

**Exhibit A to Resolution No. 11-4280**

**2011 South/North Land Use Final Order Amendment**

**Columbia River Crossing Project  
Expo Center/Hayden Island Segment**

**Adopted by the Metro Council**

**August 11, 2011**

***DRAFT: UPDATED 7/13/11***

## **1. Introduction**

This document constitutes a Land Use Final Order (LUFO) for the South/North Project in accordance with Oregon Laws 1996, Chapter 12 (House Bill 3478). This 2011 South/North LUFO Amendment is the fifth in a series of LUFOs adopted by the Metro Council that established or amended the light rail route, light rail stations, light rail park-and-ride lots and maintenance facilities, and the highway improvements for the South/North Project, including their locations. The four previously adopted LUFOs are as follows:

- On July 23, 1998, the Metro Council adopted Resolution No. 98-2673 (the 1998 LUFO), establishing the initial light rail route, stations, lots and maintenance facilities and the highway improvements, including their locations, for the South/North Project.
- On October 28, 1999, the Metro Council adopted Resolution No. 99-2853A (the 1999 LUFO), amending the 1998 LUFO to reflect revisions for that portion of the South/North Project extending from the Steel Bridge northward to the Portland Metropolitan Exposition Center (Expo Center), primarily along Interstate Avenue. The 1999 LUFO modified the northern light rail alignment; established, relocated or expanded light rail station locations along that alignment; and authorized park-and-ride lots at Portland International Raceway (PIR) and the Expo Center along the light rail route.
- On January 15, 2004, the Metro Council adopted Resolution No. 03-3372 (the 2004 LUFO), further amending the previous South/North LUFO resolutions to (1) establish the light rail route, stations and park-and-ride lots, including their locations, along the Interstate-205 right-of-way from the Gateway Transit Center to Clackamas Regional Center; (2) modify the route along the downtown Portland Transit Mall to extend light rail transit (LRT) to Portland State University (PSU) and establish, adjust or relocate station locations; (3) modify the 1998 LUFO for the segment from Portland to Milwaukie by revising the alignment and adding study areas; (4) remove the 1998 LUFO designations from Milwaukie to Clackamas Regional Center; and (5) complete technical amendments to the 1999 LUFO alignment to reflect the final built configuration at certain stations consistent with the Full Funding Agreement Grant approved by the Federal Transit Administration.
- On July 25, 2008, the Metro Council adopted Resolution No. 08-3964 (the 2008 LUFO), amending the 1998 and 2004 South/North LUFOs as they relate to the segment of the South/North Project extending from Portland State University (PSU) in downtown Portland through SE Portland and downtown Milwaukie to SE Park Avenue in unincorporated Clackamas County. The 2008 LUFO realigned the light rail route between PSU and SE 7<sup>th</sup> Avenue; established the route from SE Tacoma Street to SE Park Avenue; relocated light rail stations or authorized new stations along the light rail route; and established the park-and-ride lots and highway improvements for the Portland to Milwaukie segment.

This 2011 South/North LUFO Amendment (the 2011 LUFO) amends the 1998 LUFO as it relates to the segment of the South/North Project in north Portland extending northward from the Expo Center and the Interstate 5/Victory Boulevard Interchange to the Oregon/Washington state line on the Columbia River. This 2011 LUFO realigns the light rail route between the Expo Center and the Oregon/Washington state line westward from its alignment in the 1998 LUFO and it relocates the Hayden Island station west of its previous location. Over the river it provides for the light rail route to be accommodated on the lower tier of a new southbound Interstate 5 bridge. This 2011 LUFO also establishes a number of highway improvements, including new northbound and southbound Interstate 5 Columbia River bridges and removal of the existing bridges; widening of Interstate 5 in both directions between approximately N Victory Boulevard and the Oregon/Washington state line on the Columbia River; new or modified interchanges at N Marine Drive, Hayden Island and Victory Boulevard; a new integrated rail/vehicular/bicycle pedestrian bridge connecting Hayden Island with the Expo Center; and roadway realignments, widenings, modifications and new connections within the project area.

This 2011 LUFO further provides for expansion and improvement of the Ruby Junction Maintenance Facility along NW Eleven Mile Avenue in Gresham within the facility boundaries established in the 2008 LUFO, to accommodate and maintain additional LRT vehicles associated with the Columbia River Crossing Project.

## **2. Requirements of House Bill 3478**

Chapter 12 of the 1998 Oregon Laws (House Bill 3478) provides procedures for siting the South/North light rail route, associated light rail facilities, and the highway improvements included in the South/North Project. In brief, it provides a set of regulations for making and for appealing land use decisions related to the South/North Project as it may be amended or extended from time to time. The law includes a provision directing the Land Conservation and Development Commission (LCDC) to adopt criteria for land use final orders; a requirement that TriMet make application for land use final orders; requirements for how the Metro Council conducts its public hearings; and procedures for appeal.

Pursuant to House Bill 3478, upon application by TriMet and following a public hearing held on August 11, 2011, and in consideration of the whole record and based on a finding that there is substantial evidence supporting the proposed action, the Metro Council hereby adopts this 2011 South/North LUFO Amendment for the Project by Resolution No. 11-4280.

## **3. Establishment of Columbia River Crossing Project Light Rail Routes, Stations, Maintenance Facilities and Highway Improvements, Including their Locations**

The Metro Council approves the light rail route, light rail station and highway improvements identified textually below and illustrated in the location boundary maps (**Figures 1.1 to 1.3**) that follow. These light rail facilities and highway improvements and their location boundaries are identical to those that the LUFO Steering Committee and ODOT recommended to TriMet and that TriMet included in its application for a LUFO amendment.

The Metro Council also approves expansion and improvement of the Ruby Junction Maintenance Facility within the location boundaries established in the 2008 LUFO to accommodate light rail vehicles associated with the Columbia River Crossing Project. **See Figure 2.1.**

The LUFO boundary maps contained in this order were prepared using cad line work of proposed improvements on top of aerial photos taken in 2005 and 2007. The maps illustrate the adopted boundaries at an approximate scale of one inch equals 400 feet. The boundaries shown on these maps represent the areas within which the light rail facilities and highway improvements may be located.

Preliminary and final engineering have not yet been completed. Preliminary and advanced preliminary engineering will continue until about October 2012, when the Project is expected to enter into its final engineering phase. With more detailed engineering and environmental information available, some variations from the illustrations in the attached figures may be needed when the project is built. Accordingly, the LUFO shows a larger, more generalized boundary than that actually needed for the track alignment, station and highway improvements to accommodate such variations. Final location of the light rail facilities and highway improvements anywhere within the boundaries found on the LUFO maps would be consistent with this LUFO.

The 1998 LUFO established a light rail alignment that included a segment extending from downtown Portland across the Steel Bridge and through northeast and north Portland to the Expo Center and the Oregon/Washington state line. The 1999 LUFO amended the light rail alignment for that portion located between approximately the Steel Bridge and the Expo Center.

This 2011 LUFO further modifies the 1998 LUFO by:

- 1) Relocating the light rail alignment and Hayden Island station farther to the west;
- 2) Relocating the light rail alignment leading into Vancouver, Washington onto the lower tier of a new southbound Interstate 5 bridge;
- 3) Providing significant highway improvements between approximately N. Victory Boulevard and the Oregon/Washington state line on the Columbia River, including but not limited to new northbound and southbound Interstate 5 bridges to accommodate highway, rail, pedestrian and bicycle travel; widening of northbound and southbound Interstate 5 to accommodate three travel lanes and two auxiliary lanes; and interchange and roadway modifications and improvements and new roadway.

In the 1998 LUFO there were two segments that, together, provided LRT service between the Expo Center and the Oregon/Washington state line on the Columbia River. These segments were the North Portland segment and the Hayden Island segment. In the 1999 LUFO, the Metro Council renamed the portion of the North Portland segment extending from south of the Columbia Slough near N Columbia Boulevard to the Expo Center the "Expo Center

Segment.” This 2011 LUFO amendment retains the name “Expo Center Segment” and extends it to N Marine Drive, where the Hayden Island Segment begins. This 2011 LUFO amendment also extends the Expo Center and Hayden Island segments east of Interstate 5 approximately 2,500 feet to include all areas identified for highway improvements. For convenience purposes, these two segments are consolidated and addressed as a single segment (Expo Center/Hayden Island).

### **Light Rail Alignment and Station**

From the Expo Center station, the light rail alignment proceeds northward under N Marine Drive and onto a new, integrated light rail/vehicular/bicycle/pedestrian bridge crossing over the North Portland Harbor onto Hayden Island west of I-5. The alignment then continues northward towards Vancouver, Washington, crossing over N Hayden Island Drive onto the lower deck of the new southbound Interstate 5 bridge.

A single light rail station is located in the Expo Center/Hayden Island Segment. The Hayden Island Station will be elevated and positioned adjacent to I-5, over or near Tomahawk Island Drive. Tomahawk Island Drive will be extended under I-5 to provide a third east/west street connection for Hayden Island.

There are no new park-and-ride lots or maintenance facilities within the Expo Center/Hayden Island Segment.

### **Highway Improvements**

The highway improvements in the Expo Center/Hayden Island Segment include the following:

1. New northbound and southbound I-5 Columbia River bridges and removal of the existing I-5 Columbia River bridges. The new southbound bridge is a two-tier bridge with highway on the upper deck and light rail on the lower deck. The new northbound bridge is a two-tier bridge with highway on the upper deck and bicycle and pedestrian facilities on the lower deck. Each new bridge will include three travel lanes and two auxiliary lanes.
2. Widening of I-5 in both the northbound and southbound directions from N Victory Boulevard to the Oregon/Washington state line. Northbound, I-5 will widen from three travel lanes at N Victory Boulevard to three travel lanes and two auxiliary lanes on the new northbound I-5 Columbia River bridge. Southbound, I-5 will narrow from three travel lanes and two auxiliary lanes on the new southbound I-5 Columbia River bridge to three lanes south of N Victory Boulevard.
3. A newly designed I-5/Marine Drive interchange, including ramps connecting I-5 with N Marine Drive and NE Martin Luther King Jr. Boulevard.
4. A newly designed I-5/Hayden Island interchange including relocated northbound and southbound exit and entrance ramps.

5. A new integrated light rail/vehicular/bicycle/pedestrian bridge west of I-5 connecting Hayden Island with the Expo Center and N Expo Road.
6. Realignment and widening of NE Martin Luther King Jr. Boulevard between the new I-5/Marine Drive interchange and approximately N Hayden Meadows Drive.
7. Realignment and widening of N Marine Drive between N Gantenbein Avenue and N Vancouver Way.
8. Modification, widening and extension of N Vancouver Way between east of N Haney Drive and approximately the light rail alignment west of I-5.
9. Realignment and widening of NE Union Court between N Hayden Meadows Drive and N Vancouver Way.
10. A new northbound connection between NE Martin Luther King Jr. Boulevard and N Vancouver Way and a new southbound connection between NE Martin Luther King Jr. Boulevard and NE Union Court.
11. Realignments, widening and roadway modifications to N Jantzen Avenue, N Jantzen Drive and N Hayden Island Drive.
12. Modification, widening and extension of N Tomahawk Island Drive from east of N Jantzen Drive to the west of I-5.
13. Construction of a new roadway west of I-5 and the light rail alignment between N Jantzen Avenue and N Hayden Island Drive.
14. A new public road extending N Expo Road westward to N Force Avenue.

See **Figures 1.1 to 1.3** of the LUFO for the boundaries within which the above described light rail facilities and highway improvements would be located.

### **Ruby Junction Maintenance Facility**

The Ruby Junction Maintenance Facility along NW Eleven Mile Avenue in Gresham was first authorized in 1980 as part of the Portland to Gresham light rail project. The facility includes light rail tracks, vehicle storage spaces and maintenance bays, an operation center, and related facilities necessary to maintain light rail vehicles.

As part of the 2008 LUFO amendments for the Portland to Milwaukie Project, the Metro Council approved the modification and expansion of the Ruby Junction Maintenance Facility and adopted location boundaries for it. See **Figure 2.1** of this 2011 LUFO. This LUFO authorizes the use of that facility to serve light rail vehicles associated with the Columbia River Crossing Project. Such use was expressly anticipated in the 2008 LUFO findings. Because use and improvement of the facility in connection with the Columbia River Crossing

project will occur within the location boundaries approved in 2008, no location boundary amendments are necessary.

#### **4. Interpretation of Terms**

As it did in the 1998, 1999, 2004 and 2008 LUFOs, the Metro Council interprets the terms "light rail route", "stations", "lots", "maintenance facilities" and "highway improvements" as it did in its previous South/North LUFOs, to have the following meanings:

- **"Light rail route"** means the alignment upon which the light rail tracks will be located. The light rail route will be located on land to be owned by or under the operating control of TriMet.
- **"Stations"** means those facilities to be located along the light rail route for purposes of accessing or serving the light rail system. Stations include light rail station platforms; kiss-and-ride areas; bus transfer platforms and transit centers; vendor facilities; and transit operations rooms.
- **"Lots"** means those parking structures or surface parking lots that are associated with a station, owned by or under the operating control of either TriMet or another entity with the concurrence of TriMet, and intended primarily for use by persons riding transit or carpooling. Parking structures may include some retail or office spaces in association with the primary use.
- **"Maintenance facilities"** means those facilities to be located on land to be owned or controlled by TriMet for purposes of operating, servicing, repairing or maintaining the light rail transit system, including but not limited to light rail vehicles, the light rail tracks, stations, lots, and ancillary facilities and improvements. Maintenance facilities include maintenance facility access trackways; storage tracks for light rail vehicles; service, repair and maintenance shops and equipment; office facilities; locker rooms; control and communications rooms; transit district employee and visitor parking lots; and storage areas for materials and equipment and non-revenue vehicles.
- **"Highway improvements"** include new roads, road extensions or road widenings outside existing rights-of-ways that have independent utility in themselves and are not needed to mitigate adverse traffic impacts associated with the light rail route, stations, lots or maintenance facilities.

Also consistent with its previous South/North LUFOs, the Metro Council determines that implementation of the South/North LUFO under sections 8(1)(a) and (b) of Chapter 12 of the 1996 Oregon Laws (HB 3478), including the construction, operation and maintenance of the light rail route, stations, lots and maintenance facilities and the highway improvements for the Project, necessitates and requires development approval of certain associated actions and the permitting of certain associated or ancillary facilities or improvements. These associated actions or ancillary facilities or improvements generally are required: (1) to ensure the safe and proper functioning and operation of the light rail system; (2) to provide project access; (3) to improve traffic flow, circulation or safety in the vicinity of the Project; or (4) to mitigate adverse impacts caused to the adjoining roadway network resulting from the alignment, stations, lots or maintenance facilities. For these reasons, these actions, facilities or improvements are integral and necessary parts of the Project.

The Metro Council further determines that the associated actions and ancillary facilities or improvements for the South/North Project include, but are not limited to: ties, ballast, and other track support materials such as tunnels and bridges; modifications to existing tracks; retaining walls and noise walls; culverts and other drainage systems; traction electrification equipment including substations; light rail signals and communications equipment and buildings; lighting; station, lot and maintenance facility accesses, including road accesses, pedestrian bridges and pedestrian and bicycle accessways; roadway crossing protection; and the provision of pedestrian paths, bike lanes, bus stops, bus pullouts, shelters, bicycle storage facilities and similar facilities. They also include temporary LRT construction-related roadways, staging areas and road or lane closures; roadway reconstruction, realignment, repair, widening, channelization, signalization or signal modification, lane reconfiguration or reduction, addition or modification of turning lanes or refuges, modification of traffic circulation patterns, or other modifications or improvements that provide or improve Project access, improve traffic flow, circulation or safety in the vicinity of the Project, facilitate or are necessary for the safe or proper functioning and operation of the Project, or are necessary to mitigate adverse traffic impacts created by the Project; modifications of private roadways adjoining the Project; permanent road, lane or access closures associated with and necessitated by the Project; and other associated actions or associated or ancillary facilities or improvements related to the Project.

## **5. Applicable Land Use Criteria**

On May 30, 1996, pursuant to Section 4 of House Bill 3478, LCDC established the criteria to be used by the Metro Council in making land use decisions establishing or amending the light rail route, stations, lots and maintenance facilities, and the highway improvements for the South/North Project, including their locations. The approved criteria include two procedural, six substantive, and two alignment-specific standards, set out below. Compliance with these criteria must be demonstrated.

### **Procedural Criteria**

1. Coordinate with and provide an opportunity for Clackamas and Multnomah counties, the cities of Gladstone, Milwaukie, Oregon City and Portland, the Tri-County Metropolitan Transportation District of Oregon and the Oregon Department of Transportation to submit testimony on the light rail route, light rail stations, park-and-ride lots and vehicle maintenance facilities, and the highway improvements, including their locations.
2. Hold a public hearing to provide an opportunity for the public to submit testimony on the light rail route, light rail stations, park-and-ride lots, vehicle maintenance facilities and the highway improvements, including their locations.



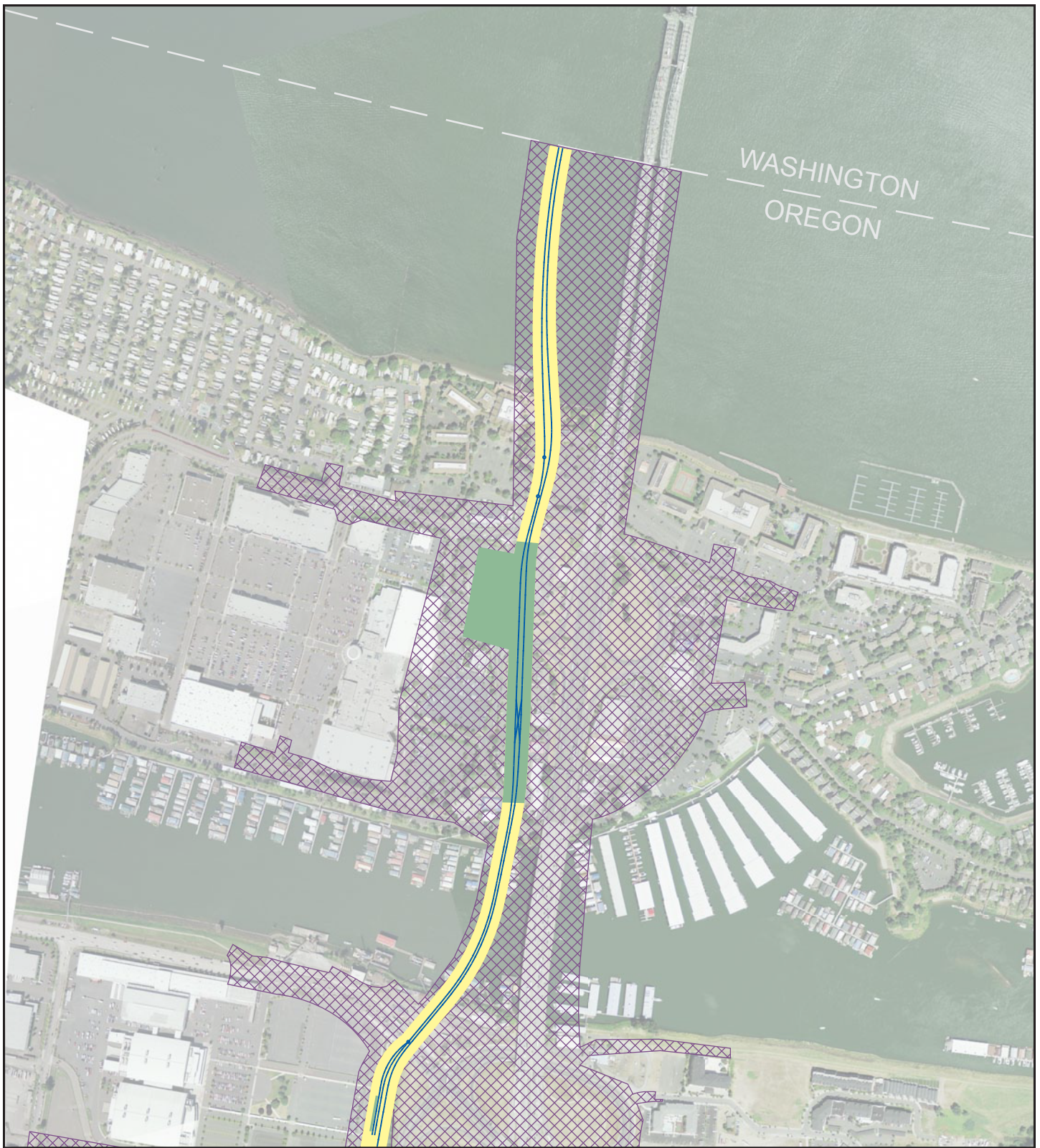
## **Substantive Criteria**

3. Identify adverse economic, social and traffic impacts on affected residential, commercial and industrial neighborhoods and mixed use centers. Identify measures to reduce those impacts which could be imposed as conditions of approval during the National Environmental Policy Act (NEPA) process, or, if reasonable and necessary, by affected local governments during the local permitting process.
  - A. Provide for a light rail route and light rail stations, park-and-ride lots and vehicle maintenance facilities, including their locations, balancing (1) the need for light rail proximity and service to present or planned residential, employment and recreational areas that are capable of enhancing transit ridership; (2) the likely contribution of light rail proximity and service to the development of an efficient and compact urban form; and (3) the need to protect affected neighborhoods from the identified adverse impacts.
  - B. Provide for associated highway improvements, including their locations, balancing (1) the need to improve the highway system with (2) the need to protect affected neighborhoods from the identified adverse impacts.
4. Identify adverse noise impacts and identify measures to reduce noise impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by affected local governments during the permitting process.
5. Identify affected landslide areas, areas of severe erosion potential, areas subject to earthquake damage and lands within the 100-year floodplain. Demonstrate that adverse impacts to persons or property can be reduced or mitigated through design or construction techniques which could be imposed during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.
6. Identify adverse impacts on significant fish and wildlife, scenic and open space, riparian, wetland and park and recreational areas, including the Willamette River Greenway, that are protected in acknowledged local comprehensive plans. Where adverse impacts cannot practicably be avoided, encourage the conservation of natural resources by demonstrating that there are measures to reduce or mitigate impacts which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.
7. Identify adverse impacts associated with stormwater runoff. Demonstrate that there are measures to provide adequate stormwater drainage retention or removal and protect water quality which could be imposed as conditions of approval during the NEPA process or, if reasonable and necessary, by local governments during the permitting process.

8. Identify adverse impacts on significant historic and cultural resources protected in acknowledged comprehensive plans. Where adverse impacts cannot practicably be avoided, identify local, state or federal review processes that are available to address and to reduce adverse impacts to the affected resources.

#### **Alignment-Specific Criteria**

9. Consider a light rail route connecting the Clackamas Town Center area with the City of Milwaukie's Downtown. Consider an extension of the light rail route connecting the City of Oregon City and the City of Gladstone with the City of Milwaukie via the Interstate 205 corridor and/or the McLoughlin Boulevard corridor.
10. Consider a light rail route connecting Portland's Central City with the City of Milwaukie's Downtown via inner southeast Portland neighborhoods and, in the City of Milwaukie, the McLoughlin Boulevard corridor, and further connecting the Central City with north and inner northeast Portland neighborhoods via the Interstate 5/Interstate Avenue corridor.





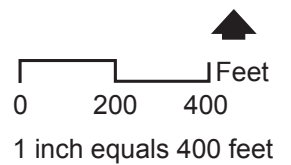
## South/North Land Use Final Order Amendment Boundary Map

**Figure 1.1**

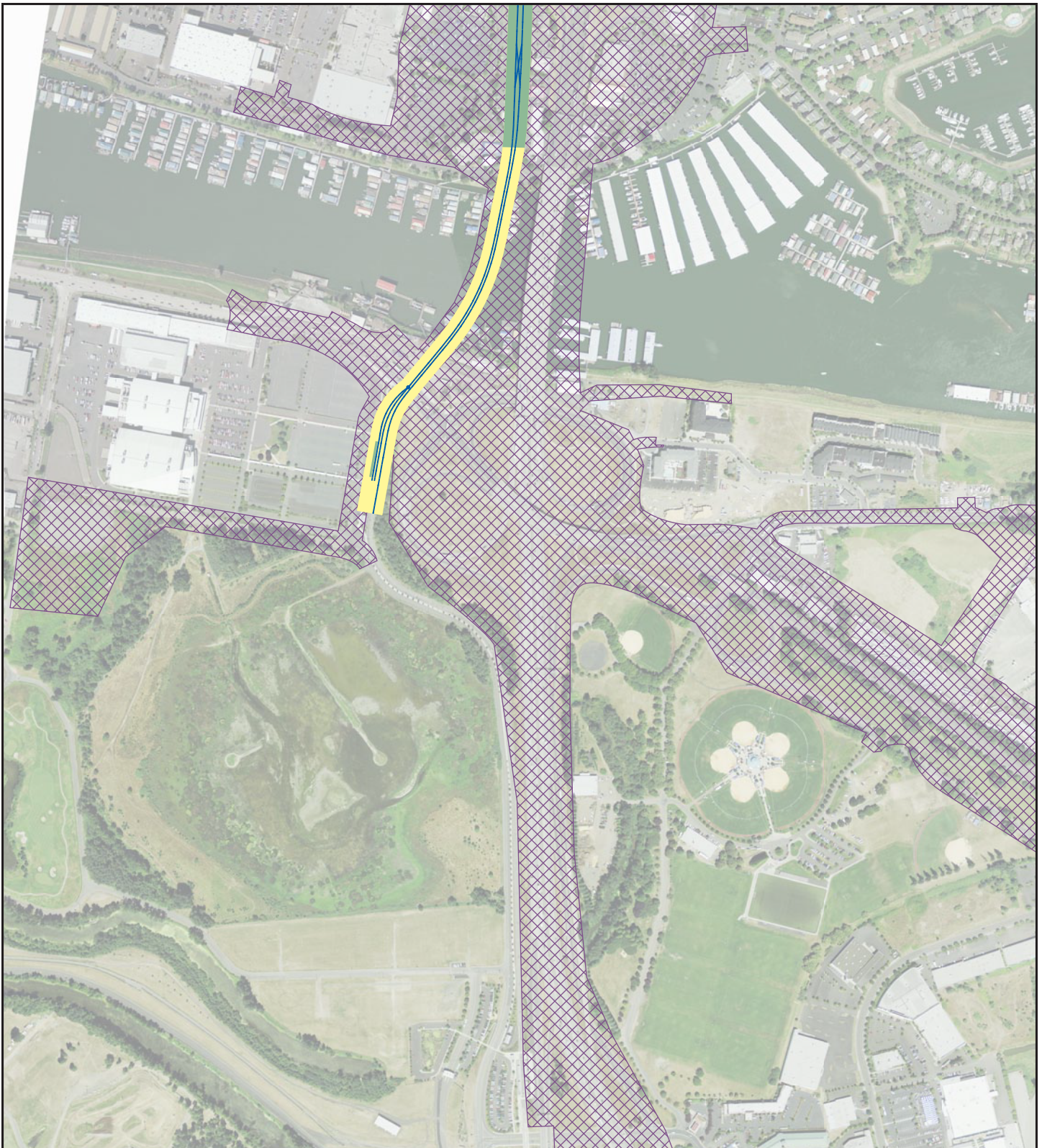
### Columbia River Crossing Project

-  Light Rail Route
-  Light Rail Stations
-  Highway improvements

-  Potential Alignment
-  Potential Station Platform










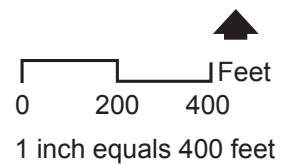
## South/North Land Use Final Order Amendment Boundary Map

**Figure 1.2**

### Columbia River Crossing Project

-  Light Rail Route
-  Light Rail Stations
-  Highway improvements

-  Potential Alignment
-  Potential Station Platform












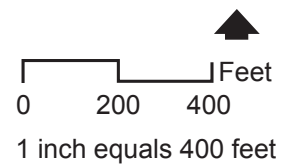
## South/North Land Use Final Order Amendment Boundary Map

**Figure 1.3**

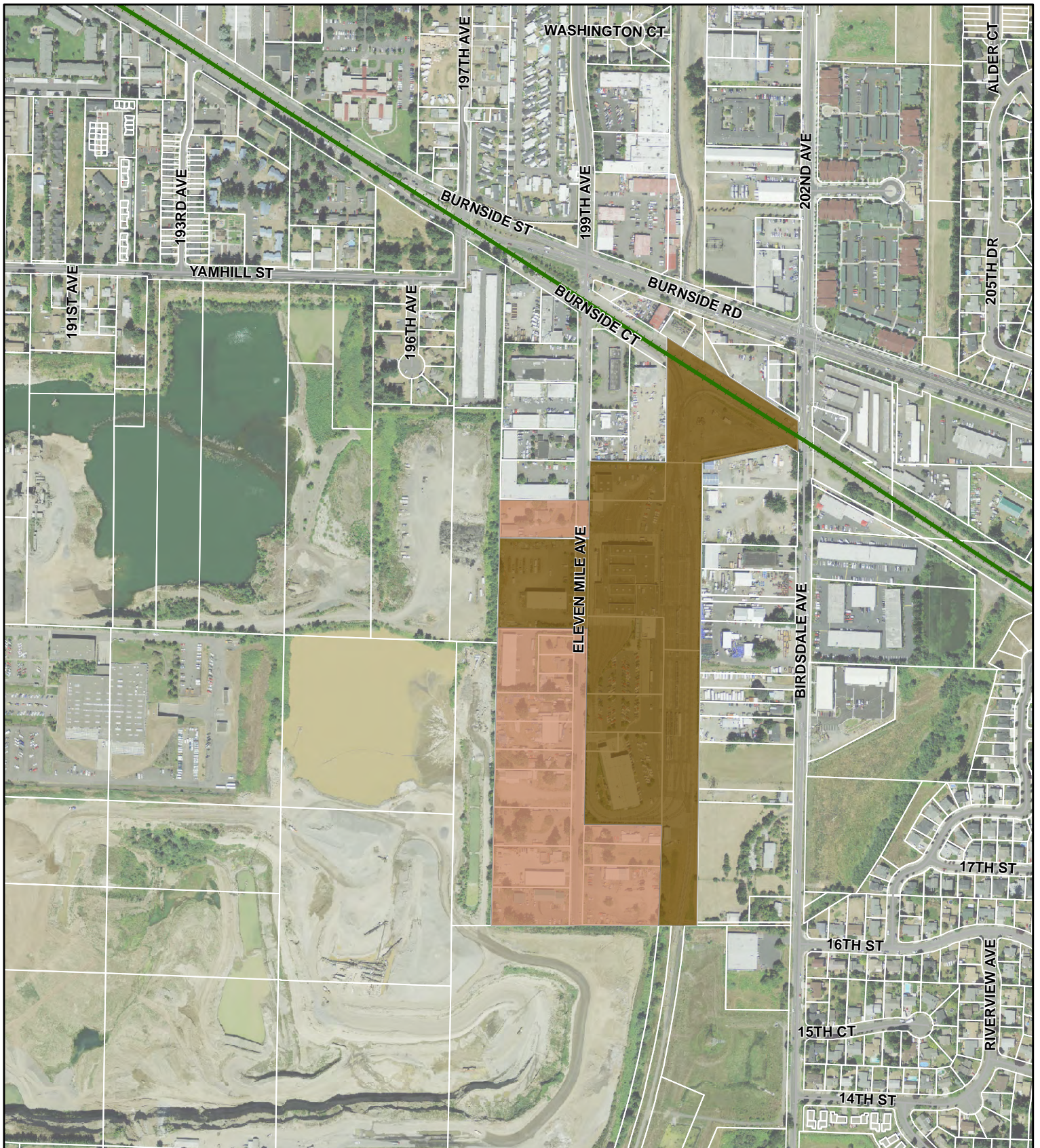
### Columbia River Crossing Project

-  Light Rail Route
-  Light Rail Stations
-  Highway improvements

-  Potential Alignment
-  Potential Station Platform







## South/North Land Use Final Order Amendment Boundary Map

Figure 2.1

### Ruby Junction Operations and Maintenance Facility

- Existing O&M
- Potential O&M expansion
- Potential Alignment
- Potential Station Platform
- Existing Light Rail



▲
 Feet  
 0      250      500  
 1 inch equals 500 feet