

CULTURAL RESOURCES REPORT COVER SHEET

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Title of Report: 7240 North Mercer Way, Owen Sun Residence, Mercer Island, King County, WASHINGTON (NWS-2020-408) – Cultural Resources Assessment

Date of Report: April 2021

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Quad: Mercer Island, WA Acres: <1

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Replace a draft? Yes No

Satisfy a DAHP Archaeological Excavation Permit requirement? Yes # No

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7240 NORTH MERCER WAY, OWEN SUN RESIDENCE,
MERCER ISLAND, KING COUNTY, WASHINGTON
(NWS-2020-408)

Cultural Resources Assessment

Prepared for

April 2021

Seaborn Pile Driving



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MERCER ISLAND, KING COUNTY, WASHINGTON
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(RCW 42.56.300)**

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ABSTRACT

Environmental Science Associates (ESA) was retained by Seaborn Pile Driving to conduct a cultural resources assessment for the 7240 North Mercer Way Owen Sun Residence in King County, Washington. The Project is located in the City of Mercer Island in Section 1 of Township 24 North, Range 04 East, on the Mercer Island, Washington 7.5' series topographic map. It is located along the shoreline of Lake Washington on a residential property (King County parcel number 531510-0045). The proposed Project will upgrade an existing dock, modify the shoreline, and alter landscaping. This Project is anticipated to require a federal permit from the U.S. Army Corps of Engineers (USACE), which requires that the Project comply with Section 106 of the National Historic Preservation Act ("Section 106"). USACE follows the procedures outlined in 33 CFR Part 325, Appendix C ("Appendix C") to fulfill the requirements of Section 106. As part of its Section 106 review, the USACE requested a cultural resources survey.

The Project Area contains no previously recorded archaeological sites, historic properties, cemeteries or ethnographic place names. ESA conducted a cultural resources survey consisting of pedestrian and subsurface survey. The Project parcel contains a 1956 single family residence and circa 1950s/1960s dock and boathouse, which meets the minimum age criteria to be eligible for listing in the National Register of Historic Places. The Project Area has been modified as a result previous construction and landscaping, and the original historic ground surface was likely removed as a result of these actions. Furthermore, the Project Area is situated on a landform that was below the water level of Lake Washington until 1916, when completion of the Montlake Cut resulted in a lowering of the lake level by 9 to 10 feet.

As a result of its cultural resources assessment, ESA recommends the Project will result in **No Historic Properties Affected (36 CFR800.4(d)(1))**, and recommends no further cultural resources work at this time.

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1. INTRODUCTION

Environmental Science Associates (ESA) was retained by Seaborn Pile Driving to conduct a cultural resources assessment for the 7240 North Mercer Way Owen Sun Residence (Project) in King County, Washington. The Project is located in the City of Mercer Island in Section 1 of Township 24 North, Range 04 East, on the Mercer Island, Washington 7.5' series topographic map (Figure 1). It is located along the shoreline of Lake Washington on a residential property (King County parcel number 531510-0045).

The proposed Project will upgrade an existing dock, modify the shoreline, and alter landscaping at the residential property located at 7240 North Mercer Way. Construction activities are under contract and being completed by Seaborn Pile Driving. Project construction will consist of repairing existing piles, removal of a mooring pile, installing new thruflow decking on the dock, and installing a boatlift under the existing moorage cover. The project will also consist of tree and shrub planting in the backyard as well as the construction of a beach cove (Figure 2). No temporary access roads or constructed staging areas are proposed. Materials and equipment will be brought in by barge to minimize impacts to the existing home and backyard.

1.1 Regulatory Environment

This Project is anticipated to require a federal permit from the U.S. Army Corps of Engineers (USACE), which would require that the Project comply with Section 106 of the National Historic Preservation Act (“Section 106”). USACE follows the procedures outlined in 33 CFR Part 325, Appendix C (“Appendix C”) to fulfill the requirements of Section 106. Section 106 requires USACE to consider the effects of this undertaking upon Historic Properties within the Project’s “Area of Potential Effects” (APE). The USACE has assigned the following tracking number: NWS-2020-408. This report has been prepared to meet the standards of the Section 106 process. This report documents all of the steps taken to consider the effects of the Project on Historic Properties, and the results of the investigation.

Additional laws that apply to archaeological projects conducted within the State of Washington include: Archaeological Sites and Resources (RCW 27.53), Indian Graves and Records (RCW 27.44), Human Remains (RCW 68.50), and Abandoned and Historic Cemeteries and Historic Graves (RCW 68.60).

1.2 Project Area

The Project Area consists of the proposed footprint of disturbance necessary to upgrade the existing dock, construction of the beach cove, and tree and shrub plantings. The overall Project Area consists of a residential parcel; however, the area of ground disturbance is confined to the back yard, which is approximately 75 feet (23 meters) by 50 feet (15 meters). The majority of this area has been previously disturbed by the construction of the original dock structure as well as the construction of the residence and landscaping of the backyard. The Project Area is less than 0.25 acres.



Figure 1
Project Location

2. PROJECT SETTING

2.1 Research Methods

ESA conducted a background review of the Project's Study Area, which is defined as a 1.0-mile radius from the Project Area. It is based on review of prior archaeological survey reports, recorded cultural resources, historic register-listed properties, ethnographic studies, historical maps, government landowner records, aerial photographs, regional histories, geological maps, soils surveys, and environmental reports. These sources were reviewed in order to identify cultural resources, including archaeological sites, historic properties, cemeteries and Traditional Cultural Properties (TCPs), within the Project Area, and the probability for unrecorded resources. Research included review of the Washington Information System for Architectural and Archaeological Records Data (WISAARD) system maintained by the Washington State Department of Archaeology and Historic Preservation (DAHP), digital collections of the U.S. Bureau of Land Management, King County Road Services, King County Assessor, other online resources, and resources within ESA's research library. Research was conducted to the extent possible during COVID-19 health and safety closure orders.

2.2 Environmental Setting

2.2.1 Geomorphology

The Project Area is situated on the shoreline of Lake Washington. Lake Washington occupies a north-south elongated trough that was carved between approximately 17,400 and 16,400 years ago during the Vashon stade of the Fraser glaciation (Booth 1994). As the Vashon lobe of the Cordilleran ice sheet advanced and retreated during this time interval, meltwater and ice scoured through older glacial drift deposits to an elevation of up to -400 feet (Troost 2011). Water and sediment accumulated in the trough as the glacial ice continued to retreat. Lake Washington rapidly filled to an elevation of -40 feet by about 14,500 years ago, after which it continued to rise slowly until 1916 when the lake level was abruptly and permanently lowered over several months by approximately 9 feet after opening of the Montlake Cut to complete the Lake Washington Ship Canal (Troost 2011). The lowering of the lake level resulted in exposure of an approximately 9 to 10-foot high bench as formerly inundated areas along the shoreline were left above the waterline. Lake level, which averages around 18 to 19 feet above mean sea level, is kept within a 2-foot range and is controlled by a dam at the Hiram M. Chittenden Locks at the west end of the Lake Washington Ship Canal (Troost 2011).

The Project Area is located along the previously submerged slope that was exposed as a result of the lowering of the lake level in 1916. The Project Area is underlain by Vashon stade glacial till. During progradation and stagnation, the glacier deposited vast quantities of diamict till, a poorly-sorted mixture of glacial clay, silt, sand, and gravel; till deposits tend to appear gray to blue and are usually extremely compact. Due to the age and environment of deposition of the till, intact till deposits would not be expected to contain intact, buried archaeological deposits.

2.2.2 Soils

Soils underlying the Project Area are mapped as Kitsap silt loam. The Kitsap series consists of moderately deep, moderately well drained, silt loam soil developed in glacial glaciomarine sediments on glacially modified hills on glacial drift plains (NRCS 2018). The Kitsap series is formed in glacial parent material, which would tend to preclude the potential for deeply buried, intact archaeological deposits.

2.2.3 Flora and Fauna

The Project is located within the western hemlock (*Tsuga heterophylla*) plant association, which is the most extensive vegetal zone of western Washington (Franklin and Dyrness 1988). The mild, wet, maritime climate contributes to the growth of abundant vegetation with forests dominated by western hemlock (*Tsuga heterophylla*), western red cedar (*Thuja plicata*), and Douglas fir (*Pseudotsuya menziesii*) (Franklin and Dyrness 1988). Native fauna typical of the western hemlock area include deer (*Odocoileus* spp.), cougar (*Puma concolor*), elk (*Cervus canadensis*), bear (*Ursus americanus*), coyote (*Canis latrans*), beaver (*Castor canadensis*), skunk (*Mephitis mephitis*), weasel (*Mustela* spp.), and muskrat (*Ondatra zibethicus*) (Franklin and Dyrness 1998). Principal fish species available in Lake Washington include coastal cutthroat trout (*Oncorhynchus clarki clarki*), largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), yellow perch (*Perca flavescens*), black crappie (*Pomoxis nigromaculatus*), steelhead (*Oncorhynchus mykiss*), Chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kistuch*), and sockeye (*Oncorhynchus nerka*).

2.3 Precontact Setting

2.3.1 Overview

The precontact cultural chronology of the Pacific Northwest and Puget Sound from the Late Pleistocene onward has been previously summarized (Ames and Maschner 1999; Kidd 1964; Kopperl et al. 2016; Matson and Coupland 1995; Nelson 1990). The various chronologies generally agree on broad patterns in culture but may differ regarding the timing and significance of changes in specific aspects of culture, such as subsistence, technology, and social organization. The following discussion of cultural-historical sequence draws broadly on the various chronologies, but follows Kopperl et al. (2016) by recognizing five periods, which are summarized in Table 1. The Late Pacific period overlaps slightly with the Ethnographic period, as discussed below.

TABLE 1
PRECONTACT PERIODS

Period	King County Analytic Period	Approximate Date Range	Characteristics
Late Pacific	5	2500 – 200 cal BP	Represented by seasonal camps associated with resource procurement and increased variability in burial methods. Site types include winter villages, base camps, field camps, resource gathering sites for hunting, fishing, plants, and quarry sources.
Middle Pacific	4	5000 – 2500 cal BP	Represented by large plank houses, increase in decorative items, woodworking tools (adzes, mauls, wedges). Site types include possible villages, base camps, field camps, resource gathering sites for hunting, fishing, plants, and quarry sources.

Period	King County Analytic Period	Approximate Date Range	Characteristics
Early Pacific	3	8000 – 5000 cal BP	Located in marine and estuary settings; represented by large shell middens and decorative artifacts such as labrets and bracelets. Site types include base camps, field camps, and various resources gathering and non-residential sites.
Archaic	2	12,000 – 8000 cal BP	Often referred to as Olcott culture and located in riverine and lake settings; represented by cobble tools and lanceolate projectile points. Site types include small residential base camps, field camps, resource gathering, and quarry sites.
Paleoindian	1	14,000 – 12,000 cal BP	Often referred to as Clovis culture, represented by projectile points. This period represents post-glacial entry of humans into the Puget Sound basin. Site types would include small residential base camps, resource gathering near those camps, and isolate finds.

No precontact-era archaeological sites have been recorded in the Study Area. The closest precontact-era archaeological site is 45-KI-1217, a multi-component site located approximately 2.45 miles east of the Project Area, along the Mercer Slough. It contained a precontact lithic scatter and fire modified rock (FMR). No diagnostic artifacts were recorded and no dates for the site exist at this time (Lothrop and Hoy 2014). Looking beyond the Study Area for greater context, no archaeological sites have been recorded on the present-day eastern shoreline of Lake Washington between Meydenbauer Bay and Newcastle Beach Park or the present-day western shoreline of Lake Washington between Madrona Park and Mount Baker Park.

2.4 Ethnographic Setting

2.4.1 Overview

The Study Area is located within the traditional territory of the Southern Coast Salish which includes but is not limited to; Duwamish *dxʷdəwʔabš* (people of the inside) and Snoqualmie *sdukʷalbixʷ* (people of the moon). Southern Coast Salish have used the Study Area since time immemorial for various levels of habitation and resource gathering. The traditional language of the Southern Coast Salish is Southern Lushootseed (Suttles and Lane 1990:485). Descendants of the Duwamish and Snoqualmie are members of today's non-Federally recognized Duwamish Tribe and the following Federally-recognized tribes: Snoqualmie Indian Tribe, Suquamish Tribe, Tulalip Tribes, Muckleshoot Indian Tribe, and Confederated Bands and Tribes of the Yakama Nation (Miller and Blukis Onat 2004:24-25, 56-108).

The Southern Coast Salish culture group shares similarities in language, subsistence patterns, structures, and other cultural practices (Suttles and Lane 1990). Permanent and seasonal campsites were located at specific locations ideal for resource gathering, hunting, and travel. Villages were located at the mouths of rivers, river confluences, and terraces, following a seasonal round for subsistence and resources. Southern Coast Salish relied heavily upon salmon for subsistence, supplementing this diet with other resources found in marsh and river environments. Nearby rivers, lakes, and forests, would have provided fishing and hunting opportunities for resources such as salmon, beaver, waterfowl, deer, elk, bear, and other animals.

Impacts on Indigenous tribes in Puget Sound increased as treaties were signed with the U.S. Government and reservations established. The U.S. negotiated the Treaty of Point Elliott with the Duwamish and 21 “allied tribes” in 1855. Under the provisions of this treaty, ratified in 1859, the U.S. Government established four reservations within the Puget Sound region for the “Duwamish and allied tribes” to reside upon: Tulalip, Port Madison, Swinomish, and Lummi. The Treaty did not create a reservation specifically for the Duwamish and not all Coast Salish moved to the established reservations (Lane 1975a, 1975b; Miller and Blukis Onat 2004). The Duwamish are actively petitioning the U.S. for federal acknowledgement (Duwamish Tribe 2021; U.S. Bureau of Indian Affairs 2021). The Snoqualmie were granted federal recognition in 1999.

Evidence from oral traditions, ethnographic reports, and archaeological investigations document numerous place names and villages along the shores of Lake Washington and nearby Lake Sammamish (Haeberlin and Gunther 1930; Hilbert et al 2001; Lane 1975a, 1975b; Miller 2014; Miller and Blukis Onat 2004; Smith 1941; Spier 1936; Thrush 2007). Two recorded place names were identified within the Study Area (Table 2).

TABLE 2
RECORDED ETHNOGRAPHIC PLACE NAMES WITHIN THE STUDY AREA

Approximate Location	Lushootseed Name	English Translation	Description	Citation ¹
Northern end of the island (Study Area)	<i>čəčqčəqabac</i>	gooseberry bushes	“gooseberry bushes,” at East Seattle [Mercer Island] on the north end of Mercer Island. The particular locality named here within is the site of the old Proctor Ranch. Wild roses were formerly very plentiful here.”	Hilbert et al. 2001:107 (145a)
Western shore	<i>Q³oq³o'btsi*</i>	water lilies	“water lilies,” for a place on the west shore of Mercer Island. A plant with a large yellow flower.”	Hilbert et al. 2001:107 (145c)

¹ Parenthetical numbers are map locations used in the publication

* Waterman Orthography

2.5 Historical Setting

2.5.1 Overview

The land surrounding the Project Area was first surveyed in 1862. No notable features, like wagon roads, homesteads, or trails were recorded (U.S. Surveyor General 1862). A land patent was first issued to Calip P. Stone, a Merchant from Vermont, on September 9, 1870 (U.S. Bureau of Land Management 1995; King County 1871). The earliest non-Indigenous residents of Mercer Island arrived shortly afterward in the 1870s (Gellatly 1977:11). Mercer Island was likely named for Thomas Mercer, one of three brothers from Illinois who were among the first to settle in the area (Stein 2002a; Tingwall et al. 2008). Historic maps show the area subdivided into several smaller plats, including the McGilvra’s and Roanoke Plat, and unimproved roads in place by the early 1900s (Anderson Map Company 1907; King County Engineering Department 1905, Kroll Map Company 1912; USGS 1895).

In order to improve trade and access in the region, a new transportation route to connect Lake Washington to the Puget Sound began in 1909 with the Montlake Cut (Ott 2012). The U.S. Army Corps of Engineers managed the construction, with development of the Hiram M. Chittenden locks at Salmon Bay starting by 1911 (Ott 2012). When the canal opened in 1916 the water level of Lake Washington dropped by approximately 9 to 10 feet, turning previously submerged areas into today's shoreline. This suggests that portions of the Project Area may have been submerged prior to 1916.

Prior to World War 1, the only way to travel to and from the island was by passenger boat. The need for access was addressed by building a bridge at its closest point to the mainland, in the northeast (Stein 2002b). Several wharves, landings, and docks were in place around the island by 1921 (King County Engineers Office 1920, 1921). In 1921, Homer Hadley proposed a concrete floating bridge to connect Mercer Island to Seattle. However, the first bridge on Mercer Island was at its northeastern end. In 1923, the East Channel Bridge, was constructed connecting Mercer Island at Barnabie Point to Enatai in Bellevue (Gellatly 1977; Stein 2002b). By the late 1930s, funding was secured for Hadley's idea and in 1940 the Lake Washington Floating Bridge (Mercer Island Bridge) was open to traffic. At that time, it was the world's largest floating structure, the East channel bridge was also replaced in 1940 (Burrows 2005; Stein 2002b; USGS 1956). The project parcel remained undeveloped through the 1930s and 1940s (King County 2021; NETROnline 2021; Pacific Aerial Surveys 1937). Residences with associated docks were in place surround the project parcel by at least 1937 and ferry service from Roanoke (northwest of the Project Area) to Leschi Park was a main access route to Seattle before the bridge was in place (Kroll Map Company 1926; Metsker Map Company 1936; Pacific Aerial Survey 1937; Stein 2002b; USGS 1956).

Access to and throughout the island continued to improve in the mid-twentieth century. Historic aerial photography from the 1950s and 1960s show residential development and private docks appear in the general area (King County Aerial Survey 1965; NETROnline 2021; USGS 1956, 1969, 1976). The Project Area has remained relatively unchanged though the late 20th and early 21st centuries (NetrOnline 2020; King County 2021).

The Project Area is located on King County tax parcel 531510-0045, a rectangular shaped residential parcel along the shore of Lake Washington. The single family residence was originally constructed in 1956 (King County Assessor 2021). Although no built date information was available online for the dock and boat house; historic aerial photographs and topo maps from the 1960s show a dock and boathouse in the project area by at least 1965 (King County Aerial Survey 1965; NETROnline 2021; USGS 1969).

2.6 Existing Resources

ESA conducted a records search of DAHP's WISAARD system on April 22, 2021 (DAHP 2020). There have been five prior cultural resources assessments recorded in the Study Area. No archaeological sites, recorded cemeteries, or traditional cultural properties are present.

2.6.1 Prior Cultural Resources Assessments

There have been five prior cultural resources assessments conducted within the Study Area (Table 3). None of the previous assessments overlapped the Project Area and none of the assessments identified and

cultural resources. The assessments were conducted for road improvements, shoreline restoration, and private development.

TABLE 3
PRIOR CULTURAL RESOURCES ASSESSMENTS CONDUCTED WITHIN THE STUDY AREA

Approximate Distance from Project	Cultural Resources Identified in Study Area	Project	NADB Number	Citation
0.15 mile south	None	Cultural Resources Survey Lake Washington Congestion Management Program SR 520/I-90 – Active Traffic Management Project	1353924	Walker Gray and Juell 2009
0.25 mile south	None	I-90/ SR 520 Urban Partnership Agreement Active Traffic Management System, Determination of No Adverse Effects and Request for Concurrence	1354564	Bartoy 2010
0.40 mile east	None	Cultural Resources Assessment for the Property at 7840 & 8000 SE 20th Street Project	1692594	Kleinschmidt and Gardner 2018
0.50 mile east	None	Cultural Resources Assessment for the Phillips Beach Cove Project, Mercer Island	1690030	Kassa-Kleinschmidt 2017
0.60 mile east	None	Cultural Resources Survey Report, Calkins Point Restoration	1686361	Bundy 2015

Source: DAHP 2021

2.6.2 Built Environment Resources

No aboveground built environment resources are located within or adjacent to the Project Area that are listed in the NRHP or have been determined or recommend eligible for listing in the National Register of Historic Places (NRHP). There is one register listed property within the Study Area.

The Keewaydin Clubhouse (45-KI-720), is an NRHP and Washington Heritage Register (WHR) listed property built in 1922, located approximately 400-feet from the Project Area at the southern corner of the North Mercer Way and 72nd Avenue Southeast intersection (1836 72nd Avenue Southeast). The clubhouse was constructed as a community meeting place for the Mercer Island Community Club until the early 1960s when it was purchase by the Veterans of Foreign Wars Post 5760 (Lind 2005).

King County Assessor records list the single family residence, located on the Project parcel (531510-0045) as being built in 1956 (King County Assessor 2021). As discussed in Section 2.5 the Project Parcel also contains a circa 1950s/1960s dock and boathouse. These historic-aged¹ built environment resources meet the minimum age threshold for listing in the NRHP, but have not yet been evaluated for their eligibility. The residence and associated dock and boat house are currently unoccupied and unmaintained.

¹ Historic-aged built environment resources are those that would meet the NRHP minimum age threshold for consideration as a Historic Property (50 years or older) at the time of Project construction. This Project is anticipated to begin in 2021. Therefore, resources built in or before 1971 are considered historic-aged and included in this review.

2.7 Expectations

2.7.1 Precontact-Era Archaeological Resources

The Project Area is classified as High to Very High Risk in DAHP's statewide predictive model for containing precontact-era archaeological sites (DAHP 2010). The statewide predictive model is a tool used by archaeologists and planners to evaluate potential archaeological risks on a broad scale. The model was developed to statistically evaluate multiple environmental factors (e.g., elevation, slope percent, aspect, distance to water, soils, and landforms) in order to predict where archaeological resources might be found (Kauhi 2013). It is not a substitute for conducting site-specific subsurface investigations.

Based on the Project setting discussed above, ESA considers the Project Area to be low risk for precontact-era archaeological resources. Due to the lowering of water level by approximately 9 feet in Lake Washington in 1916, the majority of the Project Area was likely submerged prior to 1916. This significantly decreases the potential that the landform was used by Indigenous people during the precontact or ethnographic era. Furthermore, if isolated artifacts or features were within the Project Area, they have likely been removed, or heavily disturbed, as a result of construction of the existing dock structure and associated residence.

2.7.2 Historic-Era Archaeological Resources

Based on the Project setting discussed above, ESA considers the Project Area to be low probability for historic-era archaeological resources. According to historic aerial photography and maps the project parcel remained undeveloped at least through the 1930s and likely until the current single family residence was built in 1956. The existing dock and boathouse may be a circa 1950s/1960s dock and boathouse present on historic aerial photos, and further archival research of permits and historic property records would be necessary to confirm. Materials related to historic use of the lakeshore and residential development during the early to mid-20th century may have been deposited within the Project Area. However, previous landscaping activities is likely to have removed or disturbed any historic artifacts or features.

3. ARCHAEOLOGICAL ASSESSMENT

3.1 Survey Methodology

On March 31st, 2021, ESA staff member Christopher Yamamoto conducted an archaeological field survey of the Project Area. The survey consisted of both pedestrian and subsurface. Weather conditions at the time of survey generally consisted of seasonally mild temperatures and partly cloudy skies.

Detailed notes regarding stratigraphy, shovel probe (probe) location, presence or absence of cultural materials, documentation of buildings, general area conditions, and photographs were taken. Data was recorded using smartphones and tablets with Global Positioning System/Global Navigation Satellite System (GPS+GLONASS), with a positional accuracy of 9.8 feet (3 meters) or less. Records are saved at the ESA offices on a secure server.

Three probes (Figure 3) were excavated with a round-nosed shovel and a 40-cm (1.3-foot) diameter, to a target depth of 90 cm (3 feet) or until encountering intact glacial parent material, lacustrine sediments, or obstructions whichever came first. Probes were excavated stratigraphically, or in 20-cm (8-inch) arbitrary levels within strata. Excavated material was screened through ¼-inch mesh. Relevant matrix data (such as color, grain size, gravel content and shape, presence of charcoal, oxidation, reduction, organics, historic or modern aged materials, and boundary characteristics) were recorded for each stratum. For full descriptions of each probe, see Appendix B. No in-water survey work was performed.

3.2 Results

No archaeological sites were recorded during the cultural resource survey of 7240 North Mercer Way Owen Sun Residence.

The Project is in the backyard of 7240 North Mercer Way, which is a landscaped residential yard located on the shore of Lake Washington. The majority of the backyard consists of a grassy lawn sloping to the northeast toward the lake. Landscaped bushes, terraced landscaping, and a concrete walkway leading to the shoreline are also present in the backyard. The house is currently unoccupied and unmaintained. Rip-rap boulders, a small stone walkway, and the dock and boathouse make up the shoreline of the backyard (Figure 4, Figure 5).

Three probes were placed in along the shoreline of the backyard where proposed ground disturbance will occur (Figure 6). Probe 1 was placed in the north corner of the yard near the shore where a proposed tree planting is to occur. Probe 1 consisted of primarily fill material in the form of a brown mixed topsoil fill overlying a blueish gray fill material as silty clay loam. (Figure 7). Probe 2 was placed in the location of where the proposed beach cove is to be constructed. Probe 2 also consisted of similar sediments found in Probe 1 consisting of a mixed topsoil fill overlying silty clay loam fill (Figure 8). Probe 2 contained several pieces of demolished asphalt and terminated on cobbles. Probe 3 was placed in the southeast corner of the yard, slightly uphill from the existing tree, where a proposed tree planting is to occur. Probe 3 consisted of heavily bioturbated topsoil overlying mixed glacially derived sediments. All three probes were terminated on cobble obstructions.



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Figure 3
Shovel Probe Locations



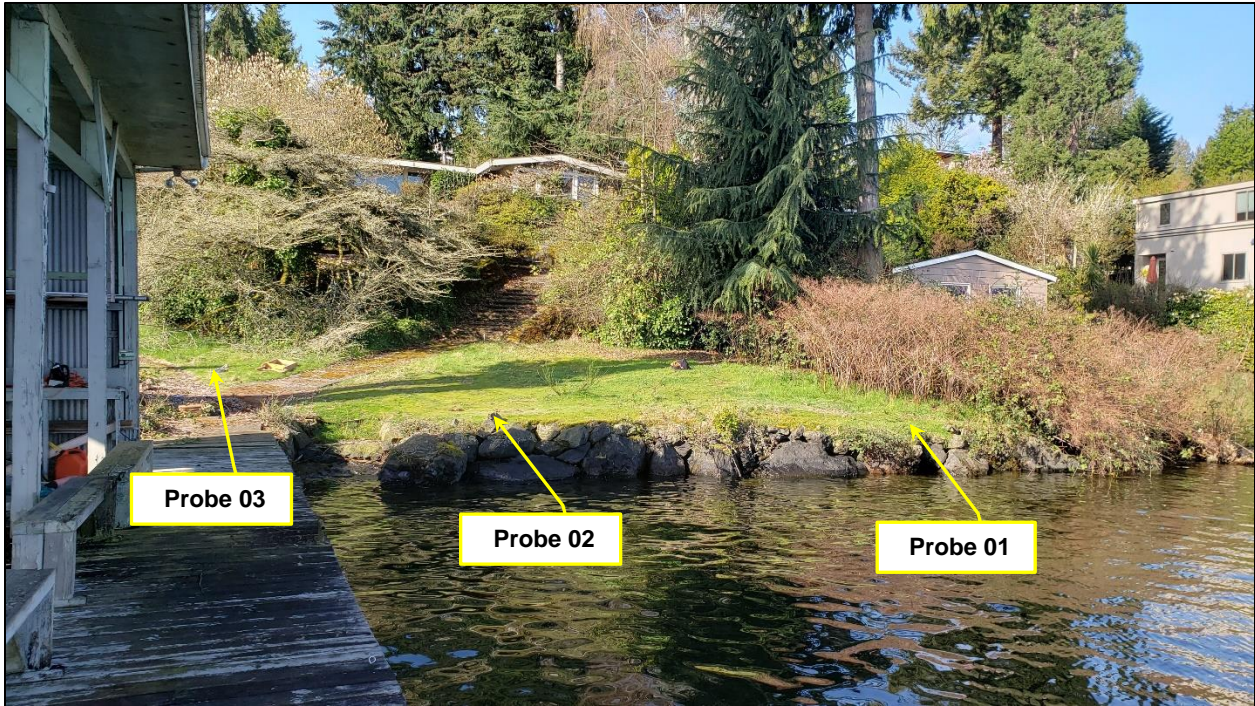
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Figure 4
Dock and Boathouse. View northeast.



ESA 2021

Figure 5
Dock and Boathouse. View southwest.



ESA 2021

Figure 6
Overview of Shovel Probe Locations



ESA 2021

Figure 7
Overview of Shovel Probe 01



ESA 2021

Figure 8
Overview of Shovel Probe 02



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Figure 9
Overview of Shovel Probe 03

4. INTERPRETATION & EVALUATION

The initial construction of the house in 1956, including the landscaping of the backyard, the installation of the dock and boathouse, and the development of the shoreline have reshaped the Project Area from its original setting. Previous disturbance from these actions have removed the native soil A- and B-horizons from the backyard. Shovel probe data suggest that fill material overlies glacial lacustrine sediments. The previous actions likely associated with the initial development of the house has resulted in a very low probability of encountering precontact period artifacts or features.

The location of ground disturbance is to be primarily along the shoreline of the backyard, adjacent to the water's edge. Due to the lowering of water level by approximately 9 to 10 feet in Lake Washington in 1916, the shoreline at 7240 North Mercer Way was likely submerged prior to this time. This significantly decreases the potential that the landform was used by Indigenous people during the precontact or ethnographic era. Furthermore, if isolated artifacts or features were within the Project Area, they have likely been removed, or heavily disturbed, as a result of residential development.

The development of the house has also created a very low probability for encountering historic period artifacts or features. While no historic artifacts or historic fill layers were identified in the probes, it is possible that isolated disturbed historic period artifacts might be encountered in fill deposits. However, these isolated finds would lack critical integrity necessary to provide additional information about the past, and as a result would be unlikely to be eligible for listing in the NRHP.

5. RECOMMENDATIONS

As a result of its cultural resources assessment, ESA recommends the Project will result in **No Historic Properties Affected (36 CFR800.4(d)(1))**, and recommends no further cultural resources work at this time.

The findings and professional opinions included in this report are based on standard archaeological techniques including pedestrian survey and shovel testing; however, each has its limitations. It is possible that unanticipated cultural resource materials may be encountered during construction. In the event that cultural resources are observed during implementation of the Project then work should be temporarily suspended at that location and a professional archaeologist should be consulted.

Pursuant to RCWs 68.50.645, 27.44.055, and 68.60.055, if ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

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Appendix A

Shovel Probe Data

HOLE	LAYER	DEPTH (cm)	TOOL	COLOR	TEXTURE	SAND MODE	GRAVEL MODE	CONSISTENCE	PEDS	BOTTOM BOUNDARY	SOIL HORIZON	SPECIAL FEATURES	MODERN DEBRIS	CULTURAL	COMMENTS
1	1	0-11	Shovel	brown	sandy loam (no bedding)	medium poorly-sorted	5-15% poorly-sorted subrounded medium	slightly hard	structureless	very abrupt smooth	A		no	no	
1	2	11-57	Shovel	gray	silty clay loam (no bedding)	medium poorly-sorted	15-35% poorly-sorted subrounded mixed	moderately hard	structureless	no horizon	fill	reduced	no	no	Large cobbles in bottom 10 cm of layer. Mixed glacial and lacustrine deposits.. Terminated at gravel/cobble obstruction.
2	1	0-10	Shovel	dark brown	loamy sand (no bedding)	medium moderately-sorted	<5% moderately-sorted subrounded medium	slightly hard	structureless	abrupt smooth	A		no	no	
2	2	10-43	Shovel	gray	silty clay loam (no bedding)	fine poorly-sorted	15-35% poorly-sorted rounded-angular mixed	hard	structureless	very abrupt no horizon topography	fill		yes	no	Asphalt chunks, terminated on asphalt. Terminated at gravel/cobble obstruction.
3	1	0-10	Shovel	brown	sandy loam (no bedding)	medium poorly-sorted	<5% poorly-sorted subrounded medium	moderately hard	structureless	abrupt smooth	A		no	no	
3	2	10-37	Shovel	grayish-brown	sandy loam (no bedding)	medium poorly-sorted	15-35% poorly-sorted subrounded mixed	hard	structureless	no horizon	mixed		no	no	Krotovina in north side wall. Compacted, but also heavily bioturbated from the nearby cedar.. Terminated at gravel/cobble obstruction.