A

Deschutes River Valley Feasibility Report

City of Tumwater Considering the Acquisition of Parcels 09470003000, 09470045000, and 09470021000

Prepared For:
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June 18, 2024

SCJ ALLIANCE
CONSULTING SERVICES

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Railroad Crossing Coordination (HDR)
Traffic Analysis/Phased Construction

Appendix B

Phase I ESA, July 2011 (TPNs 09470047000, 09470045000, 09470003000) by reference
Phase I ESA, April 2013 (TPN 09470021000) by reference only
Cultural Resources, Existing Ordinances and Property Constraints Memo, Nov 2014
Revised Conditions Assessment Summary & Prioritization Memo, August 2016

EXECUTIVE SUMMARY

In 2011, LOTT purchased three parcels with the intent of using these properties in conjunction with expanding their regional service capacity. We understand that LOTT no longer intends to use these parcels for that purpose and is interested in selling the property.

Property Description

The subject parcels are located in the City of Tumwater within the Deschutes River Valley, situated east of Capital Boulevard, west of Cleveland Avenue, north of the Tumwater Valley Municipal Golf Course, and south of the South Bates Subdistrict properties. The parcels have previously been developed as Light Industrial and Commercial uses as part of the former Olympia Brewery and are specifically identified as Thurston County Tax Parcels: 09470003000 (West Parcel), 09470045000 (East Parcel), and 09470021000 (Southeast Parcel). The three parcels are 18.53, 19.28, and 7.0 acres in size, respectively. In total, the Site is approximately 44.81 acres in size. See Figure 1.

We understand that there is a measure of concern regarding encountering subsurface environmental contamination, regarding the challenges of new development taking place within the floodplain and regarding the ability to obtain suitable access to the parcels. We also understand that, at some level, these three development concerns contributed to LOTT's decision not to expand their facilities on this site. These three areas of concern are reviewed further in this Feasibility Report.

Purpose of this Feasibility Report

In the interest of furthering the goals and objectives of the City of Tumwater as identified in the City's Comprehensive Plan and the Brewery District Plan, the purchase of these three parcels is being considered by the City. Previously identified City Goals and Objectives are listed in Section 1.3. Project Goals and Objectives specific to the Brewery District Plan are provide in Section 1.4. As indicated in Figure 1.1 from the Brewery District Plan, the Plan has 4 Project Goals with 22 supporting objectives. The proposed acquisition of the LOTT properties has the opportunity to provide direct or indirect benefits in support of all four goals, most specifically relating to transportation, economic opportunity and creating a stronger sense of place throughout the District. Objectives 1c, 2a, 2d, 3b, and 4b, identified in Figure 1.1, have the potential to be the most notably benefited through the acquisition and redevelopment of the subject parcels.

Feasibility Report Scope

This report reviews and summarizes aspects of City of Tumwater, LOTT and Capital Salvage studies, reports, and documentation to identify potential conditions, constraints, opportunities, and costs associated with potential City of Tumwater ownership and development of these properties in light of the City's stated objectives for the properties.

The factors considered in this report include land use considerations, physical and environmental characteristics, technical and constructibility matters, market demand, financial viability, and regulatory considerations. We understand that the City will utilize this information as an added point of reference along with other considerations and studies in evaluating whether it is in the City's best interest to purchase the subject parcels. This report is not intended to be comprehensive and is based upon third party reports and information provided by the City and others as noted within this report.

Constraints on Land Use

Since the parcels are situated within the 100-year floodplain, are adjacent to the Deschutes River and also are affected by the presence of the Union Pacific Railroad, land use options are limited. It should also be noted that there is no existing public access serving these three parcels. The complications and potential solutions related to property access are addressed within the report.

Floodplain Filling and Mitigation for Alternate Types of Development

Based upon previous flood plain analysis performed for this portion of the Deschutes Valley, the potential exists to raise the ground surface elevation within a portion of the flood plain to allow for the construction of structures (buildings). However, this would also require lowering a portion of the flood plain to compensate for any lost flood volume.

E Street Extension

In 2018, the City of Tumwater explored creating a link across the Deschutes Valley so that regional traffic could be routed away from Custer Way. The extension of E Street across the valley to reroute traffic would enable the creation of a new Brewery District Hub with a strong active transportation emphasis (manual mobility, such as pedestrian and cycling). The preferred transportation alternative of the 2018 study was the elevated connector roadway, which would begin at the intersection of Capitol Boulevard and E Street (with a new roundabout) and extend easterly as a bridge going over the Deschutes River and Union Pacific Railroad where it would then provide access to the east side of the railroad tracks. From there, the road is proposed to proceed up the eastern valley slope and tie into Cleveland Avenue (with a new roundabout).

Access Across the Valley Floor

The Deschutes River and Union Pacific Railroad divide the valley floor into three distinct areas. Access to these areas is complicated by the reality that the valley floor is substantially lower in elevation than Capitol Boulevard to the west and Cleveland Avenue to the east. When the E Street Connection is built, the existing private bridge over the Deschutes River from Capitol Boulevard will no longer be present to provide access to the property east of the river.

We understand that the existing private access to the north, known as Boston Street, likely will not be available to provide access to this parcel. Since the UPRR right-of-way limits access from the east, constructing a new bridge over the river from Tumwater Valley Drive (to the west) may be the only means of access for this parcel.

Interim UPRR License Agreement Conditions

Prior to construction of the E Street Connector, the East Parcel and Southeast Parcel will continue to rely upon the existing UPRR agreement for site access use. Since the existing License Agreement between LOTT and UPRR will terminate when the properties transfer ownership, it will be necessary for the City to negotiate a new License Agreement with UPRR.

Habitat: Existing Conditions and Mitigation Opportunity

Over the years that the Olympia Brewery was constructed, the Deschutes River was partially relocated and developed as an industrial use. City acquisition of LOTT's West Parcel provides an opportunity to enhance the riparian corridor and create new habitat. We understand that enhancement of this riparian corridor could be performed as part of mitigation associated with potential habitat-related impacts of constructing the E Street Extension and also for other city projects.

Temporary Parking for Infrequent Events

The City of Tumwater utilizes the Tumwater Valley Golf Course driving range acreage to provide events to the community at various times throughout the year. South Puget Sound Community College's nearby Craft Brewery Amphitheater also provides events to the community and utilizes this parking area. The Artesian Family Festival & Thunder Valley Fireworks Show on July 4th, draws thousands of participants, creating the greatest need for temporary parking in the area, requiring up to 1,500 parking spaces.

Parking Lot Access and Design Criteria

Four temporary parking scenarios have been proposed in coordination with the City. The first scenario depicts the maximum parking available on the property east of the Deschutes River and west of the railroad tracks, similar to how parking has been provided in recent years during the 4th of July celebration. The second parking scenario identifies the amount of property that would be required to accommodate 1,500 parking stalls, which is the anticipated number of stalls that are needed for the same event. The third scenario shows the amount of parking available west of the railroad if riparian buffer enhancements are created along the east side of the Deschutes River. In this event additional parking would be needed east of the railroad tracks to provide a minimum of 1,500 parking stalls. The fourth scenario depicts all of the parking being located east of the railroad tracks once access is provided to that area via construction of the E Street Connector.

Environmental

When LOTT evaluated their purchase of the subject properties, they contracted with Brown & Caldwell to perform a Phase 1 Environmental Site Assessment. Their 2011 Phase 1 ESA identified potential areas of concern and included recommendations for actions to further investigate the areas of potential concern. We understand that LOTT has not performed a Phase II Environmental Site Assessment on these properties and purchased the property from Capital Salvage in an "as-is" condition, including with regard to the potential soil and groundwater contamination.

As part of this Feasibility Report, Landau Associates visited the site to observe the existing conditions. They also performed an independent review of Brown & Caldwell's 2011 and 2013 Phase I Environmental Site Assessment. Please refer to Section 9 of this Feasibility Report for additional information pertaining to the areas of potential environmental concern, including information regarding actions taken by LOTT to address some of the areas identified in Brown & Caldwell's report. This Feasibility Report includes a list of actions that are recommended as part of the environmental due diligence process prior to acquisition of the parcels.

City Goals and Objectives potentially furthered through Property Acquisition

Based upon the review performed in this Feasibility Study, City of Tumwater ownership of the subject parcels could further City goals pertaining to:

1) Transportation - obtaining a significant portion of the right-of-way required to extend E Street across the valley floor between Capital Boulevard and Cleveland Avenue (per Brewery District Plan active transportation objectives)

2) Habitat Creation/Enhancement - procure property along the east side of the Deschutes River to enhance the riverine buffer

3) Parks & Recreation – promote managed access to the Deschutes River for trails, rafting and other outdoor related recreation and sports opportunities, including playfields.

4) Parking – provide a city managed permanent solution to parking for city and craft district related events.

5) Economic Development – utilize these properties in a manner that aligns with the goals and objectives of the Brewery District Plan as a means of encouraging private development opportunities in the immediate and surrounding area.

As the city evaluates options for the use of the property, we understand that additional cost analysis will also be required to reflect those proposed land use scenarios. How these costs affect the desirability of owning the parcels should also be considered prior to purchase of the property.

Considerations prior to Land Acquisition

At the end of this report is a chart entitled *Considerations Prior to Property Acquisition*. The items on this chart have been compiled from the various sections of the report to assist the city in tracking due diligence concerns identified in this feasibility review. The chart is not intended to be an exhaustive list of due diligence items that may be of concern to the City. For that reason, we have provided a copy of the chart in digital format for the City's use in adding to the list as the City considers the benefits, liabilities and costs that may be associated with ownership of the parcels.

1. Introduction

1.1 Purpose

In the interest of furthering the goals and objectives of the City of Tumwater Comprehensive Plan and Brewery District Plan, the City is considering the purchase of three parcels of land (Thurston County TPNs 09470003000, 09470045000, and 09470021000). These parcels are located on the Deschutes River Valley floor and currently owned by LOTT Clean Water Alliance. Please refer to Figure 1.1.

1.2 Feasibility Report

This report reviews and summarizes aspects of City of Tumwater, LOTT and Capital Salvage studies, reports and documentation to identify potential conditions, constraints, opportunities and costs associated with potential City of Tumwater ownership and use of these properties. The goals and objectives associated with use of the property are summarized below in *Section 1.3 City Goals and Objectives in Considering the Acquisition of LOTT Parcels* and also in *Section 1.4 City Specific Goals as identified in Brewery District Plan.*

The factors considered in this report include land use considerations, physical and environmental characteristics, technical and constructability matters, market demand, financial viability, and regulatory considerations. We understand that the City will utilize this information as an added point of reference along with other considerations and studies in evaluating whether it is in the City's best interest to purchase the subject parcels. This report is not intended to be comprehensive and is based upon third party reports and information provided by the City and others as noted within this report.

This feasibility report addresses: transportation elements relevant to the E Street Connection, habitat improvements along the Deschutes River, Concept Plans for temporary parking and pedestrian access for City-sponsored events, flood mitigation considerations, a summary of railroad crossing access considerations , an updated estimate of transportation improvement costs associated with the proposed improvements, safety & security recommendations, a summary of the potential costs mentioned in this report, and an overview of the environmental areas of concern on the site along with recommendations.

Reports and Studies reviewed and utilized in this report include those listed in the Table of Contents and Appendices.

1.3 City Goals in Considering the Acquisition of LOTT Parcels

It is anticipated that by owning these parcels, the City of Tumwater would further city goals pertaining to:

1) Transportation - obtaining a significant portion of the right-of-way required to extend E Street across the valley floor between Capital Boulevard and Cleveland Avenue (per Brewery District Plan active transportation objectives),

2) Habitat Creation/Re-establishment - procure property along the east side of the Deschutes River to enhance the riverine buffer,

3) Parks & Recreation – promote managed access to the Deschutes river for trails and rafting and other outdoor related recreation and sports opportunities,

4) Parking – provide a city managed permanent solution to the on-going parking need for city and craft district related events, and

5) Economic Development – utilize these properties in a manner that aligns with the goals and objectives of the Brewery District Plan as a means of encouraging private development opportunities in the immediate and surrounding area.

1.4 Specific Goals as identified in Brewery District Plan

In 2014, the City of Tumwater completed the Brewery District Planning study to explore development opportunities for this portion of the community and to consider what will be required to help facilitate its redevelopment. The Brewery District Planning study identified the high traffic volume utilizing North Street as a primary barrier in furthering the four primary goals of the Brewery District. To address this, the City evaluated several alternate road improvement projects to reroute traffic away from North Street.

Studies indicated that the preferred alternative is to extend E Street from Capitol Boulevard easterly across the Deschutes Valley to a connection point at Cleveland Avenue. This connection will provide two key benefits: It will reroute regional traffic away from North Street to allow for pedestrian friendly development in that area and it also will provide access to the eastern portion of the Deschutes Valley for greater redevelopment opportunities in that vicinity. Acquiring right-of-way for the E Street Connector is a necessary step in moving forward with the E Street Connection project.

Evaluating the benefit of City ownership of the subject parcels is related to the City Goals and Objectives listed above in Section 1.3 as well as the specific Project Goals and Objectives identified by the Brewery District Plan. As indicated on Figure 1.1 from the Brewery District Plan (see below), the Plan has 4 Project Goals with a total of 22 supporting objectives. The proposed acquisition of the LOTT properties has the opportunity to provide direct or indirect benefits to all 4 goals, most specifically relating to transportation, economic opportunity and creating a stronger sense of place throughout the District. Objectives 1c, 2a, 2d, 3b, 3d and 4b on Figure 1.1 appear to have the potential to be the most notably benefited by the acquisition and redevelopment of the subject parcels.

PROJECT GOALS	OBJECTIVES
1. Create a stronger sense of place by facilitating pedestrian access, establishing gathering places for residents and fostering a distinct District identity	a. Evaluate opportunities for a pedestrian-oriented "Main Street"
	b. Consider opportunities for reducing /redistributing wide rights-of-way, where appropriate
	c. Introduce public uses that bring people to the District (suggestions include mini-parks, green spaces, Farmers' Market and establishing a Timberland Library satellite facility in the District)
	d. Evaluate the possibility of creating gateways at key entry points to the District and/or the City, where appropriate and feasible
	e. Facilitate opportunities for pedestrian-oriented, mixed-use and commercial development
	f. Consider providing public art at key locations
	g. Consider use of distinct "branding" through signage and other means to increase sense of place
	h. Work with the Washington State Department of Transportation and other partners to paint murals on the I-5 wall along Deschutes Way that celebrate the history of the District.
2. Improve transportation options, safety and access within and across the District	a. Reduce pressure on over-burdened intersections
	b. Improve transit, bicycle and pedestrian access into the District
	c. Prioritize and implement safety and comfort enhancements for non-motorized users
	d. Update current parking and access management framework
	e. Improve pedestrian and non-motorized connectivity into, within, and across the District – connecting neighborhoods to basic living needs
3. Expand economic opportunity and activity	a. Create opportunities for the development of "third-place"(places people can gather outside of work and home) activity and retail hubs (identified community targets include micro-brewery, coffee shop, senior center)
	b. Attract mixed use, high-density residential uses to increase "foot-traffic" customers in the District
	c. Provide for a mix of home-business and retail uses in the Bates Neighborhood
	d. Identify potential redevelopment scenarios for key opportunity sites with willing land owners
	e. Coordinate with regional workforce, business and economic development partners to track and implement location-appropriate job and industry development opportunities
	f. Implement a Main Street Program or similar effort to actively engage local businesses, land owners and other stakeholders in the revitalization program
4. Improve the function and appearance of the built environment	a. Use design / development standards to create high quality development and create a quality public domain (lighting, sidewalks, signs, etc), and a cohesive look and feel
	b. Explore strategies for minimizing the negative impacts of on-site surface parking
	c. Preserve, highlight and celebrate the District's historic heritage

Figure 1.1: Brewery District Plan Goals and Objectives

VICINITY MAP

Legend

Scale 1: 5,196

0 250 500

Feet

Map Created Using GeoData Public Website

Published: 3/26/2024

Note:

2 Site Summary

2.1 Site Assessment

Previously conducted site assessments addressing physical, historic, cultural and legal conditions and constraints have been reviewed and portions have been summarized in this report. These conditions and constraints have been included in this report to aid the City in considering pertinent issues potentially affecting the responsibilities of owning these properties and the free use of the property for the purposes identified in Section 1.2 of this report. It is also our intent to bring attention to the risks, constraints and opportunities some of which pertain to location, historic land use, adjacent land uses, the presence of critical areas (such as wetlands, riparian corridors and floodplains), geotechnical and ecological characteristics, environmental areas of concern , the potential for cultural resources or artifacts, legal requirements (such as easements, covenants, restrictions) and regulations (such as zoning and development codes).

2.2 Property Description

The Site is located in the City of Tumwater within the Deschutes River Valley situated east of Capital Boulevard, west of Cleveland Avenue, north of the Tumwater Valley Municipal Golf Course and south of the South Bates Subdistrict properties. The Site consists of 3 separate Thurston County Tax Parcels: 09470003000 (West Parcel), 09470045000 (East Parcel), and 09470021000 (Southeast Parcel). The site area has generally been developed for light industrial and commercial use. The three subject parcels are 18.53, 19.28, and 7.0 acres in size respectively. In total, the Site is approximately 44.81 acres in size. See Figures 1.

The site terrain is generally level in the valley floor, with steep slopes along the eastern border rising up to Cleveland Avenue. Along the western border of the West Parcel is the Deschutes River. West of the Deschutes River, the terrain slopes up to the ground elevation of Capital Boulevard.

Surrounding Area: The area surrounding the site has a variety of land uses. The area to the north of the site is developed with residential and light commercial uses. The property to the south is the Tumwater Valley Municipal Golf Course. To the east is a cemetery and a mix of commercial uses. The area to the west is developed with light commercial uses.

Zoning: The property was previously zoned as Light Industrial. This zoning was changed with the City's adoption of the Brewery District Plan along with its associated Comprehensive Plan and zoning code changes. We understand that the Tumwater Municipal Code and BD zoning allows light industrial use to continue on the property if developed in a manner compatible with surrounding land uses.

Approximate Elevation and Drainage: Based upon available GIS data, topography at the site ranges from approximately 97 to 160 feet above mean sea level sloping down to the west with surface water draining to the Deschutes River. The overall basin flows to the north as the river flows toward the Puget Sound. The site soils are predominantly a silt loam with moderate infiltration capacity. The groundwater direction across the site is anticipated to flow to the west-northwest towards the Deschutes River

2.3 Property: Current Ownership and Availability

In 2011, LOTT purchased these parcels with the intent of using the property in conjunction with expanding their regional service capacity. Currently, we understand that LOTT no longer intends to use these three properties for that purpose and is currently interested in selling the properties.

The 2011 and 2013 Phase I Environmental Site Assessments (prepared by Brown & Caldwell), Flood Mitigation Study (prepared by Brown & Caldwell), and the Railroad Crossing Coordination Memorandum (prepared by HDR) address what appears to be the three main areas of difficulty for developing these parcels. We understand that there is a measure of concern regarding encountering subsurface environmental contamination, regarding the challenges of developing within the 100-year floodplain, and regarding the ability to obtain suitable access to the property. The Railroad Crossing Coordination Memorandum by HDR, dated April 17, 2017, addressed issues relevant to the required License Agreement with Union Pacific Railroad for at-grade vehicular crossing over the UPRR rail for vehicular access to LOTT's property. Based upon the access constraints in the current License Agreement between UPRR and LOTT, we understand that the at-grade access agreement is not suitable for the operation of a new regional wastewater treatment facility.

At some level, we anticipate that these three site development concerns contributed to LOTT's decision not to build a regional service facility on this site. These three areas of concern are reviewed further in this Feasibility Report.

2.4 Site Maintenance & Security

From our discussions with Justin Long of LOTT, we understand that the existing structures located on the parcels have been well secured and are not a frequent target for vandalism. Mr. Long also indicated that site security has being managed and paid for by Tumwater Development, LLC. Likely this is the case due to the size and complexity of the Tumwater Development, LLC structures on their adjacent properties and the frequency of vandalism associated with those structures and trespassing on their properties. Given the limited improvements on the LOTT parcels and ease of providing security for those, there has been no request to date for LOTT to assume security responsibility. If the city began to provide security for the subject parcels, we assume that it would be in partnership with Tumwater Development, LLC and the cost for a guard to monitor the subject parcels and intercept potential trespassers to be between $25,000 to $60,000 depending upon the level of security and frequency of site monitoring desired.

For property Maintenance, we understand that the structures require minimal care and that the majority of the maintenance work required is associated with care of the vegetation on the site and removal of debris. We recommend that city property maintenance staff assess the scope of work required for this type of maintenance and obtain pricing from contractors for performance of the identified scope of work. This will allow the City to identify an accurate and independent cost of the added burden to the City for maintenance of the subject parcels.

2.5 Title Review

A Title Report was not available for review in association with the preparation of this report. For that reason, it is recommended that a new Title Report be obtained for all three parcels to review easements, covenants and restrictions that may encumber the property. At the time that the city enters

into a Purchase and Sale Agreement (PSA), it is recommended that an ALTA Survey be prepared as part of the PSA's Due Diligence process to delineate easements and other potential encumberances.

3 Land Use & Zoning

3.1 Brewery District Zoning

The subject parcels are within the Brewery District (BD) zone, which is intended to "provide for a mix of uses within the former brewery district properties, consistent with the city's economic development and strategic plans in the final report for the community visioning project for the former Olympia Brewery (TMC 18.27.010)." This portion of the Deschutes River valley floor is noted as "ideal for light industrial uses that do not create compatibility issues with other land uses, and for certain kinds of commercial uses that are most appropriately located as neighbors have industrial uses (TMC 18.27.020.B)."

Given that the property is zoned as BD, we understand that development opportunities will be consistent with the goals of the Brewery District Plan.

3.2 Constraints on Land Use

As noted in Prime Locations' March 13, 2024 memorandum (below), options for the use of the valley floor property are limited due to the presence of the 100-year floodplain and a corresponding restriction on new structures being located within the floodplain. For that reason, the valley floor property is noted by Prime Locations as having little marketable value, leaving it better suited for open space, parks or recreation.

Property access is also currently limited since there is no existing public road serving the three parcels. However, the city's intent to extend E Street across the valley floor and provide new access to the valley floor properties will maximize the potential for redevelopment under the limited uses identified, including for the adjacent parcel owned by Tumwater Development, LLC where the existing warehouse is situated.

3.3 Floodplain Filling and Mitigation for Alternate Types of Development

In order for a portion of the subject parcels to be redeveloped for uses that include building structures, the building pad areas must be at least 1 foot above the base flood elevation, making it necessary to raise the existing ground elevation within the 100-year floodplain. This type of filling within the floodplain can potentially be permitted by FEMA under the condition that new additional flood storage is provided within the floodplain to compensate for flood storage capacity lost (due to placing the fill). It is also necessary to confirm that any localized changes in the flood elevation comply with FEMA requirements related to localized flood elevations and flow velocities.

3.4 Flood Mitigation Study

Brown & Caldwell studied multiple scenarios for modifying the floodplain to enable the placement of a new wastewater treatment facility on LOTT's East Parcel. Based upon this analysis, it appears that the potential exists to raise a portion of the floodplain along the east side of the valley while lowering the ground elevation on the West Parcel. This would create a buildable area for the development of additional land uses within the valley.

In this scenario, excavating soil to create the new floodplain storage capacity could be accomplished in various ways. For example, soil could be excavated in a manner that lowers the average West Parcel ground elevation. Or, if consistent with the City's habitat enhancement plans, a greater depth of soil could be excavated along the east side of the Deschutes River to lower the grade and create additional wetlands within the riparian buffer. As discussed below in *Section 5 The Deschutes River Valley Habitat*, the creation of wetlands would also result in additional wetland buffers that may impact the ability to develop or use portions of the West Parcel.

Considerations:

Development in Floodplain: If purchasing these properties is contingent upon the ability to develop the subject properties with one or more new buildings within the floodplain, then it is recommended that the city identify the size and type of development and the corresponding property area to be raised above the floodplain to accommodate the proposed development. Based upon this information, a more precise flood analysis can be performed to identify the likelihood of FEMA approval and the associated cost.

Suitable Property Access: Since there is no public access to the parcels at this time, it is recommended that suitable access be confirmed prior to closing on the property. This is addressed in detail in the following sections of this report.

MEMORANDUM

TO: Dan Smith, City of Tumwater

FROM: Zach Kosturos & Joni Baker

DATE: 3/13/24

SUBJECT: Land Use Considerations associated with the E Street Connector

After reviewing the current parcels owned by LOTT and the City of Tumwater, we conclude that there is currently little marketable value in the land as nearly all of it sits in the 100-year flood plain, with several additional critical areas and/or buffers impacting each parcel. Utilizing this land for development would be extremely challenging and costly given the land's current restrictions and the financial barriers associated with development efforts.

The new connector road will bring additional traffic and visibility to all of the parcels mentioned. However, given the challenges mentioned above, we do not believe the new road will result in a substantial increase in land value, as the main challenges associated with these parcels will still exist.

In our opinion, the best use for most of this land would be as open space, a park, or some similar use that benefits the community at large and acts as a draw for people. Doing so will make good use of the land and help the surrounding business community by attracting new patrons to the area while alleviating the current traffic congestion.

One could argue that parcel 09470029000 would see a substantial increase in value on account of traffic being diverted at or near its location. We would generally concur. However, with a multi-lane city road running through that parcel and the associated landscaping buffers, there likely won't be enough land left for viable development. Should the road be positioned otherwise, this parcel could see the largest increase in valuation, in our opinion.

With all of that said, the benefits of the connector road for the Brewery District and the desire for the revitalization of this area are many. Diverting traffic from Custer Way will help alleviate the current bottleneck that occurs during peak traffic hours. The current traffic congestion causes problems for businesses in that area, as their clientele often find their locations difficult to access during these times. Additionally, it creates a safety issue for pedestrian traffic, thus reducing walkability. Creating a connector road will provide much-needed relief in this area and will, likely, create a more viable environment for redevelopment, revitalization, and increased business and pedestrian activity in this corridor.

In addition to the benefits related to Custer Way, the connector road will, in our estimation, provide substantial benefits to the parcels that currently make up the "Brewery Property." Allowing access to the lower portion of the Brewery Property directly from Cleveland Ave opens up a myriad of possibilities for continued use of the old warehouses in the valley. The upper portion of the Brewery Property will also benefit substantially as the alleviation of traffic congestion will allow for easier access. While these parcels may still face substantial challenges with land-use related restrictions, if those can be overcome, the connector road will be a benefit to these parcels.

The other landowners that will benefit the most from the connector road, in our opinion, are the parcels owned by Tumwater Development, LLC on Cleveland Ave and parcel 09470046000 adjacent to the railroad tracks.

Overall, we believe the addition of the connector road will help create a safer and more viable environment in the Brewery District and will attract new investment to the area. Creating this kind of a climate will invite the kind of development needed in the area. If some of the land was turned into a park, recreation center, ball fields, etc., this would bring with it the added benefit of additional commerce to the area, which would further help attract new businesses and investment.

Zach Kosturos
Joni Baker

Prime Locations, Inc.

4 Transportation

4.1 E Street Extension

The E Street Extension was conceptually studied in 2018 by the City of Tumwater to create a link across the Deschutes Valley so that regional traffic could be routed away from Custer Way to allow for the creation of a Brewery District Hub with a strong active transportation emphasis (manual mobility, such as pedestrian and cycling). The preferred transportation alternative of the 2018 study was the elevated connector roadway which would begin at the intersection of Capitol Boulevard and E Street (with a new roundabout) and extend easterly as a bridge going over the Deschutes River and Union Pacific Railroad where it would then transition to being supported on retaining walls. The retaining wall section would be closer to the existing ground elevation, less costly than a bridge section, and would allow for the roadway to provide access the east side of the railroad tracks. From there, the road is proposed to proceed up the eastern valley slope and tie into Cleveland Avenue (with a new roundabout). The preferred alternative was identified as the ideal balance between construction cost and transportation performance - with integrated access to the east side of the valley being a key component.

The transportation concepts that were explored in 2018 assumed that LOTT would develop a treatment facility in the valley. As noted previously, LOTT has since determined that developing a new facility in the valley is not in the best interest of community needs and LOTT is now considering selling their parcels. City ownership of the parcels would allow more flexibility with regard to future transportation considerations and also with respect to land use/development options relating to these properties.

4.2 Access Across the Valley Floor

The Deschutes River Valley floor is divided into three distinct areas of access due to the presence of the Deschutes River and the Union Pacific Railroad. This access is further complicated by the reality that the valley floor is substantially lower in elevation than Capitol Boulevard to the west and Cleveland Avenue to the east.

Access West of the Deschutes River: The first access area is situated west of the Deschutes River and includes Tumwater Valley Athletic Club and the Municipal Golf Course. A new access serving this area has been constructed immediately south of the Craft Distillery.

Access Between the Deschutes River and Union Pacific Railroad: The second access area is situated east of the Deschutes River and west of the Union Pacific Railroad. This area between the river and the rail includes LOTT parcel 0947003000. This parcel is located west of Tumwater Development, LLC's warehouse property.

Access to this area is challenging in that the main access route, which is the existing private bridge, will at some point need to be removed to accommodate the construction of the proposed E Street Connection elevated roadway. With the removal of the existing bridge, the parcels to the east of the river will no longer have direct access. Two access solutions have been considered. The first access scenario considered obtaining an easement from Tumwater Development, LLC to allow the use of the private road known as Boston Street does not appear to be an option due in part to the limited ability for the property owner to expand the roadway to a suitable width. The second access option is for the City to construct a new bridge extending over the river from Tumwater Valley Drive.

Access East of the Union Pacific Railroad: The third access area is located east of the UP Railroad and currently has limited private access as defined by LOTT's License Agreement with UPRR, which is highly restrictive of at-grade vehicle or pedestrian access.

Currently, there is one private UPRR crossing permitted for LOTT to access their East Parcel and Southeast Parcel. The parcel to the east of the Union Pacific Railroad right of way and north of the LOTT parcel, owned by Tumwater Development LLC, has no railroad crossing rights granted from Union Pacific Railroad. To provide public access to the east side of the valley, a separate road access will need to be constructed. This separate access has been a primary component of the E Street Extension conceptual design and study.

4.3 Interim UPRR License Agreement Conditions

Prior to construction of the E Street Connector, the subject parcels require reasonable use of an at-grade access to both the East Parcel and Southeast Parcel across UPRR's right-of-way. Since the existing License Agreement between LOTT and UPRR terminate when the properties transfer ownership, it will be necessary for the City to negotiate a new License Agreement with UPRR. We recommend that the City reach agreement with UPRR on the terms of a new License Agreement prior to purchasing the property. We also recommend that the License Agreement negotiation with UPRR include construction related access rights that enable safe and reasonable temporary construction access for the construction of the E Street Connector bridge over the UPRR right-of-way.

4.4 E Street Preferred Alignment and Estimated Cost

The E Street Connection Alternate 2b Preferred Alignment proposes to cross a portion of the East Parcel (TPN 09470045000) and would also require acquiring right-of-way across the westernmost portion of the property, but would leave the remainder of the property open for development. The preferred alignment impacts the Southeastern parcel (TPN 09470021000) similarly but the parcel is smaller so the impact would affect a greater percentage of the parcel area. Alternate alignment concepts that have been considered impact this parcel to varying degrees.

The December 2018 E Street Extension Corridor Study Conceptual Cost Estimate included an estimate for the cost of the right-of-way acquisition. The Alternate 2b E Street and LOTT Access Cost Estimates, when adjusted to 2024 dollars, include approx. $317,000 for the cost of right-of-way acquisition from LOTT. If the City purchases the subject parcels from LOTT, then this portion of the right-of-way costs would already be accounted for by the City's investment in the acquisition of these parcels.

As part of the E Street Connector the cost to develop the preferred transportation alternative is estimated to be approximately $50 to $52 million in 2024 dollars. Refer to the E Street Extension Corridor Study for additional information.

When pedestrian access is required over the UPRR, we anticipate that this will be accomplished through the addition of stairs between the new E Street sidewalk and the ground elevation on each side of the railroad tracks. The conceptual construction cost for the addition of the stairs on each side of the tracks is estimated to be approximately $190,000. This cost is not included in the above referenced E Street Extension Corridor budget.

E Street Connection Exhibit

SCJ ALLIANCE
CONSULTING SERVICES

City of Tumwater
E Street Extension
CONCEPTUAL LEVEL ESTIMATE SUMMARY

	Strategy Description	E Street Extension	LOTT Access	E Street + LOTT Access
A1	Alternative 1 - Bridge to East, Separate LOTT Facility Access	$41,840,000	$3,910,000	$45,750,000
A2	Alternative 2 - Bridge to Southeast, LOTT Facility access from top of hill	$55,280,000	$3,810,000	$59,090,000
A2a	Alternative 2a - Bridge east across railroad ROW, integrated LOTT access on valley floor	$36,610,000	$630,000	$37,240,000
A2b	Alternative 2b - Bridge east across railroad ROW, integrated LOTT access on valley floor with 6% grades	$35,190,000	$1,110,000	$36,300,000

With the construction escalation percentage of 1.42, the preferred alternative A2B, would increase to $51,546,000

The other sub-alternatives evaluated recently for the City (A2C, A2D, A2E) vary in cost from $50,000,000 to $52,000,000

SCJ ALLIANCE
CONSULTING SERVICES

Element	Element Based Upon		ALT 2b - E Street Estimate Measurement	
Roadwork	**Estimated Quantities**			**$ 24,884,938**
	Mobilization	6%	1	$ 1,671,376
	Clearing and Grubbing	SF	203,000	$ 46,602
	Roadway Excavation Incl Haul	CY	48,200	$ 1,205,000
	Roadway Section	SF	166,500	$ 1,053,945
	Select Borrow	CY	1,000	$ 15,000
	Embankment Compaction	CY	48,100	$ 288,600
	Conveyance	LF	3,200	$ 194,880
	Water Quality/Flow Control	SF	208,000	$ 473,200
	Bridge	SF	75,000	$ 16,875,000
	Sidewalk	LF	3,200	$ 221,760
	Curb and Gutter	LF	3,200	$ 162,176
	Erosion Control	LF	2,300	$ 38,640
	Signal	EACH		$ -
	Illumination	LF	3,200	$ 213,120
	Undergrounding Power	LF	1600	$ 84,838
	Permanent Signing	LF	3,200	$ 12,800
	Wall	SF	38,800	$ 2,328,000
Right-of-Way				**$ 846,335**
	UP Property	SF	10,720	$ 214,400
	LOTT Property	SF	79,280	$ 158,560
	Private Property	SF	30,800	$ 308,000
	Parcels	Value	110,250	$ 165,375
Engineering	**18%**			**$ 4,479,289**
	Design	10%	1	$ 2,488,494
	Construction	8%	1	$ 1,990,795
	Subtotal			$ 30,210,562
	Conceptual Contingency (20%)			$ 4,976,988
	Total			**$ 35,190,000**

SCJ ALLIANCE
CONSULTING SERVICES

Element	Element Based Upon		ALT 2b - LOTT Access Estimate Measurement	
Roadwork	**Estimated Quantities**			**$ 752,346**
	Mobilization	6%	1	$ 50,531
	Clearing and Grubbing	SF	58,900	$ 13,522
	Select Borrow	CY	15,500	$ 232,500
	Embankment Compaction	CY	15,500	$ 93,000
	Roadway Section	SF	19,800	$ 125,334
	Conveyance	LF	550	$ 33,495
	Water Quality/Flow Control	SF	26,700	$ 60,743
	Sidewalk	LF	550	$ 38,115
	Curb and Gutter	LF	550	$ 27,874
	Erosion Control	LF	550	$ 9,240
	Illumination	LF	550	$ 36,630
	Undergrounding Power	LF	550	$ 29,163
	Permanent Signing	LF	550	$ 2,200
	Landscaping	LF		$ -
Right-of-Way				**$ 66,000**
	UP Property	SF		$ -
	LOTT Property	SF	33,000	$ 66,000
	Private Property	SF		$ -
	Parcels	Value		$ -
Engineering	**18%**			**$ 135,422**
	Design	10%	1	$ 75,235
	Construction	8%	1	$ 60,188
	Subtotal			$ 953,768
	Conceptual Contingency (20%)			$ 150,469
	Total			**$ 1,110,000**

Considerations:

As noted above, when the existing private bridge is removed, the parcels to the east of the Deschutes river will no longer have access. We recommend that the City confirm that a suitable access plan has been identified for the parcels located east of the river.

Prior to closing on the property, we recommend that the city reach agreement with Union Pacific regarding the terms of a new license agreement with the city. Knowing that one intention in purchasing the property is to obtain the right way for the construction of the E Street extension, we also recommend that the license agreement include the necessary access and use of the UPRR right of way to enable reasonable construction activities.

As discussed in Section 6, Temporary Parking for Events, the long-term parking configuration anticipates parking to be located east of UPRR with the E St. connector in place. In this scenario, pedestrian crossing over the UPRR is anticipated to require a grade separated crossing. Refer to Section 6 for additional information.

5 Deschutes River Valley Habitat

5.1 Habitat: Existing Conditions and Mitigation Opportunity

Over the years that the Olympia Brewery improvements were constructed, the Deschutes river was partially relocated and the natural riverine habitat was filled and developed. City acquisition of LOTT's West Parcel provides an opportunity to enhance the riparian corridor and corresponding habitat. We understand that enhancement of this riparian habitat could be performed as part of mitigation associated with potential habitat related impacts of the E Street Extension and for other city projects.

5.2 Site Visit and Riparian Corridor Summary - Landau Associates

Based on Landau Associates' preliminary review of site conditions during the February 5, 2024 site visit, readily available online sources, and early [E Street Connector] designs, we anticipate that enhancement or rehabilitation of [up to] the 250-foot[1] regulatory buffer associated with the Deschutes River is able to provide sufficient mitigation area (shown in purple) to offset proposed [E Street Connector] impacts.[2] Based on discussions with SCJ, Landau understands that the City is also considering additional uses for the land adjacent to the mitigation area including a park, industrial uses, or leaving the access road/parking in place. All potential land uses are allowed adjacent to mitigation sites so long as the adjacent land use is approved and does not negatively impact the mitigation site.

5.2.1 Existing Conditions

Currently the low functioning stream buffer consists of degraded vegetated areas and impervious surfaces. The vegetated portion of the buffer is degraded by high invasive species cover. Dominant invasive species within the vegetated portion of the stream buffer include reed canary grass (Phalaris arundinacea), English ivy (Hedera helix), Himalayan blackberry (Rubus armeniacus), and Canada thistle (Cirsium arvense). Limited canopy cover south of the E Street Bridge provides some shade, woody debris, and potential habitat for beneficial insects and other food sources for aquatic life.

No appreciable overhanging vegetation is present along the right bank of the Deschutes River adjacent to the subject parcel. There is an opportunity for habitat improvement in the riparian areas both north and south of E Street that could be used as mitigation. There is a degraded vegetated area that appears to be below the OHWM north of E Street; this area could potentially be improved and used to offset potential in-stream or overwater impacts.

North of the E Street Bridge, impervious surfaces within the stream buffer consist of concrete and packed gravel. Overbank flows from the Deschutes River may access the floodplain within the subject parcels, but the high coverage of impervious surfaces and shoreline protections do not allow for groundwater infiltration or natural meanders. Additionally, the impervious surfaces increase stormwater runoff and pollutant levels during high water events. This section of the Deschutes River is on the 303(d) List for temperature, bacteria, dissolved oxygen, total suspended solids, and pH. Impervious surface removal, invasive species control, and native plant installation are well-suited to the site and would repair the degraded stream buffer functions and address recorded systemic issues locally.

5.2.2 Potential Mitigation

Suitable enhancement activities within the potential mitigation area could include invasive species removal, soil amendment, impervious surface removal, and native species planting. Any compensatory mitigation actions will require an approved mitigation plan and annual monitoring (typically 5 years' worth of monitoring) to ensure the project successfully offsets impacts to critical areas and the associated buffers. It is anticipated that permanent protective fencing and signage will need to be installed along the perimeter of the mitigation area.

1 Per TMC 16.32.065.C, the City of Tumwater provides an isolated buffer provision in which the approval authority may allow a buffer to be reduced to the functional edge of a buffer should it be interrupted by "topographic breaks (e.g., bluffs) or a legally established road, railroad or other lineal facility or barrier." Should the approval authority find that the north access road or paved parking area functionally isolate the buffer, the regulated buffer width may be reduced to less than 250 feet.
2 It is anticipated that a portion of the mitigation potential area will be unusable for mitigation due to the E Street Connector footprint (e.g., bridge pillars, etc.). Italics in Section 5.2 denote text provided by Landau Associates.

5.3 Opportunities and Barriers to Riparian Enhancement along the East Bank of the River

5.3.1 TMC Code: Riparian Buffer Mitigation Standards

TMC Section 16.32.065.B.4 describes typical riparian enhancement standards that allow for buffer reduction (in this case, from the standard 250 ft to the proposed 150 ft). This Section only applies to buffer areas, not to wetlands or flowing water bodies, which would require a different mitigation approach.

In general, 1. Conifer species are targeted along the bank to encourage future sources of large woody debris (LWD); 2. Invasive or weedy plants are to be removed and replaced with native species; 3. Riprap and related materials along the bank are to be replaced by anchored logs or other appropriate bioengineering materials – however, it should be noted that due to the high flow velocities and more erosive soil characteristics it is recommended to retain the riprap and manmade stabilization methods to protect the downstream areas, such as the hatchery; 4. Deep rooted native plants are to be planted on and near the bank to reduce erosion; 5. Include a vegetated filter strip at least 25-50 ft wide at the outer edge of the riparian habitat area to reduce incoming pollution from adjacent uplands; 6. If

warranted, off-channel habitat enhancement; 7. If warranted, anchored placement of durable LWD or racks in the stream bed; 8 and 9. Removal of roads (parking lots, structures…) and replant with native vegetation, 10. Replace culverts that are barriers to fish migration.

It should be noted that large woody debris likely will not be supported by WDFW Hatchery due to problems that may be associated with woody debris making its way downstream and impacting the hatchery. For this reason, this portion of the river may be best served through reliance upon slope stabilization measures such as rip rap, large stones and cast-in-place concrete slope retainage measures.

5.3.2 Mitigation for Direct Impacts to Wetlands or River from Project Development

The onsite wetlands and the River will be regulated as Waters of the US (WOTUS) or Waters of the State (WOTS). In either case, any direct impacts – either from direct fill or from enhancement work – will require a federal and/or state permit and regulatory review.
River crossing impacts from improving the existing bridge at E-Street may be mitigated by following mitigation sequencing standards to minimize the impacts, such as by minimizing bridge width, or by raising the bridge to decrease shading impacts. Stormwater quality management is expected to be focused on infiltration as far away from the river as possible to treat and remove 6PPD tire oxidants, which are recently identified pollutants with mortal impacts to coho, and chinook salmon (and potentially other resident fish and salmonids).

Direct **permanent** wetland impacts that result in **loss** of wetland acreage will require replacement mitigation – i.e., ***creation*** of new wetland acreage at another location, preferably nearby. Mitigation for wetland impacts can also include ***enhancement*** of an existing degraded or partially filled wetland or ***enhancement*** of a degraded wetland. The replacement ratio is dependent on the type of wetland impacted and the type of mitigation proposed – ranging from as low as 1.5:1 and as high as 24:1 (TMC Title 16.28.220).

5.3.3 Mitigation Bank Considerations

Areas within the riparian buffer may be used for wetland creation or enhancement, in mitigation for either onsite impacts or for wetland impacts from other nearby projects in the same drainage basin (as would be regulated under Tumwater code). If wetland creation onsite is proposed for future mitigation purposes (in essence, banking mitigation credits for a future City project), it would be important to define the work as advance mitigation, and to define (in advance) the ecosystem value of the proposed work (wetland mitigation credits). We understand that the West Parcel may be utilized as a mitigation opportunity, not as a formal mitigation bank. In the event that the City did desire to use this property as a mitigation bank, Ecology provides guidance on how to determine the value of mitigation credits for a more standard mitigation bank (a regulated financial instrument), and this guidance might be adapted for the City's purpose. We are not aware of any nearby state certified mitigation banks that could be used for this purpose. This is a regulatory issue and should be discussed with the City attorney.

It should be noted that any new wetland acreage created in the riparian buffer will require additional wetland buffer width (and/or buffer enhancement) to meet the minimum TMC wetland buffer standard, and thus may limit development options farther to the east. Typically, standard buffers cannot be reduced for mitigation wetlands.

5.3.4 Conceptual Habitat Mitigation Area

A potential riparian corridor buffer has been depicted along the east bank of the Deschutes River on the Conceptual Mitigation Exhibit, CM1 dated March 2024, which is included at the end of this section of the report. The width of the proposed mitigation would create a vegetated buffer width of 150' along the entirety of the West Parcel.

The portion of the potential mitigation that is located adjacent to the existing decommissioned Brewery electrical substation has been shown in blue and the remaining extent of the potential 150' buffer extending to the south has been shown in green. The blue buffer adjacent to the substation represents an area that, based upon the Phase I ESA, may have a higher potential for encountering contaminated subsurface soil. The portion of the 150' buffer shown in green represents an area where lower potential for contamination is expected based upon the areas of concern mentioned in the Phase I ESA.

Mitigation Buffer Areas (Per the Conceptual Mitigation Exhibit):

The Blue Buffer area totals approximately 21,100 SF.

The Green Buffer area totals approximately 243,100 SF.

5.4 Potential Riparian Buffer Impacts and Associated Mitigation Opportunities

5.4.1 Floodplain Storage impacts: **Permanent** storage losses (i.e., buried under permanent fill) are generally addressed by providing (nearby) the same volume of flood storage that was lost by adding fill to the 100-year floodplain. Example: If the 100-year flood level at the project site is 2 ft deep and 3 ft of fill is applied across an area that is 100 ft x 60 ft, the lost storage volume would be 12,000ft^3. To regain this lost volume, an area adjacent to and outside of the existing flood plain could be added to the floodplain by surface grading at the same elevation to increase the floodplain extent by the same volume (12,000ft^3).

5.4.2 Habitat impacts within the floodplain: **Permanent** habitat losses are generally addressed by finding an area in the nearby riparian buffer with moderately to severely degraded habitat conditions and restoring that area to a non-weedy, native riparian habitat plant community on a 1:1 area replacement basis. This would be considered rehabilitation (severely degraded) or enhancement (moderately degraded) from a mitigation standpoint, but usually, for buffer (rather than wetland) impacts, the replacement ratio is still 1:1, and does not change.

5.4.3 Riparian buffer impacts: **Permanent** buffer area losses at this location might be addressed by finding another area within the standard buffer width that would not *currently* be regulated (such as an area that is within the buffer distance, but within a parking lot OR on the other side of a road or parking lot), and add that isolated or non-functional buffer area back into the buffer, by removing pavement and restoring the area to a non-weedy, native riparian habitat plant community on a 1:1 area basis. In essence, one must replace the lost buffer area with new buffer area on a 1:1 basis.
All **temporary** buffer losses (such as temporary parking for construction vehicles) are usually addressed by rehabilitating soils in the disturbed area, then replanting with a non-weedy, native plant community. All mitigation areas (wetland or buffer) usually require at least three (and up to ten) years of monitoring once planting is completed to ensure that the plants survive and the mitigation plan performance

standards are met. To discourage future impacts in enhanced wetlands or in the replanted buffer areas from public trails, it is recommended to install fencing and/or signs.

5.5 Phase II Environmental Assessment Recommendation (if bonding or bank financing is required). Typically, a Phase I Environmental Site Assessment (ESA – a desktop research report) is required by a bank or a municipal attorney, to ensure that the target parcel does not harbor hidden pollutants (a property value and liability issue). ASTM E1527-21 defines the standards for conducting Phase I ESAs. If the Phase I report indicates the potential of pollutants being present onsite, then a Phase II ESA (onsite testing) is typically carried out to verify or refute the presence of the potential pollutants identified in the Phase I ESA report.

If a Phase I ESA indicated a potential area of concern, there are potential liability and public safety issues associated with not having Phase II testing performed in areas that will be used by the public. Preliminary testing for hydrocarbons and heavy metals is recommended within 1 ft of the surface prior to any permit review process. Basic soil test pits to determine fill depth and subsoil conditions may be warranted in previously filled areas that will be excavated or graded for mitigation purposes.

TMC 16.32.065 Riparian habitat areas – Buffers.

Recommended riparian habitat area widths are shown in the table below. A riparian habitat shall have the width recommended, unless a greater width is required pursuant to subsection A of this section, or a lesser width is allowed pursuant to subsection B of this section. Widths shall be measured outward in each direction, from the ordinary high water mark or the top of the bank if the ordinary high water mark cannot be identified. Riparian areas should be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions. Such functions include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian habitat to other habitats.

Table 1: Riparian Habitat Areas

Stream Type	Recommended RHA Widths
Type 1 and 2; or shorelines of the state, or shorelines of statewide significance	250 feet
Type 3; or other perennial or fish bearing streams, 5 – 20 feet wide	200 feet
Type 3; or other perennial or fish bearing streams, < 5 feet wide	100 feet
Type 4 and 5	50 feet

A. Increased Riparian Habitat Area Widths. The recommended riparian habitat area widths as shown in Table 1 shall be increased as follows:

- 1. When the community development director determines, using best available science, that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area;
- 2. When the one-hundred-year floodplain exceeds the recommended riparian habitat area width, the riparian habitat area shall be extended to the outer edge of the one-hundred-year floodplain;
- 3. When the habitat area is within a channel migration zone, the riparian habitat area width shall be as recommended in Table 1, or the distance of the channel migration zone, whichever is greater;
- 4. When the habitat area is in an area of high blowdown potential, the riparian habitat area width shall be expanded an additional fifty feet on the windward side;
- 5. When the habitat area is within an erosion or landslide hazard area or buffer, the riparian habitat area width shall be as recommended in Table 1, or the distance of the erosion or landslide area, whichever is greater.

B. Riparian Habitat Area Width Averaging. In degraded areas along type 1 through 3 streams where forest cover has been removed, the community development director may reduce the width of riparian habitat areas twenty-five percent in exchange for habitat enhancement if:

- 1. It is determined that the reduction in habitat width, coupled with the proposed enhancement, would result in better stream/riparian habitat functions than the standard riparian habitat area without such enhancement. This determination shall be made in consultation with Washington State Department of Fish and Wildlife based on a comparative analysis of the existing and enhanced riparian habitat submitted by the applicant. This comparative analysis, prepared by a qualified biologist, shall address stream habitat, water quality and all riparian habitat functions (i.e., large woody debris recruitment; stream shading/leaf litter inputs; filtration of sediments and pollution; nutrient regulation; erosion control/bank stabilization; regulation of stream flow/moderation of stormwater impacts; providing cover, refuge, foraging and breeding habitat for wildlife; wildlife travel corridors; and micro-climate effects); and
- 2. The degradation was not caused while the property was in the applicant's ownership or within the previous seven years, whichever is greater. This does not apply to habitat damage from lawful land use prior to June 17, 2005; and

Considerations:

If a Phase I ESA indicated a potential area of concern, there are potential liability and public safety issues associated with not having Phase II testing performed in areas that will be used by the public. Preliminary testing for hydrocarbons and heavy metals is recommended within 1 ft of the surface prior to any permit review process. Basic soil test pits to determine fill depth and subsoil conditions may be warranted in previously filled areas that will be excavated or graded for mitigation purposes.

To verify the suitability of the West parcel for riparian corridor enhancement, prior to purchase of the property, we recommend shallow testing of the soil for potential contaminants within the proposed mitigation buffer area.

To address issues of potential future liability associated with the ownership of the LOTT Parcels, we recommend that a Phase II Environmental Site Assessment be completed to address the items identified in the Phase I ESA reports and particularly as summarized in Section 9, Phase I Environmental Assessment. We recommend that this work be performed prior to purchase of the property.

0 100 200
SCALE IN FEET

LEGEND

- DESCHUTES RIVER OHWM (APPROXIMATE)
- 150' BUFFER BOUNDARY
- PROPERTY BOUNDARY
- RIPARIAN CORRIDOR HABITAT RESTORATION AREA (243,100 SF)
- EXISTING SUBSTATION AREA (21,100 SF)

NOTES:

1. THE ORDINARY HIGH WATER MARK (OHWM) SHOWN ON THIS EXHIBIT IS AN APPROXIMATION AND HAS NOT BEEN GEOGRAPHICALLY LOCATED. A SURVEY IS REQUIRED TO DETERMINE EXACT LOCATION OF OHWM.

PARKING STALL SIZES - 9 FT X 18 FT
NO.0F STALLS - 1,500
AISLE WIDTH - 22.5 FT

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HORIZONTAL SCALE: AS SHOWN
DATE: MARCH 2024
JOB No.: 23-001181
DRAWING FILE No.: CM-1 - CONCEPTUAL MITIGATION EXHIBIT.DWG

CONCEPTUAL MITIGATION EXHIBIT
DESCHUTES VALLEY PROPERTIES FEASIBILITY
1,078 STALLS WEST OF UNION PACIFIC RAILROAD RIGHT-OF-WAY, 422 STALL TO THE EAST

EXHIBIT No: **CM1**
SHEET No: **1**

6 Temporary Parking for Events

6.1 Background

The City of Tumwater utilizes the Tumwater Valley Golf Course driving range grounds to provide events to the community at various times throughout the year. South Puget Sound Community College's nearby Craft Brewery Amphitheater also provides events to the community and utilizes this parking area. The Artesian Family Festival & Thunder Valley Fireworks Show on July 4th, draws thousands of participants, creating the greatest need for temporary parking in the area, requiring up to 1,500 parking spaces.

6.2 Parking Lot Design Criteria

Event parking will require suitable access for each of the various parking scenarios proposed. Prior to construction of the E Street Connector, we presume that the existing private bridge owned by Tumwater Development will be suitable for access to parking between the Deschutes River and the railroad tracks.

During construction of the E Street Extension, it will be necessary to demolish and remove the existing private bridge that crosses the Deschutes River from Capital Boulevard. At that time, it will likely be necessary to construct a new bridge over the Deschutes River that would be extended from Tumwater Valley Drive. In the event that Tumwater Development LLC is willing to accommodate the use of Boston Street SW to access this property, it could be possible to avoid construction of a new bridge over the Deschutes River. We do understand however, that the use of Boston Street SW would require widening the existing access road which could impact the adjacent buildings.

The parking stalls shown in the exhibits are 9 feet wide by 18 feet deep with a 22.5 foot drive aisle. It has not been determined whether the City will continue to utilize the existing surfacing for event parking, or improve the surface. No landscape islands or other new landscape areas have been included in the design at this time. No ADA compliant stalls are marked on the exhibits even though much of the parking grades would naturally be ADA compliant. For installation of a permanent parking lot, we expect that city standard landscape islands within the parking lot will be required. To maintain the desired 1,500 parking stalls, as the West Parcel stall count decreases (to include interior landscaping in the parking field), the East Parcel stall count will need to increase.

Parking Lot Fencing: As part of negotiating a new UPRR License Agreement, it is anticipated that UPRR will require fencing to be placed along the UPRR right-of-way if the parking lot is being used on days that the rail is active.

6.3 Parking Lot Options

The following parking lot scenarios demonstrate the total parking available on the West Parcel without reserving the proposed 150' riverine buffer. In this parking scenario there is land area available for approximately 1,747 parking spaces per Temporary Event Parking Exhibit #1. Temporary Event Parking Exhibit #2 depicts a parking field of approximately 1,500 parking stalls to be situated on the West Parcel as far south as possible to be more adjacent to the event area. In considering where to locate the temporary parking, priority was given to the LOTT parcel situated west of the Union Pacific Railroad in

order to avoid crossing the railroad and needing to obtain additional access approval from UPRR. For Temporary Event Parking Exhibit #3, a temporary parking exhibit depicts parking east of the railroad tracks proposing an area that could be available for parking after the E Street Connector is built, or before the Connector is built if at grade access approval from UPRR is obtained.

Temporary Event Parking Plan 1 depicts 1,747 parking stalls to demonstrate the maximum parking capacity available. In this layout, existing developed areas are assumed to be useable for parking and no riparian corridor setback has been shown.

Temporary Event Parking Plan 2 depicts 1,500 parking stalls on the western LOTT parcel without the riparian corridor setback being shown to allow the City to understand the depth of the temporary parking field to provide the 1,500 parking stalls.

Temporary Event Parking Plan 3 depicts 1,078 parking stalls on the western LOTT parcel with a riparian corridor setback of 150' being shown. An additional 422 stalls are proposed east of the UPRR right-of-way to obtain the total count of 1,500 parking stalls. If this area is utilized prior to completion of the E Street Connector improvements, vehicle and pedestrian railroad crossings for event parking will be at-grade and will require a UPRR License Agreement (except on July 4th, when we understand the rail is not active).

Temporary Event Parking Plan 4 depicts 1,500 event parking spaces located east of the railroad tracks, which could be provided with viable access after the E Street Connector has been constructed.

It should also be noted that if the City determines that a multi-use facility (city park, recreational areas, stormwater management, infrequent parking, etc.) is in the best interest of the City, the most appropriate surfacing for one or more parking scenarios may include the use of lawn.

6.4 Pedestrian Bridge Conceptual Cost

As noted above, under the scenario proposed by Temporary Event Parking Exhibit 3, a parking field would be constructed on the east side of the UPRR right-of-way. For this scenario, it is anticipated that the E Street Connector road would already be in place, along with the access road to the East Parcel. Rather than utilize a shuttle to bring individuals from the east parking lot to events located west of the UPRR right-of-way, a pedestrian bridge could be constructed either as a free standing structure or integrated into the elevated E Street roadway design using the proposed E Street sidewalks to cross over the UPRR right-of-way.

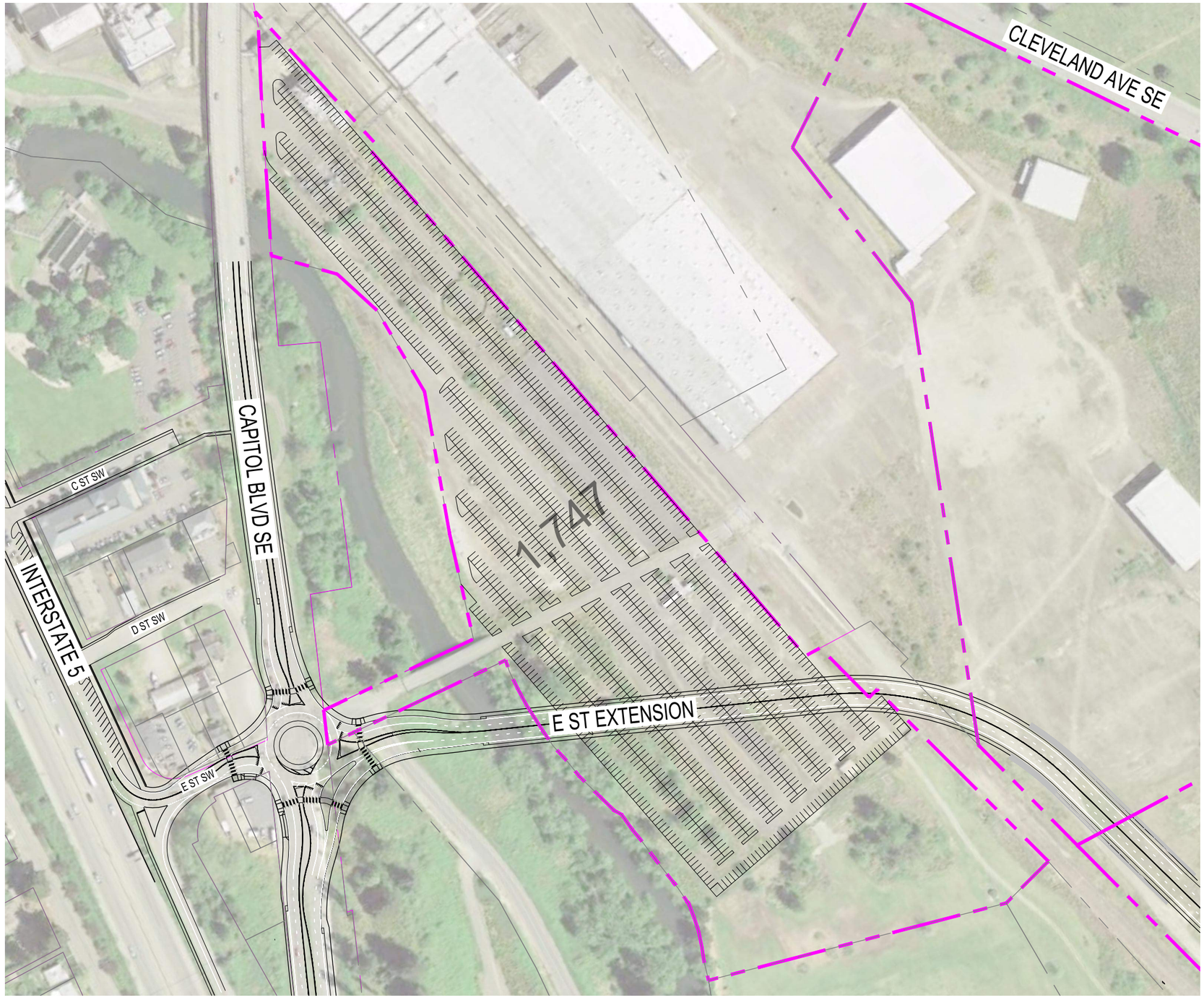
Temporary Parking for Events, the long-term parking configuration (TP3) anticipates a field of parking to be located east of UPRR with the E St. connector in place. In this scenario, pedestrian crossing over the UPRR is anticipated to require a grade separated crossing. Likely, the most cost-effective means of accomplishing this is expected to be via the addition of stairs between the E Street sidewalk, and the ground elevation on each side of the tracks. The estimated conceptual construction cost for the addition of the stairs is approximately $190,000.

Please refer to the following Parking Lot Exhibits and also refer to the UPRR section of this report for additional relevant information.

Considerations:

As discussed above, we recommend budgeting for the inclusion of pedestrian access over the UPRR right-of-way in tandem with the E Street Extension improvements.

As noted above, event parking will require the use of the existing (but closed) north access road known as Boston Street SW. The use of the road for access to the West Parcel and East Parcel parking area will require negotiating an agreement with Tumwater Development, LLC. If an agreement cannot be obtained, then construction of a new two-lane bridge crossing the Deschutes River likely will be required. It is recommended that use of the Boston Street access be negotiated with Tumwater Development, LLC prior to closing on the property.



0 100 200

SCALE IN FEET

PARKING STALL SIZES - 9 FT X 18 FT
NO.0F STALLS - 1,747
AISLE WIDTH - 22.5 FT

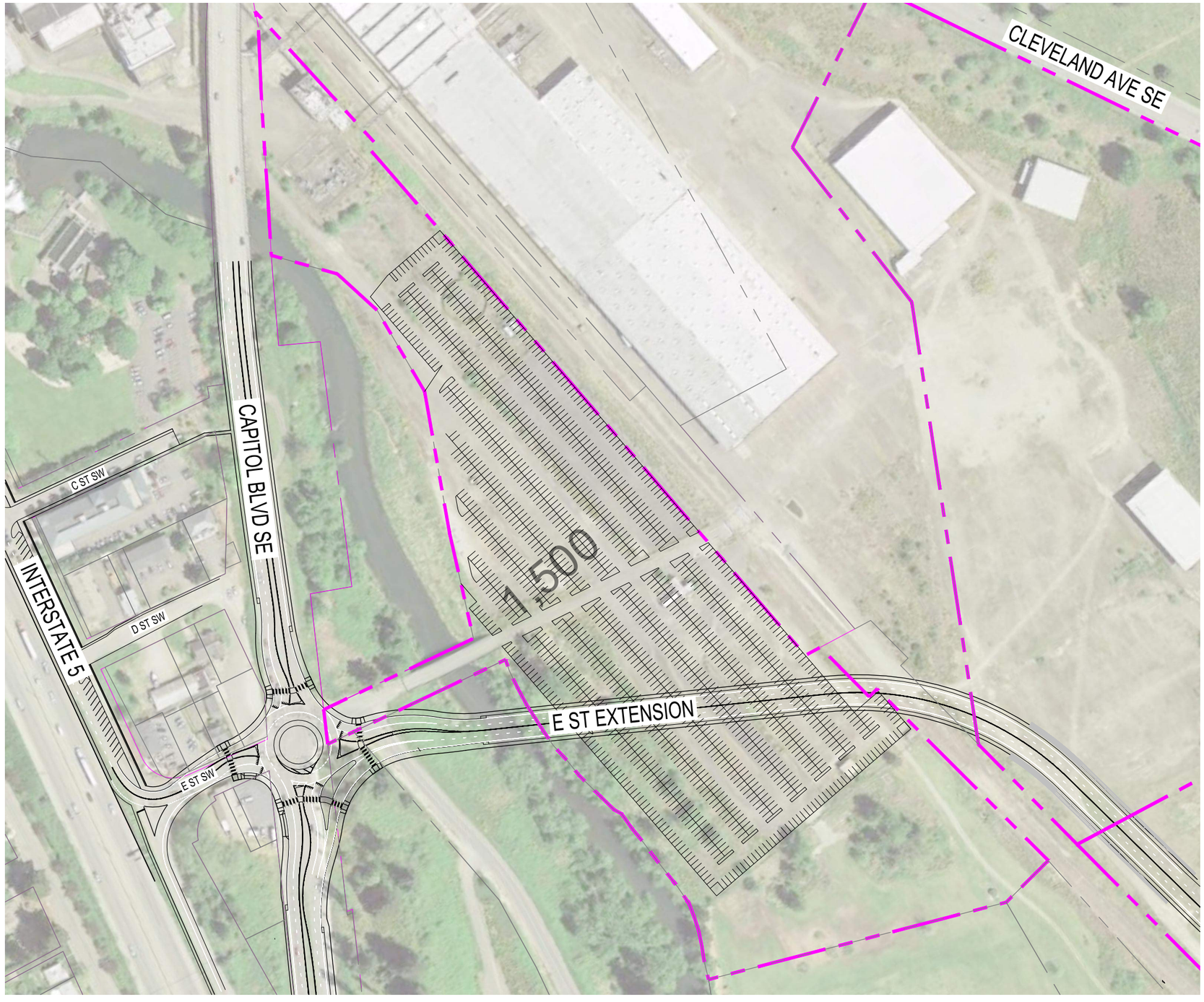
SCJ ALLIANCE
CONSULTING SERVICES
8730 TALLON LANE NE, SUITE 200, LACEY, WASHINGTON 98516
P: 360-352-1465 F: 360-352-1509
SCJALLIANCE.COM

HORIZONTAL SCALE:	AS SHOWN
DATE:	JUNE 2024
JOB No.:	23-001181
DRAWING FILE No.:	TP1-3 - EVENT PARKING.DWG

TEMPORARY EVENT PARKING EXHIBIT
DESCHUTES VALLEY PROPERTIES FEASIBILITY
1,747 STALLS WEST OF UNION PACIFIC RAILROAD RIGHT-OF-WAY

EXHIBIT No: TP1

SHEET No: 1



0 100 200

SCALE IN FEET

PARKING STALL SIZES - 9 FT X 18 FT
NO.0F STALLS - 1,500
AISLE WIDTH - 22.5 FT

SCJ ALLIANCE
CONSULTING SERVICES
8730 TALLON LANE NE, SUITE 200, LACEY, WASHINGTON 98516
P: 360-352-1465 F: 360-352-1509
SCJALLIANCE.COM

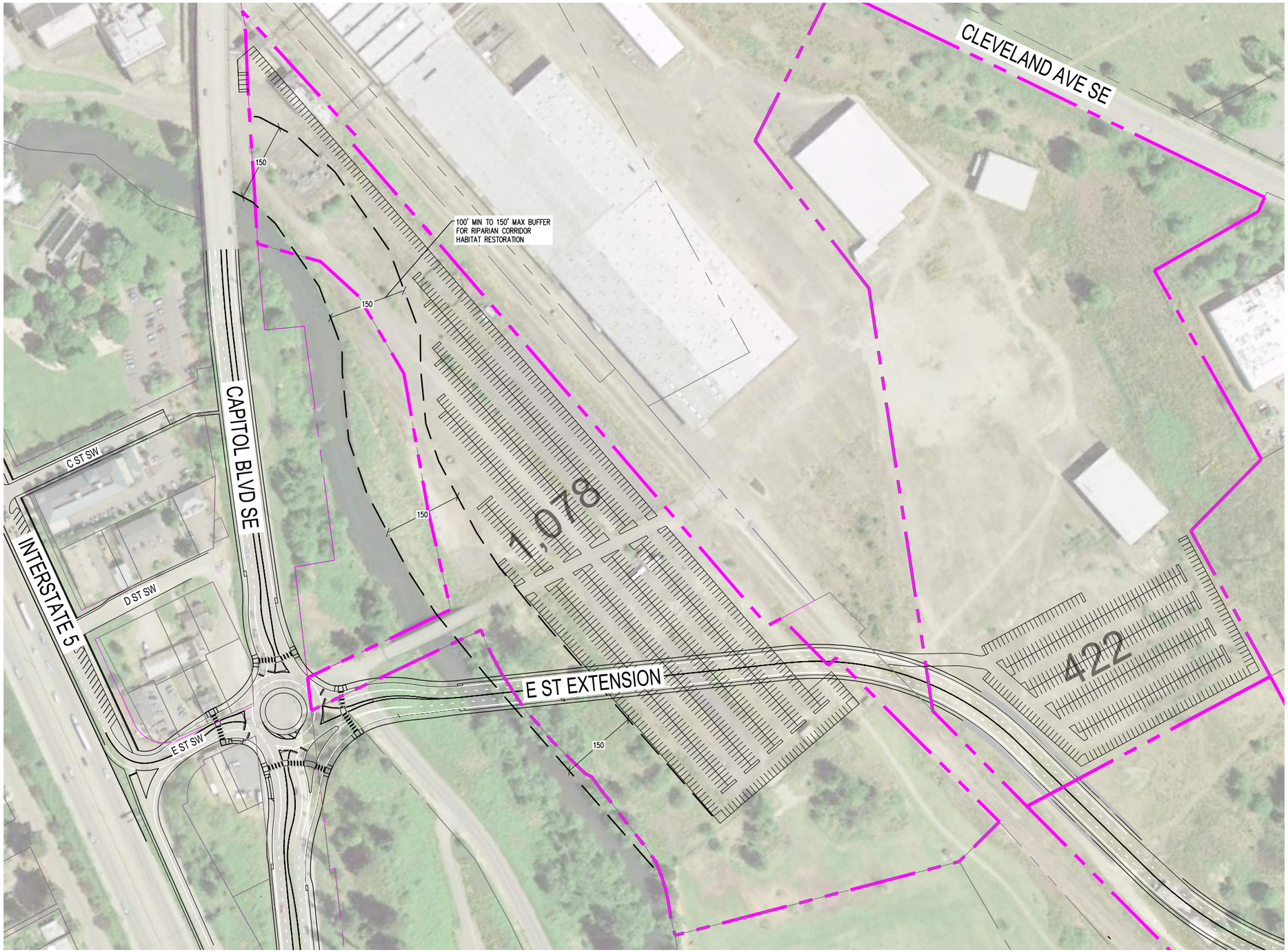
HORIZONTAL SCALE:	AS SHOWN
DATE:	JUNE 2024
JOB No.:	23-001181
DRAWING FILE No.:	TP1-3 - EVENT PARKING.DWG

TEMPORARY EVENT PARKING EXHIBIT
DESCHUTES VALLEY PROPERTIES FEASIBILITY
1,500 STALLS WEST OF UNION PACIFIC RAILROAD RIGHT-OF-WAY

EXHIBIT No: TP2

SHEET No: 2

Jun 18, 2024 10:35:59am – User: kyle.goins
N:\PROJECTS\0625 CITY OF TUMWATER\23-001181 DESCHUTES VALLEY PROPERTIES FEASIBILITY\CADD\TP1-3 – EVENT PARKING.DWG



0 100 200
SCALE IN FEET

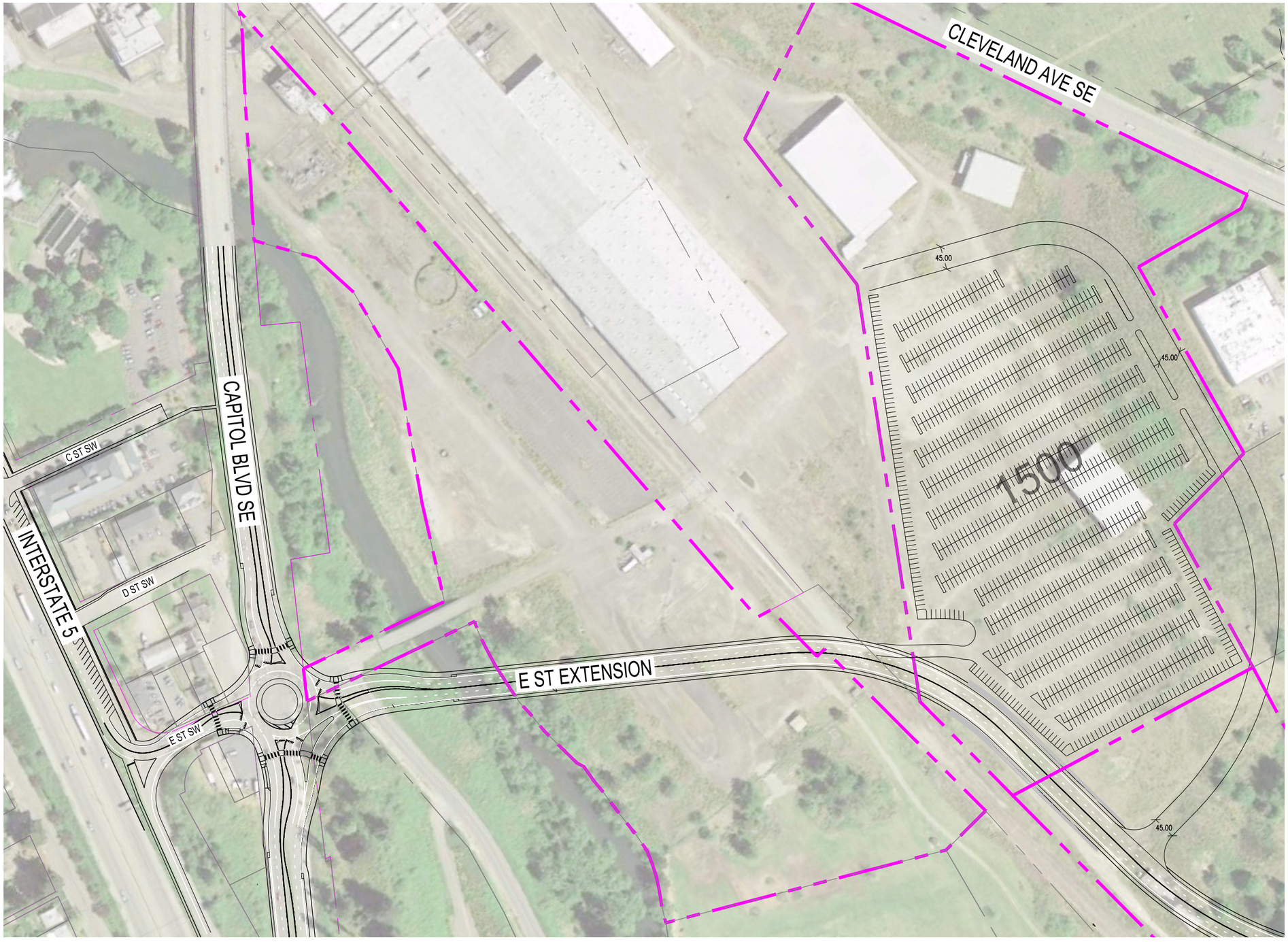
PARKING STALL SIZES - 9 FT X 18 FT
NO.0F STALLS - 1,500
AISLE WIDTH - 22.5 FT

SCJ ALLIANCE
CONSULTING SERVICES
8730 TALLON LANE NE, SUITE 200, LACEY, WASHINGTON 98516
P: 360-352-1465 F: 360-352-1509
SCJALLIANCE.COM

HORIZONTAL SCALE:	AS SHOWN
DATE:	JUNE 2024
JOB No.:	23-001181
DRAWING FILE No.:	TP1-3 - EVENT PARKING.DWG

TEMPORARY PARKING FOR EVENTS
DESCHUTES VALLEY PROPERTIES FEASIBILITY
1,078 STALLS WEST OF UNION PACIFIC RAILROAD RIGHT-OF-WAY, 422 STALLS TO THE EAST

EXHIBIT No: TP3
SHEET No: 3



0 100 200
SCALE IN FEET

PARKING STALL SIZES - 9 FT X 18 FT
NO.0F STALLS - 1,500
AISLE WIDTH - 22.5 FT

SCJ ALLIANCE
CONSULTING SERVICES
8730 TALLON LANE NE, SUITE 200, LACEY, WASHINGTON 98516
P: 360-352-1465 F: 360-352-1509
SCJALLIANCE.COM

HORIZONTAL SCALE:	AS SHOWN
DATE:	JUNE 2024
JOB No.:	23-001181
DRAWING FILE No.:	TP1-3 - EVENT PARKING.DWG

TEMPORARY PARKING FOR EVENTS
DESCHUTES VALLEY PROPERTIES FEASIBILITY
1500 STALLS TO THE EAST OF UNION PACIFIC RAILROAD RIGHT-OF-WAY

EXHIBIT No: TP4
SHEET No: 4

Jun 18, 2024 11:41:52am – User kyle.goins
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7 Union Pacific Railroad (UPRR) License Agreement

7.1 License Agreement Termination

The language of the existing License Agreement between Union Pacific Railroad and LOTT indicates that the agreement will terminate when LOTT sells or transfers the property. If the City becomes the new owner of the LOTT property, UPRR's previously granted permission to cross their right-of-way will terminate. For this reason, the City must negotiate a new Lease Agreement with UPRR.

7.2 Advance Negotiation of License Agreement

We recommend that the City of Tumwater initiate negotiations with UPRR in advance of purchasing the property to ensure that there is adequate vehicular and pedestrian access across the right-of-way. We understand that at the time that LOTT purchased their valley floor parcels, LOTT negotiated a new License Agreement with UPRR in order to establish their access rights over the railroad tracks to their property. Included as part of the new License Agreement was the stipulation by UP that the northernmost at-grade vehicular railroad crossing be abandoned and its use discontinued, leaving on-going but restricted access across the southern UP tracks at the existing crossing location (near the south end of the warehouse). We understand that access granted by UP only allows private vehicle and pedestrian crossing associated with the maintenance of LOTT's property.

Refer to the Wiser Rail Engineering memorandum for additional information regarding UPRR's expected response to: 1) a grade separated crossing as proposed by the E Street Extension (Option 1 in memo), 2) West Parcel Event Parking (Option 2), East Parcel Event Parking (Option 3), At-Grade Pedestrian Crossing to East Parcel (Option 4), and At-Grade Vehicular Crossing to East Parcel (Option 5). and in coordination with LOTT, we understand that railroad crossing This means that when property is sold or transferred, that all UPRR granted rights for crossing their railroad right-of-way typically expire.

7.3 New License Agreement Conditions

7.3.1 West Parcel Parking Lot with At-Grade Access

When the City places temporary parking on the west side of the UPRR right-of-way on days that the rail is active, we understand that Union Pacific will request that the City placing a temporary fence along the edge of the railroad right-of-way to protect those using the parking lot.

7.3.2 East Parcel Parking Lot with At-Grade Access

In the event that the City would like to locate temporary parking on the east side of the tracks, a separate approval from UPRR is expected to be required to allow for pedestrian or vehicular crossings of the tracks during events. We understand that UPRR will first require the City to demonstrate that there are no other viable option and, if granted, UP will require the City to contract with a UP approved flagger to be on-site during the use of the parking lots. UP may also place restrictions on the frequency of use. UP flagging personnel, if available, bill at approximately $120 per hour with a minimum timeframe of 10 hours (including driving time to the site). This scenario would also include a request for at-grade pedestrian crossing.

7.3.3 Liability Insurance for Event Parking

We understand that the City has coordinated temporary use of the LOTT property for event parking for July 4th, a day when this railroad track is not operating. If the City is not already aware of the insurance requirements that must be satisfied for pedestrian and vehicle access of the UPRR right-of-way during city events. We recommend that the City confirm that liability insurance coverage is adequate for meeting the City's needs for any public use of the UPRR right-of-way for event parking.

Considerations:

We recommend that the City of Tumwater initiate negotiations with UPRR in advance of purchasing the property to ensure that there is adequate vehicular and pedestrian access across the UPRR right-of-way. We also recommend that the license agreement include the necessary access and use of the UPRR right-of-way to enable reasonable construction activities.

It is also recommended that the City investigate the cost for liability insurance for use of the event parking adjacent to an active railroad.

THOMAS W. WISER, P.E.
Consulting Railway Engineer

22750 SW Miami Dr.
Tualatin, OR 97062
503 / 691-6095

WISER RAIL ENGINEERING

Technical Memorandum

TO Bill Dunning, PE
COMPANY SCJ Alliance
ADDRESS 8730 Tallon Lane NE, Suite 200
Lacey, WA 98516

DATE March 6, 2024
PHONE 360-352-1465x362
PROJECT No. 24006
PROJECT NAME Tumwater Private Crossing

SUBJECT UPRR Private Crossing

There are two existing private crossings on the old Brewery site with USDOT#'s 807838R and 807837J across the UPRR Olympia Industrial Lead in Tumwater, WA. The first is a vehicular crossing and the second is listed as a pedestrian crossing. They cross the main industrial lead track and the middle of a yard track into the Tumwater Brewery Site. The property on the west side of the UPRR R/W is owned by the City of Tumwater and the property on the east side by a private developer. The City is looking into a number of scenarios to best utilize the properties, provide E Street right-of-way, and to provide for temporary event parking.

It's my understanding the private crossings were maintained by UPRR for the benefit of the City for maintenance access to both properties. At the time the brewery was purchased, UPRR wanted to close both of these crossings but allowed them to remain open for occasional maintenance access. I'll address each of the vehicular and pedestrian crossing options below.

Option 1 - Grade-Separated Crossing of E Street Connector. The option would extend E Street to the east to connect with Cleveland Ave SE. This option would cross the UPRR tracks south of the existing private crossings. The bridge would need to follow the latest edition of the Union Pacific Railroad-BNSF Railway Guidelines for Railroad Grade Separation Projects. Approval of this concept would be fairly straight forward with all likelihood of approval. The minimum permanent vertical clearance shall be 23'-4" from the top of the existing rail and require horizontal clearances that would place the piers and abutments outside of the UPRR R/W. If the piers are within 25' of an existing track or proposed future track pier protection will be required. All drainage will need to be diverted away from the UPRR R/W. The following design submittals will be required: Concept, 30%, and Final. This is the option that will be viewed favorably by the UPRR.

Option 2 - Event parking on the west side of the UPRR R/W. This option utilizes the publicly owned property to the west of the UPRR R/W for event parking. There will be no crossing or access to the UPRR R/W and as such, there will be no involvement with UPRR for this option. The private crossings and UPRR R/W should be clearly closed during these events to prevent errant vehicles and pedestrians from crossing into their R/W. It's also recommended that temporary fencing be placed along the R/W to keep pedestrians from potential conflict with trains.

Option 3 - Event parking on the east side of the tracks. This would require vehicular access via E Street Connect and the use of the two private crossings for pedestrian access between parking and event locations. It's my understanding this would not be something that UPRR would consider for safety reasons and because it would limit their use of the yard track. They do not want events with large numbers of people wandering from one side of the tracks to the other even with a flagger present. It may warrant some further discussion with UPRR representatives in the future, but the likelihood of this being allowed is very slim.

Option 4 - Permanent at-grade pedestrian crossing. This would be considered a new crossing and the UPRR Public Projects Manual states: "Every effort must be made to obtain alternative access using grade separations, parallel or other roads leading to existing crossings, and access from other directions." In addition, they state: "Union Pacific expects communities to engage in a study to identify crossings for closure. Proposals for establishing a new At-Grade Crossing shall identify three or more crossings for closure for each proposed new crossing opened. These crossings identified shall have the same characteristics as the new proposed at-grade crossing, (i.e., similar average daily traffic / train counts, etc.). In addition, there may be specific engineering or rail operation considerations that would prevent an establishment of a new crossing." As stated, UPRR expects 3+ crossing closures for each new crossing. Even if these criteria were met, the City would be required to own the property on both sides of the crossing. In addition, UPRR would oppose it on the basis that it will restrict their use and operation of their yard. I do not believe they will give an exemption to these requirements at this location making permitting extremely difficult and unlikely.

Option 5 - Permanent at-grade vehicular crossing. The requirements for this option will be the same as those for Option 4, the pedestrian crossing. It will be extremely difficult and unlikely.

In my opinion, options 1 & 2 are the only viable options with any likelihood of receiving approval from UPRR. If you have any questions, or if I can be of any further assistance, please call. I attached several pictures of critical locations on the next page.

Thank You,

Thomas W. Wiser

Thomas W. Wiser, P.E.
Consulting Railway Engineer

8 Floodplain Considerations

8.1 Previous Floodplain Analysis

The Hydraulic Modeling Interim Project Summary by Brown & Caldwell/Cardno, dated July 21, 2016, models the local Deschutes River floodplain during the 100-year flood event. This provides a baseline 100-year flood event analysis using the existing Deschutes River conditions and the existing valley floor conditions. In 2023, Stantec performed additional analysis of the Deschutes River basin flooding with their modeling beginning upstream in the vicinity of the Henderson Boulevard bridge at Pioneer Park. This additional analysis provides an improved model of future flooding conditions and should be the basis of flood mitigation modeling for development work in the portion of the valley where LOTTs parcels are situated.

The 2016 model was unique in that the analysis extrapolates the baseline flood model data to identify constraints affecting the development of a future LOTT treatment plant within the Deschutes Valley while also considering potential development and mitigation alternatives. It is noted in the 2016 report summary that consideration of the future E Street alignment, potentially contaminated soils, river habitat, and other developer-driven conditions will play the biggest roles in establishing a preferred mitigation strategy in the future.

Initial efforts documented the existing floodplain geomorphology and hydraulic conditions of LOTT's Deschutes valley properties along with modeling baseline floodwater elevations and 2-dimensional hydraulic modeling to assess several potential development and mitigation flood event scenarios. It also noted that that analysis is based upon the 2012 Flood Insurance Rate Map information.

The 2016 analysis identifies that suitable mitigation strategies can be implemented to allow for development within the floodplain. All of the strategies considered require a large quantity of earthmoving throughout the valley floor. The general strategy is to cut and lower the ground elevation in proximity to the river and to fill and raise the ground in areas farther from the river. This strategy focuses the surface flood water flows along the river and results in narrowing the floodway in a manner that the average ground elevation across the floodplain is unchanged.

8.2 Floodplain Habitat

The City floodplain ordinance considers the loss of floodplain area to be a loss of habitat. Much of the current floodplain in the Deschutes River valley is developed in a manner that physically separates the outlying floodplain from the river, resulting in the majority of the existing floodplain having little functional habitat value.

8.3 Soil Excavation in the Floodplain

Based upon known historic site operations and observations listed in the site assessments and Phase I Environmental report, there is a risk of encountering contaminated soil during earthwork operations. If excavated site soils cannot be reused due to the presence of contamination or soil characteristics, there will be additional costs for hauling and disposing of unsuitable material off-site and importing additional suitable fill.

8.4 Floodplain Storage Mitigation Strategies

Potential mitigation strategies include engineered berms and excavated features to elevate the treatment facility footprint out of the floodplain. The preliminary mitigation cost estimate determined that earthwork costs could range from $4.8M to $13 M in 2016 dollars, and approximately $7.3M to $19.9M in 2024 dollars. The range of costs is due to the uncertainty in the amount of soil contamination and whether that contaminated soil can be disposed of on-site or will require off-site disposal. In determining the cost for this earthwork, Brown & Caldwell assumed that 50% of the soil encountered would be considered contaminated and require special treatment. The lower cost assumes that contaminated soils are able to be placed on-site and covered with parking or other hard surfacing. We understand that the Flood Mitigation Study considered the creation of a fill area of approximately 10 acres in size. As the city seeks to determine the applicability of this information to potential development scenarios on the parcels, it is reasonable to assume a fairly linear relationship between the acreage of the fill area and the estimated cost for the required earthwork.

Considerations:

If acquisition of the subject parcels is contingent upon development for uses other than parks, open, space or recreation, it is recommended that the city perform a floodplain analysis (based upon the most current flood data from Stantec) to confirm that 1) the desired development scope may reasonably obtain FEMA approval of the required floodplain mitigation, and that 2) the associated earthwork cost is acceptable.

As noted in other portions of the report, it is also recommended that Phase II ESA investigation be performed to identify whether soil contamination is present.

9 Phase I Environmental

At the time that LOTT evaluated their purchase of the subject properties, they contracted with Brown & Caldwell to perform a Phase 1 Environmental Site Assessment. Their 2011 Phase 1 ESA identified potential areas of concern and included recommendations for actions to further investigate the areas of potential concern. We understand that LOTT has not performed a Phase II Environmental Site Assessment on these properties and purchased the property from Capital Salvage in an "as-is" condition, including with respect to both soil and groundwater contamination.

As part of this Feasibility Report, Landau Associates visited the site to observe the existing conditions and also performed an independent review of Brown & Caldwell's 2011 and 2013 Phase I Environmental Site Assessment. Below is a summary of their findings and recommendations.

9.1 LANDAU ASSOCIATES SITE VISIT AND REVIEW OF PHASE I ESAs

The following areas of concern were identified in the 2011 and 2013 Phase I ESAs. It should be noted that the Phase I reports did not identify these concerns as Real Environmental Concerns; however, they did recommend that these concerns be further investigated.

9.1.1 Electrical Transformers - There were several transformers located throughout Parcel Nos. 09470045000 and 09470003000 during the 2011 site reconnaissance, some of which appeared to contain PCB oil and be in poor condition.

9.1.2 Above Ground Storage Tanks - Several ASTs and evidence of former ASTs (i.e. surface staining, partially dismantled piping, a spill containment structure) were identified on all three parcels in the 2011 and 2013 Phase I ESAs. Although many of these ASTs were visibly empty or contained labels that indicated that they did not contain hazardous substances or petroleum products, work completed in the Phase I ESAs did not verify the historical contents of the ASTs and could not determine the presence or absence of historical spills or leaks associated with these tanks. Many of these ASTs have likely been removed from the property since the completion of the Phase I ESAs.

Note: On March 26, 2024, SCJ interviewed Mr. Kim Austin, who was employed at the Olympia Brewery for approximately 30 years prior to its closing managing maintenance activities on the subject parcels. Mr. Austin indicated that the ASTs contained propane for the operation of fork lifts, alcohol in the alcohol tanks for beer processing, and Bunker C Oil in the large tank which was located in the concrete Spill Control Area. It was noted that the Bunker C Oil was piped from the AST to the boiler in an above ground insulated pipe, thereby reducing the potential for soil contamination associated with the boiler fuel.

9.1.3 Truck Wash Station - Site reconnaissance revealed the presence of a potential former truck wash station on the south side of Parcel No. 09470045000.

Note: From SCJ's interview with the former OBML, we understand that the truck wash was used for rinsing the boiler ash off of cars and trucks. There was no recollection of other usage.

9.1.4 Undocumented Fill - Fill material consisting primarily of pavement, cement, and other construction equipment is present and observed at ground surface level on Parcel No. 09470021000. Other fill of unknown types may be buried. Dumping was observed on this parcel during the 2011 Phase I, in which it was considered an adjoining property. Discarded paint cans, tires, and construction materials were observed in the vicinity of the fill material during the 2013 Phase I ESA.

9.1.5 UPRR - A railroad has run through the center of the subject property since at least 1937.

9.1.6 Storm Drain Runoff

Stormwater runoff appears to be directed from Cleveland Ave SE onto Parcel No. 09470045000. Additionally, during the 2011 Phase I ESA, a pipe approximately five feet in diameter was observed leading from Cleveland Ave SE to the vicinity of the southernmost building on this parcel. The east wall of the building was discolored near where the pipe used to connect. **Landau recommends surface and/or subsurface sampling in this area in order to identify potential contamination related to the runoff.**

Note: From our March 26th interview, we understand that this large diameter pipe was used to convey filled beer cans to the warehouse facility for storage and loading for shipping.

What appears to be a storm drainage pipe located west of the Alcohol Tanks & main parking and east of the Deschutes River has been noted as discharging rust colored runoff during and after rainfall events. This has been noted in aerial photos and by site observations. **We recommend that the discharge be tested to identify the cause of the discoloration.**

9.2 LANDAU ASSOCIATES RECOMMENDATIONS

Landau has the following recommendations based on the findings of the 2011 and 2013 Phase I ESAs:

9.2.1 Electrical Transformers

An electrical substation was identified in the northern portion of Parcel No. 09470003000, and five electrical transformers containing or possibly containing PCBs were identified across three areas on Parcel Nos. 09470003000 and 09470045000. **Landau recommends limited surface and/or subsurface sampling in each of these four areas in order to identify potential contamination resulting in leaks or spills of PCBs from the substation and transformers.**

9.2.2 Above Ground Storage Tanks

At least nine ASTs or areas with evidence of former ASTs were identified across five areas in the 2011 and 2013 Phase I documents. Eight of the nine ASTs were identified on Parcel No. 09470003000, and one additional AST was identified on Parcel No. 09470021000. Aside from two alcohol tanks located on Parcel No. 09470003000, the former contents of these ASTs are unknown. **Landau recommends limited**

surface and/or subsurface sampling in each of these five areas in order to identify potential contamination resulting in leaks or spills from the former ASTs.

9.2.3 Truck Wash Station

A truck wash station was identified on the southern portion of Parcel No. 09470045000. **Landau recommends limited surface and/or subsurface sampling in the vicinity of the truck wash station in order to identify potential contamination resulting from the historical use of cleaning solvents and/or petroleum-contaminated runoff.**

9.2.4 Undocumented Fill

Fill material from an unknown source containing pavement, cement, and construction equipment was observed on the north side of Parcel No. 09470021000. Discarded paint cans, tires, and piles of construction materials were also observed in the vicinity of this fill material. **Landau recommends surface and/or subsurface sampling in this area in order to identify potential contamination resulting from the dumped materials and/or the constituents of the fill material.**

9.2.5 UPRR

A railroad runs approximately north-south between Parcel Nos. 09470045000 and 09470021000 and Parcel No. 09470003000. **Landau recommends limited surface and/or subsurface sampling on the portions of the subject property parcels closest to the railroad in order to identify potential contaminants up to and including creosote from old railroad ties, metals deposited by air emissions from coal-powered trains, maintenance fluids from train equipment, and potential leaks from petroleum and hazardous materials containers carried on the rail cars.**

The following Summary of Property Actions provided by LOTT lists the property actions they have taken to address some of the potential areas of concern.

LOTT property boundaries

Hazardous material assessment

Demolition completed

Deschutes Valley Property Structures

LOTT Clean Water Alliance

Summary of Property Actions

December 2011:	Purchased 36 acres of Deschutes Valley property for potential future treatment facility
December 2012:	Purchased additional 7 acres of adjacent Deschutes Valley property
October 2014:	Began master planning effort for future site development
August 2016:	Completed a Condition Assessment, Hydraulic Assessment, and paused further master planning efforts
May 2017:	Orion completed hazardous materials inventory for two site structures
May 2018:	Abatement of hazardous materials at two structures and demolition of wooden storage building
December 2018:	Demolition of security building (guard shack)
March 2019:	Orion completed hazardous materials inventory for remaining site structures
March 2019:	Gray & Osbourne developed cost estimates for structure removal
June 2019:	Confirmed ownership of main substation by Puget Sound Energy
November 2019:	Drained oil from transformers in LOTT-owned substation
December 2019:	Obtained quote to remove and recycle transformer and cabinets, paused removal action
September 2020:	Demolition of alcohol recovery building, pesticide cabinet, paint storage shed
June 2020:	Plans and specs for demolition of boiler building completed for future use
October 2021:	Removal of transformers in LOTT-owned substation

Considerations:

Based upon information provided by LOTT, several items in the Phase I ESAs have been addressed (as noted in the green in their Summary of Property Action Exhibit – Demolition Completed). As part of a Purchase and Sale Agreement, it is recommended that the City, LOTT and an environmental consultant perform a site visit to confirm the scope of the Phase II testing. During the PSA Due Diligence period and prior to closing on the LOTT Parcels, it is recommended that the Phase II ESA be completed and the results reviewed to confirm that there are no known contaminants on the site that will preclude use of the property in a manner that supports the applicable goals and objectives of the City.

Appendix A

Deschutes River Valley Feasibility Considerations
E Street Extension Study (Dec 2018) with Appendices
- Alternatives Analysis – Crossing Locations
- Alternatives Analysis – E Street Connection Alternatives
- Retaining Wall Design
- Flood Plain Impacts
- Bridge Concepts
- Geotechnical Evaluation
- Environmental Screening
- Railroad Crossing Coordination (HDR)
- Traffic Analysis/Phased Construction

Deschutes Valley Properties - Considerations Regarding Property Acquisition

	Consideration	Action	Outcome
Land Use	Limited Land Use potential may be experienced due impacts on the property from the presence of the Deschutes River, Union Pacific Railroad, surrrounding development and site topography. These all result in access limitations and floodplain impacts to the subject property. For these reasons, there are linitation in the types of uses that can be successfully developed on the property. If purchasing these properties is contingent upon the ability to develop the subject properties with one or more new buildings within the floodplain, then it is recommended that the city identify the size and type of development and the corresponding property area to be raised above the floodplain to accommodate the proposed development. Based upon this information, a more precise flood analysis can be performed to identify the likelihood of FEMA approval and the associated cost.		
Site Access	Suitable Property Access: Since there is no public vehicular access to the parcels at this time, prior to closing on the property it is recommended that interim and permanent access is verified as acceptable.		
Transportation	When the existing private bridge is removed (as part of the E Street Extension) the parcels to the east of the Deschutes River will no longer be provided with vehicular or pedestrian access. We recommend that the City confirm that a suitable access plan has been identified for the parcels located east of the river.		
UPRR License Agreement	Prior to closing on the property, we recommend that the city reach agreement with Union Pacific regarding the terms of a new license agreement with the city. Knowing that one intention in purchasing the property is to obtain the right way for the construction of the E Street extension, we also recommend that the license agreement include the necessary access and use of the UPRR right of way to enable reasonable construction activities.		
Elevated Pedestrian Crossing	As discussed in Section 6, Temporary Parking for Events, the long-term parking configuration anticipates parking to be located east of UPRR with the E St. connector in place. In this scenario, pedestrian crossing over the UPRR is anticipated to require a grade separated crossing.		
Temporary Parking for Events	As discussed above, we recommend budgeting for the inclusion of pedestrian access over the UPRR right-of-way in tandem with the E Street Extension improvements.		
Union Pacific Railroad License Agreement	We recommend that the City of Tumwater initiate negotiations with UPRR in advance of purchasing the property to ensure that there is adequate vehicular and pedestrian access across the UPRR right-of-way. We also recommend that the license agreement include the necessary access and use of the UPRR right-of-way to enable reasonable construction activities.		
Liability Insurance	It is also recommended that the City investigate the cost for liability insurance for use of the event parking adjacent to an active railroad.		

Identify Initial Scope for Additional Environmental Investigation	Based upon information provided by LOTT, several items in the Phase I ESAs have been addressed (as noted in LOTT's Summary of Property Action Exhibit – Demolition Completed). As part of the Due Diligence investigation associated with a Purchase and Sale Agreement, it is recommended that the City, LOTT and an environmental consultant perform a site visit to confirm the necessary scope of the Phase II testing. Prior to closing on the LOTT Parcels, it is recommended that the Phase II ESA be completed and the results reviewed to confirm that there are no known contaminants on the site that will preclude (make impractical) use of the property in a manner that supports the applicable goals and objectives of the City. To verify the suitability of the West parcel for riparian corridor enhancement, prior to purchase of the property, we recommend shallow testing of the soil for potential contaminants within the proposed mitigation buffer area.		
Public Interaction with Potential Environmental Contamination	If a Phase I ESA indicated a potential area of concern, there are potential liability and public safety issues associated with not having Phase II testing performed in areas that will be used by the public. Preliminary testing for hydrocarbons and heavy metals is recommended within 1 ft of the surface prior to any permit review process. Basic soil test pits to determine fill depth and subsoil conditions may be warranted in previously filled areas that will be excavated or graded for mitigation purposes.		
Riparian Enhancement	The City may want to identify the preferred riparian enhancement scenario and obtain a ROM cost to assess the viability of this property to serve the enhancement and mitigation objectives of the City.		