



Washington State  
Department of Transportation

## **SR 520 Bridge Replacement and HOV Program**



I-5 to Medina: Bridge Replacement and HOV Project

# **SR 520 Montlake to Lake Washington – I/C and Bridge Replacement**

## **Request for Proposal**

February 28, 2018

### **Appendix E11 Tree and Vegetation Management and Protection Plan (TVMPP)**



# Tree and Vegetation Management and Protection Plan

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SR 520 Montlake to Lake Washington  
Interchange and Bridge Replacement Project  
(SR 520 Montlake Phase)

*October 4, 2016 Update*

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## Acronyms and Abbreviations

ABGC	Arboretum and Botanical Garden Committee
CCMP	Community Construction Management Plan
DBH	Diameter (of tree trunk) at breast height
DCI	City of Seattle Department of Construction and Inspection
DPD	City of Seattle Department of Planning and Community Development
ECA	Environmental Critical Areas
GPS	Global Positioning System
HVF	High Visibility Fencing
Montlake Phase	Montlake to Lake Washington – Interchange and Bridge Replacement Project
MOU	Memorandum of Understanding
MUP	Master Use Permit
SDOT	Seattle Department of Transportation
SMC	Seattle Municipal Code
TVMPP	Tree and Vegetation Management and Protection Plan
UW	University of Washington
WABN	West Approach Bridge North
WABS	West Approach Bridge South
WSDOT	Washington State Department of Transportation

# I. Executive Summary

WSDOT has developed this Tree and Vegetation Management and Protection Plan (TVMPP) as part of the SR 520 Montlake to Lake Washington – Interchange and Bridge Replacement Project (SR Montlake Phase) Community Construction Management Plan (CCMP) and to comply with Condition 10 of the City of Seattle (Seattle) Department of Construction and Inspections (DCI) Shoreline Decision (decision) for Project 3012587 (and Master Use Permit [MUP] revision request #3025160)– SR 520 West Approach. The Montlake Phase is one construction phase of the SR 520, I-5 to Medina: Bridge Replacement and HOV Project (I-5 to Medina Project), and the second phase of the West Approach Project authorized under MUP 3012587.

This TVMPP update focuses on the Montlake Phase, which is the first phase of the I-5 to Lake Washington enhancements of the SR 520 corridor. I-5 to Lake Washington received full funding through the Connection Washington funding package in 2015. The remaining work will be delivered in three construction phases.

The purpose of the TVMPP is to describe the standards and project-specific best management practices that will be used as guidance to preserve and protect trees and vegetation within the limits of project construction. The TVMPP presents a variety of methods for minimizing effects on trees and vegetation during construction and establishes an implementation and tracking plan to ensure that the best practices are followed. To accomplish this, the plan identifies areas of mature tree removal, protection, and restoration, including areas temporarily dedicated to construction.

Input from the City of Seattle and key stakeholders was considered in developing the TVMPP. WSDOT will submit the TVMPP to these stakeholders prior to construction. WSDOT will submit the TVMPP to Seattle DCI to support a request to modify the MUP that was issued for the West Approach Project in March 2014.

During construction, WSDOT will adhere to the TVMPP and notifies neighborhoods prior to construction activities per the Montlake Phase Community Construction Management Plan (CCMP).

## **II. Tree and Vegetation Management and Protection Plan Overview**

### **Purpose**

This TVMPP has been prepared to comply with Condition 10 of the City of Seattle (City) Department of Construction and Inspections (DCI) Shoreline Decision (decision) for Project 3012587 – SR 520 West Approach. The purpose of the TVMPP is to describe the standard and project-specific best management practices that will be used as guidance to preserve and protect trees and vegetation to the extent feasible within the limits of construction of the Montlake Phase (further described in Section III). This plan presents a variety of tools for protecting trees and vegetation during construction. To accomplish this, the TVMPP identifies subareas within the project where mature trees will either be removed or require protection and restoration.

The TVMPP reflects input WSDOT received through previous discussions with the City, University of Washington (UW), and Arboretum and Botanical Garden Committee (ABGC), as described further in Section V.

### **Timeline and Process**

This is the first update of the TVMPP, the original version having been developed for the West Approach Bridge North (WABN) Phase of construction in October 2013. The project team developed a draft outline as the first step toward developing the TVMPP. The outline was reviewed with the City before WSDOT began to draft the original TVMPP. The TVMPP has been developed through coordination of the SR 520 permitting and design teams and is one component of the September 2013 Master Use Permit submittal to DCI.

This TVMPP update focuses on the Montlake Phase; the first of three funded phases to complete the I-5 to Lake Washington section of the SR 520 corridor. WSDOT is submitting this version of the TVMPP to Seattle DCI as part of the Master Use Permit revision request for the Montlake Phase of construction scheduled to begin in 2018.

### **Implementation**

The TVMPP documents WSDOT's plans to protect and restore trees and vegetation during construction.

### **III. SR 520 Montlake Phase Overview**

#### **Background**

The SR 520 Montlake Phase is one construction phase of the SR 520 Bridge Replacement and HOV Program. The SR 520 Program's 12.8-mile-long corridor area begins at I-5 in Seattle and extends to SR 202 in Redmond. The SR 520 Program also includes the Pontoon Construction Project, the Medina to SR 202: Eastside Transit and HOV Project, the Floating Bridge and Landings Project and the West Approach Bridge North Project. In 2015, WSDOT received full funding through the Connecting Washington package for the I-5 to Lake Washington Project. This project will complete WSDOT's enhancement of the SR 520 corridor. The remaining work will be delivered in three project phases. The Montlake Phase is the first of these three phases.

#### **SR 520 Montlake Phase Description**

The SR 520 Montlake Phase includes the construction of the West Approach Bridge South (WABS), Montlake lid and interchange, and Montlake bicycle / pedestrian land bridge. Construction of this first phase of the I-5 to Lake Washington Project is expected to begin in 2018. The WABS will connect eastbound traffic from Montlake to the new floating bridge. It will also feature a dedicated transit/HOV lane that connects these facilities to the floating bridge and, in turn, to the eastside SR 520.

Implementation of this phase also includes removal of the existing eastbound Lake Washington Boulevard on-ramp, and construction of an improved Montlake interchange.

The new Montlake interchange, including a lid, will include direct-access for transit and HOV in addition to new bicycle and pedestrian connections to existing regional and local trails and routes. The Montlake lid will be a hub for local and regional transportation connectivity, and will include multifunctional open spaces, urban trails, undercrossings, a regional shared-use path and transit connections. A new land bridge, to the east of the lid, will be a bicycle/pedestrian path over SR 520 that provides a north-south connection across the highway between the Arboretum and points north of the SR 520 corridor. The Montlake Phase also features the construction of stormwater treatment facilities that capture and naturally filter and treat highway runoff.

The project design team has undertaken a process by which all of the various commitments made by the SR 520 Program through the environmental process will be implemented throughout various phases of design and construction. A multi-disciplinary team has inventoried all commitments and identified the process, tool, or product that is appropriate for the implementation of the commitment.

#### **Construction Schedule**

Montlake Phase construction is scheduled to begin in 2018.

Compliance with environmental permits will restrict the construction schedule for when some activities, such as in-water pile driving, can occur. WSDOT anticipates completing construction of the new WABS structure, Montlake lid interchange and land bridge within four to five years of beginning construction.

## IV. Environmental Compliance

WSDOT has applied for, and received, various environmental permits and authorizations from federal, state, and local regulatory authorities for the I-5 to Medina Project. Vegetation management is related to compliance with permit regulations as they pertain to natural resource and water quality protection. At the federal and state levels, the I-5 to Medina Project must comply with the vegetation management provisions of the following authorizations:

- National Environmental Policy Act compliance with the Federal Highway Administration and cooperating agencies
- National Historic Preservation Act Section 106 Consultation with the Department of Archaeology and Historic Preservation
- Endangered Species Act Section 7 Consultation with the US Fish and Wildlife Service and NOAA's National Marine Fisheries Service
- Department of the Army Permit issued by the Corps of Engineers
- Water Quality Certification Order issued by the Washington State Department of Ecology
- Hydraulic Project Approval issued by the Washington Department of Fish and Wildlife

As part of the shoreline permit approval process, the project must also comply with the local City of Seattle tree protection policies and regulations as described below:

### Shoreline Decision Requirements

The West Approach project was conditionally granted approval through the shoreline decision. The TVMPP has been developed to satisfy Condition 10 of SDCI's decision 3012587, which reads as follows:

*As part of the Community Construction Management Plan process, and as agreed to in the signed MOU between the State and the City of Seattle, WSDOT will develop a Tree and Vegetation Management and Protection Plan (TVMPP). The final TVMPP will be developed and implemented prior to construction. The plan will be developed in collaboration with the City, neighborhoods, and organized groups, such as the ABGC, and will address areas of the corridor where specific trees and or vegetation are to be removed or disturbed as part of the construction or resulting project improvements.*

*The plan will identify areas of mature tree removal, protection, potential relocation, and restoration of project areas including areas temporarily dedicated to construction, including staging and lay down areas. The goal of the plan is to minimize effects on trees where feasible. WSDOT will ensure that contractors adhere to the plan, notify neighborhoods prior to impacts, and that tree and vegetation removal would only occur at the approximate time required for construction. A DPD planner or designated representative shall be a participant in this process.*

Development of the TVMPP is required prior to WSDOT obtaining the modification to the Master Use Permit necessary for the construction of the Montlake Phase.

## Other City Regulations

As part of the shoreline permit approval process, the project must also comply with city tree protection regulations contained in Seattle Municipal Code (SMC) Title 25 for all trees within Seattle's shoreline jurisdiction. These regulations include the Environmental Critical Areas (ECA) Ordinance and the Tree Protection Ordinance. The project will also comply with the Seattle Department of Transportation's (SDOT) Street Use Ordinance (SMC Title 15) for street trees within City of Seattle right-of-way. Exhibit A-1 graphically portrays where these three ordinances have jurisdiction and will be applied within the boundaries of the project limits.

### **SMC 25.09 - Environmental Critical Areas Ordinance**

Project construction activities occur in environmentally critical areas, which triggers SMC 25.09. This ordinance applies to development (defined in Section 25.09.520) that is carried out by any person on publicly or privately owned parcels containing an environmentally critical area or buffers. For trees located within ECAs or ECA buffers the SR 520 project will:

- Characterize and mitigate impacts to trees, per ECA provisions. The project will provide mitigation equal in function to those functions that are lost.
- Plant new trees at a standard density to the extent possible in order to provide for ecological function. Specific mitigation ratios, acreage amounts, plant types and plant spacing information are included in the SR 520 project ECA report.
- Restore onsite temporary impacts as a part of the Montlake Phase construction contract package. Offsite compensatory mitigation will be executed under separate construction contracts.

### **SMC 25.11 - Tree Protection Ordinance**

SR520 Montlake Phase construction activities do not trigger Tree Protection Ordinance SMC 25.11 because these activities do not occur on undeveloped lots, which is the jurisdiction of SMC 25.11. The code does encourage the preservation of trees in general and exceptional trees in particular.

### **SMC Title 15 - Street Use Ordinance**

SR520 Montlake Phase construction activities will trigger SMC Title 15 and require a Street Use permit from the Seattle Department of Transportation. The ordinance authorizes and defines Seattle's policy of retaining and preserving street trees in public places whenever possible. Accordingly, any work affecting street trees that are under the jurisdiction of the Seattle Department of Transportation (authorized by Section 15.43.010) requires a street use permit. Street tree removal is only permitted by the Seattle Department of Transportation Director under certain well-defined conditions, one of which is when a street tree cannot be successfully retained because it conflicts with public construction activities. Removal of any trees within SDOT's right-of-way will be subject to the requirements and conditions of a City of Seattle Street Use permit.

The three areas within the SDOT right-of-way that are affected by the SR520 Montlake Phase are East Park Drive East in the Shelby-Hamlin neighborhood, Montlake Boulevard East and East Lake Washington Boulevard (Exhibit A-2 and A-3). No trees are planned to be removed along East Park Drive East.

Approximately four or five trees on the north side of East Lake Washington Boulevard will be affected by utilities work and may be affected. To the extent possible, the removed street trees will be replaced with the same species as that being removed, species identified during the 2016 SR 520 West Approach Bridge/Montlake lid Technical Working Group process, or a species from the approved tree list, or with a tree approved by the Director. The replanting will be consistent with the standards in the Street Tree Manual, as site conditions allow.

## V. TVMPP Development and Coordination Process

This section describes the process through which the TVMPP was developed, including WSDOT's work to identify and monitor trees in the project area, coordination with stakeholders related to protecting trees and vegetation, and commitments through the Montlake Phase design process.

### 2009 Tree Inventory

Trees were identified by a tree survey performed in 2009 as part of the environmental impacts assessment process. Using hand-held GPS, project biologists located trees with trunk diameter at breast height (DBH) greater than or equal to six inches. Survey data include location, DBH, and species and genus (if possible) for each tree. Specimen trees within the inventory were identified by information from the Washington Park Arboretum.

### Stakeholder Commitments

WSDOT has coordinated with several external stakeholders and stakeholder groups throughout the environmental process for the I-5 to Medina Project (Project). Vegetation management is also addressed through WSDOT's commitments with external stakeholders during that process and documented through various plans and agreements.

### Cultural and Historic Mitigation

Section 106 of the National Historic Preservation Act is the primary driver behind cultural and historic mitigation commitments related to vegetation management. A Programmatic Agreement, developed through consultation with affected stakeholders, includes the following key components related to tree and vegetation management:

- Consult with the Arboretum Botanical Garden Committee (ABGC) and the affected tribes on a planting plan.
- Re-vegetate WSDOT right-of-way on Foster Island with native vegetation of ethnobotanical significance to affected tribes. The WSDOT contracted plant establishment period would extend for a period of years to be determined through consultation.
- Select planting materials [for Foster Island] from an ethnobotanical list provided by the Muckleshoot Indian Tribe;
- Use planting materials on Foster Island that are consistent with historic and documentary research performed as part of the ethnographic study, which identified types of vegetation present on Foster Island historically.
- To the maximum extent practicable, avoid placement of temporary work bridges and other short-term construction features where they would require permanent removal of or would damage mature trees.
- Conduct vegetation management, including provisions for:

- Protecting trees and other screening vegetation adjacent to construction work areas from construction impacts
- Replacing removed trees following City of Seattle street tree standards (see below for the standards).
- Monitoring of adherence to these commitments
- Development of the CCMP. This document, also under development for the Montlake Phase, describes anticipated construction effects, applicable commitments, and possible best practices and tools to minimize the effects of construction on local communities (including the development of this TVMPP).

Per the commitments outlined in the Programmatic Agreement, and to fulfill Section 4(f) and 6(f) obligations described below, WSDOT coordinated with the ABGC and consulting tribes on restoration of native vegetation in the Foster Island portion of the project area.

### **Parks Mitigation**

Section 4(f) of the Department of Transportation Act and Section 6(f) of the Land and Water Conservation Fund Act require mitigation for affected park resources. WSDOT coordinated with various stakeholders, including the ABGC, Seattle Parks and Recreation, SDOT, UW, and the Arboretum Foundation, to identify mitigation for effects to park resources.

This coordination process resulted in a cooperative agreement between WSDOT, the ABGC, Seattle Parks and Recreation, SDOT, UW, and the Arboretum Foundation (GCB 1182), executed in January 2013, describing mitigation actions specific to the Washington Park Arboretum, including coordination with tribes and the ABGC related to Foster Island. Further coordination related to improvements to the Foster Island undercrossing and surrounding area has also included discussion of tree and vegetation protection. Feedback from the tribes and ABGC representatives has included:

- Replant with native plants of tribal significance, to be identified in coordination with the tribes.
- Integrate plantings within WSDOT right-of-way with adjacent shoreline mitigation plantings. Minimize tree and vegetation removal on Foster Island as much as possible; use low-impact equipment for removing trees and vegetation.
- Minimize impacts to the bald cypress strand on Foster Island, as these trees are an important part of the Arboretum.

The feedback received from the tribes and ABGC representatives participating in this coordination process were reflected in the design concepts developed for the Foster Island undercrossing and surrounding areas.

### **Other stakeholder feedback**

The project team met several times during 2013 with the urban design subgroup of the Seattle Technical Working Group to discuss design goals and options for Canal Reserve and the MOHAI/East Montlake Park area. As a result of these discussions:

- Large trees would be planted just inside East Montlake Park along East Park Drive East to contribute to Seattle urban forest goals and the character of the Shelby-Hamlin neighborhood.
- The upper MOHAI parking lot would be converted to a grassy (lawn) open area surrounded by shrubs and small trees. This landscaping would act as an attractive street end consistent with the character of the neighborhood and screen the Hamlin residences.
- Portions of East Montlake Park affected by construction will be returned to its original condition (open and grassed) when construction was finished.
- The safety fencing around a pre-settling cell, if included in the final design, would either be of an attractive, park-appropriate design or screened by vegetation.

## **SR520 Montlake Phase**

This version of the TVMPP focuses on the West Approach Bridge South and Montlake Interchange (Montlake Phase), which is fully funded for construction. This TVMPP will be updated for the subsequent phases as they approach construction. This updated TVMPP is intended to continue to satisfy the commitment originating with the CCMP process and to satisfy the City's shoreline decision condition 10. As stated in the overview, this TVMPP documents the mechanisms that WSDOT will use in implementing vegetation management during construction of the Montlake Phase. These mechanisms are further discussed in the subsequent implementation section.

Community coordination and public outreach specific to the Montlake Phase builds off of efforts previously undertaken prior to starting WABN project construction. Coordination and outreach specific to the scope of the Montlake Phase was initiated in March 2016 with interested stakeholders including City of Seattle staff, Seattle Design Commission, and community members via public meetings and briefings, online material review opportunities, phone calls and email responses, frontline neighbor outreach, and a variety of other public involvement tools. Coordination with stakeholders and corresponding refinements related to these plans are scheduled to be ongoing up to the RFP publication date in spring 2017. Coordination on both CCMP and TVMPP development will continue with the City of Seattle throughout the MUP process and as future community coordination occurs related to the CCMP.

## **VI. SR 520 Montlake Phase Tree and Vegetation Protection Implementation**

This section discusses the means and methods available for ensuring that trees and vegetation will be protected during the Montlake Phase construction.

### **Montlake Phase– Technical Requirements by Vegetation Management Area**

These technical requirements were written for the conditions and activities specific to the areas affected by the Montlake Phase construction. The vegetation management areas are geographically distinct landscapes with unique uses and landscape character (Exhibit A-2). A management area may have more than one vegetation protection zone. Working with individual vegetation management areas enables WSDOT to take a context-sensitive approach to tree and vegetation protection while keeping track of its special details.

#### **Old Canal Reserve**

Old Canal Reserve is about a one acre piece of land that contains mature and specimen trees of species such sequoia, cedar, pine and spruce (Exhibit A-3), some of which were planted by the Arboretum (BOLA 2003). The trees include ornamentals and fruit trees, some of which have been removed as part of the WABN project. Groves of very mature sequoias and pines line the alley and screen the backs of the houses north of the alley.

For the Montlake Phase an off-ramp for westbound traffic to Montlake Boulevard, a regional shared use path and a sidewalk connection to Montlake Boulevard will be constructed in the south and central areas of Canal Reserve. As a result of construction activities, the critical root zones of existing trees remaining in the Old Canal Reserve will be impacted, likely requiring remaining trees to be removed.

#### **Landscaping goals and requirements**

Revegetation will entail planting of new trees, shrubs, groundcover and seeding the areas along the new sidewalk, regional shared-use path and the newly exposed slopes along the off-ramp to match the existing condition.

#### **Former MOHAI site – McCurdy Park**

McCurdy Park and the former site of the Museum of History and Industry (MOHAI) are on the eastern portion of what was once the greater canal reserve area. The property (about one and one quarter acre) is currently the primary staging area for the construction of the WABN project (Exhibit A-2). A Japanese Laceleaf Maple was listed as a heritage tree (now called “exceptional” tree), and it was previously relocated. The property is bounded on the east by the shoreline of Union Bay, an environmentally sensitive area.

For the Montlake Phase, a permanent constructed stormwater treatment facility will be built into the slope just north of the former MOHAI building and parking lot. An off-ramp and regional shared-use

path will be constructed in the south portion of the former MOHAI building and parking lot. There will continue to be one protection zone, which is the shoreline and Arboretum Waterfront Trail trailhead.

During the construction of the WABN project all of the trees in this management area were removed for the new roadway, off ramp, and regional shared-use path for cyclists and pedestrians. Remaining trees within this management area near the shoreline are not anticipated to be affected by subsequent phases of construction.

### **Landscaping goals and requirements**

The landscape goals for the Montlake Phase are to create a low maintenance, self-sustaining landscape that is compatible with the recreational uses and the residential setting around the facility. The Montlake Phase facility will be planted with robust shrubs, grass, and low-growing ground covers. Trees will be planted for aesthetic purposes and to balance the scale and character of new project features with the park and shoreline.

### **East Montlake Park**

East Montlake Park is a grassy, open park bordered by East Park Drive East to the west, the former MOHAI parking lot to the south, and dense stands of alders, cottonwoods, and birches along the shorelines to the east and north. The Shelby-Hamlin neighborhood is to the west, with sweetgum and linden street trees (Exhibit A-3).

On-street parking and a permanent 14-foot wide path/driveway will be added as part of the WABN project in addition to a 6-foot wide sidewalk along the East Park Drive parking. Several street trees will be planted as part of the WABN project along the east side of the new sidewalk.

There are three vegetation protection areas. The first is along the wetland buffer boundary on the north, the second is the shoreline buffer boundary on the east and the third is the area immediately around the street trees associated with the new on-street parking. During the Montlake Phase construction the south portion of East Montlake Park will be used for construction staging and constructing the stormwater facility and a new permanent path linking East Park Drive East to the land bridge and regional shared use paths. No trees are planned to be removed, but trees along the east shoreline near the Arboretum Waterfront Trail trailhead may be removed or pruned during construction of the permanent stormwater facility.

This area should not be affected by future phases because the decision was made to limit construction effects to once-in/once out in order to minimize impacts on the neighborhood.

### **Landscaping goals and requirements**

The landscaping goals for the Montlake Phase are to return the area to its original character as an open, grassy park, with the addition of a few street trees for the neighborhood and infill planting along the shoreline to enhance the buffer.

## **Lake Washington Boulevard and WSDOT Peninsula**

Lake Washington Boulevard, in the project area, is a tree-lined roadway of historic character that connects the University of Washington and the Arboretum (Exhibit A-4). The boulevard has its own vegetation management plan, which this TVMPP will refer to and uphold.

Construction of utilities for the WABN project removed several trees along the north side of East Lake Washington Boulevard near 24th Avenue East. The Montlake Phase will have little additional effect on the boulevard other than the removal of a few trees near its terminus at Montlake Boulevard East for a temporary Montlake Boulevard East detour. There are two protection areas: one enclosing the wetland and buffer at the north end of the peninsula and the second is a small grove of trees at the south end of the peninsula.

During construction of the Montlake Phase, the WSDOT Peninsula will likely be used for construction staging. Trees directly adjacent to the boulevard will be left in place to screen views of construction activities from houses facing east.

This vegetation management area is likely to be used for staging for future phases of the Program.

### **Landscaping goals and requirements**

The landscaping goal for the Montlake Phase construction is to return the peninsula to a grassy, open recreation area, as it currently is. The trees removed for the Montlake Phase will not be replaced during the Montlake Phase because the WSDOT peninsula will likely be used for construction staging in future phases. The long-term landscape plan is to implement a plan developed by the ABGC and Seattle Parks and Recreation that will create a park-like landscape consistent with the Arboretum's use and character. This landscaping will be installed by Seattle Department of Parks and Recreation after SR 520 projects have been completed. The wetland and buffer at the north end of the peninsula will receive enhancement planting to bolster the function and quality of the area.

Restoration of East Lake Washington Boulevard landscaping near the Montlake interchange will be completed as part of the Montlake Phase construction. The landscaping will include planting of trees along the north side of the boulevard immediately south of SR 520 and the installation of a center median with a row of trees between 24th Avenue East and Montlake Boulevard.

## **Montlake Boulevard East**

Montlake Boulevard East, in the project area, is a tree-lined boulevard of historic character that connects the University of Washington and the Montlake neighborhood south of SR 520 (Exhibit A-4). Construction of the Montlake Phase will remove several trees in the center median and eastern planter strip between SR 520 and East Hamlin Street. In addition, a few trees south of SR 520 along the eastern side of the boulevard may be removed for sidewalk improvements. Provision for one protection area is provided for existing street trees along the western side of Montlake Boulevard north of SR 520.

### **Landscaping goals and requirements**

Restoration of Montlake Boulevard landscaping near the interchange will be completed as part of the Montlake Phase construction. The landscaping will include replanting of trees in medians, planter strips

and on either side of the boulevard as new landscaped lid crosses over SR 520. Trees south of SR 520 may be replanted within tree pits as space allows.

### **Foster Island**

The existing SR 520 roadway crosses Foster Island, a wooded park with walking paths that lead to shoreline swimming, picnic areas and hand-carried boat launches, where the north and south islands meet. (Exhibit A-5). The Montlake Phase will affect only the south island. Within the Montlake Phase construction limits are mature ash, black cottonwood, and red alder trees. To the east and west are shrub-scrub and forested wetlands, and beyond that are emergent wetlands. The wetlands on the east (LWN-1) have a collection of ten bald cypress trees that are special for the Arboretum. There are two bald cypresses in the west wetland (LWN-3).

There will be no permanent Montlake Phase structures left on Foster Island other than the piers and columns required to hold the WABS bridge. There is one vegetation protection zone within the Foster Island management area established during WABN construction that will remain in place during the Montlake Phase for protection of bald cypress trees in open water east of the north island.

The limits of construction will also be marked with high visibility fencing to protect the north island woodland landscape that abuts the project boundary.

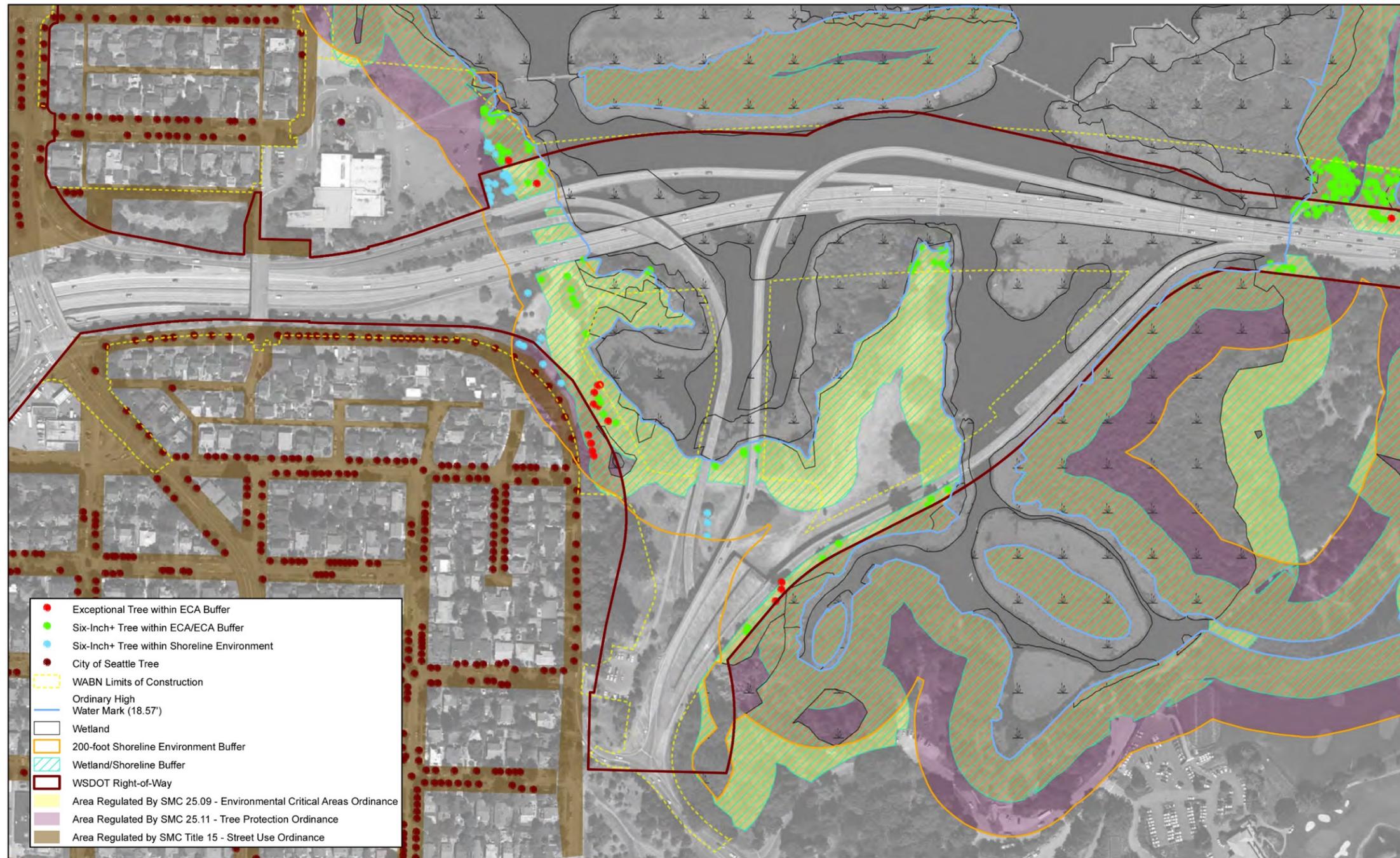
The Foster Island management area will not be affected by future phases.

### **Landscaping goals and requirements**

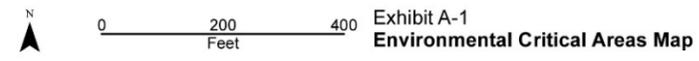
The landscaping goals for south Foster Island are a sustainable, safe, and park-like landscape that encourages through-movement. This is to be achieved by using native and ethno-botanical plant species, nurse logs, and stones that model the appearance of the floor of a forest under WABS and a naturalistic landscape where the temporary work bridges were consistent with those installed with WABN. This will be bolstered by the required 10-year monitoring period for the scrub-shrub wetlands and buffers and three-year monitoring period for the emergent wetlands.

## VII. References

- BOLA Architecture + Planning. "Washington Park Arboretum Historic Review." September 2003.
- WSDOT. Westside Final Tree Inventory Technical Memorandum. June 23, 2009.



Note: Exhibit to be updated in the future as required for modification to WSDOT Right-of-Way or WAML Limits of Construction. Please refer to right of way plans for current right of way information.



A-1 ENVIRONMENTAL CRITICAL AREAS MAP

**Montlake Boulevard**

- Preserve the trees outside of the Montlake project area and tree protection areas
- Restore trees along plater strips and medians north of SR 520
- Restore street trees south of SR 520

**E Park Drive E**

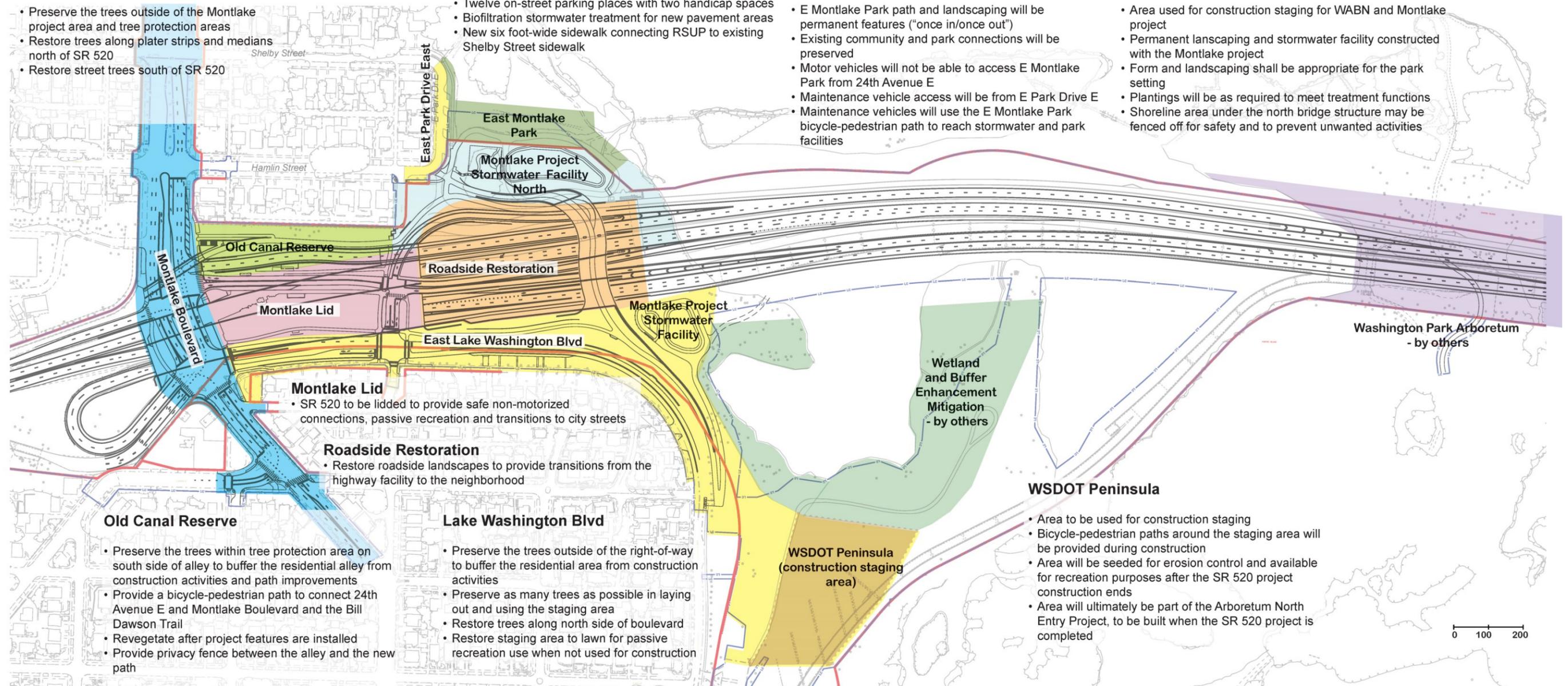
- Twelve on-street parking places with two handicap spaces
- Biofiltration stormwater treatment for new pavement areas
- New six foot-wide sidewalk connecting RSUP to existing Shelby Street sidewalk

**East Montlake Park**

- E Montlake Park path and landscaping will be permanent features ("once in/once out")
- Existing community and park connections will be preserved
- Motor vehicles will not be able to access E Montlake Park from 24th Avenue E
- Maintenance vehicle access will be from E Park Drive E
- Maintenance vehicles will use the E Montlake Park bicycle-pedestrian path to reach stormwater and park facilities

**Montlake Project - Stormwater Facility - North**

- Area used for construction staging for WABN and Montlake project
- Permanent landscaping and stormwater facility constructed with the Montlake project
- Form and landscaping shall be appropriate for the park setting
- Plantings will be as required to meet treatment functions
- Shoreline area under the north bridge structure may be fenced off for safety and to prevent unwanted activities



**Old Canal Reserve**

- Preserve the trees within tree protection area on south side of alley to buffer the residential alley from construction activities and path improvements
- Provide a bicycle-pedestrian path to connect 24th Avenue E and Montlake Boulevard and the Bill Dawson Trail
- Revegetate after project features are installed
- Provide privacy fence between the alley and the new path

**Roadside Restoration**

- Restore roadside landscapes to provide transitions from the highway facility to the neighborhood

**Lake Washington Blvd**

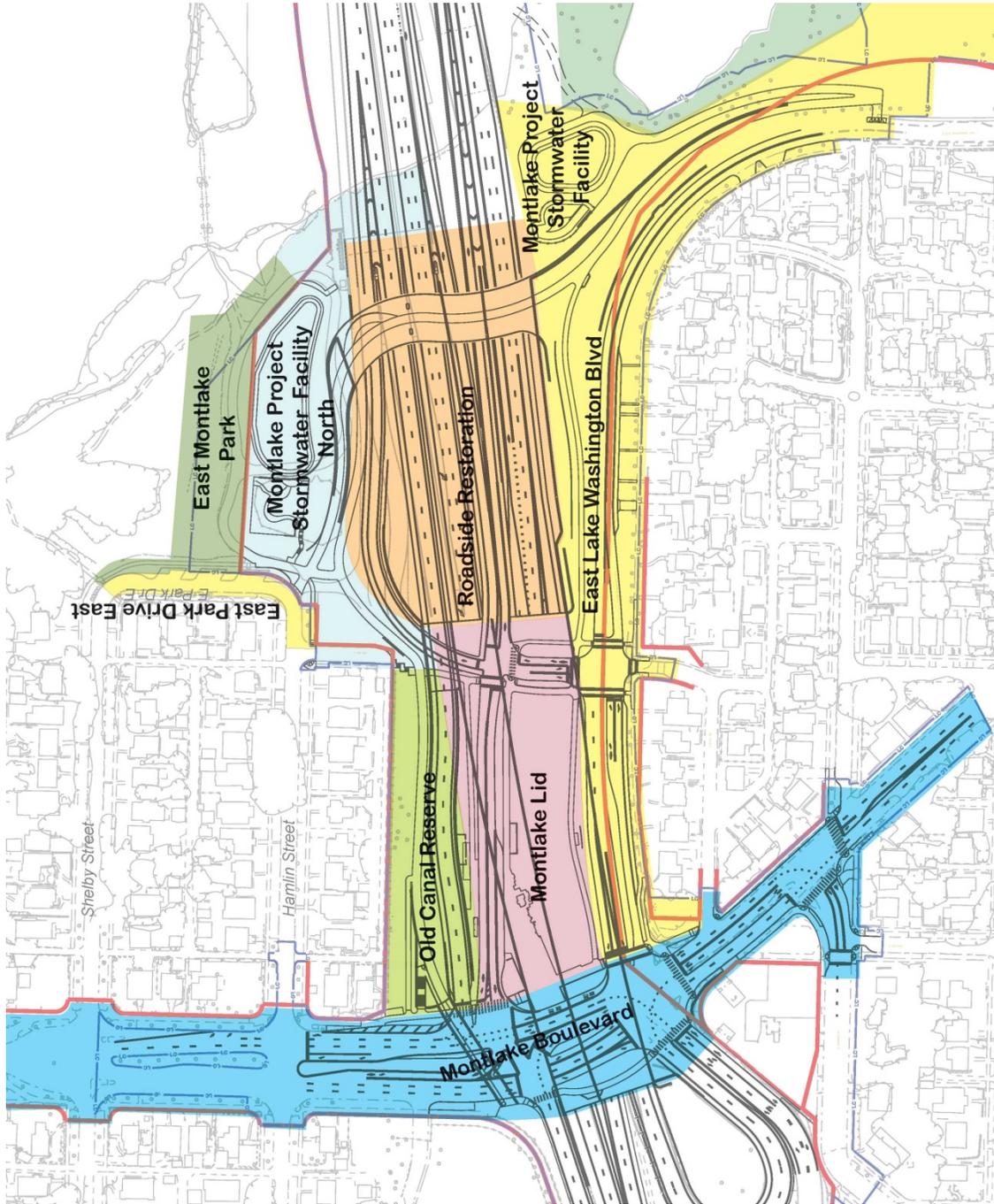
- Preserve the trees outside of the right-of-way to buffer the residential area from construction activities
- Preserve as many trees as possible in laying out and using the staging area
- Restore trees along north side of boulevard
- Restore staging area to lawn for passive recreation use when not used for construction

**WSDOT Peninsula**

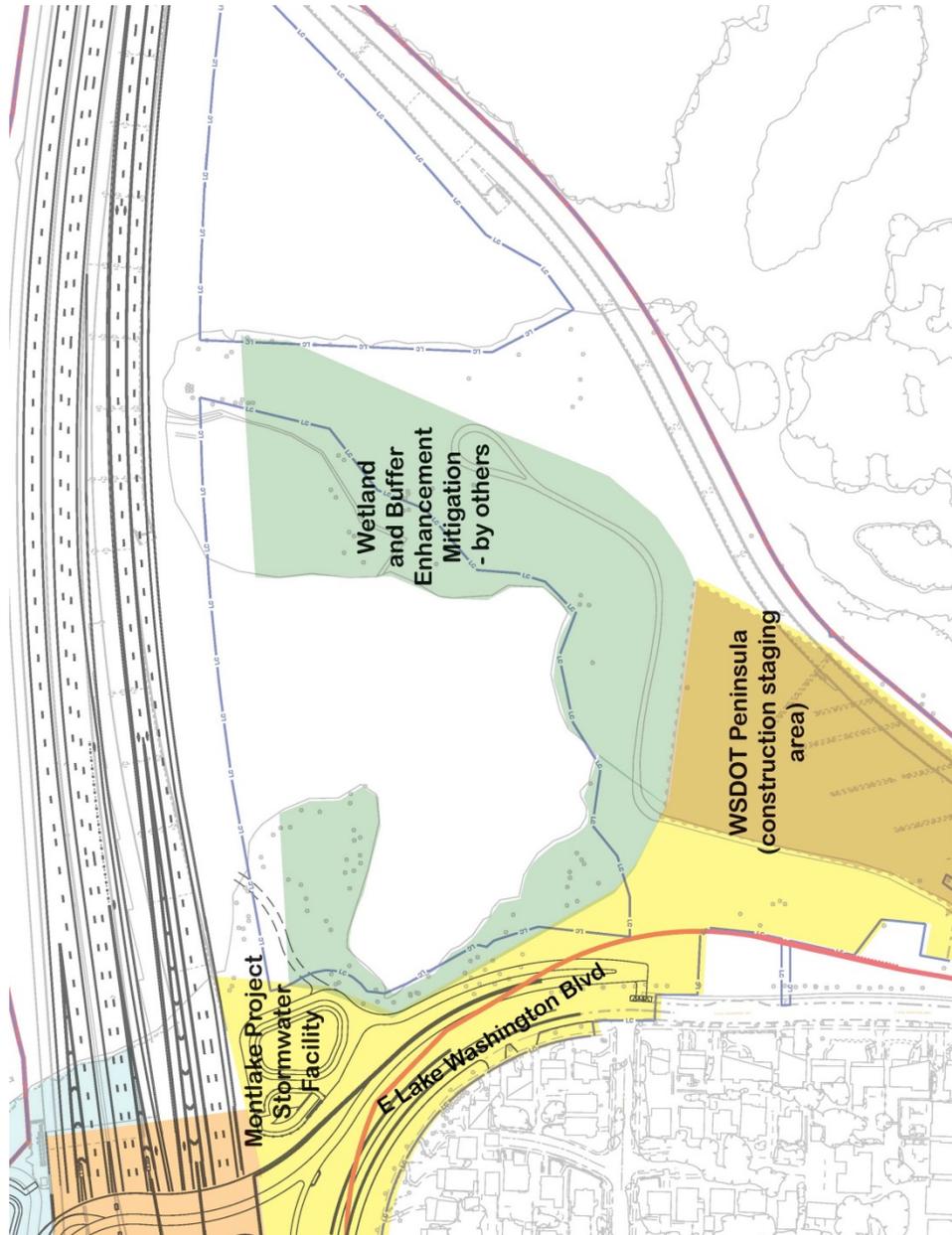
- Area to be used for construction staging
- Bicycle-pedestrian paths around the staging area will be provided during construction
- Area will be seeded for erosion control and available for recreation purposes after the SR 520 project construction ends
- Area will ultimately be part of the Arboretum North Entry Project, to be built when the SR 520 project is completed

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A-3 MONTLAKE MANAGEMENT AREAS



A-4 LAKE WASHINGTON BOULEVARD AND WSDOT PENINSULA MANAGEMENT AREAS



A-5 FOSTER ISLAND MANAGEMENT AREA

