location, architectural and contextual information, and photographs of each building's front façade. Copies of the forms are included in Appendix B. Since preparation of the forms, the project name has changed. The forms in Appendix B have the former project name: I-405, NE 8th Street to SR 520 Improvement Project.

Assessment Results

Archaeological fieldwork was conducted on April 26, 27, and 30, 2007, and on May 1, 2007. Further shovel testing for the proposed staging area occurred May 17, 2007. Surface vegetation at all locations included Douglas-fir, red alder, western red cedar, Oregon grape, and big-leaf maple trees, as well as blackberry, sword fern, and rhododendron *(Rhododendron spp.)*.

Archaeological Investigations

Twenty-two shovel probes were excavated in two areas within the APE. No newly discovered archaeological resources were recorded or observed within the project APE.

Area of Proposed Widening of I-405 from Approximately Mile Post 14.4 to Mile Post 14.6

Ten shovel probes (SP-01 to SP-10) were placed in the backyards of houses adjacent to the existing I-405 sound wall (see Exhibits 12 and 13 and Photos 1, 2, and 3). The shovel probes varied in depth from 30 centimeters (cm) below the ground surface (BGS) to 140 cm BGS. All probes exposed an organic-rich dark to very dark yellowish to gray brown clay silt resting directly on light olive brown sandy silt (Photos 4 and 5). Exhibit 15 summarizes the shovel probe findings. All sediment profiles lacked soil horizons, indicating the Holocene soil had been completely removed and that the local terrain had been stripped down to the well consolidated glacial till in preparation for residential development. Any archaeological resources once present in the area would have been destroyed. Subsequent consultation with WSDOT archaeologists resulted in the decision to not excavate any additional probes in this area.

Cultural material was observed in six shovel probes and included four plastic fragments, two terra cotta planter fragments, four concrete fragments, one brick fragment, one asphalt fragment, one clear vessel glass fragment, one brown vessel glass fragment, one clear flat glass fragment, six metal chain link fencing fragments, one metal car emblem fragment, one metal wire fragment, one unidentifiable metal object, and one piece of landscaping fabric. None of the material is historic in age (greater than 50 years). Asphalt layers were exposed in two probes (see Exhibit 15 and Photo 5).

Proposed Construction Staging Area

The construction staging area parcel has an alder and western red cedar grove with an understory of blackberry and ferns, and is partially developed with a maintenance road present on it (Photos 6, 7, and 8). The ground surface is littered with modern debris from past dumping episodes.

Photo 1: Overview of Proposed I-405 Widening Area Looking South

Photo 2: Overview of Proposed I-405 Widening Area Looking South from SP-05

Photo 3: Overview of Proposed I-405 Widening Area Looking North from SP-05

Photo 4: SP-04 in Proposed I-405 Widening Area

Photo 5: Asphalt in SP-05 in Proposed Ramp Area

Exhibit 15: I-405 Widening Shovel Probes

Shovel Probe #	Depth BGS	Soil Description	Cultural Material Identified
01	120 cm	Duff layer over dark yellowish brown, medium fine sandy silt with 40% to 50% subrounded to subangular gravels.	None
02	140 cm	Dark yellowish brown, fine silty sand with 30% to 40% subrounded to subangular gravels.	Modern debris
03	130 cm	Duff layer over dark yellowish brown, silty sand with 30% to 40% subrounded to subangular gravels over olive brown, fine sand with 20% gravels and cobbles decreasing to 0%.	Modern debris
04	30 cm	Very dark grayish brown silty sand over light olive brown, compact sandy silt (Photo 4).	None
05	100 cm	Olive brown, sandy silt flecked with charcoal over olive brown, silty sandy loam with subrounded to subangular gravels decreasing in depth to 5% to 10%. Eight-cm thick asphalt layer, with yellow paint, exposed in sidewall (Photo 5).	Modern debris
06	65 cm	Duff layer over very dark grayish brown, coarse sandy silt with 50% to 60% subrounded to subangular gravels over olive brown, very compact silty clay with 10% subrounded to subangular gravels.	Modern debris
07	45 cm	Very dark brown, silty clay over olive brown, sandy silt with 10% subrounded to subangular gravels. Shovel probe terminated by asphalt protruding out of south wall into north wall and extending down in depth.	Modern debris
08	120 cm	Dark brown, fine silty sandy loam with 20% subangular to subrounded gravels over olive brown fine silty sand with up to 20% subrounded to subangular gravels over dark yellowish brown, silty sandy loam with up to 20% subrounded to subangular gravels.	None
09	55 cm	Very dark brown, silty clay over dark yellowish brown, fine silty sand with up to 20% subangular to subrounded gravels over light olive brown, very compacted till.	None
10	35 cm	Olive brown, silty sand with hard clay nodules and up to 30% subangular to subrounded gravels over light olive brown, very compact silty sand.	Modern debris

Photo 6: Overview of Proposed Staging Area
Looking East from SP-12

Photo 7: Overview of Proposed Staging Area
Looking South from SP-11

Photo 8: Overview of Proposed Staging Area
Looking North from SP-11

Twelve shovel probes (SP-11 to SP-22) were placed at regular intervals across the proposed staging area (see Exhibit 14). Exhibit 16 summarizes the shovel probe findings in the staging area. The initial four shovel probes, representing 33 percent of the sample grid, were placed approximately 20 meters (65 feet) apart in one transect. Although two probes (SP-13 and -15) clearly exposed previously disturbed substrates as indicated by the presence of a weakly developed O/A soil horizons resting directly on glacial till, the other two probes (SP-12 and -14) exposed a developed soil with an oxidized B horizon. WSDOT determined that additional subsurface investigations were necessary. These investigations occurred on May 17, 2007, with the excavation of eight additional shovel probes (see Exhibit 14 and Exhibit 16).

Exhibit 16: Staging Area Shovel Probes

Shovel Probe #	Depth BGS	Soil Description	Cultural Material Identified
11	100 cm	Duff layer over dark brown, silty sand with up to 30% subrounded to subangular gravels over dark yellowish brown, sandy silt with up to 20% subrounded to subangular gravels and sparse charcoal fragments.	None
12	75 cm	Very dark brown, silty clay with up to 20% subangular to subrounded gravels over dark yellowish brown, silty sand with up to 20% subrounded to subangular gravels over a reddish light olive brown silt.	None
13	110 cm	Very dark brown, silty clay with up to 20% subrounded to subangular gravels over olive brown, compact silty sandy clay with 10% subrounded to subangular gravels.	None
14	80 cm	Very dark brown over dark yellowish brown, sandy silt with up to 20% subrounded to subangular gravels over olive brown, compact silty clay with 10% subrounded to subangular gravels.	None
15	110 cm	Very dark brown, fine silty sandy loam over dark yellowish brown, fine silty sand with olive brown mottles and 5% subrounded to subangular gravels	None
16	80 cm	Dark brown, silty sandy loam over dark yellowish brown, silty sand with 20% gravels over olive brown, compact silty clay with up to 30% subrounded to subangular gravels.	Modern debris
17	70 cm	Very dark brown, loose silty sandy loam with abundant cedar roots and bark over dark yellowish brown, silty sandy loam with less than 5% gravels over olive brown, compact clayey silty sand. Cedar and blackberry roots extend to 70 cm BGS.	None
18	35 cm	Layer of concrete chunks over very dark grayish brown loose silty sandy loam and mottled with olive brown sandy loam. Concrete slab encountered at 35 cm BGS.	Modern debris-concrete chunks and slab
19	80 cm	Dark brown loam with less than 5% subrounded gravels over light olive brown, fine sandy silty loam with less than 25% gravels.	None
20	60 cm	Very dark brown loam with less than 10% subrounded gravels over dark yellowish brown, compact loam with 40% gravels over light olive brown, very compact sandy silt with reddish brown staining.	Modern debris
21	40 cm	Duff layer over olive brown, sandy silty loam with less than 20% subrounded gravels over light olive brown, very compact sandy silt with amorphous reddish yellowish brown mottling and subrounded pebbles.	Modern debris
22	40 cm	Duff layer over olive brown, compact sandy silty loam and less than 25% gravels and pieces of charcoal over light olive brown, very compact sandy silty loam with less than 25% gravels.	None

Shovel probes varied in depth between 35 cm and 110 cm BGS. The dominant sediment profile was a very dark brown to dark brown to very dark grayish brown, silty loam over dark yellowish brown, sandy silt over compact light olive brown clay silt. The soil profile indicates extensive previous disturbance by truncation or intermixing of the original A/O and B soil horizons across much of the parcel. Only five probes (SP-12, -14, -16, -17, and -20) retain a developed oxidized B horizon.

Recent-era cultural material was recovered or exposed in four shovel probes (SP-16, -18, -20, and -21), including plastic fragments, concrete chunks and a concrete slab (SP-18), a painted flower pot rim, thin brown bottle glass, styrofoam fragments, and candy wrappers.

Sturtevant Creek Stream Mitigation Site

WSDOT Archaeologist Ken Juell and Project Environmental Manager Pat Svoboda visited the proposed stream mitigation site to assess existing conditions and decide whether subsurface investigations were necessary. Field inspection determined that Sturtevant Creek had been artificially straightened or channelized along the entire reach that will undergo mitigation, and the portion south of NE 4th Street was also regraded to create a large berm along the eastern I-405 right-of-way to prevent potential flooding of adjacent private properties. The entire site has been previously disturbed to such a great extent that there is no potential for the area to retain intact cultural resources. No subsurface investigation was deemed necessary.

Historic Buildings and Structures

Twenty-six historic buildings constructed in 1959 or earlier were identified within the APE (Exhibit 17). The resources are located in residential and mixed business-residential settings, and most buildings are single-family homes constructed in the 1950s. None of the historic resources within the APE possessed historically substantial characteristics; none were determined eligible for inclusion in the NRHP. Tax parcels with historic-period buildings are shown in Exhibits 6 through 11.

Exhibit 17: Historic Structures within APE

Number	Address	Date Built	Common Name	Historic Name	Meets NRHP Criteria
BrH-01	1815 114th Ave. NE, Bellevue	1955	Invisible Caregiver Innovations, LLC	B.A. Van Etten Property	No
BrH-02	1816 114th Ave. NE, Bellevue	1955	Filbert Residence	B.A. Van Etten Property	No
BrH-03	1825 114th Ave. NE, Bellevue	1955	Lakeville Homes	B.A. Van Etten Property	No
BrH-04	1826 114th Ave. NE, Bellevue	1956	McArdel Properties, LLC	B.A. Van Etten Property	No
BrH-05	1833 114th Ave. NE, Bellevue	1956	Body Evolution/Spa Beyond	B.A. Van Etten Property	No
BrH-06	1836 114th Ave. NE, Bellevue	1955	Shalinder Residence	B.A. Van Etten Property	No

Number	Address	Date Built	Common Name	Historic Name	Meets NRHP Criteria
BrH-07	1841 114th Ave. NE, Bellevue,	1956	Sundance Preschool	B.A. Van Etten Property	No
BrH-08	1844 114th Ave. NE, Bellevue	1956	Abossein Engineering, LLC	B.A. Van Etten Property	No
BrH-09	1849 114th Ave. NE, Bellevue	1955	Washington Women in Need	B.A. Van Etten Property	No
BrH-10	11409 NE 19th St., Bellevue	1955	Sundance Infant and Toddler Center	B.A. Van Etten Property	No
BrH-12	11406 NE 19th St., Bellevue	1955	Field House LLC	J.M. McGovern Property	No
BrH-13	11421 NE 20th St., Bellevue	1958	Fairyland Childcare Center	J.M. McGovern Property	No
BrH-14	11410 NE 19th St., Bellevue	1958	Jacobson Residence	J.M. McGovern Property	No
BrH-15	114200 NE 20th St., Bellevue	1958	Halpin Residence	J.M. McGovern Property	No
BrH-16	11411 NE 19th St., Bellevue	1956	Eastside Behavioral Institute	J.M. McGovern Property	No
BrH-17	11422 NE 21st St., Bellevue	1956	Allstate Insurance Office	Arnold Bakkten Property	No
BrH-18	11034 NE 26th Pl., Bellevue	1953	Knotts Residence	J. Marvin Brown Property	No
BrH-19	2602 110th Ave. NE, Bellevue	1953	Fessler Residence	Robert L. Brown Property	No
BrH-20	2610 110th Ave. NE, Bellevue	1953	Tsao and Dupuis Residence	Theodore Cowles Property	No
BrH-21	2636 110th Ave. NE, Bellevue	1953	Brandon Residence	L.P. Bates Property	No
BrH-22	2640 110th Ave. NE, Bellevue	1953	Russell Residence	Arthur M. Russell Property	No
BrH-23	2650 110th Ave. NE, Bellevue	1953	Kitch Residence	W.J. Fritz Property	No
BrH-24	2650 116th Ave. NE, Bellevue	1930	Little School	Northrup School House	No
BrH-25	2426 116th Ave. NE, Bellevue	1959	ICOM America	Hook Property	No
BrH-28	12628 Northrup Way, Bellevue	1959	Hi Lan Apartments	Stanley S. Shelton Property	No
BrH-29	11417 NE 21st St., Bellevue	1959	Dogwood Park, LLC	Willibur Ward Property	No

Potential Effects and Mitigation Measures

No archaeological resources or historic properties will be affected by the project, as none are known or expected to be present within the APE.

Construction Effects

Build Alternative

No historic properties (substantial archaeological resources or historic buildings) will be affected by construction of the Build Alternative.

No Build Alternative

The No Build Alternative requires no action; therefore no historic properties would be affected.

Operation Effects

No historic properties will be affected by project operation.

Measures to Avoid or Minimize Adverse Effects

No mitigation measures are required because there will be no adverse effects to historic properties.

An Unanticipated Discovery Plan (UDP) has been developed by WSDOT Cultural Resources Program staff for the I-405 Corridor Program, and will be followed if necessary during construction. The UDP will outline procedures to be followed in the unlikely event that potential historic properties or human skeletal remains are discovered. Such procedures will include notification and consultation with FHWA, WSDOT, the identified concerned tribes, and DAHP/SHPO, and law enforcement as necessary or required.

No mitigation measures are required because there will be no adverse effects on archaeological resources or historic properties.

The project remains only partially funded at present. Should any design changes arise in the future that require new areas to be surveyed and cultural resources to be evaluated, the Section 106 process will resume and be directed using procedures outlined in the I-405 Corridor Programmatic Agreement (see Appendix C).

Unavoidable Adverse Effects

There are no known historic properties in the project APE. Thus, there will be no unavoidable adverse effects.

Acronyms and Abbreviations

APE	Area of Potential Effects
BGS	below ground surface
BP	before present
CFR	Code of Federal Regulations
cm	centimeter
DAHP	Washington State Department of Archaeology and Historic Preservation
FHWA	Federal Highway Administration
HOV	high-occupancy vehicle
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPRR	Northern Pacific Railroad
NPS	National Park Service
NRHP	National Register of Historic Places
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SP	shovel probe
SHPO	Washington State Historic Preservation Officer
SR	State Route
TCP	traditional cultural property
UDP	unanticipated discovery plan
WAC	Washington Administrative Code
WHR	Washington Heritage Register
WSDOT	Washington State Department of Transportation

Glossary

Term	Definition
advance outwash	Layered and sorted sediments (chiefly sand and gravel) washed out from an advancing glacier by melt-water streams and deposited beyond the margin of the glacier. The coarser material is deposited nearer to the glacier.
adverse effect (historic and cultural resources)	Within the context of an historic and cultural resources analysis, an effect to an historic property that alters the characteristics which qualify it for the National Register of Historic Places (National Register) in such a way that the property's eligibility for the National Register would be diminished.
anadromous fish	A fish species that spends a part of its life cycle in the sea and returns to freshwater streams to reproduce (for example, salmon).
anaerobic	A situation in which molecular oxygen is absent from the environment.
Area of Potential Effects	The area within which historic properties could be affected directly or indirectly by an undertaking.
artifact	A product of human manufacture or use.
auxiliary lane	A lane added between interchanges—from one on-ramp to the next off-ramp. It is dedicated to traffic entering and leaving a freeway.
cobble	Rock smaller than boulder and larger than gravel; arbitrarily 1 to 50 pounds or 2 to 8 inches in diameter.
cultural resource	Any district, site, building, structure, object, person or people, document, or traditional place that may be important in American history or prehistory.
direct effect	An effect caused by an action or alternative occurring at the same time and location. Effects may be ecological, aesthetic, historic, cultural, economic, social, or health-related.
eligible	Refers to cultural resources that meet the National Park Service criteria for listing on the National Register of Historic Places.
eustatic processes	Processes that relate to the worldwide change of sea level.
feature	A prehistoric-period or historic nonportable remnant of human activity, such as a cooking pit, post mold, hearth, road, or house remains.