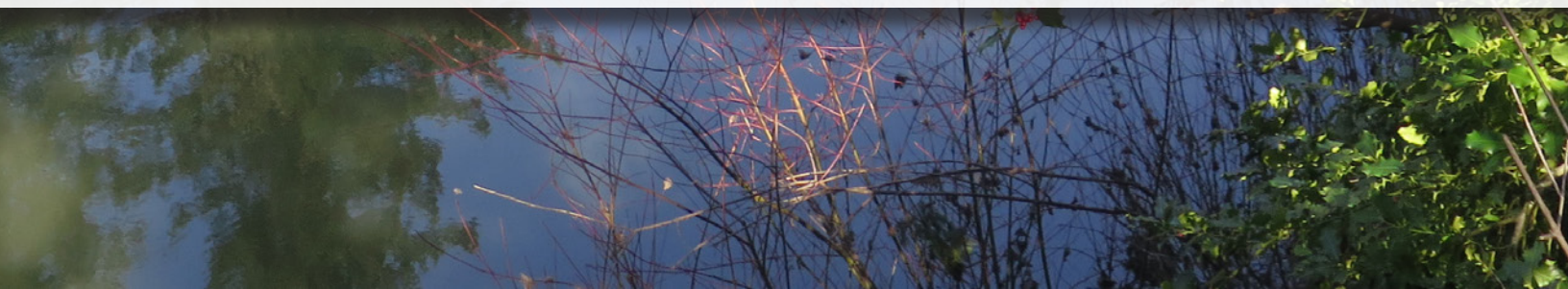




TUALATIN RIVER ACCESS

SITE ASSESSMENT

WALKER | MACY April 2023





ACKNOWLEDGEMENTS

City of Tualatin:

Ross Hoover, Parks & Recreation Director

Rich Mueller, Parks Planning & Development Manager

Kyla Cesca, Office Coordinator

Project Team:

Michael Zilis, Principal - Walker Macy

Reif Larsen, Landscape Architect - Walker Macy

John van Staveren, Principal - Pacific Habitat

Andrew Jansky, Principal - Flowing Solutions

CONTENTS

<i>1</i>	<i>INTRODUCTION</i>
<i>3</i>	<i>PROJECT GOALS</i>
<i>5</i>	<i>EXISTING CONDITIONS</i>
<i>7</i>	<i>ENVIRONMENTAL CONSIDERATIONS</i>
<i>10</i>	<i>OPPORTUNITIES</i>
<i>13</i>	<i>CONCLUSION</i>



INTRODUCTION



PROJECT BACKGROUND

The 3.0-acre property at 18615 SW Boone's Ferry Road is located at an important connection of the Tualatin River and the City of Tualatin's downtown core in Washington County, Oregon. Adjacent to the property are the Tualatin Community Park, the Juanita Pohl Center, the Van Raden Center, and several private residences. The site is easily accessed via multiple modes of transit, including the bus route along Boone's Ferry Road and the Tualatin River Greenway Trail.

The property was once part of Tualatin's historic downtown. Since the 1996 flood, it has remained vacant, though it has been assessed several times for private development, such as the Tualatin Riverhouse multifamily project which was abandoned between 2007-2009. In February of 2023, the City of Tualatin initiated a purchase agreement with the owner of the property to acquire the land for public, recreational use.

In February of 2023, the City of Tualatin Parks & Recreation Department hired Walker Macy to conduct a feasibility study for non-motorized recreational river access on the property and to prepare this initial site assessment report.



PROJECT GOALS

CORE VALUES

The City of Tualatin Parks and Recreation Master Plan was adopted by the City Council in 2019. The following core values from the Plan have been acknowledged by the Project Team to define this project's intent.

ACCESSIBILITY

Expand accessible and inclusive parks and facilities to support community interests and recreation needs.

CONNECTIVITY

Create a walkable, bikeable, and interconnected City by providing a network of regional and local trails.

VIBRANCY

Activate public open space, provide recreation opportunities for all people, celebrate Tualatin's cultural identity and history, and support urban vitality and economic growth.

ACCESS TO NATURE

Conserve and restore natural areas to support wildlife, promote ecological functions, and connect residents to nature and the outdoors.

STEWARDSHIP

Manage and maintain quality parks and outdoor recreational facilities through sustainable practices.

PLANNING OBJECTIVES

The 2019 Parks & Recreation Master Plan identifies the parcel as a missing link in the Tualatin River Greenway, which currently terminates at the northwest corner of the site and 1/10 mile to the southeast along SW Barngrover Way. The proposed trail is categorized as a Priority Trail Connection.

The Master Plan also recommends the expansion of the adjacent Tualatin Community Park through land acquisition to strengthen the park's presence at the center of the community.

Although there are several existing river access points in the park, few are accessible. Community feedback from the Master Plan indicates strong desire for a direct, universally accessible connection to the river.

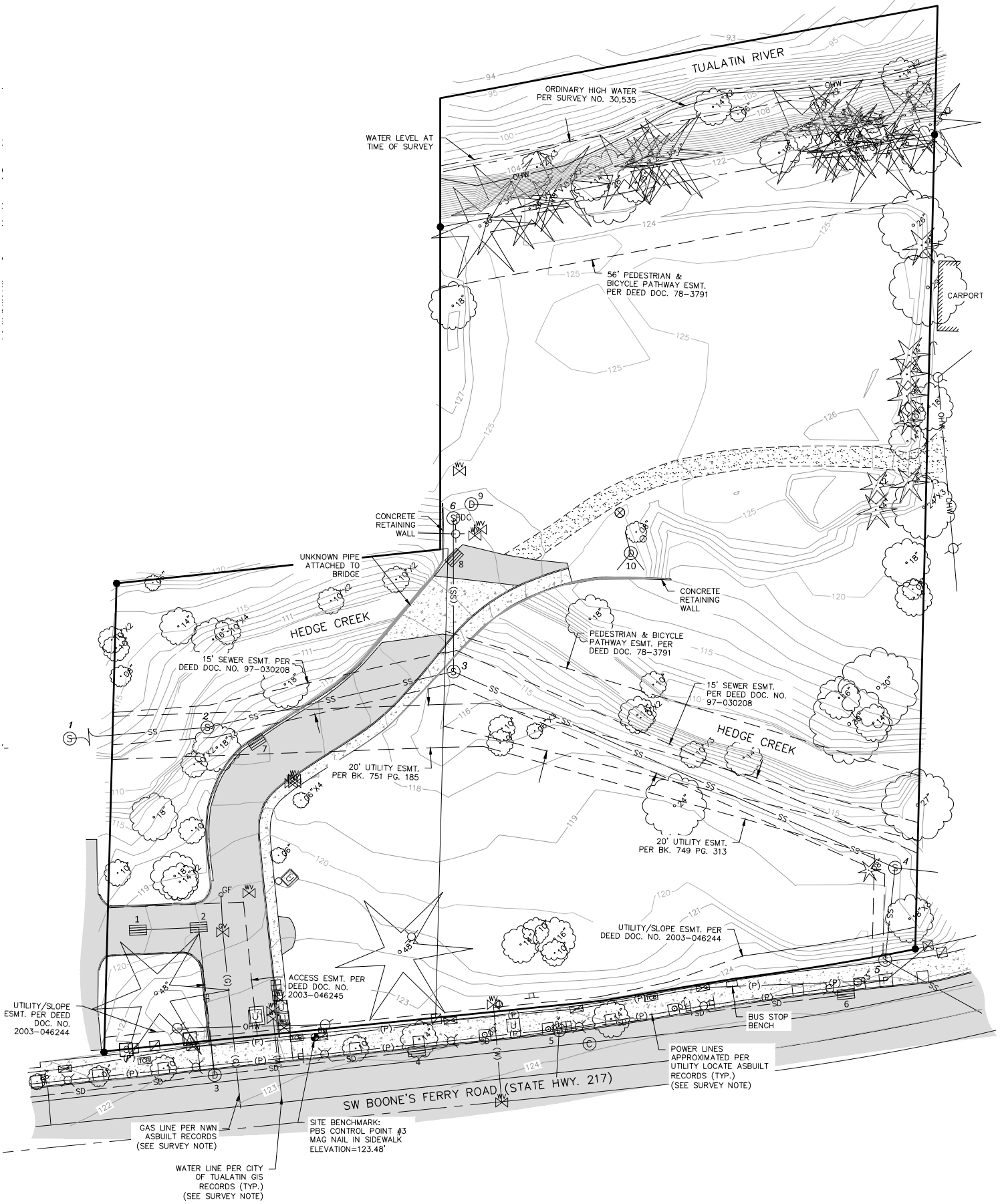


EXHIBIT 1 | TOPOGRAPHIC SURVEY

EXISTING CONDITIONS

OVERVIEW

The property consists of two relatively flat, elevated areas spanning Hedge Creek, which runs west-east, bisecting the site in the middle. To the north is the Tualatin River, and to the south is Boone's Ferry Road. Most of the site's interior is meadow, and the perimeter is mostly vegetated with a mixture of native trees and shrubs with some invasive plants.

The Boone's Ferry Road right of way runs along the entire southern edge of the property, providing access for pedestrians from the sidewalk. A curb cut and existing asphalt driveway in the southwestern quadrant of the site provides vehicular access both to the property and the neighboring apartments through an access easement. The driveway connects to an existing bridge across Hedge Creek and terminates thereafter.

The northern half of the site is an open, vegetated field on imported fill, likely another remnant from the incompleting River House project. A gravel path continues eastward from the end of the driveway toward the neighboring property. A public, concrete trail terminates at the northwestern corner of the site, providing access to and from the Juanita Pohl Center and the Tualatin River Greenway Trail.

At the very northern edge, the topography drops steeply 20-25 feet into the Tualatin River. The water is visible only at close proximity through a dense stand of mature fir and maple trees and through a gap in the center of the site.

UTILITIES

Most of the site's public utility connections, including gas, water, and power, are located near the curb cut. Sanitary sewer runs along an easement on the southern side of the creek. There are several existing utility standpipes which connect to water and sewer and a Fire Department connection on the northern side of the bridge.

ZONING & ADJACENCIES

The property and all adjoining parcels are within Tualatin's Central Commercial (CC) zoning district. As a public park, the property would fall under Category P - Parks & Open Space. Property setbacks of up to 20' on all sides apply to this parcel, pending architectural review.

The parcel to the east is currently a private, single family residence. The large parcel to the northwest is owned by the city and contains several municipal facilities and a public park. The parcel to the southwest is privately owned and contains multifamily apartments.

ENCROACHMENT SURVEY

PBS Engineering surveyed the property for possible encroachments with no permanent physical encroachment identified. Access to the adjacent property to the east is known by the City since bridge removal in 2018.

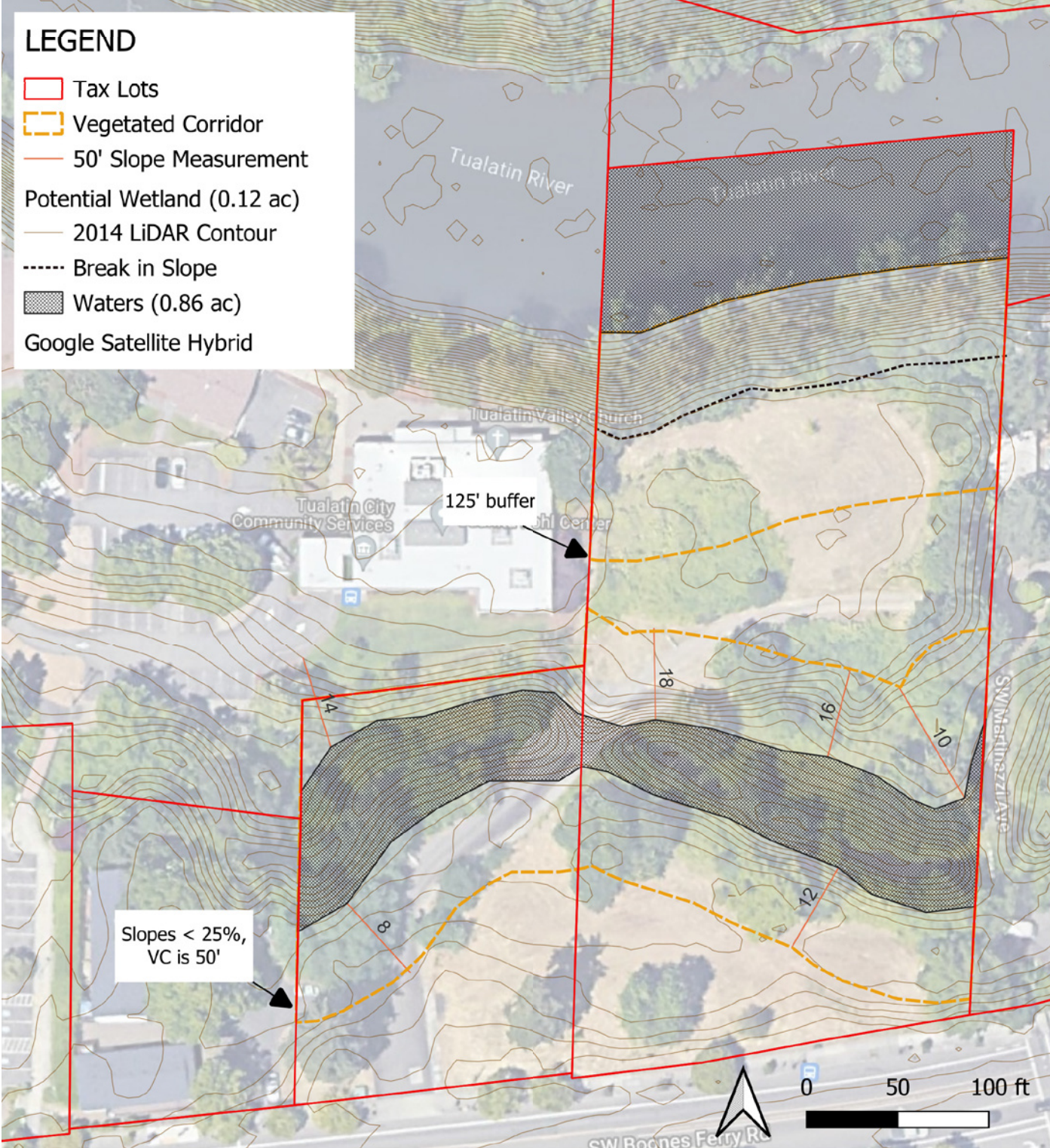


EXHIBIT 2A | PRELIMINARY ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL CONSIDERATIONS

OVERVIEW

The property contains the Tualatin River along the northern portion of tax lot 1301 and Hedges Creek and adjacent wetland in the northern portion of tax lot 1400 and the central portion of tax lot 1301. The ordinary high water elevation of the Tualatin River corresponds to the two-year 24-hour surface water elevation.

Slopes on either side of Hedges Creek are much less than 25 percent. While slopes immediately adjacent to the Tualatin River exceed 25%, slopes a distance of 50 to 75 feet from the river are much flatter. As a result, regulated vegetated corridors along Hedges Creek and adjoining wetlands is 50 feet, and along the Tualatin River is 125 feet.

The vegetation within 60 feet of the Tualatin River includes a mix of native trees and shrubs, although English ivy dominates the understory. The overstory includes Douglas fir, big leaf maple, Oregon ash, grand fir, and one Oregon white oak. Beyond 60 feet and out to 125 feet, the vegetated corridor includes very few native species and no trees.

Along Hedges Creek in the western portion of the property, the overstory includes Oregon ash, black locust, English hawthorn, and western red cedar. The understory is dominated by Himalayan blackberry and English ivy, though larger shrubs of red osier dogwood and hazelnut are present. In the eastern portion, there is a woodland riparian area with more open tree canopy. Trees include Oregon ash, red alder, and big leaf maple. The south bank of Hedges Creek includes a predominance of Himalayan blackberry in the eastern half of the corridor. The remaining areas are comprised generally of non-native grasses.

ENVIRONMENTAL ASSESSMENT

PBS Engineering and Environmental performed a Phase 1 Environmental Site Assessment resulting in no significant concerns or findings.

VEGETATED CORRIDORS

Proposed improvements to the property will likely impact vegetated corridors. As such, a Service Provider Letter will be required from Clean Water Services (CWS). As part of the Natural Resource Assessment to be submitted to CWS, a Tier 2 analysis and an alternatives analysis will be required. On-site mitigation will also be required for impacts to the vegetated corridors, which can be provided in the outer area of the vegetated corridor along the river.

PERMITTING

Permitting will likely be required for recreational facilities from the following jurisdictions:

- Clean Water Services
- FEMA
- US Army Corps of Engineers
- Oregon Department of State Lands
- Oregon Department of Environmental Quality
- City of Tualatin

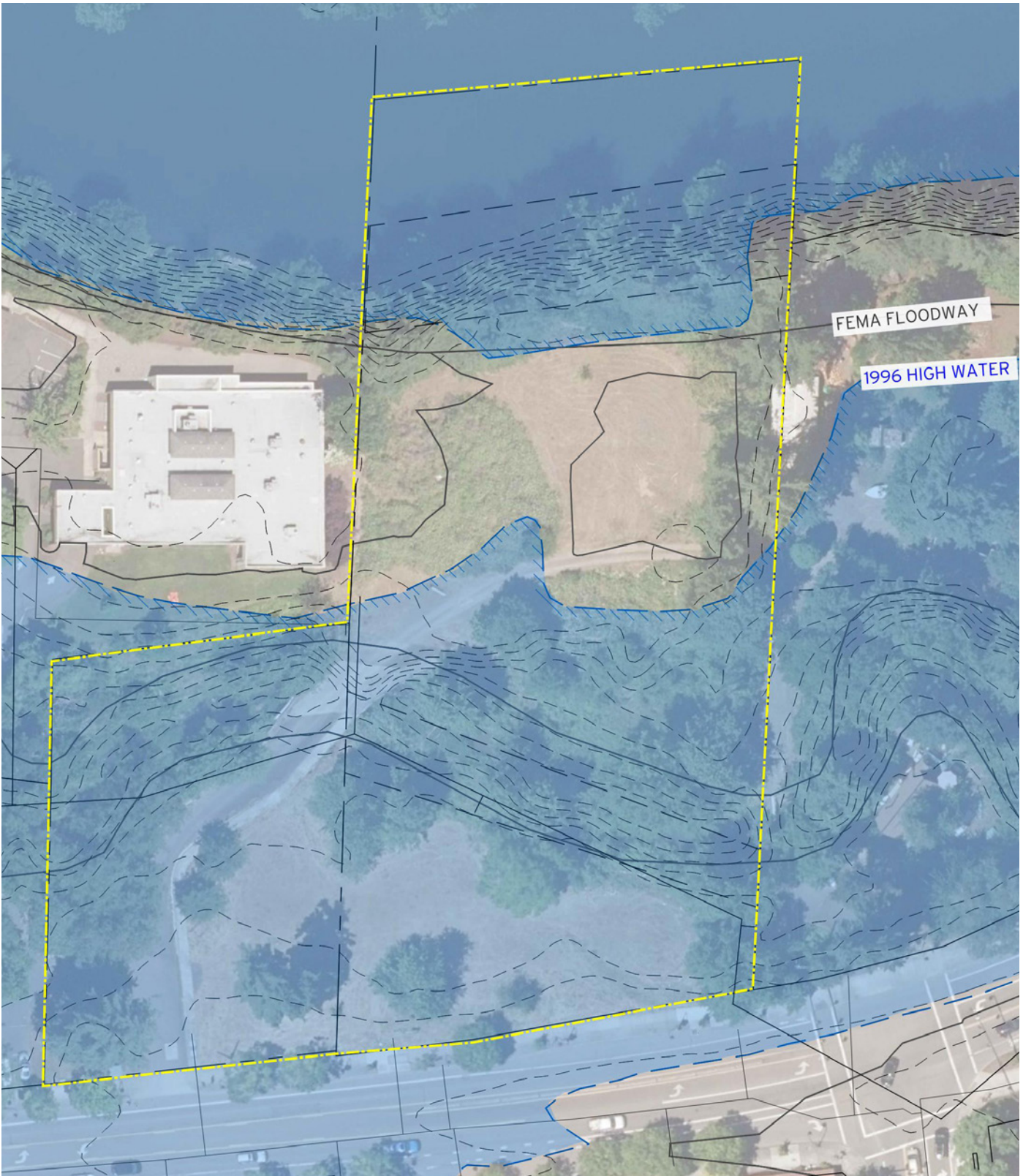


EXHIBIT 2B | RIVERBANK & FLOODPLAIN CONSIDERATIONS

RIVERBANK

The riverbank stability has two key factors: surface erosion, and internal geotechnical stability from slump failure. This parcel is located on the outside bend of river and is subject to erosive forces. The Tualatin River has been impacted by development over the years but retains its meandering character which does help reduce the stream energy. The site does show signs of some erosion along the shore, however given the size and age of the trees on the bank also indicate the erosion rate is low. The Tualatin river has a high sediment transport load which can quickly form shoaling and deposition on the riverbank when conditions permit. Careful consideration of riverbank improvements should limit measures that could increase erosion, improve bank stability and encourage sedimentation in the desired areas.

GEOTECHNICAL

The riverbank is overstep, but also has survived a large flood, several high water events and has supported growth of very large trees in the last 30 years, indicating some inherent stability exists. The proposed improvements would dictate the scope and scale of future investigation necessary at this site.

FLOOD CONSIDERATIONS

This site is located adjacent to the Tualatin River which frequently experiences high water events. The central portion of the site is below the 100 yr flood elevation and could be flooded periodically, however the area by the main road and along the river are above the flood elevation. Sufficient areas exist at the location for siting of structures that would be prohibited within the flood zone. Mapping appears generally accurate and was established by the 1996 Metro flood photo. A previous development appears to have placed some fill in anticipation of future work. Depending on the proposed project this fill might require removal or additional investigation regarding past placement authorization from the city and FEMA may be required.

The floodway line is along the top of bank and development riverward of that line is generally prohibited, other than water dependent access structures. This development would require modeling and documentation to ensure it does not cause a rise in upstream flood elevations.

ARCHAEOLOGY CONSIDERATIONS

Historically, the Tualatin River basin was used by countless generations of native peoples. Prior to work being done, an assessment of the site's potential archeology should be conducted. All development work on this site should be done carefully and following guidance of the Oregon State Historic Preservation Office (SHPO) to ensure that any found artifacts are properly protected and respectfully cared for.

EXISTING BRIDGE

David Evans and Associates inspected the existing vehicular bridge using the National Bridge Inspection Standards (NBIS) to rate the conditions of the deck, superstructure, substructure and channel elements as 7 (good) on a scale of 1-9 with 9 being the best. The original structural design plans were not available to determine maximum weight load.

OPPORTUNITIES

PARK PROGRAM

The following potential uses have been discussed for the site:

- Accessible route to the river
- Small paddle craft access
- Views and access to nature and the river
- Connections to the Tualatin River Greenway Trail
- Small parking lot and support facilities
- Low-impact development facilities (stormwater, etc.)

ACCESSIBLE RIVER ACCESS

The city's aspiration is to provide accessibility to the river. Access could be achieved through a variety of means including graded walkways with landings or possibly a gangway and dock.

VEHICULAR ACCESS

There appears to be sufficient space on the northern half of the property to support a small, accessible parking area and turnaround for emergency vehicles, accessed from the existing curb cut via the existing bridge. The southern half of the site could also support more parking stalls (Exhibit 3).

PARK FACILITIES

The site has potential to accommodate small support facilities for parkgoers, such as picnic tables, benches, accessible restrooms, drinking water, changing stalls, outdoor showers and/or spray stations for washing up, and minor storage space for maintenance. The size and location of such a facility should be determined in future studies.

TRAIL CONNECTIVITY

In addition to providing public access to the water, the property can support a connection between the northwestern and southeastern links of the Tualatin River Greenway Trail. Forming an intersection between the Greenway Trail and the Tualatin River Water Trail in the heart of downtown, the property will provide a valuable, multimodal asset for the community (Exhibit 3).

ACCESS TO NATURE

Visibility of the river from the upland will provide an implicit connection between downtown Tualatin and the water. A majority of the site is within a Vegetated Corridor. Restoration of the vegetation within these areas, in addition to preservation of existing vegetation where feasible, will yield a park with a relatively natural, riparian character while promoting public access to nature and ecological awareness.

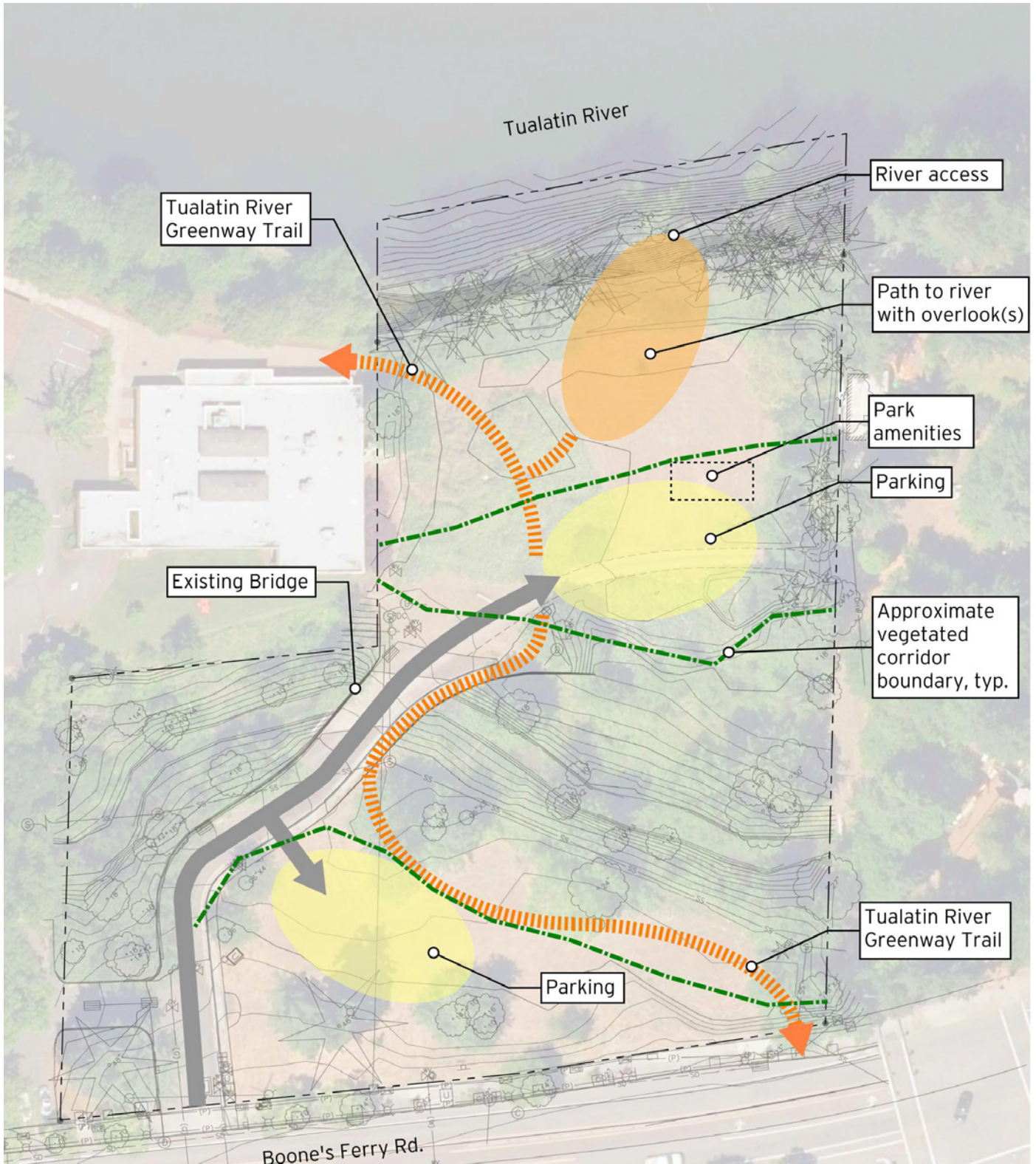


EXHIBIT 3 | PRELIMINARY SITE DIAGRAM



CONCLUSION

FEASIBILITY

The property appears to be suitable for access to the river for light recreational uses such as swimming and paddlecraft. Though there are several important environmental considerations, the site's uniquely favorable location and existing features make it a good candidate for a new, public river access facility. Design of the facility should focus on balancing impacts to the site with recreational needs, and maintaining and enhancing the site's natural character while providing visual connections to the water.

MEETING WITH CLEAN WATER SERVICES

On March 29, 2023, the project team met with Clean Water Services (CWS) personnel for preliminary information gathering about the site. In the meeting, it was confirmed that proposed river access improvements within the vegetated corridors on site would be considered encroachments and require mitigation. Although the CWS team was not able to confirm that the proposed improvements are permissible, approaches shown in the preliminary site diagrams (Exhibit 3) were noted to be achievable and approvable through the permitting process with CWS.

NEXT STEPS

Based on the City's purchase of the property, the following steps could be undertaken:

- Further study of desired park programming and physical characteristics
- Public dialogue and input
- Alternatives analysis for proposed improvements
- Design and documentation
- Permitting
- Construction