urban forester.
- C. When proposing tree code updates, **utilize and defer to the best practices and integrate public engagement** to ensure alignment with community values. Examples from the Arbor Day Foundation, the City of Milwaukie, West Linn, and Portland provide examples of tree codes that place greater emphasis on tree preservation for public and private development. Also, they provide clear standards for planting and pruning to ensure new trees are established for success and mature trees are maintained for health and safety.
- D. The city should **adopt industry standard practices for assessing hazard trees**. When evaluating tree health, the city can require Tree Risk Assessments performed only by Certified Arborists. To prevent a conflict of interest, an assessing arborist should never be from the same contractor hired in case of removal. This conflict underscores the importance of a city forester to objectively review removal requests and ensure trees are maintained properly and are not needlessly removed for financial gain.
- E. We should also **develop clear policy with reasonable deference for tree retention** in cases of healthy trees where sidewalks can be repaired or moved to accommodate the tree. For sidewalk uplift, we should correctly indicate that the sidewalk is the hazard rather than an adjacent tree where the tree is not considered dead, dying, or dangerous. If uplift from trees creates a non-compliant sidewalk that violates ADA requirements, alternatives to tree removal including sidewalk repair, rerouting and/or prudent root pruning by a certified arborist should be the first options explored. An adjusted sidewalk may be feasible at a lower cost than tree removal.
- a. If code is to allow tree removal in cases where necessary, we urge more robust mitigation requirements to replace lost canopy. Acceptable replacement trees should include consideration of potential canopy size (not only tree count). Mitigation requirements must include care and maintenance for establishment after planting.
 - b. Where mitigation is not possible, we recommend an increased fee-in-lieu to \$600 as higher fees provide more incentive for retention. Also, the income from fees for removing street trees can support more tree plantings, improved maintenance, and better compliance enforcement. Adjustments to the city's Sidewalk Replacement Assistance grant program could be modified to include funding support for costs of an easement or covenant on adjacent private property to provide space of the new sidewalk for those who have a financial need.

- F. For 4-foot strips and larger without overhead wires, **compulsory replanting is recommended** following guidance from the Street Tree Planting List.
4. What are the relevant funding needs and prospects?
- a. The cost of an Urban Forester staff position is possible given vacancies in current FTEs in the Public Works and Parks Departments. Adjustments in adding this position would not significantly alter current staff expenditures for the city.
 - b. To support development of a Tree Code and an Urban Forest Management plan, there are two major grants available. These funds are available without any match requirement. Projects such as increased tree planting, conducting Tree Canopy Assessments, Tree Inventories, and Urban Forest Plan development, and other green infrastructure projects are activities supported by these grants. Oregon Department of Forestry and the Oregon Department of Land Conservation and Development are requesting proposals to fund efforts such as we propose here. The City should allocate some staff time to pursue these grants.
 - c. The work of updating the code and developing a long-term tree canopy plan could be done with a mix of staff time, volunteer involvement, and hired contracting. See above for grant funding to support this work.
 - d. Along with the overall plans and policies, a dedicated FTE for an Urban Forester position would be the best investment in managing the canopy long-term. This position would relieve less-specialized workers in Public Works or Parks and reduce contracting costs. It would also enable the city to identify and address tree issues sooner before they become more costly. As the City needs to manage trees regardless, this position should save the city money overall compared to attempts to manage a healthy canopy without this role.

We should not delay implementing better urban forestry management. In addition to the numerous reasons to prioritize this issue, trees take many years to grow. Just as it is easier in general to break things than to fix them, it is harder to recover from tree canopy loss than to retain a healthy canopy in the first place. We have seen major canopy loss in recent years, and we need to understand it and slow the loss to get on track to eventual recovery and resilience. To have a healthy canopy in 2040 aligned with the OC2040 vision, we need to work today to protect and enhance the canopy we have now.