

PART 2. IMPLEMENTATION TOOLS

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A. 2035 COMPREHENSIVE PLAN AMENDMENTS

1. 2035 Comprehensive Plan Policy Amendments

This section presents staff's proposed 2035 Comprehensive Plan policy amendments. The section is formatted to facilitate readability by showing draft amendments on the right-hand pages and related commentary on the facing left-hand pages.

Commentary

Policy 1.15

This policy addresses intergovernmental coordination but does not currently reference tribal nations. This amendment officially recognizes tribal nations as governments and includes them in the City's intergovernmental coordination with governments on administering the Comprehensive Plan and implementation tools. This will be accomplished in a manner that supports tribal governments' cultural practices and fiscal health.

Policy 2.1.g.

This policy refers to sovereign tribes. The City's preferred term is tribal nations.

Policy 2.12

This policy references roles and responsibilities for various entities but does not reference governmental agencies or tribal governments. This amendment acknowledges the need to coordinate with other agencies and tribal governments.

Policy 4.58

This policy refers to sovereign tribes. The City's preferred term is tribal nations.

Policy 7.9

This policy is about habitat and biological communities. The fourth bullet references culturally important food sources including those associated with Native American fishing rights. Based on comments from the Confederated Tribes of the Umatilla Indian Reservation, staff is amending this policy to be more complete by adding to fishing rights - traditional foods including plants and wildlife.

- Policy 1.15** **Intergovernmental coordination.** Strive to administer the Comprehensive Plan elements and implementation tools in a manner that:
- a. Supports the efforts and fiscal health of the City, county and regional governments, and partner agencies such as school districts and transit agencies.
 - b. Supports the cultural practices and fiscal health of tribal nations.
- Policy 2.1.g.** **Partnerships and Coordination.** Maintain partnerships and coordinate land use engagement with institutions, governments, and ~~Sovereign tribes~~ tribal nations.
- Policy 2.12** **Roles and responsibilities.** Establish clear roles, rights, and responsibilities for participants and decision makers in planning and investment processes. Address roles of City bureaus, elected officials, and participants, including government agencies and tribal nations in addition to community and neighborhood leadership, business, organizations, and individuals.
- Policy 4.58** **Archaeological resources.** Protect and preserve archaeological resources, especially those sites and objects associated with Native American cultures. Work in partnership with ~~Sovereign tribes~~ tribal nations, Native American communities, and the state to protect against disturbance to Native American archaeological resources.
- Policy 7.9** **Habitat and biological communities.** Improve, or support efforts to improve, fish and wildlife habitat and biological communities. Use plans and investments to enhance the diversity, quantity, and quality of habitats, habitat corridors, and especially habitats that:
- Are rare or declining.
 - Support at-risk plant and animal species and communities.
 - Support recovery of species under the Endangered Species Act, and prevent new listings.
 - Provide culturally important food sources, including those associated with Native American fishing rights as well as traditional foods including plants and wildlife.

B. ZONING CODE AND MAP AMENDMENTS

1. Zoning Code Amendments

This section presents staff's proposed zoning code amendments. The section is formatted to facilitate readability by showing draft code amendments on the right-hand pages and related commentary on the facing left-hand pages.

Commentary

33.10.030.B.1

This update removes the word “environmental” from the reference to the “river environmental” overlay zone to clarify that rights-of-way within any of the River overlay zones, including River General, River Recreational, and River Environmental, are subject to the requirements of Title 33.

33.10.030.C.

The clarification for waterbodies subsection of when the zoning code applies is amended to state that the zoning code regulates dredging in the Central and now South reaches but not in other portions of the Willamette River and any other waterbody. This clarification is part of updating the Willamette River Greenway regulations for the South Reach. The *Natural Resources Protection Plan* for the South Reach identified significant natural resources including riverbeds, streams, drainageways and wetlands that play an important role in the life cycle of aquatic species, including the federal Endangered Species Act listed fish. Land use review will ensure that dredging activities have the least detrimental impact of aquatic habitat as practicable, and that the mitigation is conducted to offset any unavoidable impacts to aquatic habitat.

33.10 Legal Framework and Relationships

10

33.10.030 When the Zoning Code Applies

- A. **[No Change]**
- B. **Clarification for rights-of-way.** Land within private rights-of-way, including rail rights-of way and utility rights-of-way, is regulated by Title 33. Land within public rights-of-way is regulated by Title 17, Public Improvements, and not by Title 33, except in the following situations where both Titles apply:
 - 1. Rights-of-way in the greenway, river ~~environmental~~, environmental conservation, environmental protection, pleasant valley natural resource, and scenic resource overlay zones, including the creation of new rights-of-way and the expansion or vacation of existing rights-of-way;
 - 2.-5. **[No Change]**
- C. **Clarification for waterbodies.** The siting of fills or structures on or over waterbodies is subject to zoning code provisions. The zoning code does not regulate shipping, dredging, boating, and other similar uses on water bodies. The zoning code does regulate dredging in the Willamette River Central and South reaches, but does not regulate dredging on or in any other portion of the Willamette River or any other water body.
- D. **[No Change]**

Commentary

33.296.030.F.4.c.(2)

Subparagraph (2) ensures that temporary construction staging areas located within environmentally sensitive areas are always subject to the environmental and greenway regulations regardless of whether the staging area is temporary or permanent. This regulation is intended to avoid lasting detrimental impacts on these resources.

The amendment proposed here adds the River Environmental overlay zone to the list of environment-related overlay zones. This amendment should have been proposed as part of the River Plan / Central Reach project, but was inadvertently missed.

33.296 Temporary Activities

296

33.296.030 Temporary Activities Allowed

A.-G. [No change]

F. Construction activities

1.-3. [No change]

4. Construction staging areas

a.-b. [No change]

c. Staging area standards. Adjustments to the following standards are prohibited

(1) [No change]

(2) Staging areas that last longer than 3 years are subject to the regulations for permanent uses, except for staging areas located within an Environmental, River Environmental, or River Natural overlay zone, in which case the staging area is subject to the regulations for a permanent use regardless of the length of time the staging area will be in place.

(3)-(5) [No change]

G.-I. [No change]

Commentary

33.430 Environmental Overlay Zones

The table of contents for this section has been updated to remove the "Major" from the title of Section 33.430.190, Standards for Major Public Trails. As a part of the *Central City 2035 Plan*, major was incorrectly added to the title of this standard. The standard applies to all public trails and was not intended to only apply to major public trails.

33.430 Environmental Overlay Zones

430

Sections:

General

- 33.430.010 Purpose
- 33.430.015 Purpose of the Environmental Protection Zone
- 33.475.017 Purpose of the Environmental Conservation Zone
- 33.475.020 Environmental Reports
- 33.430.030 Relationship to Other Environmental Regulations
- 33.430.033 Relationship to Scenic Resources Zone
- 33.430.035 Other City Regulations
- 33.430.040 Overlay Zones and Map Symbols
- 33.430.050 Subareas of Environmental Zones
- 33.430.060 Where These Regulations Apply
- 33.430.070 When These Regulations Apply
- 33.430.080 Items Exempt From These Regulations
- 33.430.090 Prohibitions

Development Standards

- 33.430.110 Purpose
- 33.430.120 Procedure
- 33.430.130 Permit Application Requirements
- 33.430.140 General Development Standards
- 33.430.150 Standards for Utility Lines
- 33.430.160 Standards for Land Divisions and Planned Developments
- 33.430.165 Standards for Property Line Adjustments
- 33.430.170 Standards for Resource Enhancement Projects
- 33.430.175 Standards for Right-of-Way Improvements
- 33.430.180 Standards for Stormwater Outfalls
- 33.430.190 Standards for ~~Major~~ Public Trails
- 33.430.195 Standards for Tree Removal in the Scenic Resources Zone

Environmental Review

- 33.430.210 Purpose
- 33.430.220 When Review is Required
- 33.430.230 Procedure
- 33.430.240 Supplemental Application Requirements
- 33.430.250 Approval Criteria
- 33.430.260 Use of Performance Guarantees
- 33.430.270 Special Evaluation by a Trained Professional
- 33.430.280 Modification of Base Zone Development Standards

Natural Resource Management Plans

- 33.430.310 Purpose
- 33.430.320 Scope
- 33.430.330 Procedure
- 33.430.340 Components
- 33.430.350 Approval Criteria for Adoption and Amendment

Commentary

33.430.190 Standards for Major Public Trails

This section has been updated to remove the "Major" from Major Public Trails. As a part of the *Central City 2035 Plan*, major was incorrectly added to this standard. The standard is intended to apply to all public trails and not just Major Public Trails.

33.430.190 Standards for ~~Major~~ Public Trails

The following standards apply to ~~major~~ public trails and viewing areas developed in conjunction with the major public trail. All of the standards must be met.

- A. [No change]
- B. [No change]
- C. [No change]
- D. [No change]
- E. [No change]

Commentary

33.440.030.B Where these regulations apply

The City of Portland is in the process of updating the regulations for land and river area within the Willamette River Greenway boundary. Planning for the Central Reach was completed as a part of the *Central City 2035 Plan*, completed in 2018. Central Reach regulations are now in 33.475, River Overlay Zones, and applies to non-industrial properties in that reach.

South Reach regulations will be revised with adoption of the *River Plan / South Reach*, and the River Overlay Zones chapter will be applied to all land and river area within the South Reach. Chapter 33.440, Greenway Overlay Zones, will no longer apply. The changes made to 33.440.030.B remove references to the South Reach (where these regulations apply) and South Reach-specific exceptions from the chapter.

The exception for the interior of Ross and Hardtack islands has been removed because this chapter will no longer apply to Ross and Hardtack islands.

Chapter 33.440 continues to apply to a few industrial zoned sites in the Central Reach and the entirety of the North Reach. Planning for those areas will commence after the *River Plan / South Reach* is completed. When north reach planning is complete, Chapter 33.440 will no longer apply anywhere in the city and will be rescinded.

33.440 Greenway Overlay Zones

440

33.440.030 Greenway Overlay Zones

A. Purpose. [No change]

B. Where these regulations apply.

1. General. The regulations of this chapter apply to all land and fills and structures in water within the North ~~and South~~ reaches and industrially zoned sites within the Central reach of the Willamette Greenway ~~Plan boundary~~. The North ~~and South~~ reaches and industrially zoned sites within the Central reach of the Willamette Greenway ~~Plan boundary~~ are shown on Map 440-1, and are designated on the Official Zoning Maps with River Natural, River Recreational, River General, River Industrial, or River Water Quality overlay zones.
2. Exceptions. ~~a. The interior of Ross and Hardtack Islands will not be subject to the regulations of this chapter during such time as the Ross Island Management Plan is in effect.~~ ~~b.~~ The major public trail standards of Section 33.440.240 apply to all lands within the Willamette Greenway Plan boundary designated with the major public trail symbol but which are outside of the greenway zones.

C.-D.[No change]

Commentary

Maps 440-1 Willamette Greenway Public Access Map (existing Maps 1-5)

Map 440-1 is a series of maps that delineate the Willamette Greenway Boundary and where the regulations of 33.440 apply. These maps also include major trail alignments, access paths and connection points to other pedestrian paths and bicycle routes.

The changes to all 440-1 maps depict the major public trail alignments within the Willamette River Greenway boundary that were adopted in the *2035 Comprehensive Plan* (2018). There no longer are primary and interim greenway trail designations.

There is a minor change to Map 4 of 5 that deletes the northern portion of the South Reach boundary from the map and replaces it with a note to "See Map 475-1" because this area will now be subject to the requirements of 33.475, River Overlay Zones.

The deletion of Map 5 of 5 removes the rest of the South Reach area from the regulations of Chapter 440, because the requirements of 33.475, River Overlay Zones will apply to the entire South Reach area.

The remaining 4 maps are renumbered to be one of four in the series.

Willamette Greenway Public Access Map

Map 440-1

Map 1 of 5 4

Map Revised Xxxx X, 201X



Legend

----- City Boundary

Greenway Boundary

----- Major Public Trails



Connection points to
other pedestrian paths
and bicycle routes



Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Map 440-1 (Map 2 of ~~54~~)

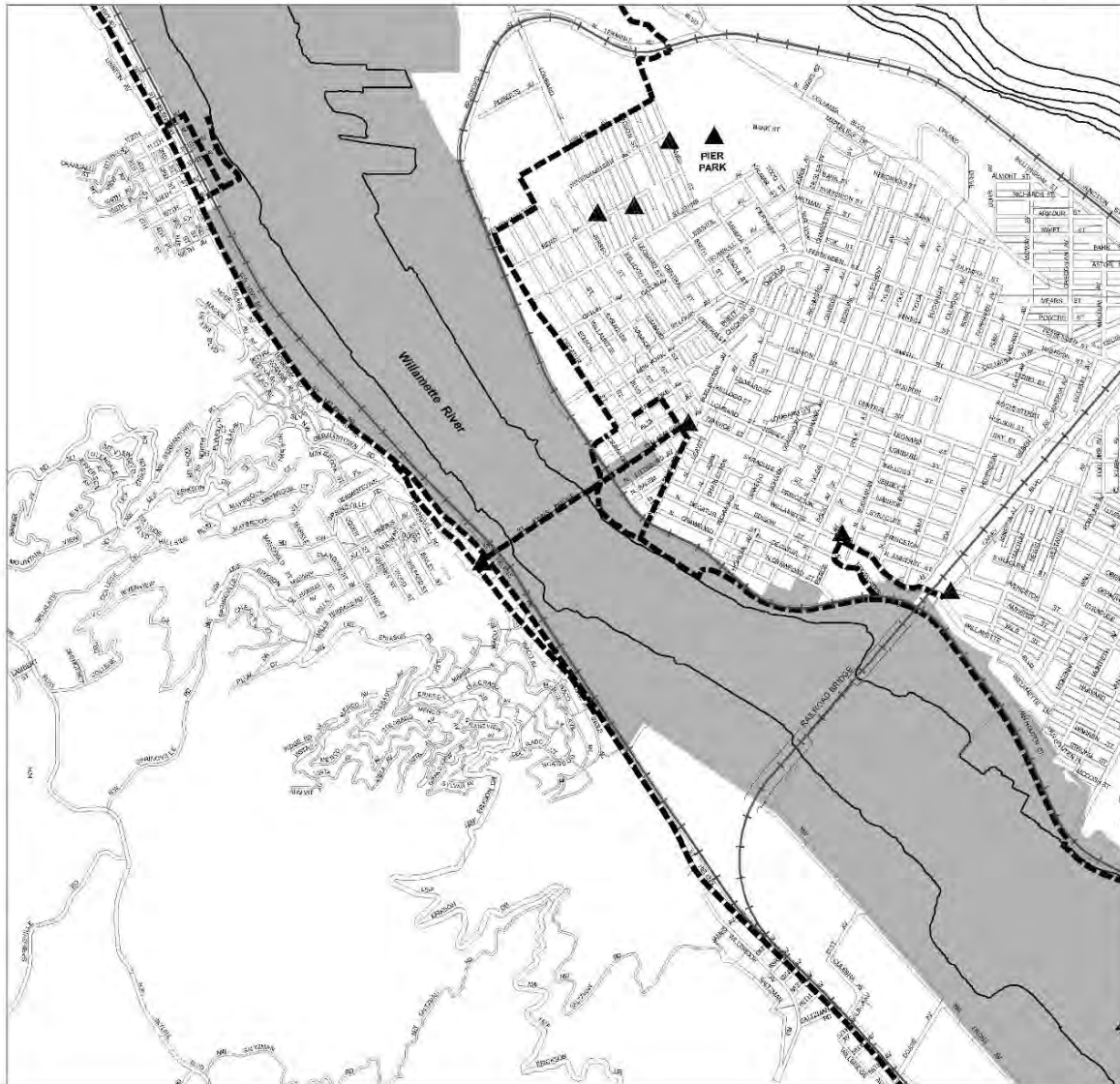
This map is updated to reflect the Major Public Trails alignment adopted in the 2035 *Comprehensive Plan* (2018) that include the Willamette River Greenway trails. There are no longer primary and interim greenway trail designations. The map series notation is revised to indicate deletion of Map 5 of 5.

Willamette Greenway Public Access Map

Map 440-1

Map 2 of 5 4

Map Revised XXXX X, 201X



Legend

----- City Boundary

Greenway Boundary

----- Major Public Trails



Connection points to
other pedestrian paths
and bicycle routes



0 2,000 4,000

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Map 440-1 (Map 3 of ~~54~~)

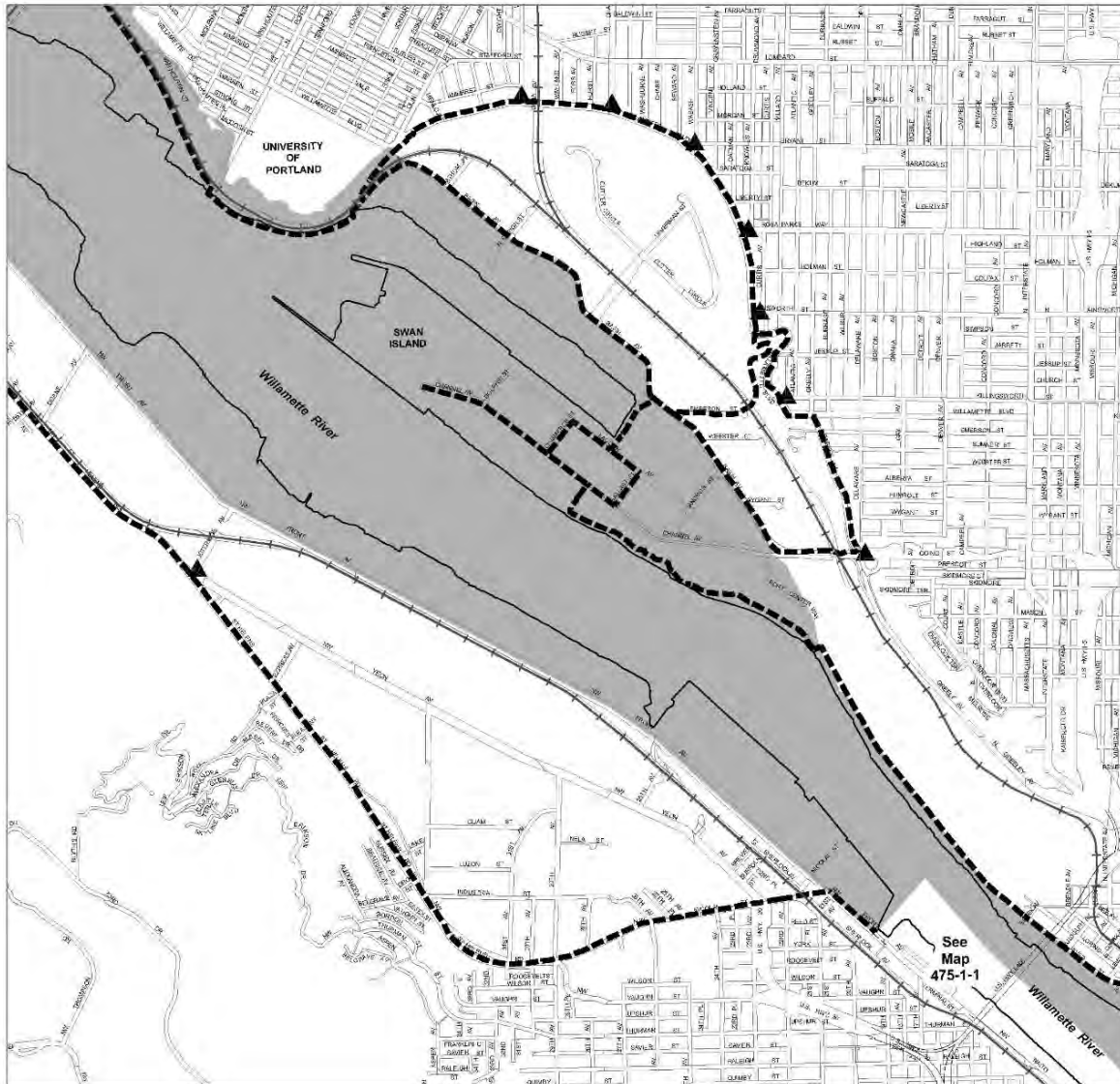
This map is updated to reflect the Major Public Trails alignment adopted in the 2035 *Comprehensive Plan* (2018) that include the Willamette River Greenway trails. There are no longer primary and interim greenway trail designations. The map series notation is revised to indicate deletion of Map 5 of 5.

Willamette Greenway Public Access Map

Map 440-1

Map 3 of 5 4

Map Revised Xxxx X, 201X



Legend

----- City Boundary

Greenway Boundary

----- Major Public Trails



Connection points to
other pedestrian paths
and bicycle routes



0 2,000 4,000

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Map 440-1 (4 of 54)

This map is amended to only include the north reach area that includes industrially zoned properties in the Central Reach and the southern part of the North Reach area. The map deletes out the northern most portion of the South Reach, which will be addressed in Chapter 33.475 River Overlay Zones and primary Willamette Greenway trail alignments and access paths that are outside of the North Reach area shown on this map. The map series notation is revised to indicate deletion of Map 5 of 5.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

Willamette Greenway Public Access Map

Map 440-1

Map 4 of 5 4

Map Revised Xxxx X, 201X



Legend

- City Boundary
- Greenway Boundary
- Major Public Trails

Connection points to
other pedestrian paths
and bicycle routes



Commentary

Map 440-1 (5 of 5)

This map is deleted since the South Reach area will now have its Willamette River Greenway boundary regulations addressed in Chapter 33.475 River Overlay Zones. The River Overlay Zones chapter is the replacement to the Greenway Overlay Zones chapter and includes the Central and South reaches.

Willamette Greenway Public Access Map

Map 440-1

—Map 5 of 5

Map Revised XXXX X, 201X



Commentary

33.475 River Overlay Zones

The River Overlay Zones chapter (33.475) will apply to the South Reach study area (including the riverfront portion of the unincorporated Multnomah County neighborhood of Dunthorpe) as a part of the River Plan / South Reach update of the *Willamette Greenway Plan*. The River overlay zones currently apply within the Central Reach portion of the Willamette River Greenway in Portland. There are two existing River overlay zones—River General and River Environmental. The River Recreational overlay zone is being added to the chapter as part of the River Plan / South Reach.

Other updates to the River overlay zones include the allowance of a limited amount of Retail Sales and Service use at a few locations in the River Recreational overlay zone, the addition of a bird-safe glazing requirement and an archeological resources protection requirement in the South Reach. Additional detail on these new requirements is provided in the commentary associated with their respective sections of the code.

Future river planning for the North Reach will focus on the unique characteristics of that reach and will apply the River overlay zones in that area. When that occurs, Chapter 33.475 will replace Chapter 33.440, *Greenway Overlay Zones*, entirely within the City of Portland and for riverfront and nearby properties in unincorporated Multnomah County, for which the City of Portland plans.

33.475 River Overlay Zones

475

Sections:

General

- 33.475.010 Purpose
- 33.475.020 River Overlay Zones
- 33.475.030 Where These Regulations Apply
- ~~33.475.040 When These Regulations Apply~~
- 33.475.050 Supplemental Permit Application Requirements

River General and River Recreational Overlay Zone

- 33.475.200 Use Regulations
- 33.475.205 When These Regulations Apply
- 33.475.210 River Setback
- 33.475.215 Marine Passenger Docks and Marine Passenger Terminals
- 33.475.220 Landscaping
- 33.475.225 Residential Docks
- 33.475.230 Exterior Lighting
- 33.475.235 Bird-safe Glazing
- 33.475.240 Public Viewpoints
- 33.475.245 Archaeological Resources Protection
- 33.475.250 Nonconforming Uses and Development
- 33.475.260 Property Line Adjustments

River Environmental Overlay Zone

- 33.475.400 Use Regulations
- 33.475.403 When These Regulations Apply
- 33.475.405 Items Exempt From These Regulations
- 33.475.410 Environmental Report
- 33.475.420 Review Procedures
- 33.475.430 Prohibitions
- 33.475.440 Development Standards
- 33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards

Clean Up of Contaminated Sites

- 33.475.500 Removal or Remediation of Hazardous Substances

Map 475-1 ~~Central Reach~~ River Overlay Boundary

Map 475-2 Willamette River Top of Bank

Map 475-3 Governor Tom McCall Waterfront Park and Eastbank Crescent

Map 475-4 Archaeological Sensitivity Areas

Map 475-5 Retail Sales and Service Allowed in OS

Map 475-6 Riparian Buffer Area

Commentary

33.475.010 Purpose

The purpose statement now includes the South Reach for application of the River Overlay Zones regulations. It also acknowledges more directly the importance of a well-functioning floodplain to the river and riverfront area.

33.475.020.A.2 River Recreational

The River Recreational (r*) overlay zone will apply only in the South Reach. The River Recreational overlay zone is applied to public park sites where river-dependent and river-related recreational uses are required. This is to maximize the relationship of public recreation activities that take advantage of close proximity to the Willamette River and enhance the river's natural and scenic qualities.

33.475.020.A.3 River Environmental

The River Environmental overlay zone is applied to protect important high-, medium- and some low-ranked natural resources along the Willamette River. These natural resources are identified in the *Willamette River South Reach Natural Resources Protection Plan* (2020), which will be adopted as part of the River Plan / South Reach project, and the previously-adopted *Willamette River Central Reach Natural Resources Protection Plan* (2018). The only low-value resources identified in the natural resources protection plans to which the River Environmental overlay zone will now be applied are developed floodplains. As a part of the *Central City 2035 Plan* (2018) the River Environmental overlay zone was not applied to developed floodplain. Applying it now to the developed floodplain recognizes the importance of improving both flood capacity and habitat in these areas to minimize future flood impacts. The River Environmental overlay zone will now pertain to developed floodplain in both the South and Central reaches of the Willamette River.

Application of the River Environmental overlay zone to developed floodplains draws on the guidance included in the National Marine Fisheries Service (NMFS) 2016 Biological Opinion on the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP). The NMFS Biological Opinion directed FEMA to ensure the preservation and expansion of habitat and flood capacity with new development in the floodplain. The directive required FEMA to address vegetation management (i.e., tree replacement), stormwater management and flood storage capacity (specifically, in cases of fill) to avoid impacts to fish species listed as Threatened or Endangered under the Federal Endangered Species Act (ESA).

The inclusion of developed floodplain will better address the vegetation management component of the NMFS directive. Future updates to the City's Stormwater Management Manual and Title 24.50, Flood Hazard Areas, will address the other two components. FEMA NFIP regulations and maps may be modified in the near future and result in necessary changes to the requirements of this section.

Additionally, the description of the River Environmental overlay zone is being amended to clearly identify the goal of improving natural resources over time as a result of mitigation requirements.

33.475.010 Purpose

The River Overlay zones generally promote the protection, conservation, restoration, enhancement and maintenance of the economic, natural, scenic, and recreational qualities of lands along the ~~Central~~ and South reaches of the Willamette River. This purpose is achieved by applying regulations that control development of land, change of use and intensification of use. The regulations reflect the desired character of the ~~Central~~ and South reaches of the Willamette River—a character that includes:

- A healthy river, floodplain, and watershed;
- A thriving riverfront with regional gathering spaces, active and passive recreational uses, maritime and commercial activities, and a welcoming mixed-use community; and
- Access to, along and in the river.

The River Overlay Zones also implement the City’s responsibilities under ORS 390.310 to 390.368.

33.475.020 River Overlay Zones

A. **Purpose.** The River Overlay ~~z~~Zones implement the land use pattern identified in the *Central City 2035 Plan* (2018) and River Plan / South Reach (2020). There are ~~two~~three River Overlay zones each with their own purpose:

1. River General. The River General overlay zone allows for uses and development that are consistent with the base zoning and allows for public use and enjoyment of the riverfront.
2. River Recreational. The River Recreational zone encourages river-dependent and river-related recreational uses, which provide a variety of types of public access to, along, and in the river, and which enhance the river’s natural and scenic qualities.
- ~~3.~~ 2. River Environmental. The River Environmental overlay zone protects, conserves and enhances important natural resource functions and values while allowing environmentally sensitive development. The purpose of the zone is to limit the impacts from development and vegetation maintenance on the natural resources and functional values contained within the overlay zone. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to be sensitive to the site’s protected resources. Mitigation is required for unavoidable impacts and is intended to ~~have no net loss of~~ compensate for impacts and improve natural resource features or functions over time. The River Environmental overlay zone applies to specific natural resource areas identified in ~~at two detailed study studies~~ two detailed studies titled *Willamette River Central Reach Natural Resources Protection Plan* (~~2017~~2018) and River Plan / South Reach Natural Resources Protection Plan (2020). This overlay zone always applies in combination with one of the other River Overlay zones.

Commentary

33.475.020.B. Map Symbols

The amendment to this subsection reflects the addition of the River Recreational overlay zone map symbol. The new River Recreational (r*) overlay zone will apply to a number of South Reach parks. The asterisk is used to differentiate it from River Recreational overlay zone that applies in the North Reach (see 33.440).

When the City updates the *Willamette Greenway Plan* for the North Reach, the regulations of 33.440 will be replaced by 33.475. The final Chapter 33.475 will include the addition of the River Industrial overlay zone and the asterisks will be removed from the River overlay map symbols.

33.475.030 Where These Regulations Apply

This section identifies where and when the regulations in this chapter apply to uses and development on the land and in the water. Map 475-1 depicts the area within which the River overlay zones and associated regulations apply in the South and Central reaches.

For clarity, the descriptions of which sections of this chapter apply for the various River overlay zones have been moved from the previous 33.475.040, *When These Regulations Apply*. Information on the River General, River Environmental and the removal or remediation of hazardous sites has been relocated to this section. Additionally, the amendments include information on the new River Recreation (r*) overlay.

The existing *Willamette Greenway Plan* (1987) exempts the interior of Ross and Hardtack islands from the regulations of the *Greenway Overlay Zones*. In the *Greenway Overlay Zones* chapter (33.440), it states that "the interior of Ross and Hardtack Islands will not be subject to the regulations of this chapter during such time as the Ross Island Management Plan is in effect". The *Ross Island Management Plan* was established as a part of the Ross Island Sand and Gravel conditional use approval in 1980 and is now outdated and difficult to implement. Therefore, this exception will not be maintained in the River Overlay Zones chapter. All future development on Ross and Hardtack islands will be subject to this chapter.

33.475.040 When These Regulations Apply

This section is being deleted from this location and the relevant language regarding when the regulations apply is being moved into the River General, River Recreation, and River Environmental overlay zone sections. See each section for relevant commentary.

- B. Map symbols.** The River Overlay Zones are shown on the official zoning maps with the following symbols:

<u>Overlay Zone</u>	<u>Map Symbol</u>
River General	<u>g*</u>
<u>River Recreational</u>	<u>r*</u>
River Environmental	e

33.475.030 Where These Regulations Apply

- A. General.** The regulations of this chapter apply to the land and the water within the Central Reach and South Reach portions of the Willamette Greenway Plan boundary shown on Map 475-1 and designated on the Official Zoning Maps with the River General (g*), the River Recreational (r*), and the River Environmental (e) overlay zones. The regulations of this chapter do not apply to the River General (g) or River Recreational (r) overlay zones located within the Greenway Overlay zone boundary shown on Map 440-1. See Chapter 33.440, Greenway Overlay zones for regulations that apply to the River General (g) and River Recreational (r) overlay zones within the Greenway Overlay zone boundary.

1. River General and River Recreational overlay zones. The regulations in Sections 33.475.200 through 33.475.260 apply to all sites in the River General and River Recreational overlay zones.
2. River Environmental overlay zone. The regulations in 33.475.400 through 33.475.450 apply to all sites in the River Environmental overlay zone
3. Removal or Remediation of Hazardous Substances. The regulations in 33.475.500 apply to actions to remove or remediate hazardous substances that have been approved or selected under Oregon or federal cleanup law. The regulations in 33.475.500 only apply to the portions of the site where the removal or remediation actions will occur; development or exterior alterations on other portions of the site outside of the removal or remediation areas must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within public rights of way and actions not approved or selected by a state or federal cleanup authority must meet all other applicable regulations and procedural requirements of this chapter and may not use 33.475.500. The applicant conducting the removal or remediation action may choose to meet the regulations of 33.475.500 or all other applicable regulations of this chapter.

33.475.040 When These Regulations Apply

- ~~**A. River General overlay zone.** The regulations in Sections 33.475.200 through 33.475.260 apply to any changes to land or development in the River General overlay zone including rights of way.~~
- ~~**B. River Environmental overlay zone.** The regulations in 33.475.400 through 33.475.450 apply in the River Environmental overlay zone as follows:~~
- ~~1. Unless exempted by Paragraph B.2., the regulations apply to:~~

Commentary

- a. ~~Development;~~
 - b. ~~Planting, removing, cutting, mowing, clearing, burning or poisoning trees or vegetation;~~
 - c. ~~Changing topography, grading, excavation or filling; and~~
 - d. ~~Resource enhancement.~~
2. ~~Exemptions. The following items are exempt from the River Environmental overlay zone regulations:~~
- a. ~~Change of ownership;~~
 - b. ~~Temporary emergency procedures necessary for the protection of life, health, safety, or property;~~
 - c. ~~Changes to the interior of a building where there are no exterior alterations;~~
 - d. ~~Operation, maintenance, alterations, repair, and replacement of existing structures, exterior improvements, irrigation system, stormwater facilities, nonpotable water systems, roads, utilities, public trails and paths, public viewpoints, public interpretive facilities, and erosion control measures. Alterations, repair and replacement is not exempt whenever total square footage, building coverage or utility size is increased;~~
 - e. ~~Dredging, channel maintenance, and the removal of materials from the river as follows:~~
 - (1) ~~Dredging, channel maintenance, and the removal of material within the federal navigation channel.~~
 - (2) ~~Dredging, channel maintenance, and the removal of materials outside the federal navigation channel as follows:~~
 - ~~Dredging and the removal of materials in waters that are 35 feet deep or deeper, measured from the ordinary high water mark; or~~
 - ~~Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers.~~
 - (3) ~~The placement of dredged materials within the River Environmental overlay zone is not exempt.~~
 - f. ~~Removal of structures and debris located landward of the ordinary high water mark of the Willamette River, streams or drainageways, or more than 30 feet from the edge of a wetland;~~
 - g. ~~Installation of temporary erosion control measures;~~
 - h. ~~Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;~~
 - i. ~~Continued maintenance of existing gardens, lawns, and other planted areas, including the installation of new plants except those listed on the *Nuisance Plants List*;~~

Commentary

- j. ~~Changes to existing disturbance areas to accommodate outdoor activities such as events, play areas and gardens as long as plantings do not include plants on the Nuisance Plants List and no trees 1.5 or more inches in diameter are removed;~~
- k. ~~Development located on an existing dock, wharf, or pier. A dock, wharf, or pier includes the gangway that provides access to the dock, wharf or pier;~~
- l. ~~Removal or pruning of trees that are not more than 1.5 inches in diameter and other vegetation that is not listed as native on the Portland Plant List. The removal or pruning must be done with handheld equipment. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance area located outside and landward of the river setback must be replanted to meet the subarea 3 standard of Table 475-1.~~
- m. ~~Planting of native vegetation listed on the *Portland Plant List* when planted with hand held equipment or equipment with a wheel surface to ground pressure of no more than 7.5 psi;~~
- n. ~~Public street and sidewalk improvements meeting all of the following:~~
 - ~~(1) Improvements must be within an existing public right-of-way used by truck or automobile traffic; and~~
 - ~~(2) Streets and sidewalks must not exceed the minimum width standards of the Bureau of Transportation Engineering.~~
- o. ~~Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department and water quality monitoring stations when access is by foot only;~~
- p. ~~Installation of security cameras provided that no more than 100 square feet of ground surface is disturbed landward of top of bank, no ground is disturbed riverward of the top of bank, no native trees and disturbed area is planted with the following (top of bank is shown on Map 475-2):~~
 - ~~(1) Three shrubs per 100 square feet; and~~
 - ~~(2) Grass and forb seed mix at a ratio of 30 pounds per acre restored to pre-construction conditions;~~
- q. ~~Utility service using a single utility pole or where no more than 100 square feet of ground surface is disturbed landward of the top of bank, no ground is disturbed riverward of top of bank and disturbance area is planted with the following (top of bank is shown on Map 475-2):~~
 - ~~(1) Three shrubs per 100 square feet; and~~
 - ~~(2) Grass and forb seed mix at a ratio of 30 pounds per acre;~~

Commentary

- r. ~~Utilities installed above or below developed portions of the public right-of-way, and stormwater management facilities within the public right-of-way provided that no ground is disturbed riverward of top of bank (top of bank is shown on Map 475-2);~~
- s. ~~Installation of fencing in the following situations:~~
 - (1) ~~Fencing on an existing paved surface;~~
 - (2) ~~Fencing around stormwater facilities that meet the Stormwater Management Manual; or~~
 - (3) ~~Temporary fencing to protect resource enhancement project planting areas, prevent access to hazardous material spill areas or contaminated sites, or to close off or control the use of illegal trails. The fence must be removed within five years;~~
- t. ~~Installation of signage provided no trees over 1.5 inches in diameter are removed; and~~
- u. ~~Removal of trash, provided that native vegetation is not removed or damaged. This includes removal of trash from the river bed and from the water. Removal of trash does not include the removal or remediation of hazardous substances.~~

~~**C. Removal or Remediation of Hazardous Substances.** The regulations in 33.475.500 apply to actions to remove or remediate hazardous substances that have been approved or selected under Oregon or federal cleanup law. The regulations in 33.475.500 only apply to the portions of the site where the removal or remediation actions will occur; development or exterior alterations on other portions of the site outside of the removal or remediation areas must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within public rights of way and actions not approved or selected by a state or federal cleanup authority must meet all other applicable regulations and procedural requirements of this chapter and may not use 33.475.500. The applicant conducting the removal or remediation action may choose to meet the regulations of 33.475.500 or all other applicable regulations of this chapter.~~

33.475.050 Supplemental Permit Application Requirements

The following information is required when a permit for development or exterior alteration in the River Overlay Zones is reviewed for compliance with this chapter.

- A. Supplemental site plans.** The following supplemental site plans are required when a permit for development or exterior alteration within the River Overlay zones is reviewed for compliance with this chapter. Five copies of each required site plan must be submitted. The site plans must show the entire site, must be drawn accurately to a scale that is between 1 inch to 50 feet and 1 inch to 10 feet, and must show all property lines with dimensions, a north arrow and a date. Additional site plans that show only a portion of the site may be submitted. All copies of site plans must be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches; and
 - 1. An existing conditions site plan including:
 - a. Location of all base zone and overlay zone lines on the site;

Commentary

33.475.050.A.1.d.

The River Environmental overlay zone includes all floodplain areas, including the 100-year floodplain and 1996 Flood Inundation Area. The 1996 Flood Inundation Area is the geographic extent, based on aerial imagery, of the full 1996 flood zone in Portland. This amendment requires that the 1996 Flood Inundation Area be shown on site plans submitted to the City. In some cases, additional requirements related to tree replacement and violation correction options have been added for the floodplain areas. See below for specific commentary on the additional requirements.

33.475.050.A.1.e. and f.

These subparagraphs have been updated to remove the requirement to document the location of trees and vegetation within 50 feet of where ground disturbance and vegetation removal will occur. Instead, the requirement will be to provide tree and vegetation documentation within and adjacent to the area where ground disturbance and vegetation removal will occur.

33.475.050.A.2.b.

The River Environmental overlay zone includes all floodplain areas, which is made up of the 100-year floodplain and 1996 Flood Inundation Area, and, in some cases, additional requirements related to tree replacement and violation correction options have been placed on those areas. This update requires that the 1996 Flood Inundation Area be shown on site plans submitted to the City.

33.475.050.A.2.c.

For proposed development or exterior alterations, submitted plans must identify the location of any cut proposed to offset the impact of any proposed fill. If fill is proposed in the 100-year floodplain or 1996 Flood Inundation Area, the proposed cut must also occur within the 100-year floodplain or 1996 Flood Inundation Area.

- b. Location of the top of bank, river setback line, and the landscaping sub areas;
 - c. Outline of any existing development, including existing river bank stabilization treatments, stormwater treatment facilities, environmental enhancement or mitigation areas, and trails and paths;
 - d. Extent of the riparian buffer area, 100-year floodplain, and 1996 Flood Inundation Area;
 - e. The location, size including trunk and canopy crown diameter, and species of trees that are 1.5 inches or greater in diameter that are within and adjacent to the area where ground disturbance or vegetation removal will occur, ~~or that are within 50 feet of the area where ground disturbance and vegetation removal will occur;~~
 - f. Vegetation other than trees within and adjacent to the area where ground disturbance or vegetation removal will occur, ~~and vegetation other than trees within 50 feet of the area where ground disturbance and vegetation removal will occur.~~ Vegetation may be shown as the area of cover with a list and percent cover of plant species present; and
 - g. Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater.
2. A proposed development or exterior alterations plan including:
- a. Outline of the proposed project area, including:
 - (1) limits of the temporary and permanent disturbance areas, equipment staging and maneuvering areas, ingress and egress areas, and areas to be left undisturbed;
 - (2) areas of ground disturbance, stockpiling or grading;
 - (3) outfalls and river bank stabilization treatments;
 - (4) trails and paths;
 - (5) areas of vegetation to be left undisturbed including the root protection zone for trees;
 - (6) environmental enhancement or mitigation areas,
 - b. Location of the top of bank, river setback line, and the landscaping sub areas;
 - c. Extent of the riparian buffer area, 100-year floodplain, and 1996 Flood Inundation Area;
 - ~~b~~d. Location and size (cubic yards) of fill to be placed within the 100-year floodplain and 1996 Flood Inundation Area;
 - e. Location, size (cubic yards), and design of proposed cut within the 100-year floodplain and 1996 Flood Inundation Area;
 - ~~e~~f. Location and description of all proposed erosion control measures;

Commentary

33.475.050.C

For proposed development that triggers the mitigation requirements of 33.475.440.L, this provision provides the allowance to purchase credits from a City-approved mitigation bank operating on the Lower Willamette River. City-approved mitigation banks may include by State- or Federal-certified mitigation banks or, City-certified mitigation bank, if the City chooses to develop such a certification. The Bureau of Environmental Services will maintain the list of approved mitigation banks that may be used and the list will be available to the public. The Lower Willamette River is defined as the portion of the Willamette River that extends from the base of Willamette Falls to the confluence with the Columbia River, not including West Hayden Island.

33.475.200.B. Use Regulations

The River Recreational (r*) overlay zone is added to the River Overlay Zones chapter from the Greenway Overlay Zones chapter. The use regulations limit the primary uses to river-dependent and river-related recreational uses to take advantage of the river and riverfront area for recreation activities. Other recreational activities that do not relate to the river need not be the primary recreational activities at these locations. There is a use allowance for a limited amount of Retail Sales and Services uses and development at 3 sites in the South Reach: Willamette Park, Multnomah County property (formerly the Staff Jennings Boating Center) and Sellwood Riverfront Park (see Map 475-5). The intent of allowing up to 1,500 square feet of Retail Sales and Services uses and development is to provide a limited amount of services that support river recreation activities and users like recreational equipment rentals, refreshments and sundries. This provision is not allowed in all OS zoned properties. The 3 sites identified have or are planned to have active river/riverfront recreation activities.

Portland Parks and Recreation will ensure that any proposed retail use:

- a. Is complementary in design and use to the function and appearance of the park where it is locating;
- b. Provides community benefits in the context of park activation, increased visibility, and improved safety by providing 'eyes on the Park';
- c. Won't create conflicts between the retail structures loading and servicing needs and the existing park uses;
- d. Be reviewed for any equity impacts to park users, affordability issues, and effects on nearby commercial before approving the retail use, and;
- e. Consider opportunities for broad inclusion of vendors that reflect the diversity of the city.

33.475.210.A. Purpose

The river setback requirement that currently applies to sites with the River General (g*) overlay zone in the Central Reach now also applies to sites zoned River General (g*) in the South Reach. Reference to the Central Reach will be removed because the standard no longer applies only to the Central Reach.

- ~~dg.~~ Location and description of all proposed stormwater management facilities;
 - ~~eh.~~ Location of proposed fencing and identification of where the fencing is temporary and where it is permanent;
 - ~~fj.~~ Location of exterior lighting; and
 - ~~gj.~~ A landscaping plan indicating the size, species, and location of all vegetation to be planted, including all required mitigation plantings for proposals subject to the requirements of 33.475.440.L.
- B. Photos of the site.** Submission of photographs of the site are not required but are encouraged to supplement the existing conditions site plan.
- C. Mitigation bank credits.** If credits will be purchased from a City approved mitigation bank to satisfy the requirements of 33.475.440.L, the applicant must provide proof of the purchase of the appropriate number of credits.

River General and River Recreational Overlay Zones

33.475.200 Use Regulations

- A. River General overlay zone.** There are no special use restrictions in the River General overlay zone.
- B. River Recreational overlay zone.** Primary uses in the River Recreational overlay zone are limited to recreational uses that are river-dependent or river-related. On sites shown on Map 475-5, Retail Sales and Service use is allowed as an accessory use when the total amount of Retail Sales And Service use does not exceed 1,500 square feet of net building area.

33.475.210 River Setback

- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River ~~in the Central Reach~~ by reserving space for the conservation and enhancement of natural vegetation and the opportunity for public access. In addition, OAR 660-015-0005 requires the establishment of a setback line.
- B. General.** The requirements of this section focus on whether the development is river-dependent or river-related. The focus is not on the primary use of the land. For example, in the River General overlay zone, a marine transportation terminal is a river-dependent primary use, but not all development associated with the terminal is river-dependent. The dock is river-dependent, but the parking lot and offices are not.

Commentary

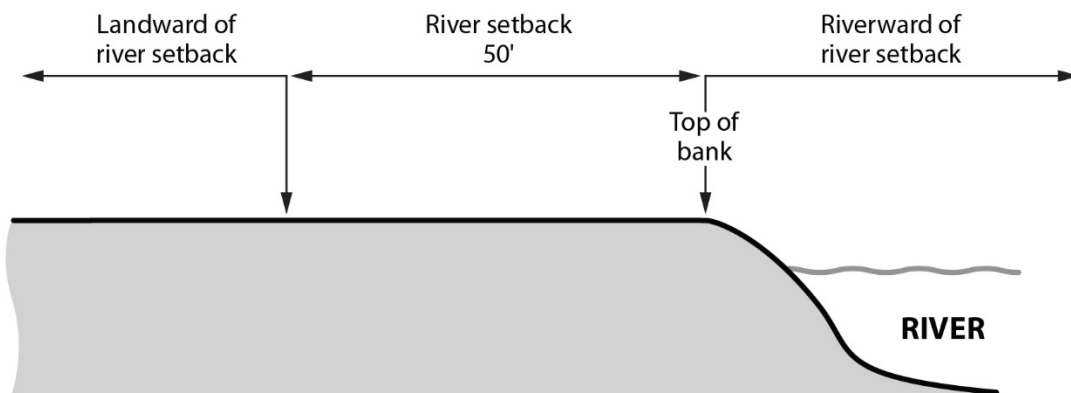
33.475.210.C. The River Setback

For clarity, the discussion of options for top of bank in cases where the river bank has been altered has been moved into a separate paragraph.

- C. The river setback.** The river setback extends from the top of the bank to a point 50 feet landward of the top of bank. See Figure 475-1. Top of bank is shown on Map 475-2. Where top of bank is not shown on Map 475-2, top of bank is determined as described in 33.910.030, Definitions, and 33.930.150, Measuring Top of Bank.

Where alteration to the river bank carried out to meet 33.475.440.H results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and new top of bank line must be submitted for verification that the top of bank has been measured according to the standard in 33.930.150, Measuring Top of Bank, and then recorded with the County recorder. In all cases the river setback line must be at least 5 feet landward of the new top of bank line.

**Figure 475-1
River Setback**



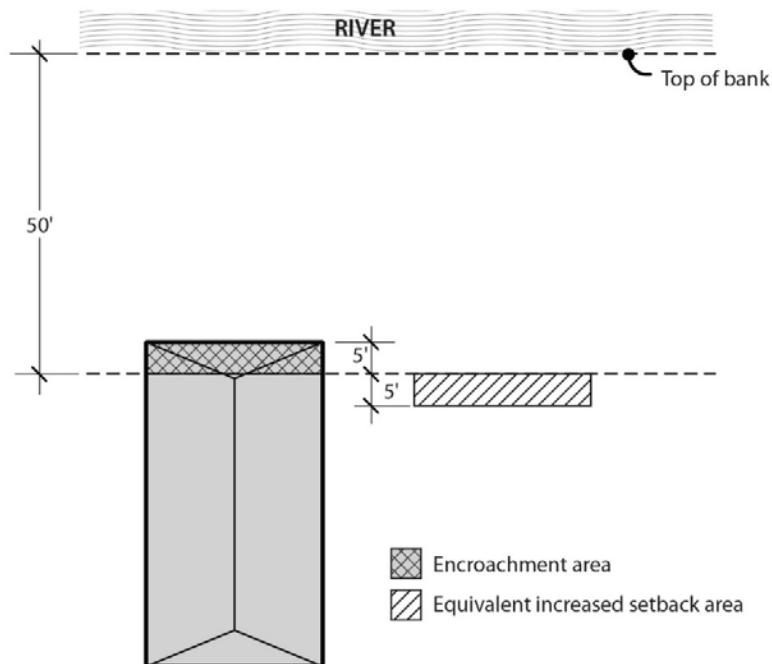
D. River setback standards.

1. Development landward of the river setback. Development, exterior alterations, excavations, and fills landward of the river setback are not required to be river-dependent or river-related.
2. Development within or riverward of the river setback. Except as follows, development, exterior alterations, excavations, and fills within or riverward of the river setback must be river-dependent or river-related:
 - a. Development, exterior alterations, excavations, and fills that are not river-dependent or river-related are allowed to encroach into the river setback as described in Subsection E. Development, exterior alterations, excavations, and fills located riverward of the setback must be river-dependent or river-related, except as allowed by 33.475.250.D;

Commentary

- b. Development within a Historic or Conservation landmark located within or riverward of the river setback is not required to be river-dependent or river-related, and the floor area of the landmark and the exterior improvement area associated with the landmark can be increased up to a total of 10 percent within the river setback when the alteration does not bring the building or exterior improvement area closer to the river.
 - c. All other development, exterior alterations, excavations, and fills that are not river-dependent or river-related are allowed if approved through a Greenway Goal Exception.
- E. **Encroachment into the setback.** Development that is not river-dependent or river-related may encroach up to 5 feet into the river setback provided that the setback is increased by an area equivalent in size to the encroachment area. The area that is increased must be located adjacent to the original setback. See Figure 475-2.

Figure 475-2
Encroachment into the River Setback



Commentary

33.475.215 Marine Passenger Docks and Terminals

- A. Purpose.** River-related development provides goods or services that are directly associated with river-dependent land or waterway use. River-related development is typically allowed within the river setback, however certain river-related development associated with a marine passenger dock, while river-related in nature, does not need to be fully located within the river setback. In order to ensure that these particular types of river-related development do not overwhelm or dominate within the river setback, the total amount of footprint allowed within the setback is limited. The limitation will ensure that the river setback can accommodate other river-related or river-dependent development and provide opportunities for recreation, public access, and the conservation and enhancement of natural, scenic and historic resources.
- B. Standard.** Passenger waiting and queuing areas, security checkpoints, and machine shops associated with marine passenger docks for subregional travel or marine passenger terminals for regional travel are limited to a 5,000 square foot footprint within or riverward of the river setback.

33.475.220 Landscaping

The following regulations to new development and exterior alterations to existing development apply in the River General and River Recreational overlay zones. Adjustments are prohibited.

- A. Purpose.** The landscaping regulations are intended to increase vegetation along the Willamette River. Adding a diversity of vegetation within the river setback will improve multiple ecosystem functions, increase fish and wildlife habitat, provide shade, cool the air, and create visual diversity. The regulations are also intended to accommodate safe and enjoyable public access to and along the Willamette River.
- B. Required landscaping.**
1. Governor Tom McCall Waterfront Park and the Eastbank Crescent beach shown on Map 475-3 are exempt from this Section.
 2. Required landscaping for all other areas. For areas not exempt from this section, land within and riverward of the river setback that is not covered with a building or other structure, an existing parking area or developed with a trail or viewing area must be landscaped to meet Table 475-1, Landscaping Planting Density. Subareas are shown on Figure 475-3 and described below. There are three planting densities allowed within each subarea. The applicant may choose which planting density standard to apply within each subarea, and more than one planting density may occur on a site. For example, the applicant may choose planting density 1 for all the subareas, or planting density 2 for subarea 1, planting density 3 for subarea 2, and planting density 1 for subarea 3.
 - a. Subareas:
 - (1) Subarea 1. Subarea 1 extends from the ordinary high water mark to the top of bank of the Willamette River.
 - (2) Subarea 2. Subarea 2 extends from the top of bank to a point 25 feet landward of the top of bank of the Willamette River.

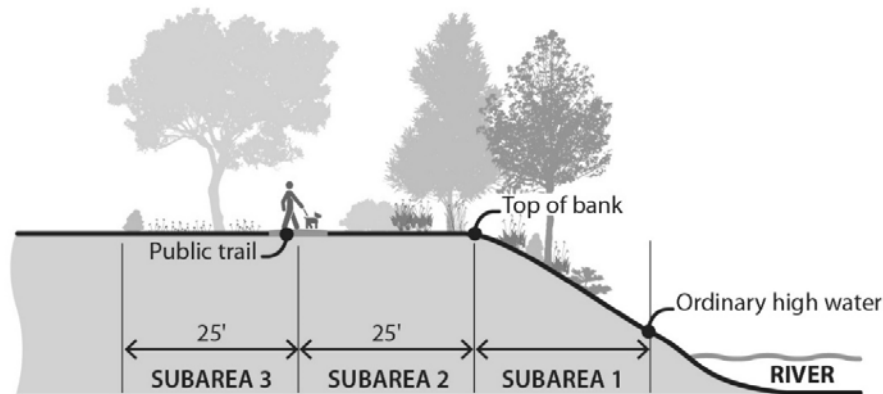
Commentary

33.475.220.B.2.c.(2)

An exception from the landscaping requirements is added for when providing the required landscaping would significantly interfere with a river-dependent or river-related use or development, or when adding the landscaping is deemed by the Fire Marshal to be a safety hazard.

- (3) Subarea 3. Subarea 3 extends from a point 25 feet landward of the top of bank to a point 50 feet landward of the top of bank of the Willamette River (top of bank is shown on Map 475-2). When the setback area is increased in conformance with 33.475.210.E., Encroachment into the setback, Subarea 3 extends into the increased setback area.

Figure 475-3
Landscaping Area



- b. Vegetation planted to meet the resource enhancement standards of 33.475.440. H or the mitigation standards of 33.475.440.L may be counted towards meeting the landscaping standard.
- c. Exceptions.
- (1) Landscaping is not required within portions of sites where contamination removal or remediation actions meet the standards of 33.475.500;
- (2) Landscaping is not required where it would significantly interfere with a river-dependent or river-related use or development, or where the Fire Marshal finds that it would pose a safety hazard;
- (3) Trees and shrubs are not required within utility easements but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre;
- ~~(3)~~(4) Trees and shrubs are not required within a ~~s~~Scenic ~~(s)~~ overlay zones but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees may not be planted within a ~~s~~Scenic ~~(s)~~ overlay zones; or

Commentary

33.475.220.B.2.c.(5)

This section is updated to change the requirement to state that revegetation projects can be completed anywhere within the River Environmental overlay zone, rather than in the same reach of the Willamette River. This will allow more flexibility in the location of Bureau of Environmental Services (BES) revegetation projects while still achieving the vegetation goals of the River Environmental overlay zone.

~~(4)~~(5) If the area to be landscaped within subarea 1 has an average slope of 30 percent or steeper (30 percent slope represents a rise over run ratio of 1:3.3) and the area with an average slope of 30 percent or steeper is armored with rip rap, or the area within subarea 1 has rip rap that is at least four feet deep, then the required subarea 1 landscaping may be planted on an area of the site that is landward of the river setback but within the River overlay zones, or the applicant may pay a revegetation fee-in-lieu as described below. If the landscaping will be provided on-site, the total area outside of subarea 1 to be landscaped must be equivalent in size to the area that would have been required to be landscaped in subarea 1. More than one landscaped area may be provided to achieve the total, but other required landscaping may not count toward the total:

- Revegetation fee-in-lieu use and administration. The revegetation fee is collected by Bureau of Development Services and is administered by the Bureau of Environmental Services (BES). The fees collected are used for revegetation projects on public or private property within the ~~same reach of the Willamette River as the site~~River Environmental overlay zone. The reaches are shown on Map 475-1.
- Calculation of required fee-in-lieu contributions. Applicants must contribute the cost to purchase and plant trees, shrubs and groundcover plants as set out in the next bullet. The cost to purchase and plant trees and plants will be adjusted annually as determined by the Director of BES based on current market prices for materials, labor and maintenance.
- Required fee-in-lieu contribution. The applicant must contribute the cost to purchase, plant and maintain one tree, three shrubs and four ground cover plants per 100 square feet of required planting area before a building permit will be issued. The fee calculation will be rounded up to the next multiple of \$10. The minimum area to be used in this calculation is 100 square feet. Calculations that are not a multiple of 100 will be rounded up to the next multiple of 100

Commentary

Table 475-1

Landscaping plant density requirements contained in Table 475-1 have been updated to make the requirements more user-friendly by reducing the level of complexity of subarea 2 and subarea 3 planting requirements. Additionally, the table is updated to allow for clustering of trees in all three subareas. Allowing for clustering will enable property owners to meet landscaping requirements while also preserving views along the riverbank. Shrubs and ground cover are expected to be dispersed throughout out the subareas, as required by Table 475-1.

Table 475-1 Landscaping Planting Density			
Subarea	Planting Density 1: Small Trees[1]	Planting Density 2: Medium Trees[1]	Planting Density 3: Large Trees[1]
Landscaping Subarea 1	<p>At least one tree, three shrubs, and four other ground cover plants must be planted for every 100 square feet of subarea.</p> <p>Trees may be clustered. All plants must be native.</p>	<p>At least one tree, six shrubs, and eight other ground cover plants must be planted for every 200 square feet of subarea.</p> <p>Trees may be clustered. All plants must be native.</p>	<p>At least one tree, nine shrubs, and 12 other ground cover plants must be planted for every 300 square feet of subarea.</p> <p>Trees may be clustered. All plants must be native.</p>
Landscaping Subarea 2	<p><u>Option 1:</u> Same as Subarea 1</p> <p><u>Option 2:</u> At least one tree and three shrubs must be planted for every 100 square feet of subarea, and the entire subarea must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.</p> <p>Trees may be clustered.</p> <p>One tree and one of the following two options for every 100 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: Three shrubs and four other groundcover plants.</p>	<p><u>Option 1:</u> Same as Subarea 1</p> <p><u>Option 2:</u> At least one tree and six shrubs must be planted for every 200 square feet of subarea, and the entire subarea must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.</p> <p>Trees may be clustered.</p> <p>One tree and one of the following two options for every 200 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: Six shrubs and eight other groundcover plants.</p>	<p><u>Option 1:</u> Same as Subarea 1</p> <p><u>Option 2:</u> At least one tree and nine shrubs must be planted for every 300 square feet of subarea, and the entire subarea must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre</p> <p>Trees may be clustered.</p> <p>One tree and one of the following two options for every 300 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Nine shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: Nine shrubs and 12 other groundcover plants.</p>

Commentary

Landscaping Subarea 3	<p><u>At least One tree must be planted for every 100 square feet of subarea, and the entire subarea must be and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.</u></p> <p><u>If shrubs are provided, a minimum of 3 shrubs must be planted for every 100 square feet of subarea.</u></p> <p><u>Trees may be clustered.</u> Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.</p>	<p><u>At least One tree must be planted for every 200 square feet of subarea, and the entire subarea must be and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.</u></p> <p><u>If shrubs are provided, a minimum of 6 shrubs must be planted for every 200 square feet of subarea.</u></p> <p><u>Trees may be clustered.</u> Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.</p>	<p><u>At least One tree must be planted for every 300 square feet of subarea, and the entire subarea must be and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.</u></p> <p><u>If shrubs are provided, a minimum of 9 shrubs must be planted for every 300 square feet of subarea.</u></p> <p><u>Trees may be clustered.</u> Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.</p>
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[1] Tree size is based on Title 11.60.020.C Canopy Size

C. Landscaped area site preparation. Before installing the required landscaping, the following standards must be met:

1. All prohibited and nuisance plants listed on the *Portland Plant List* must be removed within and riverward of the river setback.
2. All structures and debris located within and riverward of the river setback must be removed except for river-dependent and river-related structures, legal non-conforming development, erosion control measures, flood control facilities, large wood, and bioengineered structures. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in biodegradable fabrics.
3. If the area to be planted is not currently vegetated, the soil must be amended with 12 inches of growing medium. If the planting area ~~is~~ in subarea 1 has an average slope of 30 percent or steeper (30 percent slope represents a rise over run ratio of 1:3.3), and is armored with rip rap, the growing medium may be placed in planting wells. The composition of the growing medium must meet one of the following:
 - a. For all planting areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or

Commentary

33.475.220.C.3.b.

This subsection is updated to only require confirmation from a landscape architect or engineer that the growing medium is heavier than water in subarea 1. Confirmation is needed in subarea 1 to ensure that the growing medium selected will not be washed away over time, increasing the likelihood of success for vegetation planted in the area.

33.475.220.E. Exception for sites with an existing nonconforming use, allowed use, limited use, or conditional use

This amendment ensures that when the project value threshold is exceeded for an alteration to a site with nonconforming development, the project will come more into compliance with applicable standards. This section requires that any upgrades required by this chapter be completed first. This language is consistent with other portions of the code.

- b. For all planting areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A landscape architect or civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and that any growing medium to be located in subarea 1 is heavier than water.
 4. Placement of the growing medium is not allowed when the ground is frozen or saturated; and
 5. Temporary erosion control measures are required until permanent stabilization measures are functional. Temporary erosion control measures must be biodegradable or removed after permanent stabilization measures are functional or within 3 years, whichever is sooner.
- D. Plant requirements.** Trees must be a minimum ½-inch caliper, bareroot, or live stakes, unless they are oak or madrone, which may be one gallon size. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used.
- E. Exception for sites with an existing nonconforming use, allowed use, limited use, or conditional use.** The regulations of this subsection apply to sites with an existing nonconforming use, an allowed use, a limited use, or a conditional use. When alterations are made to a site that does not meet the requirements of this section, and the alterations are over the threshold of Paragraph E.1, below, the site must be brought into conformance with the development standards listed in Subsections A, B, C, and D, above. The value of the alterations is based on the entire project, not individual building permits. The cost of the upgrades required by this chapter may be counted toward the cost of upgrades required by Subsection 33.258.070.D. However, the upgrades required by this chapter must be completed first.
1. Thresholds triggering compliance. The requirements of Subsections A, B, C, and D must be met when the value of the proposed alterations on the site, as determined by BDS, is more than \$168,550. Alterations and improvements stated in 33.258.070.D.2.a do not count toward the threshold.
 2. Area of required improvements. Except as provided in 33.258.070.D.2.c(2), Exception for Sites with Ground Leases, required improvements must be made to the entire site.
 3. Timing and cost of required improvements. The timing and cost of the required improvements is specified in 33.258.070.D.2.d. However, where 33.258.070.D.2.d refers to the standards listed in Subparagraph 33.258.070.D.2.b, the standards of Subsections A, B, C, and D, above, are also included.

Commentary

33.475.225 Residential Docks

There are numerous residential docks along the Willamette River in the South Reach, including the unincorporated Multnomah County area of Dunthorpe. While docks may provide enjoyment for the property owner, these overwater structures have negative impacts on critical fish habitats, especially for endangered and threatened juvenile fish species like Chinook, Coho and Sockeye Salmon, and Steelhead Trout. This section of the Willamette River is also a key migratory habitat for Pacific Lamprey and Coastal Cutthroat Trout. Overwater structures create shaded areas on the river's surface and have been found to change fish gathering areas and behavior and the relationship between predator and prey species. Dark areas under docks are where predatory fish species like Pikeminnow, Walleye, Smallmouth Bass, and Largemouth Bass hide and eat juvenile salmon as they migrate to the Columbia River along the Willamette River's edges and shallow habitat areas.

Overwater structures can force juvenile fish to swim further out into the river, adding to their travel distance and energy spent with increased river velocity away from the riverbank. In the South Reach there are a limited number of shallow water habitat areas that need to be protected for migratory juvenile fish as resting and feeding places out of the river current.

This proposal is based on conversations with federal and state agencies that implement Endangered Species Act, other relevant legislation and provide leasing permits for structures over public resources like the Willamette River.... The standard for residential docks does not allow docks to locate in shallow water habitat areas or in the river channel. The size limitation is based on federal Access Board standards for recreational docks. Adjustments to this standard are not allowed. However, an applicant could apply for a larger residential dock through River Review, 33.865. Larger residential docks would have to be designed to minimize the impacts of the overwater structure on critical fish habitat and related environmental impacts.

While use of this dock standard will help facilitate review of an application, the placement of the dock will still be subject to a River Review.

33.475.225 Residential Docks

- A. Purpose.** Limiting the size, coverage, and location of residential docks on the Willamette River will reduce the impacts of these over-water structures on fish (including migrating juvenile fish), wildlife and their habitats. Docks create shaded areas that invasive fish species use to prey on endangered and threatened fish species.
- B. Dock size standards.** The following standards apply to the floating portions of boat docking structures located in a Residential zone. Adjustments are prohibited. Modifications may be allowed through River Review. See 33.865.
1. The total square footage of the floating portions of a boat docking structure must not exceed 200 square feet;
 2. The floating portions of a boat docking structure are prohibited within shallow water habitat and the navigational channel of the Willamette River.

33.475.230 Exterior Lighting

- A. Purpose.** The standards for exterior lighting are intended to:
- ~~Avoid or minimize~~ Minimize light glare and light spill from artificial lighting and associated negative impacts on fish and wildlife and their habitats;
 - Reduce light pollution and glare impacts on residential developments;
 - Maintain public safety and security along public trails, in parks, along public streets, and on piers and gangways; and
 - Provide flexibility for river-dependent operations associated with docks.
- B. General standards.** The following standards apply to all exterior lights located within the River General overlay zone.
- Exterior lights must not project light upward or to the side of the fixture; and
 - The top and sides of all exterior light fixtures must be shielded with 100 percent opaque materials.

Commentary

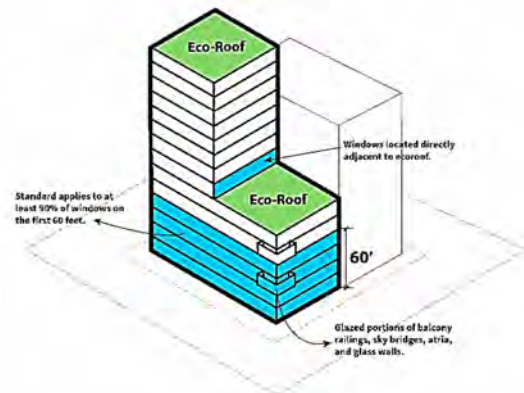
33.475.235 Bird-safe Glazing

This provision responds to City Council Resolution 37034 (Oct. 2, 2013) directing City bureaus to seek opportunities to incorporate bird-friendly building design into City plans and projects, including the Comprehensive Plan, the City's Green Building Policy, and others. These standards are already required within the Central City Plan District (33.510.223), which includes the Central Reach of the Willamette River. This proposal applies bird-safe glazing to new development and redevelopment in the South Reach.

Bird strikes can occur anywhere there is exterior clear glass, and particularly when the glass is near features that provide habitat for birds such as water, both natural and human-made features, and vegetation, such as street trees or ecoroofs, or when the glass reflects the sky. Given the large number of resident and migrant bird species present in the South Reach, ensuring bird-safe design of new commercial and mixed-use buildings is critical. This includes opaque or translucent spandrel glazing, which may be reflective.

The intent of this standard is to require new development and major remodels (except remodels of historic buildings) to use bird safe glazing techniques on windows that pose the highest risk for bird collisions. This tends to be the first 60 feet where the glazing is likely to be near street trees and landscaping and next to ecoroofs.

The standard requires bird safe glazing within the first 15 feet adjacent to an ecoroof; however, the intent is to apply the standard to the first floor adjacent to and above the ecoroof as shown in the diagram, even if that floor is more than 15 feet. The standards do not apply to low-density residential structures (including detached single-dwelling units, duplexes, and triplexes), historic landmarks or contributing resources in historic or conservation districts.



The Portland Bird-Safe Windows List is an Administrative Rule administered by the Bureau of Planning and Sustainability. The list includes the required window glazing patterns and application techniques that reduce incidences of bird strikes. The Administrative Rule is periodically updated to reflect current science and industries advancements.

Finally, the last component of the standard states that glass fences must meet the standard. Glass barriers that separate outdoor areas are considered fences. These barriers can be of any height or length.

- C. Additional standards for areas near the Willamette River.** The following standards apply to all permanent exterior lights located within and riverward of the river setback, and all permanent exterior lights located within 25 feet landward of the river setback. Exterior lights within Governor Tom McCall Waterfront Park, and exterior lights within public streets are exempt from this Subsection:
1. Exterior lights are allowed only if the lights are for the following uses or development:
 - a. Park and Open Area uses;
 - b. The major public trail; c. A public viewing area; or
 - d. River-dependent or river-related development.
 2. Structures that support exterior light fixtures must be set back at least 5 feet from the top of bank of the Willamette River unless the structure that supports the exterior light fixture is located on a dock, pier and gangway, and must be setback at least 30 feet from any other stream, drainageway, wetland or water body (top of bank is shown on Map 475-2);
 3. Structures that support exterior light fixtures must be spaced at least 25 feet apart;
 4. Lamps must fall below 3000K or within an S/P ratio range of 1 to 1.2; and
 5. Exterior lights must not project directly into the Willamette River.

33.475.235 Bird-safe Glazing

- A. Purpose.** The bird-safe glazing standards are intended to reduce the risk of bird-to-building collisions. The standards reduce the transparency, or reflectivity, of exterior windows and other glazed surfaces, thereby improving the visibility of exterior glazed surfaces to birds. The reduction in transparency applies to the portions of buildings that studies show are associated with the greatest occurrence of bird strikes.
- B. Development subject to the bird-safe exterior glazing standards.** The bird-safe glazing standards apply to new buildings and major remodeling projects in the South Reach. See Map 475-1. For new buildings, the standards apply per façade when the façade has 30 percent or more glazing, including spandrel glazing, within the first 60 feet measured from the grade adjacent to the façade. For major remodeling projects, the standards apply per façade when at least 75 percent of the façade is altered and the altered façade has 30 percent or more glazing, including spandrel glazing, within the first 60 feet measured from the grade adjacent to the facade. The standards also apply to glazing located directly adjacent to an ecoroof, roof garden, or other vegetated or landscaped roof area. The standards do not apply to houses, attached houses, manufactured homes, accessory dwelling units, duplexes, attached duplexes, triplexes, historic landmarks, and contributing resources in historic or conservation districts.

Commentary

33.475.240. Public Viewpoints

This section is deleted because the provision of viewing areas at viewpoints is now included in Chapter 33.480, Scenic Resource Zone. Viewpoints where improvements to viewing areas will be required will be identified in a new map at the end of that chapter.

Viewpoints identified in the new map are located along an existing trail, a major public trail shown as a star symbol (★) on the Official Zoning Maps, or within a right-of-way.

33.475.245 Archaeological Resources Protection in the South Reach

Areas along the Willamette River in the South Reach were used by Native Americans for thousands of years prior to European American settlement in the 19th Century. This new code section provides a process for identifying whether any Native American archaeological resources exist prior to ground disturbing development in areas that have been determined most likely to have those resources (high sensitivity areas). If archaeological resources are identified, regulations intended to protect the resources are applied.

The regulations of this section are based on the archaeological resource-related regulations of the Columbia South Shore Plan District, 33.515.262. The primary changes have been to reorganize and clarify the Columbia South Shore provisions, to make implementation of archaeological resource identification and protection regulations easier in the south reach.

33.475.245.B Definitions.

The definitions are essentially unchanged from the Columbia South Shore provisions. Note that the definitions refer to guidelines, processes and definitions determined by the State Historic Preservation Office (SHPO), the agency that houses Oregon's Archaeological Services Program and administers the state's cultural resource protection programs and regulations.

C. Bird-safe exterior glazing standards. At least 90 percent of the windows and glazing on the following portions of each façade must choose treatment patterns and application techniques from the *Portland Bird Safe Windows List*:

1. Windows and glazing, including glazed balcony railings, located within the first 60 feet of the building measured from the grade adjacent to the façade;
2. Windows and glazing located within the first 15 feet of the building above an adjacent ecoroof, roof garden, or other vegetated or landscaped roof area; and
3. The glazed portions of sky bridges or fences.

33.475.240 Public Viewpoints

~~**A. Purpose.** Public viewpoints provide stopping places along major public trails where the public can view and enjoy the natural, scenic, historic, cultural, recreational and economic qualities of the Willamette River.~~

~~**B. Viewpoint Requirement.** All sites with a designated viewpoint(s) in the *Central City Scenic Resources Protection Plan* are required to provide a public viewing area(s). The viewpoint design is addressed through the Central City Fundamental Design Guidelines. In addition, the viewpoint must comply with the Use of Trail, Hours of Use, Trespass and Trail Maintenance and Liability sections of Chapter 33.272, Major Public Trails. The Trails Maintenance and Liability section is applicable when the viewpoint is located along the physically contiguous trail segment.~~

33.475.245 Archaeological Resources Protection

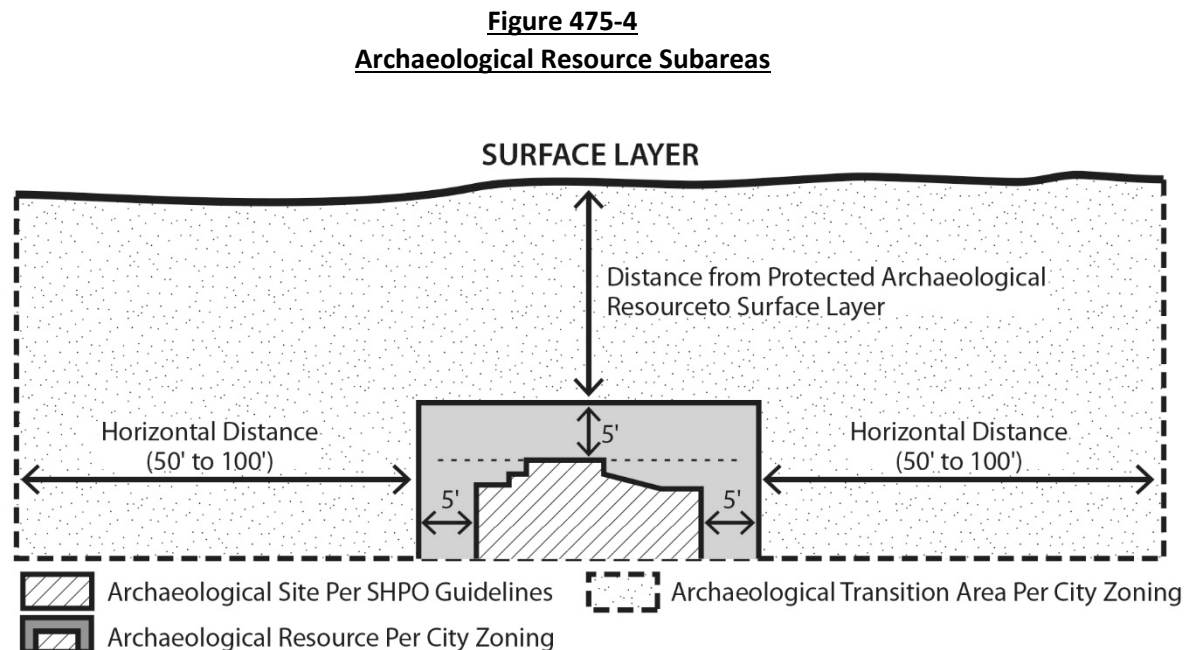
A. Purpose. Archaeological and historical evidence shows that Native Americans lived along the Columbia and Willamette rivers in the Portland region prior to European American contact and settlement. Pre-contact archaeological resources have historic, cultural, and scientific value to the general public and associated Native American tribes, whose ancestors lived in the area and harvested natural resources for subsistence and spiritual/ceremonial uses. Of special concern is the potential for ground disturbing activities to uncover human remains and archaeological resources that may be eligible for listing on the National Register of Historic Places. The regulations of this section provide a process to survey areas with a high probability of having archaeological resources prior to ground disturbing activities and development and to protect any identified archaeological resources and their functional values.

B. Definitions. The following definitions apply for the purposes of implementing this section:

1. Archaeological resource. A resource identified through a State Historic Preservation Office (SHPO) archaeological permit process that meets one or both of the following:

Commentary

- a. An archaeological site associated with use by Native Americans prior to European-American contact that meets SHPO guidelines plus a 5-foot vertical buffer and a 5-foot horizontal buffer. The vertical buffer extends directly above the most shallow archaeological materials found in the site records. The horizontal buffer extends sideways from the archaeological resource. See Figure 475-4; or
 - b. A traditional, sacred, or cultural use site, as documented in writing by an appropriate tribe through a SHPO permit.
2. Transition area. The transition area is the area directly between the archaeological resource and the surface layer and extends horizontally from the edge of the archaeological resource, as described below. See Figure 475-4. Archaeological features associated with a resource may also be encountered in the transition area:
- a. For burials and villages, the horizontal distance is 100 feet from the archaeological resource.
 - b. For seasonal campsites; activity areas; and traditional, sacred, or cultural use sites, the horizontal distance is 50 feet from the archaeological resource.
3. Appropriate tribe. One or more tribes identified by the Oregon Legislative Commission on Indian Services.
4. Qualified archaeologist. An archaeologist on the SHPO list of qualified archaeologists knowledgeable in Native American lifeways in the Portland Basin in the pre-contact period.
5. Consultation with appropriate tribes. A process that follows SHPO procedures for tribal consultation on state archaeological permits.



Commentary

33.475.245.C Where these regulations apply.

The regulations apply in "high sensitivity areas," in the South Reach as shown on Map 475-4, where an archaeological consultant has determined that archaeological resources are most likely to be found (see Volume 1, Appendix B). These areas were mapped based on an archaeological resource sensitivity model that considers factors such as previous archaeological surveys, precontact land forms and vegetation, and historical accounts of usage by Native Americans.

33.475.245.D. When these regulations apply.

Development with disturbance areas of 200 SF or less are not subject to the provisions of this section. Generally, structures less than 200 SF do not require a building permit.

33.475.245.E. Archaeological resource identification.

Applicants must provide information showing whether archaeological resources are known to exist on the portion of the site within the high sensitivity area. If no resources exist, the resource classification and protections of subsections F. and G. do not apply; if resources exist, F. and G. apply.

33.475.245.E.2 Archaeological survey.

The survey must be performed by a qualified archaeologist (SHPO determines the qualifications) and include a visual inspection and a subsurface investigation. The parameters of the survey are determined by the archaeologist. The results of the survey are provided in a survey report to the Bureau of Planning and Sustainability (BPS). If no resource is found, BPS issues a zoning confirmation letter waiving additional compliance with this section. This letter may also be used to comply with this section with future development proposals (245.E.1).

If resources are found, additional materials must be submitted, including maps that show site topography, proposed building footprints, location and depth of ground disturbance activities, and the location of the resource. Archaeological reports submitted to SHPO must also be submitted. The information in these materials assist in the application of the resource protection requirements of 275.G.

Note that location-specific archaeological site information submitted to the City is subject to the non-disclosure policies of City Council Resolution No. 35299. BPS keeps a confidential GIS database of the locations of archaeological resources.

- C. Where these regulations apply.** The regulations of this section apply within the high sensitivity areas shown on Map 475-4.
- D. When these regulations apply.** The regulations of this section apply to new development and alterations to existing development when the development causes more than 200 square feet of disturbance within the high sensitivity area.
- E. Archaeological resource identification.** Prior to new development or alteration to existing development, the applicant must identify whether archaeological resources exist in the high sensitivity area. If archaeological resources exist, then the regulations of Subsections F. and G. apply. If no archaeological resources exist, then the regulations of Subsection F. and G. do not apply. The applicant must identify whether archaeological resources exist using one of the following two methods:
1. Written documentation. The applicant must provide documentation that specifies that the high sensitivity area has been previously surveyed and that no archaeological resource was identified. The written documentation must be a certification letter from SHPO or a zoning confirmation letter from the Portland Bureau of Planning and Sustainability; or
 2. Archaeological survey. The applicant must conduct an archaeological survey to determine whether archaeological resources exist in the high sensitivity area. The archaeological survey must meet the following standards:
 - a. A qualified archaeologist must perform the survey in consultation with appropriate tribes.
 - b. The survey must include a pedestrian visual inspection of the ground surface of the high sensitivity area. The methodology of the pedestrian visual inspection shall be determined by the qualified archaeologist.
 - c. The survey must include a subsurface investigation with at least 1 subsurface probe. The methodology of the subsurface investigation, including the number, location and dimensions of subsurface probes shall be determined by the qualified archaeologist.
 - d. A survey report describing the methodology of the survey and whether any archaeological resources were found in the high sensitivity area must be submitted to the Bureau of Planning and Sustainability. If no archaeological resource is found, BPS will provide a zoning confirmation letter to the applicant waiving any additional compliance with this section. If the survey identifies an archaeological resource, the applicant must provide the following additional materials. In the interest of not disclosing the location of archaeological resources, the materials required below will be stamped "Confidential: Sensitive Information." Bureau of Planning and Sustainability and Bureau of Development Services staff will treat these materials in accordance with the City's nondisclosure policies:
 - (1) Site plan. A site plan, at a scale of 1 inch = 50 feet or larger, showing the building footprints, underground utilities and all other proposed ground disturbing activities, and an estimated ground disturbance depth. The site plan must show the existing topography of the site;

Commentary

33.475.245.F. Archaeological resource classification.

If a resource is found, a qualified archaeologist must classify the type of resource. The application of the resource protection standards of Subsection G. are based, in part, on the type of resource.

G. Archaeological resource protection standards.

These standards are intended to protect identified resources while still allowing some kinds of development in certain situations. The code is structured so as to prohibit development within the resource area and transition area (see definitions) with exceptions for two categories of activities (note that there is no exception for archaeological resource areas for burials, i.e. ground disturbance activities within the resource area of a burial are prohibited):

- (2) Archaeological survey map. A map showing the locations of all subsurface probes completed for the site;
- (3) Archaeological resource map. A map showing the boundaries of all archaeological resources that are recorded with SHPO or encountered during the archaeological survey. The map must also show the transition area associated with each archaeological resource and any conservation easements intended to protect archaeological resources. The Bureau of Planning and Sustainability will maintain a confidential atlas of identified archaeological resources within the archaeological sensitivity areas shown on Map 475-4; and
- (4) SHPO archaeological reports. Any archaeological reports related to the site filed with SHPO.

F. Archaeological resource classification. When an archaeological resource has been identified, a qualified archaeologist must classify the archaeological resource as one or more of the following types:

1. Burial. A burial is an archaeological resource where there is evidence of human remains or funerary objects, as defined in Oregon Administrative Rules.
2. Village. A village is an archaeological resource where there is evidence of a relatively permanent residential location typically occupied during the winter and on an annual basis. Archaeological evidence may include remains of structures, storage pits, and midden deposits.
3. Seasonal campsite. A seasonal campsite is an archaeological resource where there is evidence of organized activity in extracting and processing resources on a seasonal basis.
4. Activity area. An activity area is an archaeological resource where specific activity (e.g., roasting camas bulbs or stone tool making) took place.
5. Traditional, sacred, or cultural use site. A traditional, sacred, or cultural use site is an archaeological resource where there is evidence of a sacred or ceremonial site, and may include vision quest sites, sites of other sacred ceremonies, and sweat lodge sites.

G. Archaeological resource protection standards. The following standards apply to identified archaeological resources:

1. Application of development standards. Where more than one archaeological resource is identified together:
 - a. If one of the archaeological resources is a burial, the standards for burials apply to all resources;
 - b. If any of the archaeological resources are villages; or traditional, sacred, or cultural use sites, and there is no burial, the standards for villages; or traditional, sacred, or cultural use sites apply to all resources;
 - c. If all of the archaeological resources are seasonal campsites or activity areas, the standards for seasonal campsites or activity areas apply to all resources.

Commentary

G.2.a. Ongoing and low-impact activities.

Certain activities are allowed that are less likely to disturb archaeological resources. These include maintenance activities for structures and landscaping and other listed activities. Construction of paved parking and circulation areas is allowed in the transition area, but not in the resource area.

G.2.b. Activities allowed with an archaeological resource recovery plan and Memorandum of Understanding.

Activities other than those listed in G.2.a. require an archaeological resource recovery plan and a Memorandum of Understanding (MOU). The recovery plan allows development to occur after an evaluation of the resource, consultation with appropriate tribes, and an MOU between the owner, applicant, SHPO and appropriate tribe that specifies how recovered resources will be cared for and how site monitoring will occur during construction. For villages and traditional, sacred, or cultural use sites, resource removal is limited to removal of archaeological materials necessary to construct a paved parking lot or vehicle circulation area within an archaeological resource. For seasonal campsites and activity areas, an archaeological resource recovery plan may remove some or all archaeological materials, as negotiated and specified in the recovery plan.

2. Ground disturbing activities within the archaeological resource and transition area are prohibited except as follows:

a. Ongoing and low-impact activities. Except for the archaeological resource area of burials, the following ongoing and low-impact activities are allowed in archaeological resource and transition areas:

- (1) Maintenance, repair, and replacement of existing structures, exterior improvements, roads, boat launch areas, and utilities when the activity does not enlarge the existing disturbance area horizontally or vertically;
- (2) Maintenance of lawns and landscape areas, including the installation of new irrigation and drainage facilities, and new erosion control features;
- (3) Change of crop type or farming technique on land currently in agricultural use;
- (4) Alterations of buildings that do not increase building coverage;
- (5) Operation, maintenance, and repair of the following existing facilities: irrigation systems, drainage facilities and conveyance channels, stormwater detention areas, pumping stations, erosion control and soil stabilization features, and pollution reduction facilities. Maintenance of drainage facilities includes the dredging and channel cleaning of existing drainage facilities and vegetative maintenance within the minimum floodway cross section of drainageways where all spoils are placed outside environmental zones and the high sensitivity area;
- (6) Removing a nuisance tree listed on the *Portland Plant List*. When no other development is proposed, tree removal is subject to the tree permit requirements of Title 11, Trees;
- (7) Planting of native vegetation listed on the *Portland Plant List* when planted with hand-held equipment;
- (8) Public street and sidewalk improvements that do not enlarge the existing disturbance area horizontally or vertically; and
- (9) Constructing paved parking lots and circulation areas in the transition area.

b. Activities allowed with an archaeological resource recovery plan and MOU. For villages; seasonal campsites; activity areas; and traditional, sacred, or cultural use sites, ground disturbing activities associated with uses otherwise permitted by this Title are allowed if an archaeological resource recovery plan that meets the following is submitted. Ground disturbing activities other than allowed by Subparagraph G.2.a. are prohibited within the archaeological resource and transition area of a burial:

Commentary

(1) An archaeological resource recovery plan allows for the removal of archaeological materials following an archaeological evaluation, a consultation process with appropriate tribes, and a private agreement (Memorandum of Understanding) between the applicant, property owner, SHPO and tribes. The required steps include:

- Archaeological evaluation. A detailed archaeological evaluation must be completed. The evaluation must be conducted by a qualified archaeologist. The evaluation must meet SHPO standards for archaeological resource recovery projects.
- Consultation with appropriate tribes.
 - The applicant must contact the appropriate tribes, by registered or certified mail, to request comments on archaeological survey results and archaeological resource recovery plan, and offer a meeting. The tribes should reply to the contact within 14 days and hold a meeting within 30 days of the date of the initial contact. If the appropriate tribes do not reply within 30 days, the applicant may apply for a state archaeological permit and implement the terms of that permit without further delay. The tribes may schedule the meeting with a tribal council, one of its committees, or designee.
 - The purpose of the meeting is to allow tribal representatives and the applicant to review archaeological survey results and discuss the archaeological resource recovery plan. More than one meeting may be held.
 - After the meetings, and before applying for a building permit, the applicant must send a letter to the appropriate tribes. The letter will explain any changes in the project's design and archaeological resource recovery plan since the date of the last meeting.
- Development of a Memorandum of Understanding (MOU). The applicant must develop a Memorandum of Understanding (MOU) signed by the applicant, the property owner, SHPO and at least one appropriate tribe. The MOU must specify the care and disposition of any archaeological materials recovered on the site. The MOU must also specify how the parties will communicate and how on-site monitoring will proceed during project construction.
- Archaeological resource recovery plans, letters to tribal governments and Memoranda of Understanding signed with SHPO and tribal governments must be filed with the building permit.

G.3. Modification of other development standards. The modification of setback, parking and landscape standards on sites with archaeological resources is intended to provide additional development flexibility on sites where the archaeological resource protection standards of this section may otherwise constrain development types and locations.

33.475.250.D

Nonconforming uses and development exist where a site met zoning code regulations at the time the developed was established but no longer meets regulations because of subsequent changes to the Portland Zoning Code. For example, many parking lots were built before the City required landscaping. Such development can remain as long as there are no changes to the site.

These regulations currently allow nonconforming uses and development to continue and expand as long as the expansion is landward of the river setback. No additional development is allowed within the setback. This amendment will allow an existing nonconforming house in the setback to expand as long as the building coverage of the house is not increased. In this case, the term building coverage will not include uncovered porches, decks or cantilevered structures. For example, an additional story may be added to an existing house, as long as all other requirements of the base zone are met, but enclosing an existing uncovered deck will not be allowed.

33.475.260 Property Line Adjustments

This amendment will allow a property line adjustment to result in a lot in more than one river overlay zone when the adjustment expands an identified Portland Parks and Recreation natural area park. The amendment reduces cost to the City when park property is being expanded. Without the amendment, the expansion of a natural area park that is in two overlay zones requires a land division.

- (2) For villages and traditional, sacred, or cultural use sites, an archaeological resource recovery plan is limited to the removal of archaeological materials necessary to construct a paved parking lot or vehicle circulation area within an archaeological resource. The paved area must provide spill containment so that chemicals do not degrade the remaining archaeological resource.
 - (3) For seasonal campsites and activity areas, an archaeological resource recovery plan may remove some or all archaeological materials, as negotiated with the appropriate tribes and specified in the archaeological resource recovery plan.
3. Modification of other development standards. For sites with identified archaeological resources, the following development standards are modified:
 - a. Minimum building setbacks are reduced to zero;
 - b. Minimum number of off-street parking spaces is reduced to zero; and
 - c. For purposes of meeting minimum landscaping requirements, the applicant may exclude the archaeological resource area from the total site area.

33.475.250 Nonconforming Uses and Development

Nonconforming uses and development in the River General overlay zone are subject to the regulations and reviews of Chapter 33.258, Nonconforming Situations. The additional regulations stated below apply to development within or riverward of the river setback that is not river-dependent or river-related:

- A. The development may continue;
- B. The development may be changed to an allowed river-dependent or river-related development by right;
- C. The development may be changed to another nonconforming development if within the existing building. If outdoors, it may not be changed to another nonconforming development; and
- D. Except for an existing house, tThe development may be expanded, but not within or riverward of the river setback. An existing house may be expanded within the river setback when the existing building coverage is not increased. For the purpose of this standard, building coverage does not include uncovered porches, decks or cantilevered structures. Expansion includes adding additional floor area.

33.475.260 Property Line Adjustments

Property line adjustments may not result in a property that is in more than one river overlay zone except as follows; ~~unless the second overlay is the River Environmental overlay zone. Adjustments are prohibited.~~

- A. The second overlay zone is the River Environmental overlay zone;
- B. The property line adjustment will result in the expansion of a Portland Parks and Recreation identified Natural Area.

Commentary

33.475.403 When These Regulations Apply

This section has moved here from the previous 33.475.040, When These Regulations Apply, to provide more clarity on when these regulations apply and any exemptions, as applicable, for each River overlay zone. Exemptions for the River Environmental overlay zone are provided in a new section, 33.475.405, Items Exempt From These Regulations. The previous 33.475.040 is proposed for deletion.

33.475.403.B.

The term “cutting” used in the previous 33.475.040, When These Regulations Apply, is replaced by “pruning” to make it clear that the regulations apply to all types of pruning. This is a commonly-used term for any cutting of existing vegetation.

33.475.405 Items Exempt From These Regulations

This is a new section that has been moved from the previous 33.475.040, When These Regulations Apply, to provide more clarity on development actions that are exempt in the River Environmental overlay zone. In general, most of the previous exemptions have been maintained in the new section. However, some changes have been made as a part of the River Plan / South Reach project. Those specific updates are identified and described in the commentary below.

River Environmental Overlay Zone

33.475.400 Use Regulation

There are no special use restrictions associated specifically with the River Environmental overlay zone. However, any use restrictions that apply as a result of an accompanying River overlay zone also apply within the River Environmental overlay zone.

33.475.403 When These Regulations Apply

Unless exempted by 33.475.405, the regulations apply to:

- A. Development;
- B. Planting, removing, pruning, mowing, clearing, burning or poisoning trees or vegetation;
- C. Changing topography, grading, excavation or filling; and
- D. Resource enhancement.

33.475.405 Items Exempt From These Regulations

The following items are exempt from the River Environmental overlay zone regulations:

- A. Change of ownership;
- B. Temporary emergency procedures necessary for the protection of life, health, safety, or property;
- C. Changes to the interior of a building where there are no exterior alterations;
- D. Operation, maintenance, alterations, repair, and replacement of existing structures, exterior improvements, irrigation system, stormwater facilities, non-potable water systems, roads, utilities, public trails and paths, public viewpoints, public interpretive facilities, and erosion control measures. Alterations, repair and replacement is not exempt whenever total square footage, building coverage or utility size is increased;
- E. Dredging, channel maintenance, and the removal of materials from the river as follows:
 - 1. Dredging, channel maintenance, and the removal of material within the federal navigation channel.
 - 2. Dredging, channel maintenance, and the removal of materials outside the federal navigation channel as follows:
 - a. Dredging and the removal of materials in waters that are 35 feet deep or deeper, measured from the ordinary high water mark; or
 - b. Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers.
 - 3. The placement of dredged materials within the River Environmental overlay zone is not exempt.

Commentary

33.475.405.J.

This updated language exempts changes to disturbance areas for certain outdoor activities as long as no trees 1.5 inches or greater are removed within or riverward of the setback and no trees 6 inches or greater are removed landward of the setback. These tree removal thresholds ensure tree removal on the riverbank (i.e., within and riverward of the river setback) is limited to small trees, while removal of larger trees is allowed elsewhere on the site.

33.475.405.L.

Application of the River Environmental overlay zone generally focused on the river setback as a part of the *Central City 2035 Plan Central Reach* planning effort. The tree removal threshold was set at 1.5 inches in diameter at breast height (dbh) to ensure the retention of existing vegetation along the riverbank. The River Environmental overlay zone will also be applied to important natural resource areas landward of the river setback as a part of the River Plan / South Reach. The tree replacement standard for these areas is set at 6 inches dbh to allow for more flexibility in tree removal and management in these upland areas. The 6-inch threshold is consistent with the tree removal threshold of other environmental zones in the city.

33.475.405.N.

This requirement is updated to allow the exemption within the developed portion of rights-of-way to avoid the potential for tree removal and other impacts in unimproved rights-of-way. Street and sidewalk improvements in unimproved rights-of-way must meet the relevant requirements of the chapter.

33.475.405.P and Q

These sections have been updated to incorporate the 1.5 inch dbh tree removal threshold within and riverward of the river setback and the 6 inch dbh tree removal threshold for areas landward of the river setback.

- F.** Removal of structures and debris located landward of the ordinary high water mark of the Willamette River, streams or drainageways, or more than 30 feet from the edge of a wetland;
- G.** Installation of temporary erosion control measures;
- H.** Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;
- I.** Continued maintenance of existing gardens, lawns, and other planted areas, including the installation of new plants except those listed on the Nuisance Plants List;
- J.** Changes to existing disturbance areas to accommodate outdoor activities such as events, play areas and gardens as long as plantings do not include plants on the Nuisance Plants List and no trees 1.5 or more inches in diameter are removed within or riverward of the river setback and no trees 6 or more inches in diameter are removed landward of the river setback;
- K.** Development located on an existing dock, wharf, or pier. A dock, wharf, or pier includes the gangway that provides access to the dock, wharf or pier;
- L.** Removal or pruning of trees as follows:
 - 1.** Within or riverward of the river setback. Removal or pruning of trees that are not more than 1.5 inches in diameter and other vegetation that is not listed as native on the *Portland Plant List*. The removal or pruning must be done with handheld equipment. Temporary disturbance must be replanted to meet the relevant subarea standards of Table 475-1.
 - 2.** Landward of the river setback. Removal or pruning of trees that are not more than 6 inches in diameter and other vegetation that is not listed as native on the *Portland Plant List*. Temporary disturbance area must be replanted to meet the subarea 3 standard of Table 475-1.
- M.** Planting of native vegetation listed on the Portland Plant List when planted with hand held equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;
- N.** Public street and sidewalk improvements ~~must be~~ that are located within the developed portion of a public right-of-way.
- O.** Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department and water quality monitoring stations when access is by foot only;
- P.** Installation of security cameras provided that no more than 100 square feet of ground surface is disturbed landward of top of bank, no ground is disturbed riverward of the top of bank, no native trees over 1.5 inches in diameter are removed within or riverward of the river setback, no trees over 6 inches are removed landward of the river setback, and disturbed area is planted with the following (top of bank is shown on Map 475-2):
 - 1.** Three shrubs per 100 square feet; and
 - 2.** Grass and forb seed mix at a ratio of 30 pounds per acre restored to pre-construction conditions;

Commentary

33.475.405.R

This section is revised to incorporate the 1.5 inch dbh tree removal threshold within and riverward of the river setback and the 6 inch dbh tree removal threshold for areas landward of the river setback.

33.475.405.T

This section is updated to incorporate the 1.5 inch dbh tree removal threshold within and riverward of the river setback and the 6 inch dbh tree removal threshold for areas landward of the river setback.

33.475.405.V

This section adds an exemption for smaller soft-surface trails that would have a very limited impact on existing natural resources within the disturbance area. The structure and criteria of this exemption is the same as a similar exemption in 33.430, Environmental Zones. Standards are available for trails that do not meet these criteria.

- Q.** Utility service using a single utility pole or where no more than 100 square feet of ground surface is disturbed landward of the top of bank, no ground is disturbed riverward of top of bank, no trees over 1.5 inches in diameter are removed within or riverward of the river setback, no trees over 6 inches are removed landward of the river setback, and disturbance area is planted with the following (top of bank is shown on Map 475-2):
1. Three shrubs per 100 square feet; and
 2. Grass and forb seed mix at a ratio of 30 pounds per acre;
- R.** Utilities installed above or below developed portions of the public right-of-way, and stormwater management facilities within the developed portions of a public right-of-way provided that no ground is disturbed riverward of top of bank (top of bank is shown on Map 475-2);
- S.** Installation of fencing in the following situations:
1. Fencing on an existing paved surface;
 2. Fencing around stormwater facilities that meet the Stormwater Management Manual; or
 3. Temporary fencing to protect resource enhancement project planting areas, prevent access to hazardous material spill areas or contaminated sites, or to close off or control the use of illegal trails. The fence must be removed within five years;
- T.** Installation of signage provided no trees over 1.5 inches in diameter are removed within or riverward of the river setback, and no trees over 6 inches are removed landward of the river setback; and
- U.** Removal of trash, provided that native vegetation is not removed or damaged. This includes removal of trash from the river bed and from the water. Removal of trash does not include the removal or remediation of hazardous substances.
- V.** Trails meeting all of the following:
1. Trails must be confined to a single ownership or be within a public trail easement
 2. Trail width does not exceed 30 inches, stair or ramp width does not exceed 50 inches, and trail grade does not exceed 20 percent except for the portion of the trail containing stairs;
 3. Plant trimming must not exceed a height of 8 feet and a width of 6 feet as shown in Figure 475-5;
 4. No native trees 1.5 or more inches in diameter and no native shrubs larger than 5 feet tall may be removed;
 5. The trail is not paved; and
 6. The trail is at least 15 feet from the top of bank of all water bodies.

Commentary

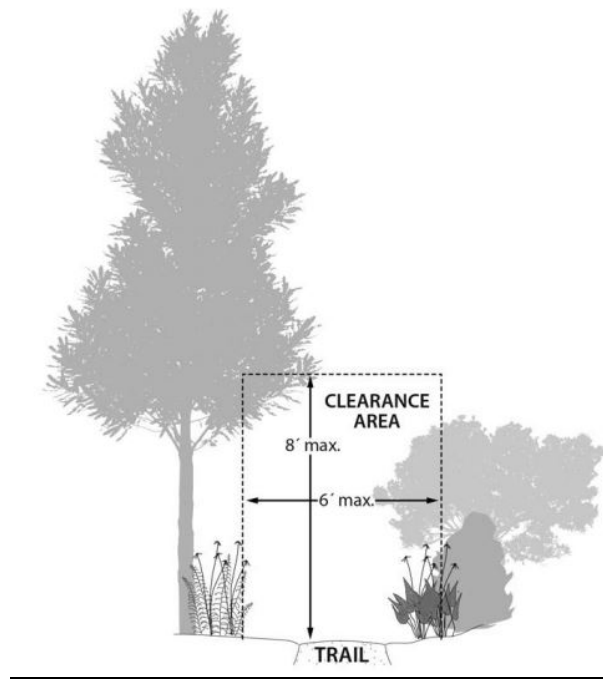
Figure 475-5

A new figure is added to provide guidance on the allowed vegetation pruning and maintenance allowed for trails exempted in 33.475.405.V.

33.475.410 Environmental Report

The revision to this section adds the *Willamette River South Reach Natural Resources Protection Plan* that will be adopted by Portland City Council as part of the *River Plan / South Reach* in 2020 as a second protection plan to serve as the basis for the application of the River Environmental overlay zone.

Figure 475-5
Trail Vegetation Pruning and Maintenance Area



33.475.410 Environmental Report

The application of the River Environmental overlay zone is based on ~~a two detailed study studies: titled~~ the Willamette River Central Reach Natural Resources Protection Plan (2017-2018) and the Willamette River South Reach Natural Resources Protection Plan (2020). The report identifies the type, location, extent and relative condition of natural resource features and describes the functional values they provide within the study area. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of the report.

33.475.420 Review Procedures

Development and exterior alterations will be reviewed through one of the following tracks:

- A. Standards.** Several specific types of development and exterior alterations are allowed within the River Environmental overlay zone if the proposal meets certain standards. The standards are intended to encourage sensitive development while providing clear limitations on disturbance, including tree removal, and minimizing impacts on resources and functional values. Adjustments to the standards are prohibited. Modification of the standards may be approved through River Review. When a proposal can meet the standards, the applicant may choose to meet the objective standards of this section or go through the discretionary River Review process. When there are no applicable standards, the proposal must be approved through River Review. Compliance with the standards is determined as part of the building permit or development permit application process. The standards are listed in 33.475.440.

33.475.440 Development Standards

The subsection referenced for exempt items is updated to refer to the new section 33.475.405. These exemptions were moved from 33.475.040.B.2. to provide greater clarity on uses and development that are exempt.

33.475.440.A. Standards for rail rights of way

33.475.440.B Standards for utility lines

In recognition of the unique contributions of floodplains directly adjacent to the riverbank to special status species habitat and flood capacity, a new "riparian buffer area" has been established and incorporated into the extent of the River Environmental overlay zone. The riparian buffer area includes the area 170 feet landward of Ordinary High Water (constrained by the 100-year floodplain and 1996 Flood Inundation Area), and is an area identified in the NMFS Biological Opinion on the FEMA National Flood Insurance Program as a place where additional steps to limit the impact of development is necessary. The riparian buffer area is provided on Map 475-6.

In the riparian buffer area, "beneficial gain" must be demonstrated for development projects that are not river-dependent or river-related. Beneficial gain is defined as no net loss of natural resource area or any functional values and a significant improvement of at least one functional value. Beneficial gain cannot be achieved through a clear and objective development standard, therefore development of rail rights of way and utility lines in the riparian buffer area must undergo River Review.

- B. Review.** River Review is required when the proposed development or exterior alteration is subject to the River Environmental overlay zone regulations and the development or exterior alteration either does not meet the River Environmental overlay zone development standards or there are no River Environmental overlay zone development standards that apply to the proposal. The process and approval criteria for River Review can be found in Chapter 33.865, River Review.

33.475.430 Prohibitions

The following are prohibited within the River Environmental overlay zone:

- A.** The packaging or storage of hazardous substances except as follows:
1. Use of consumer quantities of hazardous substances is allowed. Consumer quantities of hazardous substances are packaged and distributed in a form intended or suitable for sale through retail sale outlets for consumption by individuals for purposes of personal use; and
 2. Marine vessel fueling stations are allowed.
- B.** The planting or propagation of any plant listed on the *Nuisance Plant List*; and
- C.** Dumping of trash or yard debris.

33.475.440 Development Standards

Unless exempted by 33.475.405040-B.2., the standards in this Section apply to development and exterior alterations in the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.

- A. Standards for rail rights of way.** The following standards apply to rail rights-of-way:
1. The disturbance area associated with the development of a rail right-of-way must occur within a corridor that is not more than 20 feet wide. No disturbance is allowed outside of the 20-foot-wide corridor;
 2. Disturbance associated with the rail corridor or development of the rail corridor must not occur within the riparian buffer area, riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of any other stream, wetland, or water body. See Map 475-6 for the riparian buffer area and Map 475-2 for the top of bank ~~(top of bank is shown on Map 475-2);~~
 3. Tree removal is allowed as specified in Subsection K.; and
 4. Mitigation is required as specified in Subsection L.

Commentary

33.475.440.D. Standards for placement of piles

In this section modifications allow for the removal of piles or dolphins anywhere within the River Environmental overlay zone, rather than within a designated reach. Removal can include cutting the pile or dolphin down to the bottom of river rather than fully removing the entire structure in order to, for example, reduce the risk of disturbing existing soil contaminants.

- B. Standards for utility lines.** The following standards apply to new utility lines and upgrades to existing utility lines, including stormwater conveyance facilities, and private connections to utility lines:
1. The disturbance area for the installation of a utility line or upgrade to an existing utility line, including utility trenching, must be no more than 15 feet wide;
 2. The disturbance area must not occur within the riparian buffer area, riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of any other stream, wetland, or other water body. See Map 475-6 for the riparian buffer area and Map 475-2 for the top of bank ~~(top of bank is shown on Map 475-2);~~
 3. Tree removal is allowed as specified in Subsection K.;
 4. The temporary disturbance area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; and
 5. Exemption. If a proposed utility line or upgrade to an existing utility line runs through an area that has already been approved as a permanent disturbance area, or allowed by standards of this section, it is exempt from Paragraphs B.1. and B.2.
- C. Standards for stormwater outfalls.** The following standards apply to the installation of stormwater outfalls:
1. The disturbance area associated with the installation or replacement of a stormwater outfall must not be more than 15 feet wide;
 2. When constructed open channels or vegetated swales are proposed, the slope between the stormwater source and the water body must not exceed 15 percent at any point;
 3. If an outfall riprap pad is used it must be planted with live stakes of native plant stock, one-half inch in diameter. Stakes must be installed at a density of three stakes per square yard. Detailed specifications for installing live stakes are found in the Erosion Control Manual;
 4. Tree removal is allowed as specified in Subsection K.; and
 5. Mitigation is required as specified in Subsection L.
- D. Standards for placement of piles.** The following standards apply to the placement of up to four new single piles or two new multiple-pile dolphins for each 100 feet of shoreline:
1. The placement of the piles or dolphins must be associated with a river-dependent or river-related use;
 2. An equal number of piles or dolphins as are placed in the River Environmental overlay zone, plus one, must be removed from the River Environmental overlay zone ~~within the Central Reach~~. Removal may include cutting piles or dolphins down to the river bottom, rather than removing them completely ~~The boundaries of the Central Reach are shown on Map 475-1; and~~

Commentary

33.475.440.E. Standards for public trails

Changes to this section expand the types of trails that can be built utilizing these standards. Previously, the standard inadvertently only applied to trails designated as major public trails, such as the Springwater Corridor Trail and Willamette Greenway Trail. In the South Reach, major public trails are shown as a star symbol (★) on the Official Zoning Maps.

The standard can now be used when major public trails or smaller public trails are constructed or altered. The maximum trail width allowed by the standards for a trail designated as a major public trail will remain at 16 feet and the maximum width of the disturbance area will continue to be 24 feet. Only one trail of this size is allowed per site., For all other trails, a maximum trail width of 4 feet is allowed by the standard for trails that are not designated as a major public trail. The maximum disturbance area for these trails will be no more than 8 feet. Any trails that do not meet the criteria in the standard are subject to River Review.

33.475.440.F Standards for public viewing areas

This section is updated to add the *Willamette River South Reach Scenic Resources Protection Plan* that will be adopted as part of *River Plan / South Reach* to the source documents to be used to identify designated viewpoints within the River Environmental overlay zone.

3. If the applicant does not own the property where the pile or dolphin removal will occur, the applicant must have an easement or deed restriction sufficient to allow the necessary removal.
- E. Standards for public trails.** The following standards apply to the construction of a new ~~major~~ public trail and alterations to an existing ~~major~~ public trail:
1. The trail is located on public property or within a public trail easement;
 2. The trail must be setback at least 10 feet, and disturbance associated with construction of the trail must be setback at least 5 feet, from the top of bank of the Willamette River or a stream (top of bank is shown on Map 475-2);
 - ~~23.~~ The trail and disturbance associated with construction of the trail must be setback at least 30 feet from the top of bank of a wetland or other water body;
 - ~~3.~~ The total width of the trail must be no more than 16 feet;
 - ~~4.~~ The total width of disturbance area must be no more than 24 feet;
 4. Maximum trail width:
 - a. On sites with the major public trail designation, one trail may be up to 16 feet wide and the disturbance area for the one trail may be up to 24 feet wide;
 - b. For all other trails, the total width of the trail must be no more than 4 feet and the total width of disturbance area must be no more than 8 feet wide;
 5. Tree removal is allowed as specified in Subsection K; and
 6. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a ~~Scenic (s)~~ overlay zone.
- F. Standards for public viewing areas.** The following standards apply to the construction of a public viewing area:
1. The viewing area must be associated with a viewpoint designated in the *Central City Scenic Resources Protection Plan (2018) or River Plan / South Reach Scenic Resources Protection Plan (2020)*;

Commentary

33.475.440.H Standards for resource enhancement

This section is updated to clarify that this section cannot be used for mitigation bank projects. Proposals for mitigation bank projects are subject to River Review.

2. The total disturbance area must be no more than 800 square feet in area;
 3. The permanent disturbance area associated with the viewing area must not be more than 500 square feet in area;
 4. The total disturbance area must not be located below the top-of-bank of the Willamette River (top of bank is shown on Map 475-2), stream, or any other water body, and must not be located within 30 feet of a wetland;
 5. Tree removal is allowed as specified in Subsection K.; and
 6. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a Scenic ~~(s)~~ overlay zone.
- G. Standards for view corridors.** The following standards apply to pruning or removing vegetation in a Scenic ~~(s)~~ overlay zone.
1. Tree removal and pruning is allowed as specified in Subsection K.; and
 2. Temporary disturbance areas must be replanted with three shrubs per 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.
- H. Standards for resource enhancement.** The following standards apply to resource enhancement projects. These standards do not apply to mitigation bank projects.
1. There must be no excavation, fill, or construction activity below ordinary high water mark of any river, stream, wetland or other water body;
 2. The riverbank may be re-graded if the slope after grading is shallower than the slope prior to grading and the slope is no greater than 20 percent (20 percent slope represents a rise to run ratio equal to 1:5);
 3. Rock armoring must not be used on the surface between the top of bank and the ordinary high water mark of any water body except as required surrounding outfalls (top of bank is shown on Map 475-2);
 4. No structures are proposed landward of the top of bank except trails that meet the regulations of 33.475.440.E, and structures associated with public viewing areas that meet the regulations of 33.475.440.F.;
 5. All nuisance plants listed on the *Portland Plant List* must be removed;
 6. Tree removal is allowed as specified in Subsection K.; and
 7. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a Scenic ~~(s)~~ overlay zone.

Commentary

33.475.440.K.2

Updates to this section include the addition of a requirement that all vegetation removal or pruning be conducted outside of the primary bird nesting season, which extends from April 15 to July 31. Limiting removal and pruning during this period will avoid potential impacts on nesting birds adjacent to the river and riverbank. If tree removal or pruning is unavoidable during this period, a biologist must be present on-site to identify the presence of nests and avoid impacts on them.

- I. Standards for site investigative work.** The following standards apply to site investigative work. Site investigative work includes soil tests and test pits, land surveys, and groundwater and water quality monitoring stations.
1. No more than 100 square feet of disturbance area is allowed per test pit or monitoring station;
 2. Disturbance associated with site investigative work must be temporary;
 3. No trees are removed; and
 4. Temporary disturbance area must be planted with three shrubs per 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre.
- J. Standards for ~~other~~ development in a City of Portland park.** The following standards apply to development in a City of Portland park that is not subject to another set of development standards contained in this Section.
1. The total disturbance area must not be more than 2,200 square feet;
 2. Disturbance area must not be located below the top-of-bank of the Willamette River (~~top of bank is shown on Map 475-2~~), streams, or other water body, or located within 30 feet of a wetland. See Map 475-2 for the top of bank of the Willamette River;
 3. Tree removal is allowed as specified in Subsection K.; and
 4. Mitigation is required as specified in Subsection L.
- K. Standards for removal or pruning of vegetation.** The following standards apply to the removal or pruning of vegetation:
1. All vegetation removal activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site;
 2. Except for dead, dying and dangerous trees subject to Subsection K.5.b, vegetation removal or pruning within the riparian buffer area is prohibited between April 15 and July 31 unless a biologist is present on-site during removal.
 - ~~23.~~ 23. ~~The~~All vegetation removal or pruning must be conducted with handheld equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;
 - ~~34.~~ 34. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1;
 - ~~45.~~ 45. ~~The~~Vegétation that is removed or pruned is limited to the following:
 - a. Vegetation listed on the *Nuisance Plant List*;

Commentary

33.475.440.K.5.c.

This section is updated to add the *Willamette River South Reach Scenic Resources Protection Plan* to the source documents to be used to identify designated viewpoints within the River Environmental overlay zone.

33.475.440.K.5.d.

The previous item d. is deleted from the list and moved into text of the previous item e. This is accomplished by specifically addressing madrone, garry oak and Pacific yew and trees that are not listed on the *Nuisance Plant List*, which includes the non-native trees addressed in the previous item d.

The *Willamette River South Reach Scenic Resources Protection Plan* is also added to the source documents to be used to identify designated viewpoints within the River Environmental overlay zone.

The previous item e. is now item d. The labels of subsequent items have been updated based on this change.

33.475.440.K.5.d.(9)

This new subsection allows the removal of trees within the disturbance area associated with residential structures built per the new standard for residential structures. Additional information on the new standard can be found in 33.475.440.O, Standards for residential development.

33.475.440.K.5.e.

This new subsection allows for the thinning of trees planted as a part of a resource enhancement project as long as those trees are less than 3 inches dbh and the relevant landscaping standards of Table 475-1 are still met.

- b. Dead, dying or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or certified arborist. All sections of wood more than 12 inches in diameter must be placed in the River Environmental overlay zone of the ownership within which the wood was cut unless the City Forester authorizes the removal because the wood is diseased and will threaten the health of other trees;
- c. Vegetation that exceeds the height restriction of a view corridor with special height restrictions designated in the *Central City Scenic Resources Protection Plan* or River Plan / South Reach Scenic Resources Protection Plan;
- ~~d. Trees that are not native trees on the *Portland Plant List*; or~~
- ed. Madrone, Garry Oak or Pacific Yew that are less than 6 inches in diameter, or other ~~native trees not listed~~ on the ~~*Portland Plant List*~~ *Nuisance Plant List* that are less than 12 inches in diameter may be removed if the removal or pruning is in conjunction with development or an exterior alteration approved under the standards of this section as follows:
 - (1) Within a rail right-of-way or within 10 feet of the rail right-of-way;
 - (2) Within a utility line corridor;
 - (3) Within the disturbance area for installation or replacement of stormwater outfalls;
 - (4) Within a major public trail;
 - (5) Within a public viewing areas associated with viewpoints designated in the *Central City Scenic Resources Protection Plan* or River Plan / South Reach Scenic Resources Protection Plan;
 - (6) Within a ~~s~~Scenic ~~{s}~~ overlay zone;
 - (7) Within a resource enhancement area; or
 - (8) Within the disturbance area associated with development in a City of Portland park; or
 - (9) Within the disturbance area associated with residential structures.
- e. Removal of trees less than 3 inches in diameter planted within a resource enhancement area when the relevant required landscaping subarea standards of Table 475-1 are still met.

Commentary

33.475.440.K.6.a.(2)

This subsection is revised to provide additional clarity on the legal structures needed for off-site tree replacement. The language is more consistent with language included in other sections of the Zoning Code.

Additionally, the subsection is updated with language that requires off-site tree planting be located within the 100-year or 1996 Flood Inundation Area if on-site tree removal occurred within either of those areas.

Table 475-2

The tree replacement ratios in Table 475-2 have been updated to more specifically address the recommendations in the FEMA National Flood Insurance Program Biological Opinion, which focuses on replacement of trees that are six inches diameter at breast height (dbh) or larger. The replacement ratios for trees between six and 12 inches dbh is combined with the ratios for trees between 12 and 20 inches dbh. Removal of these trees now requires the planting of three native trees. For trees of this size range, planting a combination of trees and shrubs is no longer an available option.

33.475.440.L Standards for mitigation

The update to this section adds the new standards for residential development and existing seawalls to the list of development actions that may use this section to satisfy mitigation requirements. The standard for residential development requires that the standards for mitigation be satisfied when alterations to existing development are conducted in an area where the maximum allowed disturbance area has already been exceeded. For more information see 33.475.440.O, Standards for residential development.

33.475.440.L.1

This subsection is updated to clarify the different mitigation ratios that must be achieved for onsite mitigation and mitigation through the purchase of credits from a City-certified mitigation (1.5:1) and all other offsite mitigation (3:1). City-approved mitigation banks may include by State- or Federal-certified mitigation banks or City-certified mitigation banks, if the City chooses to pursue such a certification. At this time, there are no City-certified mitigation banks but they may be established in the future.

56. Trees removed must be replaced as shown in Table 475-2 and must meet the following:

- a. Replacement vegetation must meet all of the following:
 - (1) Trees must be a minimum ½-inch caliper, bareroot or live stakes, unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent;
 - (2) The planting must occur within the River Overlay ~~Z~~zones. Trees must not be planted within a ~~s~~Scenic ~~(s)~~ overlay zone. If the vegetation is not planted on the applicant's site, then the applicant must own the property or possess a legal instrument, such as an easement or deed restriction, that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the mitigation~~the applicant must own the property or have an easement or deed that ensures the vegetated area will not be developed. If tree removal on the project site is located in either the 100-year floodplain or 1996 Flood Inundation Area tree planting must also be within the 100-year floodplain or 1996 Flood Inundation Area;~~ and
 - (3) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met; and
- b. Vegetation planted to meet the landscaping requirements of 33.475.220 may be counted towards meeting the tree replacement standard.

Table 475 – 2		
Tree Replacement in River Environmental Overlay Zone		
Size of tree to be removed (inches in diameter)	Option A (no. of native trees to be planted)	Option B (combination of native trees and shrubs)
At least 1.5 and up to 6	1	Not applicable
More than 6 and up to 12 20	2 3	Not applicable
More than 12 and up to 20	3	1 tree and 3 shrubs
More than 20 and up to 25	5	3 trees and 6 shrubs
More than 25 and up to 30	7	5 trees and 9 shrubs
More than 30	10	7 trees and 12 shrubs

L. **Standards for mitigation.** The following standards apply to mitigation required by Subsections A., C., and ~~J.~~, O., and P.

1. Mitigation ratio. Mitigation must be provided at the following ratios:
 - a. Onsite mitigation and mitigation purchased from a City approved mitigation bank must occur at a minimum 1.5:1 ratio of mitigation area to project disturbance area;

Commentary

33.475.440.L.2

This section is modified to identify where mitigation projects can be located. Credits purchased from City-approved mitigation banks must be located as close as possible to the project within the Lower Willamette River. The Bureau of Environmental Services will maintain the list of approved mitigation banks that may be used and the list will be available to the public. All other mitigation must be completed within the River Environmental overlay zone.

Additionally, the update establishes a requirement that if the project disturbance area is within the 100-year floodplain or 1996 Flood Inundation Area, the mitigation must also be located in either of those areas.

33.475.440.L.3.

This subsection is revised to clarify that for mitigation other than credits from a City-approved mitigation banks, the applicant must possess a legal instrument to ensure the monitoring and maintenance of mitigation projects.

33.475.440.L.4. and 5.

These subsections are revised to replace the reference to Subsection J with Subsection K for tree and vegetation removal requirements.

- b. All other mitigation must occur at a minimum 3:1 ratio of mitigation area to project disturbance area. Mitigation must occur at a 1.5:1 ratio of mitigation area to project impact area. Project impact area is the total area within the River Environmental overlay zone where structures will be built, vegetation will be removed, or ground disturbance will occur as a result of the proposal. Mitigation area is not counted as part of the project impact area;
2. Location of mitigation. The mitigation area must be located as follows:
 - a. If mitigation will be provided as credits from a mitigation bank, the credits must be purchased from a from City approved mitigation bank located along the Lower Willamette River that is as close as possible to the disturbance area;
 - b. All other mitigation areas must be located in the River Environmental overlay zone and if the disturbance area is located within the 100-year floodplain or the 1996 Flood Inundation Area, the mitigation area must also be located within the 100-year flood plain or 1996 Flood Inundation Area. Mitigation must occur in the River Environmental overlay zone within the Central Reach. The boundaries of the Central Reach are shown on Map 475-1.;
3. If the mitigation area is not on the site where the project disturbance occurs and is not credits purchased from a City approved mitigation bank, then the applicant must own the property or possess a legal instrument, such as an easement or deed restriction that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the mitigation;
4. Nuisance plants identified on the *Portland Plant List* must be removed within the area to be replanted. Trees removed to meet this Paragraph must be replaced as specified in Subsection ~~J~~K.;
5. Plantings required for tree removal, as specified in Subsection ~~J~~K., can be counted towards mitigation if the planting is located within the River Environmental overlay zone or in an area that is contiguous to the River Environmental overlay zone;
6. Required planting density standards are specified in Table 475-3. Trees may be clustered. Trees must not be planted within a view corridor ~~shown on Map 480-1~~. Plants must be selected from the *Portland Plant List*;

Commentary

Table 475-3 Planting Density			
	Small Trees[1]	Medium Trees[1]	Large Trees[1]
Planting Density	One tree and one of the following two options for every 100 square feet:	One tree and one of the following two options for every 200 square feet:	One tree and one of the following two options for every 300 square feet:
	Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or	Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or	Option 1: Nine shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or
	Option 2: Three shrub and four other groundcover plants.	Option 2: Six shrub and eight other groundcover plants.	Option 2: Nine shrub and 12 other groundcover plants.

[1] Tree size is based on Title 11.60.020.C Canopy Size

7. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used; and
8. Trees must be a minimum ½-inch caliper, bareroot or live stake, unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent.

M. Standards for application of soil amendments. The following standards apply to the application of soil amendments:

1. The depth of the soil amendment must be no more than 12 inches;
2. The soil must not be applied below the ordinary high water mark of the Willamette River, streams, or other water body, or within 30 feet of a wetland;
3. The composition of the growing medium must meet one of the following:
 - a. For all planting areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or
 - b. For all planting areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A landscape architect or civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
4. Placement of soil is not allowed when the ground is frozen or saturated; and
5. Temporary erosion control measures are required until permanent stabilization measures are functional. Temporary erosion control measures must be biodegradable or removed after permanent stabilization measures are functional or within 3 years, whichever is sooner.

Commentary

33.475.440.N Standards for Placement of Temporary Structures for a Seasonal Public Swimming Area

This standard is amended to include two structures that address seasonal swimming areas. One is a land-based storage container exclusively used for life-safety equipment and the other is the placement of up to eight temporary floating structures in the river. The latter currently applies to the Central Reach and will be expanded to apply to the South Reach. The addition of allowing a temporary land-based structure that is limited in size, exclusively for life safety equipment, reflects the need to ensure safe public swimming by providing access to personal flotation devices and other safety equipment to respond to in-river safety issues when they arise. Temporary public swimming areas are growing in popularity now that the river is cleaner, due in part to the Combined Sewer Overflow project, completed in 2011. The South Reach is a river recreation hub along the Willamette River and it is anticipated that there may be public swimming locations in the future where the placement of temporary structures may be desired.

The standards for placement of temporary floating structures ensures that negative impacts to endangered fish and shallow water habitats are minimized through standards that locate these structures (outside of shallow water areas) and by a free-floating requirement (no anchoring to river bottom). The timeframe for allowance of these structures is also outside of fish migration season.

N. Standards for placement of temporary ~~floating~~ structures for a seasonal public swimming area. The following standards apply to temporary ~~floating~~ structures for a seasonal public swimming area:

1. One land-based structure exclusively for storing life-safety equipment is allowed per site and must not exceed 300 square feet of floor area.
2. Temporary floating structures are allowed and must meet the following standards:
 - a. More than one floating structure is allowed per site, but no more than 8 floating structures are allowed per reach of the Willamette River;
 - b. The floating structure must be free-floating or attached to an existing dock, pier or piling. Free floating means that the structure is anchored to the river bottom and is not accessible from the riverbank via anything other than the water;
 - c. The structure must not have walls or a roof; and
 - d. The structure must be at least 100 feet away from the riverbank. The 100 feet is measured horizontally from the ordinary high water mark. See Figure 475-9.
- ~~3.1. The structure and a~~ All work necessary to install and remove the temporary structures is allowed in the Willamette River only between July 1 and October 31; All temporary structures must be removed by October 31; and
4. The swimming area must be open to the public.
- ~~2. The structure must be located within the OS zone;~~
- ~~3. There are no more than 8 temporary floating structures in the Central Reach at one time;~~
- ~~4. The structure is free-floating or is attached to an existing dock, pier or piling. Free-floating means that the structure is anchored to the river bottom and is not accessible from the riverbank via anything other than the water;~~
- ~~5. The dimensions of the entire temporary structure must not be greater than 12 feet by 50 feet;~~
- ~~6. The structure has no walls and no roof;~~
- ~~7. The structure is at least 50 feet away from the riverbank. The 50 feet is measured horizontally from the ordinary low water mark. See Figure 475-4; and~~
- ~~8. The hours of operation are between 6 am and 10 pm.~~

33.475.440.O Standards for residential development

This new development standard establishes a process by which residential developments are not required to go through discretionary review for approval. The structure of the standard is similar to the general development standard implemented in the Environmental overlay zone chapter (33.430, Environmental Zones).

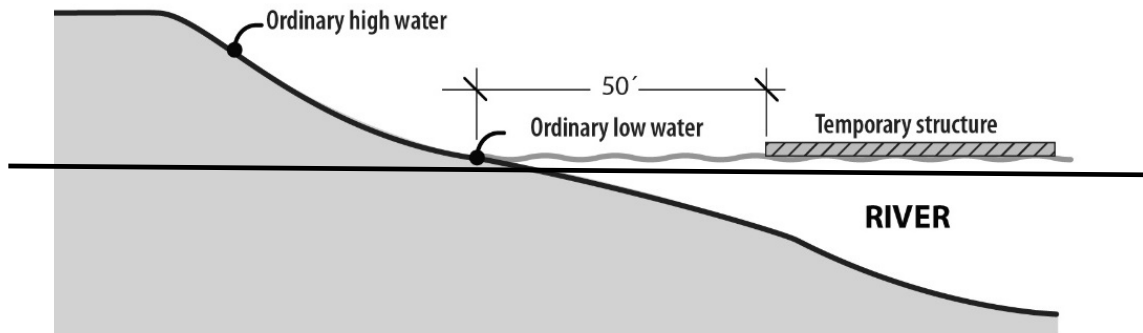
The standard for residential structures establishes a maximum disturbance area allowed within the River Environmental overlay zone in different base zones. Table 475-4 provides the maximum allowed disturbance area for a number of residential zones and all other zones. The amount of area outside of the River Environmental overlay zone must be subtracted from this maximum disturbance area to determine the allowable disturbance area on an individual parcel.

A number of criteria are required to be met to utilize the standard. For both new development and alterations to existing development, the disturbance area must be at least five feet from the river setback boundary and a minimum of 30 feet from other streams, wetlands and water bodies. Tree removal within the disturbance area is allowed if the requirements of Subsection K are met.

In cases where the existing development exceeds the maximum disturbance area included in Table 475-4, alterations are allowed without mitigation if the existing disturbance area is not expanded. Increases in building coverage are allowed if the mitigation requirements of Subsection L are satisfied.

Additionally, a provision is included in the standard to allow for the reduction in the minimum front and street building and garage entrance setbacks to provide greater flexibility in preserving the natural resources within the River Environmental overlay zone. These setbacks can be reduced from the minimum allowed by the base zone to zero, if necessary.

Figure 475-49
Floating Structures



[FIGURE 475-9 TO BE UPDATED IN PROPOSED DRAFT]

O. Standards for residential development. The following standards apply to residential development:

1. The maximum disturbance area allowed within the River Environmental overlay zone on the site is determined by subtracting all portions of the site outside the River Environmental overlay zone boundary from the number listed in Table 475-4.

Table 475-4			
Maximum Disturbance Area Allowed			
	<u>RF, R20, and R10</u>	<u>R5</u>	<u>All Other Zones</u>
<u>Maximum Disturbance Area</u>	<u>5,000 sq. ft. [1]</u>	<u>2,500 sq. ft. [1]</u>	<u>50% of the base zone building coverage</u>

[1] Subtract the amount of area on the site outside the resource area from the number given in the table.

2. The disturbance area is located outside of the riparian buffer area and is set back at least:
 - a. Five feet landward of the river setback.
 - b. Thirty feet from the top of bank of any other stream, wetland, or other water body landward of the river setback.
3. Tree and vegetation removal is allowed as specified in Subsection K.
4. For alterations to existing development where the existing disturbance area now exceeds the limitations of Table 475-4, alterations are allowed within the existing disturbance area when the following are met:
 - a. The existing disturbance area may not be expanded; and
 - b. Increases in building coverage and exterior improvement area are allowed if the mitigation requirements specified in Subsection L are met.

Commentary

33.475.440.P Standards for existing seawalls

This section is added to allow for and limit the maintenance and repair of existing seawalls. Seawalls may be reinforced as long as the width of the structure is increased by no more one foot and the height is not increased.

33.475.450 Corrections to Violations of the River Environmental Overlay Zone

The title of this section is updated to remove the reference to development standards because the correction process applies to projects that utilize development standards or River Review.

5. The minimum front and street building setback and garage entrance setback of the base zone may be reduced to any distance between the base zone minimum and zero. Where a side lot line is also a street lot line the side building and garage entrance setback may be reduced to any distance between the base zone minimum and zero. Parking spaces may be allowed within the first 10 feet from a front lot line, and within a minimum side street setback.
6. Mitigation is required as specified in Subsection L.

P. Standards for existing seawalls. The following standards apply to the maintenance and repair of existing seawalls:

1. The width of the structure may be increased by no more than 1 foot, measured from the face to the back of the seawall;
2. The height of the structure may not be increased;
3. Installation of tiebacks is allowed in addition to the increased width of the structure if no additional permanent disturbance is proposed;
4. All vegetation removal or pruning must be conducted with handheld equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;
5. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1;
6. Tree removal is allowed as specified in Subsection K.; and
7. Mitigation is required as specified in Subsection L.

33.475.450 Corrections to Violations of the River Environmental Overlay Zone Development Standards

- A. Purpose.** The purpose of the correction regulations is to ensure the timely restoration of natural resources and functional values that have been degraded due to a violation of the River Environmental overlay zone ~~standards~~.

These regulations establish a process to determine which review requirements will be applied to remedy a violation that takes place in the River Environmental overlay zone. The type of review required depends on the circumstances of the violation. Section 33.475.450.B details methods for correcting such violations and Title 3 of the City Code details the enforcement penalties.

- B. Correction Options.** Applicants must choose one of the following options to correct a river environmental code violations.

1. When these options may be used.

Commentary

33.475.450 B.1.d.

The correction options facilitate more timely remediation for damage to resources and functional values that occur as a result of a violation. There are three options for correcting violations. Specific criteria must be met to utilize Option One or Option Two. Option Three requires River Review. All corrections to violations within the riparian buffer area must utilize Option Three to ensure that beneficial gain is achieved. See 33.865, River Review, for more information on the River Review process and requirements.

33.475.450 B.2.a.

The placement of fill is added to the list of actions that must be removed as a part of the violation.

- a. If all of the following are met, the applicant may choose Option One, Option Two, or Option Three:
 - (1) No more than 12 diameter inches of trees were removed;
 - (2) No ground disturbance occurred riverward of the top of bank of the Willamette River (~~top of bank is shown on Map 475-2~~), in the riparian buffer area, or within 30 feet of the top of bank of a stream, wetland or other water body. See Map 475-2 for top of bank;
 - (3) The correction will remove all illegal development; and
 - (4) The correction will replant illegal clearing.
 - b. If any of the following occurred, the applicant may not use Option One, but may choose either Option Two or Option Three:
 - (1) More than 12 diameter inches of trees were removed;
 - (2) A Madrone, Garry Oak, or Pacific Yew larger than 6 inches was removed; or
 - (3) Disturbance occurred riverward of the top of bank of the Willamette River (~~top of bank is shown on Map 475-2~~), or within 30 feet of the top of bank of a stream, wetland or other water body. See Map 475-2 for top of bank.
 - c. If the applicant cannot meet Options One or Two, Option Three must be used.
 - d. If the violation occurred within the riparian buffer area, the applicant must use Option Three. See Map 475-6 for the riparian buffer area.
 - ~~de.~~ If the violation also violates a condition of approval of a land use review, no trees have been removed, and disturbance did not occur riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant may choose Option One or the process described in Section 33.730.140. The applicant may not choose Options Two or Three.
 - ef. If the violation also violates a condition of approval of a land use review, trees have been removed, and disturbance occurred riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant must use the process described in Section 33.730.140. The applicant may not choose one of the options in this section.
2. Option One, Remove and Repair. This option results in removal of illegal development and replanting and repair of any damage. All of the requirements of this paragraph must be met. Adjustments and modifications to these requirements are prohibited.
 - a. All items-and, materials, and fill placed in the area of violation are removed and no new disturbance area is created;
 - b. Any soil compaction resulting from the violation is tilled or otherwise broken up to a depth of 6 inches prior to planting;

Commentary

33.475.450 B.2.c.(7)

The minimum diameter of trees planted to remediate tree removal has is reduced to $\frac{1}{2}$ -inch from one inch because $\frac{1}{2}$ -inch trees are more available than one inch trees.

33.475.450 B.3.a.

The previous reference incorrectly identified only 33.475.440.B. All applicable standards in 33.475.440 must be met.

- c. Violation remediation planting. The area to be planted is the area disturbed by the violation. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted to meet the standards of Table 475-3;
 - (2) For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used. All plants must be native;
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted to meet the standards of Table 475-3;
 - (4) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (5) Trees must be a minimum ½ inch in diameter, bareroot or live stake, unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Trees must not be planted within a Scenic ~~(s)~~ overlay zone. Trees may be clustered. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots;
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met; and
 - (7) For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum ~~one~~ one ½-inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
- 3. Option Two, Retain and Mitigate. This option results in legalizing the illegal development and mitigating for any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these standards are prohibited.
 - a. The applicable standards of paragraphs 33.475.440-~~B~~ must be met;
 - b. Violation remediation planting. The area to be planted is the area disturbed by the violation. Where development is approved for the area disturbed by the violation, an area of the same size elsewhere on the site must be planted. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted to meet the standards of Table 475-3;
 - (2) For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species are used. Plants must be native and selected from the *Portland Plant List*.

Commentary

33.475.450 B.3.c.

The minimum diameter of trees planted to remediate tree removal is reduced to $\frac{1}{2}$ -inch from one inch because $\frac{1}{2}$ -inch trees are more available than one inch trees.

- (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted to meet the standards of Table 475-3;
 - (4) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (5) Trees must be a minimum ½ inch in diameter, bareroot or live stake, unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Trees must not be planted within a ~~s~~Scenic (~~s~~) overlay zone. Trees may be clustered. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met; and
 - c. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum ~~one~~ ½-inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
4. Option Three, River Review. This option requires River Review, using the approval criteria and procedures below:
- a. Approval criteria. The applicable approval criteria of Subsection 33.865.120 must be met.
 - b. Review procedures. Reviews are processed as follows:
 - (1) Type III. A Type III review is required for any development, exterior alteration, or exterior improvement within a wetland, stream channel, drainageway, or water body
 - (2) Type II. All other reviews to correct violations are processed through a Type II procedure.
 - (3) All River Reviews must provide the information required in Section 33.865.040, Supplemental Application Requirements

Commentary

Clean Up of Contaminated Sites

33.475.500 Removal or Remediation of Hazardous Substances

- A. General.** The following regulations are substantive requirements that apply to actions taken to remove or remediate hazardous substances. All of the regulations must be met unless one or more are demonstrated to be impracticable pursuant to subsection G, below.
- B. Where these regulations apply.** The regulations of this section apply to the portion of the site located within the boundaries of the removal or remediation action.
- C. Review procedure.**
1. Except as described in paragraph C.2, compliance with these regulations is processed through a Type II procedure.
 2. If the action to remove or remediate hazardous substances is subject to this Code but exempt from procedural requirements, the action must comply with the substantive requirements of these regulations to the extent required under state or federal law and the person performing the action must notify the City that the action is exempt. A person conducting a cleanup otherwise exempted from the procedural requirements may choose to obtain a permit.
- D. Relationship to other regulations in this chapter.** Actions to remove or remediate hazardous substances that are approved or selected under Oregon or federal cleanup law are exempt from the procedural requirements of Chapter 33.475. Any part of an action that is not in itself a remedial or removal action must meet all other applicable regulations and procedural requirements of this chapter.
- E. Regulations that apply to actions to remove or remediate hazardous substances.** The following regulations apply to proposals for the removal or remediation of hazardous substances:
1. The removal or remedial actions and the final remedy must not preclude the use of the site consistent with the uses allowed by the base zone or an approved conditional use. If the site is within the River Industrial overlay zone or riverward of the river setback, the final remedy must allow the use of the site for river-dependent or river-related activities unless the site is found to be unsuitable for river-dependent or river-related uses. Generally, this means that the final remedy must allow development of major public trails, dredging necessary to establish or maintain navigation to and from riverfront sites, the placement of piles or dolphins, or the development of a marine facility, dock, or wharf or other river-dependent or river-related structure;
 2. Buildings, structures and equipment required as part of removal or remediation actions must be located and designed taking into account the purpose of the river setback standard which is to keep structures at least 50 feet away from the top of bank of the river, reserve space for public access to the river and development of major public trails, and allow for natural resource enhancement (top of bank is shown on Map 475-2); and

Commentary

33.475.500.F.1.b.(2)

The existing code incorrectly includes a reference to Map 480-1. There is no such map in the zoning code. View corridors associated with viewpoints within the River Environmental overlay zone are identified in the scenic resources protection plans identified in this subsubparagraph. The *River Plan / South Reach Scenic Resources Protection Plan* is added to the reference documents included in this subsubparagraph.

3. Water quality treatment facilities must be located outside of the River Environmental overlay zone.

F. Regulations that apply to actions to remove or remediate hazardous substances that occur in specific areas. The following regulations apply to actions within the River Environmental overlay zone to remove or remediate hazardous substances based on specific locations:

1. The following regulations apply to areas landward of the top of bank (top of bank is shown on Map 475-2):
 - a. Disturbance of the ground and removal of native vegetation must be avoided outside of the actual soil removal areas. If avoiding disturbance or native vegetation removal is not practicable, disturbance and removal must be minimized.
 - b. Where ground disturbance or removal of native vegetation cannot be avoided, the area must be replanted. The replanting standards are as follows:
 - (1) Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted and within 10 feet of any plantings;
 - (2) Planting density. The replanting area must meet one of the following plant and planting density standards specified in Table 475-45. Trees may be clustered. Trees must not be planted within a view corridor designated in the *Central City Scenic Resources Protection Plan or River Plan / South Reach Scenic Resources Protection Plan*, ~~shown on Map 480-1.~~

Table 475-45			
Planting Density			
	Small Trees[1]	Medium Trees[1]	Large Trees[1]
Planting Density	One tree and one of the following two options for every 100 square feet: Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or Option 2: Three shrub and four other groundcover plants.	One tree and one of the following two options for every 200 square feet: Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or Option 2: Six shrub and eight other groundcover plants.	One tree and one of the following two options for every 300 square feet: Option 1: Nine shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or Option 2: Nine shrub and 12 other groundcover plants.

[1] Tree size is based on Title 11.60.020.C Canopy Size

- (3) Plant diversity. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species are used;

Table 475-6

The tree replacement ratios in Table 475-6 are updated to more specifically address the recommendations in the FEMA National Flood Insurance Program Biological Opinion, which focuses on replacement of trees that are six inches diameter at breast height (dbh) or larger. The replacement ratios for trees between six and 12 inches dbh are combined with the ratios for trees between 12 and 20 inches dbh. Removal of these trees now requires the planting of three native trees. For trees of this size range, planting a combination of trees and shrubs is no longer an available option.

33.475.500.F.1.c(3)

Tree replacement is allowed anywhere within the River Environmental overlay zone. Replacement of trees removed from within the 100-year floodplain or 1996 Flood Inundation Area must also be conducted within the 100-year floodplain or 1996 Flood Inundation Area.

This subsubparagraph is updated to clarify the allowed legal structures and agreements for demonstrating adequate control of the proposed tree planting location. The language is more consistent with language included in other sections of the zoning code.

33.475.500.F.1.c(4)

The existing code incorrectly referenced subsubparagraph G.1.b(2). The correct reference is subsubparagraph F.1.b(2).

- (4) Plant size. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent; and
 - (5) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.
- c. Tree replacement. Trees that are 1.5 inches or greater in diameter that are removed must be replaced based on Table 475-~~56~~:

Table 475-56 Tree Replacement in Hazardous Substance Cleanup Sites		
Size of tree to be removed (inches in diameter)	Option A (no. of native trees to be planted)	Option B (combination of native trees and shrubs)
At least 1.5 and up to 126	2	Not applicable
More than 126 and up to 20	3	1 tree and 3 shrubs Not applicable
More than 20 and up to 25	5	3 trees and 6 shrubs
More than 25 and up to 30	7	5 trees and 9 shrubs
More than 30	10	7 trees and 12 shrubs

- (1) Size. The replacement trees must be a minimum ½-inch diameter or bareroot unless they are oak or madrone, which may be one gallon size. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent.
- (2) Type. The replacement trees must be native trees selected from the *Portland Plant List*;
- (3) Location. All replacement trees must be planted within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the ~~Central Reach~~River Environmental overlay zone. See map 475-2. (top of bank is shown on Map 475-2). If the project site is located in the 100-year floodplain or 1996 Flood Inundation Area, the plantings must also be within the 100-year floodplain or 1996 Flood Inundation Area. The person conducting the cleanup must own the property where the trees are planted or possess a legal instrument, such as an easement or deed restriction, that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the plantings~~have an easement or deed restriction sufficient to ensure the success of the tree planting~~; and
- (4) Replacement trees can be counted toward meeting the requirements of subsubparagraph ~~GF~~F.1.b(2).

Commentary

- d. All vehicle areas and construction staging areas installed for purposes of conducting the removal and remediation actions must be removed from the River Environmental overlay zone when they are no longer necessary for remedy construction. All such areas must be removed by the time the project is complete and the areas must be replanted according to the standards of subparagraph ~~GF~~F.1.b, above.
2. The following regulations apply to the area between the top of bank and the ordinary high water mark:
 - a. When there is an alteration to the area between top of bank and the ordinary high water mark that is greater than 500 square feet or includes more than 50 cubic yards of excavation or fill, changes the ground contours, results in the removal of buildings, requires engineering of the river bank or includes in-water work, the following should be met (top of bank is shown on Map 475-2):
 - (1) The area between the top of bank and the ordinary high water mark where the alteration occurs must be designed using biotechnical techniques including soil bioengineering (top of bank is shown on Map 475-2). Figures 475-~~510~~510 and 475-~~611~~611 show examples of biotechnical techniques. In addition to using biotechnical techniques, the following requirements apply:
 - Rock armoring or other hard surface armoring methods must not be used between the top of bank and the Ordinary High Water Mark except as needed surrounding outfalls. This is not intended to preclude using rock or other hard surface stabilization methods below the surface if necessary to contain hazardous substances or to preclude the use of rocks or gravel as part of the biotechnical technique;
 - The bank must be sloped or terraced in a way that allows the establishment and maintenance of vegetation as the primary soil stabilization method;
 - If the site is currently used for public recreation, including access to a beach or the river, the bank must be sloped or terraced in a way that allows for at least one public access way to the beach or river;
 - Large wood, including root wads, tree boles and logs, must be used to reduce localized erosion, improve bank stabilization, and improve ecological values and, if the site is currently used for public recreation, support continued use of beaches and the river; and
 - At least eighty percent of the area between the top of bank and the ordinary high water mark that is being altered as a result of the remedy must be planted with shrubs. At least one tree must be planted for every 400 square feet of altered area. All of the area that is not planted with shrubs or trees must be fully covered with ground cover plants. All plants must be selected from the Portland Plant List and should be appropriate for the conditions on the site. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

Commentary

- (2) If biotechnical techniques are not practicable, as described in 33.475.500.G, and rock armoring is used on the surface between the top of bank and the Ordinary High Water Mark, then the slope of the bank must be shallow enough to allow a combination of rock and vegetation. ~~(top of bank is shown on See Map 475-2).~~
At a minimum, live native willow or dogwood stakes should be planted in adequate soil, in the interstices between the rocks at a ratio of three stakes for every square yard of rock armoring.
 - b. When there is a minor alteration of less than 500 square feet or less than 50 cubic yards of excavation or fill to the area between the top of bank and the ordinary high water mark, the regulations of paragraph G.1, above apply. ~~(top of bank is shown on See Map 475-2).~~
 3. In the area that is riverward of the Ordinary High Water Mark, the following apply:
 - a. Avoid in-water permanent structures that will impact the navigation channel or will preclude river-dependent or river-related development from accessing and utilizing the river for public recreation, transportation, tourism, or the transport, transfer and conveyance of goods and materials to and from the upland site;
 - b. Integrate large wood, or other natural wave deflection structures or techniques that mimic the function of large wood, into the near-shore environment. Rock armoring, chemically treated wood, articulated block, and industrial debris is discouraged;
 - c. If the area is a beach or is a shallow water depositional area, then the final design should include all of the following:
 - (1) At least six inches depth of substrate that is ½-inch rounded gravel or smaller in size should be placed over capping material;
 - (2) The submerged slope should be no steeper than 1:7 (rise to run ratio); and
 - (3) Public access from major public trails or abutting upland sites to the river should not be precluded.
 - d. If the area is not a beach or is not a shallow water depositional area, then the final substrate should be rounded rock no larger than 6 inches (D100=6") with an average gradation size of 3 inches (D50=3"). Angular rock is discouraged.
- G. Demonstration of Impracticability.** A person conducting a cleanup may be exempted from compliance with any requirement in this section if the person demonstrates that compliance with the requirement is not capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project remedial purposes. The person must still comply with that requirement to the extent practicable and remains subject to all other applicable requirements. To demonstrate impracticability the applicant must submit an engineering analysis, a cost schedule and any other information, such as desired future use of the site, that supports a demonstration that a requirement cannot be fully met.

Commentary

Figure 475-~~510~~
Example 1: Upland and In-Water Contamination Cleanup

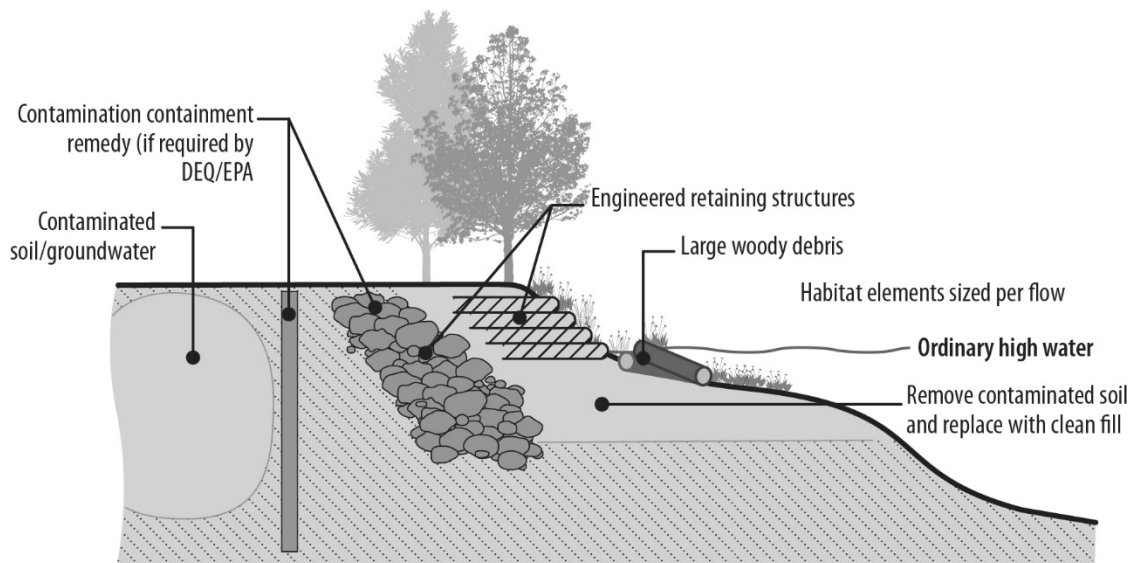
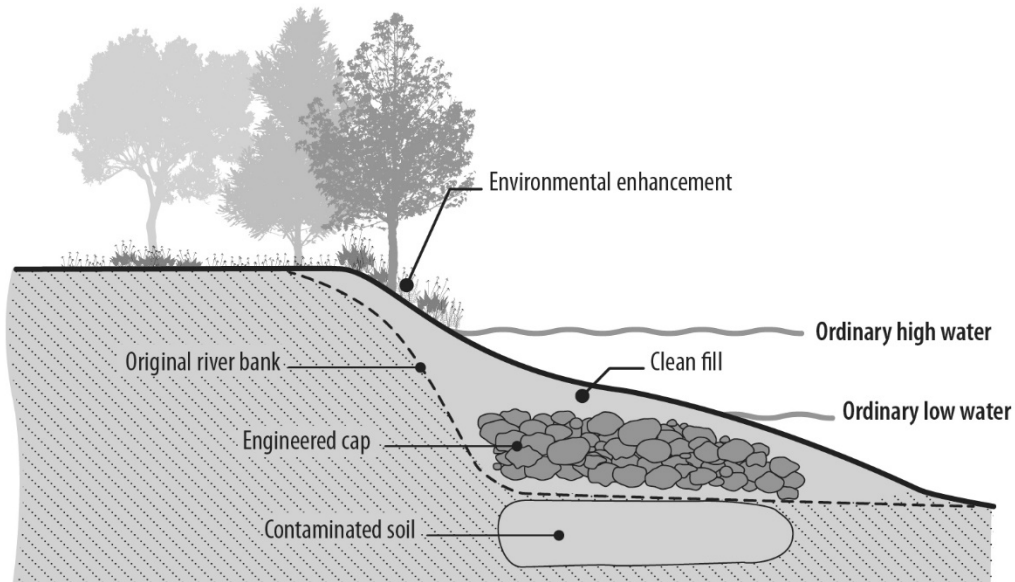


Figure 475-~~611~~
Example 2: In-Water Contamination Cleanup



Commentary

Map 475-1

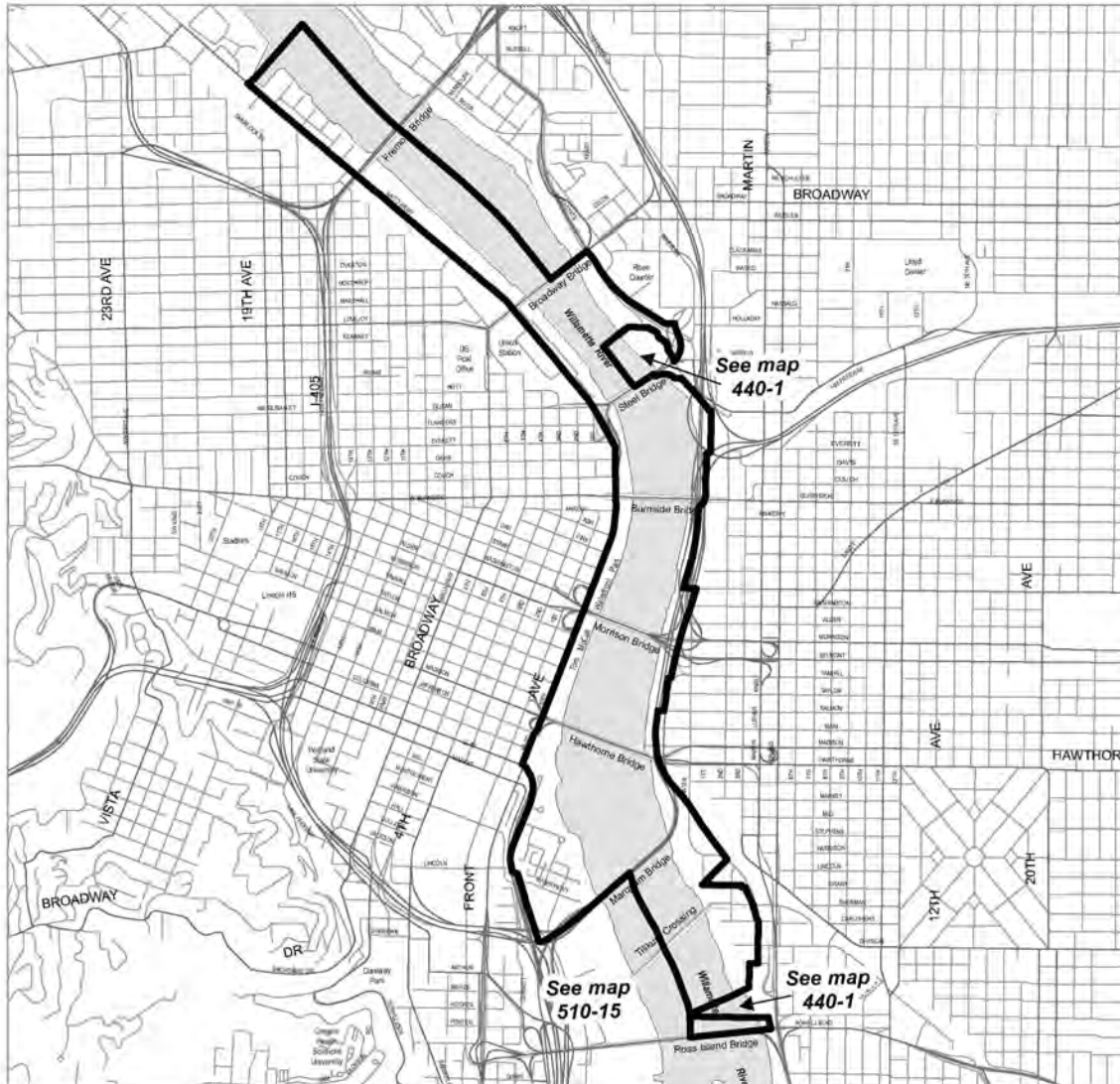
This map adds the South Reach portion of the Willamette Greenway Boundary to River Overlay Boundary that is now subject to the regulations of Chapter 475. These are revised Willamette River Greenway regulations for the South Reach.

Central Reach River Overlay Boundary

Map 475-1

Map 1 of 2

Map Revised Xxxx X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary



Commentary

Commentary

Map 475-2

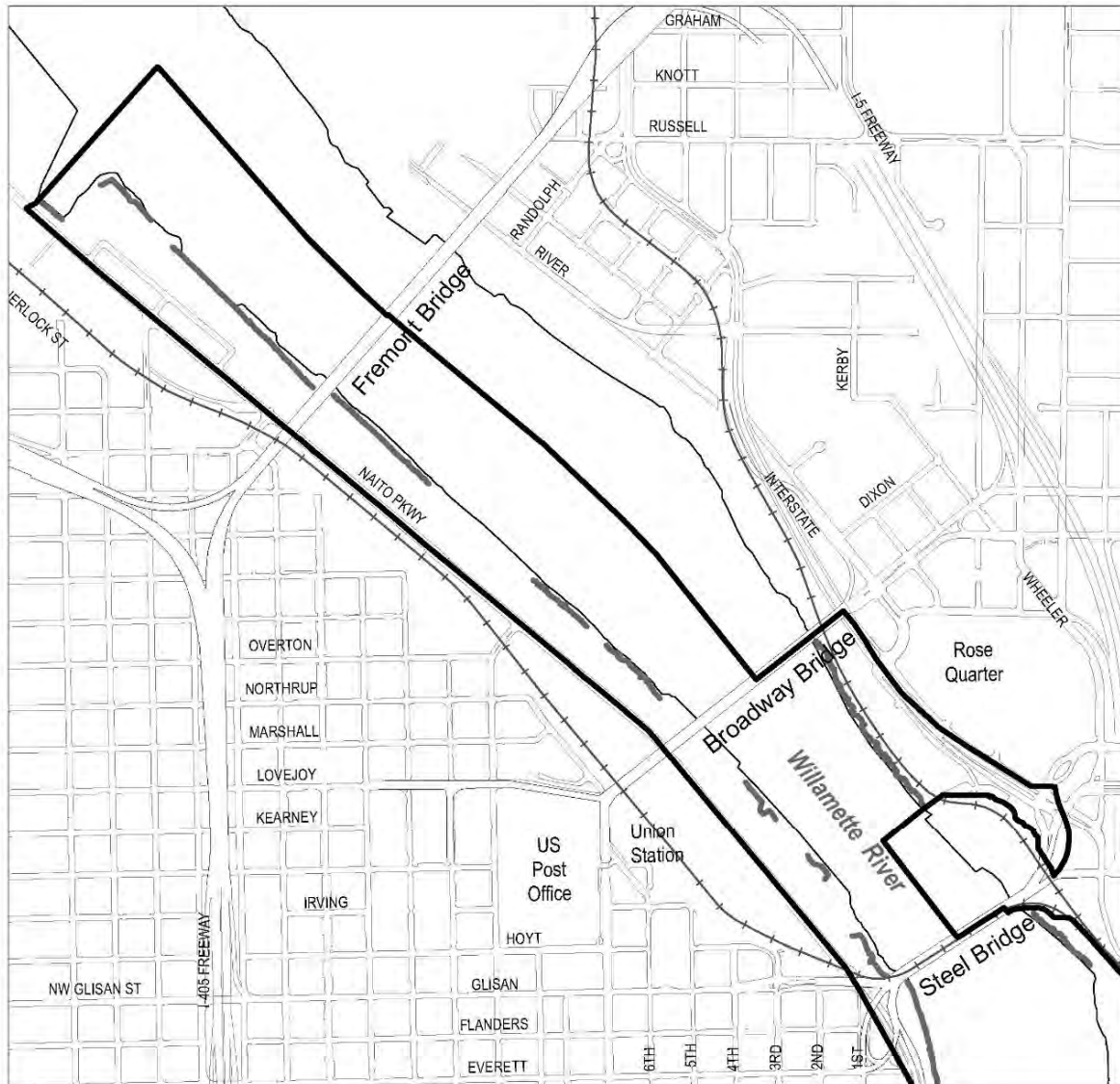
This map adds the South Reach portion of the Willamette Greenway Boundary to the Top of Bank map that is now subject to the regulations of Chapter 475. These are updated Willamette River Greenway regulations for the South Reach.

Top of Bank

Map 475-2

Map 1 of 6

Map Revised Xxxx X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary
- Top of Bank (where mapped)



Commentary

Top of Bank

Map 475-2

Map 2 of 6

Map Revised Xxxx X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary
- Top of Bank (where mapped)

▲
NORTH

0 800 1,600

Scale in Feet

Bureau of Planning and Sustainability
Portland, Oregon

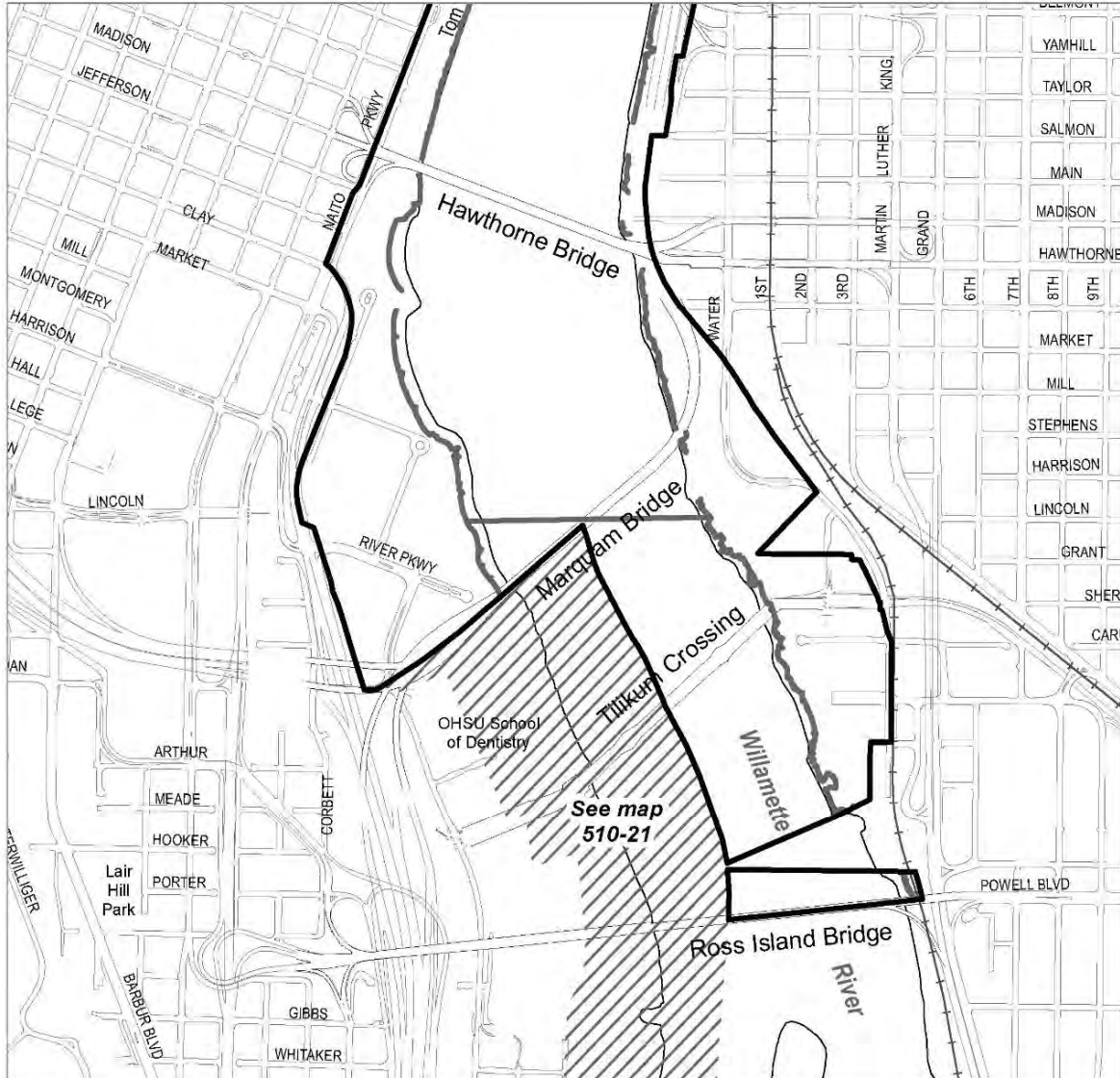
Commentary

Top of Bank





Map 475-2

Map 3 of 6

Map Revised Xxxx X, 201X



Legend

-  City Boundary
-  Urban Service Boundary
-  River Overlay Boundary
-  Top of Bank (where mapped)



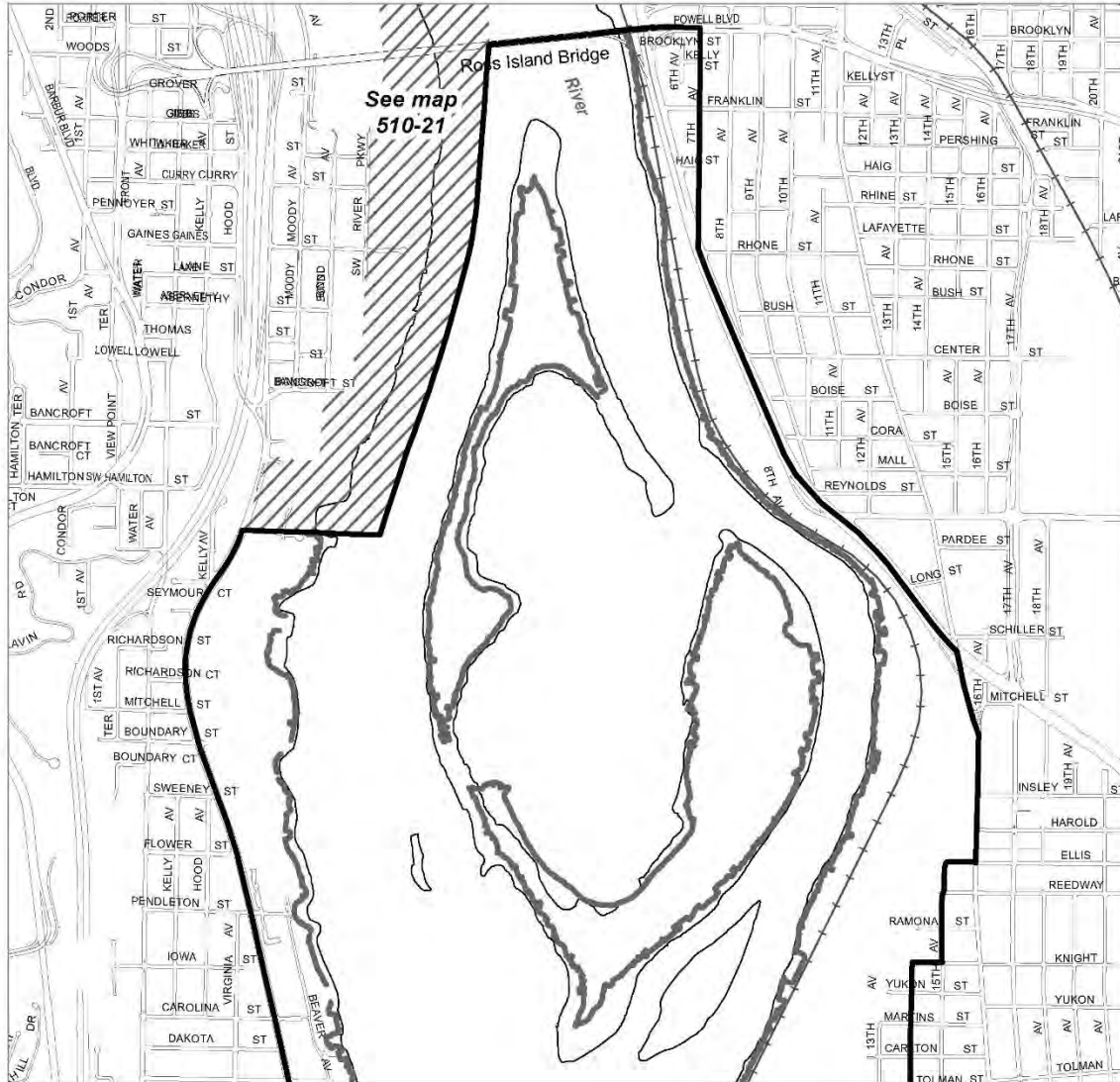
Commentary

South Reach Top of Bank

Map 475-2

Map 4 of 6

Map Revised XXXX X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary
- Top of Bank (where mapped)



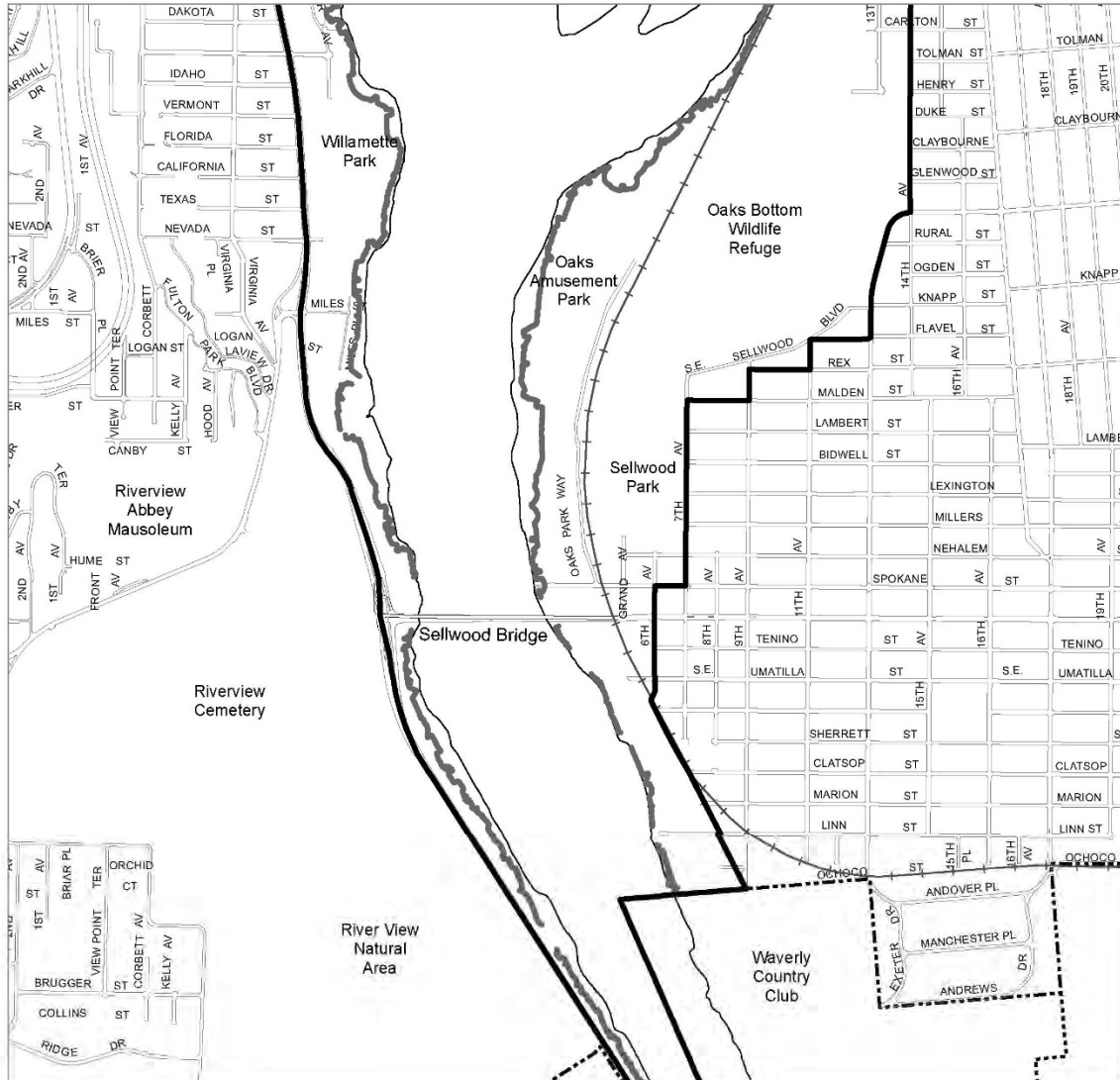
Commentary

South Reach Top of Bank

Map 475-2

Map 5 of 6

Map Revised xxxx X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary
- Top of Bank (where mapped)



Commentary

Page 143

Commentary

Map 475-3

No change to Map 475-3.



Areas Exempt from Landscaping Requirements

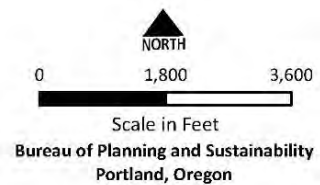
Map 475-3

Map Revised Xxxx X, 201X



Legend

-  River Overlay Boundary
-  Exempt Areas



Commentary

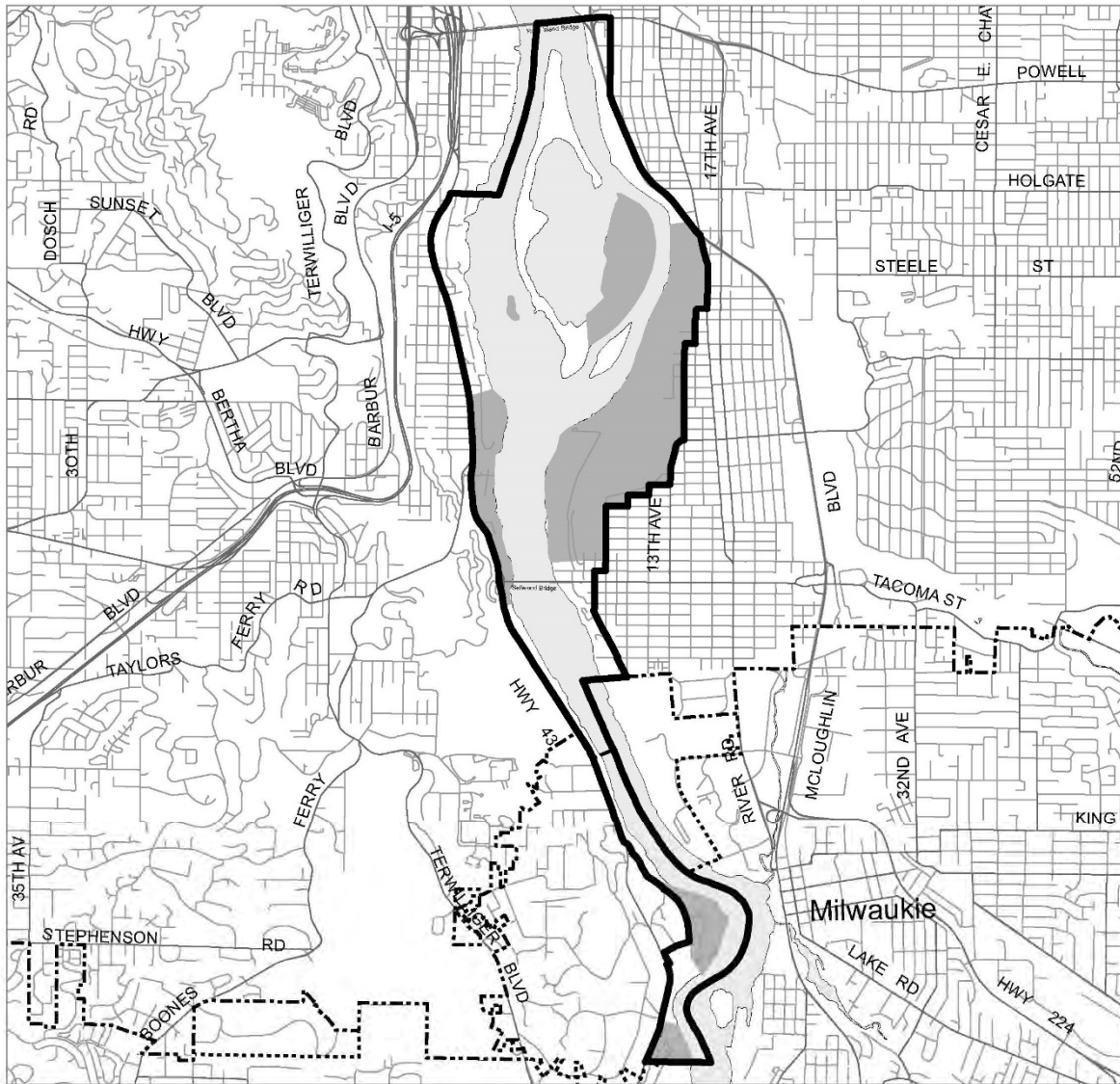
Map 475-4 Archaeological Sensitivity Areas

This new map to Chapter 33.475 depicts the high sensitivity areas where archaeological resources are most likely to be found in the South Reach area. These areas were identified in an archaeological resources study completed by Willamette Cultural Resources Associates for the Bureau of Planning and Sustainability. The study reviewed pre-contact land forms, archaeological studies and records, and historical accounts. It did not include interviews. The areas shown on the map are subject to regulations in 33.475.245.

Archaeological Sensitivity Areas

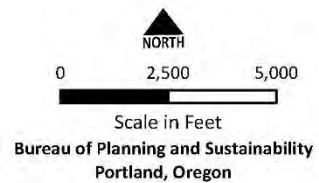
Map 475-4

Map Revised Xxxx X, 201X



Legend

- City Boundary
- Urban Service Boundary
- River Overlay Boundary
- High Sensitivity areas



Commentary

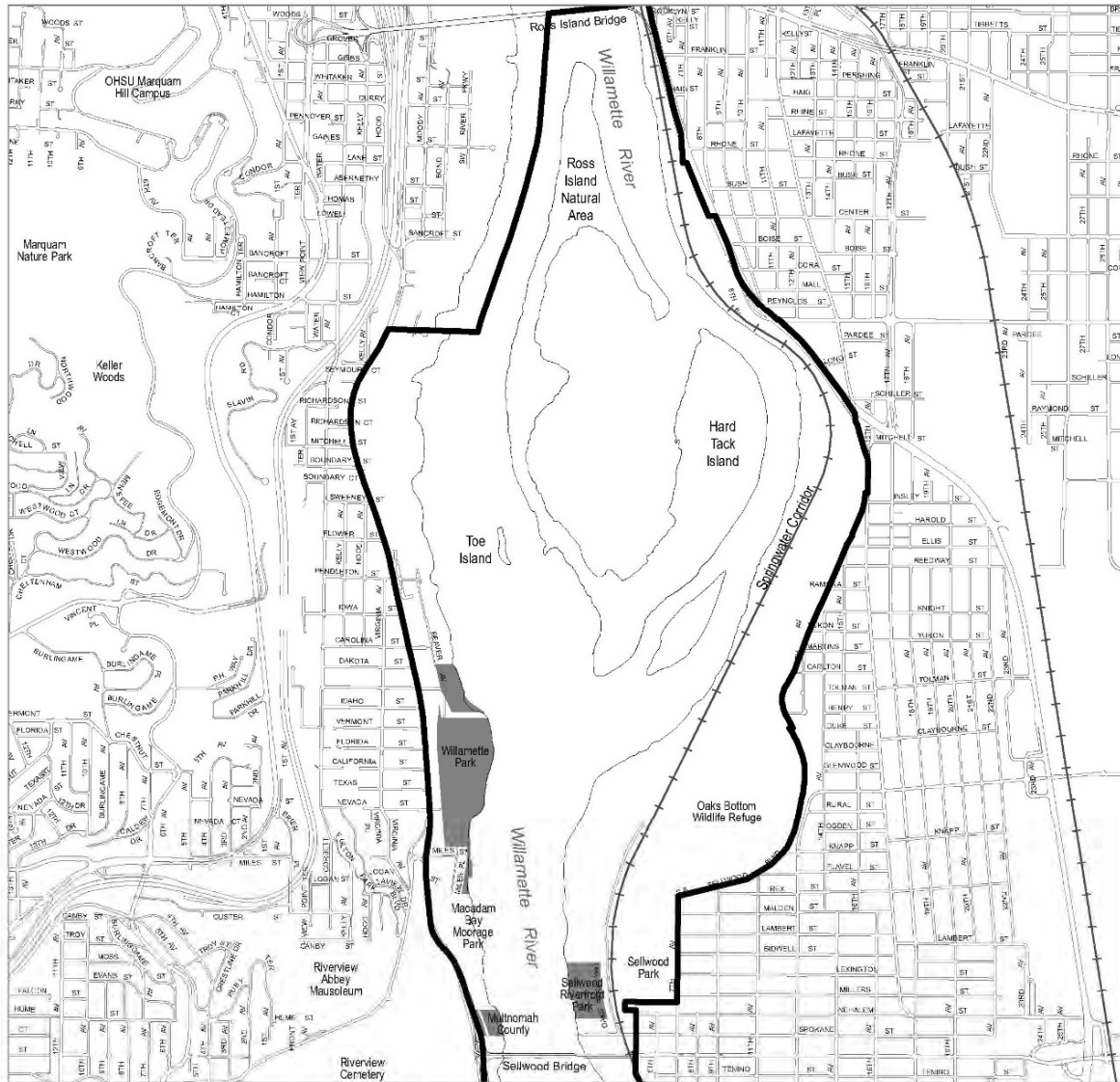
Map 475-5 Additional Uses Allowed in the Open Space Zone

This map depicts three public park sites where a limited amount of Retail Sales and Service Uses are allowed in the River Recreational (r*) overlay zone. The intent of this provision is to allow a limited amount of river recreation-supportive retail development like recreational equipment rentals and refreshments to locate in the Open Space zone at three parks in the South Reach. See 33.475.200.B. for the regulation.



Retail Sales and Services Allowed in OS

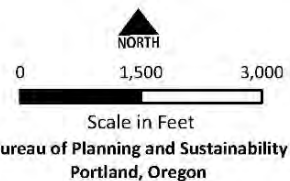
Map 475-5

Map Revised Xxxx X, 201X



Legend

-  River Overlay Boundary
-  OS zoned sites where retail sales and services are allowed



Commentary

Map 475-6 Riparian Buffer Area

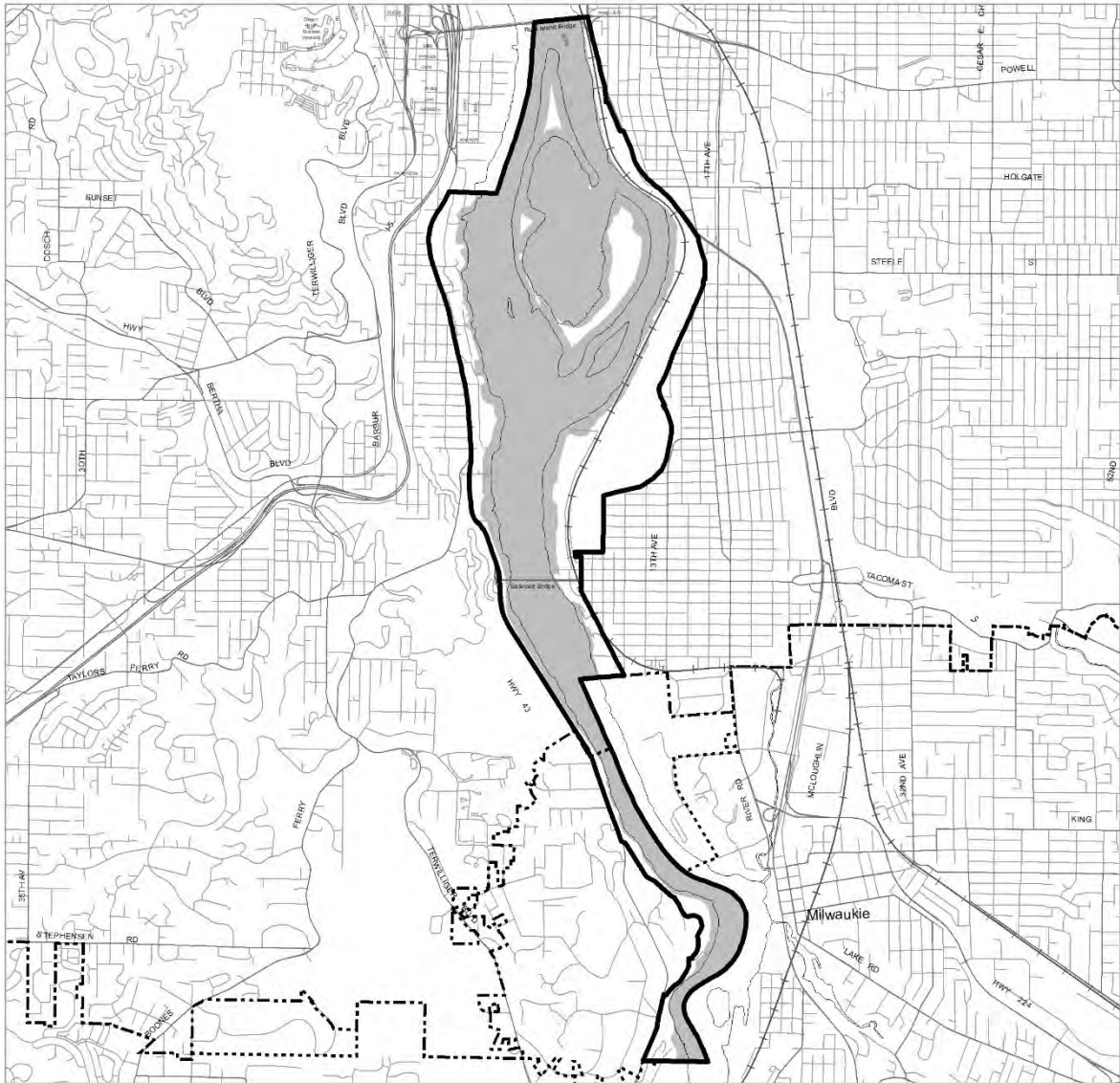
In recognition of the unique contributions of floodplains directly adjacent to the riverbank to special status species habitat and flood capacity, a new "riparian buffer area" has been established and incorporated into the extent of the River Environmental overlay zone. The riparian buffer area includes the area 170 feet landward of Ordinary High Water (constrained by the 100-year floodplain and 1996 Flood Inundation Area), and is an area identified in the NMFS Biological Opinion on the FEMA National Flood Insurance Program as a place where additional steps to limit the impact of development is necessary. The riparian buffer area is provided on Map 475-6.

In the riparian buffer area, "beneficial gain" must be demonstrated for development projects that are not river-dependent or river-related. Beneficial gain is defined as no net loss of natural resource area or any functional values and a significant improvement of at least one functional value. Beneficial gain cannot be achieved through a clear and objective development standard, therefore development of rail rights of way and utility lines in the riparian buffer area must undergo River Review.

South Reach Riparian Buffer Area

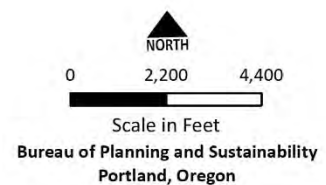
Map 475-6

Map Revised Xxxx, X 201X



Legend

-  City Boundary
-  Urban Service Boundary
-  River Overlay Boundary
-  Riparian buffer area



Commentary

33.480 Scenic Resource zone

Code amendments to this chapter add standards for viewpoints and include a number of minor changes or clarifications.

33.480.030 Application

There are more scenic resource inventoried in the two reports than the scenic resource zone applies to. The change clarifies that the zone only applies to view corridors, viewpoints and scenic corridors.

33.480.035 Where These Regulations Apply

This sentence is separated from the Application description for clarity. No change to intent or applicability.

33.480 Scenic Resource Zone

480

Sections:

- 33.480.010 Purpose
- 33.480.020 Map Symbol
- 33.480.030 Application of the Scenic Resource Zone
- 33.480.035 Where These Regulations Apply
- 33.480.040 Development Standards
- 33.480.050 Tree Removal Review

33.480.010 Purpose

The Scenic Resource zone is intended to:

- Protect Portland's significant scenic resources that provide benefits to the public as identified by the City in the *Scenic Resources Protection Plan* (1991) and the *Central City Scenic Resources Protection Plan* (2017);
- Enhance the appearance of Portland to make it a better place to live and work;
- Create attractive entrance ways to Portland and its districts;
- Improve Portland's economic vitality by enhancing the City's attractiveness to its citizens and to visitors; and
- Implement the scenic resource policies, goals, and objectives of Portland's Comprehensive Plan.

The purposes of the Scenic Resource zone are achieved by establishing height limits within view corridors to protect significant views and by establishing additional landscaping and screening standards to preserve and enhance identified scenic resources.

33.480.020 Map Symbol

The Scenic Resource zone is shown on the Official Zoning Maps with a letter "s" map symbol.

33.480.030 Application of the Scenic Resource Zone

The Scenic Resource zone is to be applied to all significant view corridors, viewpoints and scenic corridors~~resources~~ identified in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*.

33.480.035 Where These Regulations Apply

Any changes to land or development, including rights-of-way, within the Scenic Resource zone are subject to the regulations of this chapter.

Commentary

33.480.040.A. View Corridors

The standards for view corridors are expanded to require construction of designated viewpoints. The intent is to make sure there is a clear and safe area for people to stop walking or biking and look at the protected view.

Not all significant view corridors documented in the scenic resource inventories have a requirement for a viewpoint; only those show on Map 480-1. View corridors and viewpoints shown on Map 480-1 are associated with the major public trail or are in rights-of-way and have a current or anticipated high public use as a viewpoint. The size of the viewpoint is a minimum that should allow space for a person to stand or sit comfortably. Larger viewpoints are allowed. The location of the viewpoint is intended to create a space where people can move out of the lanes of travel to safely stop and take in the view.

33.480.040 Development Standards

The development standards of the Scenic Resource zone apply based on the mapping designations shown in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*. The standards for each subsection below apply only to areas with that designation in the respective plan. The resource is defined as the width of the right-of-way or top of bank to top of bank for scenic corridors. Setbacks are measured from the outer boundary of the right-of-way unless specified otherwise in the ESEE Analysis and as shown on the Official Zoning Maps. In some cases, more than one development standard applies. For example, within a scenic corridor, a view corridor standard will apply where a specific view has been identified for protection.

A. View Corridors. The following standards apply to~~All development and vegetation within a view corridor designation in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan* are subject to the regulations of this Subsection.~~

1. Purpose. The intent of the view corridor designation and standards is to establish maximum heights within view corridors to protect views from designated viewpoints and to provide a location where the public can safely take in a significant view.
2. Standards.
 - a. Height Limit. All development within the designated view corridors are subject to the height limits of the base zone, overlay zone, or plan district, except when a more restrictive height limit is established by the view corridor. In those instances, the view corridor height limit applies to both development and vegetation. Removal of trees or limbs necessary to maintain the view corridor is allowed. When no development is proposed, tree removal is subject to the requirements of Title 11, Trees. Public safety facilities are exempt from this standard.
 - b. Viewpoint standards. The following standards apply to the viewpoint portion of view corridors shown on a Map 480-1:
 - (1) Construction of a viewpoint. Construction of a viewpoint that is at least 16 feet in total area is required as follows:
 - When there is new development;
 - When exterior alterations to existing development are 35 percent or greater of the assessed improvement value of the total improvements on the site.
 - (2) Viewpoint location.
 - If the viewpoint is identified on a site that also has a major public trail designation, the viewpoint must be located adjacent to the major public trail and must comply with the Use of Trail, Hours of Use, Trespass and Trail Maintenance and Liability sections of Chapter 33.272, Major Public Trails.
 - A viewpoint shown in a right-of-way must be located within or adjacent to the lanes of pedestrian or bicycle travel.

Commentary

33.480.040.A.2.b (3)

Amenities increase the quality of the viewpoint and provide visual cues that the viewpoint is a substantially different space than the lanes of pedestrian or bicycle travel.

(3) Viewpoint amenities. The viewpoint must include at least two of the following amenities. The amenities must be located within the required viewpoint area:

- A bench;
- A light;
- A sign with information about the view; or
- A telescope directed at the focal features of the view.

CB. **Scenic Corridors.** The following standards apply to~~All~~ development and vegetation within a scenic corridor designation in the~~Scenic Resources Protection Plan or the Central City Scenic Resources Protection Plan~~ are subject to the regulations of this Subsection.

1.-2. [No change]

Commentary

Map 480-1 (Map 1 of 2), Designated Viewpoints

This new map shows the designated viewpoints in the Central City that are required to meet the viewpoint standards of 33.480.040.A.2. View corridors and viewpoints shown on the map are associated with the major public trail (designated with "stars" on the zoning map) or in rights-of-way and have a current or anticipated high public use as a viewpoint. As stated in the section, amenities will only be required during development or redevelopment of the trail or right-of-way.

Commentary

Map 480-1 (Map 2 of 2), Designated Viewpoints

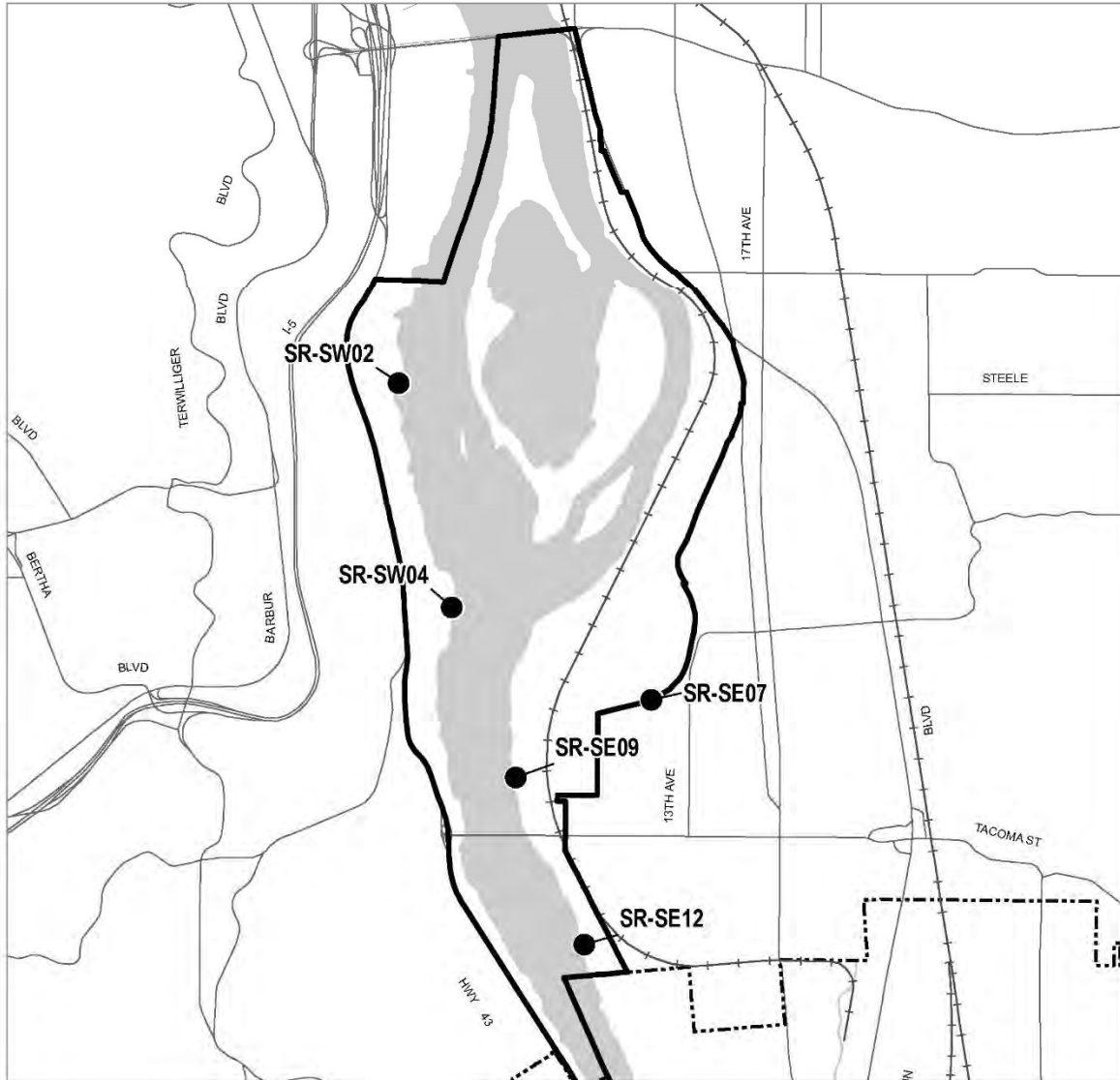
This new map shows the designated viewpoints in the South Reach that are required to meet the viewpoint standards of 33.480.040.A.2. View corridors and viewpoints shown on the map are associated with the major public trail (designated with "stars" on the zoning map) or in rights-of-way and have a current or anticipated high public use as a viewpoint. As stated in the section, amenities will only be required during development or redevelopment of the trail or right-of-way.

Designated Viewpoints

Map 480-1

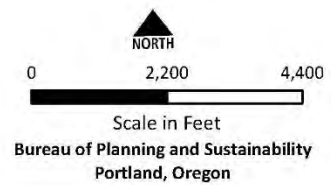
Map 2 of 2

Map Revised Xxxx, X 201X



Legend

- City Boundary
- Designated Viewpoint
- South Reach River Overlay Boundary



Commentary

33.865 River Review

This chapter contains the review process, application requirements and approval criteria for River Review. River Review will replace *Greenway Review* in the South Reach.

33.865 River Review

865

Sections:

- 33.865.010 Purpose
- 33.865.020 When River Review is Required
- 33.865.030 Procedure
- 33.865.040 Supplemental Application Requirements
- 33.865.100 Approval Criteria
- 33.865.110 Modification of Site-Related Development Standards
- 33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards
- 33.865.200 Use of Performance Guarantees
- 33.865.210 Special Evaluations by a Trained Professional

33.865.010 Purpose

River Review is intended to:

- Protect, conserve and enhance identified resources and functional values in the River Environmental overlay zone, compensate for unavoidable significant detrimental impact to those resources and functional values, and ensure the success of mitigation and enhancement activities;
- Help the City meet existing and future requirements pursuant to federal and state laws including the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the National Flood Insurance Act;
- Provide flexibility for unusual situations. River Review allows for evaluation of alternative development scenarios that may have less detrimental impact on protected resources, and allows for the evaluation of off-site mitigation proposals;
- Provide a mechanism for the evaluation of detailed, site-specific information on the location or quality of resources and functional values;
- Provide a mechanism for modifying the location of the River Environmental overlay zone to reflect permitted changes in the location or quality of resources and functional values.
- Provide for the replacement of resources and functional values that are lost through violations of the River Environmental overlay zone standards;
- Provide a mechanism to modify the River Environmental overlay zone standards of Chapter 33.475, River Overlay Zones; and
- Allow for modifications to site-related development standards when modification will result in greater resource protection.

33.865.030 Procedure

This section is updated to change the procedure by which River Review is completed from Type IIX to Type II. The use of a Type II procedure is consistent with the existing process utilized in Environmental and Greenway reviews.

33.865.040 Supplemental Application Requirements

In general, the supplemental application requirements are substantively the same as those required for environmental review. However, in recognition of the unique contributions to special status species habitat of Willamette River floodplains directly adjacent to the riverbank, a new "riparian buffer area" has been established and incorporated into the River Environmental overlay zone. The riparian buffer area includes the area 170 feet landward of Ordinary High Water (limited by the 100-year floodplain and 1996 Flood Inundation Area). The riparian buffer area is identified in the Federal Emergency Management Agency (FEMA) National Flood Insurance Program Biological Opinion prepared by the National Marine Fisheries Service as an area where additional steps to limit the impact of development are necessary. The riparian buffer area will ensure a net increase in habitat functions in this important floodplain area.

Going forward, several of the required site plans will need to include the 1996 Flood Inundation Area and riparian buffer area. The extent of the riparian buffer area can be found in Map 475-6.

Additionally, a minor change has been made to reduce the number of copies of site plans required for a river review application. Two physical copies and one scaled PDF of each required site plan are sufficient for completeness review. This will reduce the amount of paper used for project submittals.

33.865.020 When River Review is Required

River Review is required in the following situations:

- A.** When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.440 or there are no development standards applicable to the proposal;
- B.** When River Review is required to correct a violation of the River Environmental overlay zone regulations, as described in subsection 33.475.450;
- C.** When an applicant wishes to fine tune the boundary of the River Environmental overlay zone based on a detailed environmental study that more accurately identifies the location and quality of resources and functional values. Minor boundary changes are allowed through River Review. Map error corrections are reviewed under 33.855.070, Corrections to the Official Zoning Maps, and removal of the River Environmental overlay zone is processed as a change of overlay zone as stated in 33.855.060, Approval Criteria for Other Changes; or
- D.** To modify the boundary of River Environmental overlay zone to reflect permitted changes in the location or quality of resources or functional values. The modification of River Environmental overlay zone procedure does not apply to changes caused by violations of subsection 33.475.440.

33.865.030 Procedure

A River Review is processed through a Type II~~x~~ procedure, except as described in 33.475.450.B when River Review is required to correct a violation of the River Environmental overlay zone regulations.

33.865.040 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required when the River Review application is for development in the River Environmental overlay zone, or for modification of the River Environmental overlay zone boundary:

- A. Supplemental site plan requirements.** ~~Five~~Two physical copies ~~and one PDF~~ of each required site plan must be submitted. The site plans must show the entire site, must be drawn accurately to a scale that is between 1 inch to 50 feet and 1 inch to 10 feet, and must show all property lines with dimensions, a north arrow and a date. Additional site plans that show only a portion of the site may be submitted. All copies of site plans must be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The Director of BDS may waive items listed in this subsection if they are not applicable to the specific review; otherwise they must be included. Additional information such as wetland characteristics or soil type may be requested through the review process.
 - 1. Existing conditions site plan. The existing conditions site plan must show the following:

Commentary

33.865.040.A.1.c.

Existing conditions site plans must now include the boundary of the 1996 Flood Inundation Area. The location of the 1996 Flood Inundation Area is available from the City and is currently used to demonstrate compliance with Title 24.50, Flood Hazard Areas.

33.865.040.A.1.d.

Existing conditions site plans must now include the boundary of the riparian buffer area.

33.865.040.A.2.a.

The proposed development site plan must now include the boundary of the riparian buffer area.

- a. Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, including structures and topographic contours referenced to determine top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate. See Section 33.910.030, Environmental-Related Definitions, Top of Bank. In the case of a violation, also identify the location of the wetland or water body prior to alteration;
 - b. 100-year floodplain and floodway boundaries. In the case of a violation, also identify the location of the 100-year floodplain and floodway prior to alteration;
 - c. 1996 Flood Inundation Area boundary;
 - d. The boundaries of the riparian buffer area. See Map 475-6;
 - ~~ee.~~ Drainage patterns, using arrows to indicate the direction of major drainage flow;
 - ~~ef.~~ Boundaries of the River Environmental overlay zone. These boundaries may be scaled in relation to property lines from the Official City Zoning Maps;
 - ~~eg.~~ Within the River Environmental overlay zone:
 - (1) Distribution outline of shrubs and ground covers, with a list of most abundant species; and
 - (2) Trees over 1.5 inches in diameter identified by species and size, including the location and size of the trunk, canopy crown diameter and the root protection zone. In the case of a violation, also identify the trees that were cut or damaged by showing a stump diameter and species;
 - ~~fh.~~ Outside of the River Environmental overlay zone, trees over 3 inches in diameter, including the location of the trunk and canopy crown cover, identified by species and size;
 - ~~gi.~~ Location and boundaries of designated scenic resources. The location of viewpoints, view corridors and scenic corridors must be shown in relation to the property lines, existing and proposed public trails and boundaries of the River Environmental overlay zone;
 - ~~hj.~~ Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater. In the case of a violation, also identify the topography prior to alteration; and
 - ~~ik.~~ Existing improvements such as structures, buildings, utility lines, stormwater systems, septic or sewer facilities, fences, etc.
2. Proposed development site plan. The proposed development site plan must show the following:
- a. Location of the River Environmental overlay zone, the top of bank and river setback areas, the boundary of the riparian buffer area, and the landscaping area subareas;

Commentary

33.865.040.A.2.h.

This subparagraph has been updated to require a cut and fill calculation for the 1996 Flood Inundation Area in addition to the already-required 100-year floodplain calculation.

33.865.040.A.3.a.

This subparagraph has been updated to require that the construction management site plan include the top of bank and river setback (50 feet landward from top of bank), the riparian buffer area and the landscaping area subareas 1, 2 and 3. Top of bank is shown on Map 475-2. The riparian buffer area is shown on Map 475-6.

33.865.040.A.3.d.

This subparagraph has been updated to require a cut and fill calculation for the 1996 Flood Inundation Area in addition to the already-required 100-year floodplain calculation.

- b. Location of all proposed development including buildings, structures, decks, retaining walls, bridges, trails/pathways;
 - c. Location of proposed utility lines and connections, stormwater systems and septic or sewer facilities;
 - d. Location of protected scenic resources;
 - e. Delineation and total square footage of temporary and permanent disturbance areas including equipment maneuvering areas;
 - f. Delineated areas of vegetation removal and identification of trees to be removed using a bold X;
 - g. Proposed final contour lines at 2 foot vertical intervals in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater;
 - h. Location of excavation and fill and total quantities of each, including balanced cut and fill calculation for any grading in the 100-year floodplain and 1996 Flood Inundation Area;
 - i. Delineated areas to be left undisturbed; and
 - j. Location and species of existing trees, shrubs, and ground covers to remain including the required root protection zone per Title 11.
3. Construction management site plan. The construction management site plan must show the following:
- a. Location of the River Environmental overlay zone, the top of bank and river setback areas, the boundary of the riparian buffer area, and the required landscaping area subareas;
 - b. Delineation and total square footage of temporary and permanent disturbance areas including equipment maneuvering areas;
 - c. Proposed grading plan with existing and proposed contours. The grading plan must show proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;
 - d. Location of excavation and fill and total quantities of each, including balanced cut and fill calculation for any grading in the 100-year floodplain and or 1996 Flood Inundation Area;
 - e. Location of all proposed development;
 - f. Delineated areas of vegetation removal and identification of trees to be removed using a bold X;
 - g. Areas where existing topography and vegetation will not be affected by the development proposal;
 - h. Location of trees to remain including the required root protection zone per Title 11;

Commentary

33.865.040.A.4.

This paragraph has been updated to add the *Willamette River South Reach Natural Resources Protection Plan* (2020) in the referenced documents for identifying high- and medium-ranked resources that will be impacted on site. To avoid confusion, "Central Reach" has been added to the title of the existing natural resources protection plan referenced in the paragraph. This plan was completed in 2018.

33.865.040.A.4.a.

This amendment adds a requirement to show the location of the riparian buffer area in the mitigation or remediation site plan. This will ensure that a minimum of no-net-loss over time for all resources and functions and a significant improvement of at least one functional value is achieved in the riparian buffer area.

33.865.040.A.4.k.

This subparagraph has been updated to require a cut and fill calculation for the 1996 Flood Inundation Area in addition to the already-required 100-year floodplain calculation.

- i. Location of site access and egress;
 - j. Material staging and stockpile areas; and
 - k. Erosion control measures.
4. Mitigation or remediation site plan. A mitigation site plan is required when the proposed development will result in unavoidable significant detrimental impact on the resources and functional values ~~ranked high or medium~~ identified in the *Willamette River Central Reach Natural Resources Protection Plan (2018)*, *River Plan / South Reach Natural Resources Protection Plan (2020)* or when mitigation is proposed in order to meet River Review approval criteria. A remediation site plan is required when significant detrimental impacts occur in violation of the Zoning Code and no permit was applied for. The on-site or off-site mitigation or remediation site plan must show the following:
- a. Location of the River Environmental overlay zone and riparian buffer area in relation to the mitigation site;
 - b. Distribution outline, species composition, and percent cover of ground covers to be seeded or planted using standard landscape graphics;
 - c. Location, species, and size of each individual tree to be planted;
 - d. A planting table listing the size, number, and species (common and scientific) of all trees, shrubs, groundcover or seeds to be installed;
 - e. The area of the mitigation site in square feet in relation to the project impact area;
 - f. The location of the mitigation site in relation to existing, proposed or anticipated future development on the site;
 - g. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;
 - h. Location of protected viewpoints and scenic overlay zones;
 - i. Water bodies to be created, including centerline, top of bank, wetland boundary and depth;
 - j. Water sources to be used, including volumes;
 - k. Location of excavation and fill and total quantities of each including balanced cut and fill calculation for any grading in the 100-year floodplain and 1996 Flood Inundation Area; and
 - l. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

Commentary

33.865.040.B.1.

This paragraph has been updated to add the *Willamette River South Reach Natural Resources Protection Plan* (2020) in the referenced documents for identifying significant resources and functional values on the project site.

33.865.040.B.1.a.(1)

This subsubparagraph has been updated to add the *Willamette River South Reach Natural Resources Protection Plan* (2020) in the referenced documents for site-specific natural resource features and functional values, as well as special status wildlife and plant species.

B. Supplemental narrative. The following is required:

1. Impact evaluation. An impact evaluation is required to determine compliance with the approval criteria, and to evaluate practicable development alternatives for a particular site. The alternatives must be evaluated on the basis of their impact on identified resources and functional values. Significant resources and functional values are identified in the *Willamette River Central Reach Natural Resources Protection Plan (20162018)* and *River Plan / South Reach Natural Resources Protection Plan (2020)*.~~and a~~ A supplemental environmental assessment can be provided to more accurately identify resources and functional values on the site. In the case of a violation, the impact evaluation is used to determine the nature and scope of the significant detrimental impacts.

a. An impact evaluation includes:

- (1) Identification, by characteristic and quantity, of the natural resources and their functional values found on the site. The *Willamette River Central Reach Natural Resources Protection Plan (2018)* and *River Plan / South Reach Natural Resources Protection Plan (2020)* provides site-specific information on the natural resource features including:

- open water;
- shallow water (river depth 0-20 feet);
- beach;
- riparian vegetation;
- upland and bottomland forest;
- grassland;
- flood area and floodplain;
- wetlands, streams and ponds; and
- special habitat area.

The *Willamette River Central Reach Natural Resources Protection Plan (20162018)* and *River Plan / South Reach Natural Resources Protection Plan (2020)* provides site-specific information on the functional values provided by the various natural resource features including:

- Microclimate and shade;
- Stream flow moderation and water storage;
- Bank function, and sediment, pollution and nutrient control;
- Large wood and channel dynamics;
- Organic inputs, food web and nutrient cycling;
- Fish and wildlife habitat; and
- Habitat connectivity/movement corridor.

Commentary

33.865.040.B.1.a.(2)

This subsubparagraph has been updated to add the *South Reach Scenic Resources Protection Plan* (2020) in the referenced documents for identification of scenic resources.

The *Willamette River Central Reach Natural Resources Protection Plan (2018)* and *River Plan / South Reach Natural Resources Protection Plan (2020)* also provides information on wildlife and plant special status species that are known or reasonably expected to occur within or use a site. The application must contain current information regarding any special status species known or expected to occur on the site;

- (2) Identification and description of the scenic resources on the site. Scenic resources are mapped on the official zoning maps with the Scenic ~~(s)~~ overlay zone and are described in the *Central City Scenic Resources Protection Plan (2018)* and *River Plan / South Reach Scenic Resources Protection Plan (2020)*;
 - (3) Identification of significant unavoidable detrimental impacts on identified natural and scenic resources and functional values. Actions that could cause detrimental impacts and should be identified include:
 - excavation and fill both in the water and above the ordinary high water mark. The quality and source of fill material is an important factor to be considered;
 - clearing and grading;
 - construction;
 - vegetation removal;
 - tree planting;
 - altering bathymetry;
 - altering a vegetated riparian corridor or upland vegetated area;
 - altering the floodplain; and
 - altering the temperature of the river especially the altering of existing cold water sources.
 - (4) Evaluation of practicable alternative locations, design modifications, or alternative methods of development that both achieve the project purpose, taking into account cost and technology, and minimize significant detrimental impacts on identified natural and scenic resources and functional values; and
 - (5) Determination of the practicable alternative that best meets the applicable approval criteria.
- b. An impact evaluation for a violation includes:
- (1) Description, by characteristics and quantity, of the natural and scenic resources and functional values on the site prior to the violation; and
 - (2) Determination of the impact of the violation on the natural and scenic resources and functional values.

Commentary

33.865.040.B.5.i.

This subsubparagraph has been added to require documentation of the purchase of City-approved off-site mitigation bank credits if credits are to be used to satisfy mitigation requirements. City-approved mitigation banks may include by State- or Federal-certified mitigation banks or, City-certified mitigation bank, if the City chooses to pursue such a certification. At this time, there are no City-certified mitigation banks. Use of credits from a City-approved mitigation bank may allow the use of mitigation banks outside of the South or Central Reach if no banks are available within either of these reaches. The Bureau of Environmental Services will maintain the list of approved mitigation banks that may be used and the list will be available to the public.

2. Biological assessment. A biological assessment developed for the purposes of a federal or state permit may be submitted in place of some or all of the impact evaluation if the biological assessment includes the information described in subparagraph B.1, above. In the event that the applicant submits a biological assessment in place of some or all of the impact evaluation, the applicant must identify which aspects of the impact evaluation are covered by the biological assessment and, if necessary, identify which pieces of information will be included in the impact evaluation.
3. Supplemental environmental site assessment. A site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the existence, location, type, extent, and quality of the natural resources and functions on the site can be provided as part of the supplemental narrative. The assessment may verify, supplement, or challenge the information in the City's inventory for the purpose of informing the impact evaluation and identifying mitigation obligations;
4. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining natural and scenic resources and functional values at and near the construction site and provide a description of how areas that are not affected by the construction will be protected. For example, describe how trees will be protected, erosion controlled, construction equipment controlled, and the timing of construction; and
5. Mitigation or remediation plan. The purpose of a mitigation or remediation plan is to compensate for unavoidable significant detrimental impacts on identified natural and scenic resources and functional values that result from the chosen development alternative or violation. A mitigation or remediation plan includes:
 - a. Natural or scenic resources and functional values to be restored, created, or enhanced within mitigation or remediation area;
 - b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;
 - c. Construction timetables;
 - d. Operation and a long-term maintenance plan;
 - e. Monitoring and evaluation procedures that include periodic reporting;
 - f. Remedial actions for unsuccessful mitigation;
 - g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings; ~~and~~
 - h. If off-site mitigation is proposed, demonstration that on-site mitigation is not practicable or ecologically beneficial; and
 - i. If mitigation bank credits will be used, proof of purchase from a City-approved mitigation bank.

Commentary

33.865.100.A.1

These criteria have been updated to allow them to be applied to the creation of mitigation banks within the River Environmental overlay zone.

33.865.100.A.1.d.

A new criterion has been added to require documentation that a legal instrument, such as a conservation easement or deed restriction, is in place to ensure long-term monitoring and maintenance of any new mitigation bank.

33.865.100.A.2.c.

The existing references to potential impacts within the Central Reach are removed. Detrimental impacts on downstream river habitat and other environmental restoration sites are evaluated based on runoff and other byproducts generated on the site. The potential impact of these effects may not be focused solely in the Central Reach.

33.865.100.A.2.d.(1)

This subsubparagraph has been updated to incorporate the requirement that mitigation required for impacts associated with non-river-dependent or non-river-related development within the riparian buffer area must result in "beneficial gain" for floodplain habitat. The National Marine Fisheries Service (NMFS) found that continuing existing National Flood Insurance Program allowances for floodplain development would jeopardize the continued existence of endangered and threatened salmonids in Oregon (*Endangered Species Act (ESA) Section 7(a)(2) Jeopardy and Destruction or Adverse Modification of Critical Habitat Biological Opinion and Section 7(a)(2) "Not Likely to Adversely Affect" Determination for the Implementation of the National Flood Insurance Program in the State of Oregon*). To avoid jeopardy, Portland (and other Oregon communities) must show not only no net loss of floodplain habitat, but an overall net benefit to listed species. Beneficial gain is defined as a minimum of no-net-loss over time for all resources and functions and a significant improvement of at least one of three broad floodplain functional values: channel complexity, floodplain connectivity, or floodplain complexity. Examples of mitigation include, but are not limited to, placement of large woody debris, floodplain reconnection, riparian plantings, and wetland creation. The riparian buffer area serves as valuable habitat for fish and wildlife along the river. The assurance of beneficial gain in these areas recognizes the time required for habitat improvements to reach maturity and become fully functional. An overall net benefit must be achieved for all riparian areas, including the riparian buffer area and floodplain. To reach a net benefit, both city-led public restoration projects and private beneficial gain for project-specific impacts are necessary.

33.865.100 Approval Criteria.

Requests for a River Review will be approved if the review body finds that the applicant has shown that all applicable approval criteria have been met.

A. Development within the River Environmental overlay zone. The applicant's supplemental narrative must demonstrate that all of the following are met:

1. Resource enhancement or mitigation bank projects:
 - a. There will be no net loss of total resource area;
 - b. There will be no net loss of functional values; ~~and~~
 - c. There will be a significant improvement of at least one functional value; ~~and~~
 - d. For mitigation bank projects, the applicant must possess a legal instrument, such as a conservation easement or deed restriction, that is approved by the City as sufficient to ensure the monitoring and maintenance of the mitigation bank in perpetuity.
2. All other proposals in the River Environmental overlay zone:
 - a. Proposed development minimizes the loss of identified natural or scenic resources and functional values consistent with the uses that are generally permitted or allowed in the base zone without a land use review, or permitted or allowed by an approved conditional use review;
 - b. Proposed development locations, designs, and construction methods are less detrimental to identified natural and scenic resources and functional values than practicable and significantly different alternatives, including alternatives on the same site but outside of the River Environmental overlay zone;
 - c. There will be no significant detrimental impact on areas of the site reserved for mitigation, areas within the River Environmental overlay zone not proposed for development at this time, downstream river habitat ~~within the Central Reach~~, or other sites ~~in the Central Reach~~ where environmental restoration is in progress or complete;
 - d. Mitigation:
 - (1) The mitigation plan demonstrates that all significant detrimental impacts on identified scenic and natural resources and functional values, and the interim loss of functional value will be compensated for. In addition, for proposed development within the riparian buffer area that is not river-dependent or river-related, the mitigation plan must result in a significant improvement of at least one of the following functional values: channel complexity, floodplain connectivity, or floodplain complexity;

Commentary

33.865.100.A.2.d.(2)

This subsubparagraph has been updated to incorporate the requirement that any mitigation for tree removal in either the 100-year or 1996 Flood Inundation Area must occur within the relevant floodplain area(s). An additional requirement for tree replacement has been added to ensure that any tree replacement in the floodplain meets or exceeds the replacement requirements in Table 475-2. This will ensure no long-term loss of trees within the floodplain as a result of placement of trees required for mitigation outside of the floodplain. This requirement will ensure habitat for fish and wildlife and the preservation of flood management capacity during flood events.

33.865.100.A.2.d.(3) - (5)

These subsubparagraph have been updated to incorporate the applicable requirements for situations when mitigation bank credits will be used to satisfy mitigation requirements. The amount of mitigation required for onsite mitigation or when mitigation bank credits are purchased will be no less than a 1.5:1 of mitigation area to disturbance area. The amount of mitigation will be no less than a 3:1 ratio for offsite mitigation.

Additionally, the amendment establishes the allowed locations for mitigation. On-site and off-site mitigation must be located within or contiguous to the River Environmental overlay zone and must be in the floodplain if the development impacts occur in the floodplain. Mitigation bank credits must be purchased for a bank as close to the disturbance area as possible, but may purchased from a mitigation bank located anywhere in the Lower Willamette River, which extends from the confluence with the Columbia River to Willamette Falls. Currently there are no mitigation banks located in the South or Central Reach.

These three subsubparagraphs fully replace four existing subsubparagraphs, 33.865.100.A.2.d.(3) - (5).

- (2) To the extent practicable, the natural and scenic resources and functional values restored or enhanced as mitigation must be the same kind of resource, performing the same functions as the lost resource. In addition, the mitigation plan must demonstrate that mitigation for tree removal in the 100-year floodplain or 1996 Flood Inundation Area must meet or exceed the replacement requirements of Table 475-2 and occur within the 100-year floodplain and or 1996 Flood Inundation Area;
- (3) Mitigation must occur on-site when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:
- The potential for the long-term success of the restored resources and functional values in the mitigation area;
 - The amount, size, shape, and connectivity potential of on-site mitigation areas;
 - The location of the mitigation area in relation to existing, proposed or future development on the site, and the impact development may have on the mitigation area;
 - Contamination; and
 - Any other site specific issue or constraint;
- (4) The amount of natural resource mitigation due as compensation must be based on the amount and relative condition of the resources and functional values impacted by the proposal. The amount of natural resource mitigation required will be at a ratio of no less than 1.5:1 of mitigation area to project disturbance area for onsite mitigation or when mitigation bank credits are purchased and no less than 3:1 of mitigation area to project disturbance area for offsite mitigation, but may be more to address the following:
- the uniqueness of the resources and functional values impacted;
 - the relative condition of the mitigation area;
 - the distance between the impact area and mitigation area; and
 - the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full functions;
- (5) Location of mitigation. The mitigation area must be located as follows:
- If mitigation will be provided as credits from a mitigation bank, the credits must be purchased from a from City approved mitigation bank located along the Lower Willamette River that is as close as possible to the disturbance area;
 - All other mitigation areas must be located in the River Environmental overlay zone and if the disturbance area is located within the 100-year floodplain or the 1996 Flood Inundation Area, the mitigation area must also be located within the 100-year flood plain or 1996 Flood Inundation Area.

Commentary

- ~~(3)~~ The amount of natural resource mitigation due as compensation must be based on the amount and relative condition of the resources and functional values impacted by the proposal. The amount of natural resource mitigation required will be at a ratio of no less than 1.5:1 of mitigation area to project impact area, but may be more to address the following:
- the uniqueness of the resources and functional values impacted;
 - the relative condition of the mitigation area;
 - the distance between the impact area and mitigation area; and
 - the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full functions;
- ~~(4)~~ Mitigation must occur within the River Environmental overlay zone or in an area that is contiguous to the River Environmental overlay zone. The applicant must own the mitigation site, possess a legal instrument that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the mitigation (such as an easement or deed restriction);
- ~~(5)~~ Mitigation must occur on-site when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:
- The potential for the long-term success of the restored resources and functional values in the mitigation area;
 - The amount, size, shape, and connectivity potential of on-site mitigation areas;
 - The location of the mitigation area in relation to existing, proposed or future development on the site, and the impact development may have on the mitigation area;
 - Contamination; and
 - Any other site specific issue or constraint;
- ~~(6)~~ If on-site mitigation is not practicable or ecologically beneficial, the applicant may perform mitigation off-site. The off-site mitigation must meet all other approval criteria in this Subparagraph and the following: • Mitigation must occur at a minimum 3:1 ratio of mitigation area to project impact area; and • The mitigation area must be located within the Willamette River Central Reach, shown on Map 475-1; and
- (6)~~(7)~~ The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.

Commentary

33.865.100.B.3.c

The River Environmental overlay zone is being applied to both undeveloped and developed floodplains. The overlay can only be modified if high and medium-ranked resources are not present and no floodplain is present in the area to be modified.

- B. Modification of River Environmental overlay zone boundaries.** Modifications of River Environmental overlay zone boundaries that reflect permitted changes in the location or quality of resource areas will be approved upon finding that the applicant's statement demonstrates that either Paragraph B.1 or B.2 are met. For modification of River ~~e~~Environmental zone boundaries based on a more detailed site specific environmental study, that confirms the location of natural resource features identified in the adopted Natural Resources Inventory, the applicant's impact evaluation must demonstrate that Paragraph B.3, ~~below~~, is met:
1. Successful mitigation. An approved mitigation plan has been successful and a new, restored, or enhanced resource exists which should be included in the River Environmental overlay zone; or
 2. Approved loss of resource area. All of the following must be met:
 - a. All approved development in a resource area has been completed;
 - b. All mitigation required of this development has been successful; and
 - c. The identified resources and functional values at the developed site no longer exist, or have been subject to a significant detrimental impact.
 3. Modification of River Environmental overlay zone boundaries based on a more detailed site-specific environmental study. The River Environmental overlay zone line location may be modified to more accurately reflect the location of natural resources and functional values on the site. All of the following must be met:
 - a. The modified River Environmental overlay zone boundary must include all natural resource features that receive a high or medium rank using the methodology within the adopted Natural Resources Inventory; and
 - b. The modified River Environmental overlay zone boundary must be located no closer than 50 feet from the top of bank of a river, stream, drainageway, wetland or other water body; and
 - c. The modified River Environmental overlay zone boundary must include all mapped floodplain (100-year floodplain and 1996 Flood Inundation Area).

33.865.110 Modifications of Site-Related Development Standards

The review body may consider modifications to site-related development standards that are not otherwise prohibited from being adjusted as part of the River Review process. These modifications are done as part of the River Review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as floor-area ratios, intensity of use, size of the use or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations.

Commentary

33.865.120 Corrections to violations of the River Environmental Overlay Zone Standards

For corrections to violations of the River Environmental development standards the application must meet all applicable approval criteria stated in Subsection 33.865.100.A, above, and Subsection A, and Paragraphs B.2 and B.3, below. If these criteria cannot be met, then the applicant's remediation plan must demonstrate that all of the following are met:

- A.** The remediation is done in the same area as the violation; and
- B.** The remediation plan demonstrates that after its implementation there will be:
 - 1. No permanent loss of any type of resource or functional values;
 - 2. A significant improvement of a least one functional value; and
 - 3. There will be minimal loss of resources and functional values during remediation until the full remediation program is established.

33.865.200 Performance Guarantees

The Director of BDS may require performance guarantees as a condition of approval to ensure mitigation or remediation. See Section 33.700.050, Performance Guarantees.

33.865.210 Special Evaluation by a Professional

A professional consultant may be hired to evaluate proposals and make recommendations if the Director of BDS finds that outside expertise is needed due to exceptional circumstances. The professional will have expertise in the specific resource or functional value or in the potential adverse impacts on the resource or functional value. A fee for these services will be charged to the applicant in addition to the application fee.

Commentary

33.910.030 Definitions

This change adds a definition of ordinary low water, which was previously undefined but referenced in multiple standards and definitions within the zoning code.

33.910 Definitions

910

33.910.030 Definitions

The definition of words with specific meaning in the zoning code are as follows:

Ordinary Low Water. The line on the bank or shore to which the low water ordinarily recedes annually in season. On the Willamette River, ordinary low water is defined as 8' North American Vertical Datum of 1988 (NAVD88) or 5.90' City of Portland datum.

Commentary

33.930.150. Measuring Top of Bank

Subparagraphs (1) and (2) is updated to establish the default top of bank for the Willamette River South Reach to be 50 feet from ordinary high water, similar to the existing top of bank in the Central Reach.

33.930 Measurements

930

33.930.150 Measuring Top of Bank

See Section 33.910.030, Environmental-Related Definitions, Top of Bank

A.-C. [No change]

D. Default Top of Bank. If no slope decrease of 10 percent or more is found within 50 feet (measured horizontally) of the ordinary high water mark, then the top of bank will be one of the following default locations, see Figure 930-29. The Willamette River Reaches are shown on Map 440-1 and 475-1:

1. For the Willamette River Central Reach, and Willamette River South Reach the default top of bank is 50 feet (measured horizontally) from the ordinary high water mark.
2. For the Willamette River North Reach, ~~Willamette River South Reach~~, and the Columbia River, the default top of bank is 2 feet (measured vertically) from the ordinary high water mark.

3.-4. [No change]

2. Base and Overlay Zone Map Amendments

This section presents staff's proposed zoning and comprehensive plan map amendments. The section is formatted with existing zoning quarter section maps on the left-hand pages and the proposed zoning quarter section maps on the right-hand pages. There are three types of changes shown on these maps:

1. Base zone and comprehensive plan
2. Overlay zones
3. Major Public Trail alignment

Base Zone and Comprehensive Plan Map Amendments

Base zones are the zoning code designations applied to all sites that indicate the types of uses and development that are allowed on each site. For example, base zones can allow residential, a mix of uses such as residential and commercial, industrial, or parks and open spaces.

The Comprehensive Plan map designation depicted in parentheses under the base zone where changes are proposed, shows the long-term desired land use on a site. Often, the base zone and Comprehensive Plan map designations are the same. Some Comprehensive Plan map designations allow more than one base zone to permit a similar type of use and development to occur over time.

Overall, the zoning in the South Reach is appropriate for the type of uses and development that exist or could happen in this geography. There are four mostly minor map changes that are proposed. See commentary below for more information.

Overlay Zones

Overlay zones are applied to individual sites in addition to the base zone to account for unique aspects and priorities within a given area. Specific regulations or guidelines would apply when a new development or redevelopment project is proposed based on the specific overlay zone. A given site may have overlapping overlay zones depending on a variety of considerations.

In the South Reach there are a number of overlay zones that exist today and four of them are related to the Willamette River Greenway: River General (g), River Natural (n), River Recreational (r) and River Water Quality (q). There is also the design overlay zone (d) applied to parcels in the Macadam Plan District and in the Sellwood bridgehead area. There are a few other overlay zones present in the south reach: Environmental overlay zone with the protection (p) and conservation (c) designations, the Scenic overlay zone (s), and the Alternative Design Density (a) and Buffer (b) overlay zones.

As part of this update of the *Willamette Greenway Plan* for the south reach, new Willamette River Greenway regulations called river overlay zones will apply (see proposals in River Overlay Zones code chapter 33.475). There are three river overlay zones applied on the Discussion Draft Zoning maps that follow: River General (g*), River Recreational (r*) and River Environmental (e). The latter generally replaces the current River Natural and River Water Quality overlay zones. The asterisk is used to differentiate the River General and River Recreational regulations that apply in the Central and South reaches in 33.475 from the regulations for similarly-named overlay zones (River g and River r) in the north reach, where the regulations in 33.440 (Willamette River Greenway) still apply.

The *Scenic Resources Protection Plan* to be adopted with this plan includes an evaluation of existing and proposed scenic resources and recommendations for where the Scenic overlay zone applies. Staff

recommended scenic viewpoints are shown on the draft zoning maps that follow. See Volume 2 of the Discussion Draft for the update to the *Scenic Resources Protection Plan*.

There are no changes proposed to the Design, Alternative Design Density and Buffer overlay zones in this plan.

Commentary

Commentary on Map Changes

Base zone and comprehensive plan map changes (see hatched area on map)

1. *Map $\frac{1}{4}$ Section 3330* - Re-designate the northern tip of Ross Island from the zone Commercial Mixed Use 2/CM2, Comprehensive Plan map designation Mixed Use - Civic Corridor (MU-C) to Open Space/OS (OS). The City of Portland Parks and Recreation owns this site that currently is split-zoned with these two designations. The site is intended to be a natural area and the OS zone is the most appropriate designation to fulfill the desired land use.
2. *Map $\frac{1}{4}$ Section 3730 (and 3830)* - Re-designate sites zoned OS (OS) and Commercial Employment/CE (MU-C) to CM2 (MU-C). These parcels are owned by the City of Portland Parks and Recreation and includes natural areas and the Macadam Bay floating home community, which has a long-term lease with the City of Portland. The CM2 zoning allows residential development and is more consistent with the nearby zoning along the SW Macadam Avenue corridor than the CE zone, which is more of an employment zone. The rezoning from OS to CM2 is for a small parcel that is connected to the floating home moorage. The only Comprehensive Plan map designation change is for the OS portion of the rezoning.
3. *Map $\frac{1}{4}$ Section 3830* - Re-designate sites zoned CE (MU-C) to OS (OS). The largest parcel adjacent to the Willamette River is owned by Multnomah County. The parcel to the west of it is owned by the City of Portland. The longer, narrower sites to the west of the city property is owned by a number of entities including the State of Oregon, Metro and Multnomah County. These parcels are narrow strips of right-of-way or public trail.

The county parcel is the former Staff Jennings Boating Center that the county purchased for the new Sellwood Bridge project that was completed in 2016. Part of their site was used for the on-ramp to the bridge and a public trail. The remaining area contains a stormwater management facility and mitigation plantings that are part of the bridge project. The site is difficult for motor vehicles to access due to the major public trail and a green wall that is also part of the bridge project. Parking is extremely limited in the area and the site is in the floodplain. All of these factors severely limit redevelopment opportunities.

Portland Parks and Recreation (PPR) and Multnomah County have discussed entering into an agreement in the future that would have PPR maintain and operate the available portion of the County site for river recreation: a boating launch, picnic area, etc. OS-zoned parcels surround the proposed rezoning area. For the above reasons, staff recommends that these parcels be rezoned to OS.

The other sites are natural areas or trail and right-of-way areas that will not be developed. The surrounding area is OS zoning.

Commentary

4. *Map $\frac{1}{4}$ Section 3831* - Rezone part of a vacated right-of-way (formerly SE Umatilla Street) by the river currently owned by the Portland Rowing Club floating home community and marina from High Density Residential/RH (RH) to Mixed Commercial One/CM1 with a comprehensive plan map designation of Mixed Use - Dispersed (MU-D). This re-designation is proposed at the Portland Rowing Club's northern boundary (see oval shape on map) and will eliminate split zoning of the property. The majority of the site is zoned CM1. The existing RH area on this property is about 15' in width, so the hatching of the rezoning does not show up on the map to due its small size.

Overlay Zone Changes

In the introduction to Map Amendments on the previous page, basic information about relevant overlay zones in the South Reach is presented. This section describes the rationale for overlay zone changes that staff is recommending in this plan.

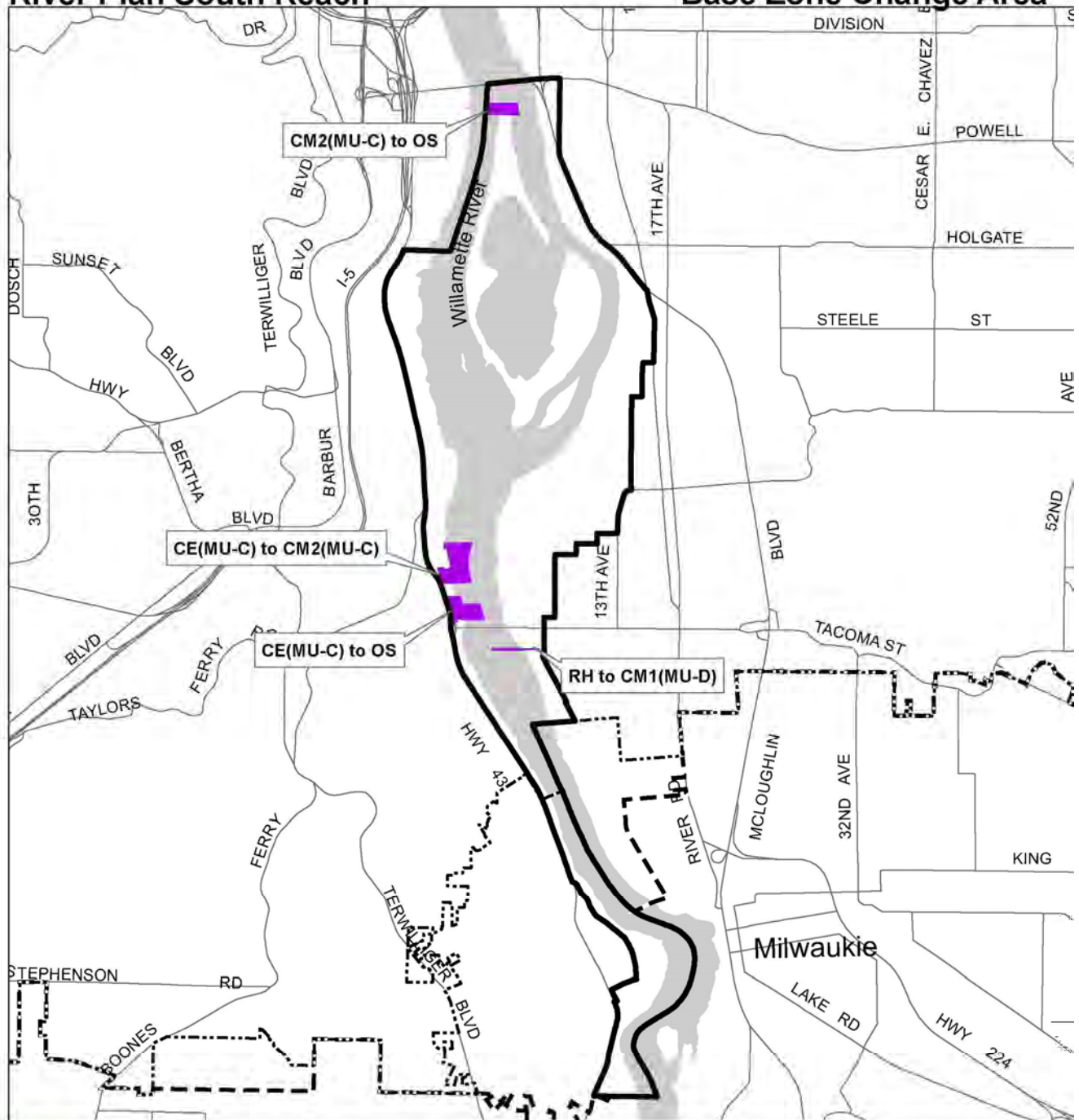
- A. River Recreational (r*) overlay zone is applied to OS zoned public properties that have, or plan to have as their primary use, river-dependent and river-related recreation uses. Other OS zoned sites where the River General (g*) is applied are sites where the primary focus is not river recreation but instead is natural areas and resource protection with limited or more passive recreation like birding.
- B. River Natural (n) and River Water Quality (q) overlay zones to River General (g*) or River Recreation (r*) and possibly the River Environmental (e) overlay zone. These overlay zones are being replaced by the River g* or River r* as the one of the primary river overlay zones.
- C. River Environmental (e) overlay zone is applied to all high- and medium-ranked natural resources, as well as all areas within the FEMA 100-year floodplain or 1996 Flood Inundation Area. The River (e) provides for protection of natural resources and vegetation management to preserve and expand habitat in the South Reach.

Major Public Trail Alignment Change

5. *Map $\frac{1}{4}$ Section 3730* - One small shift in a major public trail alignment for an east-west section from the Springwater Corridor Trail to the riverfront area (see oval on map) that then parallels the river through the Oaks Amusement Park property continuing further south along the riverfront. The current east-west trail alignment section is on the Oregon Yacht Club (OYC) floating home community property. The shift of this alignment to the south on Oaks Amusement Park (OAP) property is proposed. The stars on the zoning map are not meant to indicate the exact location of a future trail. The stars denote that a future trail may be required as part of a development project; depending on the impacts the proposed development would have on the trail system. OYC has no plans to redevelop their property. OAP attracts many visitors and a public trail through the property would bring visitors and employees to the site without requiring an automobile. OAP is completing a master plan for the site and could plan for how a future trail section might fit in with a new master plan.

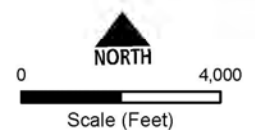
River Plan South Reach

Base Zone Change Area



Legend

- Draft Base Zone/Comprehensive Plan change area
- South Reach Boundary
- Willamette River
- City Boundary
- Urban Service Area Boundary

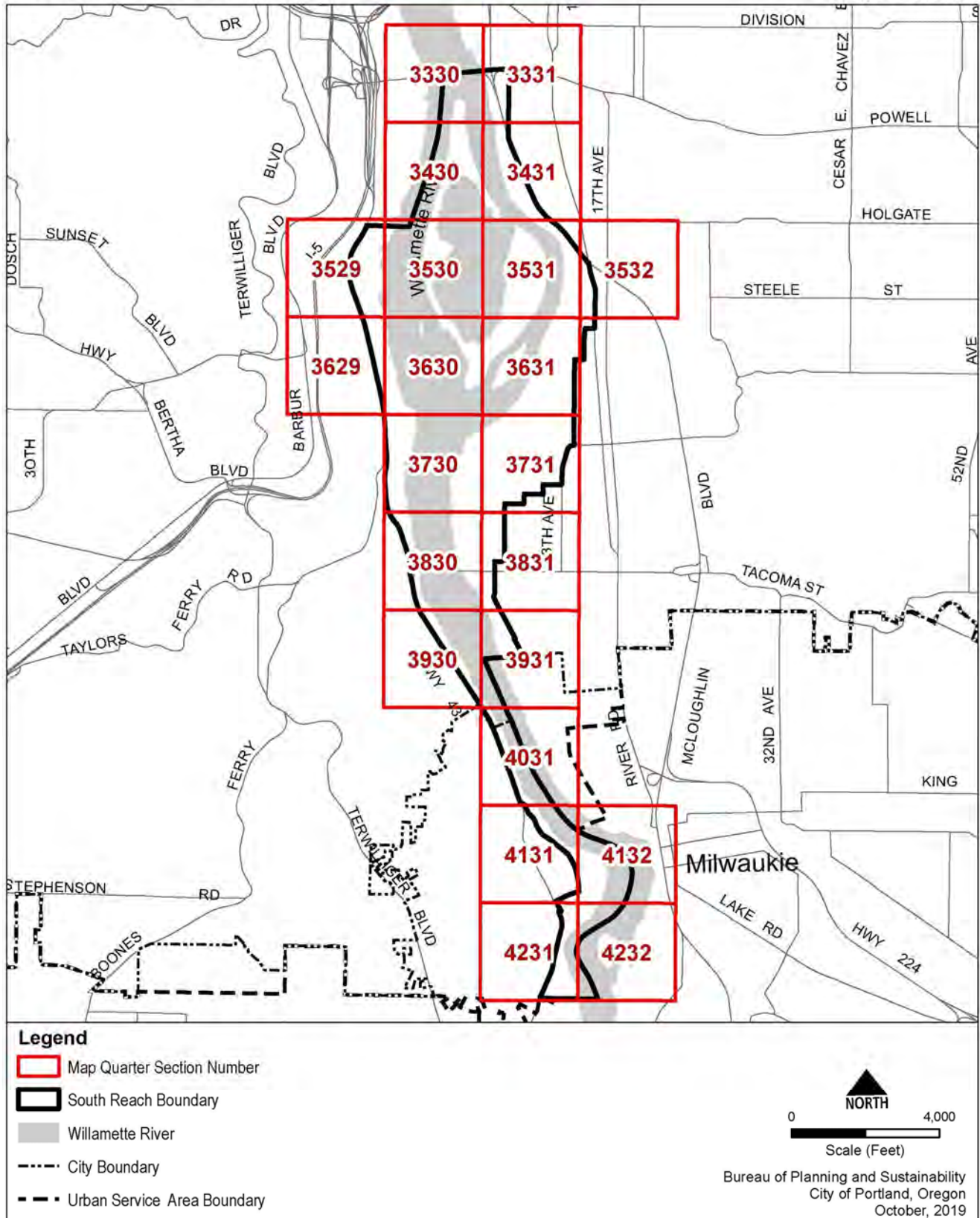


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October, 2019

Map Changes by Quarter Sections

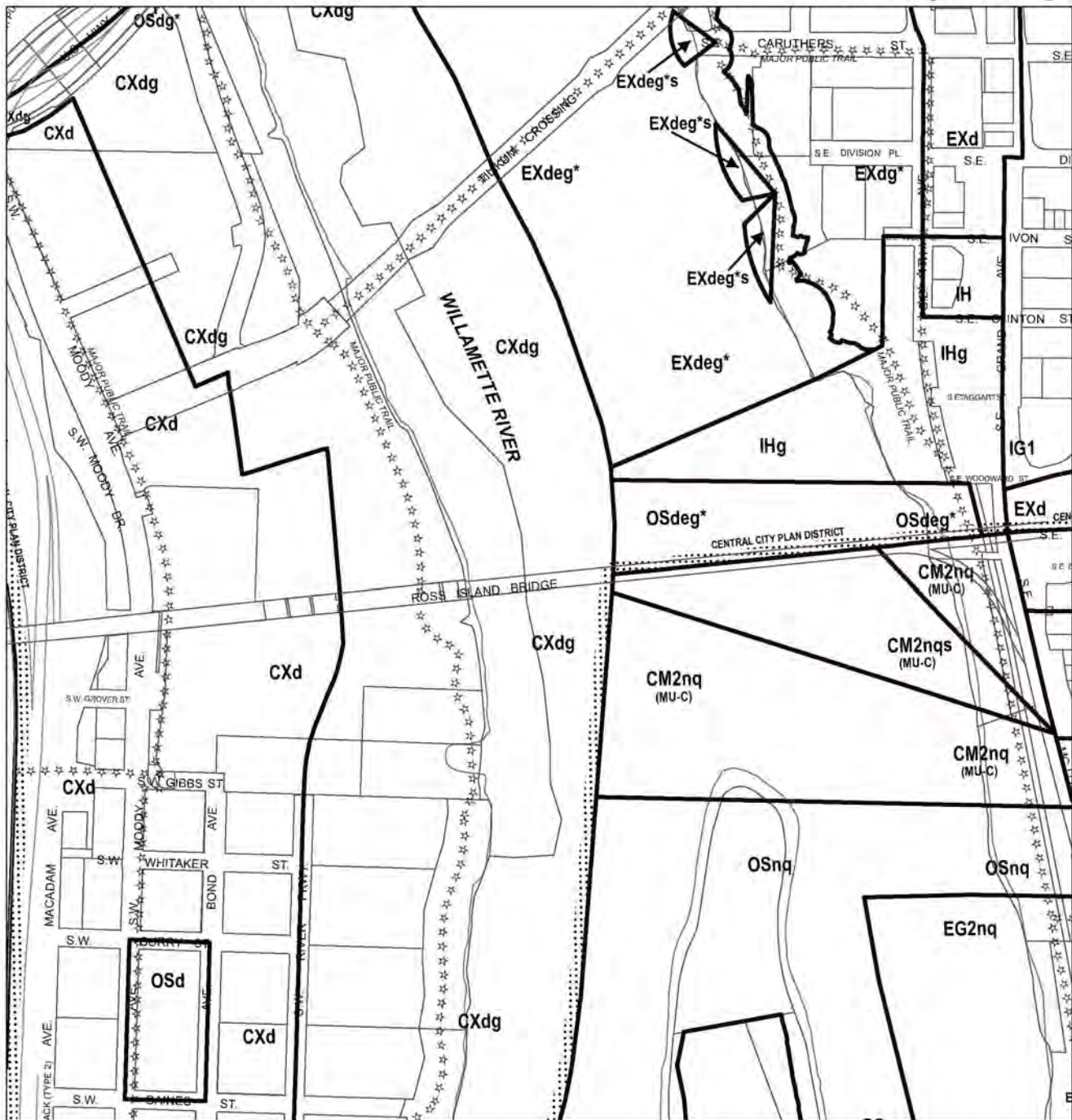
River Plan South Reach

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River Plan South Reach

Existing Zoning



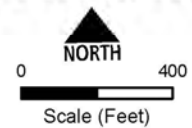
- R10** Current Zoning
(R10) Comprehensive Plan designation where there are other corresponding zones
 ☆☆☆ Major Public Trails
 ■■■■■ Plan District Boundary
 ■■■■■ City Boundary

- Greenway Zones**
 e - River Environmental zone
 i - River Industrial zone
 g - River General zone
 g* - River General* zone
 n - River Natural zone
 q - River Water Quality zone
 r - River Recreation zone

- Environmental Overlays**
 c - Environmental Conservation
 p - Environmental Protection

- Other Overlays**
 a - Alternative Design Density
 b - Buffer
 d - Design
 s - Scenic

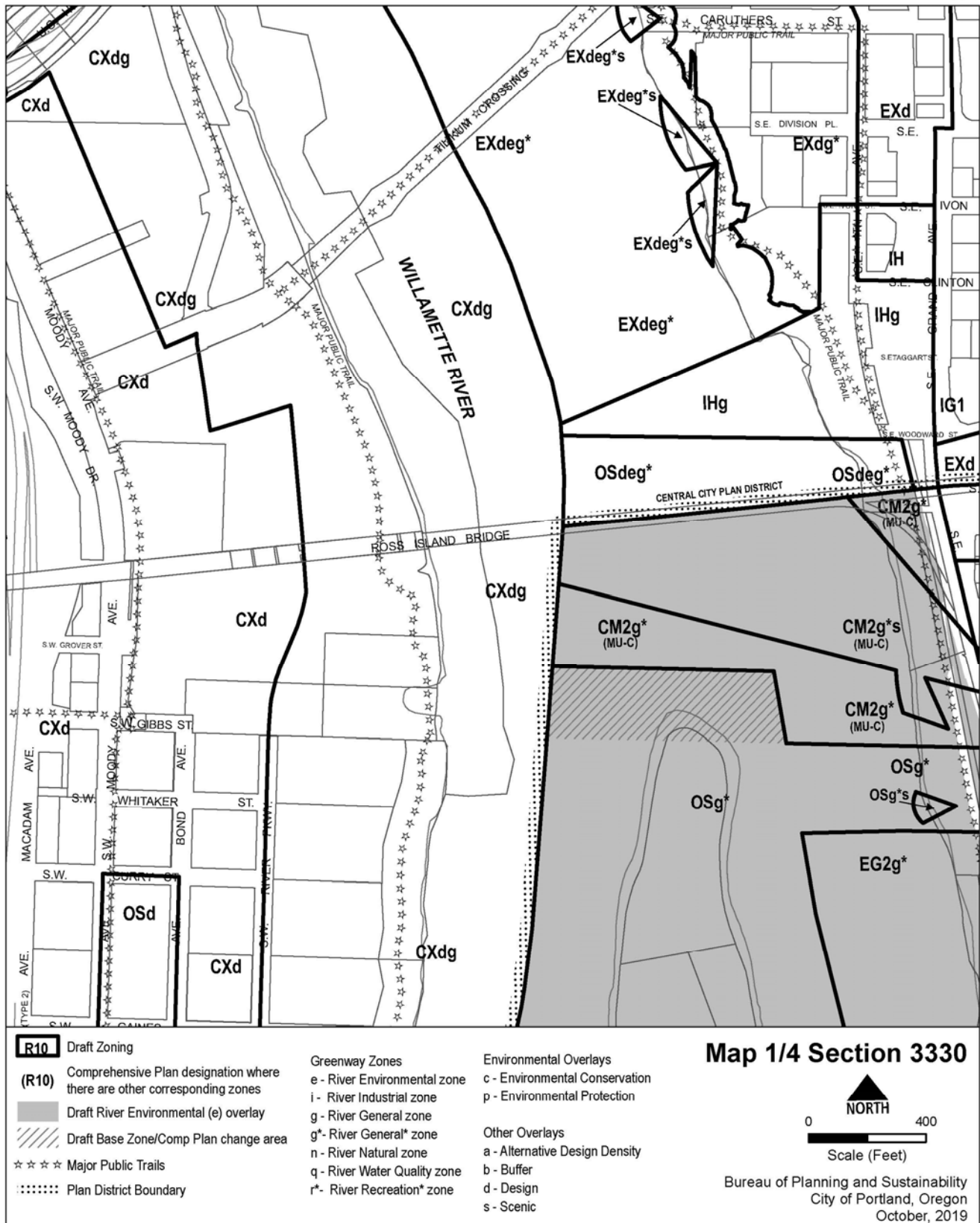
Map 1/4 Section 3330



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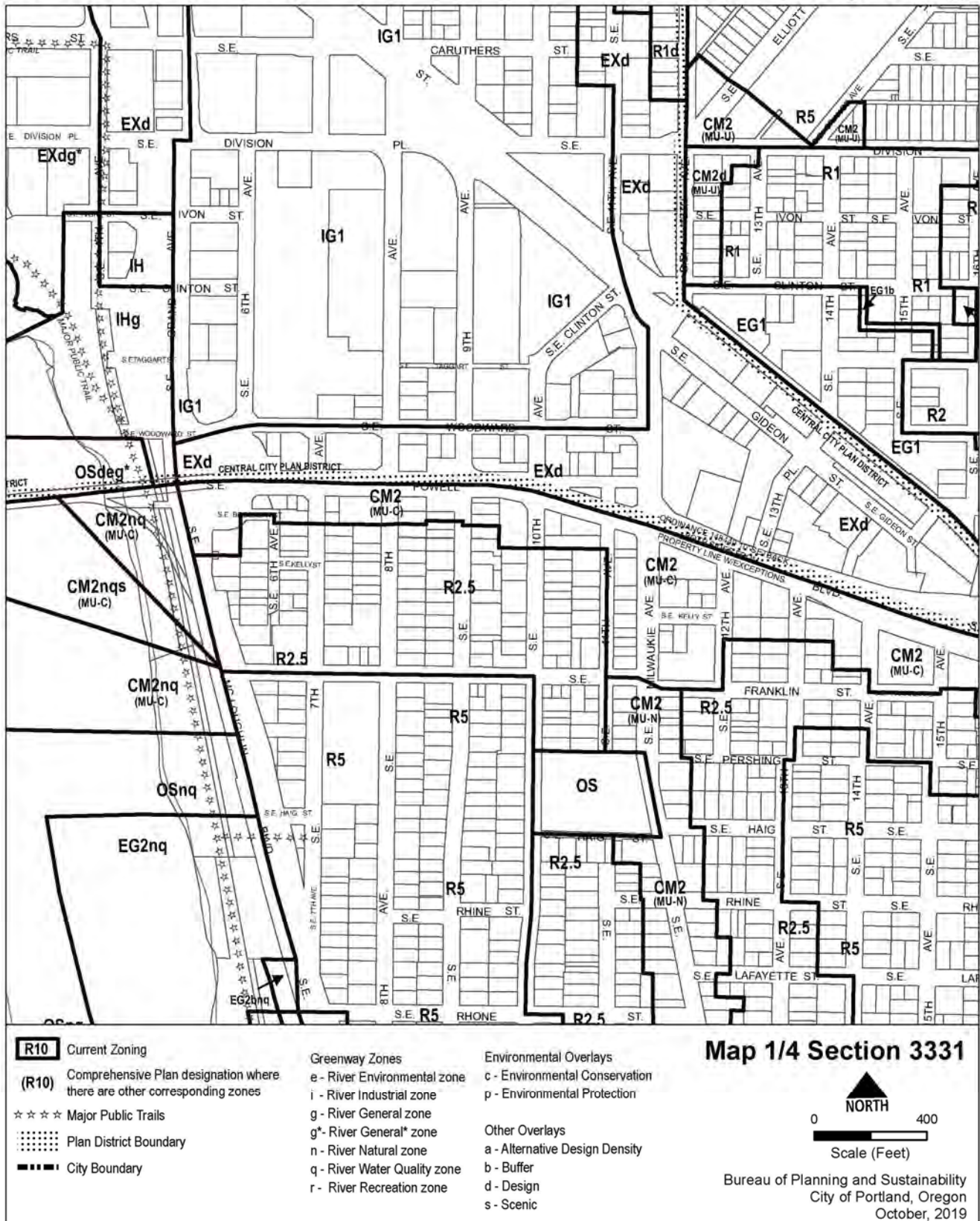
River Plan South Reach

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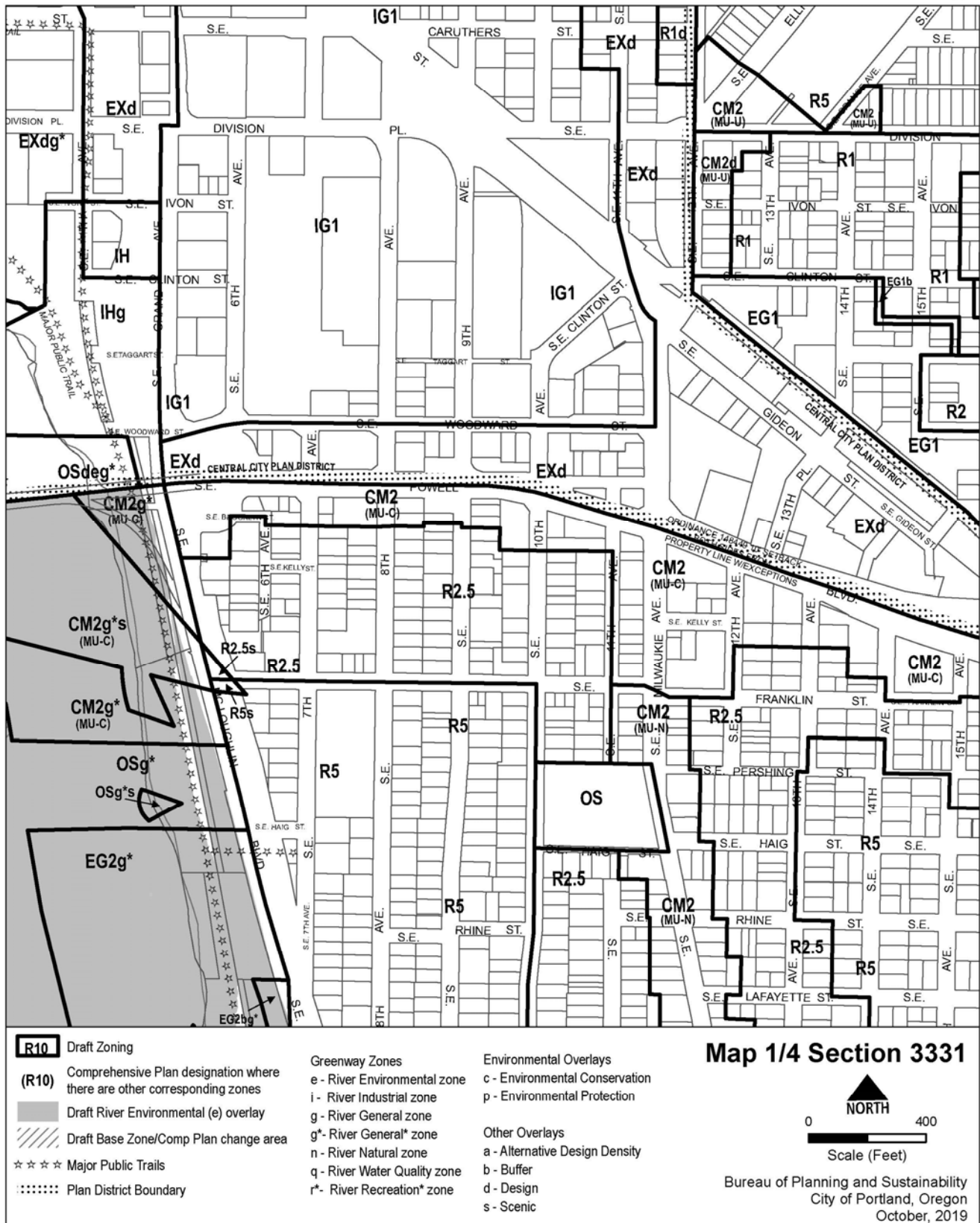
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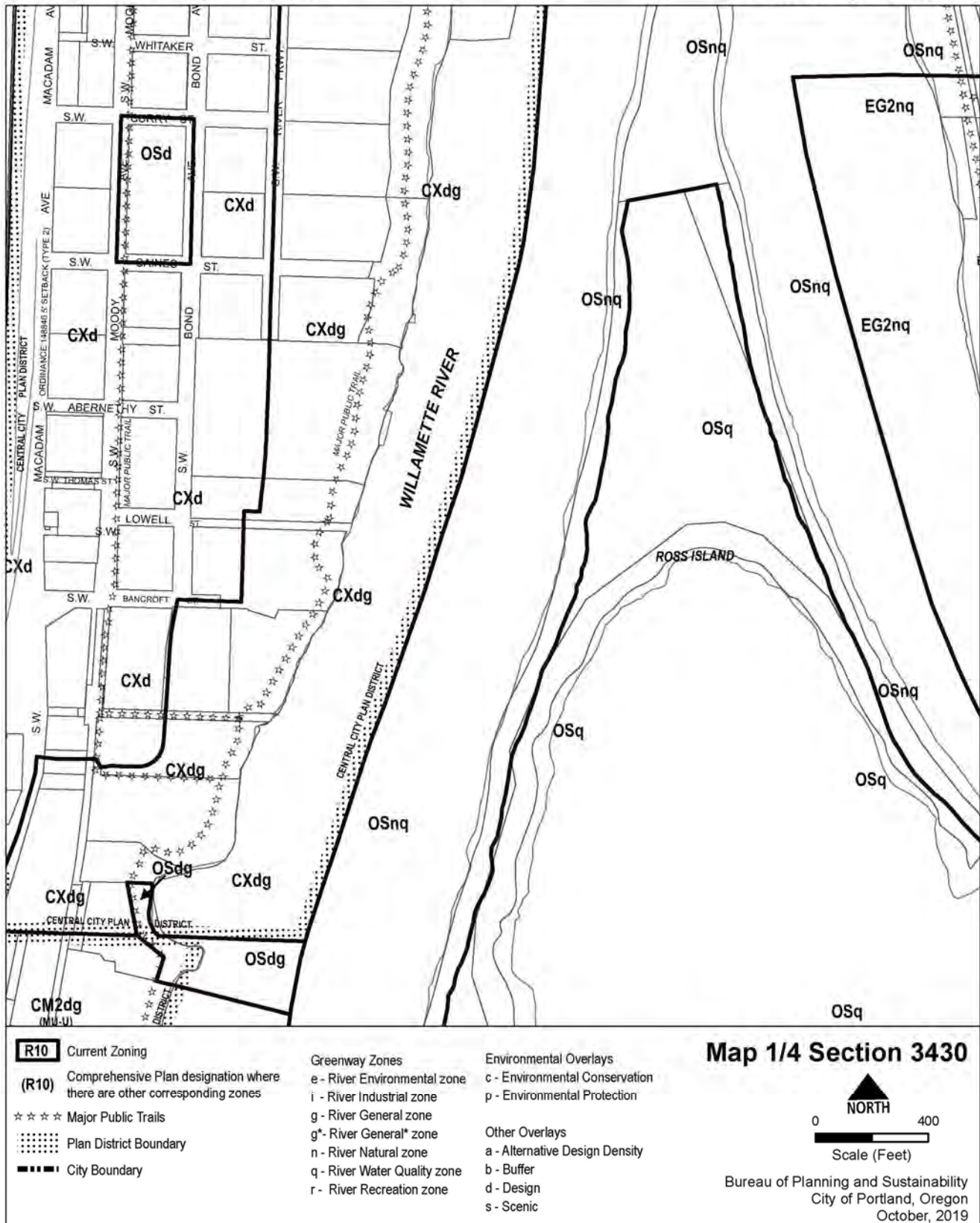
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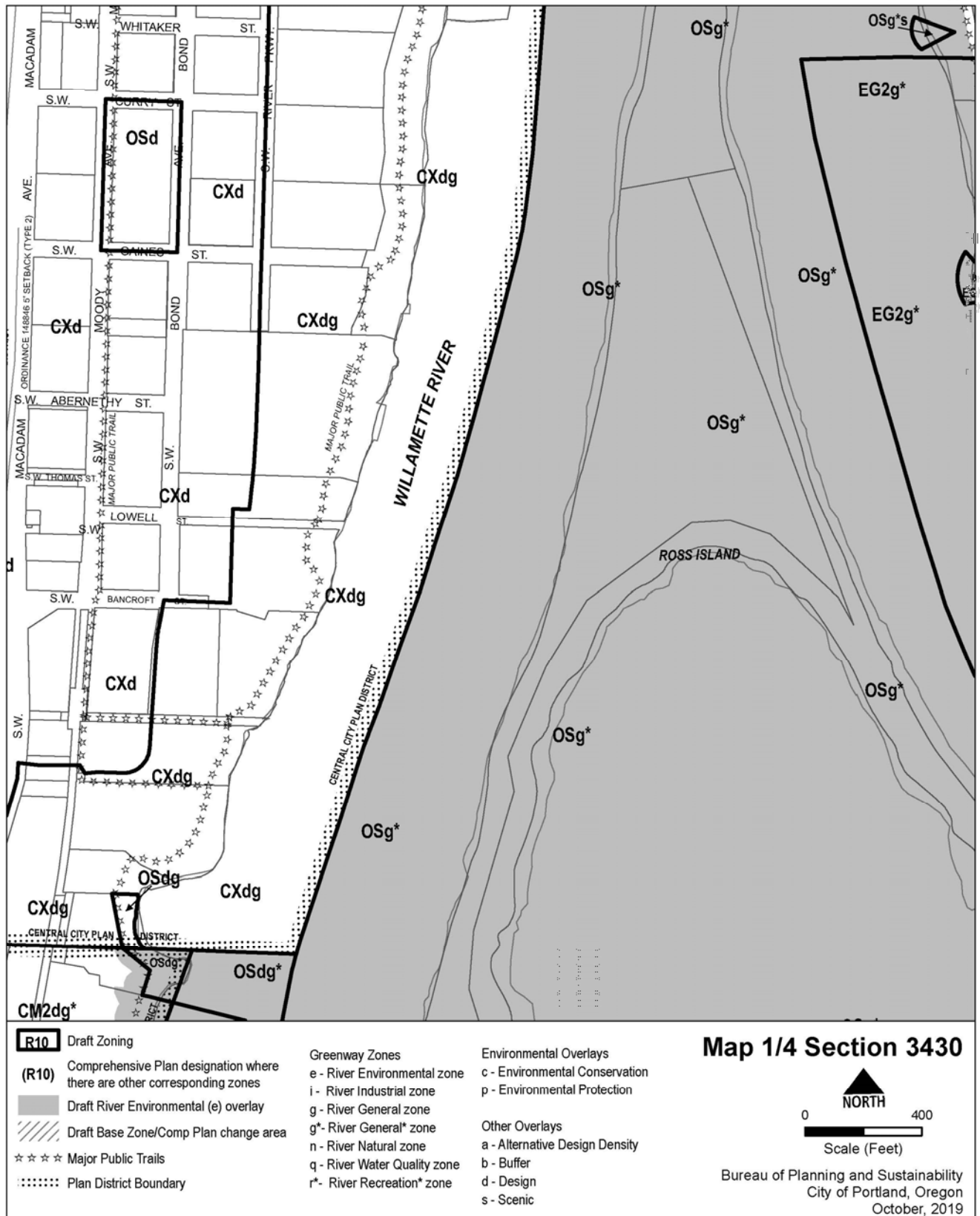
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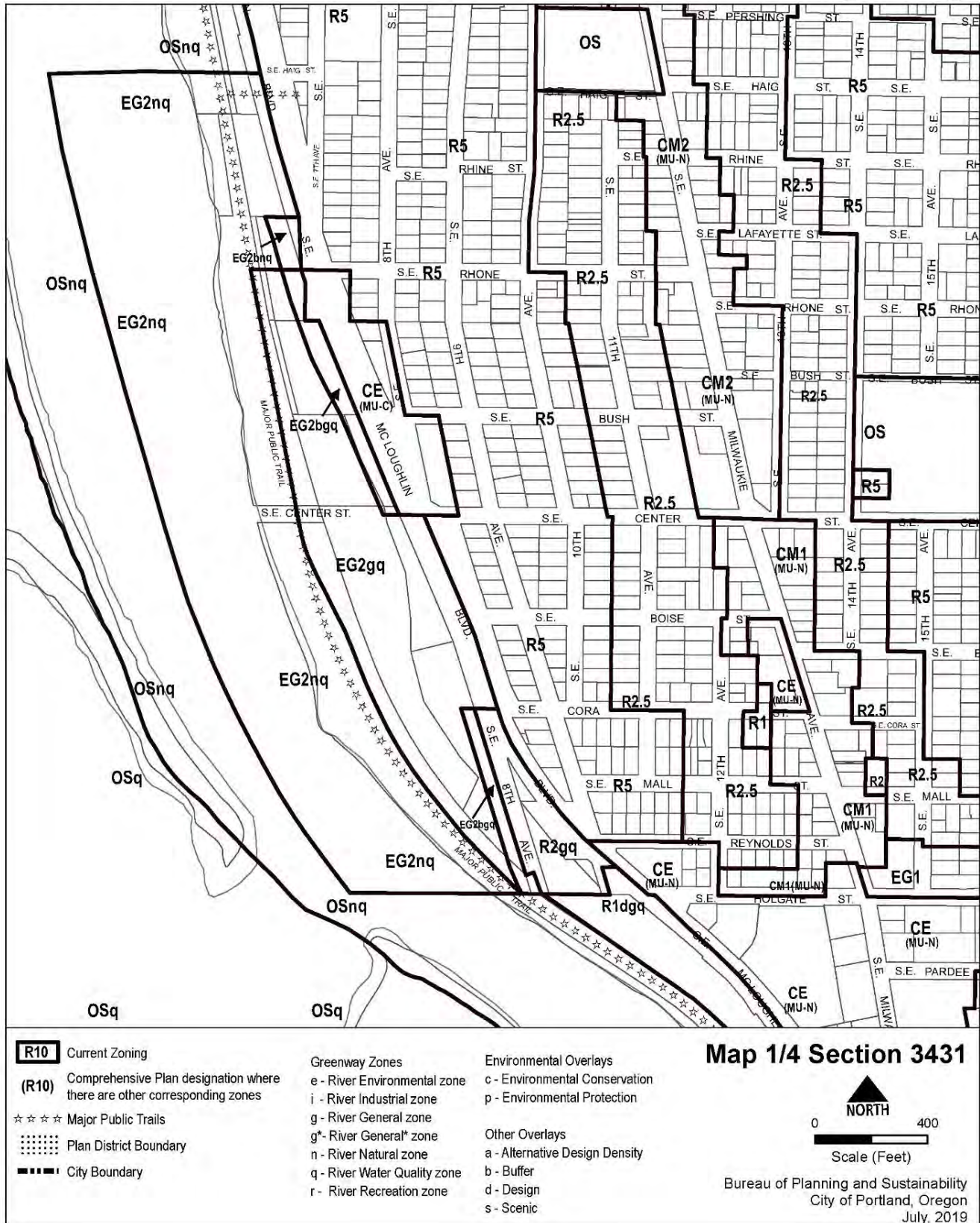
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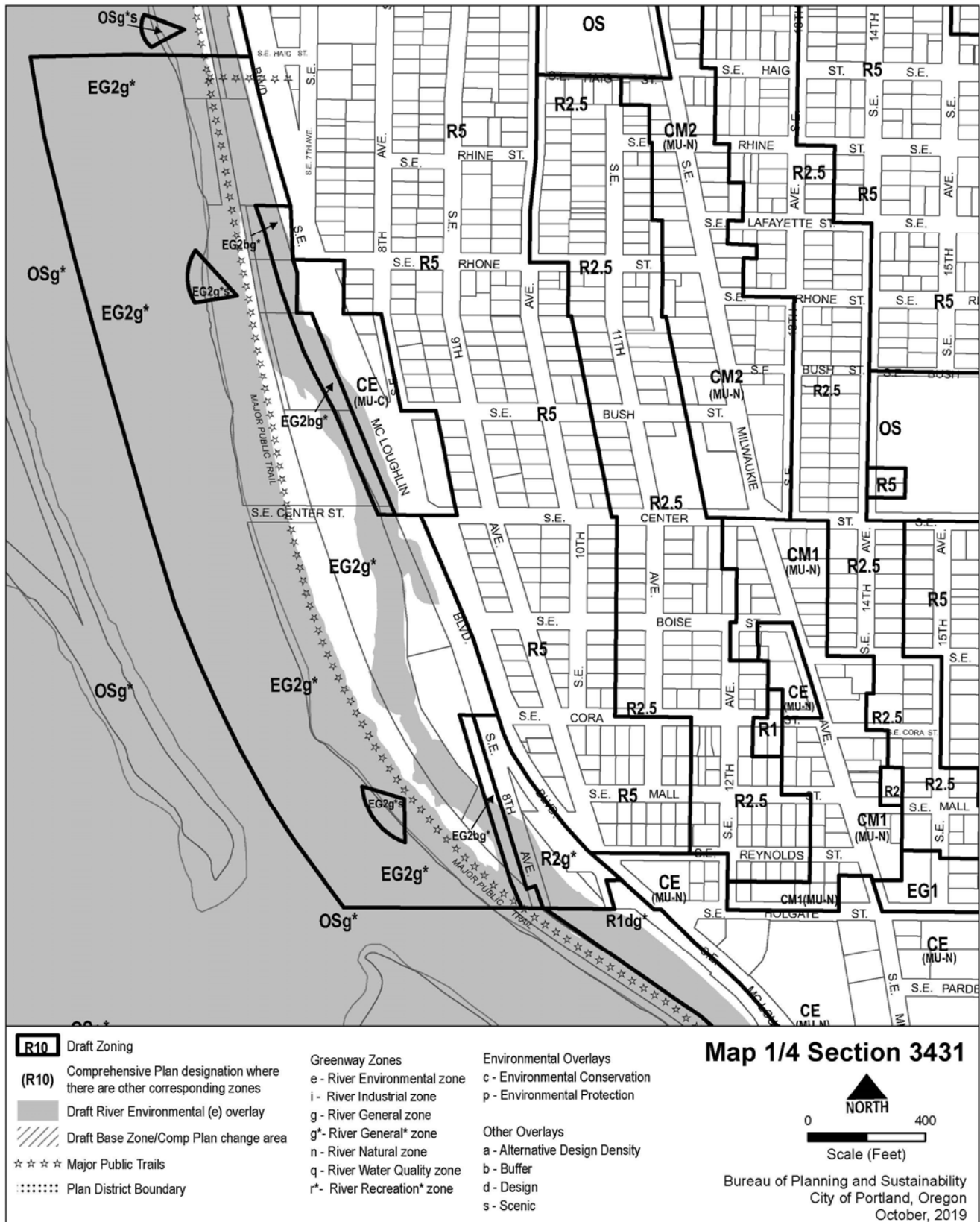
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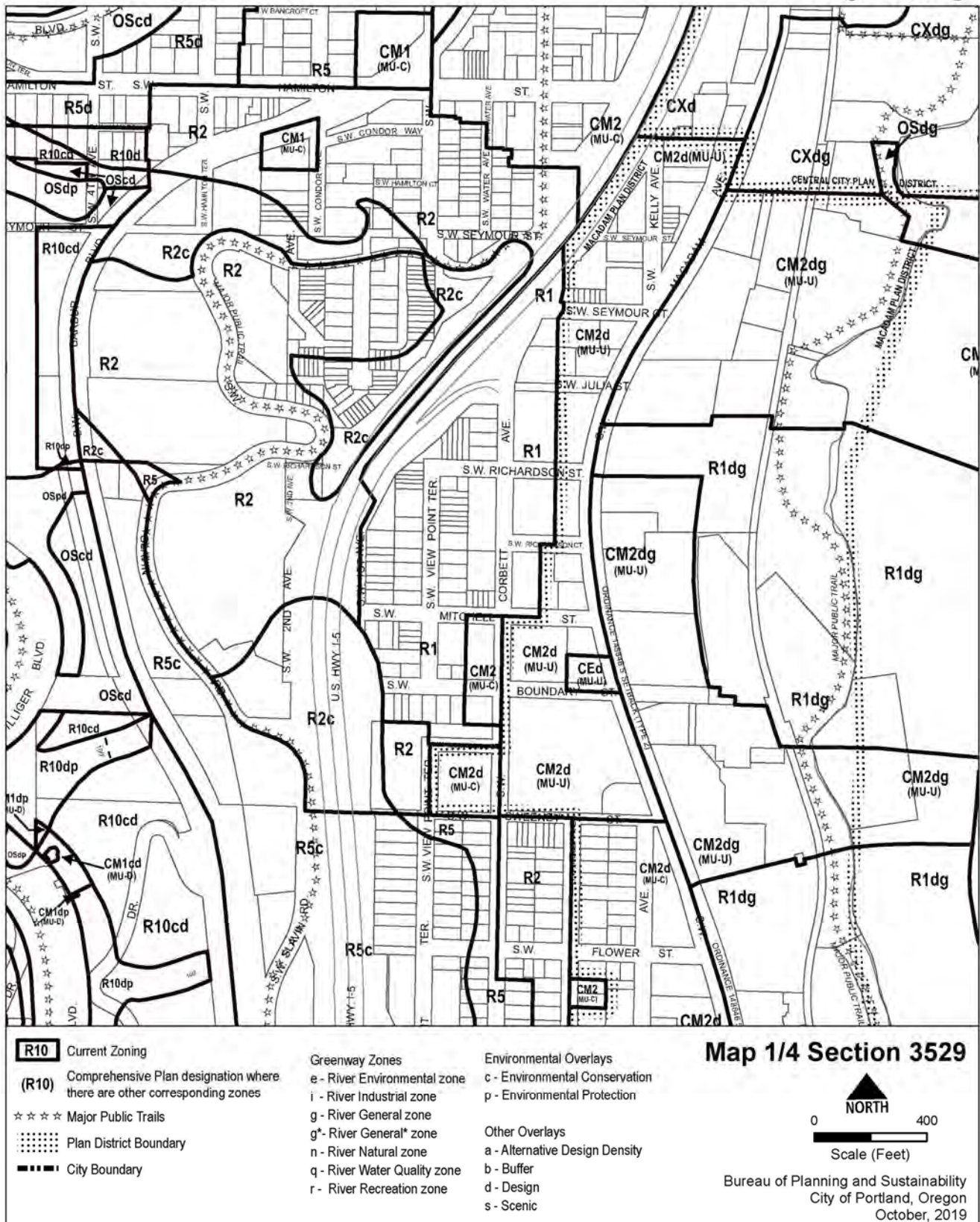
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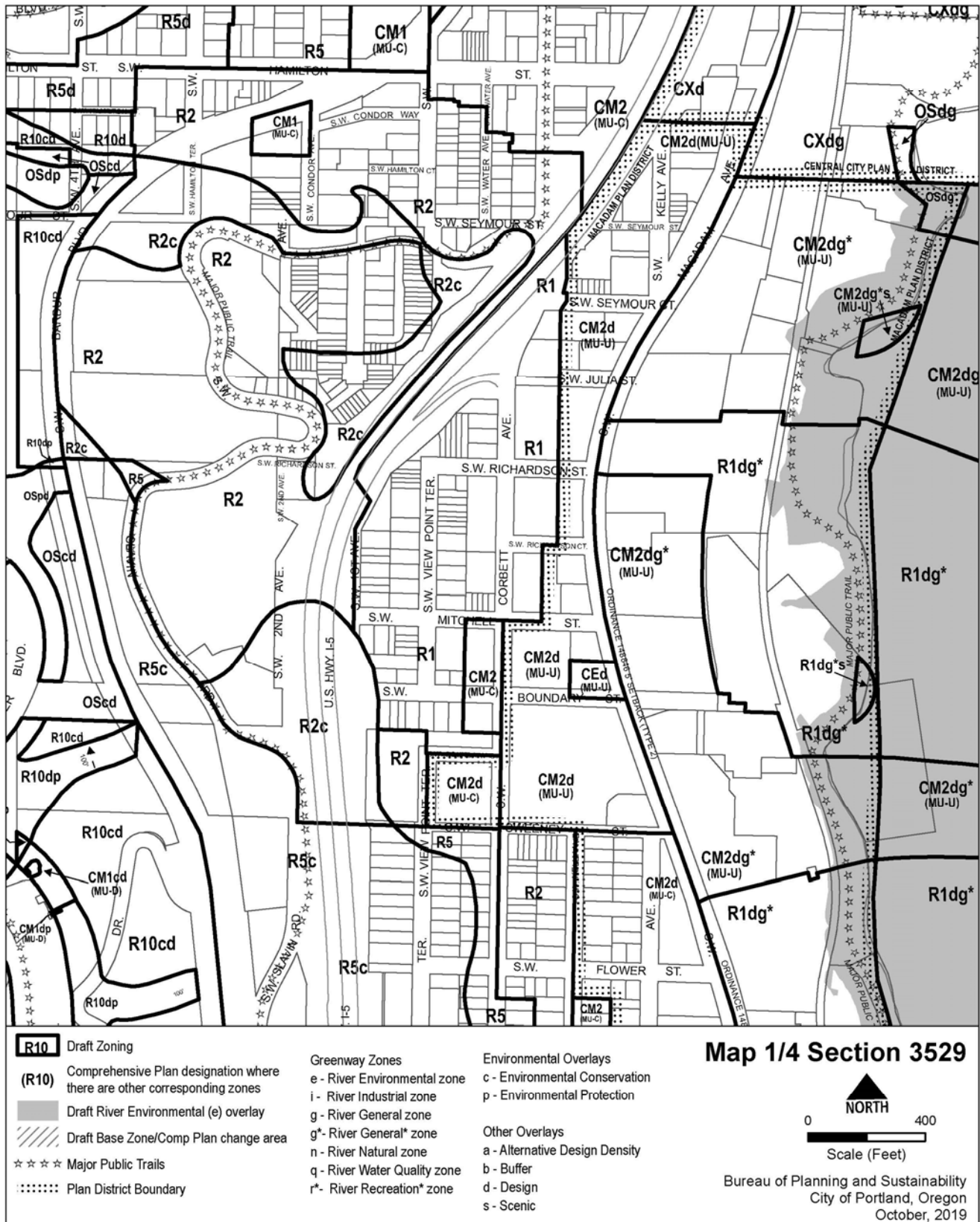
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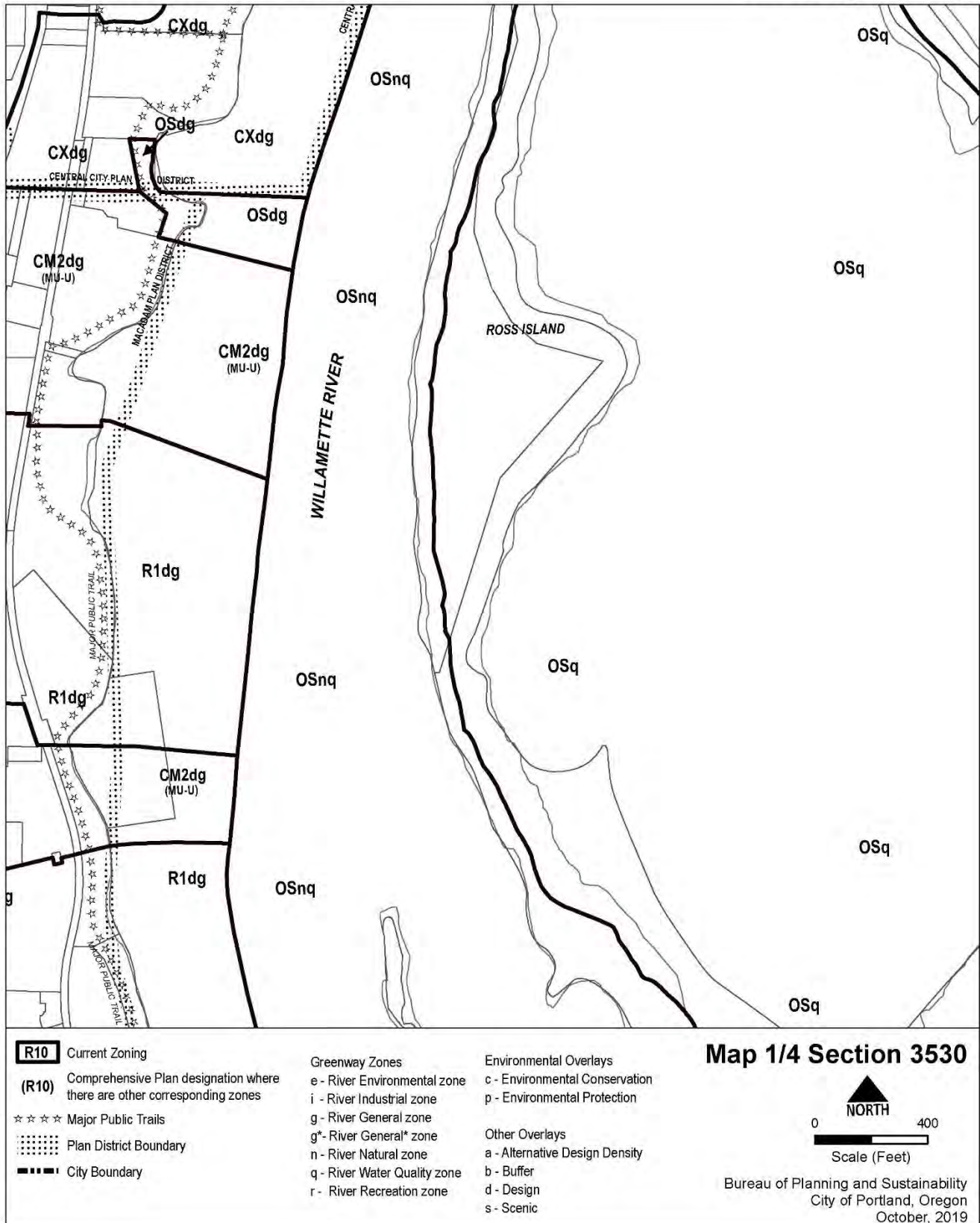
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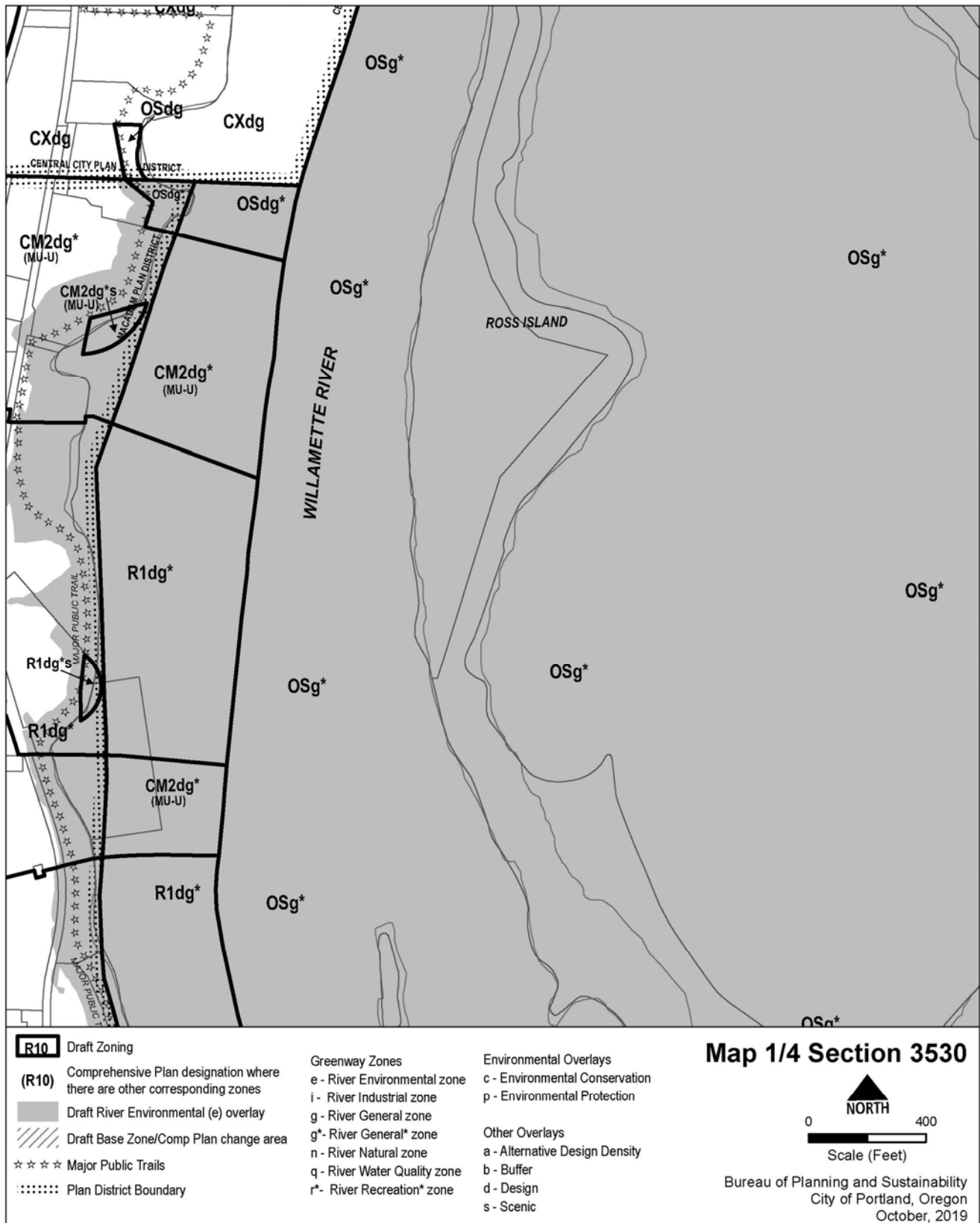
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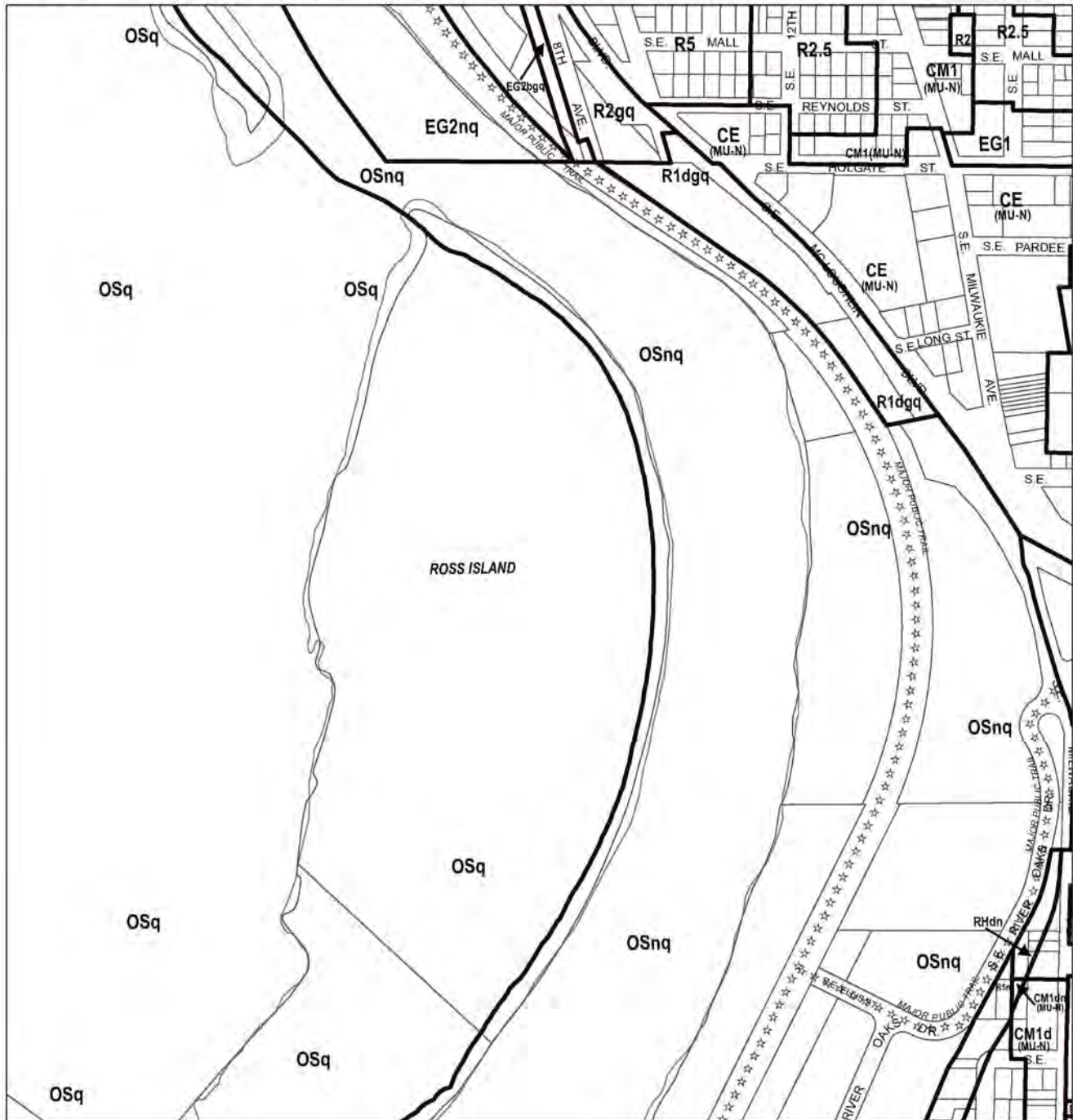
River Plan South Reach

Discussion Draft Zoning



River Plan South Reach

Existing Zoning



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(R10) Comprehensive Plan designation where there are other corresponding zones

☆☆☆☆ Major Public Trails

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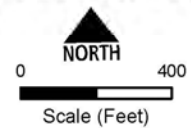
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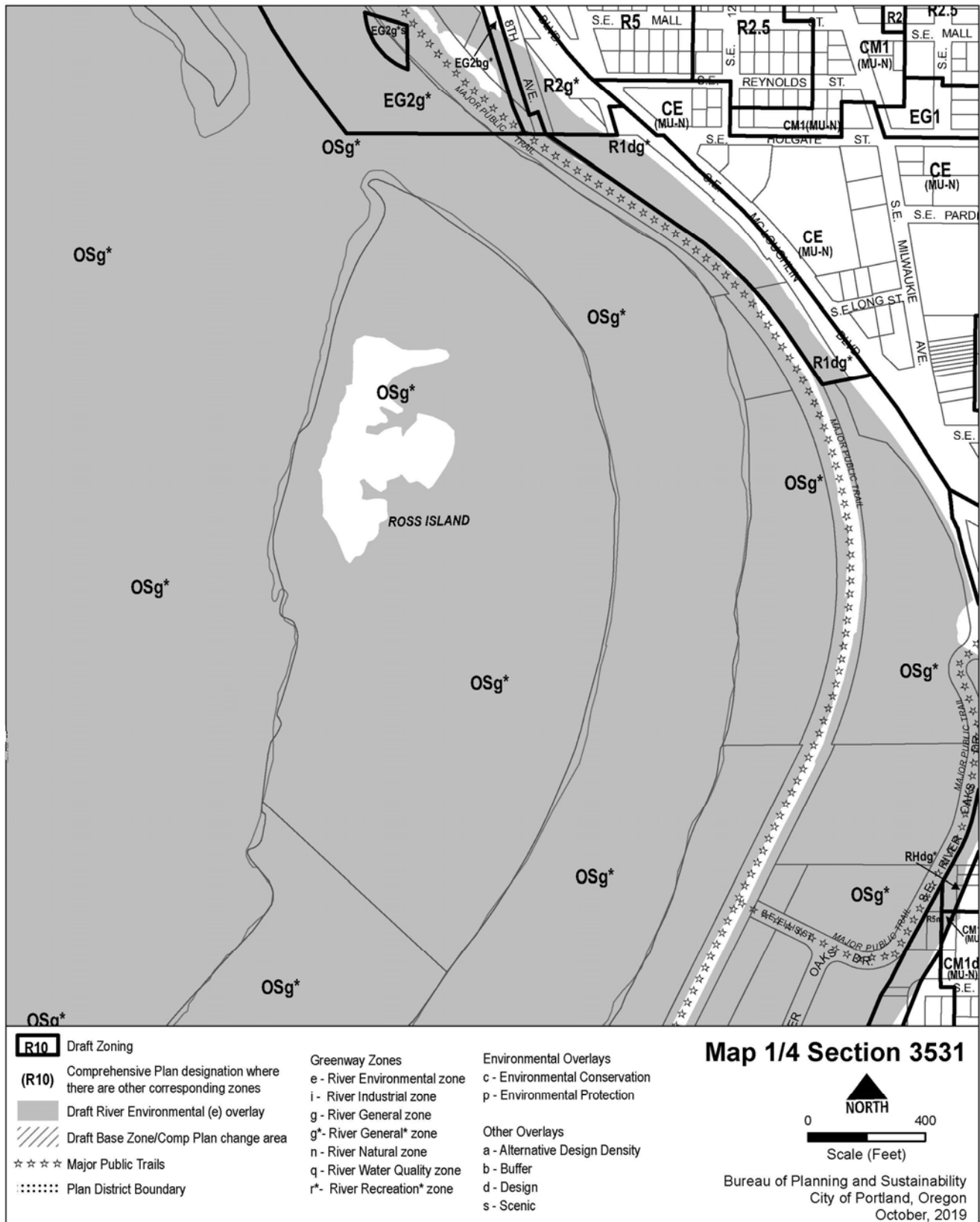
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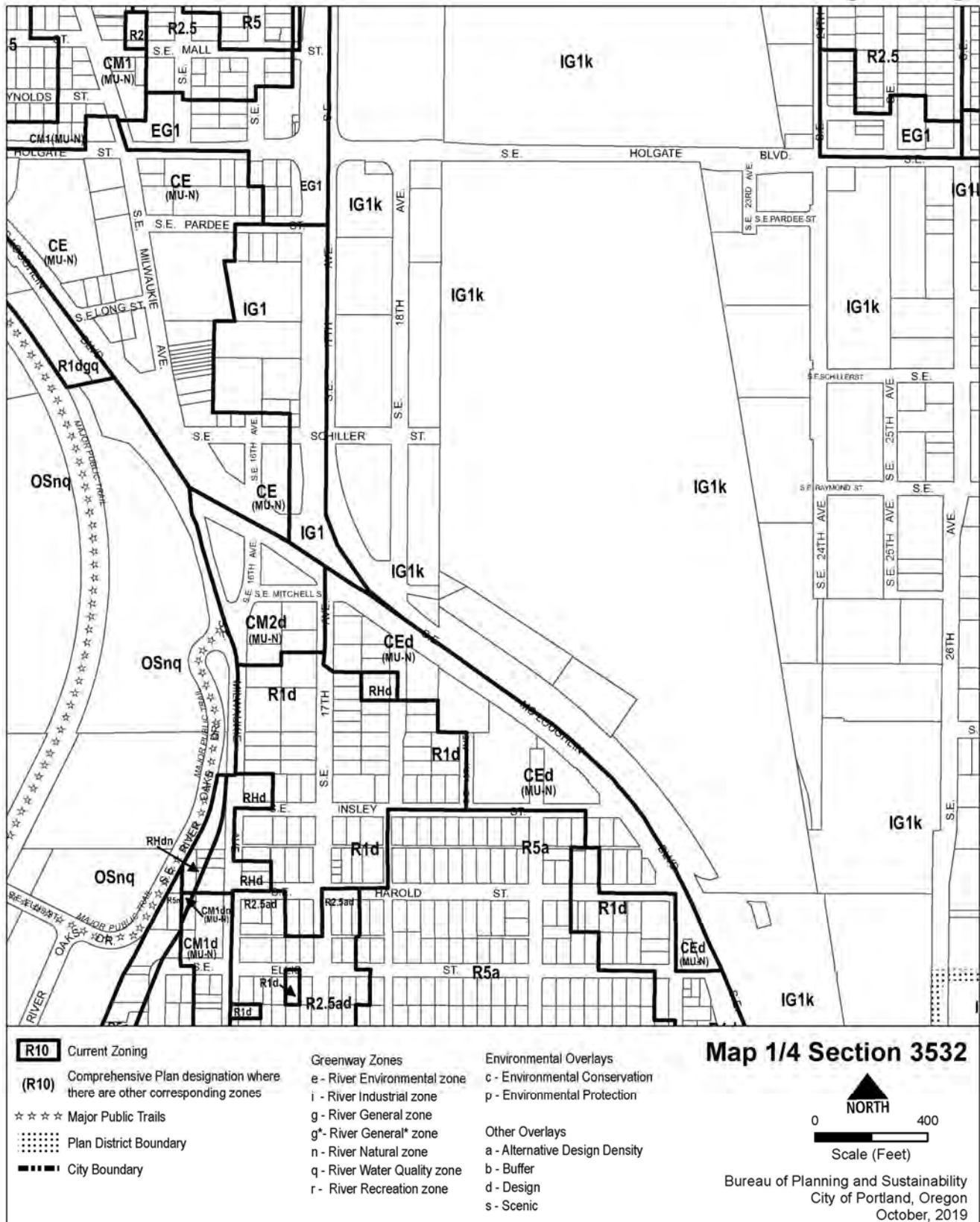
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City of Portland, Oregon
October, 2019

River Plan South Reach

Discussion Draft Zoning

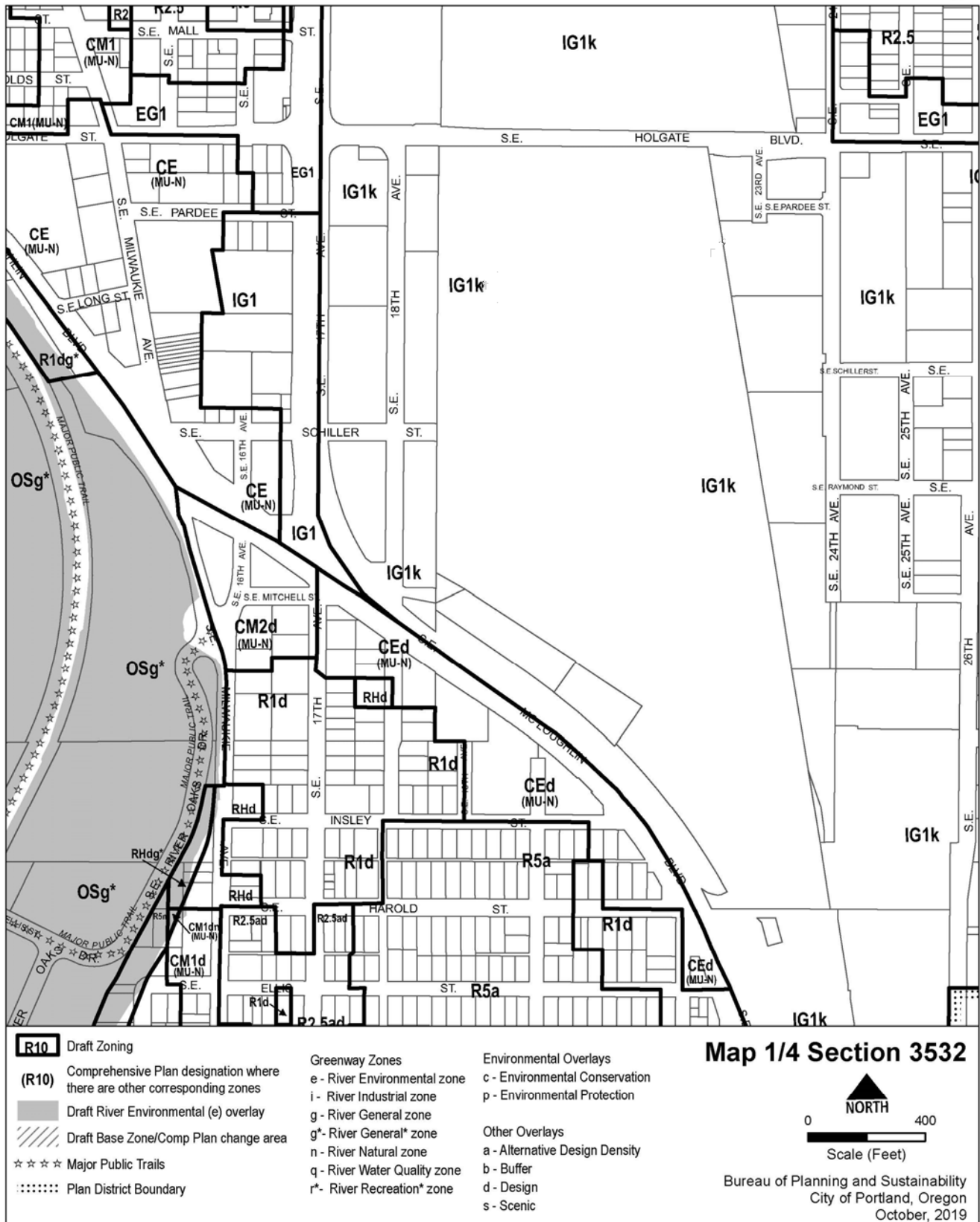


Existing Zoning



River Plan South Reach

Discussion Draft Zoning



River Plan South Reach

Existing Zoning



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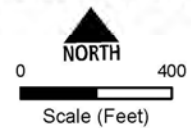
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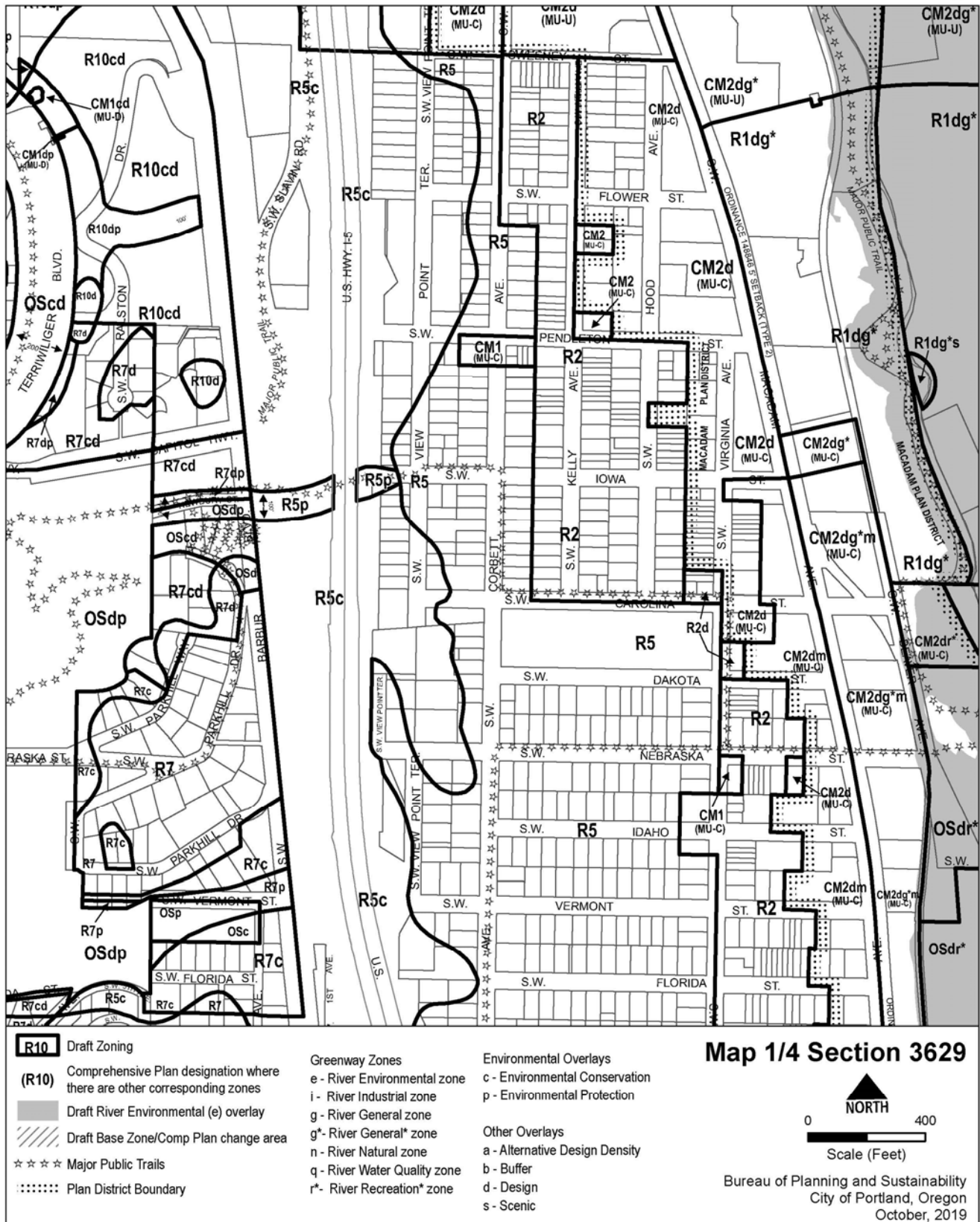
Map 1/4 Section 3629



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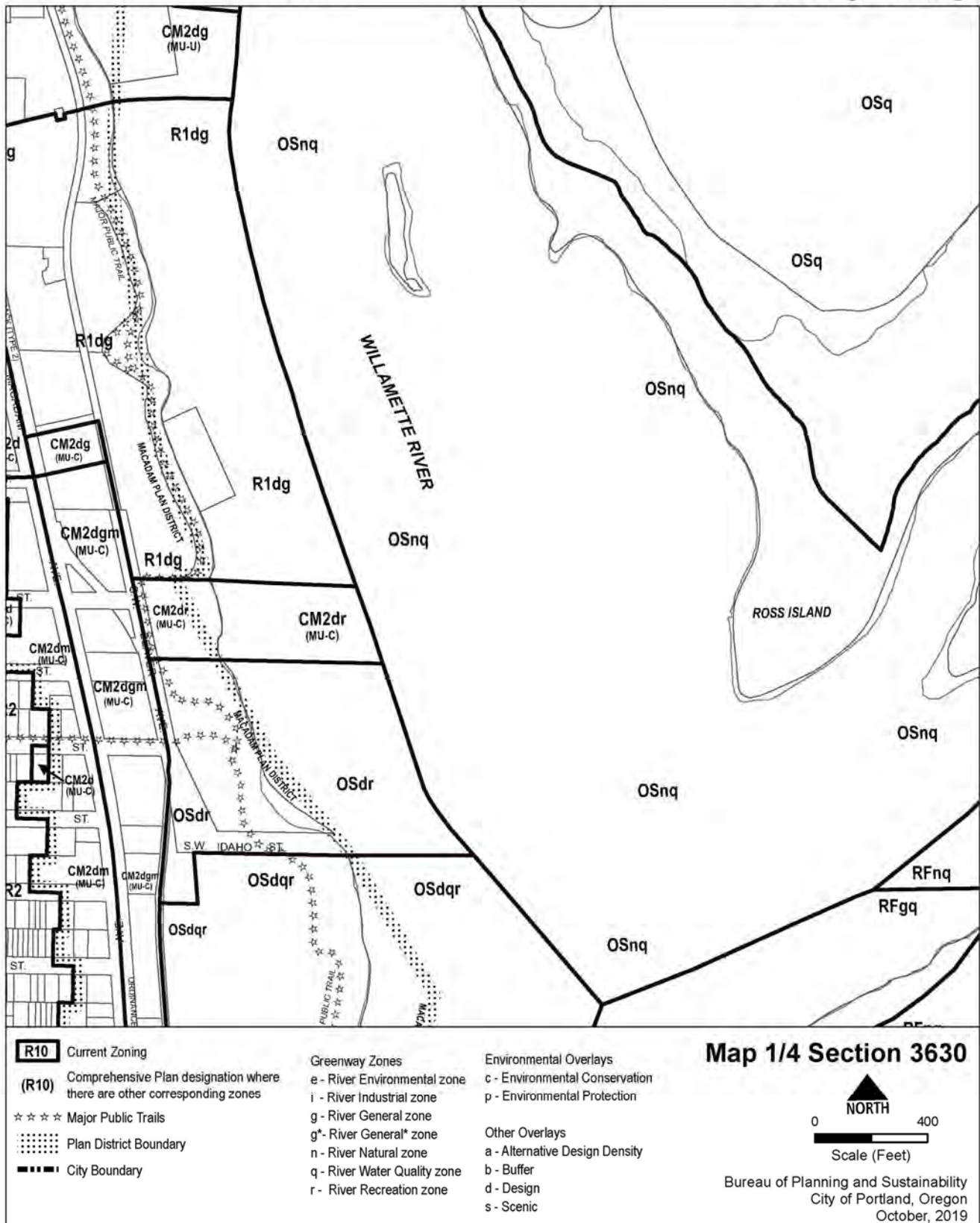
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Discussion Draft Zoning



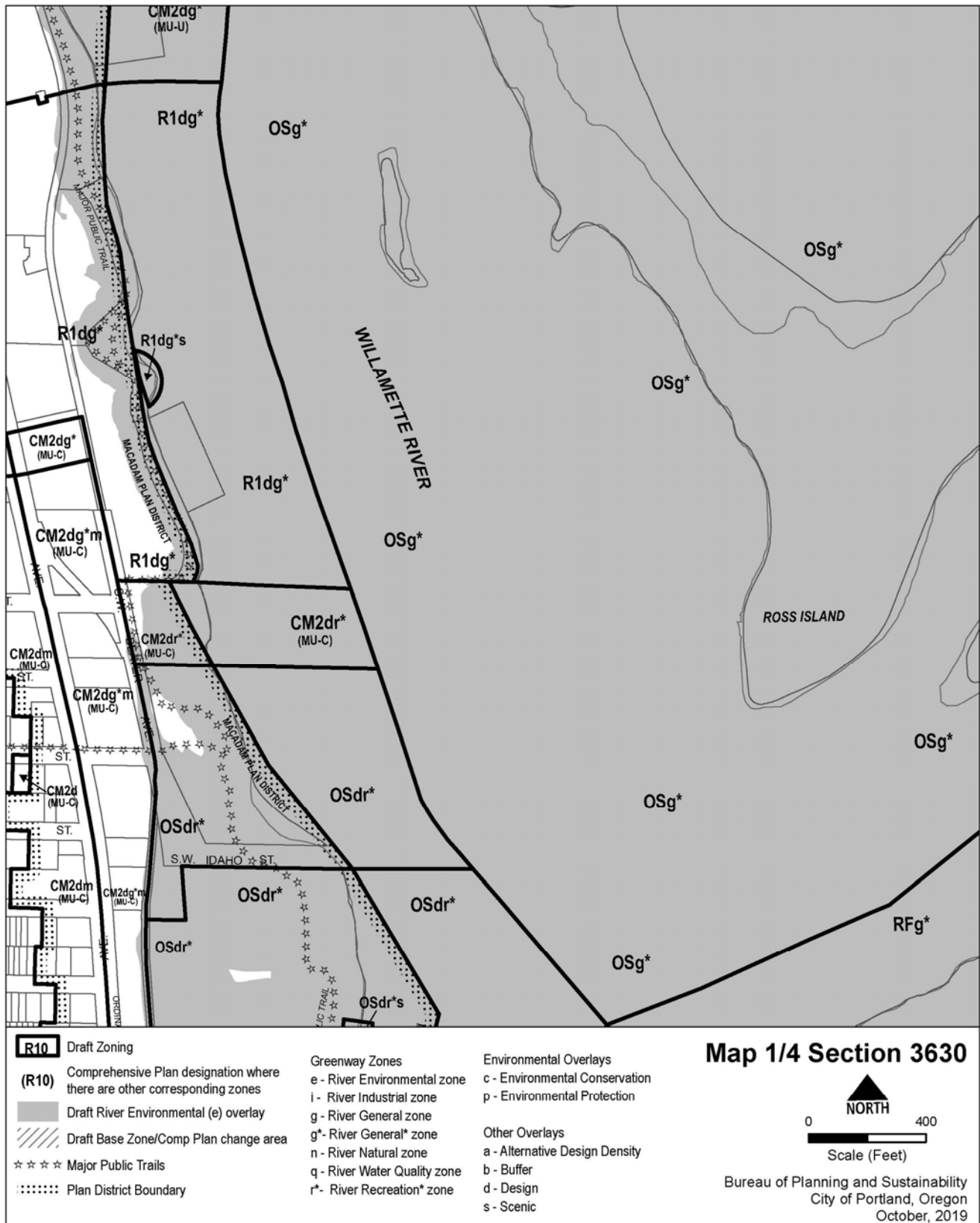
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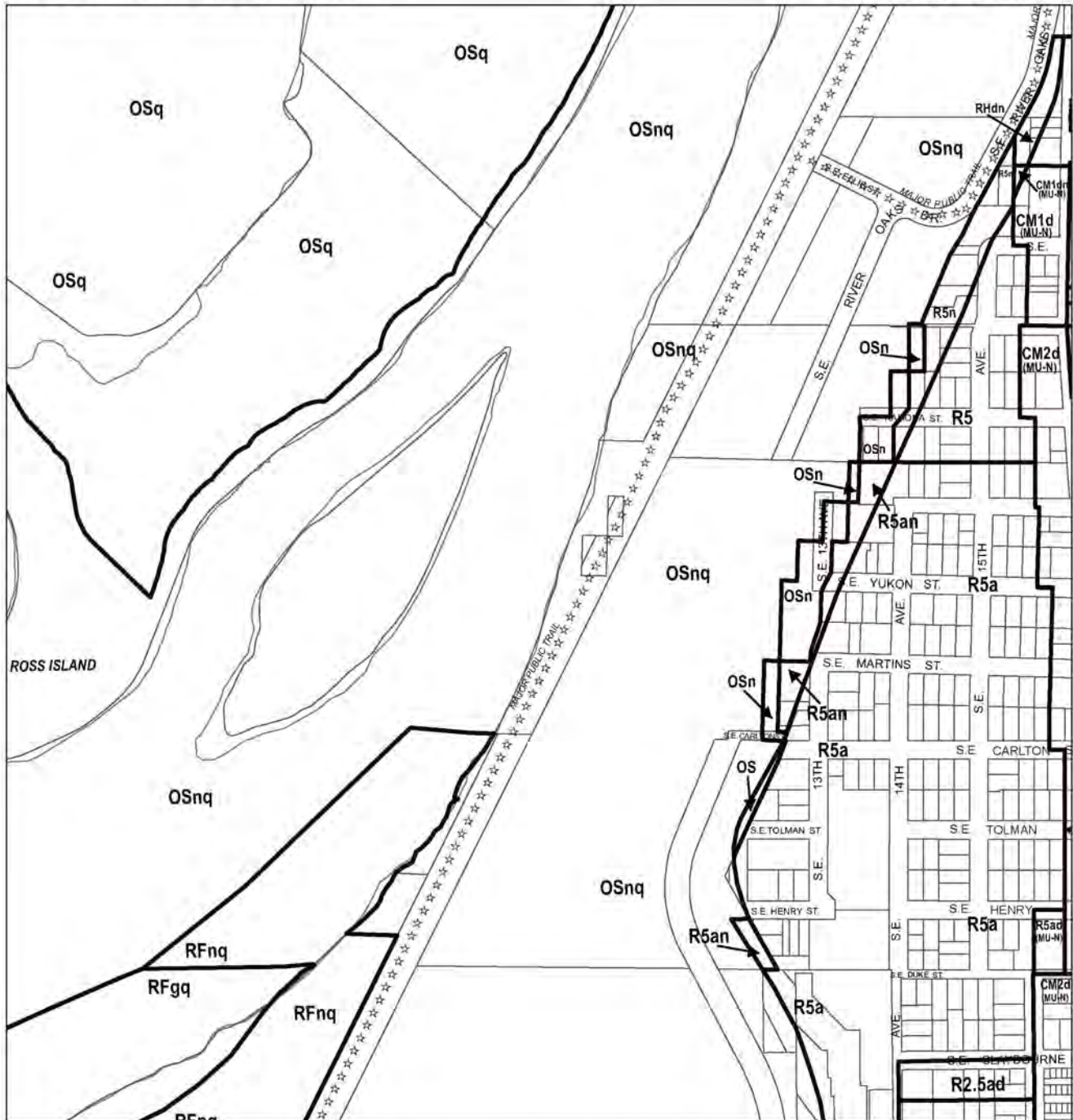
River Plan South Reach

Discussion Draft Zoning



River Plan South Reach

Existing Zoning



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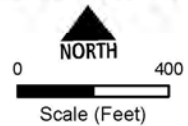
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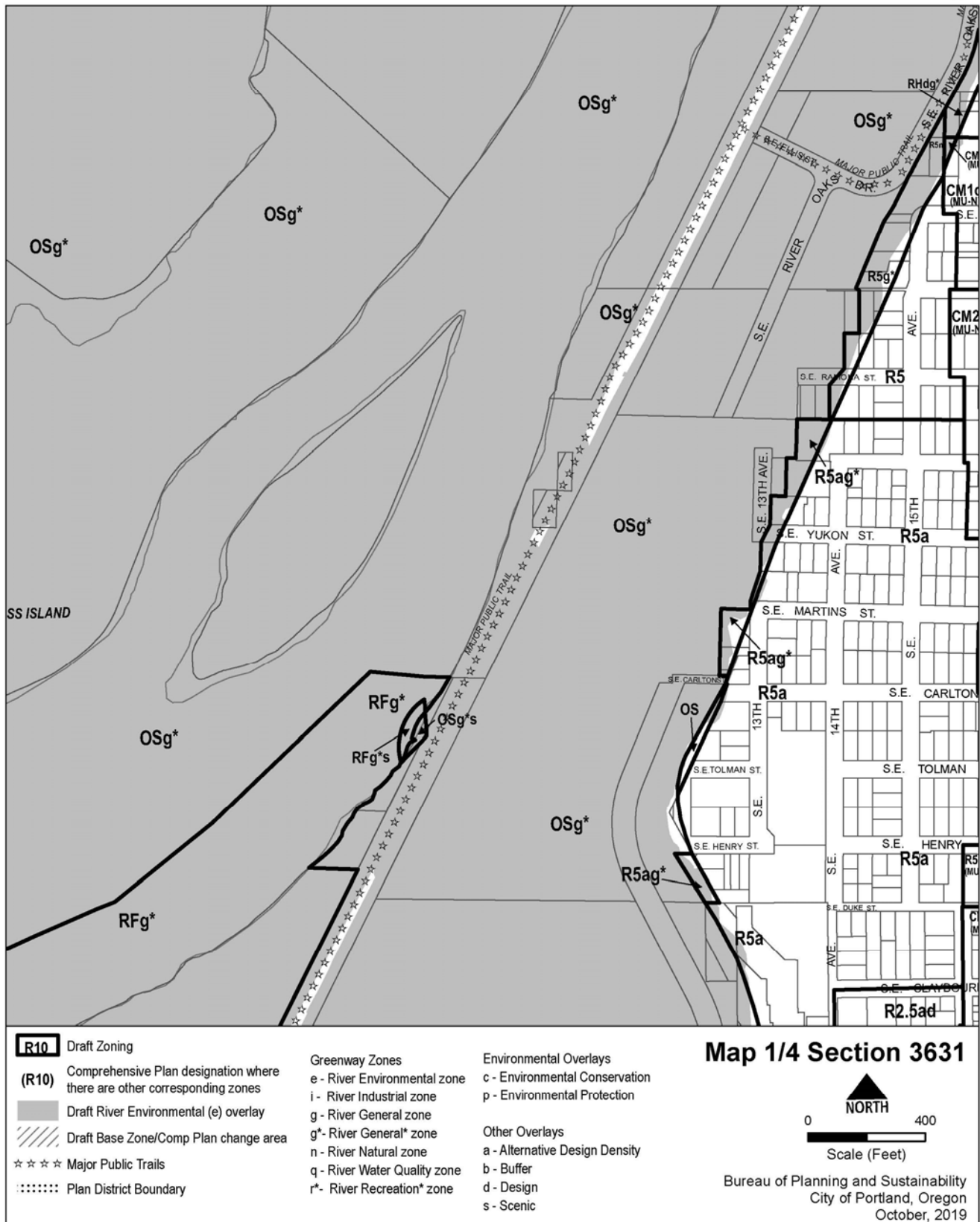
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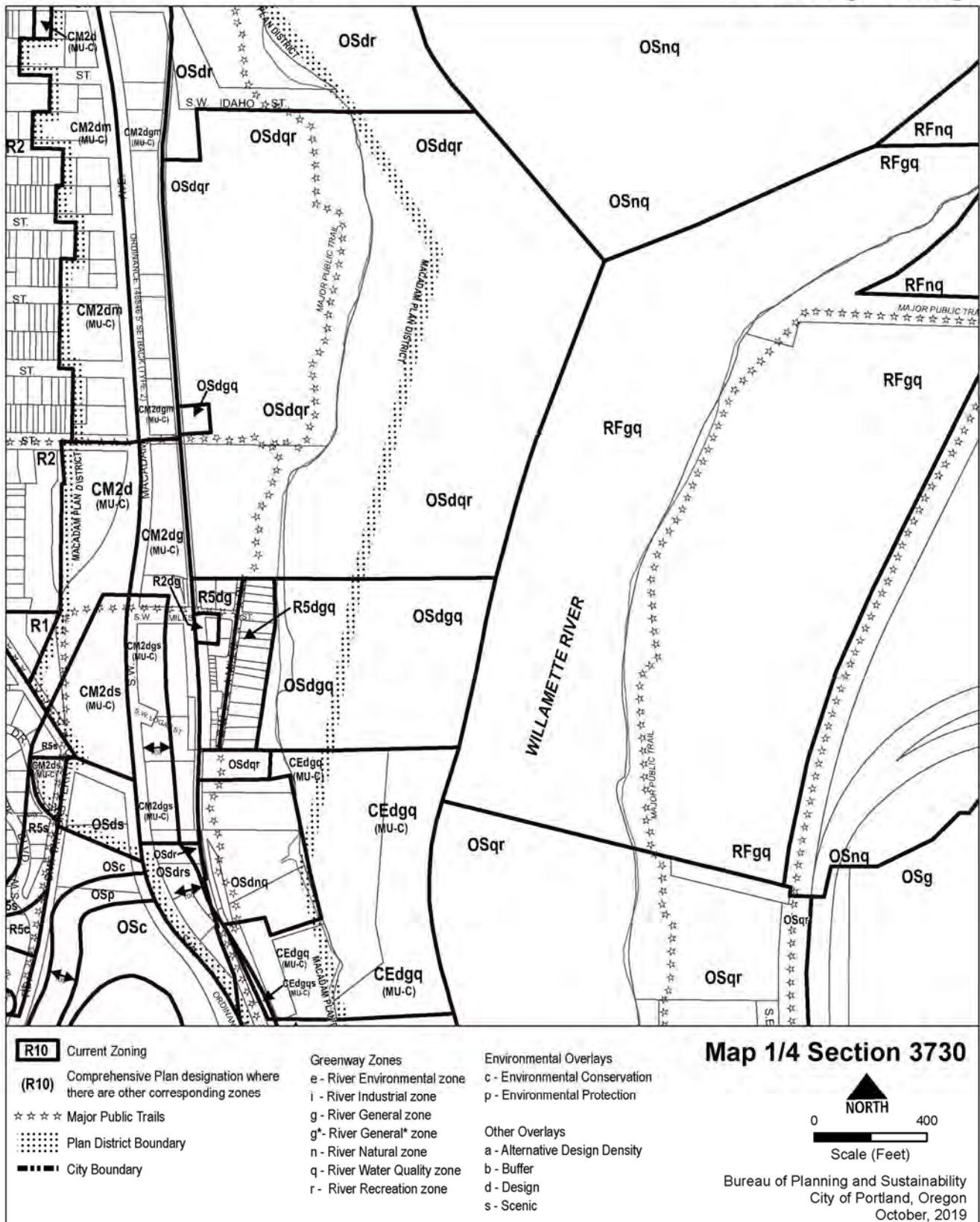
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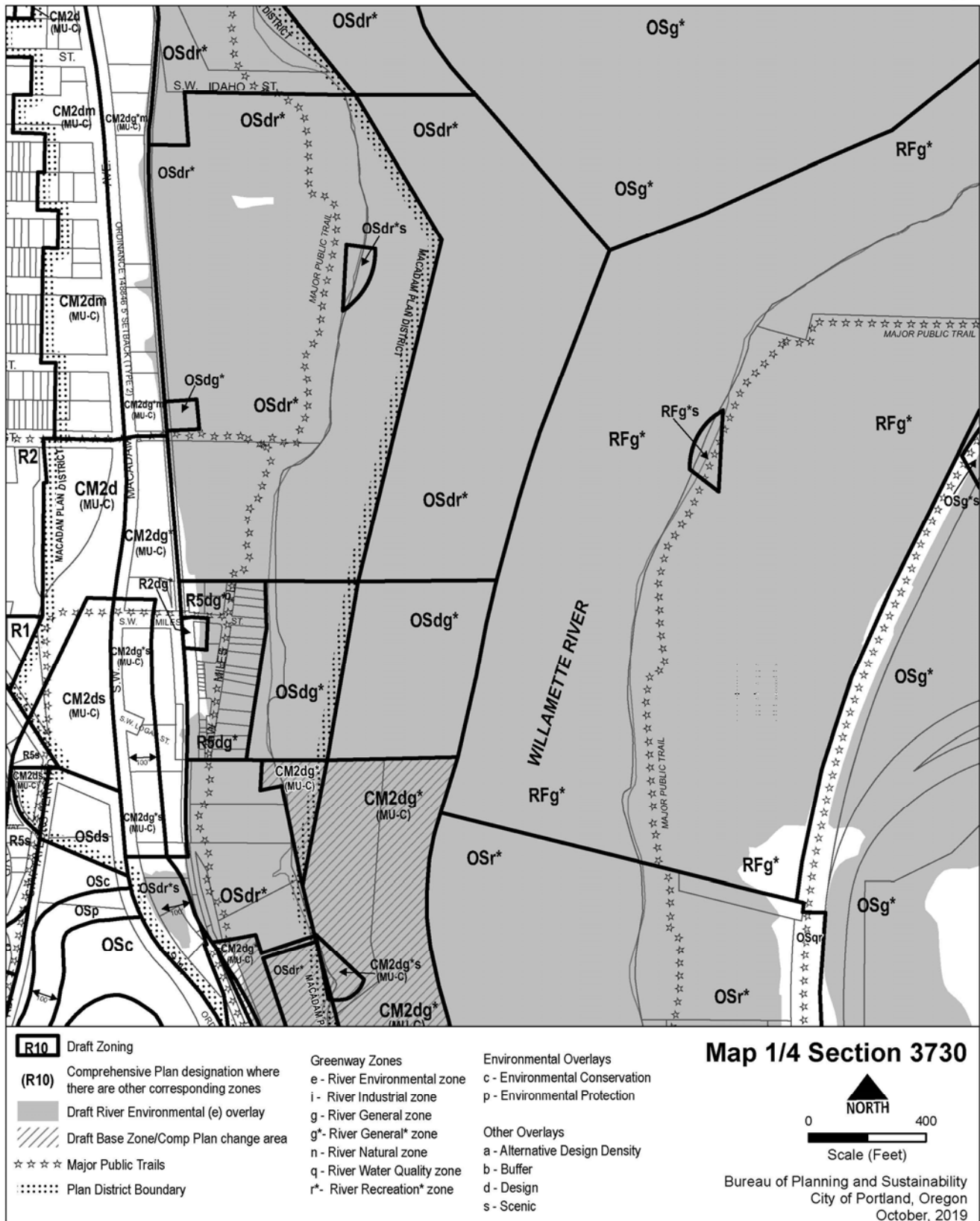
Discussion Draft Zoning



Existing Zoning

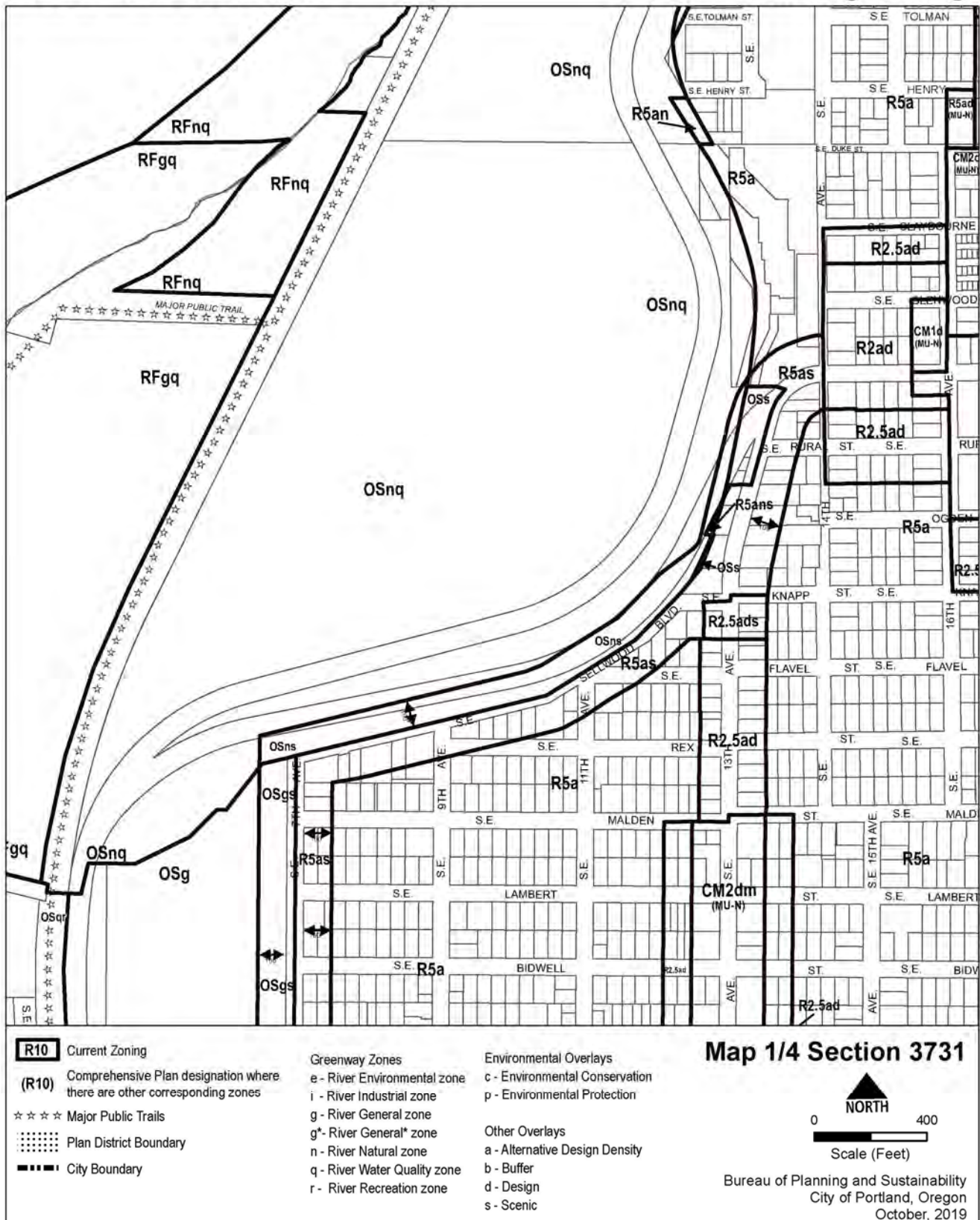


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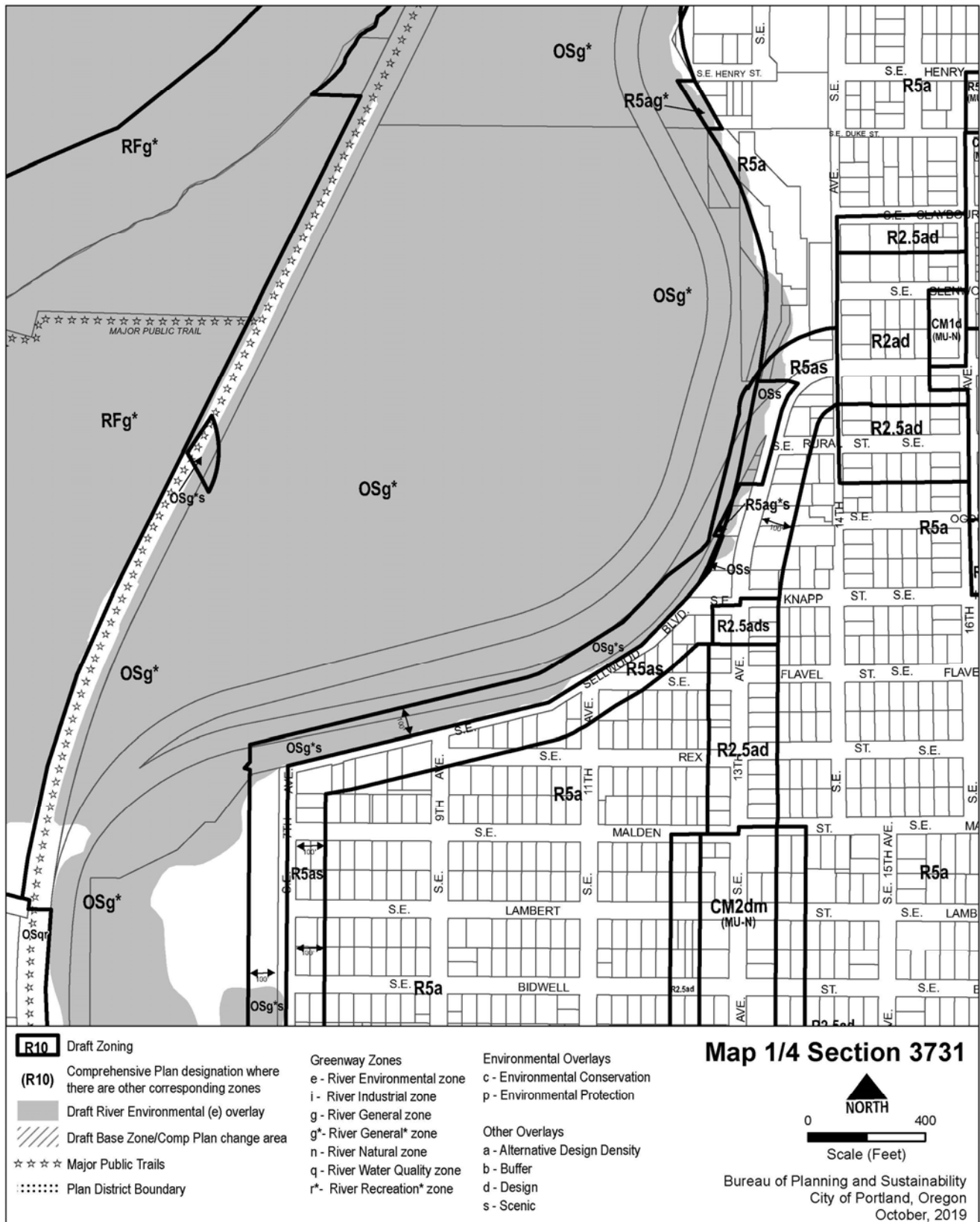
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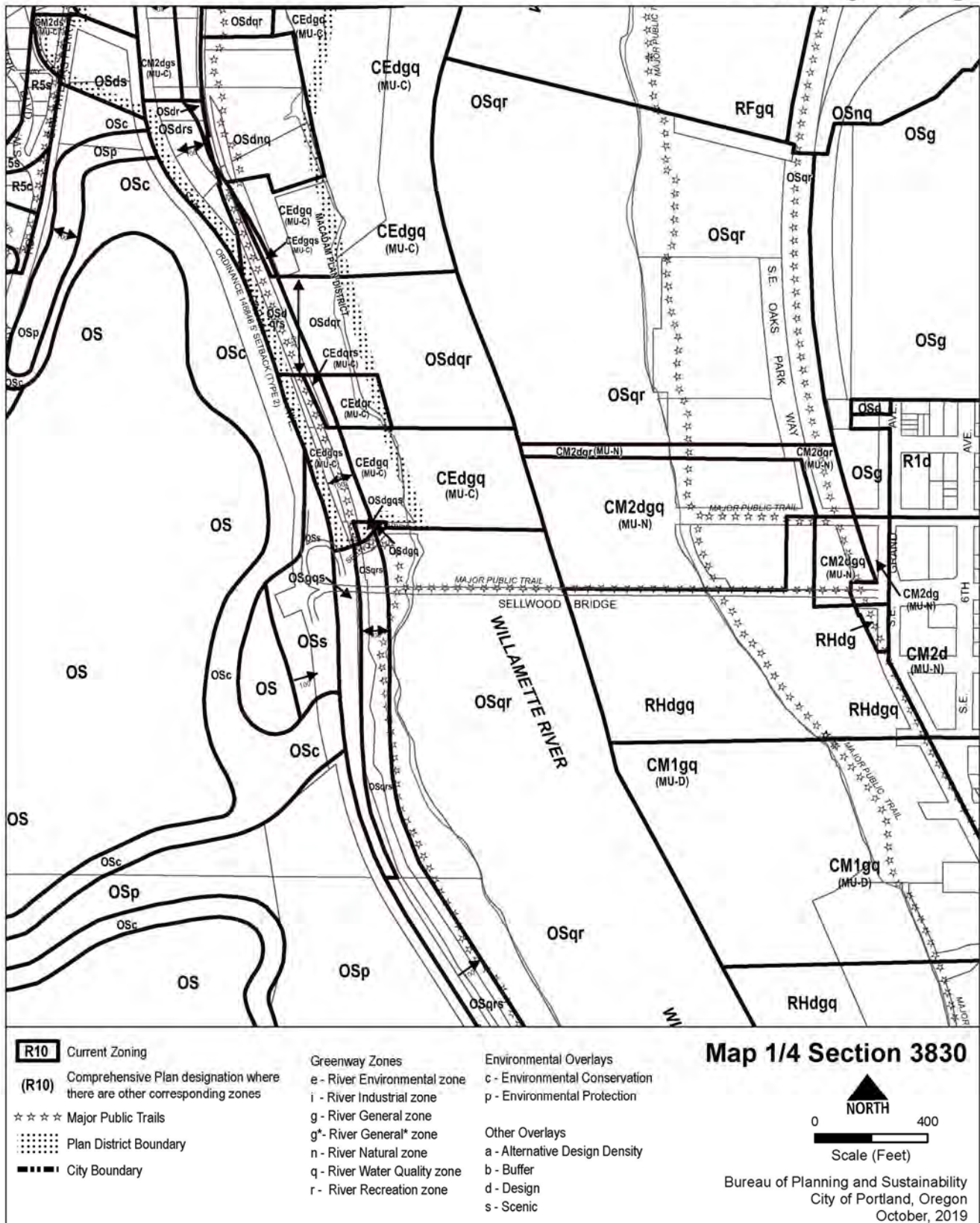


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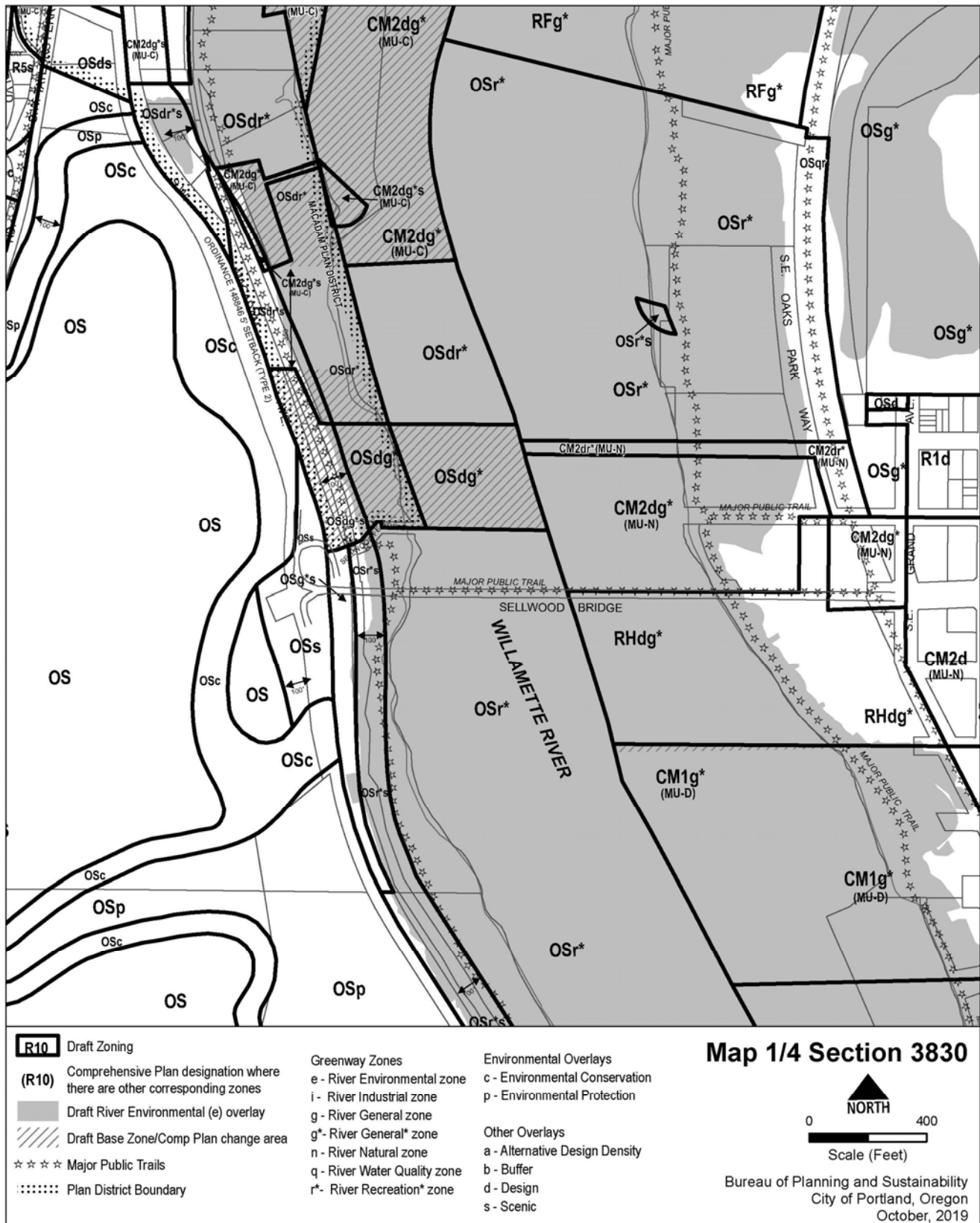


Existing Zoning



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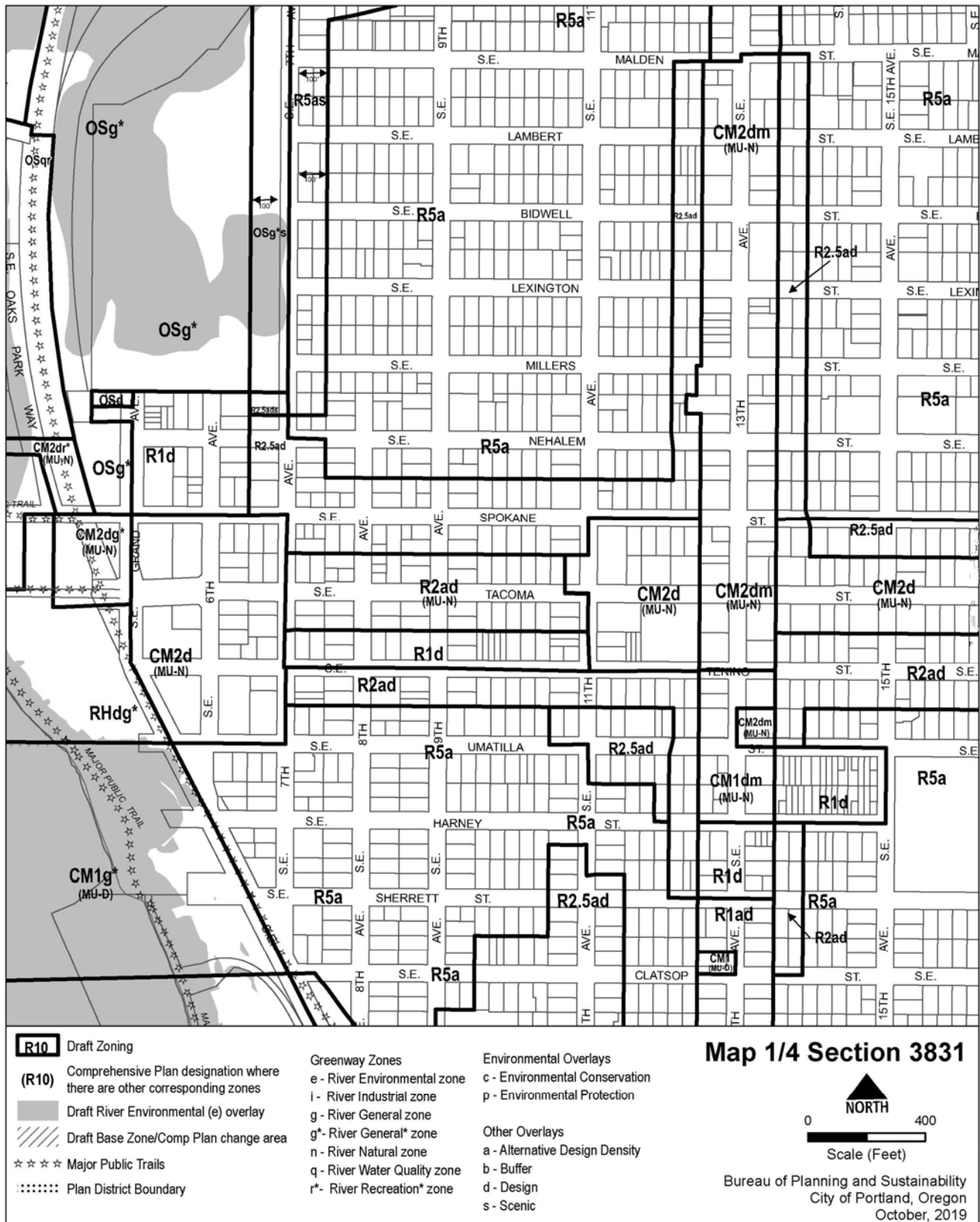


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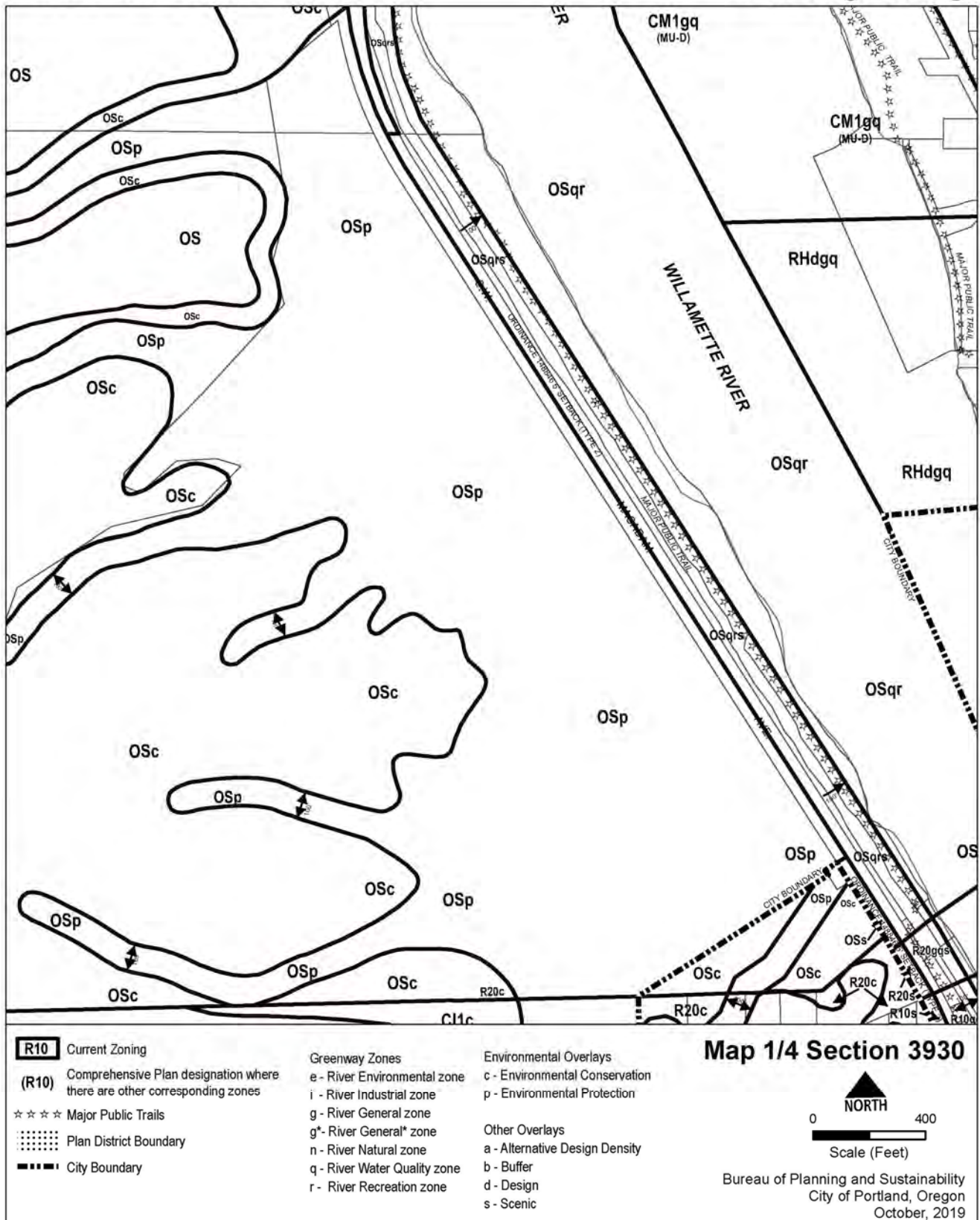
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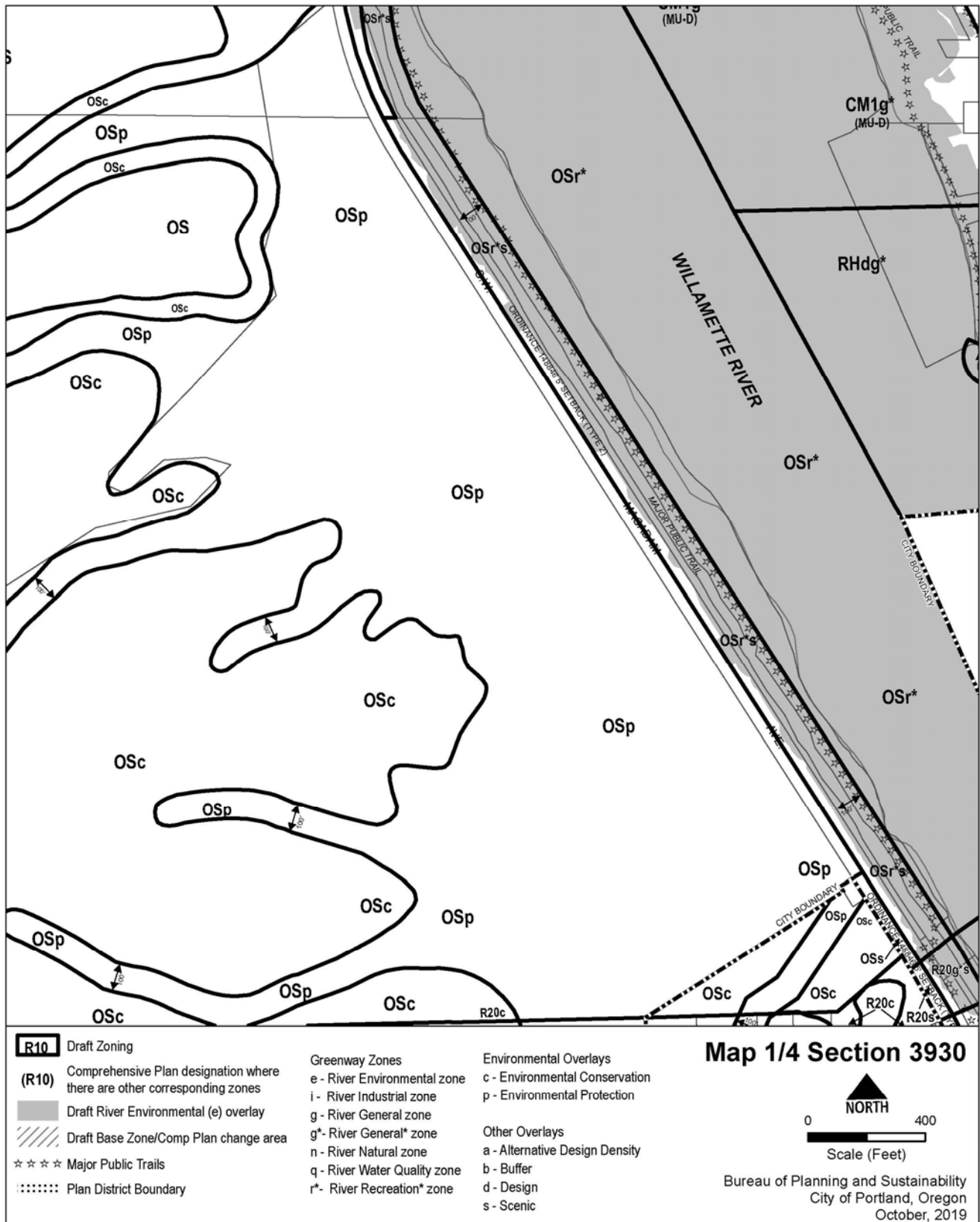
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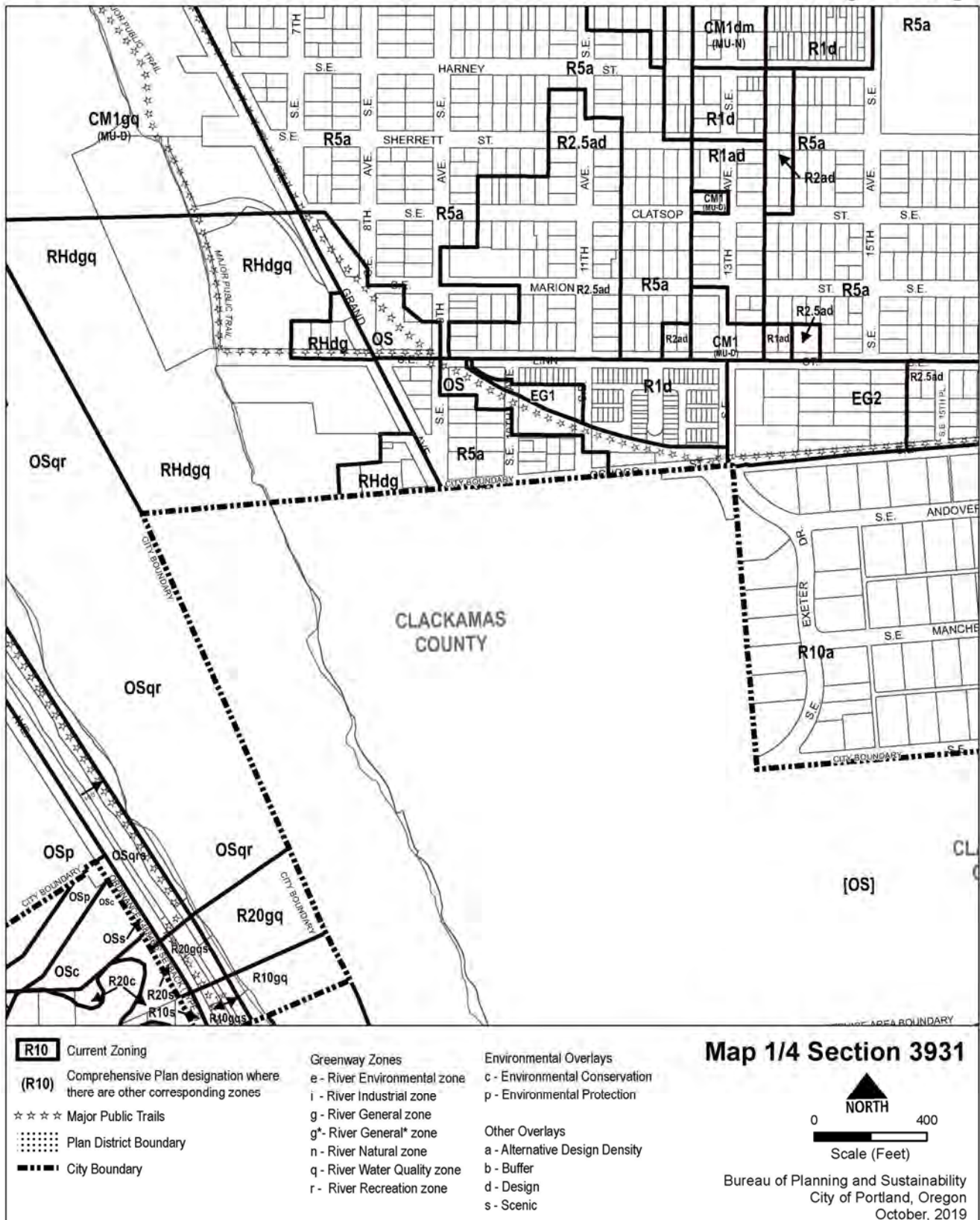


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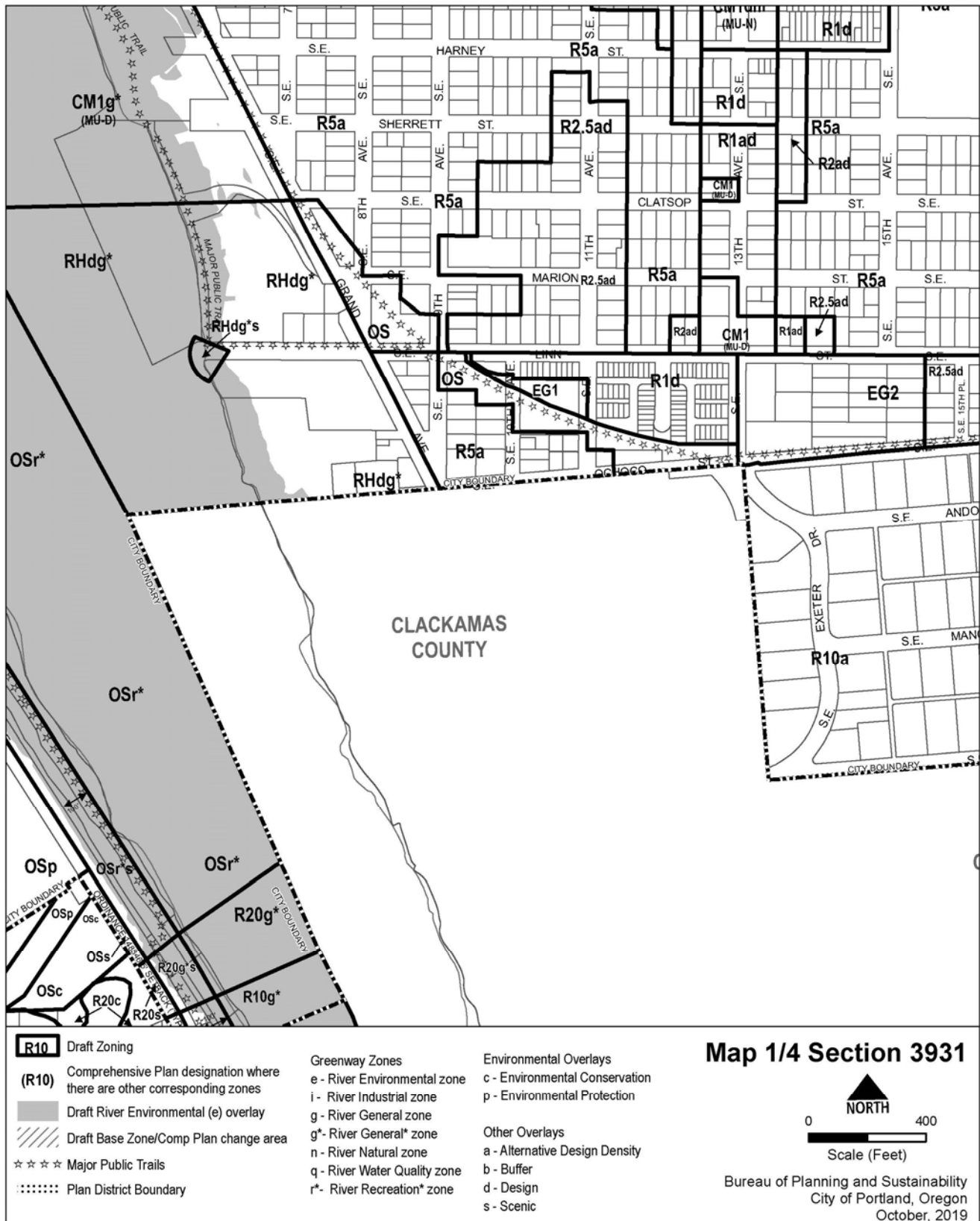
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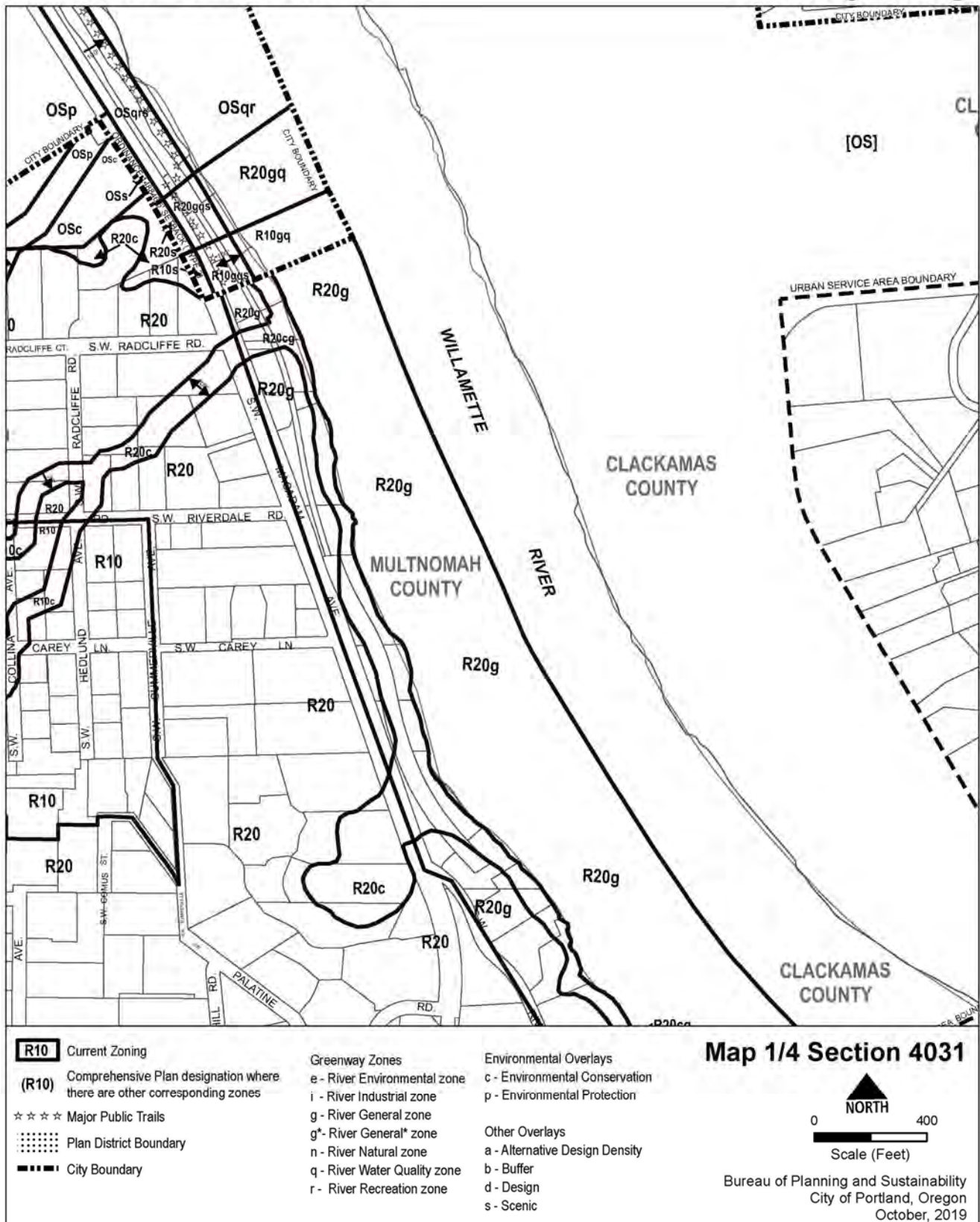


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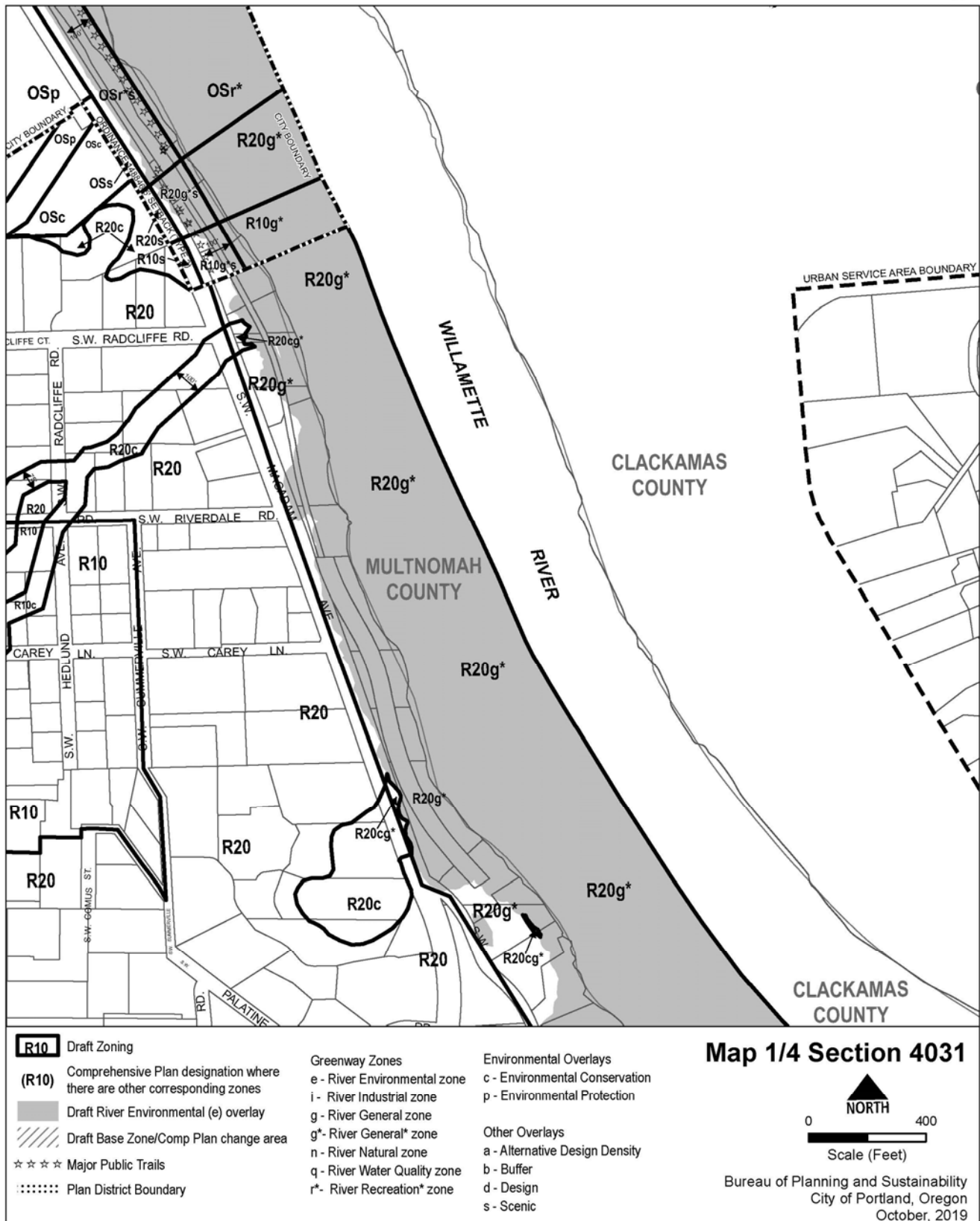


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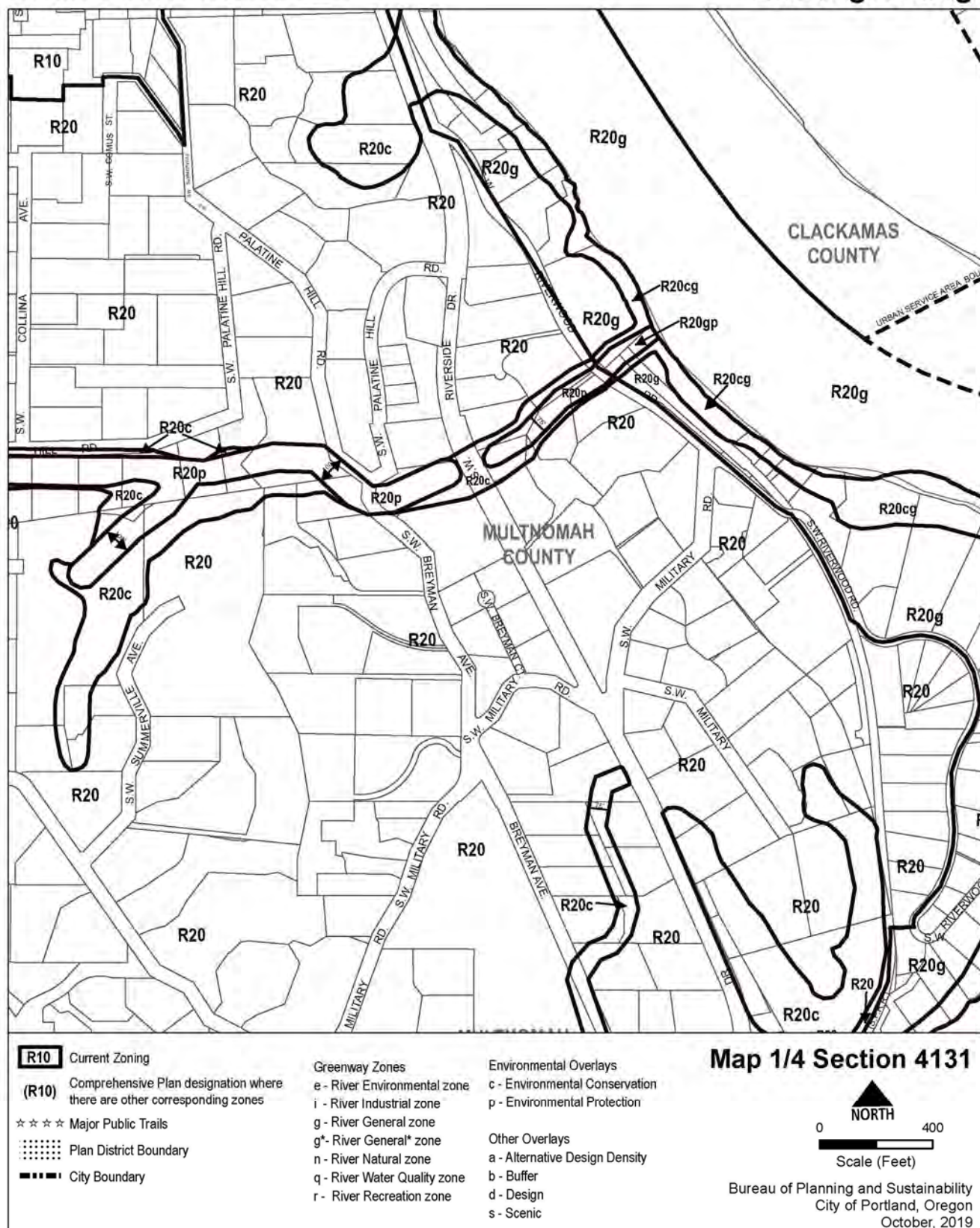
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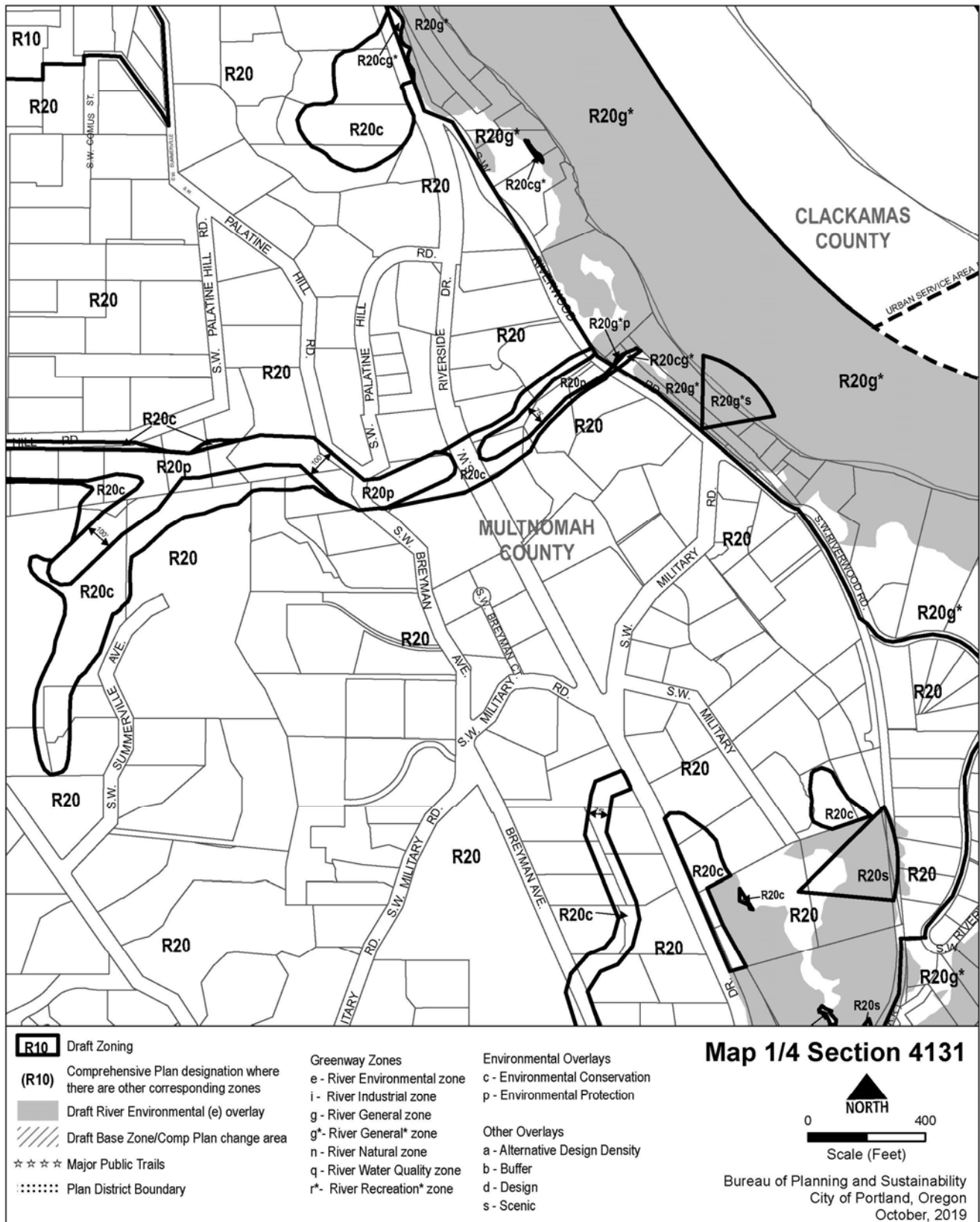


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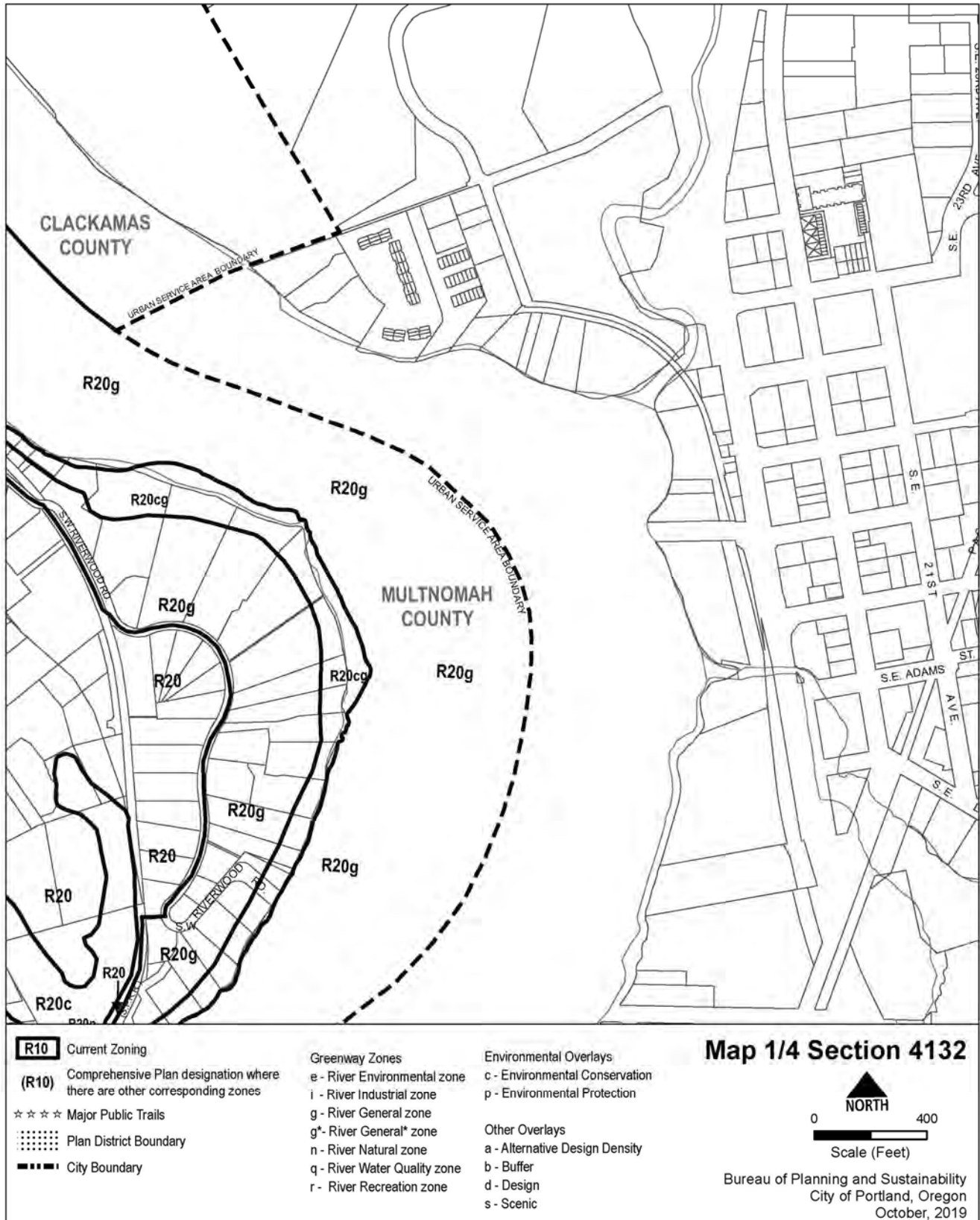
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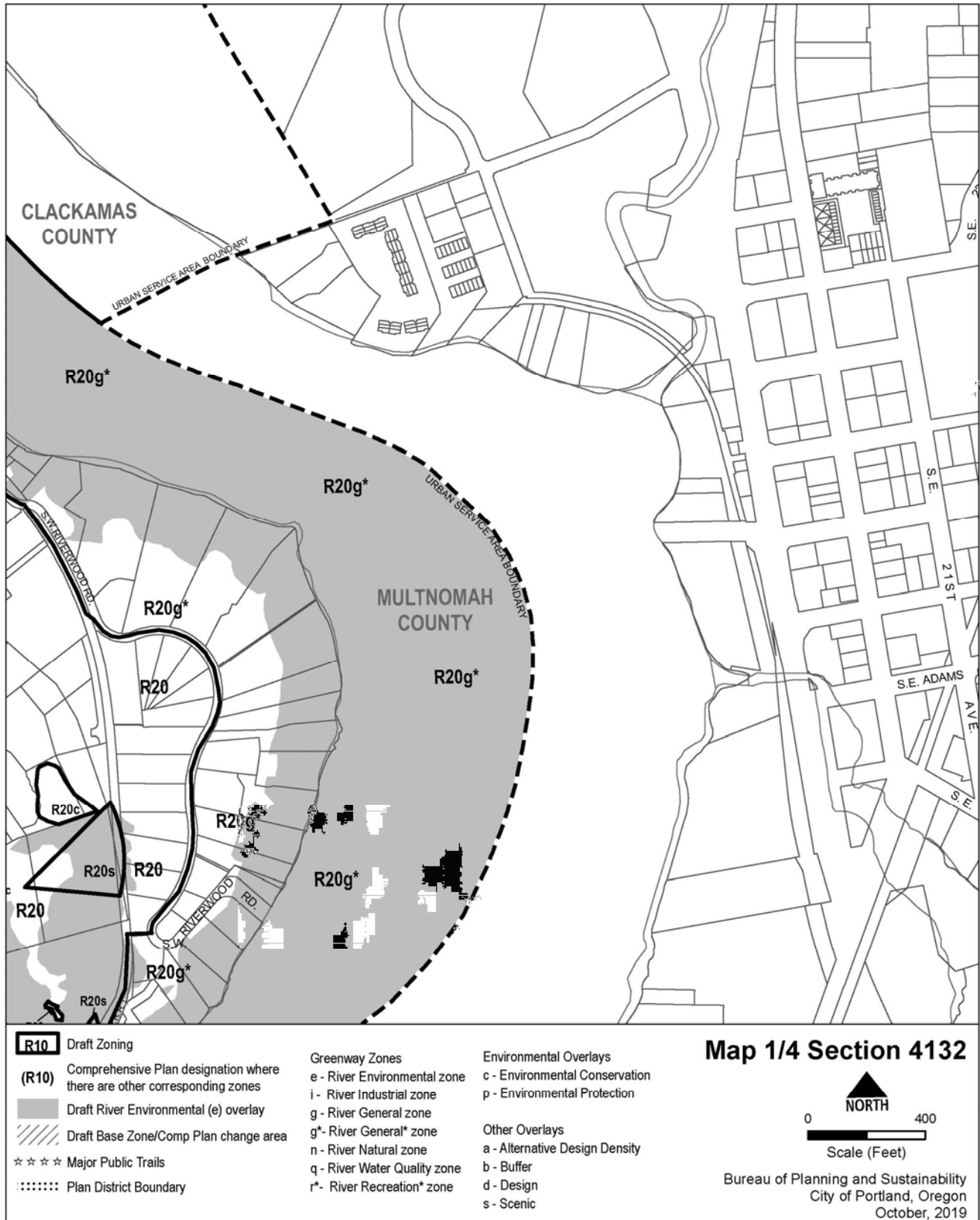
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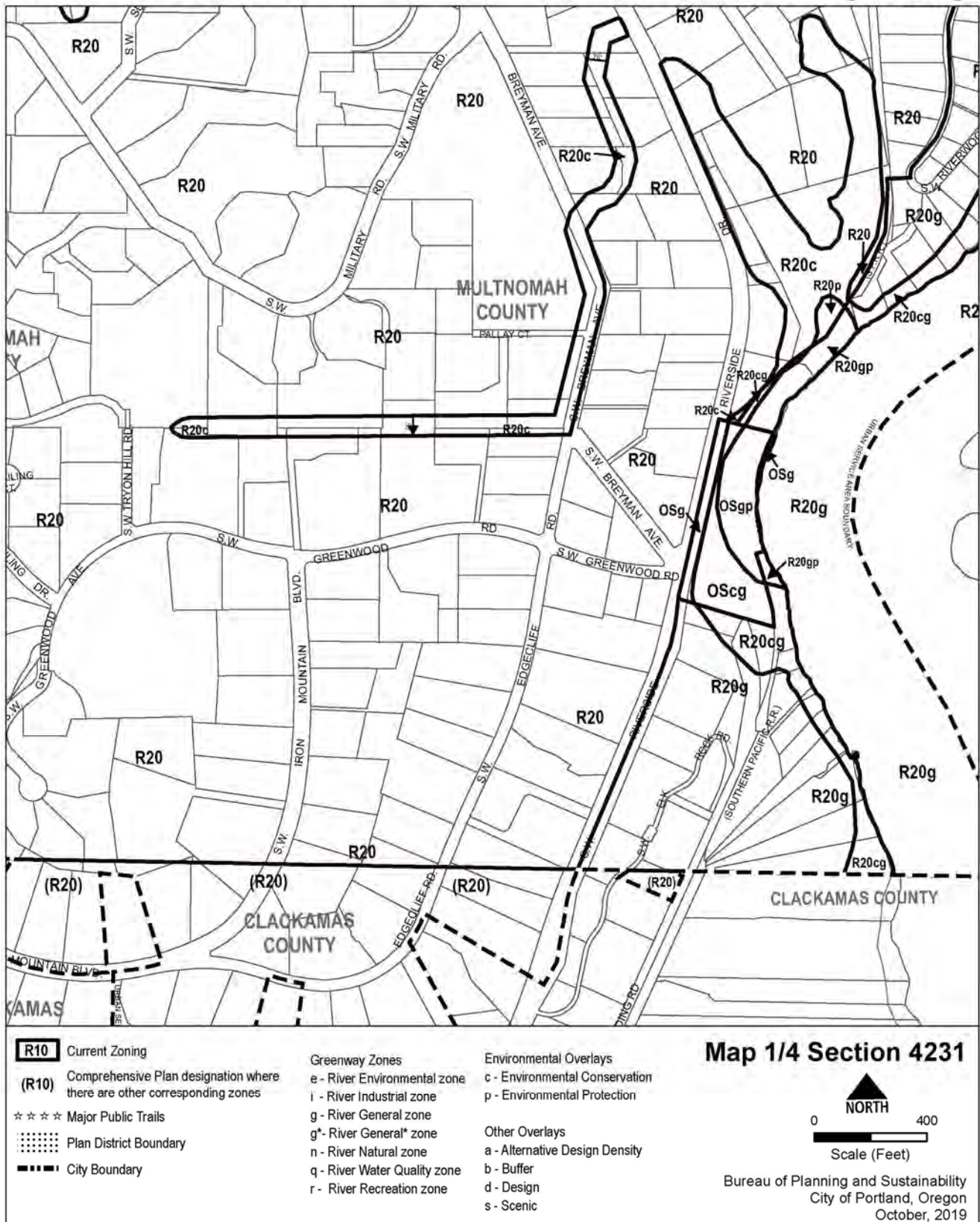
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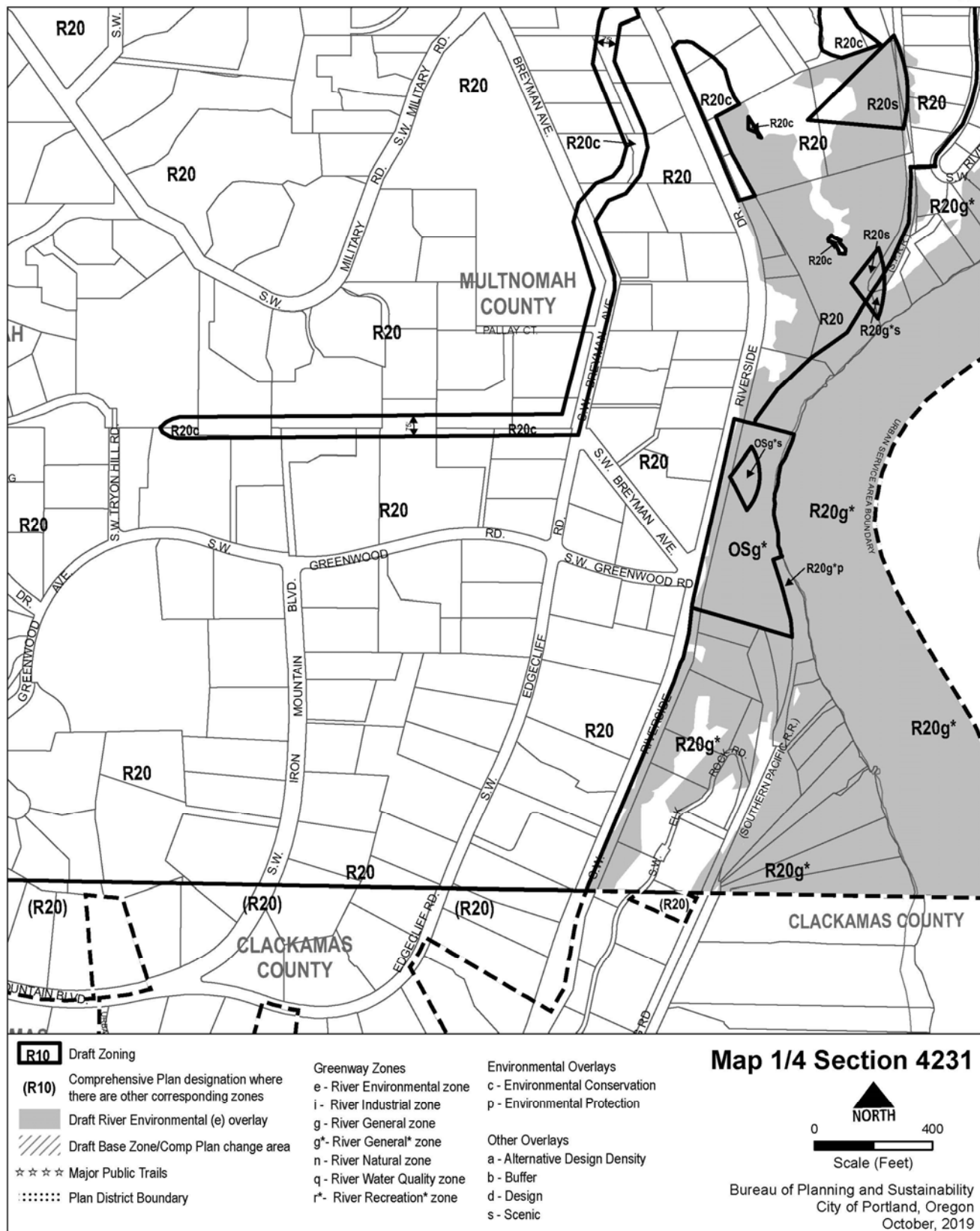


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Discussion Draft Zoning



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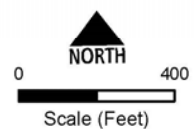


- R10** Draft Zoning
- (R10)** Comprehensive Plan designation where there are other corresponding zones
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- Draft Base Zone/Comp Plan change area**
- Major Public Trails**
- Plan District Boundary**

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Map 1/4 Section 4232



Bureau of Planning and Sustainability
City of Portland, Oregon
October, 2019

C. REPEAL OF THE MACADAM CORRIDOR DESIGN GUIDELINES

The River Plan/South Reach project considers the Willamette riverfront area and how development and redevelopment happens over the next 20 years. In the SW Macadam Civic Corridor and Sellwood bridgehead areas there are sites that have the Design overlay zone (d) applied. The city's two-track system of standards and guidelines allows a property owner/developer to choose objective zoning code standards or elect a design review process with discretionary guidelines to meet and accomplish quality development and redevelopment. The SW Macadam area has special design guidelines from 1985 that supersede applying the existing community design guidelines, which are citywide guidelines applied in areas that do not have unique area-specific design guidelines.

Another Bureau of Planning and Sustainability (BPS) project called Design Overlay Zone Amendments (DOZA) is updating the rules for the design overlay zone and the design review program. It includes refreshing the citywide design guidelines and standards using the lens of context, public realm and quality. River Plan/South Reach project staff have provided input into proposed changes for the River Pattern Area context and how riverfront area development relates to the public realm including the Willamette Greenway Trail system.

Since the *Macadam Corridor Design Guidelines* were adopted in 1985, the Portland Zoning Code has been revised on numerous occasions to improve base zone and other development standards to be more pedestrian-oriented and address other design-related development characteristics. The DOZA project will improve design guidelines and standards applied in the city. It is anticipated that final DOZA recommendations will be adopted by City Council in early spring 2020. This will occur before the River Plan/South Reach comes to City Council for final adoption.

River Plan/South Reach includes a recommendation, Action C6C, to repeal the *Macadam Corridor Design Guidelines*, provided DOZA is adopted and in effect. This will mean that the Macadam Corridor area would have the most up-to-date citywide design standards and guidelines applied to the area. The following provides more details on why the special design guidelines are recommended to be repealed and generally describes the benefits of the proposed DOZA project design regulation revisions.

Commentary

Action Plan recommendation C6C - Repeal the *Macadam Corridor Design Guidelines* (1985) and apply the Citywide Design Guidelines and Standards that are adopted through the Design Overlay and Zoning Amendments project, and in effect prior to adoption of the River Plan/South Reach.

The *Macadam Corridor Design Guidelines* (1985) were appropriate guidelines at the time they were developed. However, with changes made to the city's comprehensive plan and zoning code since that time, a lot has changed with how development happens in the city. Also, the *Willamette Greenway Plan* (1987) was not in place when the design guidelines were adopted. The DOZA recommendations update citywide design standards and guidelines to be consistent with and further the desire for quality development that reflects local context, is resilient and focuses on the public realm. There are 8 Macadam design guidelines in the 1985 document. They are:

1. Create public views to the river, greenway trail and Willamette Park.
2. Physically connect both sides of Macadam Avenue to Willamette Park, greenway trail and river.
3. Enhance scenic qualities of sites abutting the river to contribute to an attractive and enjoyable trail - preserve natural areas of the riverbank, screen vehicular areas.
4. Coordinate Macadam Avenue boulevard treatments, planters, awnings, plazas and other pedestrian amenities.
5. Design buildings to be compatible with the sub-area context, e.g. similar building materials.
6. Keep consistent building signage, no visual clutter.
7. Comply with provisions of the Johns Landing Master Plan.
8. Preserve Macadam Avenue right-of-way for future Light Rail Transit.

DOZA recommendations for guidelines and standards cover: citywide urban design framework (e.g. Macadam Avenue as a Civic Corridor), character and local identity, positive relationships and on-site features and opportunities. The street level experience and pedestrian-oriented amenities reflected in development design are addressed in recommendations related to the public realm. This includes weather protection, entries, places to sit, pause and interact, art, etc. Building compatibility, including materials and other building features, is addressed in recommendations related to quality and resilience.

Additionally, the *Willamette Greenway Plan* and implementing regulations, which are being updated with the River Plan/South Reach, address public views and scenic resources to the river, greenway trail and Willamette Park (See Volume 3, *Scenic Resources Protection Plan*), and landscaping and natural resources protection along the riverfront. The greenway plan also established public access connections to the greenway trail and river that can be

Commentary

reached by crossing Macadam Avenue. The SW Light Rail Transit planning is not using the Macadam Avenue corridor, so this guideline is no longer relevant.

BPS staff recommends that the *Macadam Corridor Design Guidelines* be repealed with adoption of River Plan/South Reach, provided that the DOZA recommendations were previously adopted by City Council and are in effect. Staff finds that the newly created design guidelines and development standards along with River Plan/South Reach regulations and existing zoning code provisions will more than adequately address the 1985 Macadam design guidelines. These provisions will provide for quality, contextual, and pedestrian-oriented development that responds to the river as a special place in SW Portland.

Macadam Corridor Design Guidelines



**Portland, Oregon
Oct. 1985**

City of Portland, Bureau of Planning

REPEAL



CITY OF

PORTLAND, OREGON

BUREAU OF PLANNING

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ADDENDUM TO DESIGN GUIDELINES: DESIGN DISTRICT THRESHOLDS

Section 33.825.030 of the Portland Zoning Code outlines the procedures for Major and Minor Design Review. Major Design Reviews are processed through the Type III procedure, which requires a public hearing. Minor Design Reviews are processed through the Type II procedure; they are approved by staff based on specific criteria. A hearing is held if the decision is appealed.

The level of Design Review is determined by the type of development, the value of the improvements, or the location of the project. There are three threshold levels for use throughout the City:

- Threshold 1: New buildings over 1,000 square feet in area or exterior alterations valued over \$200,000 (in 1990 dollars) require Major Design Review. Smaller projects require Minor Design Review.
- Threshold 2: New development or exterior alterations, valued over \$1,000,000 (in 1990 dollars), require Major Design Review. Smaller projects require Minor Design Review.
- Threshold 3: New, primary buildings require Major Design Review. New accessory buildings and expansions of existing primary buildings require Minor Design Review. Other projects do not require Design Review.

The thresholds are also applied to the Special District Design Zones, so designated for their particular character or historic value. In these cases, all projects within the Design Zone are subject to the thresholds as follows:

Districts assigned to Threshold 1:

- Downtown Design District
- Skidmore/Old Town Historic Design Subdistrict
- Yamhill Historic Design Subdistrict
- NW 13th Street Historic Design Subdistrict
- The blocks zoned CX in the NW Triangle Plan area which abut the North Park Blocks

Districts assigned to Threshold 2:

- Macadam Design District
- All areas in the Central City Plan District subject to design review that are not covered by Threshold 1
- All areas outside the Central City Plan District with a CXd or EXd designation

Districts assigned to Threshold 3:

- Lair Hill Design District
- Ladd's Addition Design District

Special Terwilliger Blvd. Design District Thresholds:

Major Design Review:

- New development that would be visible from Terwilliger Blvd., *except* for houses.

Minor Design Review:

- New houses visible from Terwilliger Blvd.
- Alterations to existing development that is visible from Terwilliger Blvd.

Exempt from Design Review:

- New development that will *not* be visible from Terwilliger Blvd.
- Alterations to existing development that will *not* be visible from Terwilliger Blvd.

The Planning Permit Center staff can answer any questions about the design review process or the assigned thresholds. The telephone number is 823-7526.

Macadam Corridor Design Guidelines

**Portland, Oregon
Oct. 1985**



Portland City Council

Bud Clark, Mayor
Dick Bogle, Commissioner
Michael Lindberg, Commissioner
Mildred Schwab, Commissioner
Margaret Strachan, Commissioner

Portland Design Commission

Patrick Jordan, Chair
Tom Bard
Tom Hardy
Prue Miller
Dave Soderstrom
John Thodos
Joe Wood

Portland Planning Bureau

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Photographs by Michael Harrison, John VAF
Neal, Michael Saba, and Laurie Wall.

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Introduction

Within the Macadam Corridor, (shown on the map on page 9), the Design Guidelines contained in this document must in the view of the Design Commission be met by each new development or remodeling requiring a building permit. Additionally, within those parts of the Corridor which are also within the Willamette River Greenway, the Greenway requirements listed in Chapter 77 of Title 33, the City Planning and Zoning Code, must also be met.

Major projects are reviewed by the full Design Commission at a public hearing for which notice is given. Ordinarily, the Design Commission will render a decision at the hearing. This decision may be tentative, to be finalized when completed by introduction of appropriate findings at a subsequent hearing. Projects which are found to be minor will be reviewed administratively. Appeals of such administrative reviews are to the full Design Commission.

The Design Commission may approve, approve with conditions, or deny request for design review approval brought before them. The Commission's decision may be appealed to the City Council within 14 days of the final decision by any person with standing. Standing is limited to those who participated in person, in writing, or through a representative prior to or at the hearing and who raised objections which were not resolved by the Commission's decision.

Background and History for Macadam Corridor Design Review

The Macadam Avenue Corridor has been shaped by people responding to its role as a transportation route and by changes in the nature of transportation on this route. During the City's early growth, lands between the Willamette River and Macadam developed into an industrial area where many firms took advantage of both river and land transportation modes. The area was close to the downtown, abutted the river on the navigable side of Ross Island, was provided with rail service and tied together by Macadam Avenue. The area west of the Avenue filled with supporting industrial and commercial activities and back from Macadam, housing. Much of this housing was constructed to meet the needs of those employed in the industries along this stretch of the river.

Industrial development with its attendant rail, auto and truck traffic on Macadam has historically separated the Willamette from the residential neighborhoods west of the avenue.

Over the decades and particularly since World War II much of the industry in the Corridor has relocated. This migration of industrial activity is attributable to shifts in industrial technology, emphasizing horizontal rather than vertical industrial plants, and changes in shipping facility needs requiring large areas of land for support. The role of the Macadam area as part of the City's marine industrial base has steadily declined except in the northern area where much larger land area is available to meet river-related industrial needs. For a time non

river-related industrial plants replaced the marine based operations but were not as vigorous as earlier development.

The softness of these new firms coupled with the resurgence of the downtown and inner city residential neighborhoods fostered redevelopment. This was capitalized on by the Johns Landing private urban renewal project of the 1970's.

Johns Landing established new standards of design and land use direction on both sides of Macadam. For the first time significant residential development between Macadam and the Willamette was realized. Also, for the first time, Macadam became a regional shopping area. The Landing's campus atmosphere contrasted sharply with the functionalist industrial facilities to the north and south of the project. In addition to the development of housing and major retailing, Johns Landing introduced large scale commercial offices into the area.

The Johns Landing project made realization possible of the long term objective of creating more public access to the river. Coupling the public creation of Willamette Park with the agreement by the Landing to dedicate and develop a recreational trail along the river produced the first opportunities for public enjoyment of the river in this part of the City.

The objective of greater public access to the river in this area was formalized with the adoption of the Willamette River Greenway Plan and its implementing ordinances. The bulk of

the Macadam Corridor was designated and zoned for scenic development under the Greenway Plan. The implementing WSD (Willamette Scenic Development) overlay zoning was imposed with the following intent statement explaining the City's objective for the Greenway in this area:

Intent: To allow for use and development consistent with the underlying zoning while allowing for public use and enjoyment of the waterfront and enhancing the river's scenic qualities.

Concurrent with the emergence of the Johns Landing project was the formation of the Corbett, Terwilliger, Lair Hill Planning Committee* and ultimately the adoption of the Corbett, Terwilliger, Lair Hill Policy Plan. The process of developing the policy plan began in 1972 in response to three factors:

1. The effects of urban renewal in the South Auditorium area and its potential impact on the future development of the Lair Hill and Corbett neighborhood.
2. The construction of the Johns Landing development and its effect on the surrounding Terwilliger residential neighborhood.
3. The possible improvements to Macadam Avenue and their effect on business in the Macadam Corridor.

The policy plan was approved by the Planning Commission in 1976 and was adopted in part by the Council in 1977. The second and third

*In 1984 the Corbett, Terwilliger, Lair Hill Planning Committee was renamed the Corbett, Terwilliger, Lair Hill Neighborhood Association.

issues listed above relate directly to problems of new development within the commercially and industrially zoned lands along Macadam.

Since the policy planning effort was completed, the 3.35 million dollar Macadam Improvement Project has been finished and a significant number of industrial firms have relocated out of the Corridor. The Macadam Improvement Project resulted in Macadam being widened, rebuilt and landscaped with a planted median strip to create a full boulevard treatment. The recommendation of the Macadam Avenue Improvement Project included, in addition to specific proposals for right-of-way improvements and landscaping, the following language:

"Implement a design zone with sign control in the Corridor to guide future development."

Macadam Avenue is designated as a boulevard in the City's Arterial Streets Classification Policy. This designation is intended to assist in beautification of the City and has been implemented in part through the Macadam Avenue Improvement Project. The Corbett, Terwilliger, Lair Hill Plan states that steps should be taken to "ensure quality development in a single entry corridor to the CBD," (page 112 of the plan). However, while consideration of such factors as urban design and sign control have been repeatedly called for, they were beyond the scope of earlier planning activities.

Macadam Avenue functions as a corridor for sub-regional trips from Sellwood, Dunthorpe, parts of Lake Oswego, West Linn and Oregon City. Over 23,000 vehicles a day travel Macadam; many

of them commuting to the center city. In addition to its boulevard designation, Macadam is also shown as a major city traffic street and a major city transit street in the Arterial Streets Classification Policy. The vehicles, autos, trucks and public transit that travel Macadam separate the residential neighborhood west of Macadam and the Willamette. The bridging of Macadam has been a significant concern of the Corbett, Terwilliger and Lair Hill neighborhood and the City for some time. One of the neighborhood's original reasons for supporting the Macadam Avenue improvements was to improve for pedestrians access across the boulevard to the Greenway Trail and Willamette Park. The sub-committee appointed by the Neighborhood Association to work with the staff on the Macadam Study set improved access across Macadam to the river as a major objective of the Study.

The neighborhood has also stressed a strong desire to avoid strip commercial development along Macadam. One of the goals for the Macadam Corridor included in the Neighborhood Policy Plan (Page 11 of 1977 document) although not adopted by the Council, is "Commercial drive-in facilities shall be discouraged in order to avoid ...commercial strip development." It was Council's recognition of this continuing concern that prompted the study which produced these guidelines. Strip commercial redevelopment could conflict with both long standing neighborhood concerns and the public's investment of the Macadam Avenue Improvement Project.

The 1977 Corbett, Terwilliger, Lair Hill Policy Plan concludes (Page 10) that "A shift in land use along the river can be expected. The Willamette Greenway Plan, which will be a component of the Comprehensive Plan, is currently studying this part of the river with the intent of proposing that the land along the river, south of the Marquam Bridge be eventually converted to residential, commercial and recreational use." This understanding is reflected in the intent statement accompanying Policy C previously quoted (page 3).

Urban waterfront redevelopment has been popular over the last ten to fifteen years nationwide. Such developments are limited by the Willamette Greenway Plan, for the most part, to lands upstream from the Broadway Bridge. The area with the greatest potential for private waterfront redevelopment along the Willamette in Portland is the Macadam Corridor. This potential helped create the environment that attracted the Johns Landing project. Today it continues to support that project and to attract new development proposals.

This potential and the long standing concern of the neighborhood and the City prompt public review of new development proposals within the Macadam Corridor. In requiring such a review it is appropriate and to the benefit of both the public and the development community for the City to publish these guidelines of design acceptability. This document is intended to convey to project developers the public's design concerns within the Macadam Corridor. It will also be used by the Design Commission in the review of project plans for design acceptability.

The Review Process

Authority and procedures for design review and approval are established by Chapter 33.62 of the Portland City Code. The goals and guidelines are intended to supplement and aid implementation of that Chapter and other chapters of the City Zoning Code. The adopted guidelines are used by the Design Review Commission to review projects requiring building permits within the Design Zone.

Major projects are reviewed by the Design Commission. Proposals will be reviewed as either major or minor projects. A minor project is one that the Planning Director and Design Commission Chair find will not significantly affect the character, use and future development of the Macadam Avenue Corridor. Minor projects are reviewed by the Planning Director or the Director's delegated staff. Where there is both a Design Zone and a Sign Zone the sign review will be administered by the Design Commission. In its decision, the Design Commission shall establish findings which address the project's compliance with the Macadam Corridor Design Guidelines.

Upon receipt of a complete application and drawings adequately describing the project, a hearing on the proposed project will be scheduled with the Design Commission. The Neighborhood Association and area business association(s) will be notified of the application by the Bureau of Planning and the date and time of the Commission's hearing. A recommendation from neighborhood and business groups fifteen days prior to the date of the hearing will be requested. These

recommendations will be a part of the staff report to the Design Commission. The date of the Design Commission hearing will be not more than 60 days following the date of receipt of the complete application. Unless the applicant or other person with standing objects to any aspect of a decision of the Design Commission, the decision is final. Those wishing to appeal a Design Commission decision have 14 days in which to file the appeal. Appeals are heard by the Portland City Council. The Commission and the Council may approve, deny or approve with conditions.

Project designers are strongly encouraged to request a preapplication conference with the Bureau of Planning prior to formal application for Design Review. Such meetings provide an opportunity for informal discussion of the specific circumstances of the project and how the guidelines might affect the development.

Application Requirements

Applications for Design Review may be obtained at the Portland Bureau of Planning and City Permit Center, both located at 1120 S.W. Fifth Avenue. An application for Design Review must be accompanied by ten sets of plans and renderings including the following:

- A written statement explaining how the proposed design responds to the Macadam Corridor Guidelines;
- A masterplan including proposed land use, building heights, densities, building placement, parking amount and placement, and

pedestrian, transit and vehicular features and access, including public rights-of-way, private streets and easements;

- A site plan showing the dimensions and arrangement of proposed and existing buildings and other structures and any changes in existing development or use of existing facilities;
- Drawings or other materials completely describing the architectural scale, style, siting, lighting, building material, color and exterior finishes to be used in the proposed project;
- A landscape plan indicating the location of proposed trails, easements, planting, screenings, plant materials, views and special natural features located on the site; and

In addition, prior to erection of any signs, the following information must be submitted for Design Review.

- The location, type, size, color, shape and height of all permanent signs, and of all incidental signs relating to the Greenway.

Goals for Macadam Corridor Design

The following goals are general statements of the aim of the Design Review process in the Macadam Corridor. Design guidelines are used by the Design Commission to review projects requiring building permits within the design zone. The goals provide a framework for the Design Review process.



Create and improve connections, both physical and visual, between the river, Greenway Trail, Willamette Park and the residential community west of Macadam.

Encourage opportunities for public use and enjoyment of the waterfront.

Promote a quality of development in this scenic entry corridor to the Downtown that complements Macadam's landscape treatment.

Require excellence in design for projects within the Corridor, particularly by assuring that new development contributes to the formation of a rich and diverse mixture of uses and styles in scale with each other.

Add to the scenic qualities of the river and the Greenway Trail.

Promote compatibility of new development with the river, surrounding uses and the neighborhood.



These goals express the desired ends of the Design Review process. They are drawn from the design concerns raised during the last

decade-and-a-half of planning activity on Macadam. They reflect ideas and statements included in the Corbett, Terwilliger and Lair Hill Policy Plan (1977), the Arterial Streets Classification Policy, the Macadam Avenue Improvement Project, the 1983 Report and Recommendations on Land Use and Urban Design in the Macadam Corridor, the Comprehensive Plan and the Willamette River Greenway Plan. They also reflect concerns raised by area business, neighborhood and environmental interest groups who participated in their development.

Guidelines

1.

Visual Connections

Issue:

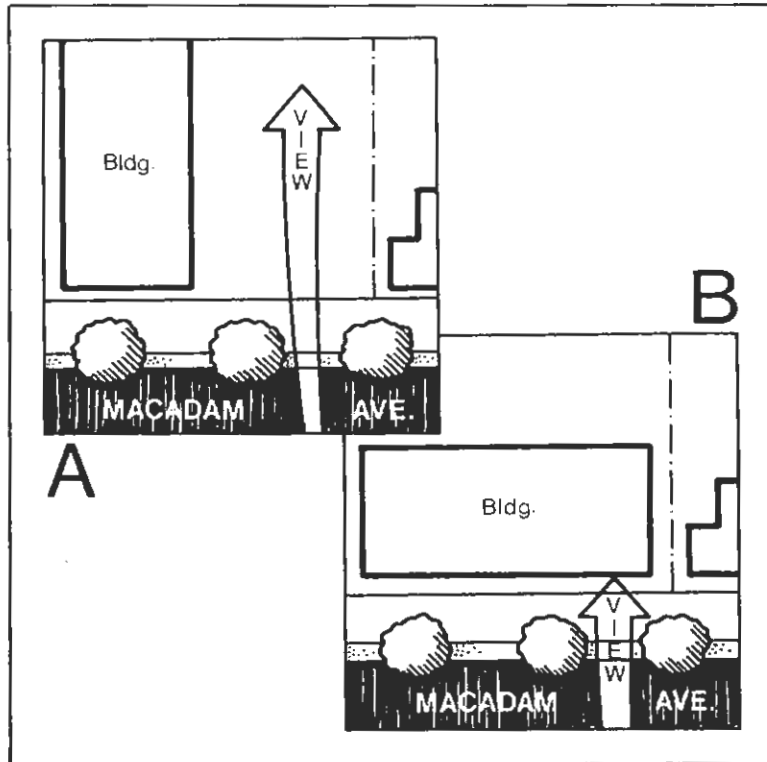
A major attraction of Portland and perhaps the single, most significant amenity within the Corbett, Terwilliger, Lair Hill neighborhood is the Willamette River. The development of Willamette Park and the Greenway Trail not only enhance the scenic qualities of the river and offer recreational opportunities, but they also add to the beauty of the City. The river itself, long invisible because of intervening development, has been visually united with the City by recent redevelopment activity. Significant opportunity exists for additional redevelopment activity along the Corridor. Failure to take advantage of these opportunities would detract from the potential attractiveness of the City and the realization of the Willamette River Greenway.

Guideline:

Create public views to the river, Greenway Trail and Willamette Park from Macadam Avenue and other public parks and rights-of-way west of Macadam as well as views from the river and the Greenway to the west.

In Doing This:

- Promote physical and visual contact between the river and the area west of Macadam Avenue.
- Orient buildings which front Macadam Avenue to preserve views of the river, Willamette Park and the Greenway.
- Integrate the east and west sides of Macadam Avenue by creating views of the river which align with streets on the east side of Macadam.
- Take particular advantage of opportunities to create and protect views which align with Southwest Texas, Florida, Pendleton, Idaho, Nebraska, Dakota and Hamilton Streets.
- Rooftops of buildings should be carefully designed to enhance views.
- Plant on site trees which will grow to a sufficient height to soften new development and screen parking areas while selecting species and planting locations which enhance view corridors to the river.



Example 1

Two possible building footprints. Proposal A fosters a view by locating the narrower building frontage on Macadam. Proposal B eliminates possible views from Macadam by using the building's long dimension on the Macadam frontage.



Example 2

East-west right-of way alignments such as Richardson Court can be preserved as view corridors by carefully locating new building and landscaping.



Example 3

Buildings which are designed with attractive roof tops can add to the quality of public and private views from hillside locations.



Example

2.

Physical Connections

Issue:

Macadam itself, with four lanes of traffic and over 23,000 vehicles traveling the avenue each day, separates the residential community to the west from the river, the Greenway and Willamette Park. This sense of separation can be either mitigated or worsened by the design and layout of new development.

Guideline:

Create a common sense of unity that ties both sides of Macadam together with each other, the river to the east and the residential area to the west. Create public walkways that physically connect the Macadam Avenue right-of-way with Willamette Park, the Greenway Trail and the Willamette River.

In Doing This:

- Orient structures and parking areas to facilitate access for pedestrians between adjacent uses.
- Extend street tree plantings west of Macadam.

- Reinforce connections for pedestrians between the Willamette River Greenway and Macadam Avenue.

- Provide safe, comfortable places where people can slow down, sit and relax. Locate these places adjacent to sidewalks, walkways and the Greenway Trail.
- Provide sidewalks and pathways through larger developments with landscaping which screens or separates these from parking and motor vehicle maneuvering areas.
- Provide walkways which link parking areas to district-wide access systems for pedestrians.

Example 1

A clearly identified pathway system is necessary if the Greenway is to be used by the public.





Example 2

Such connections can be constructed from landscape materials like vines and low plantings as well as trees. Views into interior spaces adjacent or near walkways connect these interior spaces and activities to the pedestrian.

Example 4

The provision of places to slow down, sit, relax along sidewalks, trails and walkways adds to the attractiveness of these circulation systems.



Example 3

Provision of trees on both sides of this sidewalk provides an attractive landscape canopy which extends west of Macadam and creates a visual tie to the Johns Landing "campus" environment.





Example 5

Ground level retail and service activities opening onto Macadam can reinforce connections across Macadam.



Example 6

Orienting plazas and open spaces to receive sunlight, particularly during the late morning and afternoon, will encourage their use.



Example 7

Provision of clear, attractive and conveniently located connections for pedestrians between projects and to transit service will help humanize the area and encourage both short walking trips and use of transit.



Example 8

3.

The Water's Edge

Issue:

The Willamette River Greenway is a dream and an emerging reality shared by the entire state. Implementation of the Greenway and the Greenway Trail is increasing both the attractiveness and the livability of Portland. Within the Macadam Corridor new development has the potential of greatly enhancing the scenic qualities of the river and the use of the Greenway Trail, but designs for developments which do not consider this potential are unlikely to contribute to the fulfillment of the Greenway dream.

Guideline:

Enhance the scenic qualities of the river and sites that abut the riverbank to contribute to an attractive and enjoyable Greenway Trail.

In Doing This:

- Identify natural areas of the Willamette riverbank and preserve the natural qualities of these areas.
- Screen parking, loading and vehicular movement areas from the Greenway with rich landscape plantings.

- Locate buildings to protect access to sunlight on the Greenway Trail.



Example 1

Stepping buildings down to the Greenway reduces both the mass of large projects as seen from the river and Greenway and shadows cast onto the Greenway Trail.



Example 2

Setting buildings back from the Greenway Trail contributes to the sense of its accessibility to the public and increases its attractiveness.



Example 3

Small buildings may be located close to the Greenway if a strong landscaped screen of plantings is provided as a buffer.



Example 4

A variety of building sizes and shapes along the river adds interest to the Greenway as well as expressing the urban nature of the Willamette in Portland.

4.

The Boulevard

Issue:

With completion of the Macadam Avenue Improvement Project the Avenue has the potential to become one of the City's most attractive boulevards. The heavy planting of street trees and provision of a landscaped medium beautify the street and enhance this entrance to the city and the downtown. New development along Macadam has the potential of contributing to or disrupting the avenue's attractiveness.

Guideline:

Coordinate with and enhance Macadam's boulevard treatment and contribute to the attractiveness of this entrance to the city.

In Doing This:

- Consider using awnings or other weather protection, street furniture, plazas, sculpture courts or other amenities for pedestrians to reinforce the boulevard design of Macadam.
- Abut pedestrian pathways with buildings or landscaping. Buffer with landscape screens, parking lots and structures which are not oriented to pedestrians.

- Use landscaping to reinforce the boulevard character of Macadam and to provide visual connections with private property adjacent to Macadam.
- Trees interspersed with low-growing vegetation or grass should visually predominate over impervious surfaces.
- Provide frequent views from Macadam into interior ground level spaces of projects located along the Avenue.



Example 1

Where right-of-way width limits curb planting areas and street trees, well planted setback areas are particularly important.



Example 2

The Macadam Avenue boulevard treatment is typified by a heavily planted median and street tree plantings at both east and west curb lines.



Example 3

Extending the pattern of street tree planting back from Macadam to both the east and west reinforces the boulevard character of Macadam and helps to lace the sides of the corridor together.



Example 4

Landscaping of parking areas can give the boulevard character of Macadam depth, expanding and enhancing the perceived size and attractiveness of the boulevard.

Example 6

Raised planters can be used to enhance the boulevard treatment and to improve the sense of protection afforded pedestrians from traffic.



Example 5

A strongly landscaped edge can improve the compatibility of large parking areas with Macadam's boulevard treatment.



5.

Sub-Area Context

Issue:

Macadam Corridor can presently be viewed as a mixture of several areas, each with a variety of strong or emerging characters. These sub-areas are industrial, commercial, residential and mixed. A variety of styles of architecture and types of buildings are represented. Over the coming years a significant construction activity is expected. This new development can enhance the existing character of established areas and make a contribution to the emerging character of developing areas. When new projects are designed with little consideration for how they may contribute to the overall attractiveness of their surroundings, a major opportunity is missed.

Guideline:

Enhance a site's character through designs that are compatible with features of their surroundings and contribute to the development of an attractive character in the vicinity of the project site. Pay particular attention to cases where the adjacent use is different from that which a project will house.

In Doing This:

- Locate buildings to avoid excessive shadow on public open spaces, especially Willamette Park and the Greenway Trail.
- Isolated or independent buildings and open spaces should provide design solutions of merit which consciously set a precedent for neighboring future developments.
- Buildings and open spaces should establish complementary relationships in terms of color, texture, scale of architectural elements, and proportions with neighboring developments.
- Provide sensitive transitions between new development and adjacent residential areas.



Example 1

The relationship of new commercial uses to adjacent older residential uses can be critical in protecting the attractiveness of the nearby residences and the residential neighborhood.



Example 2

Use of setbacks and landscaping help blend this new office building into the Johns Landing environment.



Example 3

Similarity of roof treatment, proportions, scale and compatibility of colors and materials helps overcome differences between adjacent uses.

6.

Signs

Issue:

Although accessory to the principal activity of any project, signs play a significant role in forming the character of a street. The signage employed along Macadam Avenue can either detract from or contribute to the boulevard treatment given the right-of-way. Careful consideration of how signage can support the beautification of this entrance to the city is appropriate.

Guideline:

Keep signage consistent with and supportive of Macadam Avenue's role as a scenic boulevard while using signs to connect the activities housed by a project to the boulevard.

In Doing This:

- The cumulative effect of signage should not create confusion for the motorist, visual clutter, or adverse visual impacts on the neighborhood.
- Signs along Macadam should not be directed to motorists on Interstate 5.

- The design, scale, color and illumination of signs should be consistent with the features of adjacent buildings and activities.



Example 1

Restrained use of signage on buildings which pre-date the current "campus" character of development along Macadam helps maintain compatibility with both the boulevard and recent projects.



Example 2

Grouping identification signs together for projects at access points leading to several buildings can reduce sign clutter and help maintain the boulevard character of Macadam.



Example 3

Restrained freestanding monument signs are characteristic of much new development along Macadam and reinforce the "campus" character of Johns Landing.

7.

Johns Landing Masterplan

Issue:

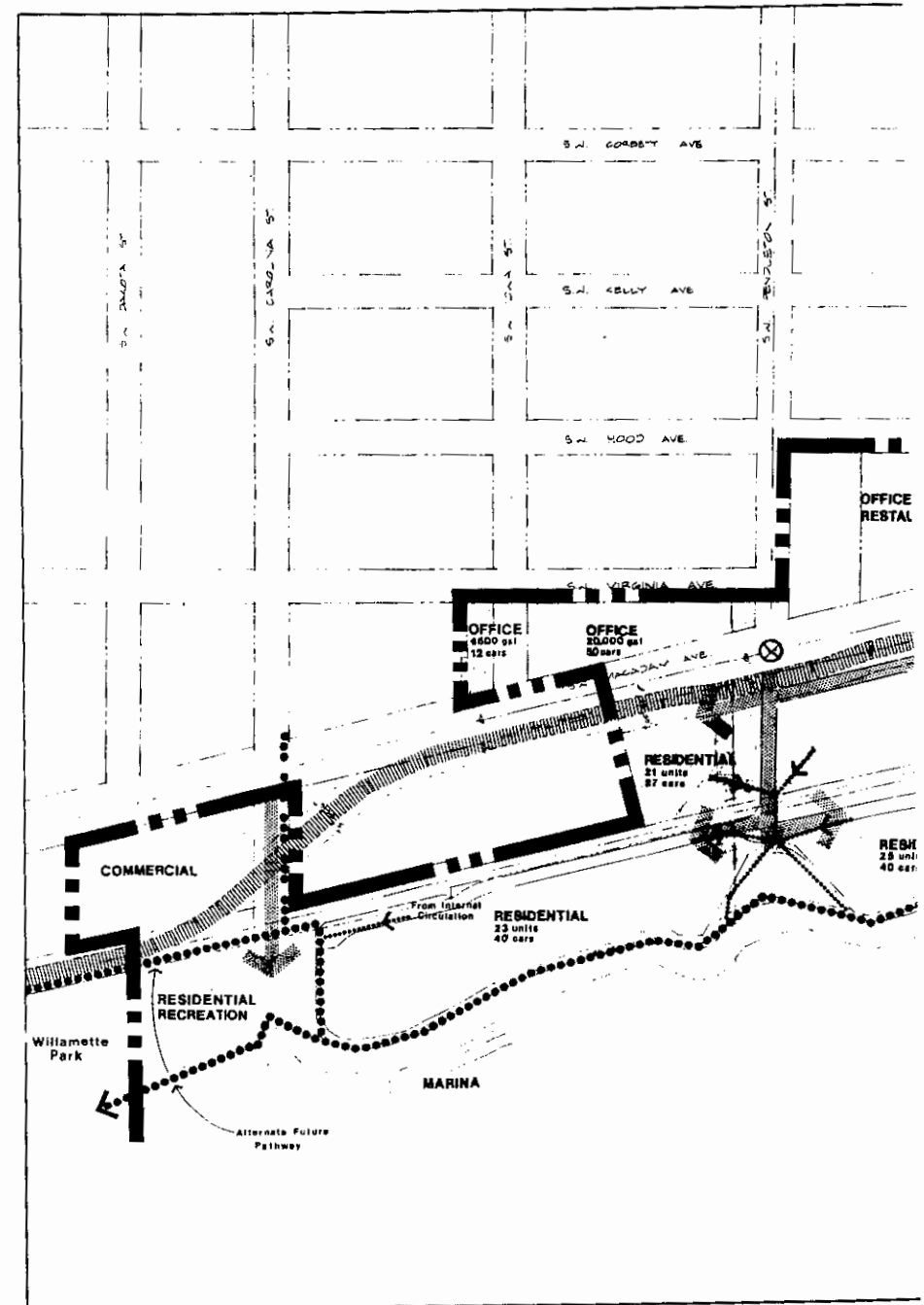
The planning Process which led to approval of the Johns Landing Project was extensive. The project as proposed was for phased development stretching over a number of years. Concerns raised during this process about the problems associated with phased projects were addressed by requiring that Johns Landing projects be in compliance with an approved masterplan. The masterplan is a specific document embracing land use and other issues not ordinarily addressed by design guidelines. These concerns are still relevant to new projects within the Johns Landing development.

Guideline:

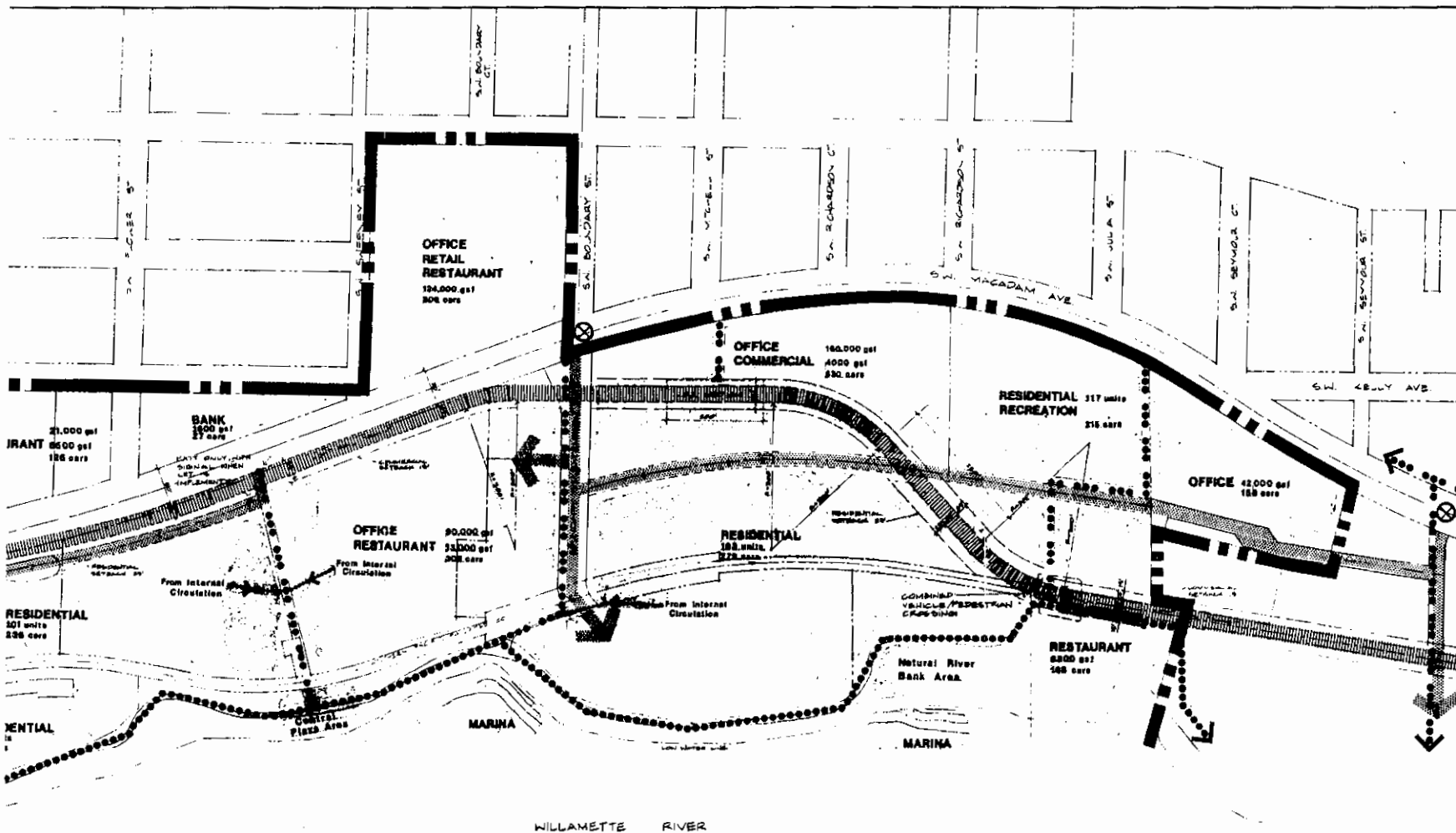
Comply with the provisions of the Johns Landing masterplan.*

Example 1

Johns Landing Masterplan

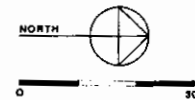


*The masterplan may be amended through review by the Planning Commission.



JOHNS ISLAND
SCHEMATIC
MASTER PLAN
NOV. 16, 1978

- KEY**
- ● ● ● Public Pedestrian Circulation
 - — — — Public Bicycle / Pedestrian Circulation
 - Private Internal Pedestrian Circulation
 - Major Internal Vehicular Circulation
 - Light Rail Transit
 - - - - Project Boundary
 - ⊗ Traffic Light



*Approved Master Plan for Johns Island
Approved by the Planning Commission
December 5, 1978
J. J. Jones*

JOHNS ISLAND SCHEMATIC MASTER PLAN

REVISIONS	DATE	BY	CHK
1	11-16-78	J. J. Jones	CHK

CHUCK LEE MAP
ARCHITECTS
1001 N. JEFFERSON AVE.
PORTLAND, OR 97201
PHONE (503) 241-1301

CLP

8.

Future Light Rail Transit

Issue:

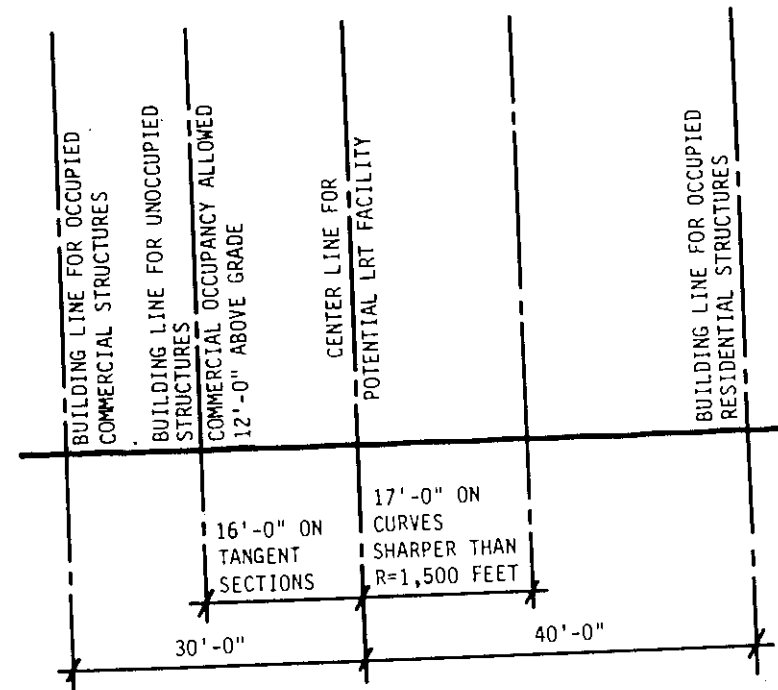
Preservation of the potential for light rail transit within the Macadam Corridor.

Guideline:

Preserve the potential for a two-direction, light rail facility within the Macadam Corridor Design Zone as illustrated. Until the LRT facility is constructed, the required setback area may be used for parking and landscaping requirements.

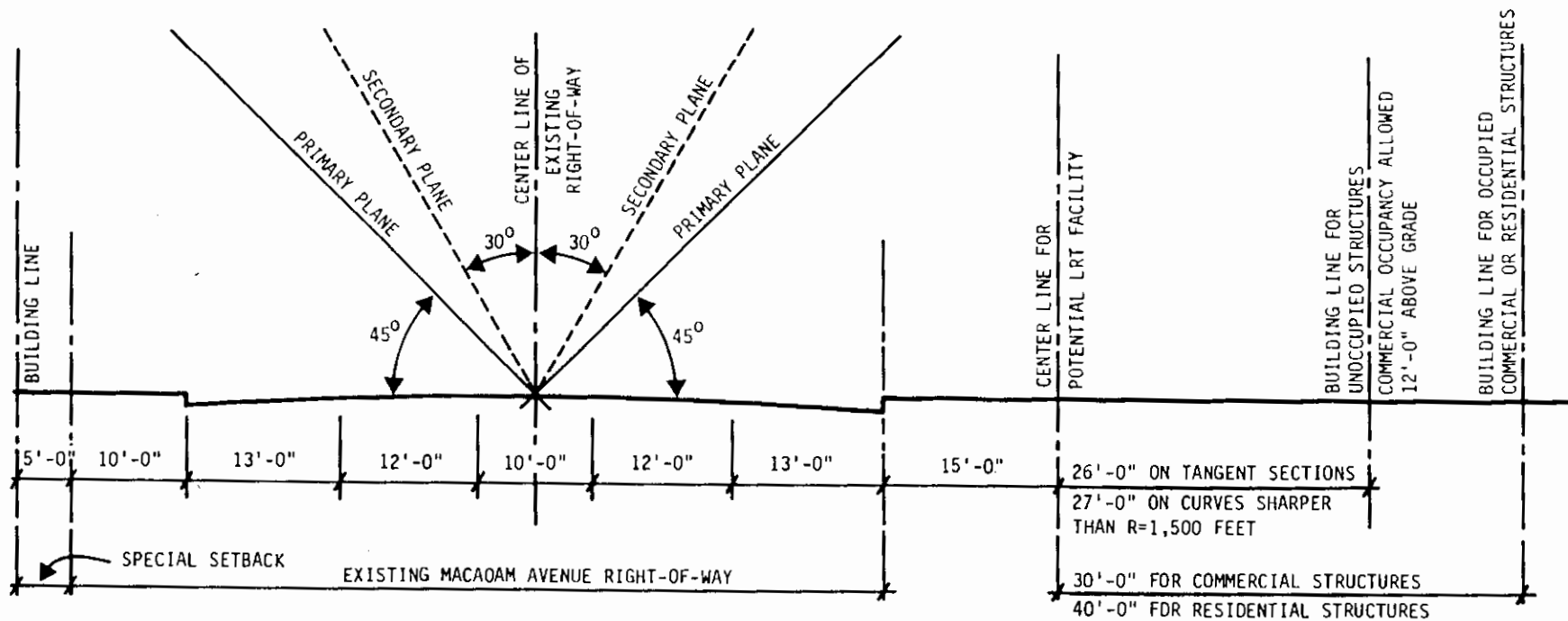
In Doing This:

- Use the following illustrations as exemplary guidelines.



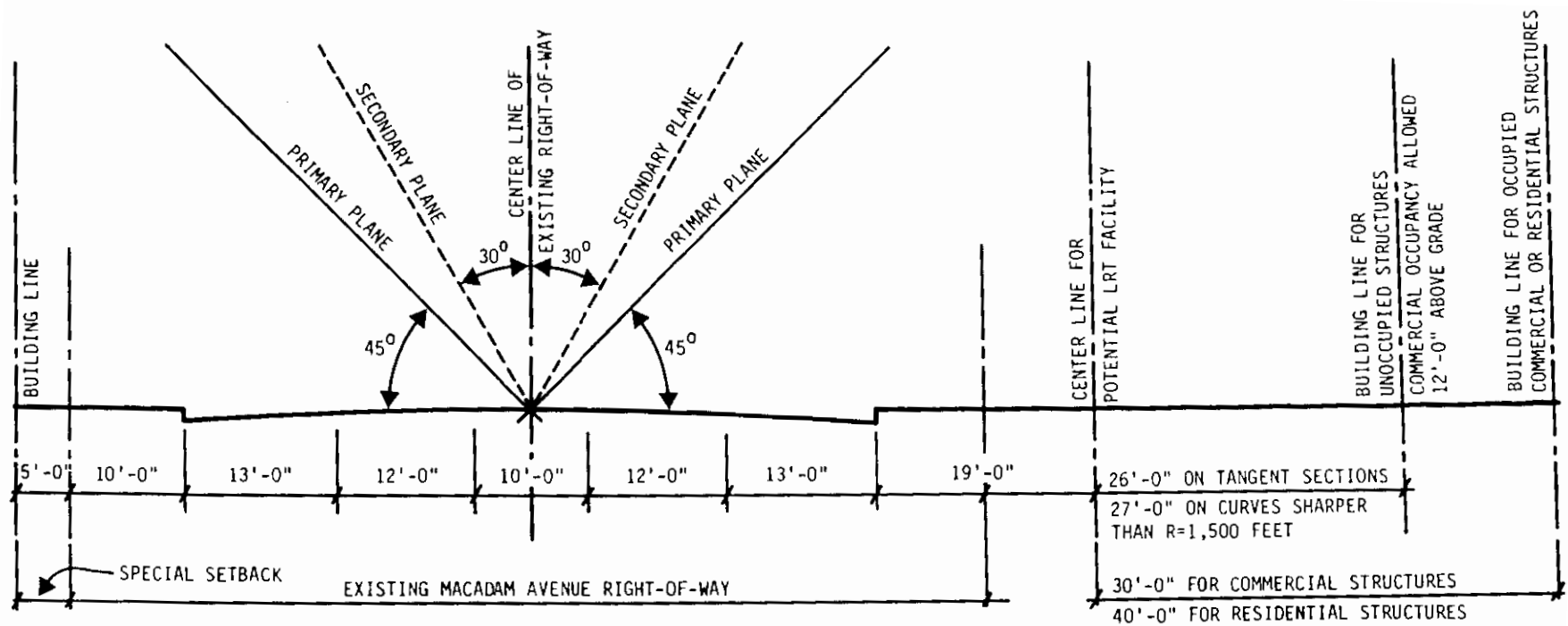
Example 1

Minimum setbacks required from center line of potential light rail transit facility



Example 2

Minimum setbacks required from center line of potential light rail transit facility adjacent to Macadam Avenue at right turn lane



Example 3

Minimum setbacks required from center line of potential light rail transit facility adjacent to Macadam Avenue