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SR 520 Bridge Replacement
and HOV Project Draft EIS
Appendix D
Cultural Resources
Discipline Report



SR 520 Bridge Replacement and HOV Project EIS

Cultural Resources Discipline Report



Prepared for
Washington State Department of Transportation
Federal Highway Administration
Sound Transit

Lead Authors
James C. Bard, Ph.D., RPA and Lori L Durio, MFA.

CH2M HILL

Consultant Team

Parametrix, Inc.

CH2M HILL

Parsons Brinckerhoff

Michael Minor and Associates

BOAS, Inc.

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
DAHP	Department of Archaeology and Historic Preservation
dBA	decibel (A-weighted scale)
DOE	determination of eligibility
FHWA	Federal Highway Administration
GIS	Geographic Information System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NOAA	National Oceanic and Atmospheric Administration
SECRET	Submerged Cultural Resources Exploration Team
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Office
TCP	traditional cultural property
WSDOT	Washington State Department of Transportation
WHR	Washington Heritage Register
WPA	Works Progress Administration



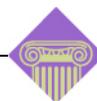
Introduction

Why are cultural resources considered in an EIS?

The term “cultural resources” encompasses archaeological sites, Native American cultural resources and other traditional cultural resources, historic buildings and structures, and other valued cultural resources. The National Historic Preservation Act (NHPA) was passed in 1966 as a reflection of the importance of these resources to our national, regional, and local culture. There is widespread public concern about the value and protection of our nation’s historic resources. Cultural resources represent “places where great American voices were heard, or where great acts of valor were performed... [and] connections between successive generations of Americans—concretely linking their ways of life” (Rains 1983). Cultural resources embody our shared history and help to define us as a society. “The past is not the property of historians; it is a public possession. It belongs to anyone who is aware of it, and it grows by being shared. It sustains the whole society, which always needs the identity that only the past can give” (Dr. Walter Havighurst 1961, as quoted in Rains 1983).

Federal, state, and local regulations recognize the public’s interest in cultural resources and the public benefit of preserving them. These laws and regulations require us to consider how this project might affect cultural resources in the project area and to take steps to avoid or reduce potential damage to them. The term “historic properties” is a technical term from the NHPA that denotes properties that have recognized public significance. Historic properties are places eligible for inclusion in the National Register of Historic Places (NRHP) or the Washington Heritage Register (WHR), or are properties designated as local landmarks by the City of Seattle’s Historic Preservation Program or King County’s Landmarks Program. These properties can include districts, sites, buildings, structures, objects, and landscapes significant in American history, prehistory, architecture, archaeology, engineering, and culture. They include properties that belong to the prehistoric era as well as the historic era.

Different classes of cultural resources are treated differently when inventorying and evaluating them to determine whether or not they are



historic properties and, for this reason, these classes are discussed separately in this document. These three main classes, which are described briefly below, are (1) archaeological resources, (2) traditional cultural resources, and (3) historic buildings and structures.

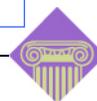
- Archaeological Resources.** Archaeological resources are places where past peoples left physical evidence of their occupation. Archaeological sites may include deposits of debris such as artifacts, food remains, (shells and bones), or the ruins of dwelling or other structures. These may date to the prehistoric era or to the historic era. Archaeological sites are often difficult to identify and are found by close examination of the ground surface for debris deposits or remnants of structural remains by an archaeologist or sometimes by exploratory excavation. Information about historic archaeological sites may be supplemented by historic archival research. Important archaeological sites may qualify as “historic properties” if, for example, they have the potential to yield valuable information about prehistory or history.
- Traditional Cultural Resources.** Traditional cultural resources may include properties that define or exemplify the identity of a particular cultural group—for example, a group of Native Americans. Traditional cultural resources may include human skeletal remains, funerary items, sacred items, and objects of cultural patrimony. Areas where Native Americans traditionally gathered food and other resources and culturally important regional landscapes may also be traditional cultural resources. Under the 1992 NHPA amendments, Traditional Cultural Properties (TCPs) can be eligible for inclusion in the NRHP because

What are the Criteria for Listing on the NRHP?

To qualify for listing on the NRHP, a property must have historic significance and integrity and generally be at least 50 years old. Historic significance in American history, architecture, archaeology, engineering, and culture may be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association. A property must demonstrate significance in at least one of the following areas:

- A Association with events that have made a significant contribution to the broad patterns of our history; or
- B Association with the lives of persons significant in our past; or
- C Embodiment of the distinctive characteristics of a type, period, or method of construction or representative of the work of a master, or possessing high artistic value, or representative of a significant and distinguishable entity whose components may lack individual distinction; or
- D Yielding, or likely to yield, information important in prehistory or history.

Historic significance is the importance of a property to a community, state or the nation. In addition to the above criteria, significance is defined by the area of history in which the property made important contributions and by the period of time when these contributions were made (National Register Bulletin 16).



of their association with cultural practices or beliefs (traditions, beliefs, practices, lifeways, arts, crafts, and social institutions) of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. Traditional cultural resources may qualify for listing in the NRHP as TCPs and "historic properties" if they are places that define the identity of a cultural group and meet the NRHP eligibility criteria (the criteria are the same for TCPs as for other historic properties). These resources are generally identified and evaluated by an anthropologists' or ethnologists' consultation with the members given cultural community, such as a Native American community.

- **Historic Buildings and Structures.** Historic buildings and structures (the "built environment") can include buildings, structures that are not buildings, objects, or even sites or locations of historic importance but where no remains still exist. The significance of such properties may be historical in that they are associated with "broad patterns in our history" or the lives of "persons significant in our past." Buildings and structures may also represent or exemplify a particular type or style of building, have aesthetic significance, or preserve the work of a master architect or engineer. To be considered for significance, buildings and structures must be at least 50 years old. These properties are identified by reconnaissance done by an architectural historian, and may be evaluated by researching archives and historical records to better understand the date of construction, architectural style, and historic context.

What are the key points of this report?

Inventory and Evaluation Results

The cultural resources discipline team defined the Area of Potential Effects (APE) for cultural resources and inventoried and evaluated cultural resources in terms of the three major classes of historic properties: (1) archaeological resources, (2) traditional cultural resources, and (3) historic buildings and structures.

- **Archaeological Resources.** There are no known or previously recorded archaeological resources in the project area; however, there are a few areas of high archaeological sensitivity. If



archaeological resources are found in these or other areas during construction, appropriate mitigation would be required. The cultural resources team conducted a detailed geomorphological study to determine where places of archaeological sensitivity might be located.

- **Traditional Cultural Resources.** There are no designated traditional cultural resources or ethnographic sites in the project area. Foster Island, however, is a place of cultural importance to Native American tribes. Ethnographic studies are being conducted to evaluate whether or not Foster Island qualifies for NRHP listing as a traditional cultural property.
- **Historic Buildings and Structures.** The project area contains a number of significant historic buildings and structures. In the Seattle project area, two neighborhoods are eligible for listing as historic districts in the NRHP – Roanoke Park and Montlake. In addition to these districts, the Mason House at 2545 Boyer Avenue East is individually eligible for the NRHP. In the Lake Washington project area, the floating portion of the Evergreen Point Bridge is individually eligible. In the Eastside project area, there are three NRHP-eligible structures and one WHR-eligible structure.

Because much of the project has a history of use by Native American tribes, Washington State Department of Transportation (WSDOT) is conducting additional reconnaissance and explorations to identify whether any archaeological or ethnographic sites might exist in the area that would be disturbed by construction. This work is currently underway, and will continue after the Draft SR 520 Bridge Replacement and HOV Project Environmental Impact Statement (Draft EIS) for the project is published. WSDOT is coordinating with the State Historic Preservation Officer on the scope of these investigations, and will report the findings in the Final EIS.

Alternatives Analysis Results

The Continued Operation Scenario would be unlikely to increase any adverse effects on cultural resources, but also does not include any design features that would mitigate existing adverse effects in the SR 520 corridor. Under the Catastrophic Failure Scenario, the Evergreen Point Bridge, an NRHP-eligible structure, would be lost.

Because no archaeological or traditional cultural resources have been identified, the alternatives would not differ in their effects on these two



classes of resources. The 4-Lane and 6-Lane Alternatives would have the following similar adverse effects on historic buildings and structures:

- Decrease in the width of the existing landscaped buffer zone, thereby increasing visual intrusion experienced at historic buildings along East Hamlin Street and Montlake Boulevard
- Demolition of the Museum of History and Industry (MOHAI), a contributing property to the NRHP-eligible proposed Montlake historic district
- Partial loss of surrounding property at the National Oceanic and Atmospheric Administration (NOAA) Northwest Fisheries Science Center building, a contributing property to the NRHP-eligible proposed Montlake historic district, thereby reducing its integrity
- Increased visual intrusion from new sound walls in the NRHP-eligible proposed Montlake historic district
- Removal of the Evergreen Point Bridge, an NRHP-eligible structure
- Increased visual intrusion at 2891 Evergreen Point Road, an NRHP-eligible structure, because of relocation of the Evergreen Point Bridge to the north

The 4-Lane and the 6-Lane Alternatives would have the following similar beneficial effects on historic buildings and structures:

- Reduction of current and future noise levels because of installation of sound walls adjacent to the project area
- Decreased visual and audible intrusion at the NRHP-eligible proposed Montlake historic district because of lowering of the SR 520 roadway in the Montlake area
- Decreased visual intrusion at the NRHP-eligible proposed Montlake historic district and Washington Park Arboretum because of the removal of the R.H. Thompson Expressway ramps, allowing restoration of that part of the Washington Park Arboretum
- Installation of a new bicycle/ pedestrian path and widening of the existing path, which would help reconnect the two sides of the NRHP-eligible proposed Montlake historic district separated by SR 520



- Relocation of the Evergreen Point Bridge to the north, which would move the highway further way from the NRHP-eligible house at 2857 Evergreen Point Road

In most instances, the 4-Lane Alternative would be less disruptive to historic structures than the 6-Lane Alternative. The exceptions are described below:

- 2851 Evergreen Point Road would experience a property loss under the 4-Lane Alternative. Under the 6-Lane Alternative, it would experience less property loss and would benefit from a sound wall and landscape lid. This is the one case in which the 4-Lane Alternative would have a greater adverse effect than the 6-Lane Alternative.
- The 6-Lane Alternative would enhance historic districts and structures by providing five large landscaped lids where bridges over SR 520 currently exist. The 4-Lane Alternative would not provide these beneficial lids.

Adverse effects on cultural resources can be mitigated through a variety of methods, depending on the type and severity of the effects and the significance of the individual resource.

What are the project alternatives?

The SR 520 Bridge Replacement and HOV Project area comprises neighborhoods in Seattle from I-5 to the Lake Washington shore, Lake Washington, and Eastside communities and neighborhoods from the Lake Washington shore to 124th Avenue Northeast just east of I-405. **Exhibit 1** shows the general location of the project. Neighborhoods and communities in the project area are:

- Seattle neighborhoods – Portage Bay/Roanoke, North Capitol Hill,

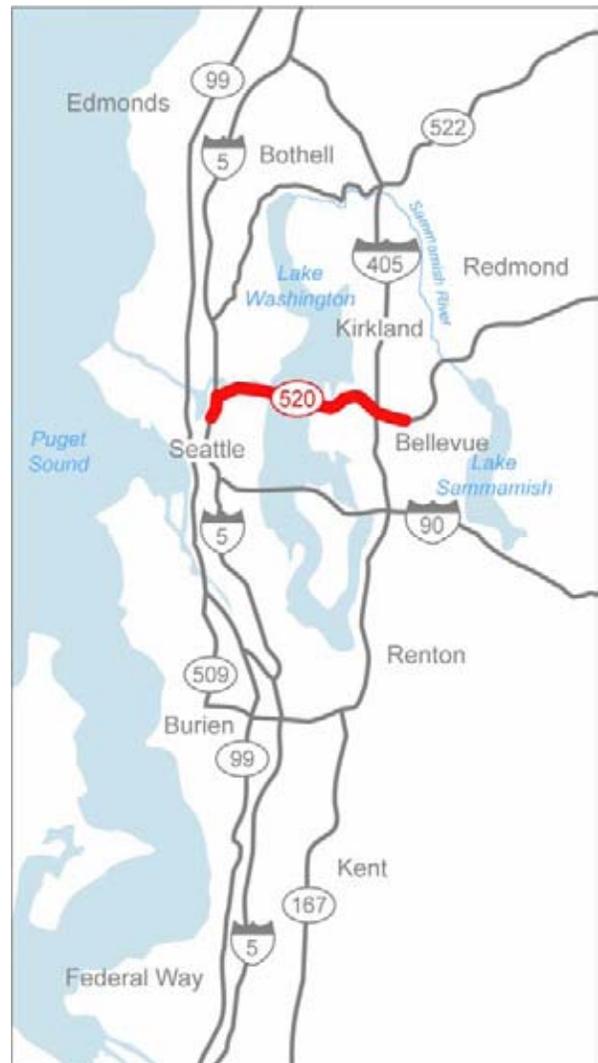


Exhibit 1. Project Vicinity Map



Montlake, University District, Laurelhurst, and Madison Park

- Eastside communities and neighborhoods – Medina, Hunts Point, Clyde Hill, Yarrow Point, Kirkland (the Lakeview neighborhood), and Bellevue (the North Bellevue, Bridle Trails, and Bel-Red/Northup neighborhoods).

The SR 520 Bridge Replacement and HOV Project Draft EIS evaluates the following three alternatives and one option:

- No Build Alternative
- 4-Lane Alternative
 - 4-Lane Option without capacity to carry future high capacity transit
- 6-Lane Alternative

Each of these alternatives is described below.

For more information, see the *Alternatives Description and Construction Methods Report* contained in Appendix A of this EIS.

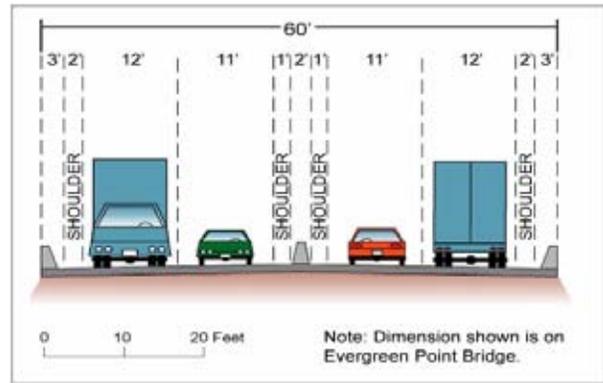


Exhibit 2. No Build Alternative

What is the No Build Alternative?

All EISs provide an alternative to assess what would happen to the environment in the future if nothing were done to solve the project's identified problem. This alternative, called the No Build Alternative, means that the existing highway would remain the same as it is today (**Exhibit 2**). The No Build Alternative provides the basis for measuring and comparing the effects of all of the project's build alternatives.

This project is unique because the existing SR 520 bridges may not remain intact through 2030, the project's design year. The fixed spans of the Portage Bay and Evergreen Point bridges are aging and are vulnerable to earthquakes; the floating portion of the Evergreen Point Bridge is vulnerable to wind and waves.

In 1999, WSDOT estimated the remaining service life of the Evergreen Point Bridge to be 20 to 25 years based on the existing structural integrity and the likelihood of severe windstorms. The floating portion of the Evergreen Point Bridge was originally designed for a sustained wind speed of 57.5 miles per hour (mph), and was rehabilitated in 1999 to withstand sustained winds of up to 77 mph. The current WSDOT design standard for bridges is to withstand a sustained wind speed of 92 mph. In order to bring the Evergreen Point Bridge up to current



design standards to withstand at least 92 mph winds, the floating portion must be completely replaced.

The fixed structures of the Portage Bay and Evergreen Point bridges do not meet current seismic design standards because the bridge is supported on hollow-core piles. These hollow-core piles were not designed to withstand a large earthquake. They are difficult and cost prohibitive to retrofit to current seismic standards.

If nothing is done to replace the Portage Bay and Evergreen Point bridges, there is a high probability that both structures could fail and become unusable to the public before 2030. WSDOT cannot predict when or how these structures would fail, so it is difficult to determine the actual consequences of doing nothing. To illustrate what could happen, two extreme example scenarios are evaluated as part of the No Build Alternative. These are the Continued Operation and Catastrophic Failure scenarios.

Under the Continued Operation Scenario, SR 520 would continue to operate as it does today as a 4-lane highway with nonstandard shoulders and without a bicycle/pedestrian path. No new facilities would be added and no existing facilities (including the unused R.H. Thompson Expressway Ramps near the Arboretum) would be removed. WSDOT would continue to maintain SR 520 as it does today. This scenario assumes the Portage Bay and Evergreen Point bridges would remain standing and functional through 2030. No catastrophic events (such as earthquakes or high winds) would be severe enough to cause major damage to the SR 520 bridges. This scenario is the baseline the EIS team used to compare the other alternatives.

In the Catastrophic Failure Scenario, both the Portage Bay and Evergreen Point bridges would be lost due to some type of catastrophic event. Although in a catastrophic event, one bridge might fail while the other stands, this Draft EIS assumes the worst-case scenario – that both bridges would fail. This scenario assumes that both bridges would be seriously damaged and would be unavailable for use by the public for an unspecified length of time.

What is the 4-Lane Alternative?

The 4-Lane Alternative would have four lanes (two general purpose lanes in each direction), the same number of lanes as today (**Exhibit 3**). SR 520 would be rebuilt from I-5 to Bellevue Way. Both the Portage Bay and Evergreen Point bridges would be replaced. The bridges over



SR 520 would also be rebuilt. Roadway shoulders would meet current standards (4-foot inside shoulder and 10-foot outside shoulder). A 14-foot-wide bicycle/pedestrian path would be built along the north side of SR 520 through Montlake, across the Evergreen Point Bridge, and along the south side of SR 520 through Medina, Hunts Point, Clyde Hill, and Yarrow Point to 96th Avenue Northeast, connecting to

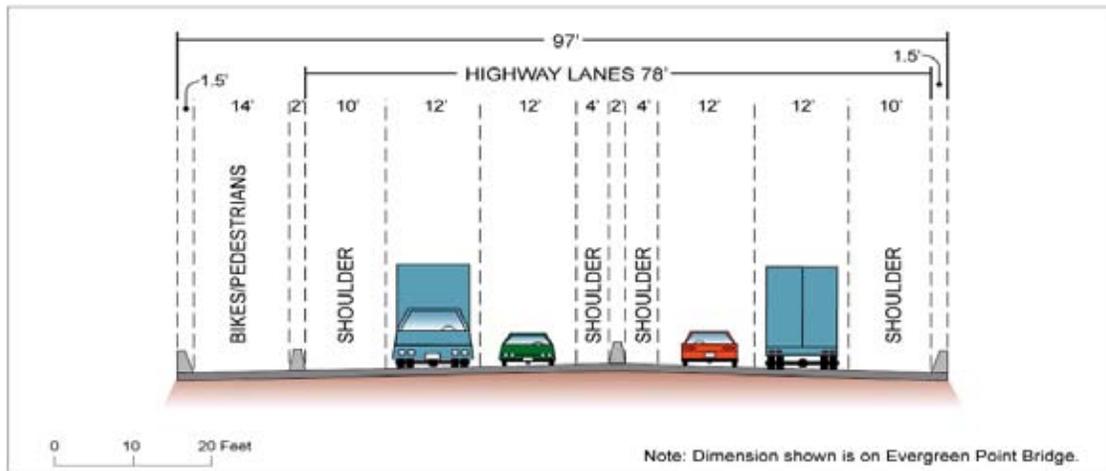


Exhibit 3. 4-Lane Alternative

Northeast Points Drive. Sound walls would be built along much of SR 520 in Seattle and the Eastside. This alternative also includes stormwater treatment and electronic toll collection.

The floating bridge pontoons of the Evergreen Point Bridge would be sized to carry future high-capacity transit. An option with smaller pontoons that could not carry future high-capacity transit is also analyzed. The alternative does not include high-capacity transit.

A bridge operations facility would be built underground beneath the east roadway approach to the bridge as part of the new bridge abutment. A dock to moor two boats and maintain the Evergreen Point Bridge would be located under the bridge on the east shore of Lake Washington.

A flexible transportation plan would promote alternative modes of travel and increase the efficiency of the system. Programs include intelligent transportation and technology, traffic systems management, vanpools and transit, education and promotion, and land use as demand management.



What is the 6-Lane Alternative?

The 6-Lane Alternative would include six lanes (two outer general purpose lanes and one inside HOV lane in each direction; **Exhibit 4**). SR 520 would be rebuilt from I-5 to 108th Avenue Northeast in Bellevue, with an auxiliary lane added on SR 520 eastbound east of I-405 to 124th Avenue Northeast. Both the Portage Bay and Evergreen Point bridges would be replaced. Bridges over SR 520 would also be rebuilt. Roadway shoulders would meet current standards (10-foot-

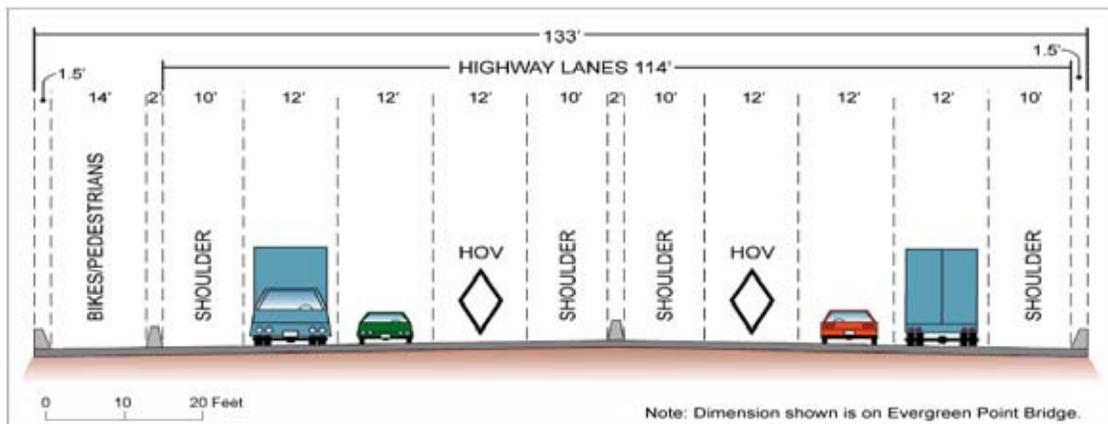


Exhibit 4. 6-Lane Alternative

wide inside shoulder and 10-foot-wide outside shoulder). A 14-foot-wide bicycle/pedestrian path would be built along the north side of SR 520 through Montlake, across the Evergreen Point Bridge, and along the south side of SR 520 through the Eastside to 96th Avenue Northeast, connecting to Northeast Points Drive. Sound walls would be built along much of SR 520 in Seattle and the Eastside. This alternative would also include stormwater treatment and electronic toll collection.

This alternative would also add five 500-foot-long landscaped lids to be built across SR 520 to help reconnect communities. These communities are Roanoke, North Capitol Hill, Portage Bay, Montlake, Medina, Hunts Point, Clyde Hill, and Yarrow Point. The lids are located at 10th Avenue East and Delmar Drive East, Montlake Boulevard, Evergreen Point Road, 84th Avenue Northeast, and 92nd Avenue Northeast.

The floating bridge pontoons of the Evergreen Point Bridge would be sized to carry future high-capacity transit. The alternative does not include high-capacity transit.



A bridge operations facility would be built underground beneath the east roadway approach to the bridge as part of the new bridge abutment. A dock to moor two boats for maintenance of the Evergreen Point Bridge would be located under the bridge on the east shore of Lake Washington.

A flexible transportation plan would promote alternative modes of travel and increase the efficiency of the system. Programs would include intelligent transportation and technology, traffic systems management, vanpools and transit, education and promotion, and land use as demand management.

What kind of regulations and policies exist to protect cultural resources?

Federal Regulations

Federal laws include the NHPA (16 USC 470f) and its implementing regulations, Protection of Historic Properties (36 CFR 800). Regulations listed in 36 CFR 800.16 define historic properties as any prehistoric or historic district, site, building, structure, or object included in or eligible for the NRHP. Under NHPA, a property is significant if it meets the NRHP criteria listed in 36 CFR 60.4. Section 106 requires federal agencies (Federal Highway Administration [FHWA]) and others to consider the effects of proposed projects on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) and the Washington State Historic Preservation Office (SHPO) with a reasonable opportunity to comment on any undertaking that would adversely affect properties listed in or eligible for the NRHP.

Regulations in 36 CFR 800 provide a process for satisfying the requirements of Section 106 – namely, resource identification (inventory), significance evaluation, assessment of adverse effects on significant historic properties, and resolution of adverse effects.

In accordance with Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance (TCPs, discussed above) can be evaluated for eligibility and listed in the NRHP.



Cultural resources must also be given consideration under the National Environmental Policy Act (NEPA), and Section 106 encourages maximum cooperation with NEPA. This cultural resources report meets the requirements of both NEPA and Section 106 of the NHPA.

For FHWA projects, Section 4(f) of the Department of Transportation Act of 1966 (49 USC. 303) and its implementing regulations (23 CFR 771.135) is another federal regulation that protects historic and cultural resources. Section 4(f) resources include any significant publicly owned park, recreation area, or wildlife refuge or any significant publicly or privately owned historic site. Section 4(f) applies to all projects that require approval by an agency of the U.S. Department of Transportation, including FHWA. See Appendix P, *Section 4(f) Evaluation*, for more information on Section 4(f) resources.

State Regulations

Construction of the SR 520 Bridge Replacement and HOV Project also requires environmental compliance at the state level through Washington's State Environmental Policy Act (SEPA). Because of this, project effects on cultural resources must be considered in weighing the overall effect of the project on the environment, as stipulated in WAC 197-11-960. SEPA requires the consideration of significant environmental impacts to cultural and historic resources, requires that effects on cultural and historic resources be taken into account in the threshold determination process (WAC 197-11-330), be considered in the final EIS (WAC 197-11-440), and stipulates that historic and cultural preservation is an element of the environment (WAC 197-11-444). Native American burials are protected under RCW 27.44, and effects to archaeological sites are regulated by RCW 27.53.

The WHR is the Washington state version of the NRHP and follows similar criteria. It is administered by the state Department of Archaeology and Historic Preservation (DAHP) rather than the National Park Service (NPS). It

What are the criteria for listing on the Washington Heritage Register?

The WHR includes buildings, structures (such as irrigation systems and bridges), districts, objects (such as statues, grave markers, and vessels), cemeteries and burial sites, historic sites (sites of important events), archaeological sites, TCPs (spiritual or creation sites), and cultural landscapes (such as habitation, agricultural, industrial, and recreational).

To be eligible for the WHR, a property must meet at least one of the following areas of significance:

- The property belongs to the early settlement, commercial development, or original native occupation of a community or region.
- The property is directly connected to a movement, organization, institution, religion, or club, which served as a focal point for a community or group.
- The property is directly connected to specific activities or events, which had a lasting impact on the community or region.
- The property is associated with legends, spiritual or religious practices, or life ways, which are uniquely related to a piece of land or to a natural feature.
- The property displays strong patterns of land use or alterations of the environment, which occurred during the historic period (cultivation, landscaping, industry, mining, irrigation, recreation).
- The property is directly associated with an individual who made an important contribution to a community or to a group of people.
- The property has strong artistic, architectural or engineering qualities, or displays unusual materials or craftwork belonging to a historic era.
- The property was designed or built by an influential architect or reflects the work of an important artisan.
- Archaeological investigation of the property has or will increase our understanding of past cultures or life ways.



emphasizes local and statewide significance and has a lower threshold for eligibility. Any building or site listed in the NRHP is automatically listed on the WHR.

County Regulations

In addition to federal and state recognition, historic and cultural resources can also be recognized and protected at the local level. Properties within the unincorporated areas of King County may be designated and protected as King County landmarks under the King County Historic Preservation Program by the King County Landmarks and Heritage Commission, a nine-member citizen board appointed by the County Executive under Chapter 20.62 of the King County Code. This Commission also acts as a municipal landmarks board for cities and towns that have entered into interlocal agreements with the county for preservation services, including Kirkland in the project area. King County landmark properties are protected by certain design review processes. Currently, there are approximately 60 properties listed on the King County Landmarks Register.

The criteria to qualify as a King County Landmark are the same as those for the NRHP, with two differences. First, “an historic resource may be designated as a King County Landmark if it is more than 40 years old or, in the case of a landmark district, contains resources that are more than 40 years old” (King County 1999). This differs from NRHP criteria, which require that a property be 50 years old. Second, in addition to the four areas of significance accepted by the NRHP, King County has added a fifth area: the resource may be “an outstanding work of a designer or builder who has made a substantial contribution to the art” (King County 1999).

In addition, the King County Landmarks and Heritage Commission also designates selected locally significant properties as “Community Landmarks.” Community Landmarks are mainly an honorary designation; these landmarks do not have to meet the more stringent criteria of properties listed on the King County Landmarks Register.

What are the criteria for Seattle city landmarks?

To qualify as a Seattle landmark under the Seattle Landmarks Preservation Ordinance (SMC 25.12), a building, object, or site must be at least 25 years old and have “significant character, interest, or value as part of the development, heritage, or cultural characteristics of the city, state, or nation.” In addition, it must possess integrity and must meet at least one of the following criteria:

- It is the location of, or is associated in a significant way with, a historic event with a significant effect upon the community, city, state, or nation; or
- It is associated in a significant way with the life of a person important in the history of the city, state, or nation; or
- It is associated in a significant way with a significant aspect of the cultural, political, or economic heritage of the community, city, state or nation; or
- It embodies the distinctive visible characteristics of an architectural style, or period, or method of construction; or
- Because of its prominence of spatial location, contrasts of siting, age, or scale, it is an easily identifiable visual feature of its neighborhood or the city and contributes to the distinctive quality or identity of such neighborhood or the site; or
- It is an outstanding work of a designer or builder.



City Regulations

Historic properties within the Seattle city limits may be designated as local landmarks or landmark districts by the Seattle Landmarks Preservation Board. Once Seattle landmarks or landmark districts are designated by a city ordinance and approved by the Seattle City Council, they are protected under a Controls and Incentives Agreement from demolition and unsympathetic changes. Certificates of Approval are then necessary to permit specific changes to the landmark building or within the district. The steps necessary to permit demolition of a designated landmark are detailed in SMC 25.12.835. Properties noted as “eligible Seattle landmarks” in this report are based on professional judgment of their potential eligibility and are not officially designated.

City regulations support and relate to SEPA as detailed in Seattle Municipal Code 25.05. For projects involving structures or sites that have been designated as historic landmarks, compliance with the Landmarks Preservation Ordinance is required. For projects involving structures or sites that are not yet designated as historic landmarks but appear to meet the criteria for designation, the site or structure may be referred to the Landmarks Preservation Board for consideration. If the Board approves the site or structure for nomination as a historic landmark, consideration of the site or structure for designation as a historic landmark and application of controls and incentives will proceed as provided by the Landmarks Preservation Ordinance. If the project is rejected for nomination, the project will not be conditioned or denied for historic preservation purposes.

When a project is proposed adjacent to or across the street from a designated site or structure, the proposal must be referred to the City's Historic Preservation Officer for an assessment of any adverse impacts on the designated landmark and for comments on possible mitigating measures. Mitigation may be required to ensure the compatibility of the proposed project with the color, material, and architectural character of the designated landmark and to reduce effects on the character of the landmark's site. Mitigating measures may be required and are limited to the following:

- Sympathetic facade treatment
- Sympathetic street treatment

A permit to demolish a Seattle Landmark shall not be issued until:

1. A certificate of approval to demolish a landmark has become final after the expiration of any appeal period or the conclusion of any appeal.
2. The landmark has been recorded and documented to the standards of the Historic American Buildings Survey (HABS) program.
3. A master use permit is ready to issue for a replacement use or structure other than a temporary use or structure.
4. The owner demonstrates to the satisfaction of the Director of the Department of Neighborhoods that the owner has a valid and binding commitment for financing sufficient for the replacement use.

SMC 25.12.835



- Sympathetic design treatment
- Reconfiguration of the project and/or relocation of the project on the project site, provided that mitigating measures not include reductions in a project's gross floor area

For sites with potential archaeological significance, an assessment of the archaeological potential of the site may be required. Mitigating measures that may be required to mitigate adverse effects on an archaeological site include, but are not limited to:

- Relocation of the project on the site
- Providing markers, plaques, or recognition of discovery
- Imposing a delay of as much as 90 days (or more than 90 days for extraordinary circumstances) to allow archaeological artifacts and information to be analyzed
- Excavation and recovery of artifacts



Affected Environment

How was the information collected?

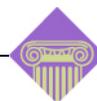
The first step in collecting information was to define the scope of the cultural resources studies in terms of the project APE for each of the three major classes of cultural resources. For archaeological properties, the APE was defined as the area within which direct ground disturbance would or could occur during construction. For traditional cultural resources, the APE extends beyond the SR 520 right-of-way itself, to include areas that could be affected by noise and visual intrusion. For historic buildings and structures, the APE was defined as the SR 520 corridor and all adjacent properties extending a single property tax lot in any direction from the corridor.

How were archaeological resources investigated?

The cultural resources discipline team, Dr. James Bard, Ph.D. and Lori Durio, MFA, contacted local agencies to obtain information about existing archaeological resources. They also contacted the following city and state agencies and other organizations for information about identified archaeological resources in the project area:

- Washington Department of Archaeology and Historic Preservation (DAHP) – Dr. Robert Whitlam, state archaeologist; and Mr. Greg Griffith, Deputy SHPO
- NRHP
- WHR
- Determinations of NRHP Eligibility at DAHP
- Historic Resources Inventory files at DAHP
- Archaeological Site Inventory files at DAHP

The team collected information from the above sources to describe the existing baseline cultural resource conditions in the project area and to identify the existing archaeological resources in the APE. Documentary sources helped to define where Native Americans may have lived



during the proto-historic period as well as where early Euroamerican settlement was located that might have left archaeological remains.

These included:

- Previous cultural resource studies, including archaeological site records and cultural resources reports
- Environmental background reports, including environmental histories and detailed geomorphologic and geoarchaeological analyses used to reconstruct prehistoric landforms and to evaluate areas of possible archaeological sensitivity
- Ethnographic and historic background material, including relevant ethnographic reports, oral histories, local histories, newspaper articles, census data, city directories, historic photographs, and historic maps
- Various information collected from tribal consultations
- University of Washington
 - Suzzallo Library
 - Special Collections and Manuscripts
 - The Burke Museum
- U.S. Army Corps of Engineers-Seattle District Cultural Resources Staff
- Association for Washington Archaeology

The background research revealed that there are no known or recorded archaeological sites along the SR 520 corridor APE. The background research confirmed that the project area lies within lands and waters once occupied by several Puget Sound Tribes, whose descendants are represented by federally recognized Indian Tribes including the Suquamish, Muckleshoot, Snoqualmie, Yakama, and Tulalip Tribes, as well as the non-federally recognized Duwamish. Because of this, the project area is considered to have a high level of archaeological sensitivity.

We also conducted an extensive analysis of landforms in the project area. BOAS, Inc. (2005) conducted this analysis to attempt to define where prehistoric archaeological deposits might be found. A detailed summary of the study is included as Attachment 1. The area's landscape rapidly and dramatically evolved during the Holocene epoch (since the end of the most recent Ice Age), and also changed



dramatically during the early historic period. Archaeological sites may be buried under recent fill or exposed in unlikely locations by recent erosion. There have been changes in land level due to removal of the great weight of the glaciers from the land, changes in sea level due to the melting of the glaciers, and changes in lake level due to human engineering in the historic period. All of these have changed the locations of prehistoric archaeological sites in relation to modern land surfaces and shorelines, and examining these factors can help in predicting where the corridor might encounter sites.

Based on this background information, known and predicted zones of high, moderate, and low probability were identified for hunter-fisher-gatherer, ethnographic, and historic period archaeological resources for the project area.

Archaeologists for the project team conducted intensive pedestrian field surveys of the entire SR 520 corridor. These involved examining all open and undeveloped areas in the entire APE where it was possible to examine the ground surface. The surveys were conducted using parallel, systematic pedestrian transects. Where the ground surface was visible, these transects were systematic and spaced no more than 20 meters (just under 66 feet) apart. In developed urban areas, the archaeologists spread out to a greater extent looking for ground exposures to examine for archaeological deposits; systematic transects were not practicable in these areas.

The survey also included limited shovel probing on Foster Island. This was done because the background research had identified Foster Island as a high sensitivity zone for archaeological deposits and also as an area in which fill may have been recently deposited, limiting visibility of the prehistoric and early historic period ground surfaces. The shovel probing encountered a dense refuse deposit of the historic era, confirming that fill had been placed on the island.

No prehistoric archaeological sites were discovered in the surveyed areas. Fill on Foster Island and the northern portions of Washington Park that is the remains of an old landfill technically qualifies as a historic archaeological deposit. Because this refuse is so widespread, consists of municipal refuse, and may be hazardous, however, it was not formally evaluated or recorded and is not considered a historic property.



In the Eastside project area, inventory focused on the few areas within the corridor not covered in asphalt or concrete and that were accessible to surveyors.

How were traditional cultural resources investigated?

Ethnologists for the project conducted extensive research regarding Native American history and protohistoric and historic use of the project area using documentary sources, and also consulted with Native American groups having traditional ties to the project area (see following section). These included:

- Federally recognized Indian Tribes: Suquamish Tribe, Muckleshoot Indian Tribe, Tulalip Tribe, Yakama Nation, and Snoqualmie Indian Tribe
- Nonrecognized Indian Tribes: Duwamish Tribe and Kikiallus Indian Nation

Documentary sources consulted included:

- TCP files at DAHP
- University of Washington
 - Suzzallo Library
 - Special Collections and Manuscripts
 - The Burke Museum
- Seattle Public Library - Seattle Room

Oral history interviews will be conducted with tribal elders to provide additional information about possible traditional cultural properties in or near the SR 520 corridor.

What tribal consultations were included for the project?

WSDOT, in cooperation with Sound Transit, has initiated the Section 106 process and is coordinating with the SHPO, ACHP, and affected Indian Tribes. As the lead federal agency, FHWA conducts government-to-government consultations with the Tribes. WSDOT and Sound Transit are assisting FHWA with the consultations. These ongoing consultations began during the Trans-Lake Washington Study



and will continue through project design and construction. Attachment 2 includes records of the agencies' meetings and correspondence with potentially affected Tribes.

Government-to-government consultation recognizes that cultural resources are important to the Indian people, whose ancestors used the land for many generations in prehistoric and historic times. The interests of the Tribes include burial and sacred site protection and perpetuation of traditional hunting, fishing, and native plant gathering activities. Historic use of natural resources produced a life way that is still integral to the maintenance of tribal culture.

How were historic buildings and structures investigated?

For this report, the cultural resources team surveyed all buildings and structures within the APEs (one building/property/tax lot facing the corridor) that predate 1961. The year 1961 was selected to conservatively include all resources that would be 45 or more years old at the time of issuance of the Record of Decision for the SR 520 project—and could be 50 or more years old by the time some parts of the project are built. The team identified and evaluated literature about historic buildings and structures; collected existing data, including archival records, building permits, historic photographs, and maps; and analyzed these data to assess the NRHP and/or WHR eligibility and city or county landmark designation.

To develop historic contexts for the buildings and structures, determine which had already been surveyed, evaluated, and listed, the team consulted the following agency and documentary sources:

- Washington DAHP—Dr. Robert Whitlam, state archaeologist; Mr. Michael Houser, architectural historian; and Mr. Greg Griffith, Deputy SHPO
- NRHP
- WHR
- Determinations of NRHP Eligibility at DAHP
- Historic Resources Inventory files at DAHP
- King County Historic Preservation Program:



- Consultation with Ms. Kate Kraft (Landmark Program Coordinator)
- Inventory forms
- List of historical organizations
- Overview of King County history
- Landmarks preservation in King County
- Landmarks designation criteria
- Incorporations in King County
- Archival resources in King County
- List of jurisdictions in King County and their historical preservation resources
- King County Historic Landmarks list
- King County Assessor’s Office
- Seattle Municipal Archives: database of photographs for neighborhoods
- Seattle Public Utilities Engineering Department: records vault (city maps, plat books, historic aerial photos)
- Seattle Department of Parks: Mr. David Goldberg
- City of Seattle Historic Preservation Division (Department of Neighborhoods):
 - List of historic landmarks (organized by Eastlake, Capitol Hill, and Montlake neighborhoods)
 - Ms. Elizabeth Chave, Landmarks Preservation Board
 - Ms. Karen Gordon, Seattle City Historic Preservation Officer
- Historic Seattle Organization: neighborhood inventories
- Friends of Seattle’s Olmsted Parks: Mr. Doug Jackson
- HistoryLink, an online encyclopedia of Seattle, King County, and Washington State history
- University of Washington
 - Suzzallo Library
 - Special Collections and Manuscripts
 - School of Architecture Library
 - School of Architecture: Professor Jeffrey Ochsner and Professor Grant Hildebrand
- MOHAI: historic photographs database



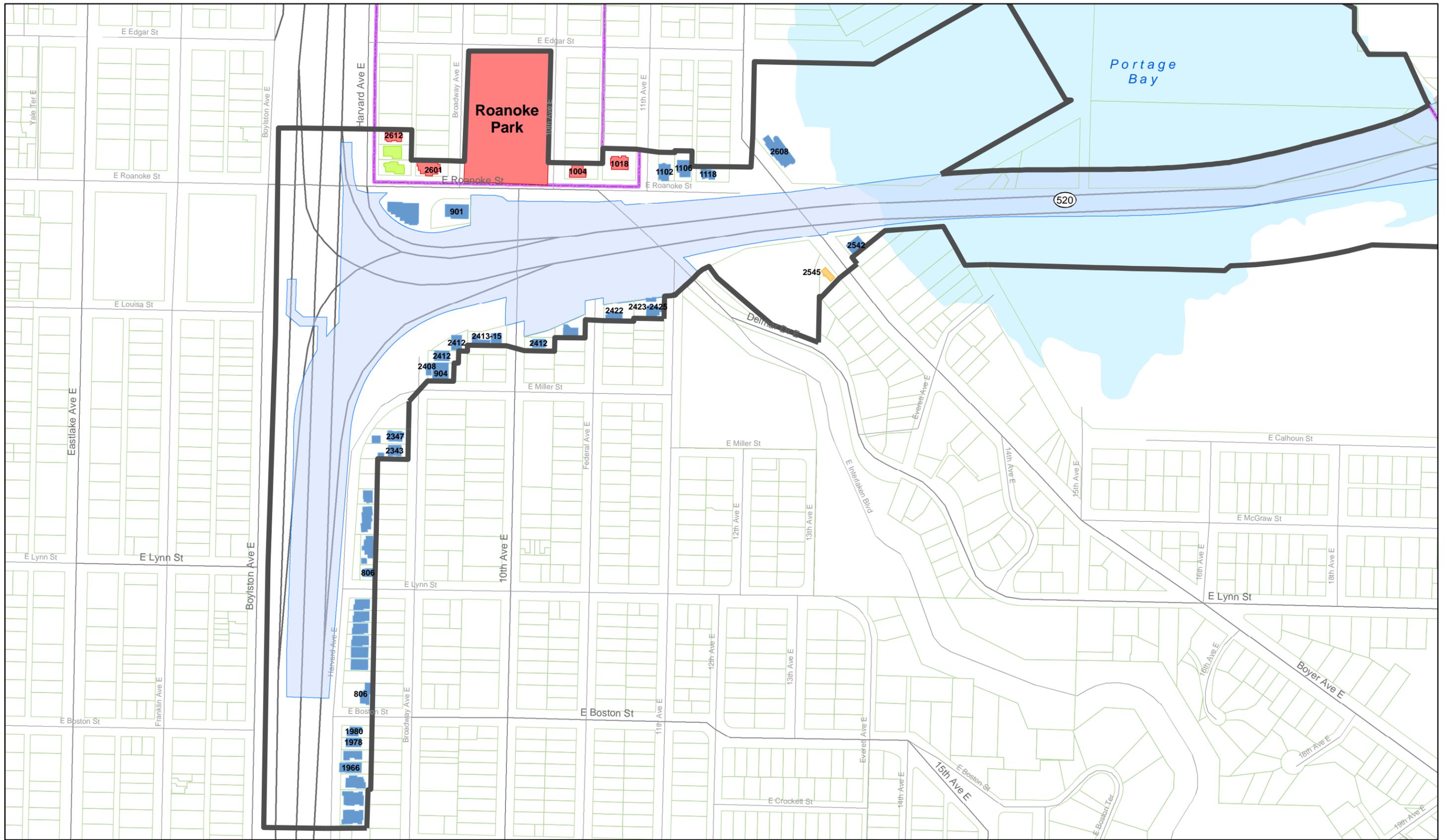
- Mr. Feliks Banel, Deputy Director for External Affairs
- Seattle Public Library – Seattle Room
- Kirkland Public Library
- Kirkland Historical Society: City of Kirkland Historical Survey
- Bellevue Public Library
- Bellevue Public School System
 - Mr. Brian Harding
- Bellevue Historical Society
 - Ms. Mary Ellen Piro and Ms. Katie Innes
 - Bellevue Historical/Cultural Survey
- NOAA Northwest Fisheries Science Center: Mr. John Herkelrath and Mr. Jim Peacock
- King County Road Services Division: Ms. Fennelle Miller
- DOCOMOMO US–Seattle Chapter (Documentation and Conservation of buildings, sites and neighborhoods of the Modern Movement)

The discipline team prepared a map of the APE based on the Geographic Information System (GIS) map layer showing the first building/property/tax lot facing the project corridor. The WSDOT has approved the APE map for the SR 520 Bridge Replacement and HOV Project. The DAHP has concurred with this APE definition (Attachment 3). The APE is shown on **Exhibits 5 (5a through 5d), 6, and 7 (7a through 7c)**.

The team conducted a field survey of those historic buildings and structures in the APE that predate 1961 that had not been previously surveyed and that had not already been designated as landmarks. The team also reevaluated buildings identified during earlier surveys to confirm that these buildings were still standing and retained their architectural integrity. Every building surveyed is noted by address on the APE exhibits.

Two historic districts were identified that were partially included in the APE. The Proposed Roanoke Park Historic District had been previously identified and was documented on file at DAHP. The proposed Montlake historic district was identified through field survey and archival research and recorded as eligible as part of this project. The





- Potentially Eligible Historic District
- Not NRHP Eligible
- NRHP Eligible
- Contributing
- Non-Contributing
- APE Line
- Parcel Boundaries
- 6-Lane Footprint

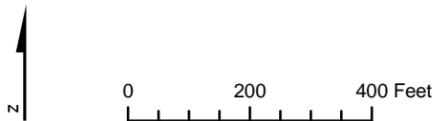


Exhibit 5a. Seattle Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project

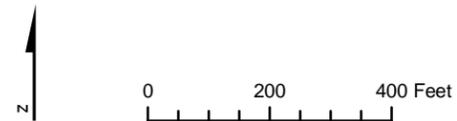
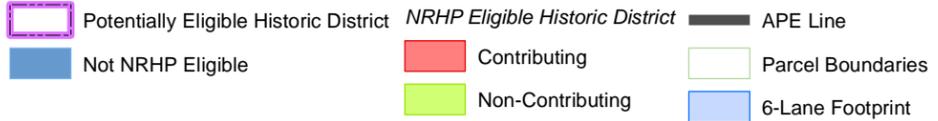
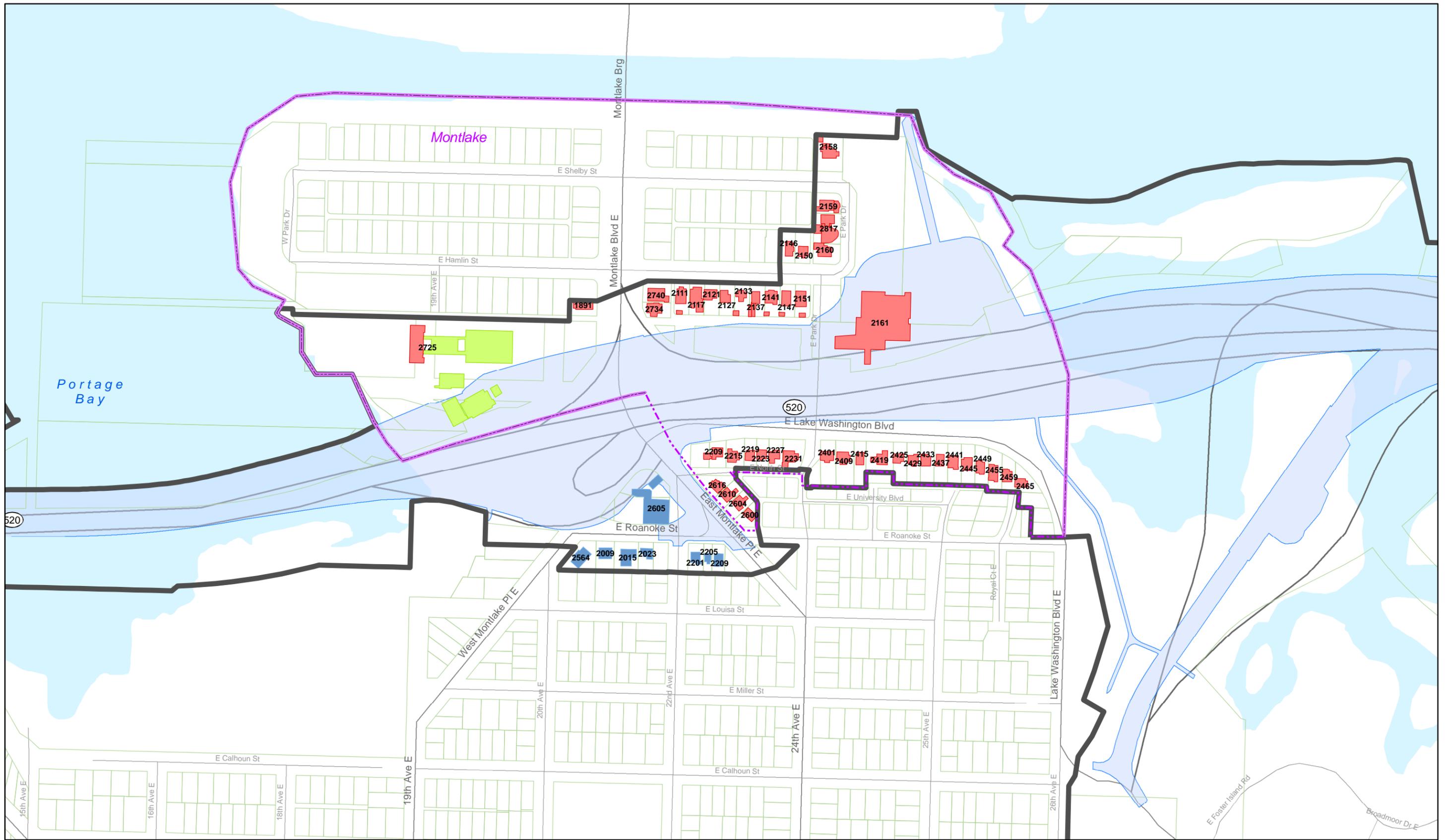


Exhibit 5b. Seattle Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project

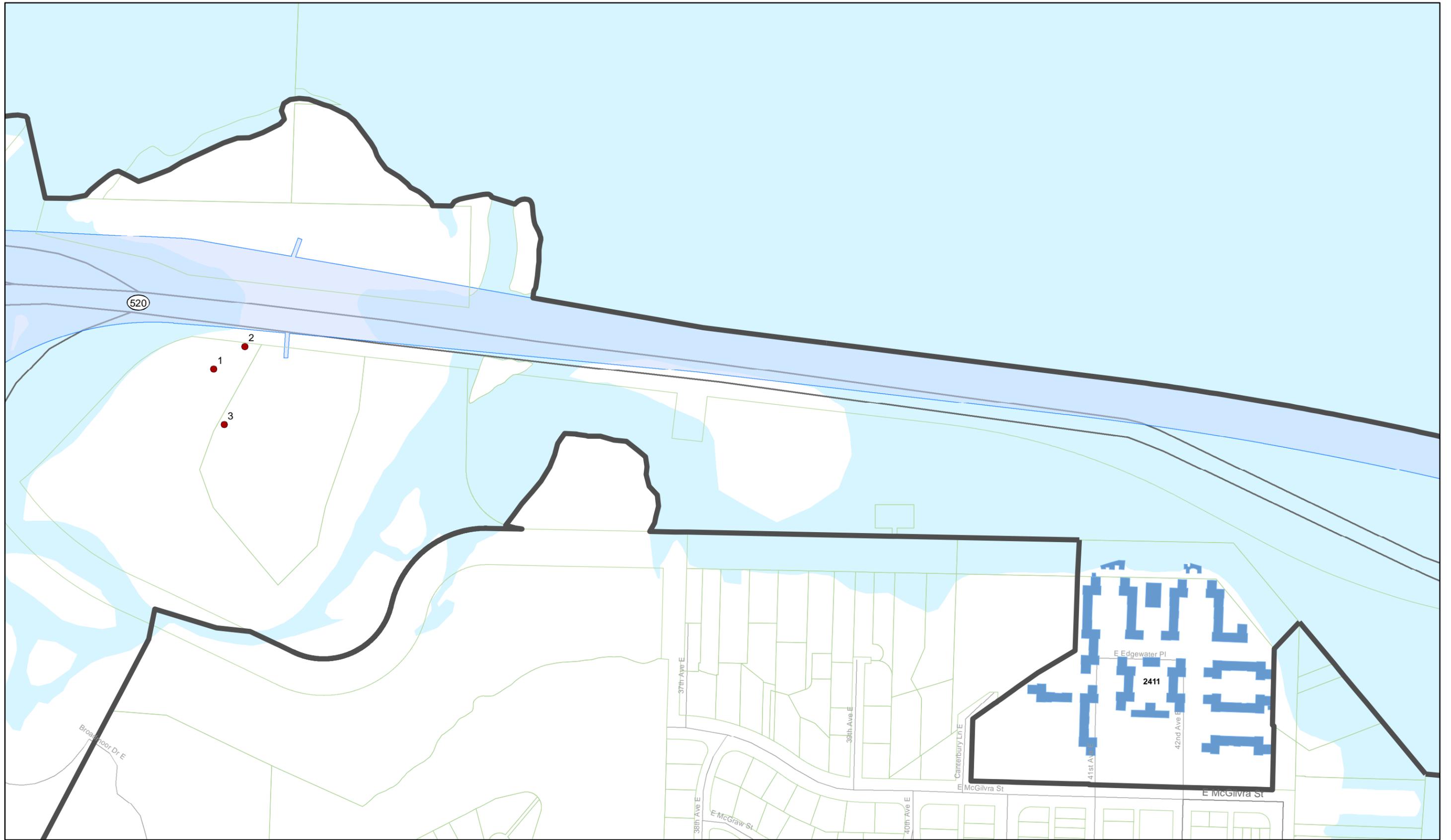
Proposed Roanoke Park Historic District meets the APE at the intersection of SR 520 and I-5. The APE includes the southern edge of this historic district, including three structures that face Harvard Avenue East, one that faces Broadway Avenue East, and two that face East Roanoke Street, as well as Roanoke Park itself. The proposed Montlake historic district is bisected by SR 520 and the project area. However, the APE includes only those resources that are adjacent to the project area, both north and south of SR 520, generally one tax lot deep. For the proposed project, not all properties in the historic districts were surveyed - only those resources that were within the boundaries of the APE were surveyed and recorded. For more information on these potentially eligible districts, see section below entitled *What eligible historic resources are in the Seattle project area?*

The cultural resources team photographed the buildings and entered data onto DAHP historic property inventory forms; these forms describe the building's key characteristics, construction date, and a brief history of uses. To collect information on these properties, the team searched city directories, city building permit files, and King County Tax Assessor property record cards. Historic photographs were included where available. The team evaluated the surveyed buildings in accordance with NRHP and WHR criteria. The team also evaluated those buildings in Seattle to determine their potential eligibility as possible Seattle local landmarks under the City of Seattle's landmark designation program. The team did not use the King County landmarks criteria because the APE did not include any unincorporated areas or Kirkland designated landmarks, where King County Landmarks Commission jurisdiction would apply. Finally, the team completed determinations of eligibility (DOEs) for each building that appeared to meet the criteria for the NRHP and/or the WHR, and entered them into the DAHP Access database.

What is the history of the area?

This section provides a brief overview of the natural, cultural, and historical background for the project area. It develops a context for the discussions regarding archaeological sites, traditional cultural resources, and historic buildings and structures that follow. The section on the natural environment focuses particularly on the geomorphology and landform history of the area. This is a synopsis of a more detailed study of geomorphology conducted for the proposed project





- Not NRHP Eligible
- Shovel Test Unit
- APE Line
- Parcel Boundaries
- 6-Lane Footprint

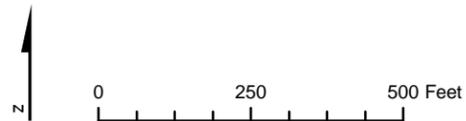
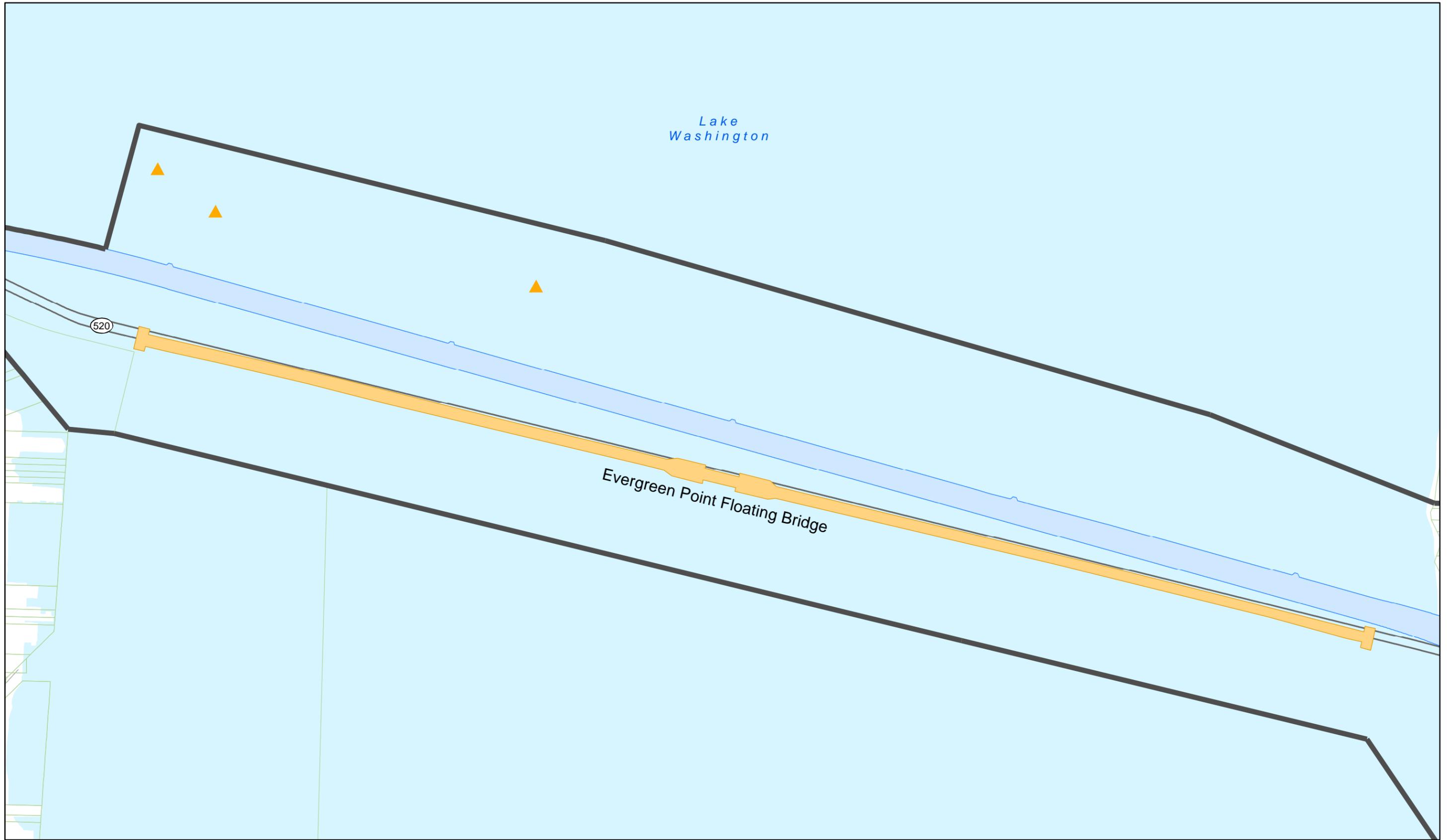


Exhibit 5d. Seattle Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project



- ▲ Identified Sunken Vessel
- 6-Lane Footprint
- NRHP Eligible
- Parcel Boundaries
- APE Line

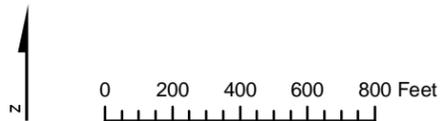
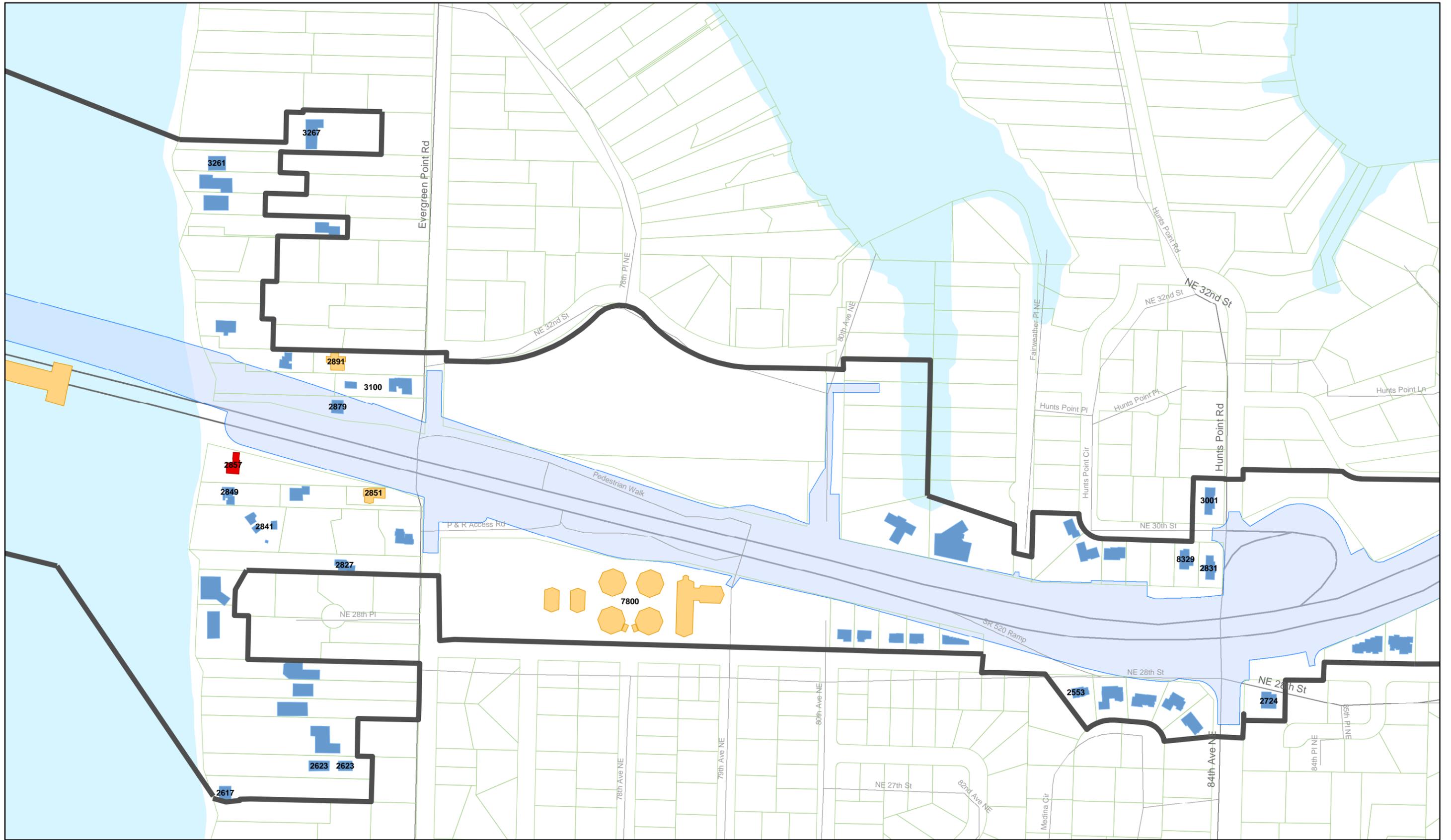


Exhibit 6. Lake Washington Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project



- Not NRHP Eligible
- NRHP Eligible
- WHR Eligible
- APE Line
- Parcel Boundaries
- 6-Lane Footprint

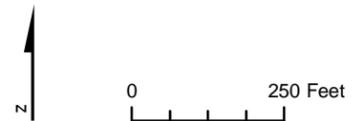
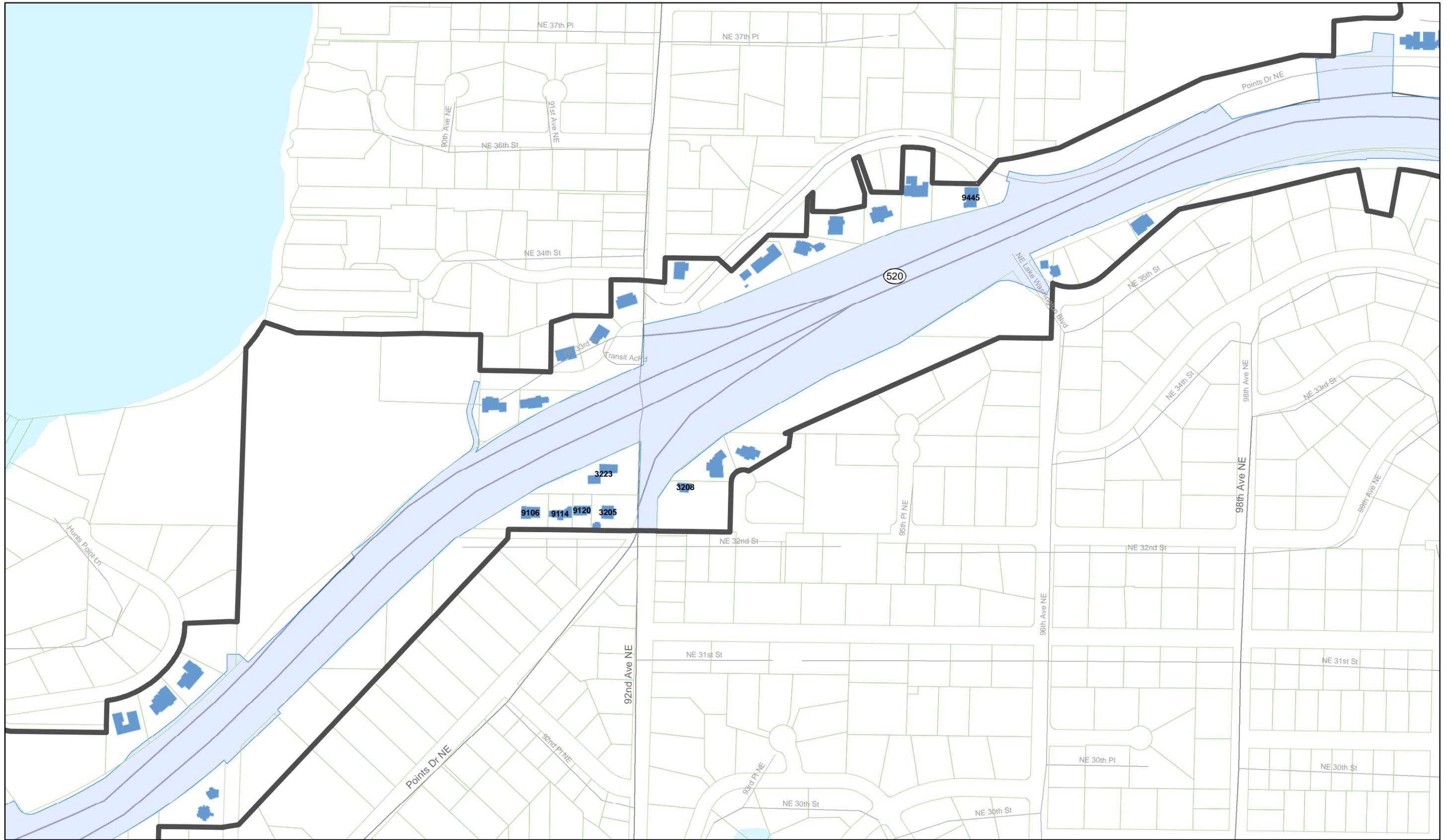


Exhibit 7a. Eastside Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project



- APE Line
- 6-Lane Footprint
- Not NRHP Eligible
- Parcel Boundaries

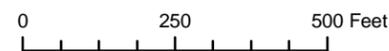
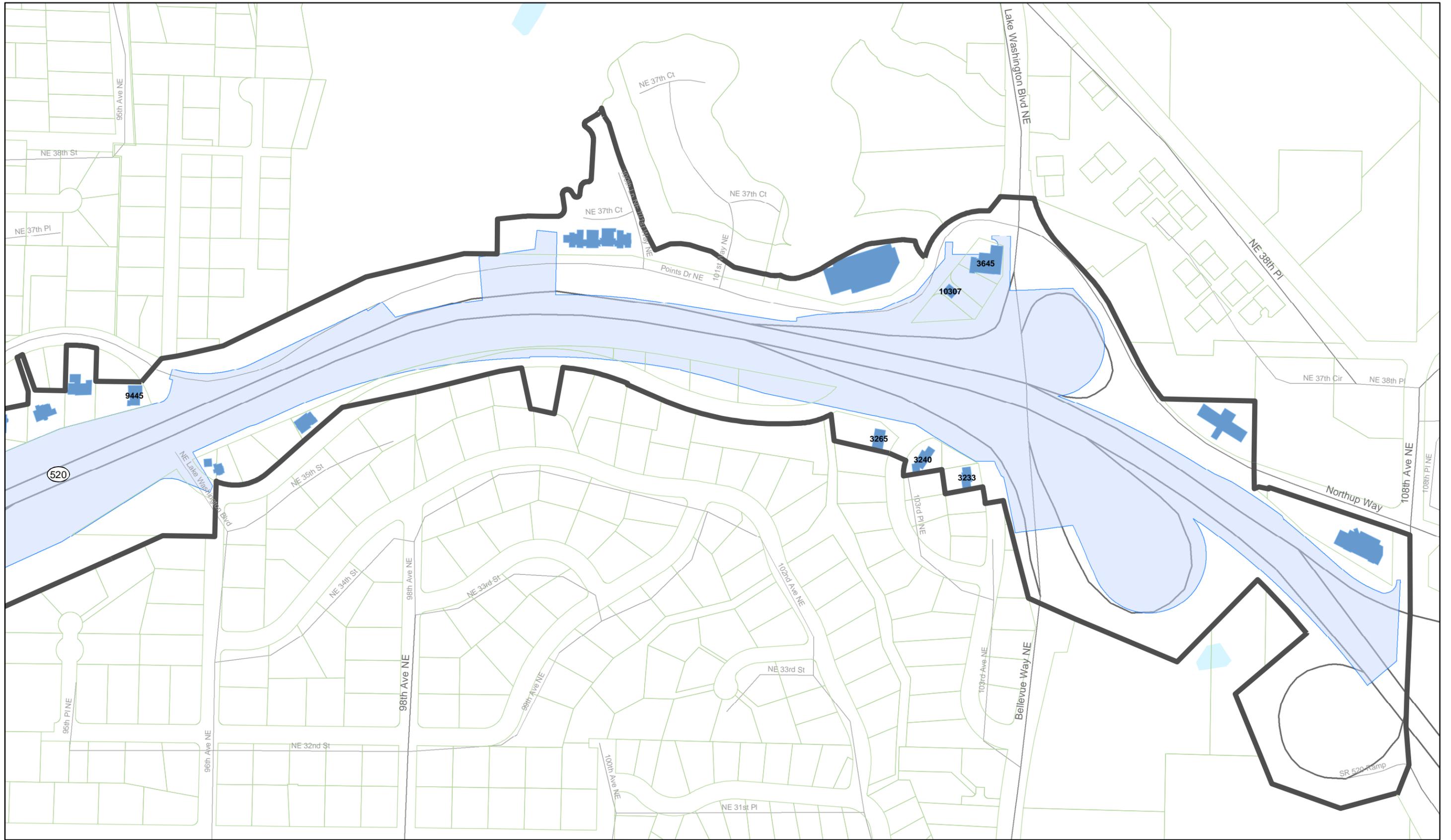


Exhibit 7b. Eastside Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project



Not NRHP Eligible
 Parcel Boundaries
 APE Line
 6-Lane Footprint

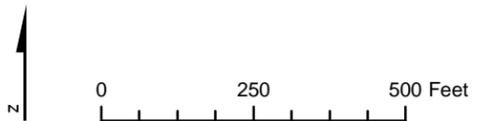


Exhibit 7c. Eastside Area of Potential Effect
 SR 520 Bridge Replacement and HOV Project

specifically to identify landforms that would be likely to contain surface or buried archaeological sites or traditional cultural resources and presents only the conclusions of this study. Please see Attachment 1 for a detailed summary of the study.

Natural and Geological Setting

The natural setting of the project area was significantly shaped by the regional climatic and geological forces. Extensive glaciation that took place during the Pleistocene Epoch (from 1.65 million until 10,000 years ago) is largely responsible for project area landforms, which in turn have shaped soils and vegetation patterns. There have been several significant changes to the hydrology of the project area due to human engineering during the past 150 years.

The cultural resources discipline team conducted an in-depth study of the geological history and geomorphic setting of the SR 520 project area (BOAS 2005). This study made use of geological, geomorphological, and geotechnical studies about Lake Washington and vicinity, and the APE specifically. They identified post-glacial landforms that were available to prehistoric people within the project area. They also examined how modern human modifications affected potential archaeological site locations.

Prehistoric Vegetation and Landforms

Throughout the Holocene, the shorelines, deltas, and intertidal zones of Puget Sound acquired their shape as sea levels rose and the land adjusted to the removal of glacial ice. Erosion leveled some of the irregular topography left behind by the last glaciation, while sediments filled the valleys and buried other topographic features. There has been a general rise in the water level of Lake Washington since the early Holocene. **Exhibit 8** shows project area water bodies.

Sediment cores from Lake Washington indicate that initial post-glacial vegetation was open parkland of lodgepole pine and spruce, grasses, and bracken fern, with scattered hazel and cedar. Between approximately 11,700 years ago and 7,800 years ago, vegetation included open forest with a mosaic of grasses, bracken fern, and scattered Douglas fir, alder, lodgepole pine, and hemlock trees. Cedar, alder, and willow were on wetter landforms, such as lake margins and alluvial floodplains. An increase in western red cedar pollen indicated the beginning of a cooler, moister climate regime around 7,800 years ago in the Lake Washington basin. A closed canopy forest with western



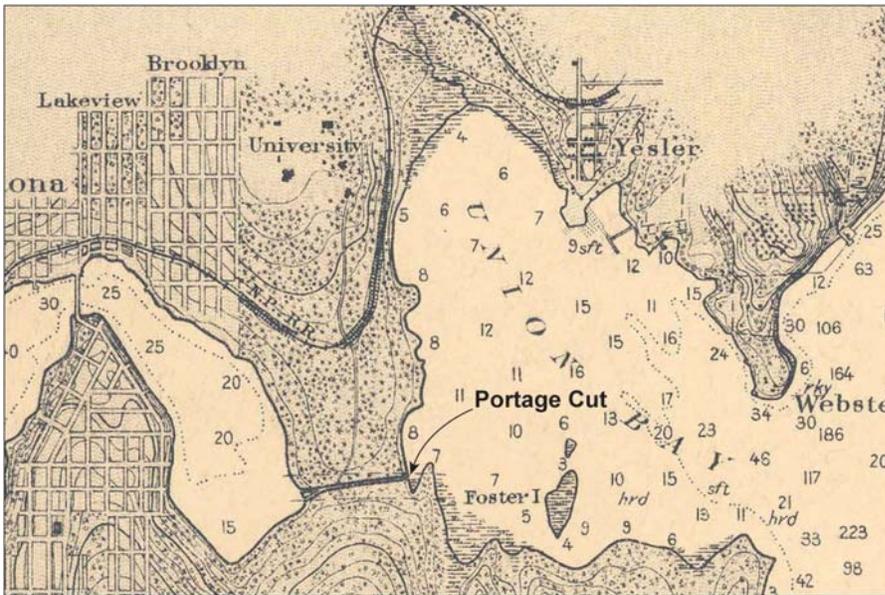


Exhibit 9. 1905 Geodetic Survey Map Showing Location of the 1885 Portage Cut and Lake Depth in Feet (Coast and Geodetic Survey 1905; University of Washington Libraries Map Collection).

Cut was completed between Union Bay on Lake Washington and Portage Bay on Lake Union in 1916. Lake Washington was gradually lowered a nominal 10 feet (3 meters) to the level of Lake Union between August and October 1916. The lowering of Lake Washington eliminated the lake's outlet to the Black River, and the Cedar River was diverted into Lake Washington.

The largest impact of the Montlake Cut on the project area was the lowering of lake elevation and the resultant exposure a broad wave-cut terrace around the perimeter of the lake. This resulted in the development of marshes in the southern portion of Union Bay. In other areas, this terrace is now occupied by waterfront homes. Foster Island significantly increased in size at this time.

The new canal required a channeled approach, so the U. S. Army Corps of Engineers dredged a straight channel between the Montlake Cut and the eastern edge of Union Bay. Dredging also continued in Union Bay after completion of the Montlake Cut, largely in soft mud and sand. Dredged material was deposited in shallow water about 75 feet beyond channel lines. Some of this dredged material was probably placed in shallow water north of the Arboretum or in the marshes that emerged in 1916 around Foster Island.

On the western side of Montlake, the southern edge of the APE is adjacent to the Montlake Playfield area, which lies along the southern



shore of contemporary Portage Bay. Filling in the 1930s created some of the original playfield area, and the playfield was again filled and expanded northward beginning in 1960. Fill spreading continued until the late 1960s, as material was brought into the park from projects around the Seattle area, including the original SR 520 project.

Low-lying portions of the project area were also used for landfill. Prior to the late 1960s, dump sites were mainly steep ravines, low-lying swampy areas, former borrow pits, and tidal areas. The largest was the Montlake dump that occupied a 200-acre swampy area on the north side of Union Bay. A smaller dump was in operation on the south side of Union Bay in the Washington Park Arboretum. The 1914/15 City Park Commissioner's Report mentions the establishment of a landfill in the marsh near Union Bay in the north part of the park. The City abandoned the dump in 1936.

Significant cutting and filling also occurred during the original construction of SR 520. Major areas of cutting for SR 520 construction in Seattle occurred on north Capitol Hill and through the Montlake neighborhood. Major cutting also occurred along the route of the old portage canal across Montlake. The old portage canal land has mostly been removed, except a segment near the NOAA Northwest Fisheries Science Center and MOHAI. The Arboretum lost approximately 60 acres of lagoon area to the SR 520 project. Great expanses of the marshes surrounding Foster Island were dredged prior to construction of the bridge footings to allow access for a pile driver. At least some of the dredged peat was cast to the side adjacent to the dredged areas. Dredging operations also removed some of the garbage fill material and underlying peat from the Miller Street dump site. Dredging extended up to the western and eastern edges of Foster Island. **Exhibit 10** provides maps showing areas of previous cutting and filling in the SR 520 corridor. **Exhibit 11** shows construction of SR 520 across Foster Island.

Natural and Geological Setting Summary and Conclusions

Geologically speaking, the project area landforms have been relatively stable throughout the Holocene, with the exception of the steeper slopes along the eastern side of Capitol Hill and the bluff along the eastern shore of Lake Washington. Surface deposits consist primarily of glacial outwash and till, with the exception of the Holocene peat deposits around Foster Island and alluvium in the eastern part of the project



area. There seems to have been minimal Holocene alluviation (deposits of sand, silt, or clay via moving water) in the outwash troughs between the till uplands, so that deeply buried sites are not expected in most of the project area. The thickest Holocene deposits in the project area consist of peat deposits in Portage and Union bays. Other Holocene deposits are at the eastern end of the project area in the old outwash valley that is now drained by Northup Creek.

The locations of shorelines in Lake Washington gradually changed during the Holocene due to glacial melting, isostatic rebound (upward movement of the earth's surface after the weight of Ice Age glaciers dissipated), tectonic (seismic), and other forces. Because of these changes, inundated archaeological sites may occur on old, inundated shorelines of Lake Washington. Contemporary engineering has also changed landforms and lake levels. Late prehistoric or historic sites that were formerly located on the shoreline of Lake Washington may occur on the shoreline that was exposed when the lake level dropped as a result of the Montlake Cut. In addition, some areas in the Union Bay area have been affected by dredging and filling for the Miller Street landfill, the Montlake Cut, and the original construction of SR 520.





Geologic map of the west Lake Washington project area (modified from Troost et al. 2005).



West of Lake Washington – Landfill areas according to Don Sherwood, Seattle Parks Department, modified from copy of map provided by Phil Woodhouse, personal communication.



West of Lake Washington – Disturbance within the SR 520 APE.



East of Lake Washington – Disturbance within the SR 520 APE.

Source: BOAS 2005: Figure 18, Appendix E and Appendix F



Exhibit 10. Maps Showing Geology, Recent Landfills, and Disturbed Areas
SR 520 Bridge Replacement and HOV Project



Exhibit 11. Aerial View West of SR 520 Construction Across Foster Island, in **Foreground** (Seattle Post-Intelligencer Collection, Museum of History and Industry Negative No. 1986.5.7596).

Prehistoric Context

The earliest occupation of Puget Sound occurred between 13,000 and 6,000 years before present (BP), beginning with the glacial retreat from the region. From 6,000 BP to 2,500 BP, the archaeological record shows differences between coastal and inland sites that probably reflect differing procurement strategies (marine versus terrestrial) and perhaps localized cultural development. From 2,500 BP to 250 BP, archaeological sites reveal further specialization in the focus of resource procurement: the full-scale development of the maritime cultures (recorded ethnographically) and land-mammal hunting and upriver fishing groups. From 250 to 150 BP (just prior to Euroamerican settlement), few sites have been examined.

Archaeological evidence of the occupation of the Seattle area by native peoples has been documented at several sites. The Duwamish No. 1 Site is located on the west shore of the Duwamish Waterway near the former mouth of the Duwamish River. It was occupied as early as 670 A.D. (approximately 1330 B.P.), with evidence of occupation to at least 1700 A.D. (approximately 300 B.P.) (NBBJ 1995:15-2). At the West Point Site Complex, archaeologists determined that its shell midden sites date



prior to 2,500 years ago and were below contemporary sea level, the first such sites identified in southern Puget Sound (Larson and Lewarch 1995:14-71). The West Point Site Complex was occupied for over 4,000 years and served as a salmon fishing station, a supplementation shellfishing area, a camping area, and a focal point for many local groups (Larson and Lewarch 1995:1-15). A brief summary of the prehistoric archaeological record in the vicinity is presented by Roedel et al. (2004:14-15).

Ethnographic Context

The SR 520 in Seattle corridor includes springs, streams, and freshwater lakes and bays. Salmon Bay, Lake Union, Lake Washington, and their tributary streams formed a series of connected waterways that could only be entered from Puget Sound at Shilshole, along a meandering course through fresh water lakes and overland portages. This area was inhabited by a group of Duwamish who were known to the white pioneers as the Lakes people; Lake Washington was first called Lake Duwamish in recognition of the aboriginal Duwamish natives. Other groups in the broader Seattle area included the Muckleshoot and Suquamish.

Duwamish

The Duwamish lived in a socially and economically interdependent network of villages located on Elliott Bay, the Duwamish River, the Black River, the Cedar River, Lake Washington, Lake Sammamish, Lake Union, and the lower White River. Like their Puget Sound neighbors, the Duwamish relied on salmon, shellfish, plants, and land game. They were adapted to a variety of environments, including tidal estuaries, large lake shores, intertidal and lakeshore river mouths, river confluences, sandspits, and saltwater bays. Each Duwamish village depended on salmon for its primary subsistence, and the people supplemented their diets with varying amounts of shellfish, land game, and other types of fish (Larson and Lewarch 1995).

A high density of winter houses characterized the ethnographic villages in the Duwamish River Valley, on Elliott Bay, and at the mouth of the Duwamish River. Fewer houses were scattered around Lake Washington, Lake Sammamish, and Salmon Bay. The Duwamish settlement pattern was based on their need to be close to large salmon runs that entered the Duwamish drainage and on being able to harvest shellfish that were available on the Elliott Bay tideflats.



Although salmon was the most important Duwamish food, a wide range of other resources provided a diverse diet and fostered the seasonal occupation of sites. While downriver and coastal villages emphasized marine resources, upriver peoples hunted game and waterfowl that could be found in the valley marshes. Winter village sites were the anchor for a local group and consisted of permanent living structures. In the warmer months, smaller groups moved to seasonal procurement camps that focused on specific resources. Thus, seasonal sites were reoccupied temporary camps used on a traditional basis.

American settlement in the 1850s disrupted Duwamish economic and social systems. Initial relationships between the incoming Euroamericans and the Duwamish were cordial. Some Duwamish provided packing and canoe transportation for settlers throughout the local river drainages. The Duwamish were essential to the survival of the settlers during the first 2 years, prompting David Denny to remark, “I don’t know what we would have done during the first two winters had it not been for the Indians” (Denny 1909). The Duwamish were an important part of Seattle’s early development because of their ability to provide food, labor, knowledge, and protection to the settlers. The Indians traded salmon, shellfish, and potatoes to the settlers for bread, fabric, beads, blankets, and other goods that lumber and cargo ships brought to the small settlement in Elliott Bay (Forsman et al. 1997).

As Seattle grew and the resources to support the Indian livelihood were eliminated, fewer Duwamish people were seen in Seattle. Shoreline filling eliminated eelgrass for herring and eliminated tideflats for shellfish. The Belltown prairie, which may have supported camas, was platted into streets and the marshy southern end of Lake Union (a prime waterfowl habitat) was also filled.

South of Seattle, the Indians maintained reasonable relationships with the white farmers of the Duwamish River Valley and provided a critical labor force at the height of the hop farm era. Many of the place names in the Seattle APE were provided by native informants working with anthropologists in the early twentieth century (Waterman 1922, Harrington ca. 1909).

The Lakes Duwamish cultivated and harvested the resources in the lake basins and drainages. Since waterways and canoes connected people, these interlinked lakes formed a cultural unit. The area contained marshes and woodlands abounding in foods, with freshwater streams



and lake providing abundant local and anadromous (spawning) fish. The Lakes people also used readily accessible inland areas around the lake margins and had several permanent and temporary settlements on all of the lakes and at the portage between Portage Bay and Union Bay. The isthmus between Portage Bay and Union Bay was used as a portage.

As reported to anthropologist T.T. Waterman by one of his native informants, Foster Island was formerly used as a graveyard. The Indians formerly hoisted their dead into trees and the informant remembered when the trees were full of boxes containing skeletons. The lashings of these boxes gave way from time to time, and the ground at that time was covered with bones that had fallen down from the trees. These bones were removed when the Washington Park Arboretum was developed (Hilbert, et al. 2001:103). The use of islands as burial areas is not uncommon in the Puget Sound region. Often these were small islands near major settlements. It appears that in some cases the dead were placed in coffins or canoes and suspended in trees. Where trees were not available, small burial houses or scaffolds for canoes were constructed and the dead were placed in these. After a time, the desiccated bones were gathered and interred in the ground, at the same or other location. The fact that bones were falling to the ground appears to relate to the period in early contact times, when many people died of introduced diseases and interment was not conducted.

According to documents detailing the history of the Washington Park Arboretum and Foster Island (Plummer 1991 and Ross Ion 2003), Foster Island no longer contained any remains of graves when development of the Arboretum began. It may be that the bones were removed during logging in the 1890s. The primary source documents that actually stated what had happened to the human skeletal remains described by T.T. Waterman could not be found (BOAS 2005:18).

As Seattle expanded north in the latter part of the 1800s, lands in the Lakes people area were developed. The donation claims of Carson Boren, Arthur and David Denny, and William Bell encompassed downtown Seattle. David Denny's experience with native people differed from that of other Seattle pioneers. David stayed alone at Alki Point during the winter of 1852, where he lived surrounded by Lakes people. He learned to speak their language as well as Chinook jargon, which was used for trading. In 1853, David Denny claimed areas immediately north of downtown including parts of Lake Union and



Portage Bay. In this manner, he and his immediate family protected the homes of Indians who settled on his claims and provided occupations for them; he also helped them buy property.

As Seattle developed to the north, many Lake Duwamish people moved or were forced out. The newly incorporated town of Seattle banned native urban residence in 1865, though Indians continued to live and work in the city (BOAS 2005:25). The Indian Homestead Act of 1875 allowed Indians to own land, provided they renounced tribal allegiance and lived like whites.

During the late 1800s, two Lakes Duwamish families were particularly prominent in the history of the Lake Union area, the family of Doctor Jim Zakuse and that of John Cheshiahud (BOAS 2005:19). The Zakuse family lived on the north shore of Portage Bay at about what is now the southwestern portion of the University of Washington campus. John Cheshiahud (known as Old John, Indian John, Lake John, Denny John, Chodups John, Lake Union John, or in anglicized Whulshootseed language: *Cheshiahud* or *Shiahud*) was the most familiar native among the shores of Portage Bay. He owned 5 acres of land across from the university, on the southwest side of Portage Bay, at or near the east end of Shelby Street on land purchased or provided by David Denny.

Many Duwamish people from the Lake Union, Portage Bay, and Lake Washington areas went to Muckleshoot (the oldest reservation in the region) or to the Suquamish, Tulalip, Lummi, or other reservations where they had kin. Many joined with the Snoqualmie on Lake Sammamish at Monohan and elsewhere in the Snoqualmie River drainage. None of them could stay along the lakes due to the ever-expanding Seattle, prejudice and maltreatment, lack of native foods, and the increasing tax-burden on their lands (BOAS 2005:39).

Muckleshoot

The term Muckleshoot is a historic reference to a prairie where the Muckleshoot Indian Reservation is located, and is now used to describe the Green River (*Skopamish*) and upper White River (*Smulkamish*) aboriginal groups who had winter homes along these river drainages. The Green River and upper White River Indians had such strong cultural and social connections to the Duwamish on the Black River and the lower White River that a definition of tribal divisions in this area is not entirely certain (Larson and Lewarch 1995). These Indians depended mostly on salmon for their subsistence, and salmon fishing



was done using fish traps (or weirs). They also hunted deer, elk, and other game because their winter homes were near the upriver hunting grounds (Smith 1940). The Indians who lived upriver would often travel along overland trails or take canoe trips on the rivers down to the shellfish beds located on Elliott Bay and in the area south of Alki Point to Browns Point (Larson 1993).

Suquamish

The Suquamish occupied the western shores of Puget Sound on the Kitsap Peninsula. The lack of a major river in their territory required the Suquamish to expand their resource procurement activities to areas beyond the waters near their winter homes to Elliott Bay, Alki Point, and Mukilteo (Wandrey 1975).

The Suquamish had social, economic, and spiritual connections to the Duwamish through marriage alliances; shared fishing grounds; and shared cooperative ceremonial activities (Haeberlin 1918, Lane 1987). Seasonal shellfish gathering was an important part of the Suquamish subsistence strategy that necessitated special trips to productive beaches to procure shellfish for winter storage and trade.

Historic Context

The Oregon Treaty of 1846 defined the boundary between the U.S. and Canada at the 49th parallel, spurring Euroamerican settlement throughout the Pacific Northwest. The Oregon Territory was created as part of the United States shortly afterward, in 1848.

The Donation Land Claim Act of 1850 and the Homestead Act of 1869 further spurred population growth in the area, luring settlers with the promise of free land. In the fall of 1851, a group of Midwestern settlers, led by Arthur Denny, arrived at Alki Point in present-day West Seattle. Later that year, they relocated to the east and named their settlement for the local Native American leader, Chief Seattle (Dorpat n.d.). In 1853 the Washington Territory was formed from a piece of the Oregon Territory.

Seattle and Lake Washington

The early economy of Seattle was based on timber and coal. The opportunities available brought more and more settlers. By 1883, Seattle had grown to over 3,000 citizens, making it the second largest municipality in the Washington Territory (Dorpat n.d.).



The introduction of cable cars and streetcars beginning in the 1880s fed the push for residential development beyond the traditional city center, fueled by intense population growth. The Klondike Gold Rush in 1897 added to the growth of Seattle, and the Alaska-Yukon-Pacific Exposition over the summer of 1909 showcased the city and celebrated its achievements and economic potential. Designed by the Olmsted Brothers, it was held on the grounds of the University of Washington. Part of the plan remains today, incorporated into the current campus. By 1910, a mere 60 years after its founding, the city had grown to 230,000 people (Dorpat n.d.).

In the historic era, modifications to the land changed lake levels in the project area. Cuts were made through the Montlake isthmus to create a water passage between Lake Washington and Puget Sound. The early cuts were made to transport logs from the lake to Puget Sound and were shallow. The Montlake Cut was completed in 1916 to provide a western outlet and direct passage to Puget Sound. As a result of the Cut, Lake Washington was lowered about 9 feet and the Portage Bay and Union Bay marshes either dried out or were covered with fill.

The Seattle portion of the project area mostly developed in the early decades of the twentieth century. The area now known as Roanoke Park was platted as part of the 1890 Denny-Fuhrman Addition to the City of Seattle by the original developers, David T. Denny and Henry Fuhrman, and it encompassed all the land north of Roanoke Street to Lake Union. By the early 1890s, David Denny had established a streetcar line through the area along Eastlake Avenue that connected with downtown Seattle and points north, facilitating the residential development of the neighborhood. The City of Seattle acquired the land that is now Roanoke Park in 1908 and developed it as a park in 1910 (Sherwood 1974). The residences of the Roanoke Park neighborhood were mostly constructed between 1908 and 1912.

East across Portage Bay, the Montlake neighborhood was developed about the same time, starting in 1909. The main era of construction was the 1910s through the 1930s. The area south of SR 520, originally known as Interlaken, was developed separately from, though concurrently with, the area north of SR 520. Two brothers, Calvin and William Hagan, with partner James Corner (Sherwood 1974) seem to have originated the name “Montlake” as they developed the Montlake Park Addition, the section between the lakes defined by East Shelby and East Hamlin Streets, now north of SR 520. John Boyer of the Interlaken Investment Company was developing the southern part of the



neighborhood, the section now on the south side of SR 520, at the same time. He preferred the name Interlaken but later agreed to Montlake as the name for the entire neighborhood (Gould 2000), and it is known as such today.

Montlake is bordered by the Washington Park Arboretum, one of the city's first parks, created from 1900 - 1904. Originally owned by the Puget Mill Company who had planned to develop it along with the adjacent area that is now known as Broadmoor, the first piece of it was deeded to the city in 1900. By 1916, the park totaled 165.22 acres (BOLA and Kiest 2003). In March 1924, Washington Park was officially set aside as a botanical garden and arboretum, and in 1925, the "Old Government Canal" property was leased to the city and added to Washington Park. The "Old Government Canal" property was mostly taken for SR 520 in 1963.

Eastside

World War II brought another wave of growth to the Seattle area, particularly with the influx of workers at Boeing Field. This began the intense growth of the Eastside, east of Lake Washington. Once only reachable by ferries, the opening of the Lake Washington Floating Bridge (later renamed the Lacey V. Murrow Bridge, the present-day route of the I-90 bridge) in 1939 made the Eastside accessible and facilitated its growth, first as a Seattle suburb and later for the rapid development of Bellevue.

The second span across Lake Washington, four miles north of the Lacey V. Murrow Bridge, was the Evergreen Point Bridge. As part of the original SR 520 project, construction on the Evergreen Point Bridge began in August 1960 and officially opened in August 1963 (Hobbs and Holstine 2004). It was officially renamed the Governor Albert D. Rosellini Bridge in 1988 (Mauldin n. d.). At the time of its construction, the Evergreen Point Bridge was the largest floating span in the world at 1.4 miles long. With the sinking of the original Lake Washington floating bridge, it became the oldest remaining floating bridge across Lake Washington, exemplifying an engineering feat of outstanding proportions.

The first homesteaders in what would become the Eastside communities of Medina and Bellevue were William Meydenbauer and Aaron Mercer, who settled there in 1869. During the 1870s, Seattle businessmen and real estate investors began to buy property along the Medina shoreline. The timber industry arrived when logger Albert King



and his brothers homesteaded nearby Groat Point and Eastland in 1875. In 1882, Isaac Bechtel Sr. bought land near current downtown Bellevue and began a logging operation. By 1890 the area boasted a sawmill, shingle mills, and a small community. Medina became known as the Gold Coast due to the number of wealthy citizens who had built large homes along the shoreline there.

The area became a haven for berry growing and fruit orchards. Bellevue was platted in 1904, and was by then the center for berry growing in King County (Stein 1998). Ten years later, Medina Heights was officially named and platted in 1914 (Rochester 1998). By 1929, Medina boasted a population of 900 in an enclave that was almost exclusively residential. Bellevue, on the other hand, was poised for major commercial growth.

Throughout the first half of the twentieth century, farming remained the most important industry on the Eastside. But the opening of the Lake Washington Floating Bridge in 1939 changed Bellevue from a small rural community to a Seattle suburb. In 1946, developer Kemper Freeman opened the first shopping mall on the Eastside, Bellevue Square, in downtown Bellevue, and it spawned commercial growth all around it (Stein 1998). Bellevue incorporated in 1953 with a plan to grow into a prosperous city. The opening of the Evergreen Point Bridge in 1963 further fueled the development of the Eastside, and Bellevue reaped many benefits, becoming a commercial center on its own, no longer merely a bedroom community for Seattle. “Of all the cities on the Eastside, Bellevue has seen the most growth in the shortest amount of time” (Stein 1998). While Bellevue embraced this intense growth, and continues to do so, Medina has focused instead on remaining a quiet residential community and becoming one the most affluent in the region.

What historical and/or cultural resources are in the project area?

This section discusses the results of the cultural resources studies conducted for the proposed project and presents those results for each of the three project areas: the Seattle, Lake Washington, and Eastside project areas. The study results are discussed for each of the categories of cultural resources within each of the project areas.



The study results show that there are no known archaeological resources in the SR 520 corridor, although there are areas of high archaeological sensitivity, as defined by the geomorphological study as well as ethnographic information. There are also no known traditional cultural properties in the corridor, although Foster Island required further investigation of its potential significance as traditional cultural property. There are two NRHP-eligible historic districts partially within the APE, each with several contributing properties in the APE. There are also several buildings or structures that are individually eligible for listing in the NRHP or WHR.

Seattle

What archaeological sites are in the Seattle project area?

No recorded archaeological sites are within the Seattle APE; however, Foster Island is a known area of cultural significance. The cultural resources discipline team determined that the following sites are areas of archaeological high probability, both for the presence of prehistoric Native American archaeological sites and also for historic period Euroamerican archaeological remains (see **Exhibits 12 and 13**).

The northern portion of the Arboretum near SR 520 is located at a natural break in Seattle’s topography, a narrow isthmus between Lake Washington and Lake Union. This area served as an early portage between the two lakes. A small creek flowed along the isthmus from Lake Washington to form a swamp at the east edge of Portage Bay. SR 520 now occupies the site of the creek outlet and an early log channel. The ship canal is about 150 to 200 yards to the north (BOLA and Kiest 2003).

Exhibit 12. Summary Description of Archaeological High Probability Areas with Supporting Ethnographic Data in Seattle Project Area

Project Segment	Ethnographic Data	Archaeological Potential	Reference to maps and illustrations
Portage Bay	Two Indian homesteads associated with ethnographic place names are located on either side of Portage Bay. The Chehsiahud settlement area is located within the SR 520 APE and extends south to the southernmost extent of Portage Bay.	It may or may not be possible to determine whether any homestead or prehistoric deposits are present (BOAS 2005:94)	BOAS (2005: Fig. 3, #113; Appendix B)



Exhibit 12. Summary Description of Archaeological High Probability Areas with Supporting Ethnographic Data in Seattle Project Area

Project Segment	Ethnographic Data	Archaeological Potential	Reference to maps and illustrations
Montlake Portage	Used extensively by several tribes. Excavation across the portage and fill placed in the vicinity has likely obliterated evidence of Indian use of the portage and its shorelines. It is unlikely that the portage area retains cultural significance except as a reference to travel routes in the 1800s. There is no indication that it would meet TCP criteria. There is no evidence in the documented record of continued access to or use of Union Bay by Lakes Duwamish descendants, and there is no indication it would meet TCP criteria (BOAS 2005:95).	Union Bay was affected first by lowering Lake Washington, then by placement of large quantities of fill in the former bay. Both events eliminated Duwamish fishery use. The extent to which either event affected possible cultural deposits is unknown (BOAS 2005:95).	BOAS (2005: Appendix B, F, H)
Union Bay	Used extensively. Material remains would have been stakes and nets, fishtraps, animal traps, tools, and fire-modified rock. Alterations include development of Montlake Cut, lowering Lake Washington, landfilling, dredging, Arboretum development, and SR 520 construction. Former marsh areas south of SR 520 and in the APE are part of the Arboretum or in the Madison Park residential neighborhood. There is no evidence in the documented record of continued access to or use of the area by Lakes Duwamish descendants (BOAS 2005:96).	There is potential for the discovery of archaeological deposits (BOAS 2005:96). Historic sites and deposits related to waste disposal are highly likely to be encountered within the project area in the vicinity of the former Miller Street dump (BOAS 2005:96).	BOAS (2005:Fig. 3, #111, Appendix B, F, H)
Foster Island	Foster Island is the only location in the APE that is of considerable interest and concern to all tribes with members that trace ancestry to the Montlake portage area and to two Lakes Duwamish families who most recently lived there. The location appears to meet at least some criteria as a TCP (BOAS 2005:96).	Foster Island was initially used as a cemetery; as such it is possible that the island could retain buried human remains, although the island has been severely modified. The central portion of the island was significantly altered by SR 520 construction, but areas north and south of SR 520 could potentially contain intact archaeological deposits at or near the ground surface (BOAS 2005:96).	BOAS (2005:Fig. 3, #110, Appendix B)
		BOAS made a preliminary evaluation of the culturally important Foster Island; evaluation of the property as a TCP will follow in a separate document after additional study and continued consultation with the tribes and SHPO (BOAS 2005:99)	



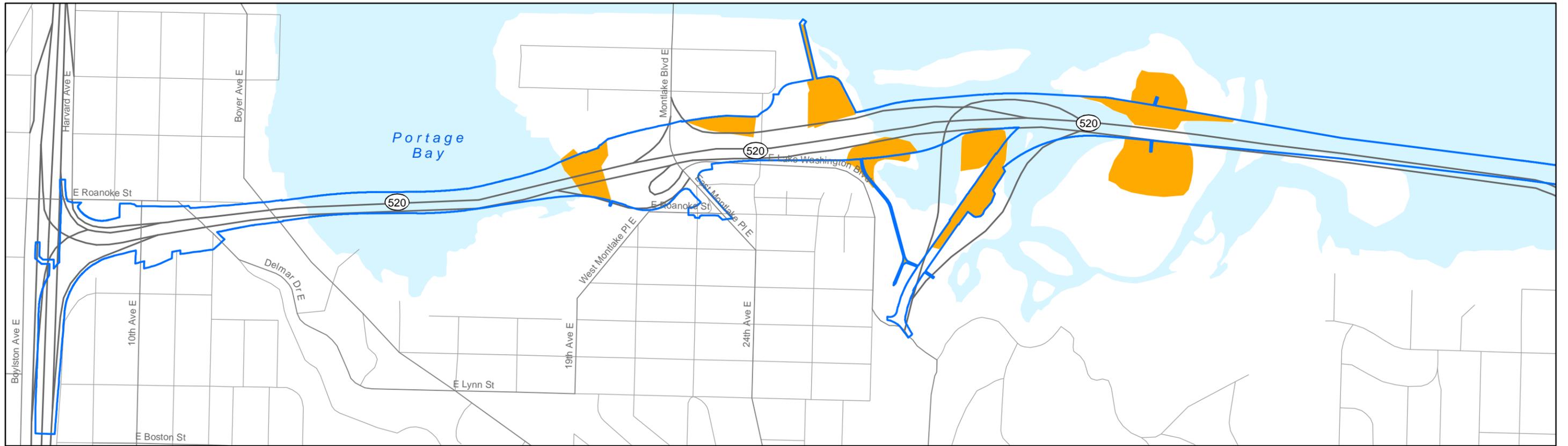
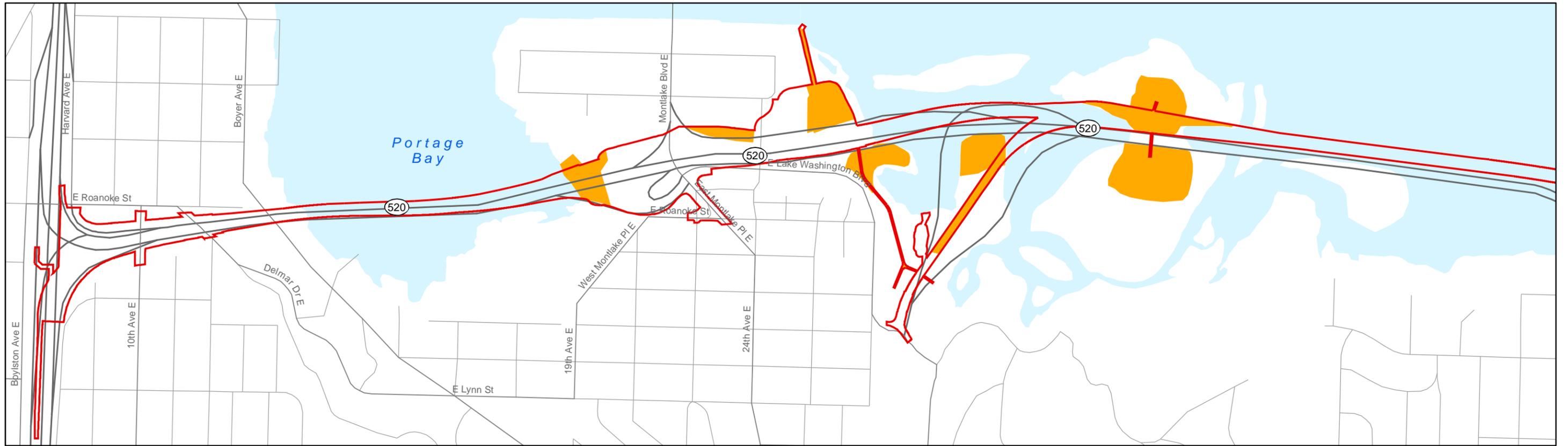
The shoreline area is associated with early Indian settlement. Records suggest that an Indian settlement was once located near the present-day University of Washington power plant (Buerge 1984). The narrow piece of land between the two lakes was a strategic location for Native Americans. The Duwamish traveled the route and called it *Sxwacugwit* or “s-hool-WEEHL” (“portage” or narrow passage in Puget Sound Salish language). This portage was critical to the Indians, just as it was for later settlers, because it led from the coast to lakes and river systems. A Duwamish village was located east of the mouth of the creek, which was called *Slalal*, or “fathom.” In presettlement times, Foster Island was reportedly an Indian graveyard. The burial methods, however, involved initially placing remains in trees, followed by collection of the remains for reburial elsewhere. For this reason, no remains have been found (Plummer 1991). See more discussion about the graveyard in the discussion about the Duwamish Tribe earlier in this report.

Landfills were developed at the north end of the Arboretum in the marsh near Union Bay. When SR 520 was built in 1961, a dump for bottles was found dating from 1904. This site was located on the knoll east of where the Arboretum creek would have entered Lake Washington before the lake was lowered (see the following paragraph), and at the informal end of Montlake Boulevard before it was extended to the University of Washington. The bottle dump may have been part of a sanitary landfill with access off Miller Street (which later came to be known as the Miller Street Dump) that was used until 1936 (BOLA and Kiest 2003).

In 1916, the temporary U.S. Army Corps of Engineers’ lower coffer dam (built as part of the cut that would link Lake Washington and Union Bay) unexpectedly eroded. The water level of Lake Washington dropped quickly by 9 feet, exposing new shore lands. This resulted in expansion of shoreline properties, including portions of Washington Park. Foster Island increased in size after the water level fell in Lake Washington. The island was also used as a dump site for soil excavated from the Montlake Cut (BOLA and Kiest 2003).

After lowering of the water level in Lake Washington in 1916, 30 acres of land at the north end of the Arboretum became a marsh that extended northward 1/4 mile to the new shoreline. Except for elevated spots like Foster Island and the Miller landfill, the area had little elevation relief and was overgrown with willows, blackberries, tall grass, and cattails. In 1938-1939, the Puget Sound Bridge and Dredging Company dredged out over 1-1/4 miles of lagoons at the north end of





- Archaeological High Probability Area
- 4-Lane Footprint
- 6-Lane Footprint

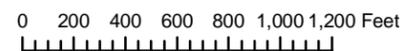


Exhibit 13. Seattle Archaeological Probability Areas
 SR 520 Bridge Replacement and HOV Project

the Arboretum. The dredged peat material was overlain on the banks and some of the material was graded off by bulldozer and hand graded by WPA crews (BOLA and Kiest 2003).

Shovel Probes

During a field survey conducted by CH2M HILL for the previous TransLake SR 520 Project (the predecessor to this project), three shovel probes were hand excavated on Foster Island on December 12, 2002, in locations shown in **Exhibit 14**. All three shovel probes were hand excavated and dry screened through 1/8-inch hardware cloth to check for the presence/absence of archaeological remains. All three shovel probes appear to be located within Bellingham silty clay soils (Gessel 1966:70). The results of this survey are summarized in **Exhibit 15**. Backdirt from several rodent holes found in the area near Lake Washington Boulevard contained historic debris (cut bone; charcoal; and fragments of brick, old glass, and porcelain). This debris appears to confirm the presence of refuse deposited as part of the Miller landfill.

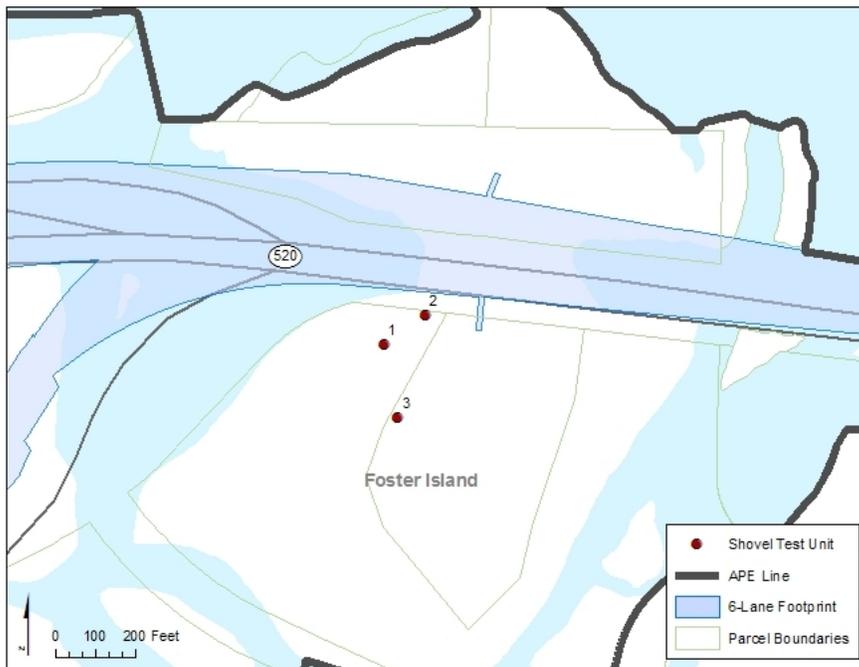


Exhibit 14. Exploratory Shovel Probes for Archaeological Remains on Foster Island



Exhibit 15. Summary of Archaeological Shovel Probes on Foster Island

Shovel Probe No.	Dimensions and Depth	Sediment Description	UTM Location	Cultural remains
1	50 cm diameter; 90 cm deep	Surface - 22 cm below surface: organic soil, duff. From 22 - 80 cm below surface: tan-brown colored mottled clayey silt. From 80 - 90 cm below surface; gray colored compact coarse-grained silt. Excavation stopped at 90 cm below surface due to rock.	N/A	Culturally sterile
2	50 cm diameter; 84 cm deep	Surface - 45 cm below surface: light tan colored coarse-grained silt. From 45 -84 cm below surface: light tan colored, more compact silt with increasing amounts of pebbles and gravels. Excavation stopped at 84 cm below surface due to rock.	N/A	Culturally sterile
3	50 cm diameter; 64 cm deep	Surface - 17 cm below surface: dark organic soil with leaf duff and small gravel. From 17 - 64 cm below surface: light tan colored, orange-stained silt with small pebbles. Excavation stopped at 64 cm below surface due to rock.	N/A	Culturally sterile

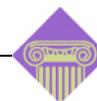
cm = centimeter; N/A = not applicable; UTM = Universal Transverse Mercator (a coordinate grid system)

What traditional cultural resources are in the Seattle project area?

No traditional cultural resources have been identified in the Seattle project area. There are several locations of ethnographic interest, however, and one property that may qualify as a TCP (Foster Island), with additional documentation. To qualify as TCPs, sites must meet the criteria for listing in the NRHP (36 CFR Part 60). A TCP is defined in National Register Bulletin 38 as a property that is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that are rooted in that community's history, and are important in maintaining the continuing cultural identity of the community (Parker and King 1990).

Like any other historic property, a TCP must meet one or more of the NRHP criteria (described in the following subsections) and have integrity. However, integrity of condition should be evaluated from the perspective of those who value or use the property (U.S. Department of the Interior 2001).

The ethnographic record for the Seattle project area is particularly detailed and this area was densely populated prior to non-Indian



settlement. This is partly because two prominent Duwamish families lived in the area well into the twentieth century. Several places are culturally important to the Lakes Duwamish people in the lowland areas between I-5 and Lake Washington (BOAS 2005: Appendix B). Two Indian homesteads associated with ethnographic place names are located on either side of Portage Bay. The Chehsiahud settlement area is within the SR 520 APE and extends south to the southernmost extent of Portage Bay. It was located on property above a marsh or wetland (BOAS 2005: Figure 3, #113; Appendix B). The cultural resources team could not determine just how extensively the Chehsiahud area has been modified in the past, although modification of the area through residential, roadway, and SR 520 construction is considerable. It may or may not be possible to determine whether any homestead or prehistoric other cultural deposits are present at this location.

The Chehsiahud family commemorative monument plaque at the foot of Shelby Street is probably not the exact location of the original homestead. The plaque commemorates local historical events and suggests that people of Duwamish descent still acknowledge the area as part of their history and actively participate in relating that history within their community. Although Lakes Duwamish descendants visit the location on a regular basis, there is currently no evidence that this location would otherwise meet the criteria for a TCP.

The Montlake portage area was an important resource procurement area and meeting place for several tribes as they traveled between Puget Sound and the Cascade Mountains (BOAS 2005: Appendix B). Activities took place along the shorelines, stream outlets, wetlands, and prairies nearby. This area has been extensively modified by construction since the mid-1800s (BOAS 2005: Appendix F). Excavation across the portage and fill placed in the vicinity have likely obliterated evidence of Indian use of the portage and its shorelines. It is unlikely that the Montlake portage area retains cultural significance except as a reference to travel routes used in the 1800s (BOAS 2005: Appendix H). BOAS (2005) found no indication that it would meet the criteria of a TCP.

Union Bay was affected first by the lowering of Lake Washington and then the placement of large quantities of fill in the former bay (BOAS 2005: Appendix F). Both events resulted in the elimination of Duwamish use of this area as a fishery. The extent to which either event had any effect on possible cultural deposits in the fishtrap locations is not known. No evidence exists in the documented record of continued



access to or use of this area by Lakes Duwamish descendants (BOAS 2005: Appendix H). BOAS (2005) found no indication that it would meet the criteria of a TCP.

Foster Island is the only location within the SR 520 APE that is of considerable interest and concern to all tribes with members who can trace ancestry to the Montlake portage area and to the two Lakes Duwamish families who most recently lived there. This location appears to meet at least some criteria as a TCP.

As discussed earlier, Foster Island (BOAS 2005: Figure 3, #110; Appendix B) was initially used as a cemetery by people living nearby on both sides of the Montlake portage and by travelers through the area. As such, it is possible that the island could retain buried human remains, although the island has been severely modified. The central portion of the island was significantly disturbed by construction of SR 520, but areas north and south of SR 520 could potentially contain intact archaeological deposits at or near the ground surface.

The location is of sufficient importance to Lakes Duwamish descendants from several tribes that it could be considered a TCP.

NRHP Evaluation

The Foster Island cemetery location is a tangible property. Although it has not been used as a cemetery for over 100 years, it retains significance as an important place to people of Duwamish descent. At present, the property has inexact boundaries resulting from lowering of Lake Washington and placement of construction fill over a period of about 100 years. The Montlake portage made the area an important meeting place for people from many directions, and people from many tribes may have been buried here. Foster Island is recognizable as an island even though much of the Foster Island area has been altered by development of the University of Washington, the Montlake Cut, initial construction of SR 520, and wetland redevelopment.

Even through the Foster Island area has been physically altered, it retains some degree of topographic identity and has considerable cultural importance to the Duwamish Tribe and people of Duwamish descent from several tribes. It also is of significance to many tribes whose members traveled through the area and may have been buried there en route. It may well be that oral history information can provide considerably more detailed information about this location. At the very least, the location is important in that there is an expressed desire to



hold a burning ceremony for the dead who have been disturbed here in the past, something that was not done when the graves on Foster Island were removed. The following subsections discuss Foster Island in relation to criteria for listing in the NRHP.

Criterion a. Association with events that have made a significant contribution to broad patterns in our history

Foster Island is a topographic entity that is still recognizable as an island landform and is known for its original purpose as a cemetery. It serves to identify the significance of the Montlake portage area to the history of Seattle. Prior to non-Indian settlement, it was used as a cemetery in an area densely populated by native people, as well as an area that experienced considerable traffic from many directions. From this area, Lakes Duwamish and other native people moved through uplands and the lakes and channels. They engaged in fishing, resource harvesting areas, and transporting goods for their own use and the use of early settlers.

During early settlement of Seattle, the Lakes Duwamish people worked for founding pioneer David Denny in his business ventures; they attempted to adjust to and follow the dictates of the U.S. government by homesteading; and they finally gave up their homes as Seattle developed in this direction. By the time Lake Washington was lowered by the Montlake Cut, they no longer occupied their traditional places but often visited them.

The Montlake portage area, and with it Foster Island, is still significant to the descendants of the Zakuse and Cheshiahud families who lived and homesteaded here. These descendants are presently members of several tribes. The significance of the area is expressed in the desire of Duwamish descendant Mr. de los Angeles and others to perform a burning ceremony for the dead who were once placed on Foster Island.

Criterion b. Association with the lives of persons significant in our past

James Zakuse and John Cheshiahud and their families were important in the founding and early development of Seattle. The homestead location of Cheshiahud has been commemorated as a small park; the Zakuse homestead location is not noted. Both individuals are also associated with David Denny and the Denny family, who are significant persons in the development of this region. James Zakuse also was an important healer and spiritual leader and would, by profession, have had frequent access to Foster Island for ceremonial purposes. The Zakuse homestead was equidistant from a *spedak* site and the cemetery



at Foster Island. The homestead also was associated with the legend of Owl and his Wife Frog (Owl often has associations with the dead).

Criterion c. Embodiment of the distinctive characteristics of a type, period, or method of construction or representative of the work of a master, or possessing high artistic value

This criterion does not appear to apply to Foster Island except as a geographic area with considerable cultural significance.

Criterion d. Yielding, or likely to yield, information important in prehistory or history.

It is quite likely that additional examination of the documentary record and oral history interviews focused on the Montlake portage would yield additional important information about this area. This is the case in terms of existing cultural practices as well as possible archaeological deposits.

There are no NRHP criteria considerations that would make Foster Island ineligible for listing in the NRHP. The Foster Island cemetery, though ineligible simply as a cemetery (Consideration d: Cemeteries), reflects the long historical association between the Lakes Duwamish, the Montlake portage area, and contacts between many tribes. It is significant as a historic reference point as well as an ancient burial area. WSDOT is sponsoring additional study and continued consultation with the tribes and SHPO to determine if Foster Island qualifies as a TCP. Some tribal governments have been identified as having an interest in the project area (Duwamish Tribe, Muckleshoot Indian Tribe, Snoqualmie Tribe, Suquamish Tribe, and Yakama Nation). Several other tribes may have an interest in the area to the extent that tribal members are descended from families who lived within or in the vicinity of the SR 520 corridor.

Indian Fishing Rights

The Muckleshoot Nation considers fish and fishing rights to be a key cultural resource. During the millennia that preceded their displacement by American settlers and industrial interests, Tribes living in this region were among the most prosperous on the continent. At the base of their prosperity was the salmon, which then, as now, the people regarded with great reverence. Season after season, the rivers and streams were literally filled with spawning salmon. The knowledge of how to smoke and preserve them for year-round use did much to free the people from the endless pursuit of food. In fact, surplus quantities of smoked salmon, as well as other commodities, were traded far and wide in an extensive network of commerce spanning the entire Pacific



Northwest and extending across the Cascade Mountains and far into the dry country beyond.

The Muckleshoot and other tribes had not been allowed to fish commercially (or to fish for subsistence) off their reservations despite Treaty rights that guaranteed otherwise. The right of tribal members to take salmon at all of their “usual and accustomed” fishing sites was explicitly guaranteed in the treaties, and efforts to reassert those rights led to the so-called “Fish Wars” of the 1960s and 1970s. The subsequent Boldt Decision reaffirmed the Tribe's treaty fishing rights, resulting in improved economic conditions and an opportunity to serve as co-manager of regional salmon resources for the Muckleshoot Tribe.

The modern era finds the salmon in far fewer numbers, threatened by overfishing and an ever increasing human population. Since the “fishing wars” of the 1970s, the Muckleshoot, thanks to court intervention, have been designated legal co-manager of the Water Resource Inventory Area (WRIA) 8 watershed. This gives the Muckleshoot Nation control over fishing and hunting in what has been formally designated the “Usual and Accustomed” fishing and hunting grounds.

What historic buildings and structures are in the Seattle project area?

After conducting the records search to identify previously recorded and evaluated properties and conducting the field inventory of all properties predating 1961 located on a property within or adjacent to the SR 520 corridor, we classified the buildings and structures based on the criteria laid out by the NRHP and the City of Seattle Landmarks Preservation Board as follows:

- Listed in the NRHP
- Eligible for listing in the NRHP
- Not eligible for listing in the NRHP
- Eligible for listing on the WHR
- Designated Seattle landmarks
- Potentially eligible Seattle landmarks

This section describes properties in the Seattle project area that are eligible for inclusion in the NRHP or the WHR, or that may be eligible as Seattle landmarks.



The Seattle APE contains no NRHP-listed properties; one NRHP-eligible individual property, the Mason House at 2545 Boyer Avenue East, which may also be eligible as a Seattle landmark; and two NRHP-eligible historic districts that together contain 49 contributing properties, for a total of 50 eligible properties. There are also 30 properties within the Seattle APE that are not eligible for the NRHP.

Exhibit 16 lists all properties within the Seattle APE that predate 1961, along with their NRHP status. **Exhibit 5 (5a through 5d)** illustrates all the structures surveyed within the Seattle APE, and also denotes their eligibility.

Exhibit 16a. Summary of Pre-1961 Properties in the Historic/Architectural APE—Seattle Project Area

Street Name	Street Address	NRHP Status	Comments
Broadway Avenue East	2343	Not eligible	Fails to meet any of the four NRHP criteria and has suffered some loss of integrity
	2347	Not eligible	Fails to meet any of the four NRHP criteria and has suffered some loss of integrity
	2408	Not eligible	Fails to meet any of the four NRHP criteria
	2412	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
East Miller Street	904	Not eligible	Fails to meet any of the four NRHP criteria and has suffered some loss of integrity
East Boston Street	806	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity through an unsympathetic addition
East Lynn Street	806	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
Harvard Avenue East	1966	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
	1978	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
	1980	Not eligible	Fails to meet any of the four NRHP criteria
10th Avenue East	2412	Not eligible	Fails to meet any of the four NRHP criteria
	2413-2415	Not eligible	Fails to meet any of the four NRHP criteria
Federal Avenue East	2422	Not eligible	Fails to meet any of the four NRHP criteria
11th Avenue East	2423-2425	Not eligible	Fails to meet any of the four NRHP criteria and has suffered some loss of integrity
Boyer Avenue East	2542	Not eligible	Fails to meet any of the four NRHP criteria



Exhibit 16a. Summary of Pre-1961 Properties in the Historic/Architectural APE—Seattle Project Area

Street Name	Street Address	NRHP Status	Comments
	2545	Eligible	Mason House Potentially eligible Seattle Landmark
	2608	Not eligible	Queen City Yacht Club Has lost significant integrity through substantial alterations
East Roanoke Street	1102	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
	1106	Not eligible	Fails to meet any of the four NRHP criteria
	1118	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2009	Not eligible	Fails to meet any of the four NRHP criteria
East Roanoke Street	2015	Not eligible	Fails to meet any of the four NRHP criteria
	2023	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
	2201	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
	2205	Not eligible	Fails to meet any of the four NRHP criteria
	2209	Not eligible	Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
West Montlake Place East	2564	Not eligible	Fails to meet any of the four NRHP criteria
22nd Avenue East	2605	Not eligible	Hop In Grocery Fails to meet any of the four NRHP criteria and has suffered significant loss of integrity
42nd Avenue East	2411	Not eligible	Edgewater Condominiums Fails to meet any of the four NRHP criteria

Note: Bolding indicates the name of the building located on the property; name is provided for reference only.

^a “Contributing” denotes those buildings that comprise a historic district, even though they may lack individual distinction, because they contribute to the character of the district. These components must possess integrity individually, as well as add to the district’s integrity.



Exhibit 16b. Summary of Pre-1961 Properties in the Historic/Architectural APE—Seattle Project Area

Roanoke Park Eligible Historic District		
Street Name	Street Address	Comments
Broadway Avenue East	2601	Contributing ^a
Harvard Avenue East	2612	Contributing
East Roanoke Street	1004	Contributing
	1018	Contributing
	901	Fire Station #22 Not eligible - constructed 1965, not yet 50 years old - outside of period of significance for proposed Roanoke Park historic district, and does not possess exceptional significance
Roanoke Park		Contributing

^a "Contributing" denotes those buildings that comprise a historic district, even though they may lack individual distinction, because they contribute to the character of the district. These components must possess integrity individually, as well as add to the district's integrity.

Exhibit 16c. Summary of Pre-1961 Properties in the Historic/Architectural APE—Seattle Project Area

Montlake Eligible Historic District		
Street Name	Street Address	Comments
Montlake Boulevard East	2725	NOAA Northwest Fisheries Science Center Multiple buildings on the site dating 1931–2003. Most date from outside proposed Montlake historic district period of significance. Potentially eligible Seattle Landmark; Contributing to historic district (original 1931 building only)
	2734	Contributing
	2740	Contributing
East Hamlin Street	1891	Contributing
	2111	Contributing
	2117	Contributing
	2121	Contributing
	2127	Contributing
	2133	Contributing
	2137	Contributing
	2141	Contributing
	2147	Contributing



Exhibit 16c. Summary of Pre-1961 Properties in the Historic/Architectural APE—Seattle Project Area

Montlake Eligible Historic District		
Street Name	Street Address	Comments
	2151	Contributing
	2146	Contributing
	2150	Contributing
	2160	Contributing
	2161	Museum of History and Industry (MOHAI) Potentially eligible Seattle Landmark; Contributing to historic district
East Park Drive East	2817	Contributing
East Shelby Street	2158	Contributing
	2159	Contributing

^a “Contributing” denotes those buildings that comprise a historic district, even though they may lack individual distinction, because they contribute to the character of the district. These components must possess integrity individually, as well as add to the district’s integrity.

In addition to the residential and public buildings adjacent to the project corridor, there are two park properties that deserve discussion as properties of the built environment, or possible historic landscapes: the Washington Park Arboretum and McCurdy Park. These were at one time part of the same property.

Washington Park Arboretum

Although the APE encompasses the Washington Park Arboretum, only a small portion of the Arboretum is actually in the project area. The Arboretum is a public facility that is part of the Olmsted Plan for Seattle Parks, Boulevards, and Playgrounds. Stretching across approximately 230 acres, it is owned by the City of Seattle and managed by the University of Washington. It contains one NRHP-listed resource, the Arboretum Aqueduct (**Exhibit 17**), which is a Seattle landmark, listed in the NRHP [Historic Bridges/Tunnels in Washington State] and the WHR). The Arboretum Aqueduct is not within the project APE. The rest of the Arboretum has not been listed or formally determined eligible for listing in the NRHP or as a Seattle landmark.



Exhibit 17. Arboretum Aqueduct, Washington Park Arboretum



The portion of the Arboretum within the project area includes the section under the Evergreen Point Bridge west approach, and all of Foster Island. The land surrounding the on- and off-ramps from SR520 to Lake Washington Boulevard, which is within the project area, is owned by WSDOT and is used primarily for transportation facilities. An April 1966 agreement between the City of Seattle and WSDOT holds that while the state would allow the city to use portions of the property for its own park-oriented use, the property would remain within WSDOT ownership. Therefore, while used for some park activities, that land is technically no longer part of the Arboretum.

Foster Island, located at the northern end of the Arboretum, is an environmentally sensitive area consisting of marshes, reeds, and cattails that provides valuable wildlife habitat. The island was bisected in 1963 when SR 520 was constructed. In 1968, the Waterfront Trail was constructed, which links Foster, Marsh, and Bamboo islands to a terminus just east of MOHAI. The Waterfront Trail passes under SR 520 in the middle of Foster Island.

The Arboretum was first known as Washington Park and was one of the city's first parks, created from 1900 to 1904. Originally owned by the Puget Mill Company, it was logged and slated for development, along with the adjacent area that is now known as Broadmoor. But the financial panic of 1893 put the company's plans on hold. In order to get needed infrastructure improvements from the city, Puget Mill Company deeded 62 acres of land that would become the park. More acreage was added over the next few years, and by 1916, it had a total of 165.22 acres (BOLA and Kiest 2003).

As early as 1903, the Olmsted Brothers came to Seattle and prepared a plan for Seattle's park system, including Washington Park. In March 1924, Washington Park was officially set aside as a botanical garden and arboretum by the Board of Park Commissioners. In 1925, the "Old Government Canal" property was leased to the city by the federal government for 99 years, to be used for park purposes, as discussed above. It was considered an expansion of Washington Park and was the location of the first official plantings done in the park in 1935-36. The first formal plan for the Arboretum was drawn up by the Olmsted Brothers in March 1936, and it included an illustrated plan, a nine page letter, a collection of photographs, and plant lists.

The area south of SR 520 near Foster Island and along the shoreline, north of East Foster Island Road and the road to Broadmoor, was



included in both the 1904 and 1936 Olmsted plans as an area of lagoons. The lowering of Lake Washington in 1916 changed the shoreline and created a marsh at the north end of the Arboretum around Foster Island. By 1936, this area was “extensive marshlands, interrupted by landfills, following two decades of exposure since the lowering of the lake. The plan proposed the introduction of waterways labeled 'lagoons' to be developed through dredging of the marshland. Dredge spoils would be used to raise the adjacent marshland and to cover the dumps. A future Alpine collection could expand into the area surrounding Foster Island, from the primary Alpine garden proposed west of the nursery” (BOLA and Kiest 2003). To implement the lagoon plan, extensive dredging was done in 1938-39, dredging out 1-1/4 miles of lagoons. In 1939, extensive planting of 16 species of bamboo and 3,500 Japanese iris took place; however, few of these survived after World War II.

After construction of SR 520 through this area, landscape architect Hideo Sasaki was hired in 1964 to salvage what was left of the northern Arboretum area. Few elements of his plan were implemented, except for the Waterfront Trail. A historic review conducted by BOLA Architecture and Karen Kiest/Landscape Architects in 2003 stated: “An estimated 60 acres were lost in the lagoon area, which had been part of the Olmsted Brothers proposed plan for the Arboretum. Excavations, which extended along the east side of 26th Avenue, filled with water. The resulting topography and the presence of the off-ramps eliminated the possibility of further development at the north end of the Arboretum” (BOLA and Kiest 2003). The integrity of this area was severely compromised by the construction of SR 520 and the Evergreen Point Bridge.

The undeveloped property north of SR 520 behind the houses facing East Hamlin Street is what remains of the “canal reserve land,” the location of the original log canal between Lake Union and Lake Washington. This piece of land was not included in the Olmsted plans for the park, but as noted above, was one of the first areas formally planted. Frederick W. Leissler, Jr., who was appointed assistant director of the Arboretum in 1936, directed WPA crews in planting Yoshino cherry trees and incense cedars on the “canal land” during the winter of 1935-36. The Seattle Garden Club, who had funded the 1936 Olmsted plan, expressed concern over these plantings, fearing that they might be detrimental to the overall plan, but the trees remained until the construction of SR 520 in 1961. At that time, many of the cherry trees



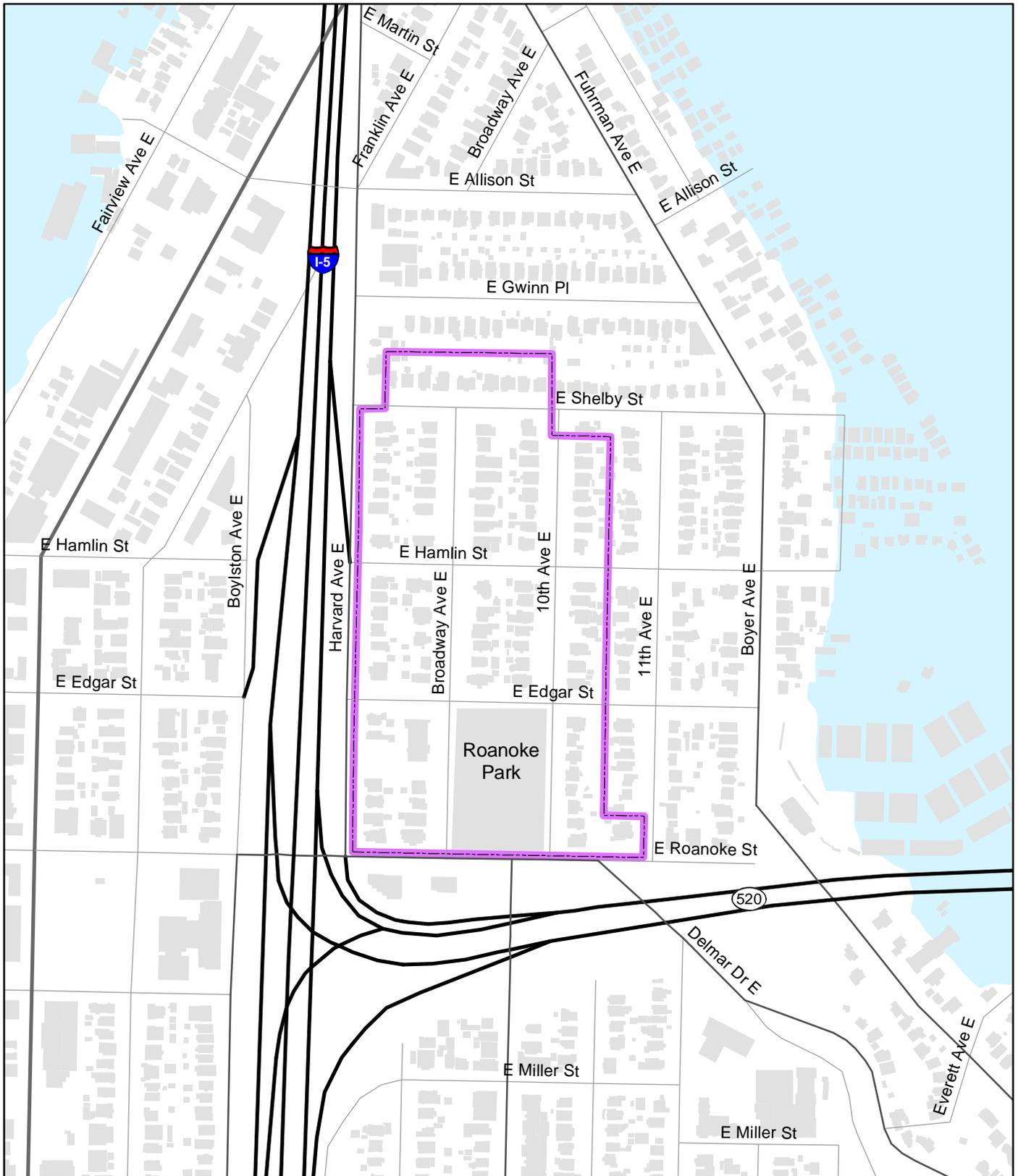
were relocated to the liberal arts quad of the University of Washington. These trees were removed in 1998 because of their advanced age (BOLA 2003). Two of the cherry trees that were not relocated remain today; however, most of the surrounding land and plantings have been removed, and the introduction of SR 520 severely compromised the integrity of this early landscape.

McCurdy Park is located on the north side of SR 520 and encompasses approximately 1.5 acres of land. It was once part of the “canal reserve land,” which had been reserved for use as a potential location for the Montlake Cut. MOHAI was constructed on a portion of this property in 1950, and the land immediately surrounding it was named for Horace W. McCurdy in 1958 (Sherwood 1974). In 1963, the State Department of Highways condemned approximately 47 acres of Arboretum property for SR 520, including most of the canal reserve land, and the path for the new expressway effectively cut off what was left of McCurdy Park from the Arboretum. McCurdy Park and MOHAI are no longer considered part of the Arboretum.

Proposed Roanoke Park Historic District

Several residences near the intersection of SR 520 and I-5 were recently documented as contributing elements of an NRHP-eligible historic district. The boundaries of the historic district include Roanoke Park, located at 910 East Roanoke (**Exhibit 18**). The original owners of the land that is now the NRHP-eligible proposed Roanoke Park historic district, David T. Denny and Henry Fuhrman, named Roanoke Street after Roanoke, Virginia, the first English settlement in the United States. When the City acquired the land in 1908 and designated it for “park and parkway purposes,” they named it Roanoke Park. The park was originally intended for use by hikers and bicyclists headed down the popular path to the Washington Park Arboretum and Lake Washington. In 1910, Roanoke Park “was transformed from an unsightly ... bare





-  Historic District
-  Building

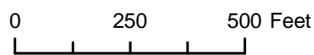


Exhibit 18. Proposed Roanoke Park Historic District

SR 520 Bridge Replacement and HOV Project

wasteland to an attractive community park.” Over the years it has been used as a neighborhood playground and garden. In 1948, the Fire Department selected the park as the site for their new fire station, but public outcry prevented any of the park from becoming a fire station, and the station was eventually built across the street (Sherwood 1974). Historic Roanoke Park continues to serve as a neighborhood park, with a playground section on the north end.

The historic property inventory form on file with DAHP describes this eligible historic district as follows:

The Proposed Roanoke Park Historic District is a collection of well-preserved historic resources that possess historic and architectural significance based on their associations with the physical development of North Capitol Hill and the careers of several notable Seattle architects, as well as their distinctive architectural character. The Roanoke Park neighborhood stands apart stylistically and developmentally from the adjacent neighborhoods. While platted as part of the 1890 Denny-Fuhrman Addition to the City of Seattle, the neighborhood did not see significant development until the later years of the first decade of the twentieth century. By the early 1890s, David Denny had established a streetcar line through the area along Eastlake Avenue that connected it with downtown Seattle and points north. Denny invested in and promoted this public transportation, no doubt to facilitate his real estate development of the South Lake Union neighborhood and of the Denny-Fuhrman Addition, which encompassed all the land north of Roanoke Street to Lake Union. This streetcar line stimulated residential and commercial development along the length of its lines, especially on the eastern shores of the lake in what is now known as the Eastlake neighborhood. However, this development did not extend much beyond the western flanks of Capitol Hill before 1900.

Displaying a variety of architectural styles, the majority of the architect- and builder-designed homes were constructed between 1908 and 1912, with the remaining lots filled in by 1950. Built in the Colonial Revival style, the 1903 William Parson House at 2706 Harvard Avenue East is one of the earliest residences in the district. The period from 1908 to 1912 saw an explosion of growth in the neighborhood with the construction of some sixty homes, approximately two-thirds of the total



number built. Architects and builders worked in a variety of styles, including Craftsman, Mission, Colonial Revival, Classic Box, Swiss Chalet, Tudor Revival, and Mediterranean Revival. Most of the homes are large two-story wood frame dwellings set in attractive landscaping and clad with wooden shingles or clapboard siding. The use of stucco and brick is also common, especially in the revival styles.

The form does not specify a period of significance or eligibility criteria. However, survey of the resources in the district and review of the historical documentation suggest a period of significance of 1900 to 1950. It is a residential neighborhood wrapped around a park, and eligible resources include intact residential structures and accessory buildings, religious institutions, and the park itself.

For examples of contributing resources in the Proposed Roanoke Park Historic District, see **Exhibits 19** and **20**. 1018 East Roanoke Street is one of the more ornate houses in the district and occupies the finest lot. It is sited overlooking the bluff and Portage Bay on a large lot. 2601 Broadway East is a substantial residence with Craftsman details, typical of other resources in the historic district, which faces Roanoke Park. Although most of the resources in the Proposed Roanoke Park Historic District have experienced some alterations over time, including the park itself, they remain substantially intact with a few exceptions. The most common alterations include window changes and minor additions. Overall the resources in the district and the historic district itself display good integrity.



Exhibit 19. 1018 East Roanoke Street, Proposed Roanoke Park Historic District



Exhibit 20. 2601 Broadway East, Proposed Roanoke Park Historic District



Proposed Montlake Historic District

The Montlake neighborhood was first developed in 1909. The main era of construction was the 1910s through the 1930s, and the side streets appear to have been paved in 1926 (Gould 2000). The residential styles in the district are cohesive, mainly Craftsman, Tudor Revival, and Colonial Revival, but the houses are “individually distinctive” (Gould 2000). **Exhibits 21** and **22** demonstrate some of the diversity of architectural styles found in the neighborhood. 2158 East Shelby Street is a large Tudor Revival style house with picturesque details from 1925 (**Exhibit 21**). Across the street, 2159 East Shelby Street is a Colonial Revival-style residence from 1914 that mimics the Georgian period (**Exhibit 22**) Several high-style, distinguished houses along East Lake Washington Boulevard include turreted Tudor Revivals and stuccoed California Mediterraneans. There are noteworthy nonresidential resources in the area including the Montlake Bridge; MOHAI; the Seattle Yacht Club; the NOAA Fisheries building; and structures such as gateways, pavilions, the Arboretum Aqueduct, and other bridges in Washington Park Arboretum, which borders the neighborhood.



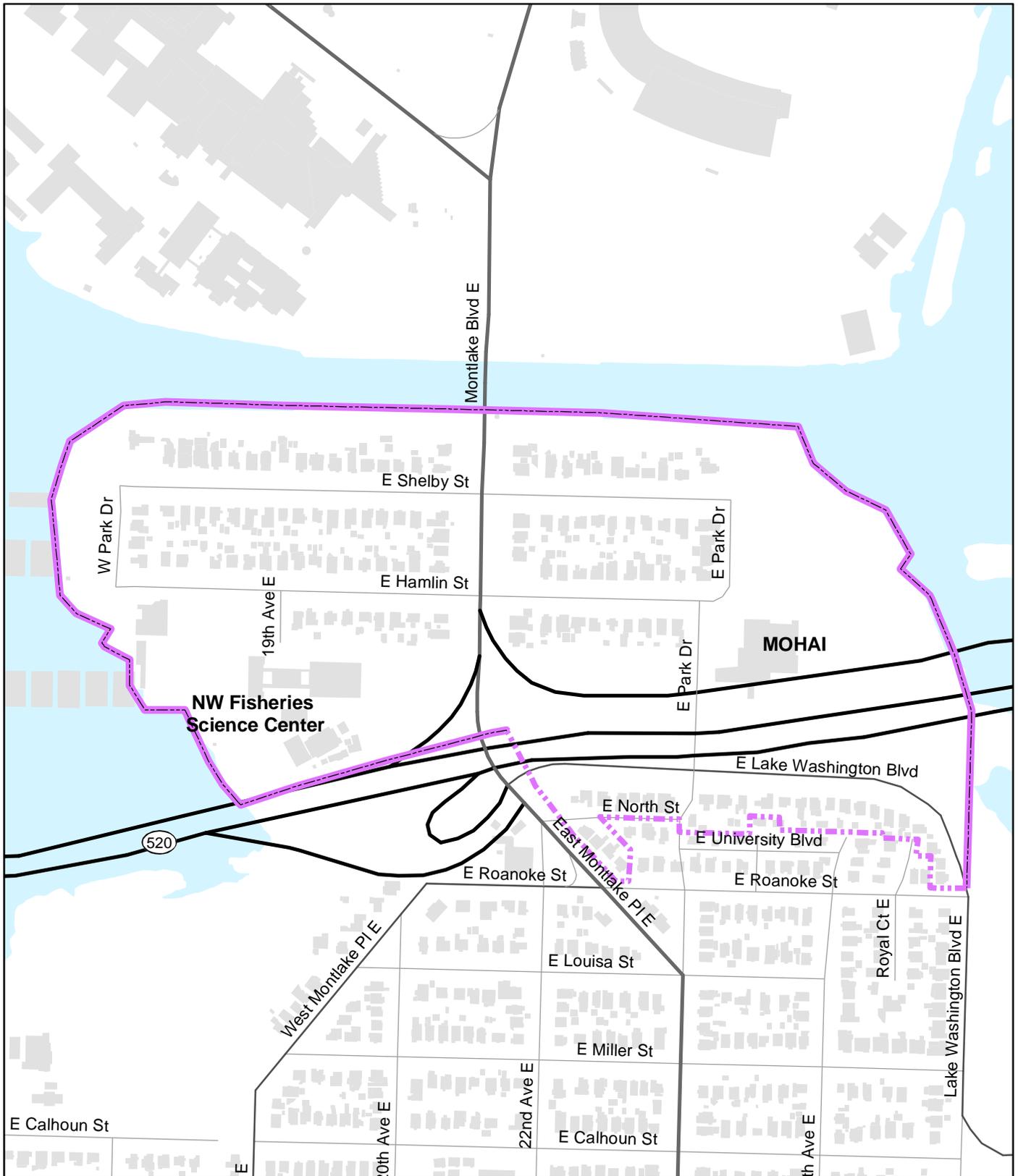
Exhibit 21. 2158 East Shelby Street, Montlake Historic District



Exhibit 22. 2159 East Shelby Street, Montlake Historic District

Exhibit 23 shows the proposed boundaries of the NRHP-eligible proposed Montlake historic district, with a period of significance of 1909 to 1952, from the platting of the neighborhood to the construction of MOHAI. Based on the survey conducted by the cultural resources discipline team, historical resources within the APE and in the surrounding area comprise an eligible National Register Historic District under Criterion C. These properties are significant for their architectural characteristics, representing the distinct design styles from the early twentieth century, terminating with the early mid-century design of MOHAI (designed 1950). As a group, they represent a distinguishable entity recognizable as the proposed Montlake





* The southern boundary of the proposed Montlake Historic District was located to include East Lake Washington Boulevard. The area south of the dotted line was not subject to intensive survey for this project. Future surveys may determine that the southern boundary should be extended to include more of this area in the proposed historic district.

-  Historic District
-  Building



Exhibit 23. Proposed Montlake Historic District

SR 520 Bridge Replacement and HOV Project

historic district. Resources within this district include an architecturally cohesive residential neighborhood, largely developed from 1909 until approximately 1945; the Seattle Yacht Club, established in 1892, which moved to its current Montlake location on Portage Bay and constructed the present clubhouse in 1920; MOHAI, designed in 1950 by noted Seattle architect Paul Thiry and completed in 1952, which is a local museum focusing Seattle area history and development; and the NOAA Northwest Fisheries Science Center building, the first federal fisheries building constructed on the West Coast, designed by John Graham, Sr. and built in 1931.

The nonresidential resources noted above are located on the periphery of the district and contribute to the physical and cultural fabric of the district's residential core. The Seattle Yacht Club and MOHAI are recreational and/or cultural institutions that support and enhance the residential quality of the neighborhood. The NOAA Northwest Fisheries Science Center building, constructed during the time of greatest development in the neighborhood, is geographically contiguous with the historic district. Its development on the canal reserve land is intimately tied to the history of the Montlake Cut and the original log canal, important elements of the Montlake area.

For purposes of this study, the north, east, and west boundaries are the traditional and natural geographic boundaries of the original Montlake Park Addition. The southern boundary was drawn along the rear property lines of those lots facing East Lake Washington Boulevard between Montlake Boulevard and East Roanoke Street, and along the rear property lines of those lots facing East Montlake Place East between East North Street and East Roanoke Street. This was done to include those houses along East Lake Washington Boulevard, which are some of the finest architectural examples in the neighborhood, and the completely intact streetscape.

This area south of SR 520, originally known as Interlaken, was developed separately from, though concurrently with, the neighborhood north of SR 520. Brothers Calvin and William Hagan, with partner James Corner (Sherwood 1974) seem to have originated the name Montlake as they developed the Montlake Park Addition, the section between the lakes defined by East Shelby and East Hamlin Streets. John Boyer of the Interlaken Investment Company was developing the southern part of the neighborhood, the section now on the south side of SR 520, at the same time. He preferred the name Interlaken but later agreed to Montlake as the name for the entire



neighborhood (Gould 2000), which is generally accepted today. The name Montlake frequently appears on maps such as the Thomas Guide as the label for the entire neighborhood, with the southern boundary often listed as Interlaken Park or Interlaken Boulevard from the Washington Park Arboretum to Portage Bay. A windshield survey, which involved driving around the blocks in the original Interlaken area south of East Lake Washington Boulevard, indicated a decrease in integrity with a greater rate of intrusions (houses less than 50 years old) as one progressed southward. As indicated on the Seattle APE shown in **Exhibit 5 (5a through 5b)**, an intensive survey was conducted only for the resources in this area within the APE. However, further intensive survey in the future may determine that more of this area should be included in the historic district.

Although the Montlake neighborhood was compromised by the construction of SR 520 in the early 1960s, most of it remains intact. Taken as a whole, it represents a significant, cohesive collection of residential architecture typical of early twentieth century Seattle, with a combination of builders' houses and high-style, architect-designed houses. While many of the individual buildings have experienced minor alterations, such as window replacements and rear additions, most of these do not detract significantly from the integrity of the resources. Only a rare few have been so altered as to make them non-contributing, and the percentage of these in the district is very low.

Museum of History and Industry

Designed by architect Paul Thiry and built between 1950 and 1952, MOHAI is an excellent example of a Modernist style public building, located at 2161 East Hamlin Street, shown in **Exhibit 24**. Additions by other architects are complementary but numerous, and the museum has undergone unsympathetic alterations, most notably changes to the original entrance. The multiple additions and unsympathetic alterations to the building are too significant to allow MOHAI to be individually eligible for the NRHP, but it is a contributing element to the NRHP-eligible proposed Montlake historic district

for its remaining architectural significance, its contributing presence to the neighborhood, and its cultural significance. MOHAI is potentially eligible for listing as a Seattle landmark for its association with the cultural heritage of the Montlake community and the city of Seattle.



Exhibit 24. MOHAI, 2161 East Hamlin Street, Montlake Historic District



NOAA Northwest Fisheries Science Center

Located in the Montlake neighborhood at 2725 Montlake Boulevard East, the NOAA Northwest Fisheries Science Center research complex contains multiple buildings and has restricted access. While most of the buildings are of newer construction and are considered noncontributing to the NRHP-eligible Montlake historic district, the original building constructed in 1931 (**Exhibits 25 and 26**) is contributing. If it were not located within a historic district, it would also be individually eligible under NRHP Criteria A and C for its association with important research that is significant locally, regionally, and nationally, and for its distinctive architectural characteristics and its design by a major architect, John Graham, Sr.

The original building, known as the West Wing, was the first federal Fisheries building constructed on the West Coast (Peacock 2004). Facing Portage Bay, the Fisheries Building was designed in the Art Deco style, ornamented with terra cotta details that reflect the marine nature of the facility, such as sea shells, coral, sea horses, and waves with fish. These details extend to the interior as well. The building contains offices and dry labs. The building has had few alterations, the most significant one being the addition of a modern building to the rear, which is connected to the historic building by two covered walkways. However, the significance of this alteration is reduced by the clearly secondary nature of the new building to the historic building, and the easily reversible attachment of the walkways. In addition, the new building is not visible when viewed from the front façade of the historic building.

John Graham, Sr., the architect of the West Wing building (Herkelrath 2004), was a major force in the construction and design of downtown



Exhibit 25. NOAA Northwest Fisheries Science Center, Montlake Historic District – View from Portage Bay



Exhibit 26. NOAA Northwest Fisheries Science Center, Montlake Historic District



Seattle, including the Dexter Horton, Bon Marche, and Exchange buildings. He also designed the Ford Motor Assembly Plant on Valley Street, several buildings on the University of Washington campus, and the Seattle Yacht Club. Graham is noted as being “particularly adept in the Art Deco style” and he designed several other “finely detailed, terra-cotta clad commercial structures” (Ochsner 1998).

The West Wing building of the NOAA facility is also potentially eligible for listing as a Seattle landmark for its association with the cultural and economic heritage of the city, and its distinctive visible characteristics of an architectural style and period.

Mason House at 2545 Boyer Avenue East

This Modern-style house, built in 1949 and shown in **Exhibit 27**, was designed by Victor Steinbrueck, a prominent Seattle architect and designer of the Space Needle, for artist Alden Mason. This flat-roofed house is visually striking, situated on the hill overlooking Portage Bay, and is an excellent example of its style. The Mason house was published in *Architectural Record*, April 1953 (p. 159–163), “Houses of the Northwest.” It has experienced few alterations over the years, including the addition of two square modern windows in the front façade of the ground floor, the replacement of the original entry door or the addition of a modern storm door over it, and partial screening of the ground floor area under the front balcony with wooden lattice. It may have also had some minor window replacement on the main level. All of these changes are minor and do not significantly impact the integrity of the resource. The house is eligible for the NRHP under Criterion C for distinctive characteristics unique to its period and as the work of a master architect, and under criterion B for its association with Alden Mason, noted Seattle artist and influential long-time faculty member at the University of Washington. As such, it is also eligible for listing in the WHR for its strong architectural qualities and design by an influential architect. It is potentially eligible as a Seattle landmark for its distinctive architectural style, as an outstanding work of a designer, and for its association with Alden Mason.



Exhibit 27. The Mason House, 2545 Boyer Avenue East



Lake Washington

What archaeological sites are in the Lake Washington project area?

The Lake Washington project area contains no known prehistoric archaeological resources. It does contain four historic archaeological resources, consisting of a submerged airplane wreck and three sunken vessels.

There is a registered submerged historic archaeological resource (45-KI-426) in Lake Washington about several hundred feet south of the existing SR 520 facility – a World War II, single-engine fighter (a Corsair #87833 built by Goodyear Corporation). The craft was involved in a midair collision on July 29, 1950. The pilot escaped the aircraft before it crashed into Lake Washington just south of Madison Park. Aircraft debris is spread over more than a 100-yard area at a depth of 90 to 110 feet.

On October 21-23, 2003, divers investigated three sunken vessels in Lake Washington north of the existing SR 520 bridge (CH2M HILL 2003, Appendix A, Map 1). The vessels were initially discovered with side-scan sonar imaging during an examination of the lake bed to prepare for design of the proposed new SR 520 bridge (CH2M HILL 2003: Appendix A, Figure 1). Divers examined the three vessels in waters up to 190 feet deep; all three vessels appear to have been salvaged and deliberately scuttled in the lake. One of these vessels, a barge, was identified as the Forest No. 15. The other two wrecks had no markings and could not be identified. The general condition of the wooden vessels was poor with considerable wood rot. Archival research (see below) does not suggest that any of these vessels possess any particular historic significance.

On November 9, 2003, Walter Jaccard, Ben McGeever, and Marc Williams of the Submerged Cultural Resources Exploration Team (SCRET) revisited Forest No. 15 and confirmed its identify. On November 16 and 23, 2003, and December 1, 2003, Jaccard, McGeever, Williams, Mark Tourtellot, and Stephan White of SCRET made a series of dives to the wooden schooner or steamer and concluded that the vessel appeared to be the remains of a wooden steamer (they were unable to identify the vessel).



Forest No. 15

The general condition of the Forest No. 15 is fair to poor. No major damage was noted that would account for its sinking. The vessel is a cargo-type deck barge of relatively heavy construction. According to the Merchant Vessels of the United States (Bureau of Navigation 1924), Forest No. 15 was listed in the “Unrigged Merchant Vessels” section as a scow (self-propelled barge) built in 1924 in Hoquiam, Washington, and homeported in Seattle. The year this vessel sank and the cause for its sinking are unknown.

Wooden Steamer

The wooden hull of this vessel currently sits in an upright position at an approximate bottom depth of 192 feet. It is basically a stripped open hull with no deck in place; the construction is “plank on frame” with bolted and spiked attachments. The upper portions of the side planking are gone or have deteriorated, leaving exposed and rotted transverse frame members. No machinery, attachments, or other hardware were found to indicate propulsion type, either power, sail, or both. Evidence of charred wood in the bow area indicates the vessel partially burned at some point. While there is no clear evidence about why this vessel sank, fire damage may have been a contributing factor. The vessel shape and size suggests it was an old schooner. Its lack of deck, bulkheads, and other attachments indicate this vessel was stripped at some point prior to sinking.

Unnamed Barge

The vessel is an early 1900s deck barge with “plank on frame” construction that sits at a depth of 161 to 168 feet. The general condition of the vessel is poor, with major damage to the forward end of the northwest side and deck. Approximately 30 percent of the deck planking is missing and no specific identifying markings were found.

Evaluation

Research and information gathered to date (Wolin 2003, CH2M HILL 2003) strongly indicates that the three vessels are not historically significant properties. Although of general interest, there is no evidence that any of the vessels satisfy the criteria for eligibility for listing in the NRHP. The vessels have no apparent association with events that contributed to the broad patterns of local, regional, or national history. No historically significant persons appear to be associated with the vessels. The vessels appear to be of a common type construction and design for commercial vessels of the period, and possess no other



extraordinary engineering or naval architectural qualities. While it might be possible to collect additional information about the specifics of each vessel, there is no indication that this additional information would yield or would be likely to yield any information important in history.

What traditional cultural resources are in the Lake Washington project area?

There are no known traditional cultural resources in the Lake Washington project area.

What historic buildings and structures are in the Lake Washington project area?

The Evergreen Point Bridge (**Exhibit 6** and **Exhibits 28 to 30**), the second span across Lake Washington, lies 4 miles north of the first floating bridge, the Lacey V. Murrow Memorial Bridge. The Evergreen Point Bridge forms the center portion of the 5.8-mile project connecting the area's two main north-south highways, Seattle's I-5 and I-405 on the Eastside (Hobbs and Holstine 2004). Construction on the Evergreen Point Bridge began in August 1960 and took almost 3 years (837 days) to complete (Hobbs and Holstine 2004). Its opening ceremony

was held August 28, 1963. Although still generally referred to as the Evergreen Point Bridge, it was officially renamed the Governor Albert D. Rosellini Bridge in 1988 (Mauldin n. d.).

At the time of its construction, the Evergreen Point Bridge was the largest floating span in the world at 1.4 miles long. It cost \$24,972,000 (the floating section alone was \$10.9 million), making it the most expensive floating bridge in the world (Hobbs and Holstine 2004). The State Toll Bridge Authority issued a \$30 million bond for the bridge, with a 40-year retirement limit. The bridge had a 35 cent toll from 1963 to 1979 (**Exhibit 29**). In June 1979, the bond was paid in full (20 years ahead of schedule) and the toll booths were removed.

The floating portion of the bridge is 7,578 feet long with 35 pontoons, the largest of which measures 360 feet long by 60 feet wide and 14.8 feet deep, and weighs 6,700 tons. There are 62 reinforced-concrete anchors, each weighing 77 tons,



Exhibit 28. Evergreen Point Bridge, Seattle, 1968



Exhibit 29. Evergreen Point Bridge Toll Plaza, Eastside, 1964



connected to the pontoons by two $\frac{3}{4}$ -inch steel cables. The roadway accommodates four lanes of traffic and is 54 feet wide. It has a 2-foot-wide median and 3-foot-wide walkway. The Evergreen Point Bridge was designed with a “no bulge” lift-draw span that opens to 200 feet to allow passage of ships. The lift spans are raised 7 feet, allowing retraction of the moveable pontoons. At each end of the floating section, elevated steel truss spans with fixed piers connect to the shore and provide enough vertical clearance to accommodate large pleasure craft (Hobbs and Holstine 2004).

The bridge has had few substantial alterations over its lifetime, and appears today much as it did when completed in 1963. Changes to the bridge over the years have mostly consisted of basic maintenance tasks, such as painting, cable replacement, repair/replacement of expansion joints, replacement and rehabilitation of guide rollers, repair of columns, and miscellaneous electrical and mechanical rehabilitation. More substantial work was done to increase the safety of the bridge, including the replacement of the draw span and the addition of an emergency stop bar in 1994, the addition of ladders and catwalks to selected pontoons, and the installation of a median barrier. The toll booths were removed in 1979. None of these alterations are substantial and they do not detract from the appearance, operation, or significance of the bridge. It continues to fulfill its original function, although it now must handle more than twice its intended capacity.

With the sinking of the original Lake Washington floating bridge, the Evergreen Point Bridge became the oldest remaining floating bridge across Lake Washington, exemplifying an engineering feat of outstanding proportions. As noted above, it was also the longest and most expensive floating bridge in the world when built. The bridge is already over 40 years old and will meet the 50-year mark in August 2013. However, due to its exceptional significance, it is already eligible for the NRHP. It is significant as a structure under Criterion C for its outstanding and innovative engineering design that meets the criteria of exceptional significance. It is also significant under Criterion A for its effect on the development of the Seattle metropolitan area, especially on the communities on the Eastside (**Exhibit 30**). As such, it is also eligible for the WHR for its strong engineering qualities and lasting effect on the community and region.

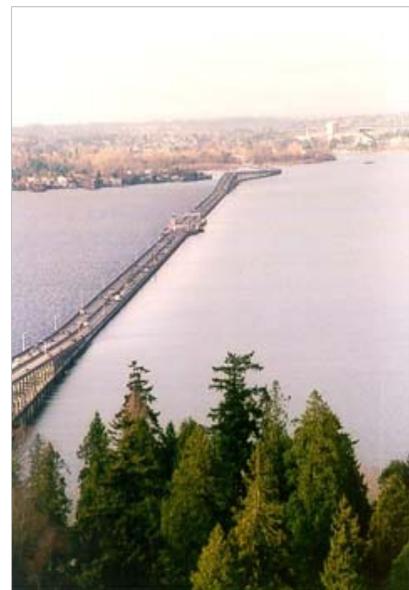


Exhibit 30. Evergreen Point Bridge, from Eastside



Eastside

What archaeological resources are in the Eastside project area?

No known or recorded archaeological sites are present in the Eastside APE. At the time of pedestrian archaeological survey, however, most of the Eastside APE was urbanized, and few native ground surfaces were found the survey.

Apart from the ethnographic evidence, some of the landforms in the Eastside project area could potentially contain intact archaeological deposits in areas not obliterated by previous construction (BOAS 2005: Appendix H). The Lake Washington shoreline below SR 520 could potentially contain temporary campsites, although the steep bluff makes regular use of the lakeshore in this vicinity unlikely, and construction from SR 520 may have significantly disturbed the lakeshore deposits. The till uplands could contain shallow special-purpose or campsites along travel routes, although non-lithic (not made of stone) materials are unlikely to be preserved in the acidic soils. Low spots between the uplands, particularly adjacent to marshes and creeks, could contain materials associated with the harvesting and processing of plant and animal resources.

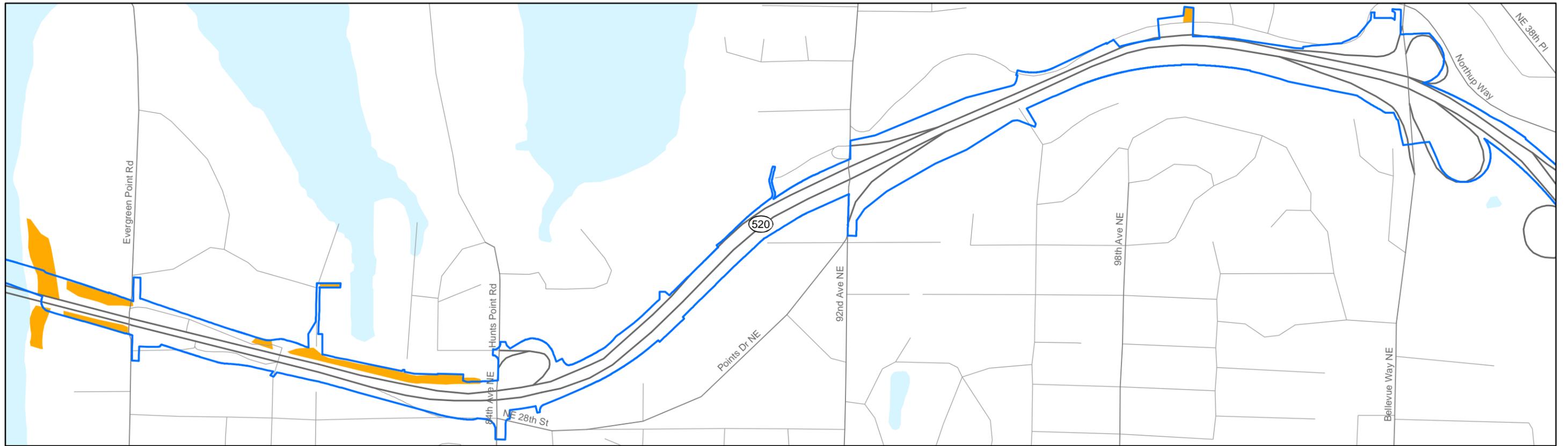
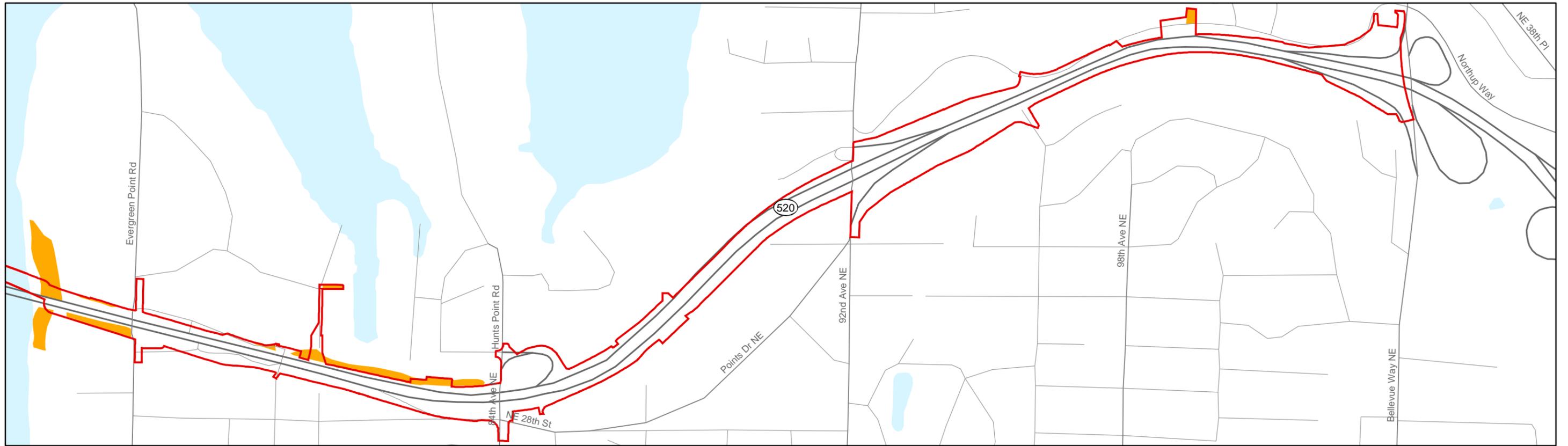
The cultural resource team's observations and assessments of the archaeological sensitivity of these areas are provided below and in **Exhibit 31**:

- **Lake Washington Eastern Shoreline to Evergreen Point Road** – The benches above the eastern shoreline of Lake Washington are high probability areas for buried cultural deposits associated with Native American occupation around the lake and use of lakeshore resources.
- **79th Avenue Northeast to 84th Avenue Northeast** – This slightly higher ground just above the southern lobes of Fairweather Bay is used as a pedestrian trail, increasing the possibility that undisturbed buried cultural deposits might be present.

What traditional cultural resources are in the Eastside project area?

The Eastside project area lies within the aboriginal territory of the Sammamish people – a Puget Salish group who lived along the Sammamish River, which links Lake Sammamish and Lake Washington





- Archaeological High Probability Area
- 4-Lane Footprint
- 6-Lane Footprint



0 200 400 600 800 1,000 Feet



Exhibit 31. Eastside Archaeological Probability Areas
 SR 520 Bridge Replacement and HOV Project

(Waterman ca. 1920). Up to the eighteenth century, the Salish Indians, known as the *Hah-tshu-absh* (or Lake people), had at least seven winter villages on the Eastside (Tobin and Pendergrass 1993).

The promontories of Hunts Point, Fairweather Point, and Yarrow Point were referred to by Native speakers as *Sli^uLi^uŪqs* (“three promontories with narrow inlets between them”) (Hilbert et al. 2001). Houses of the *Tahb-tah-byook* tribe were located at the mouth of Juanita Creek and at Yarrow Bay. According to older Euroamerican residents who recall seeing grave mounds and finding beads and bones, Yarrow Point served as a burial ground for the Sammamish River people (Tobin and Pendergrass 1993).

Farther east along the SR 520 corridor are at least three Native place names (Hilbert et al. 2001). The mouth of nearby Northup Creek south of Kirkland was known as *Tc³utsid* (“mouth of *Tc³u*”). Northup Creek was known as *Tc³u*, and the swamp at the head of Northup Creek was known as *Txwa^ubats* (“pulling toward something”).

Although none of the documented locations appear to meet the criteria as a TCP, it is possible that archaeological evidence may be found for at least some of the activities and the settlement at the mouth of Northup Creek on Yarrow Bay. In that case, some locations may be eligible to the NRHP under Criterion d.

What historic buildings and structures are in the Eastside project area?

Exhibit 32 lists all properties within the Eastside APE that predate 1961, along with their NRHP status. **Exhibit 7 (7a through 7c)** shows all the structures surveyed within the Eastside APE, and also indicates their eligibility.

2857 Evergreen Point Road, Medina

This house appears to be one of the original buildings in the area (**Exhibit 33**). Originally owned by Helen R. Pierce, it was built in 1920. Sited at the foot of the bluff near the water, it originally had a cistern/water tower and a concrete pump house; the remains of these structures are still on the site. The main house was damaged by fire in 1929 and was rebuilt in 1932. The front portion of the house facing the water is all that remains of the original 1920 structure. The building has had a few alterations and rear additions since the 1930s. A carport was added to the side of the house but is not attached to it. Although the site may not meet NRHP eligibility criteria because of the 1932 rebuild and



Exhibit 32. Summary of Pre-1961 Properties in the Historic/Architectural APE—Eastside Project Area

Street Name	Street Address	NRHP Status	Comments
Evergreen Point Road	2617	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2623	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2827	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2841	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2849	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	2851	Eligible	Eligible under criterion C
	2857	Not eligible	WHR eligible as a representative element of the early settlement of the community. Not eligible for the NRHP due to alterations causing a loss of integrity.
	2879	Not eligible	Fails to meet any of the four NRHP criteria
	2891	Eligible	Eligible under criterion C
	3100	Not eligible	Fails to meet any of the four NRHP criteria
	3261	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
3267	Not eligible	Fails to meet any of the four NRHP criteria	
Northeast 28th Street	7800 Bellevue Christian School	Will be eligible in 2011	Constructed 1961 - Will meet 50-year requirement in 2011. Eligible under criterion C
NE 32nd Street	9106	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	9114	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
	9120	Not eligible	Fails to meet any of the four NRHP criteria
84th Avenue Northeast	2724	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
92nd Avenue Northeast	3205	Not eligible	Not eligible due to loss of integrity
	3208	Not eligible	There are two houses at this address. The older house is not eligible due to a lack of integrity. The newer house fails to meet any of the four NRHP criteria.



Exhibit 32. Summary of Pre-1961 Properties in the Historic/Architectural APE—Eastside Project Area

Street Name	Street Address	NRHP Status	Comments
	3223	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
Hunts Point Road	2831	Not eligible	Fails to meet any of the four NRHP criteria
	3001	Not eligible	Fails to meet any of the four NRHP criteria
Hunts Point Circle	8329	Not eligible	Fails to meet any of the four NRHP criteria and has suffered loss of integrity
Points Drive Northeast	9445	Not eligible	Fails to meet any of the four NRHP criteria
103rd Place Northeast	3240	Not eligible	Not eligible due to a loss of integrity
	3265	Not eligible	Fails to meet any of the four NRHP criteria
103rd Avenue Northeast	3233	Not eligible	Fails to meet any of the four NRHP criteria
Lake Washington Boulevard Northeast	10307	Not eligible	Fails to meet any of the four NRHP criteria
104th Avenue Northeast	3645	Not eligible	Fails to meet any of the four NRHP criteria

alterations and additions since then, it is eligible for the WHR as a representative element of the early settlement of the community.

Bellevue Christian School, 7800 Northeast 28th Street, Medina

Originally built as the Three Points Elementary School in 1961, this collection of Modern buildings (**Exhibit 34**) was designed by noted Seattle architectural firm Narramore, Bain, Brady and Johanson, now known as NBBJ. Founded in 1943, NBBJ became a regional leader in the Pacific Northwest. Over the years, the firm has grown to become the third largest design practice in the United States and the fifth largest in the world. The school was built for the Bellevue Public School District and consists of four octagonal school room buildings, connected by a series of covered walkways, anchored by a rectangular building that is bisected by a breezeway. Next to this rectangular building, which holds



Exhibit 33. 2857 Evergreen Point Road, Medina



classrooms, the library, and administrative offices, is a two-story rectangular block that contains the cafeteria and assembly space.

The complex has had few alterations and is very intact and well-maintained. It is currently leased by the private Bellevue Christian School for use as their elementary school. It will meet the 50 year age criteria in 2011. At that time, it will be eligible for the NRHP under Criterion C for its distinctive architectural characteristics, representational of educational design theories of its period, and as the work of a masterful, world-renowned architectural firm. It will also qualify for the WHR for its strong architectural qualities and its design by an influential architectural firm.



Exhibit 34. Bellevue Christian School/Three Points Elementary, Medina

2891 Evergreen Point Road, Medina

This Modern-style house (**Exhibit 35**) was built in 1953 on a bluff overlooking Lake Washington. It is architecturally striking and appears to be architect-designed, although no architect of record was discovered during research. Originally the property sloped down to an unobstructed view of the water with an L-shaped wooden dock. In 1979 a new house (2895 Evergreen Point Road) was built between the water and the existing historic house.



Exhibit 35. 2891 Evergreen Point Road, Medina

Although currently vacant and mildly deteriorated, the house still retains its historic features. It has a flat roof, concrete foundation, and cedar siding. The rear of the house faces the road with an unprepossessing facade, with a carport and a partially roofed porch enclosed with a vertical wood divider. The front of the house faces the water and is much more dramatic, featuring a two-story glass extension



with a sloped shed roof and a wide horizontal brick chimney. The house also features large panes of glass, especially on the front.

The house has had some additions, most notably in 1962, when it appears an ell at the southwest corner, between the house and carport, was filled in and the kitchen expanded. It is assumed that the current arrangement of openings on the west elevation dates from this renovation. The carport was enlarged on the east elevation, enclosed and built out as a garage. In keeping with the new footprint of the garage, the partially roofed porch at the entry on the east elevation was added. The two decks on the west elevation, facing the lake, one on either side of the two-story projection, were also added at this time. Although these alterations are substantial, most are complementary to the original design and do not detract from its overall architectural statement. Access to the site is limited due to its distance from the road.

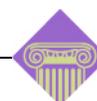
The house is eligible for the NRHP under Criterion C for its distinctive architectural characteristics uniquely representative of its mid-century period. It is also eligible for the WHR for its strong architectural qualities.

2851 Evergreen Point Road, Medina

This Modern-style residence was constructed in 1953 (**Exhibit 36**). Its L-shaped design surrounds an interior courtyard, with a separate rear deck that originally looked over Lake Washington. That view is now obscured by a 1970s house. The house has a poured concrete foundation, is clad in vertical wood siding, and features a pair of low, wide, intersecting gable roofs punctuated by wide brick chimneys. Its design incorporates extensive use of plate glass windows. The only apparent alteration to the building is the enclosure of the original front carport to form an enclosed garage. Research did not reveal an architect for this house, although it is likely from its appearance that it was



Exhibit 36. 2851 Evergreen Point Road, Medina



architect-designed. The house is eligible for the NRHP under Criterion C for its distinctive architectural characteristics, uniquely representative of its mid-century period. It is also eligible for the WHR for its strong architectural qualities.

What are the recommendations for additional study?

Although archaeological and ethnological investigations have not found any evidence of known archaeological or traditional cultural resources in the APE, the presence of TCPs and buried archaeological deposits has not been conclusively ruled out. Additional study is therefore under way to determine whether or not Foster Island is eligible for listing in the NRHP as a TCP. This investigation is consisting of oral history interviews conducted by a qualified anthropologist who has a thorough familiarity with local tribes and ethnographic data. Oral history interviews are being conducted with tribal elders in the Duwamish Tribe, Muckleshoot Indian Tribe, Snoqualmie Tribe, and Suquamish Tribe, according to protocols for such interviews established at each tribe. The anthropologist is reviewing data from earlier oral history interviews available in tribal archives.

The anthropologist may also be conducting oral history interviews with elders who are affiliated with other tribes and have ancestral ties to the project area (possibly Lummi Nation, Tulalip Tribes, and Yakama Nation). The extent of data available for the SR 520 area at each of these tribes will be determined during tribal meetings.

Although all oral history interviews are focusing on the area from Lake Union to central-east Lake Washington, special attention is being given to the significance of Foster Island and whether, given the prior alterations to this island, it retains integrity as a TCP. In addition, the archaeological work being conducted on Foster Island by archaeologists is being done in coordination with tribal interests regarding this location.

The anthropologist will prepare a TCP Nomination if the document research and oral history data are sufficient to support this action and if the interested tribes determine such a Nomination is in their interest. The FHWA would make a final evaluation of eligibility of any TCP, in consultation with the interested tribes and the SHPO.



Subsurface testing is being conducted in areas planned for excavations or significant ground disturbance (to support pilings, etc.). This testing should identify buried archaeological sites, if they are present. If archaeological sites are present, they will either be avoided or a program of mitigation could be implemented.

Potential Effects of the Project

What methods were used to evaluate the project's potential effects?

Section 106 of the NHPA creates a process for reviewing the effects of federally assisted projects on properties listed in or eligible for the NRHP. The cultural resources discipline team applied the Criteria of Effect and Adverse Effect to determine whether the proposed project would affect a listed or eligible property and whether those effects should be considered adverse. The proposed project would have an effect if it changed in any way the characteristics that qualify a property for inclusion in the NRHP, for better or for worse. The proposed project would have an adverse effect if it diminished the integrity of such characteristics.

Potential adverse effects on historic and cultural resources include, but are not limited to (36 CFR 800.5, Adverse Effect):

- Physical destruction of or damage to all or part of the property
- Alteration of a property (including restoration, rehabilitation, or repair that is not consistent with the Secretary's of the Interior's standards for the treatment of historic properties)
- Removal of the property from its historic location
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features

Specific effects that may be introduced by this project include:



- Alteration of the physical setting by introduction of new traffic lanes, widened bridges over SR 520, and new sound walls that are incompatible with the historic setting. Such alterations to the setting of a historic building can degrade the characteristics of integrity of the building (its setting or feeling) through physical impairment or visual intrusion.
- Alteration of the physical setting by a new, wider Evergreen Point Bridge located north of the existing bridge, with a higher elevation at the east and west approaches
- Alteration of the physical setting by a new, wider Portage Bay Bridge located north of the existing bridge
- Alteration of the physical setting by introduction of a new bridge operations facility and access road
- Alteration of the physical setting by decreasing property lot size or removing all or part of the existing buffer zone. This type of alteration to the setting of an historic building can also degrade characteristics of integrity of a building (its setting or feeling) through physical impairment or visual intrusion that might otherwise contribute to that building's eligibility for listing in the NRHP and/or WHR.
- Beneficial effects of decreased noise levels from the installation of sound walls
- Beneficial effects of decreased visual and audible intrusion and reuniting historic neighborhoods due to landscaped lids
- Beneficial effects of decreased visual and audible intrusion from lowering of the SR 520 roadway
- Beneficial effects of reuniting historic neighborhoods separated by SR 520 by the introduction of new or wider bicycle and pedestrian paths

The following sections describe the potential operational and construction effects on cultural resources by location and alternative, and summarize the potential effects for all known cultural resources within the APE.



How would the project permanently affect eligible cultural or historic resources?

This section addresses the project's permanent effects on significant properties ("historic properties"), those that have been found eligible for listing in the NRHP or WHR or as local landmarks. These effects can be either adverse or beneficial. The discussion is grouped by project area, with the cultural resources types discussed separately under each project area.

Seattle

How would the project permanently affect eligible archaeological resources in the Seattle project area?

Neither the 4-Lane nor the 6-Lane Alternative would permanently affect any archaeological or ethnographic sites that are listed in or eligible for listing in the NRHP. Construction in archaeological high probability areas, if not mitigated through scientific data recovery or other suitable measures, could result in adverse effects if eligible archaeological sites are discovered prior to or during construction.

WSDOT has determined that additional work would be necessary prior to selection of either the 4-Lane or the 6-Lane Alternative. This work includes the collection of oral histories from tribes with members of Lakes Duwamish descent and subsurface investigations of accessible locations where there is a probability for the discovery of archaeological deposits. This work could be conducted concurrently so that data from one can enhance interpretation of data from the other.

Subsurface archaeological investigations should be conducted in all locations identified in BOAS (2005: Appendix H), as accessible. The type and extent of investigations would be specific to each area identified, ranging from shovel probe excavation with hand tools, to investigation using mechanical coring and backhoes.

How would the project permanently affect eligible traditional cultural properties in the Seattle project area?

No traditional cultural properties have been identified within the SR 520 APE. Additional investigation is recommended, however, for Foster Island (see discussion of recommendations at the end of the *Affected Environment* section). The proposed project is not expected to



have a significant effect on Indian fishing rights, and WSDOT is working with tribal representatives and fisheries biologists to ensure that any effects to fisheries from project construction would be minimized.

How would the project permanently affect eligible historic buildings and structures in the Seattle project area?

No Build Alternative

The Continued Operation Scenario assumes that continued maintenance would allow the Evergreen Point Bridge to still operate as it does today, having no increased effects on historic resources. Current conditions would remain; most notably, visual intrusion from SR 520 and noise and air pollution from vehicles traveling on the highway would continue.

The existing SR 520 is immediately adjacent to the NRHP-eligible proposed Roanoke Park historic district, which experiences highway-related noise, as well as the visual intrusion of the highway itself and to a lesser degree, the Portage Bay Bridge. The highway's physical presence and noise from vehicles along SR 520 affect the historical context of the district.

The NRHP-eligible Mason House at 2545 Boyer Avenue East is also adjacent to SR 520 and experiences the same effects as Roanoke Park. The Mason House is located at the beginning of the Portage Bay Bridge, so the bridge is highly visible from the house and its surroundings, constituting a high degree of visual intrusion.

The existing SR 520 divides the NRHP-eligible proposed Montlake historic district and is immediately adjacent to MOHAI. This historic district experiences highway-related noise, as well as the visual intrusion of SR 520. The highway forms a physical barrier that isolates one side of the neighborhood from the other. The highway's physical and visual presence and noise from moving vehicles affect the historical context of the district. The design of the MOHAI facility and its grounds were greatly altered to accommodate the initial construction and location of SR 520. These alterations contribute to the lack of integrity and the resultant denial of individual NRHP eligibility for MOHAI. The site would retain these alterations. The northern section of the Washington Park Arboretum was also heavily affected by the construction of SR 520, and current effects would continue, including



noise and visual intrusion, as well as the physical presence of SR 520 bisecting the Foster Island area.

Under the Catastrophic Failure Scenario, if the Evergreen Point Bridge were to collapse, MOHAI would be at great risk and would likely experience some physical loss. The Evergreen Point Bridge itself would also be lost, and the area of the Arboretum underneath and adjacent to the bridge would be damaged and inaccessible for park uses.

4-Lane Alternative

The project could have long-term proximity effects on several historic resources in the Seattle project area. These are effects that are indirect in that they involve noise and visual intrusion, rather than demolition or direct removal of a property.

Proposed Roanoke Park Historic District

The NRHP-eligible proposed Roanoke Park historic district includes Roanoke Park (see **Exhibit 37**). The park has historically been associated with the neighborhood and is an integral part of the district. The project would have proximity effects on the park (see Appendix O, *Recreation Discipline Report*) and selected buildings in the NRHP-eligible proposed Roanoke Park historic district. These effects would include increased visual intrusion on the character of the district because of new sound walls and two reconstructed bridges over SR 520 at 10th Avenue East and Delmar Drive East. The installation of sound walls along the perimeter of SR 520 between 10th Avenue East and Delmar Drive East would have a beneficial effect by decreasing the noise levels from the highway for many locations in this portion of the historic district. Existing sound levels in the area adjacent to the proposed sound wall range from 61 to 67 dBA. The installation of the sound wall in this area would lower noise levels to 60 to 66 dBA. Of the 12 noise monitoring locations in the historic district, four locations would have decreases of 1 to 2 dBA, three locations would have increases of 1 to 2 dBA, and five locations would have no changes in noise levels. See Appendix M, *Noise Discipline Report*, for more information on noise effects.

Mason House

The 4-Lane Alternative would have beneficial effects on the NRHP-eligible Mason House at 2545 Boyer Avenue East. Although the new Portage Bay Bridge would be higher than the existing bridge, the new bridge would be shifted north, away from the house, which would decrease the visual and audible effects. The slope of the Portage Bay Bridge would be more gradual than it is currently, with parts of the





- 4-Lane Footprint
- Not NRHP Eligible
- NRHP Eligible
- NRHP Eligible Historic District**
- Contributing
- Non-Contributing

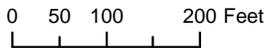


Exhibit 37. Effects of the 4-Lane Alternative on Historic Resources in the Roanoke, Portage Bay, and North Capitol Hill Neighborhoods

SR 520 Bridge Replacement and HOV Project