

SR 520, Medina to SR 202: Eastside Transit and HOV Project

Appendix K **Cultural Resources Technical Memorandum**

APPENDIX C HAS BEEN REDACTED - FOR PUBLIC DISCLOSURE

**SR 520, Medina to SR 202:
Eastside Transit and HOV Project
Environmental Assessment**

**Cultural Resources
Technical Memorandum**

Prepared for
Washington State Department of Transportation
Federal Highway Administration

November 15, 2009

Preparer's Note

Per provisions of Section 106 of the National Historic Preservation Act, this document evaluates cultural resources that may be affected by the SR 520, Medina to SR 202: Eastside Transit and HOV Project. Per federal and state regulations, this document identifies historic properties (those listed or eligible for listing in the National Register of Historic Places) within the project Area of Potential Effects (APE), and then provides an assessment of this undertaking's effects on those historic properties.

The SR 520, Medina to SR 202: Eastside Transit and HOV Project will reduce transit and high-occupancy vehicle (HOV) travel times and will enhance travel time reliability, mobility, access, and safety for transit and HOVs along the SR 520 corridor east of Lake Washington. The project extends approximately 8.8 miles along SR 520 from the east shore of Lake Washington to the interchange with SR 202 in Redmond.

This document is divided into two volumes:

- Volume 1, prepared by CH2M HILL, is titled *Historic Built Environment Cultural Resources Technical Memorandum*.
- Volume 2, prepared by ICF Jones & Stokes, is titled *Archaeological Resources Technical Memorandum*.

Both reports were prepared by professional cultural resources specialists who meet Secretary of the Interior Standards for their respective disciplines. Separating the two disciplines into two distinct volumes allowed us to capitalize on expertise, budgets, and schedule, and ultimately resulted in a comprehensive assessment of all cultural resources within the project APE.

Volume 2:

**Archaeological Resources
Technical Memorandum**

SR 520, Medina to SR 202: Eastside Transit and HOV Project

ARCHAEOLOGICAL RESOURCES TECHNICAL MEMORANDUM

SR 520, MEDINA TO SR 202: EASTSIDE TRANSIT AND HOV PROJECT

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Executive Summary

The Washington State Department of Transportation (WSDOT) and the Federal Highway Administration (FHWA) are co-lead agencies on the SR 520, Medina to SR 202: Eastside Transit and HOV Project. The purpose of this project is to enhance travel time reliability, mobility, access, and safety for transit and high occupancy vehicles (HOVs) in the rapidly growing areas along the SR 520 corridor east of Lake Washington, in King County, Washington (Appendix A, Exhibit 1).

This archaeological resources survey overlaps the area of a previous archaeological survey conducted by BOAS, Inc. in 2006 and includes additional areas within the area of potential effects (APE). As engineering planning has progressed, the APE has been amended to accommodate design changes in the roadway, stormwater treatment areas, and one proposed site for wetland mitigation: the Keller Site. The APE includes the SR 520 Corridor “ground disturbance area” (Limits of Construction) and the proposed Keller Site (Appendix A, Exhibit 2, Sheets 1 and 2), that incorporates the full horizontal area of ground disturbance and the vertical dimension to either the full depth of planned disturbance or to the depth of consolidated glacial sediments, whichever is shallower.

A combined total of 494 shovel probes were excavated by ICF Jones & Stokes in both the SR 520 Corridor and Keller Site APEs (see Appendix A, Exhibit 3, Sheets 1 through 5). The SR 520 Corridor was divided into 14 survey areas in which 336 shovel probes were excavated. A total of 158 shovel probes were excavated at the Keller Site.

No artifacts from prehistoric period sites were found in shovel probes excavated in the SR 520 Corridor or at the Keller Site. Numerous isolated objects such as bottle glass, ceramics, and building materials were found in the shovel probes excavated in the SR 520 Corridor. Most of those objects were in the recent-era construction fill matrix, none were *in situ*, and most were modern debris that appears to have been inadvertently included in the construction fill when it was deposited during road construction.

The only definitively historic-period artifact found in the shovel probes of the SR 520 Corridor is a liquor bottle found in shovel probe T-208 in Survey Area 10. That bottle is being included as road toss in the site record that is being submitted with this report for the Historic Lake Washington Boulevard roadway.

Two historic period archaeological sites were recorded during this survey. The first site includes two segments of the Historic Lake Washington Boulevard roadway, which is a circum-Lake Washington alignment that opened in 1922 and played an important role in the development of the Eastside (Eastside Journal 1922). The two recorded segments include discontinuous portions of active roadway as well as an abandoned roadway. The two segments recorded in the SR 520 Corridor portion of the APE lack physical integrity and integrity of setting, feeling, workmanship, materials, and design, and thus are recommended as not eligible for the National Register of Historic Places (NRHP). The second archaeological site recorded during this survey is a previously unrecorded, historic road and log bridge (Keller Farm-1) located in the proposed Keller Site wetland mitigation APE. Although this site retains integrity, the nature of the resource, its location outside of the core farm complex, and the lack of unique or innovative engineering indicate that the

site is not historically significant. This site does not meet the eligibility requirements of the NRHP, and is recommended not eligible for the NRHP.

No archaeological historic properties are located in the project APE. However, monitoring by a professional archaeologist is recommended for planned channel excavations on the Keller Site for the possible presence of a buried pre-contact resource, due to the scale of ground disturbance in a setting considered to have a high-probability for archaeological resources.

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Acronyms and Abbreviations

ABS	acrylonitrile butadiene styrene
APE	Area of Potential Effects
BP	before present
cm	centimeter
Corps	U.S. Army Corps of Engineers
DAHP	Department of Archaeology and Historic Preservation
DEIS	Draft Environmental Impact Statement
FHWA	Federal Highway Administration
GPS	global positioning system
HOV	high occupancy vehicle
NADB	National Archaeological Database
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
RCW	Revised Code of Washington
SP	shovel probe
SR	State Route
TCPs	traditional cultural properties
USGS	U.S. Geological Survey
WSDOT	Washington State Department of Transportation

Project Description

Proposed Project Activities and Elements

The Washington State Department of Transportation (WSDOT) and the Federal Highway Administration (FHWA) are co-lead agencies on the SR 520, Medina to SR 202: Eastside Transit and HOV Project. The purpose of this project is to enhance travel time reliability, mobility, access, and safety for transit and high occupancy vehicles (HOVs) in the rapidly growing areas along the State Route (SR) 520 corridor east of Lake Washington, in King County, Washington (Appendix A, Exhibit 1).

This archaeological resources survey overlaps the area of a previous archaeological survey conducted by BOAS, Inc. in 2006 and includes additional areas within the area of potential effects (APE). The project footprint was described in a letter from WSDOT to the Washington Department of Archaeology and Historic Preservation (DAHP) dated February 12, 2009 as follows:

...the SR 520 Eastside Transit and HOV Project will complete the HOV system along approximately 8.5 miles of SR 520 from the vicinity of Evergreen Point Road in Medina to the SR 202 interchange in Redmond, Washington. Between Evergreen Point Road and 108th Avenue NE, SR 520 would be reconstructed in a "4+2" land configuration (four general purpose lanes and two HOV lanes). East of 108th Avenue NE, existing outside lanes would be restriped to the inside.

Vertical and Horizontal Depth Definition of the Area of Potential Effects

For the purpose of complying with Section 106 of the National Historic Preservation Act (NHPA), WSDOT has defined the Area of Potential Effects (APE) for the project in a series of revisions. The initial definition was described in a letter to DAHP dated February 12, 2009, to be as follows (an illustration of the APE is provided in Appendix A, Exhibit 1; full text of the letter is provided in Appendix B):

The APE for this project includes one parcel on either side of the SR 520 right-of-way. This will account both for direct effects to historic properties, as well as potential indirect effect caused by noise, dust and dirt, vibration, change of setting, or other factors.

The archaeological portion of the APE includes a vertical element in order to consider potential effects from ground disturbance, both within the SR 520 right-of-way and the adjoining intersections to be improved. The vertical APE is defined as either the full vertical limit of all proposed construction, or the depth to consolidated glacial sediments, whichever is shallower. The latter part of the definition assumes that glacial

sediments either pre-date all human occupation in the Puget Sound region, or would have been deposited after ice sheets scoured the landform and removed any physical evidence of pre-glacial human occupation.

In March, 2009, the APE was enlarged to accommodate new project elements, including stormwater treatment areas, as described in a letter and associated maps to DAHP (March 19, 2009).

The APE ascends east onto the Interlake Drift Upland in Medina. The eastern shore of the lake is now a 150-foot-wide, wave-cut terrace exposed when the level of Lake Washington was lowered 10 feet in 1916 (Bard and Durio 2006, Attachment 1:14).

During the early Holocene, when lake levels were lower, this terrace probably extended west into the lake. A 100-foot-high bluff rises above the shoreline terrace to the upland (Bard and Durio 2006, Attachment 1:14).

The APE route crosses the drift upland, which is composed of several north–south trending ridges and intervening outwash channels. The proposed project route crosses three Vashon glacial till ridges, which extend north into Lake Washington to form Evergreen, Hunts, and Yarrow points. The ridges are separated by shallow troughs containing Vashon recessional outwash deposits. These troughs open to the north to form Fairweather Bay and Cozy Cove. Small, incised streams flow north into these bays, diverted into culverts below SR 520. Extensive marshlands formed in the bays when the lake level was lowered in 1916 (Bard and Durio 2006, Attachment 1:14-15).

The route then passes along the northern slope of another north–south trending upland ridge, crossing small, incised streams that bisect the ridge and drain into Yarrow Bay to the north. The route descends into the Larsen Channel, a former outwash channel composed of Vashon recessional outwash deposits, which now drains north into a large wetland in Yarrow Bay. Although much of the project area within this channel has received significant artificial fill, geotechnical data indicated the presence of Holocene alluvium beneath the fill and above the recessional outwash deposits (Bard and Durio 2006, Attachment 1:15).

In a letter dated May 14, 2009, WSDOT included one potential wetland mitigation site in the APE, the Keller Site. The letter includes a map showing the boundaries of the Keller Site, along with alternatives, but no detailed description. The letter and maps are included in Appendix B.

Copies of letters from DAHP expressing concurrence with the definition of the APE are included in Appendix B.

Project Background

SR 520 Corridor (Limits of Construction):

Legal Description:	T25N R4E Sec 24 T25N R5E Sec 19, 20
U.S. Geological Survey (USGS) Quad:	<i>Kirkland, WA</i> (1976)

Acreage Surveyed:

▪ Draft Environmental Impact Statement (DEIS) footprint investigated by Blukis Onat et al. (2006)	108.96 acres
▪ New limits of construction	130.94 acres
▪ Difference (area investigated during this survey)	21.98 acres

This acreage breakdown is provided to give a more accurate impression of the total area of investigation and the amount of area that could actually be accessed for the shovel probe survey. Maps showing the project location and project boundaries are provided in Appendix A of this report.

Keller Site:

Legal Description:	T25N R6E Sec 6
USGS Quad:	Redmond, WA (1976)
Acreage Surveyed:	31 acres

Project Proponents: WSDOT and FHWA

Property Owners: WSDOT, Bellevue School District, City of Bellevue, City of Kirkland, City of Medina, Town of Hunts Point, Town of Yarrow Point, and private property owners.

Copies of shoreline permits, wetland permits, and right-of-entry permission forms for all private property on which the cultural resources survey was conducted are on file at the Seattle office of ICF Jones & Stokes and WSDOT's SR 520 Project office.

Regulatory Background

The FHWA is the lead federal agency responsible for compliance with Section 106 of the NHPA and for consultation with tribal cultural resources staff, as per 36 CFR 800.4 (a) (4). WSDOT has been designated by the U.S. Army Corps of Engineers (Corps) to initiate consultation and directly manage the cultural resources studies. The FHWA, however, will maintain its status as the federal lead for the project and will address tribal concerns that relate to WSDOT's actions or tribal trust responsibilities. WSDOT initiated consultation with the Muckleshoot Indian Tribe, the Suquamish Tribe, the Snoqualmie Tribe, the Tulalip Tribes, the Confederated Tribes and Bands of the Yakima Nation, and the non-federally recognized Duwamish Tribal Services concerning the APE on June 17, 2008. All WSDOT APE correspondence is included in this report as Appendix B.

The objective of a cultural resources inventory is to assist WSDOT and the FHWA in meeting the requirements of Section 106 by making a "good faith effort" to assure that cultural resources in the APE are identified and the potential impacts of the proposed project on the properties are assessed. Cultural resources investigations in the project area included a records search, archival research, an archaeological pedestrian survey with shovel probe testing, and a historic built environment survey and evaluation of existing buildings and structures in the APE.

Project History

Evaluation of the cultural resources that could potentially be impacted by road improvements and alterations associated with the SR 520, Medina to SR 202: Eastside Transit and HOV Project began in 2004. The reports listed in Table 1-1 summarize the cultural resources studies conducted to date.

Table 1-1. Previous Cultural Resources Studies for the SR 520, Medina to SR 202: Eastside Transit and HOV Project

Author	Date	Title
CH2M HILL	2004	SR 520 Bridge Replacement and HOV Project: Cultural Resources Discipline Report
Blukis Onat et al.	2005	Preliminary Ethnographic and Geoarchaeological Study of the SR 520 Replacement and HOV Project
Blukis Onat et al.	2006	Addendum to the Preliminary Ethnographic and Geoarchaeological Study of the SR 520 Bridge Replacement and HOV Project
Blukis Onat et al.	2006	Tribal History of the SR 520 Corridor and Archaeological Field Investigations within the SR 520 Bridge Replacement and HOV Project
Durio and Bard	2006	SR 520 Bridge Replacement and HOV Project Draft EIS, Appendix D, Cultural Resources Discipline Report
Bard and Durio	2006	Addendum to Cultural Resources Discipline Report
Blukis Onat et al.	2007	Ethnohistoric and Geoarchaeological Study of the SR 520 Corridor and Archaeological Field Investigations in the SR 520 Bridge Replacement and HOV Project Including the Pacific Interchange and Second Montlake Bridge Option, King County, WA

The earlier studies were much broader than the current project in terms of both area included in the APE and the range of resources addressed. The APE for the earlier studies included both an earlier version of the SR 520 Corridor on the east side of Lake Washington that is the focus of the current study and a corridor on the west side of Lake Washington where the replacement SR 520 Evergreen Point Bridge will connect with surface roads.

BOAS, Inc. addressed ethnographic and geoarchaeological issues and the potential for buried archaeological sites. The firm's investigations included a review of ethnographic documents and a collection of geoarchaeological background information, oral history interviews, and archaeological field investigations. The goal of the study was to find locations that might be considered traditional cultural properties (TCPs) and significant subsurface prehistoric or historic archaeological deposits. The results of the study were used to define the areas where the probability of finding archaeological sites was highest. For the eastside of Lake Washington the firm defined six areas where the probability of finding archaeological sites was highest: three in the "Points" areas (Evergreen Point, Hunts Point, and Yarrow Point) and three associated with Northup Creek. These areas were then surveyed using field methods similar to the methods used in this study; that is, in each of the areas chosen for survey, we excavated shovel probes at 20-meter intervals.

Because the investigations reported here are part of the sequence of studies reported in the documents listed in Table 1-1, the background studies in this report are summary statements of the results of the prior studies, included verbatim from the earlier reports.

Survey Personnel

No individuals or organizations other than WSDOT and ICF Jones & Stokes participated directly in the fieldwork for the archaeological shovel probe survey.

Alex Stevenson; Amy Jordan, MA; George Bishop; J. Tait Elder; Keith Syda; Levin Kraushaar, MA; Meredith “Meris” Mullaley; Mike McKillop; Roy Watters, MA; M. Shane Sparks; Steve Dies; Tim Cowan; and Tom Barrett, PhD conducted the field work under the supervision of Stephanie Livingston, PhD. Stephanie was the principal investigator for the project and supervisor for the fieldwork. Amy participated in part of the fieldwork and in the report preparation process. Stephanie Livingston and Amy Jordan meet the Secretary of the Interior’s Professional Qualification Standards for archaeologists (Revised Code of Washington [RCW] 27.53.030).

Copies of this report and field records for this project (including field notes, shovel probe forms, site forms, photographs, and correspondence) are on file at the Seattle office of ICF Jones & Stokes. Copies of the reports and site forms are also on file at WSDOT’s SR 520 Project office and DAHP.

Natural and Geological Setting

The natural and geological setting described in earlier investigations prior to the shovel probe survey conducted by BOAS, Inc. staff in 2006 was based on extensive ge archaeological studies and archival search. The setting descriptions for the earlier survey are relevant for this investigation because the APE surveyed during the current investigations is immediately adjacent to most of the previous APE, and the Keller Site is nearby in settings as similar as possible to the natural setting of the SR 520 Corridor APE. The following summary statements are from the earlier studies and are included here verbatim:

Three primary types of geomorphic features have been identified in the project area: elevated landforms typically composed of Vashon till, depressions or troughs underlain by Vashon outwash and Holocene alluvium and colluviums, and lowland marshes. Vashon till is typically found covering the upland features and forming the core of other elevated topographic landforms. Post-glacial deposition on most of these landforms has been minimal, so that cultural deposits are likely to remain at or near the surface. On the slopes flanking such landforms, cultural deposits may have been buried by colluviums. Soils on till surfaces typically consist of Alderwood series and the formation of such soils may have caused cultural remains to become buried shallow beneath the ground surface by natural soil-forming processes, particularly biological activity within the upper meter of the soil profile. The growth of coniferous vegetation on such landforms has probably made the soil slightly acidic, and preservation of older cultural remains would probably be limited to lithic materials (Bard and Durio 2006:15).

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 (Bard and Durio 2006:39).

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 alleviation (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 (Bard and Durio 2006:42-43).

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 (Bard and Durio 2006:39).

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 red cedar, western hemlock, and Douglas fir is inferred in the Lake Washington vicinity by 6,500 years ago. When the first Euroamerican settlers arrived at Seattle in 1851, the region was thickly forested with tall, large-diameter Douglas fir, western red cedar, and western hemlock. Red alder and cottonwood grew on river floodplains and as pioneering trees on other disturbed land (Bard and Durio 2006:39-40).

Twentieth Century Modifications

Major lake level changes eventually occurred as a result of the excavation of a canal between Lakes Washington and Union early in the twentieth century. Navigation was the principal objective to aid the transport of logs, coal, and farm produce; flood control was an additional advantage. In 1885, a shallow, 16-foot-wide excavation was made to meet the need of the bustling timber and sawmill operations to pass logs between Union Bay on Lake Washington and Portage Bay on Lake Union. Known locally as the Portage Canal, this narrow canal took advantage of the natural difference in the lake-water levels, which produced a current to transport logs through the chute from the higher Lake Washington to Portage Bay. The effects of this shallow canal on water levels in Lake Washington are not known but were probably negligible (Bard and Durio 2006:40).

Construction began on a navigable Ship Canal in 1910 between Lake Union and Lake Washington. An excavation known as the Montlake 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 (Bard and Durio 2006:40-41).

The cultural setting provided for the previous subsurface investigations was based on extensive ethnographic and archival research and is appropriate for providing a context for the investigations reported here. We are including, verbatim, the summary of the cultural setting provided for the subsurface investigations of the APE as previously defined for the investigations by BOAS, Inc.

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 (Bard and Durio 2006:45).

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 1995:14-17). 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) as cited in Bard and Durio (2006:45-46).

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 freshwater 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 (Bard and Durio 2006:46).

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 (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) (Bard and Durio 2006:86, 89).

The promontories of Hunts Point, Fairweather Point, and Yarrow Point were referred to by Native speakers as *Sli^uLiŪqs* (“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) (Bard and Durio 2006:89).

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'bats* (“pulling toward something”) (Bard and Durio 2006:89).

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 (Bard and Durio 2006:50).

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 Denney, 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 (Bard and Durio 2006:50).

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 (Bard and Durio 2006:51).

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 (Bard and Durio 2006:52).

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 (Maudlin 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 (Bard and Durio 2006:52).

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 Median 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 because of the number of wealthy citizens who had built large homes along the shoreline there (Bard and Durio 2006:52-53).

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 (Bard and Durio 2006:53).

Early road development of the Eastside was invigorated by the growth of farming and logging operations in the area. NE 24th Street was one of the earliest roads built on the Eastside in 1879 and functioned as a route from Lake Washington to the community of Northup (Waterman 2001; WSDOT 2008). King County contracted the paving of numerous roads in 1919, which connected Bellevue with other towns and communities (Eastside Journal 1918; WSDOT 2008). The first and largest of these connected Newport with Bellevue. In 1922, Lake Washington Boulevard was opened (Eastside Journal 1922) and automobile travel was possible from the Eastside to Seattle traveling around the circumference of Lake Washington. King County Engineering Department Maps from 1938 and 1948 reflect the alignment of Lake Washington Boulevard through the modern areas of Clyde Hill, Bellevue, and the current alignment of SR 520 (King County 1938). These maps name the road "N.E. Lake Washington Boulevard" (King County 1938, 1948). The modern road alignment that runs north from SR 520 and Northup Way to Kirkland along the eastern shore of Lake Washington still retains the name "Lake Washington Boulevard NE."

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 [of] the most affluent in the region (Bard and Durio 2006:53).

Existing Data and Background Data

A summary of the archaeological properties in the APE and within 1 mile of the APE for both the SR 520 Corridor and the Keller Site is provided in the following tables. The information was compiled from reviewing existing archaeological inventories and databases, historic records, and other archival repositories.

Table 4-1. Previously Conducted Cultural Resources Surveys in and within 1 Mile of the APE– SR 520 Corridor

NADB	Citation	Title	Results
1344441	WSDOT 2005a	I-405, SR 520 to SR 522 Kirkland Nickel Project Historic, Cultural, and Archaeological Resources Discipline Report and Supplemental Analysis (Appendix M)	No significant cultural resources (1 historic structure recommended eligible)
1346848	WSDOT 2005b	I-405, NE 10th Overcrossing Project Historic, Archaeological, and Cultural Resources Technical Report	No significant cultural resources (1 historic structure recommended not eligible)
1346947	Goetz 2005	Draft Cultural Resources Assessment NE 24th Street Improvements, Bellevue, Washington	No significant cultural resources (1 historic structure, not evaluated)
1347091	Goetz 2006	Cultural Resources Assessment NE 24th Street Improvements, Bellevue, Washington (Agency Review Draft)	No significant cultural resources (1 historic structure, not evaluated)
--	Blukis Onat et al. 2007	Tribal History of the SR 520 Corridor and Archaeological Field Investigations within the SR 520 Bridge Replacement and HOV Project	Site 45KI1760 (Miller Street Landfill) – recommended eligible, Additional work recommended in Probability Area 4 (East Arboretum Creek), Recommended additional consultation work with Tribes and evaluation of Foster Island as TCP, Additional work recommended in the Points (Fingers) area (Probability Areas 9, 10, 11, 12, 13 and 17)

Table 4-2. Previously Recorded Archaeological Sites/Historic Properties within 1 Mile of the APE –SR 520 Corridor

Site No.	Name	Type	NRHP evaluation
45KI 433	Seattle Coal Company/Steamer Chehalis Coal Cars	Submerged Historic Railroad Properties	Not evaluated

Table 4-3. Previously Conducted Cultural Resources Surveys in and within 1 Mile of the Keller Site APE

NADB	Citation	Title	Results
1339738	Robinson 1993	A Cultural Resources Study of the 196th Avenue N.E. Corridor, King County, Washington	No previously recorded cultural resources (No survey conducted)
1339762	Robinson 1996	A Cultural Resources Survey of a Portion of the King County Department of Transportation's Northeast Novelty Hill Road Project, King County, Washington	No cultural resources
1339825	Norman 1999a	Archaeological Testing and Monitoring for Phase II Construction at Millennium Corporate Park	45KI 467 (Pre Contact Lithic Material, Historic Debris Scatter)
1339826*	Norman 1999b	Heritage Resource Monitoring of Construction at the Millennium Corporate Park	45KI 466, 45KI 467 (Pre Contact Lithic Material, Historic Debris Scatter, Historic Road)
1339871	Archaeological and Historical Services 1998	Archaeological Resources SR 202 SR 520 to Sahalee Way NE Improvement Project	No cultural resources
1340843	Lewarch 1997	Review of Archaeological data for the Millennium Corporate Park Vicinity, Redmond, Washington	No previously recorded cultural resources (No survey conducted)
1340846	Moore et al. 1997	Cultural Resources Survey of the Proposed Millennium Project Interim Report	No significant cultural resources (historic features lack integrity)
1340879	Norman 2002	Archaeological Investigations for the Bear Creek Mitigation/ Planting Site	No cultural resources
1343438	Johnson 2004	Monitoring of Interim East Lake Sammamish Trail Fence Augers	No significant cultural resources (modern/historic debris associated with railroad)
1346126	Greenwalt et al. 2005	Perrigo Heights Archaeological Resources and Traditional Cultural Places Assessment, King County, Washington	No cultural resources

NADB	Citation	Title	Results
1346586	Earley 2005	Cultural Resources Assessment of the Bear Creek Trail Project, Redmond, King County, Washington	No cultural resources
1346694	Boersema 2005	Archaeological Investigations for the Park Place, Redmond, King County, Washington	No significant cultural resources (modern debris)
1349527	Hartmann 2007	Cultural Resources Assessment for Union Hill Road NE between Avondale Road and 178th Place NE Project, Redmond, Washington	No cultural resources
1350299	Gilpin and Gillespie 2007	Cultural Resources Survey and Evaluation for the Puget Sound Energy Union Hill HP Project, City of Redmond, King County, Washington	45KI 771 (historic isolate, not evaluated)
1351971	AMEC 2007	NE Novelty Hill Road Project Cultural Resources Discipline Report	45KI 834/ NHR1 (Novelty Hill Road 1) Pre Contact lithic material, determination of eligibility requested
1351972	Demuth et al. 2008	Final Cultural Resources Section 106 Technical Report NE Novelty Hill Road Project- Phase I	No significant cultural resources
1351973	Kiers 2008	Results of Archaeological Survey and Testing Investigations for the NE Novelty Hill Road Project, King County, Washington	45KI 834/ NHR1 (Novelty Hill Road 1) Pre Contact lithic material, determination of eligibility requested
1351974	Demuth et al. 2008a	Final Cultural Resources Section 106 Technical Report NE Novelty Hill Road Project- Phase II	3 Pre Contact lithic isolates (not eligible) 8 historic structures (eligible for listing)
1351975	Demuth et al. 2008b	Executive Summary to Cultural Resources Section 106 Technical Report NE Novelty Hill Road Project-Phase II	45KI 834/NHR1 (Novelty Hill Road 1) Pre Contact lithic material, determination of eligibility requested) 3 Pre Contact lithic isolates (not eligible) 8 historic structures (eligible for listing)
1352313	Stegner and Kelly 2008	USPS Redmond Cultural Resources Survey, King County, Washington	No cultural resources

*Survey is in or overlaps the APE

Table 4-4. Previously Recorded Archaeological Sites/Historic Properties within 1 Mile of the Keller Site APE

Site No.	Name	Site Type	NRHP evaluation
45KI 196	Old Yellowstone Road/ Old Red Brick Road	Historic road	Listed
45KI 266	--	Pre Contact lithic material, feature (hearth)	Not evaluated
45KI 451	Seattle, Lake Shore, and Eastern Railroad Grade	Historic railroad property	Not evaluated
45KI466*	Bear/Evans Creek site	Pre Contact lithic material, historic debris scatter, historic road	Not evaluated
45KI 467	Union Hill Road site	Pre Contact lithic material, historic debris scatter	Not evaluated
45KI 699	--	Historic railroad property	Not evaluated
45KI 771	--	Historic isolate (milk can)	Not evaluated
45KI 834	Novelty Hill Road 1 (NHR1)	Pre Contact lithic material	Determination of eligibility requested
45KI 835	--	Pre Contact isolate (lithic material)	Not evaluated
45KI 836	--	Pre Contact isolate (lithic material)	Not evaluated
45KI 837	--	Pre Contact isolate (lithic material)	Not evaluated

*Site is immediately adjacent to the APE

Archival Research

Archival research was conducted in September 2009 by ICF Jones & Stokes staff. Research was conducted at the King County Library (Main Branch), the University of Washington, Special Collections, and the Eastside Historical Society.

Objectives/Expectations

This survey was conducted to extend the coverage of the archaeological survey conducted by BOAS, Inc. in 2006, and to include additional areas of the APE added to the project as engineering planning has progressed.

Expectations

The area of proposed ground disturbance investigated during the shovel probe survey is adjacent to the areas investigated by BOAS, Inc. staff in 2006. The shovel probes excavated in 2006 generally revealed that most of the APE is construction fill overlying glacial deposits. Because the areas investigated during this survey are immediately adjacent to the areas investigated during the earlier survey, ICF Jones & Stokes expected very similar results. However, most of the new APE is farther from the current SR 520 roadbed. As such, we recognized there was the potential for fill to be shallower and for finding more areas in which the natural surface had not been graded and could potentially be preserving buried sites.

Because the newly defined APE includes more ground surface further from the existing SR 520 Corridor, especially in the Keller Site, we felt there was a better chance of finding intact native deposits with buried archaeological sites in the current APE than in the previously investigated APE. Blukis Onat and Kiers (2007) identified areas of high probability for finding archaeological sites based on geoarchaeological and ethnographic data and the distribution of previously recorded archaeological sites. They summarized their expectations for the SR 520 Corridor as follows:

... some of the landforms in the Eastside project area could potentially contain intact archaeological deposits in areas not obliterated by previous construction (Blukis Onat et al. 2005: Appendix H). The Lake Washington shoreline below [buried under] 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 (Bard and Durio 2006:86).

The cultural resource team's observations and assessments of the archaeological sensitivity of these areas are:

- **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 (Bard and Durio 2006:86).

The Keller Site APE is in an area where no construction has occurred, and appears to have been at least seasonally wet for a very long time. It is bounded on the south by Evans Creek and the west by Bear Creek; streams that appear to have been there for a very long time suggest the potential for finding prehistoric sites relating to resource procurement. The presence of irrigation channels running through the area suggest the potential for historic period sites and isolates relating to agricultural activities. Likely, it was too wet during much of the past for either prehistoric or historic residential use.

Field Methods

Sampling Strategy

The locations where shovel probes were to be excavated in both the SR 520 Corridor and the Keller Site were initially chosen on maps where boundaries of the current APE and the previously investigated APE were drawn. In the APE along the SR 520 Corridor, shovel probe locations were drawn to be excavated every 30 meters where the ground was not obstructed by buildings, parking lots, roads, or extremely steep slopes. The interval between probes was reduced to 10 meters in areas proposed for stormwater retention ponds, stream realignments, culvert replacements, or other construction actions related to water.

The sampling interval was 20 meters in the Keller Site. The shovel probes were laid out on a systematic grid in the Keller Site, where most of the APE is a contiguous block. The SR 520 Corridor APE includes numerous irregularly shaped parcels that range from long, very thin strips of land where sound barriers will be installed, to larger parcels where there will be stormwater ponds. A systematic grid of units was used where possible, but for most areas the shovel probes could only be laid out in irregular strips. Regardless of the parcels' orientation, we attempted to choose locations for shovel probes that maintained the intervals of either 10 meters or 30 meters as described above.

Archaeological Survey

The field crew walked all parcels indicated on the map (Appendix A, Exhibit 3) to assess conditions and to select the locations for excavating shovel probes in the sampling design described above. Dense vegetation in the APE obscured the ground surface entirely in many areas. In these areas, the locations where shovel probes were to be dug were marked and the surface inspection continued. Areas where the ground is obscured by buildings or pavement, where the ground is too steep to dig shovel probes, or where the surface was marked as the location of buried utilities, were

recorded and are shown in Appendix A, Exhibit 3, Sheets 1 through 5 along with the locations of each shovel probe.

Each probe was excavated with a shovel to a depth of approximately 1 meter, to Pleistocene sediments, dense gravel, or to groundwater, whichever was found first. If Holocene sediments appeared to continue below 1 meter and could be probed further with a hand auger, an auger with a 10-centimeter (cm) bucket was used to investigate deeper. All matrix excavated from probes that was not clearly construction fill was sifted through a 0.25-inch mesh screen. All shovel probes were backfilled after notes were taken. Locations of all shovel probes were recorded with a Trimble geographic positioning system (GPS) unit.

No cultural materials or other samples were collected for analysis. All cultural materials found were described on their associated shovel probe form and reburied as the probe was backfilled with the excavated sediment. No curation was required for this project.

The field survey was conducted between May 18, 2009 and July 28, 2009. Conditions during the survey ranged from cold and rainy with temperatures between 50 and 55 degrees Fahrenheit to clear and sunny with temperatures reaching over 100 degrees Fahrenheit. The ground surface across the survey areas was generally obscured by vegetation, residential and commercial development, existing road, trails and sidewalks.

A summary of the shovel probe stratigraphy and cultural resources found in the probes is provided in Appendix C. The actual depth of shovel probes ranged between 20 and 120 cm below the modern surface. When Holocene sediments appeared to continue below 1 meter and could not be probed further with a shovel, then a hand auger with a 10-cm bucket was used to investigate deeper. The depth of the auger probes ranged from 117 cm to 255 cm below the modern surface. The average depth of all probes was 124 cm. All matrix excavated from probes was sifted through a 0.25-inch mesh screen. All probes were backfilled after notes were taken.

Summary of Shovel Probes by Survey Area

The shovel probe locations were chosen to make coverage as complete as possible and as close to the 30-meter and 10-meter intervals as possible. The 494 shovel probes (336 in the SR 520 Corridor and 158 in the Keller Site) excavated are shown in Appendix A, Exhibit 3, Sheets 1 through 5 and the matrix and cultural materials found are described in Appendix D.

SR 520 Corridor Survey

To allow more coherent discussion and summary of the shovel probe data, and comparison of the data with results from previous geoarchaeological and archaeological investigations in the area, the SR 520 Corridor APE has been divided into 14 survey areas as shown in Appendix A, Exhibit 3, Sheets 1 through 5. Each survey area is summarized below, including disturbances that precluded excavation of shovel probes and a description of the matrix and cultural materials found in the shovel probes in each area.

Survey Area 1

Survey Area 1 is at the west end of the APE, between the shoreline and Evergreen Point Road, on both sides of SR 520. There are two parts of Survey Area 1 where no shovel probes were excavated because the slope is extremely steep. In a third area only three probes were excavated because the bridge footings and shoreline rip-rap do not leave enough exposed surface to allow excavation of probes. These three areas where no probes were dug or where probes were excavated in clearly disturbed surface sediments are shown on Appendix A, Exhibit 3, Sheet 1.

Shovel probes T-247 through T-259 were excavated on the north side of SR 520, in an area roughly adjacent (north of) the BOAS' Probability Area 9 where probes 81 through 85 were excavated. The

probes on the north side of the road (T-247 through T-259) were all excavated to between 80 and 125 cm, with the exception of T-250 and T-251, in which excavation ended because of extremely compacted fill. The fill in these units was clearly not intact native sediments, but appeared to be fill introduced as part of road construction. This fill included a variety of debris such as fragments of glass (green and amber bottle glass and flat glass), plastic, cellophane, bricks, aluminum foil, metal flashing, and a boot heel. None of these artifacts appeared to be in situ; all appeared to be debris that is part of the fill matrix.

Shovel probes T-260 through T-265 were dug on the south side of SR 520. No probes were excavated in this area during the previous survey. The matrix in the probes also appears to be fill from previous episodes of road construction. Debris (cellophane, steel pipe fragments) was found to a depth of 50 cm below the surface, but was less common than in the probes north of SR 520.

The fill is at least 50 to 60 cm deep throughout this area. Below 60 cm the sediments are either glacial in origin, or more road fill. Pale sediment that appears to have volcanic ash in it was found in two of the probes. This ash is consistent with the Alderwood gravelly loam soil descriptions encountered and mapped for the area (United States Department of Agriculture 1973). The ash indicates the top of the glacial deposits. These probe locations are south of BOAS' Probability Area 10 where no probes were excavated because of the clear appearance that the area was impacted by construction of SR 520.

Shovel probes T-335 through T-337 were dug under the roadway ramp where a stormwater feature is proposed, in an area that is near BOAS' Probability Area 8 where the firm excavated probes SP86 and SP87.

Survey Area 2

Survey Area 2 is north of SR 520 between Evergreen Point Road and 50th Avenue NE. The matrix from these probes was interpreted as entirely glacial in origin. Shovel probes T-186 through T-192 were excavated along the north side of the SR 520 right-of-way.

A wetland is proposed northwest of the intersection of 80th and SR 520. Shovel probes T-184, T-185, T-193 through T-195, and T-197 through T-203 were dug at approximately 10-meter intervals in the area of the wetland. Shovel probes T-181 through T-183, T-196, T-204, and T-205 were excavated around the edges of the proposed wetland.

Matrix in all of the probes excavated in Survey Area 2 appears to be natural. The surface soil is consistent with the Kitsap or Bellingham series silt loam (dark grayish brown with poorly sorted gravels). It overlies sediments with more gravel that may all represent glacial deposits. Extremely dense glacial sediments were found in most probes at approximately 60 cm below the surface. It was only occasionally possible to excavate probes into the dense glacial sediments, revealing more of the same apparently glacial deposits.

No cultural materials, or even recent debris, were found in any of the probes excavated in Survey Area 2.

BOAS' Probability Area 11, where they excavated a single shovel probe (SP95), is in this survey area.

Survey Area 3

Survey Area 3 is south of SR 520 between Evergreen Point Road and 84th Avenue NE. Shovel probes T-271 through T-283 were excavated in this Survey Area. A parking lot, a constructed berm, a very steep slope, buried utility lines and landscape altered surfaces precluded excavation of shovel probes in much of Survey Area 3 (see Appendix A, Exhibit 3, Sheet 1). No probes were excavated in this area during the earlier survey; it was not included in any of BOAS' Probability Areas.

In most probes, the upper 65 cm of matrix is fill associated with construction of SR 520, parking lots, or buildings (both commercial and residential). Brick, asphalt, brick, glass, plastic, and other debris were found in many sediment probes. None of this debris appears to be more than 45 years old. Below the fill the surface appears to be glacial deposits that have been scraped and redeposited or mixed with the construction fill.

T-283 was excavated on a slope just outside the fence of a house that had clearly been remodeled within the last 20 years. The fence panel closest to the probe location appears less weathered than the rest of the fence. A large amount of debris was found in that probe, including fragments of window pane, shingles, tacks, spark plugs, green plastic, and can fragments. None of the debris collected from T-283 appears to be more than 45 years old. It was likely dumped when the house was remodeled and the area landscaped.

Survey Area 4

Survey Area 4 is north of SR 520 between 80th Avenue NE and 84th Avenue NE. The west half of Survey Area 4 is a proposed stormwater feature; the east half is extremely narrow or inaccessible for much of the length (see Appendix A, Exhibit 3, Sheet 1). Much of the stormwater feature footprint still has houses on it, making it inaccessible for excavation of shovel probes. Based on the disturbed nature of the surrounding shovel probes; however, there is no need for additional archaeological excavation after the houses are demolished. Archaeological monitoring should be conducted during construction. Shovel probes T-220 through T-235, T-237 through T-242, and T-245 were excavated in the proposed storm water facility area where appropriate space could be accessed in residential yards. The surface in most of this area has been disturbed by cut-and-fill events required for the construction of houses, roads, and driveways; installation of utility and drainage for the homes; and other related historic activities. In some of the probes, recent debris was found to a depth of 60 cm below the surface; in others the fill is only 20 cm deep with underlying glacial deposits. These shallowly buried deposits may be areas that have been scraped. There were no clearly intact buried surfaces in any of the probes.

Shovel probes T-222, T-223, T-226, T-227, T-236, T-239, T-240, T-296 through T-298 and T-329 were excavated along the southern side of Survey Area 4.

Shovel probes T-243 and T-246 were excavated north of the proposed storm water facility. The sediments in this area appear to consist entirely of fill and are extremely densely compacted. A homeowner reported that a jackhammer was required to excavate the foundation for his home when it was built.

Survey Area 4 is north of BOAS' Probability Area 13, where they excavated SP62 through SP80. BOAS summarized the matrix of these probes as massive fill, some of which included "...recent debris that could not be penetrated by shovel probes..." (Blukis Onat and Kiers 2007:39). The underlying sediments were recorded as of either lacustrine/marsh or glacial deposition.

Survey Area 5

Survey Area 5 is north of SR 520 between 84th Avenue NE and 92nd Avenue NE. Shovel probes T-284 through T-288, T-299 through T-305, and T-331 through T-333 were excavated in the narrow strip of this survey area where surface disturbances and obstructions allowed (see Appendix A, Exhibit 3, Sheet 1 and 2). Disturbances and obstacles that precluded excavation of shovel probes at the desired intervals include a berm around the entrance ramp to SR 520 at 84th Avenue NE, a paved trail along the north side of SR 520, an extremely steep slope, a paved road, and buried utilities. No probes were excavated between Survey Area 5 and SR 520 during the earlier survey.

Throughout all of these probes, at least the upper 50 to 80 cm is construction fill; many include recent debris (including fragments of concrete and asphalt) in the matrix. The underlying sediments in most probes appear to be scraped glacial deposits or extremely densely compacted fill. In the area of shovel probe T-299 there may be a buried soil at approximately 77 cm, but no in situ cultural materials were found.

Survey Area 6

Survey Area 6 is south of SR 520 between 84th Avenue NE and 92nd Avenue NE. Shovel probes T-289 through T-295 (fill to 60 to 80 cm below surface), T-306 through T-310, T-327, and T-328 were excavated in the accessible areas of Survey Area 6 (see Appendix A, Exhibit 3, Sheet 1 and 2). Obstructions that precluded excavation of probes in this area include buried utilities, residential landscaping and a driveway, and a very steep slope. No probes were excavated along this part of SR 520 during the earlier survey.

Construction or landscaping fill in this area ranges from 68 to 95 cm below the surface. The fill is overlying glacial deposits that appear to have been scraped and compacted for construction. Recent debris (e.g., a wire nail, light bulb glass, milled wood, teacup) was found in many of these probes in the construction fill.

Survey Area 7

Survey Area 7 is north of SR 520 between 92nd Avenue NE and 96th Avenue NE. Shovel probes T-317 through T-322 and T-324 through T-326 were dug in the accessible areas of Survey Area 7 (see Appendix A, Exhibit 3, Sheet 2). Obstructions that precluded excavation of probes in this area include buried utilities; existing roads; and an extensive residential development including landscaping, buried sprinkler systems and outdoor lighting; tennis courts; and swimming pools. No probes were excavated along this part of SR 520 during the earlier survey.

Construction or landscaping fill ranged from 21 to 103 cm below the surface. The fill appeared to be reworked glacial deposits overlying scraped glacial deposits. Some modern trash and debris

was noted in the fill matrix in this area and included aqua bottle glass fragments, plastic, asphalt fragments, beauty bark, and a concrete fragment.

Survey Area 8

Survey Area 8 is south of SR 520 between 92nd Avenue NE and 96th Avenue NE. This area includes a proposed stormwater facility, a narrow strip of the top edge of the cut slope, and a steep cut slope that precluded the excavation of probes. Shovel probes T-001 through T-020 were dug in Survey Area 8 (see Appendix A, Exhibit 3, Sheet 2). Shovel probes T-002 through T-013 were excavated along the top (south) edge of the cut slope at 30-meter intervals and shovel probes T-001, T-003 and T-014 were excavated at 30-meter intervals at the base of the slope near the existing right-of-way. Shovel probes T-015 through T-020 were excavated in 10-meter intervals in the area of the proposed stormwater facility.

The probes excavated along the top (south) edge of the existing cut slope had profiles that indicated compact imported fill which comprised of glacial till from 50 to 70 cm in depth. A few of the probes in this area had charcoal lenses which were 5 to 8 cm thick and were found below the fill and indicated the transition between the overlying fill and the lower scraped surface. Below the charcoal were compact glacial deposits. The slope was likely scraped and maybe burned during the construction of SR 520 and available cut deposits were used as fill to contour the surface. Modern trash, including plastic and glass fragments, was recorded in the fill matrix.

Shovel probes T-001 and T-003 yielded fill from 54 to 110 cm below the surface. The area of these probes is slightly higher than the level right-of-way to the southwest and was likely filled to provide access to the end of 96th Street NE.

Shovel probes T-014 through T-020 revealed a wet, dark brown clayey silt (developing A horizon) from 0 to 23 cm below the surface overlying gray wet gravelly sands and silts from 23 to 61 cm, over deeply scraped glacial till deposits which were extremely compact to impenetrable. This area was wet during the survey and appeared to be recent wetland development overlying compact, scraped glacial deposits.

Survey Area 9

Survey Area 9 is north of SR 520 between 96th Street NE to Lake Washington Boulevard NE and intersected by Points Drive NE. This area includes two proposed stormwater ponds, one which is entirely within Points Drive NE and that precluded the excavation of probes. Additional disturbances that precluded the excavation of probes included steep slopes north of Points Drive NE, buried utilities, existing roads, commercial property development and sloped berms along SR 520 (see Appendix A, Exhibit 3, Sheet 2 and 3).

Shovel probe T-323 was excavated south of Points Drive NE and revealed mixed fill to 124 cm below surface. Modern debris noted in the fill included a large M&M'S® package, amber bottle glass fragments and chunks of asphalt.

Shovel probes T-046 through T-059 were excavated at 10-meter intervals in a proposed stormwater facility on the east end of Survey Area 9. These probes revealed compact gravelly fill from 60 to 140 cm below ground surface overlying compact, light olive brown and dark yellowish

brown silts and sands with oxidation mottles and few to no gravels from 60 to 257 cm in depth. Shovel probe T-055 revealed a possible buried native surface at 140 to 145 cm below surface with organics and some charcoal flecks but no cultural deposits were observed or recorded in association with the possible buried surface. This proposed stormwater facility is covered in deep fill with modern trash and debris including brick fragments, crushed fill rock, wire nails, asphalt chunks, plastic, clear and amber glass fragments, a rock with pink spray paint, and a piece of copper pipe.

A building was recently removed from the north end of the proposed stormwater facility and the ground surface in this area has been scraped and covered with large crushed gravels.

Probes T-330 and T-338 through T-339 were excavated along an existing stream channel and wetland area west of three existing culverts that run beneath Points Drive NE. The shovel probe profiles yielded recent alluvium comprising sand, gravel and silt and modern debris from 43 to 95 cm below surface overlying dark reddish brown, odorous peat deposits with interbedded silt and sand from 43 to 164 cm below surface. Modern debris recorded in the recent alluvium included plastic and glass fragments. The peat deposits indicate the presence of a longstanding wetland environment.

Survey Area 10

Survey Area 10 is south of SR 520 between 96th Avenue NE and the Bellevue Avenue NE exit ramp. This area includes a proposed stormwater pond, and a stretch of steep slopes and residential development that precluded the excavation of probes. Shovel probes T-206 through T-219, T-021 through T-042, and T-312 through T-316 were dug in Survey Area 10; T-028 through T-039 and T-043 were dug at approximately 10-meter intervals in the proposed stormwater pond, the rest are at approximately 30-meter intervals (see Appendix A, Exhibit 3, Sheet 3).

Shovel probes T-214 through T-219 were excavated in the residential parcels at the west end of Survey Area 10. These probes revealed compact fill deposits ranging from 50 to 150 cm below surface. Modern debris noted in the fill included clear glass fragments, various colors of plastic fragments, terra-cotta drain tile fragments, one asphalt fragment, and one clear glass bottle base with maker's mark "NW 1968." All of the shovel probes in this area terminated in fill and did not reach any buried native deposits. This area appears to have been filled to facilitate the residential development between SR 520 and NE 35th Street.

Shovel probes T-040, T-043 and T-205 through T-213 were excavated just north and along the existing abandoned alignment of Lake Washington Boulevard and the edge of the steep slope to the north toward SR 520. Shovel probes T-205 through T-213 terminated in compact fill deposits that ranged in depths from 65 to 120 cm below surface. Modern debris recorded in the road fill matrix included clear glass fragments, blue and red plastic fragments, asphalt chunks, concrete, brick fragments, amber bottle glass fragments. A complete screw top, oval-shaped amber liquor bottle was recovered and recorded in the fill matrix of shovel probe T-208 at 53 cm below surface. Shovel probe T-040 was excavated downslope from the road on a level terrace above the steep drainage to the north and revealed colluvial deposits consisted of the road fill from upslope to 160 cm below surface overlying compact glacial deposits at 168 cm below surface.

Shovel probes T-027 through T-042 and T-044 through T-045 were excavated in approximately 10-meter intervals in the area proposed for the stormwater treatment facility. These shovel probes revealed thick fill deposits of mixed silt, sand and some peat to a maximum depth of 183 cm below surface overlying wet peat deposits interbedded with gray silt, sand and gravel that extended to 260 cm below surface. Modern trash and debris noted in the fill matrix included asphalt and concrete chunks, glass fragments, wire nails, plastic, a pull-tab beer can, and rusted can fragments.

Shovel probes T-021 through T-026 were excavated east of the proposed stormwater facility along both sides of an existing culvert and steep drainage. All of these shovel probes terminated in compact fill to a maximum depth of 174 cm below surface. The fill matrix had mixed modern debris that included glass fragments, Styrofoam, an acrylonitrile butadiene styrene (ABS) pipe fragment, asphalt chunks, and brick fragments.

Shovel probes T-312 through T-316 were excavated at the east end of Survey Area 10. These shovel probes revealed fill deposits that are 16 to 72 cm deep, beginning at the surface that directly overlay scraped glacial deposits. Modern debris noted in the fill matrix included black sheet plastic fragments, brick and brick fragments, an aluminum-can tab, and an asphalt chunk.

A paved segment of the old Lake Washington Boulevard remains in Survey Area 10 and is being recorded as an archaeological site (Appendix A, Exhibit 4). No artifacts were found on the surface on or near the road, but the area has clearly been cleaned and is currently being used as a recreational path by residents in the adjacent neighborhood. Shovel probe T-208, in which the bottle was found, was dug into the road prism.

Survey Area 11

Survey Area 11 is both north and south of SR 520, east of Bellevue Way NE/Lake Washington Boulevard NE and west of Northup Way. This survey area is adjacent the entrance and exit ramps and includes the area inside the cloverleaf ramp roadways. Shovel probes T-060 through T-076 were excavated north of SR 520 and T-077 through T-106 were dug south of SR 520 (see Appendix A, Exhibit 3, Sheet 4). Existing roads and berms, buried utilities, sidewalks, and steep slopes all precluded excavation of shovel probes in parts of Survey Area 11.

The shovel probes located the clover-leaf north of SR 520 were excavated along an existing stream channel which runs through culverts on the north and south ends of the clover leaf. The shovel probes in this area (T-063 through T-064, T-067, and T-072 through T-073) had recent alluvial deposition with modern trash and debris overlying gley-colored alluvial sand and gravels. The modern debris noted in these probes included plastic fragments, rubber fragment, and concrete.

The shovel probes excavated on the side slope above the lower channel alignment and within the proposed stormwater facility (T-066, T-068 through T-071 and T-074 through T-075) all terminated in fill with modern trash and debris. Possible underlying native deposits were not reached in these shovel probes.

The shovel probes located in the clover leaf south of SR 520 (T-077 through T-087 and T-090 through T-094) were excavated in 30-meter intervals along a stream channel that connects through culverts to the channel on the north side of SR 520 discussed above. The shovel probes had soils that developed in recent alluvium (sand and silt loams) with modern debris from 25 to 150 cm

below surface overlying what appeared to be native wetland deposits of grey and gley-colored sand and silt with peat in some probes extending to 230 cm below surface. Many of the probes encountered groundwater from 92 to 200 cm below surface. Although modified through stream channelization, culverts, road berms, and recent deposition in the lower wetland deposits suggest a relatively stable longstanding wetland environment.

Shovel probes T-088 and T-089 were excavated in accessible areas near the steeply sloped side berms of the clover leaf and terminated in fill with modern trash and asphalt.

Shovel probes T-095 through T-106 were excavated in 10- to 30-meter intervals depending on proximity to the proposed stormwater facility that extends south of the clover leaf which functions as the eastbound SR 520 exit ramp for Lake Washington Boulevard NE. All shovel probes in this area terminated in extremely compact fill that extended to 130 cm below surface. Modern trash and debris noted in the fill matrix included asphalt chunks, plastic, wire nails, ceramic fragments, and bottle glass fragments.

Survey Area 12

Survey Area 12 is north of SR 520 from Northup Way to the commercial complex west of 108th Avenue NE. Roads, parking lots, a planter, fences, sidewalks, and buried utilities all precluded the excavation of shovel probes in parts of Survey Area 12. Shovel probes T-160 through T-163 were dug in a cluster around a culvert that will be replaced southeast of the intersection of 108th Avenue NE and Northup Way; T-164 through T-168 and T-175 through T-180 were excavated at approximately 30-meter intervals in the remaining area (see Appendix A, Exhibit 3, Sheet 4).

Shovel probes T-160 through T-168, T-175, and T-178 through T-180 terminated in compact fill that reached a maximum depth of 160 cm below surface. Modern debris and trash noted in the fill matrix included concrete and asphalt chunks, brown and amber glass fragments, and white plastic sheet fragments.

Shovel probes T-176 and T-177 were excavated in a low ditch area and had fill from 45 to 53 cm overlying black peat from 53 to 80 cm overlying glacial deposits. Modern debris noted in the fill matrix included white fire brick fragments.

Survey Area 13

Survey Area 13 is the area of the 112th Avenue NE entrance ramp onto SR 520 and the undeveloped land to the northwest of that ramp. Parts of Survey Area 13 where shovel probes could not be excavated include the steep slope on the northwest edge of the survey area and an area of standing water on the southern edge of the cloverleaf ramp. The inside of the cloverleaf is a proposed stormwater pond; shovel probes T-123 through T-150 were excavated at approximately 10-meter intervals in the proposed pond area. Shovel probes T-114, T-115, and T-120 through T-122 were excavated at approximately 30 intervals on the outside of the cloverleaf road. In the undeveloped land northwest of the cloverleaf probes T-107 through T-114, T-116 through T-119, and T-156 through T-159 were excavated at approximately 30-meter intervals (see Appendix A, Exhibit 3, Sheet 4).

Shovel probes T-107 through T-108, T-111 through T-112, T-116 through T-118, and T-159 had undisturbed profiles in an active wetland environment that is intersected by numerous channels and tall reed canary grass. The profiles were silt and sand loams from 86 to 170 cm below surface overlying deep reddish black and dark olive brown peat interbedded with silts and sands extending to 264 cm below surface.

Shovel probes T-110, T-113 through T-115, and T-156 through T-159 were all excavated until moderately compact fill was found at depths that ranged from 98 to 165 cm below the surface. This fill is the constructed berm surrounding the clover leaf on-ramp for SR 520. Modern debris noted in the fill included asphalt and Styrofoam.

Shovel probes T-109, and T-119 through T-122 had fill deposits from 80 to 159 cm below surface overlying reddish black peat with interbedded silts and sand from 80 to 180 cm below surface. Modern debris noted in the fill included a tar fragment and amber glass.

Shovel probes T-123 through T-155 were excavated in the proposed stormwater facility at 10- to 20-meter intervals in the cover leaf on ramp for SR 520. All of the probes in this area terminated in mixed fill with silts and peat to 255 cm below surface. The peat deposits were mixed with the upper silts layers in dense rounded clod formations. These appeared to have been previously dried on a surface prior to their redeposition here as fill. Some of the shovel probe profiles hinted that scraped native peat deposits could have been reached, but all appeared heavily mottled and mixed resulting in the fill interpretation for this area.

Survey Area 14

Survey Area 14 is at the eastern end of the APE. Although parts of Survey Area 14 are southwest of SR 520, an existing road, buried utilities, and a very steep slope precluded excavation of shovel probes on that side of SR 520. Shovel probes T-169 through T-174 and T-266 through T-270 were dug on the northwest side of SR 520 at approximately 30-meter intervals where not prohibited by the road berm, steep slope and buried utilities (see Appendix A, Exhibit 3, Sheet 4).

Shovel probes T-169, T-170, and T-173 were excavated along the slope and slope base above the stream channel that runs northwest to southeast in a steep drainage between SR 520 and the commercial properties to the east. The shovel probe profiles appeared native and had silt and sandy loam from 19 to 66 cm below surface overlying glacial deposits.

Shovel probes T-171, T-172, and T-174 were excavated along the existing stream bottom and had recent alluvial sand and stream deposits with modern trash and debris to 140 cm below surface. Modern trash and debris noted in the recent alluvium included clear plastic, cellophane, Styrofoam packing peanuts, and brown bottle glass fragments.

Shovel probes T-266 through T-270 were excavated along the east side of SR 520 on the south end of Survey Area 14. All of these probes terminated in extremely compact fill with a maximum depth of 112 cm below surface. Modern debris noted in the fill matrix included bottle glass fragments, concrete fragments, asphalt chunks, and a foil candy wrapper.

Keller Site Shovel Probe Survey

A total of 158 shovel probes were excavated at 20-meter intervals in the Keller Site (Appendix A, Exhibit 3, Sheet 5).

Throughout this area, the upper 10 to 20 cm of sediment is very dark brown silt, overlying interbedded sands and silts that extend to depth of greater than 1 meter in most areas. There is a dark peat stratum that was found in the majority of the probes at approximately 120 cm below the surface. Sediments larger than sand were rarely found in this area, suggesting that this area has been a wetland for an extended length of time.

A previously unrecorded historic road segment and log bridge was found during the current survey in the Keller Site APE and is given the temporary site number "Keller Farm-1." The resource is located adjacent to 45KI466, a pre-contact camp and historic roadway (Appendix A, Exhibit 5). Evidence of the historic road (two-track or gravel) was found both on the surface and to a depth of 56 cm in three shovel probes (D13, G13, and M14) and in an exposed patch of ground approximately 2 meters west of G13. This road segment begins at the confluence of Evans Creek and Bear Creek, approximately 180 meters north of Union Hill Road. The road runs east-west north of a barbed-wire fence that parallels the north bank of Evans Creek, east of the confluence with Bear Creek.

A small log bridge was found and recorded on the road alignment, although there is no discernable two-track or gravel bed to either side of the log bridge.

No other cultural resources were found during the current survey.

Summary of Cultural Materials Found

No prehistoric artifacts were found in any of the shovel probes excavated in the SR 520 corridor or in the Keller Site. Numerous objects such as bottle glass, ceramics, and building materials were found in the shovel probes excavated in the SR 520 corridor APE. Most of those objects were in the construction fill matrix, none were *in situ*, and most are modern debris that appears to have been inadvertently included in the construction fill when it was deposited during road construction.

The only historic artifact found during the shovel probe survey of the SR 520 Corridor area of potential ground disturbance is a liquor bottle found in T-208 in Survey Area 10. That bottle is being included as road toss in the site record being submitted with this report for the Historic Lake Washington Boulevard.

The Historic Lake Washington Boulevard site includes segments of the existing roadway on both the north and south sides of SR 520 and an abandoned segment of Historic Lake Washington Boulevard (immediately adjacent to the existing roadway) located at the east end of NE 35th Place. The length of the two discontinuous segments (active roadway and abandoned roadway) within the APE is 1,399 meters (4,590-foot), of which 502 meters (1,647 feet) are abandoned. The paved surface is concrete laid in 20-foot by 21-foot slabs, and covered with asphalt. Shovel probe T-208 was excavated in the road prism.

The only other site (Keller Farm-1) recorded during the survey is an unimproved road alignment with an associated log bridge, found on the Keller Site.

No artifacts were collected. All cultural materials found are described in the shovel probe form tables (Appendix D) and site records.

Chapter 7

Analyses, Conclusions, and Recommendations

A total of 494 shovel probes (336 in the SR 520 Corridor and 158 in the Keller Site) were excavated during the survey. The only resources found were remnants of two historic roads: a log bridge and road segment at the Keller Site and several segments of Historic Lake Washington Boulevard along the corridor. No archaeological historic properties are located within the APE.

Based on the ethnographic study, there does not appear to be evidence for significant archaeological or ethnographic resources in the eastside of Lake Washington portion of the SR 520 Corridor (Blukis Onat 2009).

The SR 520 Corridor

Almost all shovel probes located along the corridor were excavated into construction fill, which is generally between 60 cm to well over 100 cm deep through the area of ground disturbance investigated during the fieldwork described here and in the Probability Areas investigated during the shovel probe survey by BOAS, Inc. in 2007. In probes excavated close to the SR 520 roadway (e.g., in narrow parts of the APE proposed for installation of sound barrier walls) the presence of deep fill was expected not only because that is what was found during previous investigations, but because the undulating surrounding landscape has clearly been modified to level the SR 520 roadbed in the immediate vicinity of the roadway and access ramps.

Casual examination of the landscape revealed that cut and fill was required to bring the ground surface to a level grade as is needed for a modern, high-speed roadway. In the shovel probes where it was possible to get below the construction fill, most of the underlying sediments are densely compacted glacial deposits. In some places the glacial deposits appear to have been cut to grade prior to compaction. In many areas where it was possible to excavate a shovel probe into intact native sediments, the native sediments are extremely compacted as would be expected if they had been deeply buried and the overburden scraped to bring the area to grade. Alternatively, the native sediments have been artificially compacted prior to having fill laid on top of them and further compacted to raise the area to grade.

Although fragments of glass, building materials, and other similar objects were found in many of the shovel probes excavated in the SR 520 Corridor parcels, the age of these objects either could not be determined or the objects were clearly debris less than 50 years old. None were found in primary context. Other than the bottle associated with the Historic Lake Washington Boulevard road segment, most of the cultural materials found appear to be debris that was mixed into the construction fill before it was dumped, spread, and compacted into the roadbed.

No prehistoric period sites or isolates were found in the corridor.

The paucity of cultural materials found during the survey conducted by ICF Jones & Stokes staff, and during the survey by BOAS, Inc., may reflect the large amount of construction fill that has been deposited on the underlying native substrate, and the fact that a fair amount of the natural surface

has been removed to level the ground surface prior to constructing the SR 520 roadbed. Thus, the absence of sites and isolates in the SR 520 Corridor may not adequately reflect the occurrence of cultural materials, prehistoric or historic, in the APE.

Historic Lake Washington Boulevard

Segments of the Historic Lake Washington Boulevard were found in the project APE. A site record for these road segments is being submitted to DAHP as a result of this survey (Appendix C).

Historic Lake Washington Boulevard is a roadway located in Bellevue, King County, Washington. Opened in 1922, Historic Lake Washington Boulevard was constructed to connect the Eastside of Lake Washington to the Westside and to serve as the main transportation corridor in the region.

Historic Lake Washington Boulevard runs from the intersection of Points Drive NE and NE 28th Street in Clyde Hill northeast to 92nd Avenue NE and continues north along 92nd Avenue NE across SR 520 to NE Points Drive. The road continues east following NE Points Drive to 96th Ave NE where it was removed for the SR 520 alignment. It resumes on the south side of SR 520 at the intersection of NE 35th Place and 96th Ave NE and continues east to the end of NE 35th Place and along the abandoned portion recorded as the archaeological site. The alignment continues on the north side of SR 520 along a portion of NE Points Drive just west of the intersection of Lake Washington Boulevard NE and Northup Way where it connects with the current alignment of Lake Washington Boulevard NE and proceeds north to the City of Kirkland.

The site recorded within the limits of construction includes an existing roadway segment on both the north and south sides of SR 520, and an abandoned segment located at the east end of NE 35th Place and immediately adjacent to the existing SR 520 roadway.

The discontinuous segments of the historic alignment of NE Lake Washington Boulevard include several portions of the original boulevard that are still in use as modern streets:

- A small portion of Points Drive NE (south of SR 520) southeast of the intersection 92nd Ave NE. The length of this portion is approximately 75 feet.
- 92nd Ave NE from the intersection of Points Drive NE north across SR 520 to the intersection of NE Points Drive. The length of this portion is approximately 660 feet.
- Two short segments of NE Points Drive (north of SR 520) east-north-east from the intersection of 92nd Ave NE to 96th Ave NE. The length of this portion is approximately 712 feet.
- NE 35th Place from the intersection of 96th Ave NE northeast to the end of the cul-de-sac. The length of this portion is approximately 662 feet.
- A portion of NE Points Drive west of the intersection of Lake Washington Blvd NE and Northup Way. The length of this portion is approximately 667 feet.
- The current north/south alignment of Lake Washington Blvd NE from the intersection of NE Points Drive north approximately 167 feet ending just south of the intersection of NE 38th Place. Lake Washington Blvd NE continues north to Kirkland from the end of this segment but is outside of the Project APE and limits of construction.

The second segment is an abandoned portion of roadway that is currently used as a recreational path by residents in the adjacent neighborhood and also as a utilities access road:

- East of the 35th Place NE cul-de-sac, it runs east-west then turns northeast and disappears below the south shoulder of SR 520. The length of this portion is approximately 1,647 feet.

The original roadway was fully paved and was used for vehicular traffic beginning in 1922. The abandoned segment is composed of concrete slabs and sparse segments of asphalt. The remaining segment of road comprises concrete slabs approximately 20 feet long by 21 feet wide. Three lengths of slabs are exposed concrete. Asphalt surface overlies part of the fourth, and subsequent, slabs. No artifacts were found on the surface on or near the road, but the area has clearly been cleaned and is currently being used as a recreational path by residents in the adjacent neighborhood. A bottle was found in shovel probe T-208 that was excavated into the road prism. The bottle is an amber glass liquor bottle with the Owens-Illinois maker's mark with numbers indicating it was likely made in 1953. It is 8.25 inches high and oval in cross-section 3.75 by 0.9375 inches, and had a screw-top cap.

Significance Statement

Opening in 1922, Historic Lake Washington Boulevard connected the Eastside of Lake Washington to the Westside and served as the main transportation corridor in the region. It was originally constructed as a two-lane roadway. Use of the abandoned segment was likely discontinued in the early 1960s prior to the opening of the Evergreen Point Bridge in 1963. Other sections of Historic Lake Washington Boulevard were renamed and have continued to be used as active roadways.

The site includes the discontinuous segments of active roadway, as well as an abandoned roadway segment. The existing paved roadway segment appears to have been widened and repaved and no longer resembles the historic roadway except for maintaining the original alignment. The remaining original roadway materials on the abandoned segment do not lend themselves to providing important data (Criteria D). Both the active roadway segments and the abandoned portion of Historic Lake Washington Boulevard lack physical integrity and integrity of association, setting, feeling, workmanship, materials, and design; thus, the site is recommended as not eligible for the NRHP.

Keller Site

The archaeological investigations conducted at the Keller Site identified an unimproved road alignment with an associated log bridge (Keller Farm-1). The road alignment continues south of Evans Creek where it transects previously recorded archaeological site 45KI466. The Keller Farm-1 site record is being submitted to DAHP (Appendix C).

Keller Farm-1 is located in King County, in the city of Redmond. It is located north of Evans Creek and east of the confluence of Evans Creek and Bear Creek in the Keller Farm vicinity.

The bridge is made from six logs (five parallel and one perpendicular) placed across a small north-south drainage ditch. The logs vary from 10 feet (3 meters) to 12 feet (3.6 meters) long, with diameters between 16 inches and 22 inches (40.6 to 56 cm). The bridge spans a small irrigation

ditch located in an agricultural field. The logs for the bridge deck are resting directly on the surface. No footing or piers are associated with the structure.

The unimproved road may be associated with Keller Farm, which was primarily used as a dairy cattle operation from the late nineteenth century until operations ceased in the early 1980s. The area was logged prior to dairy farming operations and irrigation ditches were constructed to alleviate the wet conditions across the farm area northeast of the confluence of Bear and Evans Creeks.

Significance Statement

The Keller Farm-1 site is an abandoned segment of gravel road and an associated log bridge that retains integrity of setting, location, design, and workmanship. However, the road grade and bridge are not architecturally significant (Criterion C) and do not possess data potential to address important research questions (Criteria D). Although this site retains integrity, the nature of the resource, its location outside of the core farm complex, and the lack of unique or innovative engineering indicate that the site is not historically significant. This site does not meet the eligibility requirements of the NRHP and is recommended not eligible for the NRHP.

Recommendations

No archaeological historic properties are located in the project APE. No mitigation measures are necessary or warranted based on this assessment.

The paucity of cultural materials found during the survey conducted by ICF Jones & Stokes staff and the survey by BOAS, Inc. may not adequately reflect the occurrence of cultural materials in the area of potential ground disturbance, and particularly the areas where stormwater ponds will be created and where stream realignments will occur. The presence of deep construction fill in most areas precluded thorough examination of the surface. Further, because the construction fill is 1 meter deep (or more) in many areas, even the shovel probes did not provide satisfactory examination of the very small samples of the native sediments underlying the construction fill.

Because it was not possible to examine much of the native sediments even with this large number of shovel probes, we recommend that a professional archaeologist monitor the construction of detention ponds, wetland enhancements, and stream channel modifications where excavations will be greater than 1 meter (3.3 feet) and where sedimentary deposits underlying fill could not be established. This is particularly important in the western half of the area of construction and other sensitive areas including the following locations:

- where the right-of-way passes closest to the area of the “Points” (e.g., Evergreen Point, Yarrow Point, and Hunts Point);
- close to the shores of Lake Washington;
- near Northup Creek;
- near other streams throughout the SR 520 Corridor APE; and

- following the demolition of the houses, where intact ground surfaces may be located beneath the area of disturbance likely associated with the construction of the residences.

Determination of the areas to be monitored should be made by reference to “as built” drawings for the previous construction phases of SR 520 and other constructed facilities in the APE, which will show cut-and-fill areas. Any area in which the surface has been cut more than 1 to 2 meters (6 to 12 feet) is unlikely to retain sediments in which archaeological sites are preserved.

No prehistoric period archaeological site was found at the Keller Site. However, monitoring by a professional archaeologist is recommended for the planned channel excavations on the Keller Site for the possible presence of a buried pre-contact resource, due to the scale of ground disturbance in a setting considered to have a high-probability for archaeological resources.

Lastly, an additional survey (including shovel probes) may be necessary if design-build changes occur during late-stage design that would result in ground disturbance in areas not included in the current APE and/or in areas unavailable to study due to right-of-entry refusals.

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