

CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: _____

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Title of Report: Draft Cultural Assessment for the Port of Seattle Industrial Wastewater Treatment Plant Project, King County, Washington

Date of Report: July 2, 2025

County(ies): King Section: 32, 33, 4 Township: 23N, 22N Range: 4E

Quad: Des Moines Acres: 10.6

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

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26 **DRAFT CULTURAL RESOURCES ASSESSMENT FOR**
27 **THE PORT OF SEATTLE INDUSTRIAL WASTEWATER**
28 **TREATMENT PLANT PROJECT**

29 King County, Washington
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36 July 2, 2025
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EXECUTIVE SUMMARY

Stell Environmental Enterprises, Inc. (Stell) was contracted by WSP USA, Inc., the prime consultant to the Port of Seattle, to conduct a Cultural Resources Assessment for the Industrial Wastewater Treatment Plant (IWTP) at the Seattle-Tacoma International Airport (SEA). This assessment is part of the IWTP Controls and Improvements (Facility) Combined Design Project (Project). The Project is primarily driven by significant reductions in the allowable mass loading of deicing chemicals, characterized as Biochemical Oxygen Demand, that can be discharged to the sanitary sewer system in stormwater runoff collected from SEA's Industrial Wastewater System. The Project is located in the City of Seattle, King County, Washington.

The Area of Potential Effect (APE) encompasses approximately 10.6 acres and includes the existing IWTP facility at SEA, situated in the City of SeaTac. The APE spans Sections 32 and 33 of Township 23 North, Range 4 East, and Section 4 of Township 22 North, Range 4 East, Willamette Meridian. This assessment documents prehistoric and historic resources within a 1-mile radius of the APE, where ground-disturbing activities are expected to occur. Eleven unique study areas are included in the APE.

The scope of work is divided into phases to provide accurate task descriptions. The first phase includes project management, regulatory support, and development of a Cultural Resources Desktop Study. The purpose of the study is to satisfy the requirements of Section 106 of the National Historic Preservation Act, defined in 36 Code of Federal Regulations Part 800, and, where applicable, the Washington's State Environmental Policy Act. The study also aims to review the Project area for potential impacts to previously recorded historic properties and to provide background information on the potential for unrecorded historic resources.

Stell conducted a literature review and record search by consulting Washington State Department of Archaeology and Historical Preservation, Washington Information System for Architectural and Archaeological Records Database, as well as historic maps, photographs, and other historical sources. Within 1 mile of the APE, two archaeological sites, ten cultural surveys, one cemeteries, no historic register properties, and 1,055 historic buildings have been documented. No known cultural resources located within the APE:

Due to the urban setting and hardscaped surfaces present within the APE and the history of the area, there is a high likelihood of inadvertent discoveries of precontact and historic-era cultural materials and/or human remains within the APE. Stell recommends geotechnical borings within the APE to determine if any buried cultural resources are present. Stell also recommends a Monitoring and Inadvertent Discovery Plan be developed in consultation with the Department of Archaeology and Historic Preservation, all Affected Tribes, and interested parties.

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99	TABLE OF CONTENTS	
100	EXECUTIVE SUMMARY	ES-1
101	1. INTRODUCTION	1-1
102	1.1 PROJECT INFORMATION.....	1-1
103	1.2 PROJECT LOCATION	1-1
104	1.3 REGULATORY ENVIRONMENT	1-4
105	1.3.1 NATIONAL REGULATIONS AND APPLICABLE POLICIES	1-4
106	1.3.1.1 NATIONAL HISTORIC PRESERVATION ACT	1-4
107	1.3.1.2 NATIONAL ENVIRONMENTAL POLICY ACT	1-4
108	1.3.1.3 STATE ENVIRONMENTAL POLICY ACT	1-4
109	2. ENVIRONMENT AND CULTURAL SETTING	2-1
110	2.1 ENVIRONMENTAL CONTEXT	2-1
111	2.1.1 PHYSIOGRAPHIC PROVINCE	2-1
112	2.1.2 GEOMORPHOLOGY	2-1
113	2.1.2.1 PLIO-PLEISTOCENE UPLIFT (7–5 MILLION YEARS AGO)	2-2
114	2.1.2.2 PLEISTOCENE GLACIATIONS (2.6 MILLION–11,700 YEARS AGO).....	2-2
115	2.1.3 PALEOECOLOGY	2-2
116	2.1.3.1 LATE GLACIAL, PRE-14,000 BP	2-2
117	2.1.3.2 EARLY POSTGLACIAL, 14,000–10,000 BP	2-3
118	2.1.3.3 EARLY AND MIDDLE HOLOCENE, 10,000–4500 BP	2-3
119	2.1.3.4 LATE HOLOCENE, Post-4500 BP	2-3
120	2.1.4 SOILS	2-3
121	2.2 CULTURAL CONTEXT.....	2-4
122	2.2.1 ARCHAEOLOGICAL CONTEXT.....	2-4
123	2.2.1.1 EARLY PERIOD	2-6
124	2.2.1.2 MIDDLE PERIOD	2-6
125	2.2.1.3 LATE PERIOD.....	2-6
126	2.2.2 PRECONTACT AND ETHNOGRAPHIC PERIODS	2-6
127	2.2.3 HISTORIC BACKGROUND.....	2-8
128	2.2.4 PROJECT APE BACKGROUND.....	2-9
129	3. RECORD SEARCH AND LITERATURE REVIEW	3-1
130	3.1 ARCHAEOLOGICAL SITES	3-1
131	3.2 CULTURAL RESOURCES SURVEYS.....	3-1
132	3.3 CEMETERIES.....	3-3
133	4. RECOMMENDATIONS & CONCLUSIONS.....	4-1
134	5. REFERENCES.....	5-1
135		

136

LIST OF FIGURES

137	Figure 1-1. Project APE location	1-2
138	Figure 1-2. Modern aerial of the APE	1-3
139	Figure 2-1. United States Department of Agriculture Soil Survey Results for the APE	2-5
140	Figure 2-2. 1863 BLM GLO plat map, T23N R4E. (BLM GLO 2025)	2-11
141	Figure 2-3. 1897 USGS topographic map, Des Moines Quadrangle (USGS 2025).....	2-12
142	Figure 2-4. 1912 Kroll’s Atlas of King County T23N R4E (Seattle Public Library 2025).....	2-13
143	Figure 2-5. 1936 Metsker’s Map of King County T23N R4E.....	2-14
144	Figure 2-6. 1937 aerial photograph of the APE and surrounding area	2-15
145	Figure 2-7. 1949 USGS topographic map, Des Moines Quadrangle (USGS 2025).....	2-16
146	Figure 2-8. 1965 aerial photograph of the APE and surrounding area	2-17

147

148

LIST OF TABLES

149	Table 3-1. Summary of Previously Recorded Archaeological Sites Within One Mile of The	
150	Project APE	3-1
151	Table 3-2. Summary of Previously Conducted Cultural Resources Investigations.....	3-2

152

153

ACRONYMS AND ABBREVIATIONS

%	Percent
ACHP	Advisory Council on Historic Preservation
AGB	Aerated gravel bed
APE	Area of Potential Effect
BOD	Biochemical Oxygen Demand
BP	Before Present
CFR	Code of Federal Regulations
DAHP	Washington State Department of Archaeology and Historic Preservation
GLO	General Land Office
GPR	Ground Penetrating Radar
IWS	Industrial Wastewater System
IWTP	Industrial Wastewater Treatment Plant
Mgal	Million gallon
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966, as amended
NRHP	National Register of Historic Places
Project	Industrial Waste Treatment Plant Controls and Improvements (Facility) Combined Design Project
SEA	Seattle Tacoma International Airport
SeaTac	The City of SeaTac
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officers
SR	State Route
Stell	Stell Environmental Enterprise, Inc.
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officers
U.S.	United States
USGS	United States Geologic Survey
WAC	Washington Administrative Code
WISAARD	Washington Information System for Architectural and Archaeological Records Database
WSP	WSP USA, Inc.

154

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1. INTRODUCTION

Stell Environmental Enterprises, Inc. (Stell) was contracted by WSP USA, Inc. (WSP), the prime consultant to Port of Seattle to conduct a Cultural Resources Assessment for the Industrial Wastewater Treatment Plant (IWTP) at the Seattle-Tacoma International Airport (SEA). This assessment is part of the IWTP Controls and Improvements (Facility) Combined Design Project (Project). The Project is primarily driven by significant reductions in the allowable mass loading of deicing chemicals, characterized as Biochemical Oxygen Demand (BOD), that can be discharged to the sanitary sewer system in stormwater runoff collected from SEA's Industrial Wastewater System (IWS). The Project is located in the City of Seattle, King County, Washington.

1.1 PROJECT INFORMATION

The Project will expand the IWTP's storage and treatment capacity to comply with the King County Industrial Waste Discharge Permit. Due to the extensive site work, the Project must also comply with the Port of Seattle's Stormwater Management Manual. The site is located in the City of SeaTac, outside of the Port's current National Pollutant Discharge Elimination System permit boundary, between Des Moines Memorial Drive South and 13th Place South.

The Project includes the construction and installation of a 5-million-gallon (Mgal) underground storage tank in the northeastern corner of the site, six aerated gravel bed (AGB) cells separated by gravel berms, and a new access road encircling the four westernmost cells and the proposed tank.

The Project consists of three work areas, shown in **Figure 1-1**:

- Area 1 – The AGB site, which drains to City of SeaTac-owned stormwater conveyance pipes to the Northwest Ponds and is subject to the Port's stormwater management requirement as the area drains to a stormwater outfall and involves significant site disturbance.
- Area 2 – The Lagoon 3 site, which primarily drains to the IWS
- Area 3 – The IWTP site, which also drains to the IWS.

The AGB site covers approximately 10.6 acres (461,302 square feet), with about 70 percent (%) consisting of impervious surfaces such as concrete building foundations and asphalt pavement. The Project proposes to construct a 5 Mgal underground storage tank with the side walls completely buried and an above-ground dome roof in the northeastern corner of the site and six AGB cells separated with gravel berms. Additionally, the new BOD treatment system requires the following structures be installed near or below grade: AGB biological treatment cells, pump stations, hydraulic control structures and vaults and IWS conveyance piping.

Additional improvements include new utility connections, service lines, and access roads with road vehicle parking constructed to service the site. The new access road is proposed to ring the four westernmost cells and also ring the proposed tank (Gresham Smith 2022).

1.2 PROJECT LOCATION

The proposed APE is located within the City of SeaTac, as shown in **Figure 1-1** and **Figure 1-2**. The APE lies within Sections 32 and 33 of Township 23 North, Range 4 East, and Section 4 of Township 22 North, Range 4 East, Willamette Meridian, King County, Washington.

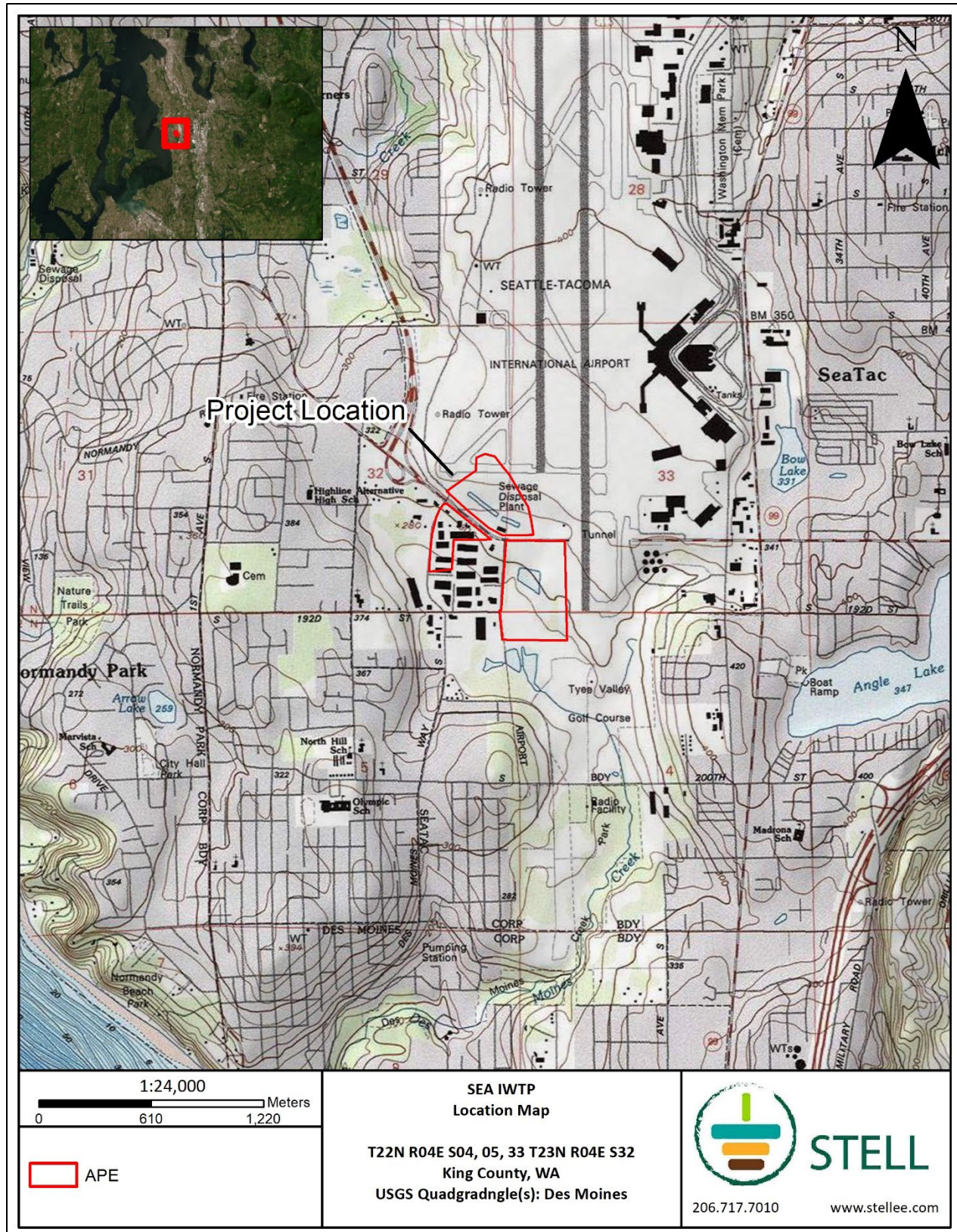


Figure 1-1. Project APE location

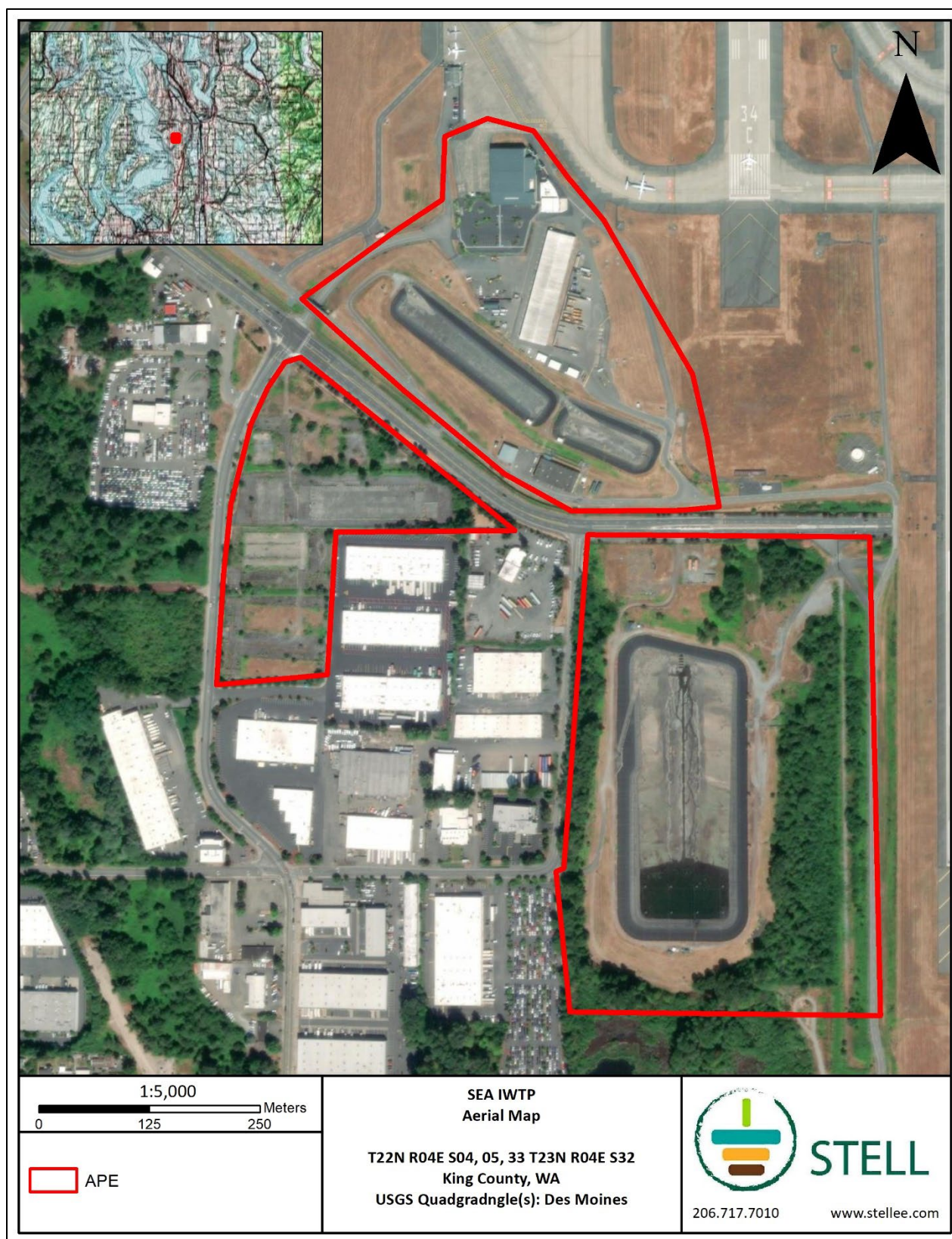


Figure 1-2. Modern aerial of the APE

1.3 REGULATORY ENVIRONMENT

1.3.1 NATIONAL REGULATIONS AND APPLICABLE POLICIES

Stell recommends the development of an Inadvertent Discoveries Plan in the event that historic materials are uncovered during construction. Archaeological monitoring is also recommended in high-probability areas to document any cultural materials that may be identified. These measures support compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). Although no federal funds are currently allocated for the Project, the Port of Seattle may seek federal funds. If received, the Project would qualify as a federal undertaking, requiring consultation through the Section 106.

1.3.1.1 NATIONAL HISTORIC PRESERVATION ACT

The NHPA (54 United States Code 300101 et seq.), enacted in 1966 and amended multiple times, established a program that encourages sound policies for the preservation of the nation's cultural resources at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the roles of State Historic Preservation Officers (SHPO) and Tribal Historic Preservation Officers, provided for the designation of State Review Boards, set up a mechanism to certify local governments to assist in meeting historic preservation goals, assisted Native American tribes in preserving their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

Should the Project receive federal funding, it would be considered a federal undertaking and would be subject to the provisions of Section 106 of the NHPA and its implementing regulations, 36 Code of Federal Regulations (CFR) 800. Section 106 of the NHPA states that federal agencies must consider the effect of an undertaking on any cultural resource that is included in, or eligible for listing in, the NRHP (called a historic property). Agencies must make a determination regarding whether the undertaking will have an adverse effect on these historic properties. If there is an adverse effect, then these impacts should be avoided, minimized, or mitigated. Section 106 of the NHPA requires that a federal agency afford the ACHP, Affected Parties (affected tribes, SHPOs, and other agencies), and interested members of the public, including individuals and organizations, an opportunity to comment on these actions.

1.3.1.2 NATIONAL ENVIRONMENTAL POLICY ACT

If federal funding is received, the Project would also be subject to NEPA. NEPA requires that all federal actions consider the impacts of the planned action on the environment, including properties of historical, archaeological, architectural, or cultural importance.

1.3.1.3 STATE ENVIRONMENTAL POLICY ACT

As a state undertaking, this Project is subject to the provisions of the State Environmental Policy Act (SEPA), which mirrors NEPA. SEPA requires that all major actions sponsored, funded, permitted, or approved by Washington State and local agencies consider the impacts of the planned action on the environment and properties of historical, archaeological, scientific, or cultural importance (Washington Administrative Code 197-11-960). This includes properties that are or could be listed on the NRHP or other historic registers, such as the Washington Heritage Register or King County Landmarks.

DAHP is the lead agency for considering the effects of a proposed action on cultural resources and provides formal recommendations to local governments and other Washington State agencies for appropriate treatments or actions. The term "historic property" is defined in the NHPA as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for

inclusion in the National Register.” Historic properties include artifacts, records, and remains related to such a district, site, building, structure, or object (16 United States Code 470[5]).

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association. They:

- a) are associated with events that have made a contribution to the broad pattern of our history;
- b) are associated with the lives of people significant in our past;
- c) embody the distinct characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) have yielded, or are likely to yield, information important for understanding prehistory or history (36 CFR 60.4).

In Washington, the NRHP program is administered by the DAHP under the direction of the SHPO. The Seattle Department of Transportation is responsible for all consultation and coordination with consulting parties that include the DAHP, affected tribes, and other interested parties, such as the Duwamish Tribal Organization.

The NHPA also requires special attention to National Historic Landmarks, which are characterized as properties that “possess exceptional value as commemorating or illustrating the history of the United States.” National Historic Landmarks are historic and archaeological sites, buildings, and objects designated by the Secretary of Interior under the authority of the Historic Sites Act of 1935.

The Revised Code of Washington 43.21C and Washington Administrative Code 197-11 also apply to this Project. These rules require the identification of historic, archaeological, and cultural resources listed on or eligible for the national, state, or local registers. Measures must be taken to minimize or limit the impacts to identified historic properties by a proposed project.

As this Project lies within the City of Seattle, all City of Seattle rules and regulations regarding historic preservation also apply. The standards for Seattle Landmark designation are outlined in the Seattle Municipal Code, Chapter 25.12.350 *Standards for Designation*:

An object, site or improvement which is more than twenty-five (25) years old may be designated for preservation as a landmark site or landmark if it has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, state, or nation, if it has integrity or the ability to convey its significance, and if it falls into one (1) of the following categories:

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

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2. ENVIRONMENT AND CULTURAL SETTING

This section describes the environmental context of the Project APE. Elements of the environmental context include geology, soils, plants, and animal habitats. Knowledge of the geologic processes associated with the landforms in this area can assist in locating archaeological resources. Geographic features, such as shorelines, rivers, lakes, and terraces, often correlate with the archaeological record. Throughout prehistory, these locations provided an abundance of plant resources and fish and often attracted terrestrial animals. As a result, sites tend to be found at shoreline locations, within active floodplains, or along associated terraces. The depth of soils and potential for buried deposits can be derived from soil surveys and geomorphologic descriptions of the landscape. Understanding the extent of native plant and ecological habitats provides a context for interpreting archaeological sites and activity locations.

2.1 ENVIRONMENTAL CONTEXT

Environmental data for the APE and surrounding areas were gathered from geologic and soil maps and reports from recent geological and geomorphological investigations that describe subsurface conditions and the post-depositional processes that may have impacted cultural deposits within the Project APE.

2.1.1 PHYSIOGRAPHIC PROVINCE

The APE is located within the Puget Sound Area of the western hemlock (*Tsuga heterophylla*) vegetation zone, specifically in the Puget Trough physiographic province (Franklin and Dyrness 1973). Native vegetation included western red cedar (*Thuja plicata*), western hemlock, and Douglas-fir (*Pseudotsuga menziesii*). The General Land Office (GLO) surveyors working in the area in the 1860s inventoried cedar, fir (*Abies* sp.), vine maple (*Acer circinatum*), alder (*Alnus* sp.), willow (*Salix* sp.), crab apple (*Pyrus fusca*) and salal (*Gaultheria shallon*) (Richardson 1863).

2.1.2 GEOMORPHOLOGY

The APE lies in the southeastern Puget Lowland, a north-south trending geological and physiographic province bordered by the Cascade Mountains to the east and the Olympic Mountains to the west (Franklin and Dyrness 1973; Troost and Stein 1995). This area was shaped by at least four periods of extensive glaciation during the Pleistocene epoch (Easterbrook 2003; Lasmanis 1991). The bedrock was depressed and deeply scoured by glaciers, and sediments were deposited and often reworked as the glaciers advanced and retreated. This can be seen in the overall rolling, low-relief topography of the area that is deeply incised by large troughs/ravines. The elevation of the area is generally within 500 feet above mean sea level (Troost and Stein 1995). The scoured troughs left by the glaciers are currently occupied by the Puget Sound and freshwater lakes (Galster and Laprade 1991; Liesch et al. 1963).

A mantle of glacial drift and outwash deposits were left across much of the Puget Lowland at the end of the Fraser Glaciation, the last of the four glacial periods (Booth et al. 2003; Easterbrook 2003). The Vashon Stade of the Fraser Glaciation began around 18,000 Before Present (BP) with an advance of the Cordilleran Ice Sheet into the lowlands (Porter and Swanson 1998). The Puget Lobe rapidly advanced into the Puget Lowland and reached its maximum extent, near what is now the town of Centralia, approximately 15,000 years ago. The glacier remained for approximately 1,000 years until the ice began to retreat. The retreating Puget Lobe reached Seattle about 13,600 years ago (Borden and Troost 2001; Porter and Swanson 1998). The Puget Lobe was thicker towards the north and thinned towards its terminus in the south.

Post-glacial topography in the APE, characterized as the Des Moines Drift Upland landform, was largely shaped by surface drainage systems and changes in relative sea level (Galster and Laprade 1991). The APE landscape was isolated from the mainland by a marine fjord, the Duwamish Embayment, which later filled with a sequence of diminishing proglacial lakes (Dragovich et al. 1994). The landform interior supported numerous upland ponds and wetlands occupying former glacial kettles. Additionally, the margins of the Des Moines Drift Upland provided access to marine or freshwater littoral resources. As sea level stabilized during the middle Holocene, the Duwamish Embayment filled with Osceola Mudflow sediments delivered via the White River from the northeast flank of Mount Rainier.

2.1.2.1 PLIO-PLEISTOCENE UPLIFT (7–5 MILLION YEARS AGO)

During the Plio-Pleistocene, the Juan de Fuca Plate began subducting below the continental crust of the Pacific Coast. This process built up pressure that caused the landmass to crumple into folds perpendicular to the force of direction. The Cascades and Coast Ranges, which include the Willapa Hills and Olympic Mountains, were created as anticlines and the Puget-Willamette Trough as a Syncline between the ranges.

2.1.2.2 PLEISTOCENE GLACIATIONS (2.6 MILLION–11,700 YEARS AGO)

A mantle of glacial drift and outwash deposits were left across much of the Puget Lowland at the end of the Fraser Glaciation, the last of the four glacial periods (Booth et al. 2003; Easterbrook 2003). The Vashon Stade of the Fraser Glaciation began around 18,000 BP with the advance of the Cordilleran Ice Sheet into the lowlands (Porter and Swanson 1998). The Puget Lobe rapidly advanced into the Puget Lowland and reached its maximum extent near what is now the town of Centralia about 15,000 years ago. The glacier remained for approximately 1,000 years until the ice began to retreat. The retreating Puget Lobe reached Seattle about 13,600 years ago (Borden and Troost 2001; Porter and Swanson 1998). The Puget Lobe was thicker towards the north and thinned towards its terminus in the south.

2.1.3 PALEOECOLOGY

Seattle is located within the Puget Sound Area of the Western Hemlock Zone (Franklin and Dyrness 1973). Forests within this zone are characterized by tall conifers, notably Douglas-fir, western hemlock, western red cedar, and less commonly grand fir (*Abies grandis*) and western white pine (*Pinus monticola*). Hardwood trees are less common than conifers in mature Puget Sound forests; however, when they do occur, red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) are typically found. Forest understories vary greatly according to temperature, moisture, and soil substrate; often the understory will include a variety of ferns and shrubs.

The Puget Sound Area of the Western Hemlock Zone is a landscape characterized by glaciation and glacial outwash. Substrates vary from coarse sand and gravel in outwash plains to clay-rich soils of glacial till and postglacial lakes to kettle ponds left behind by stagnant blocks of remnant glacial ice. Plant communities of the region must adapt to a broad variety of drainage situations.

2.1.3.1 LATE GLACIAL, PRE-14,000 BP

As early as 25,000 BP to approximately 17,000 BP, glaciers occupied much of the northern Puget Trough, and alpine glaciers of the southern Cascade Range were at their greatest extent. During this time, the region was characterized by tundra parkland dominated by grasses, species of *Artemisia*, and spruce (*Picea spp.*). The vegetation in these parklands would be like those found in high-altitude plant communities found at the tree line of the eastern side of the Cascade Crest.

Douglas-fir, true fir, and mountain hemlock (*Tsuga mertensiana*) were present, but in low frequency. Between 17,000 and 15,000 BP, conditions appear to have become more temperate, with Sitka spruce and red alder appearing and Douglas-fir becoming more prevalent. Between 15,000 and 14,000 BP, a spruce and mountain hemlock parkland returned.

2.1.3.2 EARLY POSTGLACIAL, 14,000–10,000 BP

Glaciers began receding around 14,000 BP, leaving areas newly free of ice. This exposed land was quickly colonized by open parkland of lodgepole pine (*Pinus contorta*). The above-described Late Glacial parkland persisted in areas south of the glacial ice, such as the Project APE. *Artemisia* species and grasses, along with other non-arboreal species, abundantly remained. Species better suited to temperate conditions began to appear in the parkland between 11,000 and 10,000 BP. At that time, red alder, Sitka spruce, Douglas-fir, western hemlock, and silver (*Abies amabilis*) or grand fir began to appear. The thick coniferous forests that characterize most of western Washington had not yet developed, meaning the flora and fauna available at the end of the Pleistocene were vastly different from present for the last 5,000 years.

2.1.3.3 EARLY AND MIDDLE HOLOCENE, 10,000–4500 BP

During the early to middle Holocene, the glaciers had almost completely receded into the mountains of British Columbia, with conditions becoming much warmer and drier. The southern Puget Trough became characterized by an open savannah of Douglas-fir and oak (*Quercus* sp.). The understory consisted of extensive meadows of grass, members of the aster family (Asteraceae), bracken fern (*Pteridium aquilinum*), and camas (*Camassia* sp.), much like the remnant prairies that occupied the region historically. During this early to middle Holocene, terrestrial resources, including big game, roots, and berries, were much more abundant than they would later become and may have overshadowed the salmon resources that were key to the later Holocene and ethnohistoric periods. After 7,000 BP, the parklands began to slowly close with the cooling and moistening conditions that allowed conifers to expand. Conditions during this period were likely not as conducive to salmon reproductive success because of the sediment loads in rivers and warmer water temperatures resulting from exposed open environments.

2.1.3.4 LATE HOLOCENE, POST-4500 BP

Much of the modern environment of the region became established by around 4,500 BP with fully developed closed forests. In the southern Puget Trough, the pollen signature is dominated by Douglas-fir, red alder, and western red cedar. Prairies that were present during this time likely remained as a result of the management of the indigenous peoples of the region, who actively worked and maintained the environment to satisfy their subsistence needs. The loss of the open savannah environment would have been more productive for salmon, as denser forest cover increased water quality and clarity and reduced water temperature. During this period, an overall cooling of conditions and precipitation would have resulted in increased river flow and a greater number of spawning streams for salmon. The climate during time has remained stable with small fluctuations between warmer/drier and cooler/moister conditions; however, no fluctuations were significant enough to dramatically alter the ecological structure of the region.

2.1.4 SOILS

Soils within the Project APE consist primarily of Urban land with 0 to 5% slope (94.6%), with minor components of and Alderwood-Everett complex with 0 to 12% slopes (2.3%), Urban land (2%), and Bellingham silt loam (1.1%) (Natural Resources Conservation Service 2025; **Figure**

2-1). Urban lands refer to soils that have been significantly altered by human-transported materials (i.e., dredging) or the “native” soils have been mechanically altered by development (i.e., extensive grading) (Natural Resources Conservation Service 2024).

The minor component of Alderwood-Everett soils consists of a mix of moderately well-drained gravelly sandy loam from glacial drift and outwash over dense glaciomarine deposits found in glacially modified hills and ridges (Natural Resources Conservation Service 2018a) and somewhat excessively drained very gravelly sandy loam from glacial outwash found in outwash terraces and escarpments, kames, moraines, eskers (Natural Resources Conservation Service 2018b). Bellingham soils depressions comprised of deep and poorly drained, silty clay soils that form in loess, alluvium, and lacustrine sediments (Natural Resources Conservation Service 2000).

2.2 CULTURAL CONTEXT

This section describes the cultural context of the APE. Elements of the cultural context include cultural chronologies developed for the precontact occupation through archaeological research, information derived from oral histories and Native American recollections, and historic events and land use patterns. Reviewing archival archaeological, historical, and ethnographic documents provides insight toward developing hypotheses and a research design.

2.2.1 ARCHAEOLOGICAL CONTEXT

The first human occupation of western Washington may date back about 14,000 years, as evidenced at the Manis Mastodon site in Sequim, where a bone point and the spirally fractured bones of a mastodon indicate human hunting and butchering (Gustafson et al. 1979; Waters et al. 2011). Artifacts from the Clovis period, which began between 13,500 and 13,000 years ago elsewhere in North America, have been found in isolated locales in southern and central Puget Sound. However, no occupation sites of this period have yet been found in Washington. The Richey Roberts site, a cache of Clovis blades, is the sole in-situ discovery of Clovis archaeology in Washington (Gramly 1991; Mehringer 1985). Several similar early sites that are coeval, and possibly predating Clovis in the region, are presented in recent literature (Huckeberry et al. 2003). This early culture is generally believed to have relied heavily on big game for subsistence, although there is evidence they also relied on plants and smaller animals (Cannon and Meltzer 2004).

As early as 9,000 years ago, as the climate stabilized, cultural complexes with distinct lithic technological assemblages emerged in the region (Carlson 1990; Fladmark 1979). These assemblages demonstrate a “foraging” economy based on generalized resource procurement for immediate consumption and high-residential group mobility (Ames 1981; Binford 1978). One of these distinct technologies is named the Old Cordilleran Tradition (Butler 1961). In western Washington, the Old Cordilleran Tradition manifestations are recognized by unifacial pebble and cobble tools and chopper-like cores (Butler 1961). Other contemporary technologies include the Northwest Coast Microblade Tradition, which is identified by a rather diverse assemblage that includes microblade and microblade cores, leaf-shaped bifaces, and bifacial cores (Borden 1975; Fladmark 1979). The variety of technologies found in the archaeological record suggests the establishment of multiple well-defined cultural groups populating the Northwest Coast vicinity early on in prehistory.

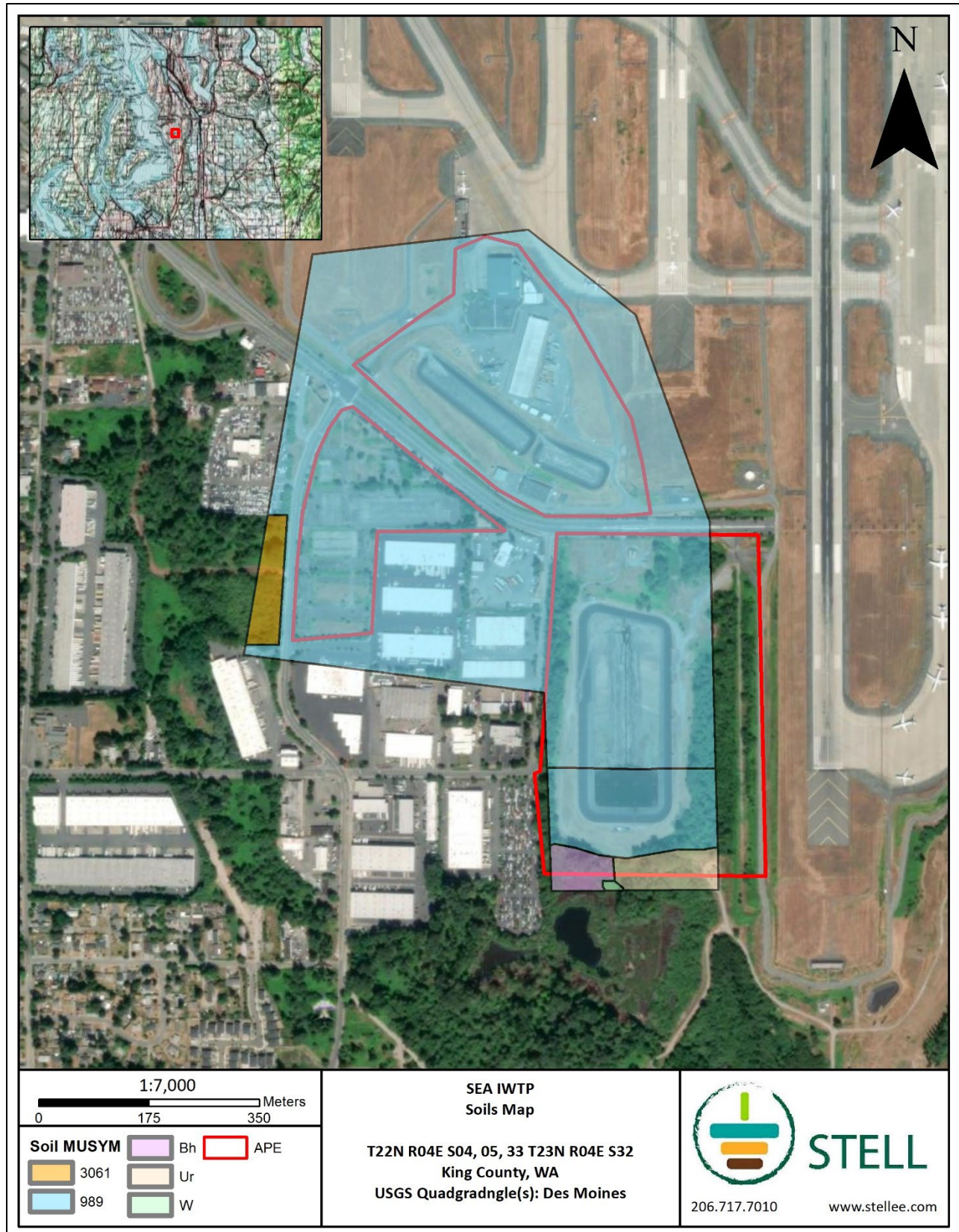


Figure 2-1. United States Department of Agriculture Soil Survey Results for the APE

2.2.1.1 EARLY PERIOD

The Early Period, which lasted from approximately 12,000 to 7,000 years ago, is classified archaeologically by the Old Cordilleran Tradition (Matson and Coupland 1995), with regional manifestations defined as the Olcott Complex in the Puget Sound and western Cascade Range regions and the Cascade Phase east of the Cascade Range. Sites of this period in western Washington typically occur on high marine and river terraces, sometimes at significant distances from modern water courses. They consist of concentrations of cobble cores; flakes; large, ovate knives; and broad-stemmed and leaf-shaped projectile points (Wessen 1990). These people are thought to have relied more on inland hunting than on fishing and shellfish procurement for subsistence, although finds along the British Columbia coast indicate aquatic resources were sometimes important (Blukis Onat 1987).

2.2.1.2 MIDDLE PERIOD

The Middle Period, lasting from 7,000 to 4,500 years ago, incorporates a continuation of the Old Cordilleran Tradition and the emergence of a distinct Northwest Coastal culture, but few sites in Washington can be attributed to this time interval (Blukis Onat et al. 2001; Morgan 1999). Toward the end of this period, as sea levels stabilized, the focus of subsistence activity seems to have changed from reliance on terrestrial to marine resources; most sites appear along the coasts or major river systems. It is thought that this adaptation may have occurred earlier in the Gulf of Georgia and Fraser Valley regions of Canada (Stein 2000).

Archaeological sites associated with this cultural period are found to be technologically more complex and more diverse. They often include tools and ornaments of bone and antler, along with flaked stone. In the Puget Sound and western Washington, the Middle period is a transitional time represented archaeologically by a shift toward marine resource utilization (Morgan 1999).

2.2.1.3 LATE PERIOD

Human lifeways changed radically in the Late Period (4,500–250 years ago), as people focused even more strongly on marine resources. During this period, the number and diversity of sites markedly increased (Matson and Coupland 1995). People maintained permanent villages on the coast and along the lower reaches of inland rivers. They used these as home bases and storage warehouses for fish, shellfish, game, and plant foods, systematically amassed during the warm seasons (Matson and Coupland 1995). Cemeteries and petroglyph sites are often associated with villages, midden sites, and fishing camps; petroglyphs also occur occasionally in higher montane settings. Blazed cedars, stripped of bark for basketry or with planks removed from their living trunks, can still be found throughout the region. Small open seasonal habitation sites—left by hunters, fishers, plant gatherers, and traders—have been found from the lowlands well into the subalpine zone of the mountains. Still, they usually remain close to larger, permanent sources of water. These seasonal habitation sites typically are concentrated along trade routes that linked communities living on both sides of the Cascade Mountains.

2.2.2 PRECONTACT AND ETHNOGRAPHIC PERIODS

The APE lies within traditional Duwamish territory, which was bordered by the Suquamish to the west, the Muckleshoot and Skopamish on the Green and White Rivers to the east, and the Puyallup to the south (Spier 1936; Suttles and Lane 1990). The Skopamish are listed as Muckleshoot by Spier (Spier 1936:34). All these groups are part of the Southern Coast Salish ethnographic group whose traditional languages are dialects of the Southern Lushootseed language.

In general, the people who inhabited the Puget Sound region utilized primary winter villages located along rivers and relied heavily upon salmon for subsistence. Groups would frequently leave the villages in order to procure game (including marine and freshwater fish/shellfish) and plants for food, medicinal, and utilitarian purposes (Gunther and Janish 1981; Ruby et al. 2010; Suttles and Lane 1990). Native American groups in the Pacific Northwest were interwoven. Due to the need to travel to different areas to gather resources, members of different language and cultural groups commonly socialized and intermarried, and individuals typically had relatives living in multiple groups. People could live in multiple villages during their lifetime, and it was not unusual to have speakers of several languages in one village. Due to this intricate social structure, it is possible for an area to have been utilized by the ancestors of multiple modern Tribal groups.

Ethnographic period Duwamish winter villages were present on Elliott Bay, the Duwamish River, and the confluence of the former Black River (Waterman et al. 2001). Nearly two miles northeast of the APE, the Allentown Fishing traditional cultural property at the Allentown archaeological site (45KI431) represents 500 years of continuous utilization of the Duwamish River fishery (Lewarch et al. 1996). An important trail providing access to the Des Moines area clam beds from the villages along the Lower White and Green Rivers, passed through or near the southern end of the APE (Eyler and Yeager 1979:iv; Gibbs 1855; Larson 1993:55–56).

Nearby ethnographic place names (Waterman et al. 2001) include hornas X~aifa'l?osng “mat smoother” at Normandy Park (roughly one mile west of the APE). Des Moines Creek and Barnes Creek were known as Cike'ib and Cargaqks, respectively.

Prior to the arrival of Europeans, the Northwest coast was one of the most densely populated non-agricultural areas in the world. Between 1770 and 1870, numerous outbreaks of infectious diseases, including smallpox and measles, among the people of the Northwest coast decimated population numbers (Boyd 1990).

The history of the mid-nineteenth century in the Pacific Northwest is dominated by the United States (U.S.) Government attempting to establish treaties with Tribal groups to solidify the United States' claim on what is now Washington State over that of British-held Canada. In the mid-to-late 1850s, after the signing of the treaties but before the ratification of these documents by the U.S. Government, there was a period of unrest throughout the area that was created by an influx of Euro-Americans looking to settle or mine in areas that were not yet legally owned by the United States and for which none of the goods and/or services offered in trade for this land had been provided to Native peoples.

This period also brought to light many issues with the terms of the agreements made with the United States in the treaties and/or misunderstandings by U.S. officials as to appropriate representation for some Native American groups. Some of the results of this unrest were hostilities breaking out near modern-day Kent on 27 October 1855, when nine settlers were killed by a small group of Native Americans which was called the “White River Massacre” and the one-day-long “Battle of Seattle” on 26 January 1856. The Muckleshoot Reservation (King County's only reservation) was established during later negotiations as a direct result of these conflicts. This reservation is located between the White and Green Rivers (Muckleshoot Indian Tribe 2019; Robbins et al. 1996).

After signing the 1855 Point Elliott Treaty, most Duwamish peoples were supposed to move to the Port Madison Reservation in Kitsap County (Ruby and Brown 1992). Many Duwamish did not

relocate to the reservations once they were established and stayed near their ancestral lands. The Duwamish who refrained from moving to the Port Madison Reservation maintained their locations off-reservation or eventually relocated to the Muckleshoot Reservation because of their traditional ties to the White and Green Rivers (Duwamish Tribe 2008; Ruby and Brown 1992). The Sackman and Dewatto Duwamish communities chose to stay within their traditional homeland and formed new communities with other tribes within the area (Tollefson 1992:214–216). These communities were forced to live outside of the City of Seattle. They retained some of their seasonal gathering, hunting, and fishing traditions that helped supplement their diet (Tollefson 1992:214–216).

Individuals of Native American descent living off-reservation in the Puget Sound region often purchased land privately or occasionally received an off-reservation allotment in their ancestral lands. As with all Native Americans in the post-treaty era, they augmented their traditional subsistence practices with Euro-American pursuits, such as agriculture, logging, industrial labor, and other work (Duwamish Tribe 2008; Huggins 1984; Ruby and Brown 1992:72–23, 140). The Muckleshoot Indian Tribe, Suquamish Tribe, Snoqualmie Indian Tribe, Tulalip Tribes of Washington, Squaxin Island Tribe, and Stillaguamish Tribe of Indians of Washington are Federally recognized, and the non-Federally recognized Duwamish peoples are all tied to the Project APE.

2.2.3 HISTORIC BACKGROUND

In 1841, the Wilkes expedition charted the Puget Sound; however, the expedition does not appear to have investigated the APE directly. By the mid-1850s and following the arrival of Euro-American settlers in the Pacific Northwest, many Native village/habitation sites were subsequently homesteaded or platted as towns. Most areas that were previously inhabited by Native Americans were generally as desirable to Euro-American settlers as they were to the area's original inhabitants. This was especially true for locations near water, at river confluences, or along traditionally utilized travel corridors/trails, many of which saw continued use into the Historic period if not into modern times. This is true of the current APE. Extensive logging and mining activity took place throughout the region from the mid-1800s to present, and the construction and expansion of transportation corridors associated with railroads and roadways had a profound effect on the landscape in this area (Marino 1990).

In 1852 the Territorial Legislature carved King, Jefferson, and Pierce County out of Thurston County which, prior to that had stretched from Olympia to the Canadian border and from the Cascades to the Pacific Ocean. The county seat was originally located in Steilacoom, which was chosen largely because it was the only town in Washington with its own jail. This was also the home of the state's first school district, Steilacoom School District No. 1, was established in 1855.

Washington Territorial contract surveyors were present in southwestern King County between 1857 and 1858 under wartime conditions (City of Burien 2020). To provide land-based access for U.S. Infantry and Washington Territorial Militia units travelling between the U.S. military installation at Fort Steilacoom and Seattle, the Seattle to Steilacoom Military Road was constructed between 1855 and 1860. The road passed roughly 1 mile east of the APE, utilizing the upland "Highline" route as an alternative to the marshy Duwamish-Green River floodplain.

Despite the efforts of the Territorial government to encourage settlement along the improved military road, the APE failed to attract land claimants until 1864 when French-Canadian George Ouellet purchased 70.55 acres of waterfront land to the west of the APE (City of Burien 2020). In the early 1870s, second-generation settler Michael Kelly (1852–1916) homesteaded in the

Sunnydale area north of Lake Reba, roughly 0.1 mile north of the APE (Eyler and Yeager 1979:6). Samuel G. Clark established a homestead in 1884 in an area which was later disturbed by airfield development (Anderson Map Co. 1907; Eyler and Yeager 1979:6). A large timber mill at Des Moines utilized Des Moines Creek as a means of transporting logs from the APE. Remaining stands of timber in the APE were likely burned during wildfires in the 1860s and late 1890s (Draper 1975).

The development of the Boeing Airplane Company in the 1920s contributed to the growth of the manufacturing industry throughout the twentieth century (Eyler and Yeager 1979). Initial construction of Sea-Tac, requiring the excavation of 6.5 million cubic yards of sediment, began in 1942 and was largely completed by 1947 (Eyler and Yeager 1979).

2.2.4 PROJECT APE BACKGROUND

The APE lies in the northwest quadrant of Township 22N, Range 4E, covering segments of Sections 4 with an extension into Section 32 and 33 of Township 23N, Range 4E (**Figure 2-2**). Prior to the arrival of Euro-American settlers in the mid-1850s, the area along the Duwamish River near its confluence with the Black River was occupied between 13 and possibly 18 villages with a population estimated at approximately 1,200 individuals in 1780 (Spier 1936:26). Most villages and other notable places within the Native landscape appear to have been limited to areas immediately adjacent to bodies of water, with the most prominent locations being at the mouths of rivers as they outlet into Elliot Bay and Lake Washington (Spier 1936:26; Waterman et al. 2001:119–140).

By the time of the first cadastral survey in 1863 (**Figure 2-2**). Euro-American settlers had already established themselves along the Duwamish River down to the Black River and beyond under the auspices of the Donation Land Claim Act of 1850. Based on these surveys, the APE was estimated to have significant potential by the surveyor, Edwin Richardson.

As Edwin Richardson noted in his general description of Township 23N, Range 4E:

This township contains a large amount of first rate [sic] land for farming, the uplands are well timbered with the finest fir and cedar. The timbers on the bottom lands, consists of cottonwood, ash, alder & cherry... Duwamish [sic] river is navigable for steamboats of light draft at low water. Its channels is [sic] now much obstructed by numerous snags the removal of which would render this river one of the finest for navigation... This township will admit of a large settlement. (Richardson 1863)

At the time of the survey and despite this significant potential, none of the sections occupied by the APE had yet been settled. Use by native groups prior to the arrival of Euro-American settlers—based on scant historical and ethnographic data—seems likely to have been focused toward seasonal or intermittently occupied settlements for hunting, foraging, and gathering of medicinal plants (O'Malley 2017:28; Spier 1936:6).

The earliest Euro-American land acquisition in the APE took place in 1869. Regarding the APE evaluated by Stell; this falls into the following Section/Quadrant areas. In Township 22N, Range 4E, northwest quarter of Section 4 which was purchased by Ransom Stokes in July 1890. In Township 23N, Range 4E, south half, southeast quarter of Section 32 was purchased by James Howe in September 1869. Township 23N, Range 4E, west half, southwest quarter of Section 33 was owned by Elbert Davis.

Of these initial landholders, Stokes, appears in the 1880 and/or 1889 census records, while Howe

and Davis are absent. The last two all acquired their land through direct cash purchase, which did not hold the same residency and improvements requirement as land purchase under the Homestead Act. As alluded to earlier, each of these individuals were likely investors who had purchased the land for logging or other purposes. Those who had acquired their land under the Homestead Act were invariably farmers by occupation. Stokes Ransom was the sole African American in the original wave of settlement in the APE. The 1897 United States Geologic Survey topographic map depicts several roads around the APE. One road cuts through part of the APE in a north-south direction (**Figure 2-3**). The topographic map also depicts many structures in the area, indicating more people moving into the area.

The ownership maps from 1912 and 1936 continue to show the further subdivision of lands within the APE (**Figure 2-4** and **Figure 2-5**; Kroll Map Company Inc. 1912, Metsker 1936). By 1912, the APE fell within the properties of Swiss Investment Company, Robert E. Ellington, W.E. Campbell, C.C. Maynard, M.E. Widmer, John Muller, and W.F. Burzloff, and C.C. Beaty. A road cuts through several of the properties. In 1937, the first set of aerial photographs produced by Pacific Aerial Surveys, Inc. became available, demonstrating that, although land divisions and ownership in the APE had multiplied significantly, it was still overwhelmingly rural in character (**Figure 2-6**; Pacific Aerial Surveys, Inc. 1937). Most parcels were occupied by a small cluster of buildings, typically accompanied by a modest orchard, with further evidence for plowing of the remaining land in several cases, such as the APE north of South 188th Street. Other areas, such as the APE at South 188th Street and Des Moines Memorial Drive, remained largely forested or at least unbuilt at this point.

SEA was constructed in the 1940s and is seen completed on the 1949 United States Geologic Survey (USGS) topographic map (**Figure 2-7**; Anon 1954). The topographic map depicts structures throughout the APE at South 188th Street and 16th Avenue South. Over the intervening years, significant numbers of houses had been constructed on all around SeaTac, though the specific investigation areas considered here still retained a semi-agricultural character.

By 1965 (**Figure 2-8**), the area surrounding Sea-Tac was completely suburbanized, with high-density housing on all sides (Anon 1965). Houses that once stood in the APE at South 188th Street and 16th Avenue South are no longer there. The northern APE along South 188th Street has a retention pond in the southeastern corner. The SeaTac airport continued to grow and the period between 1965 and 1990 saw continued development of local road systems and other logistics infrastructure.

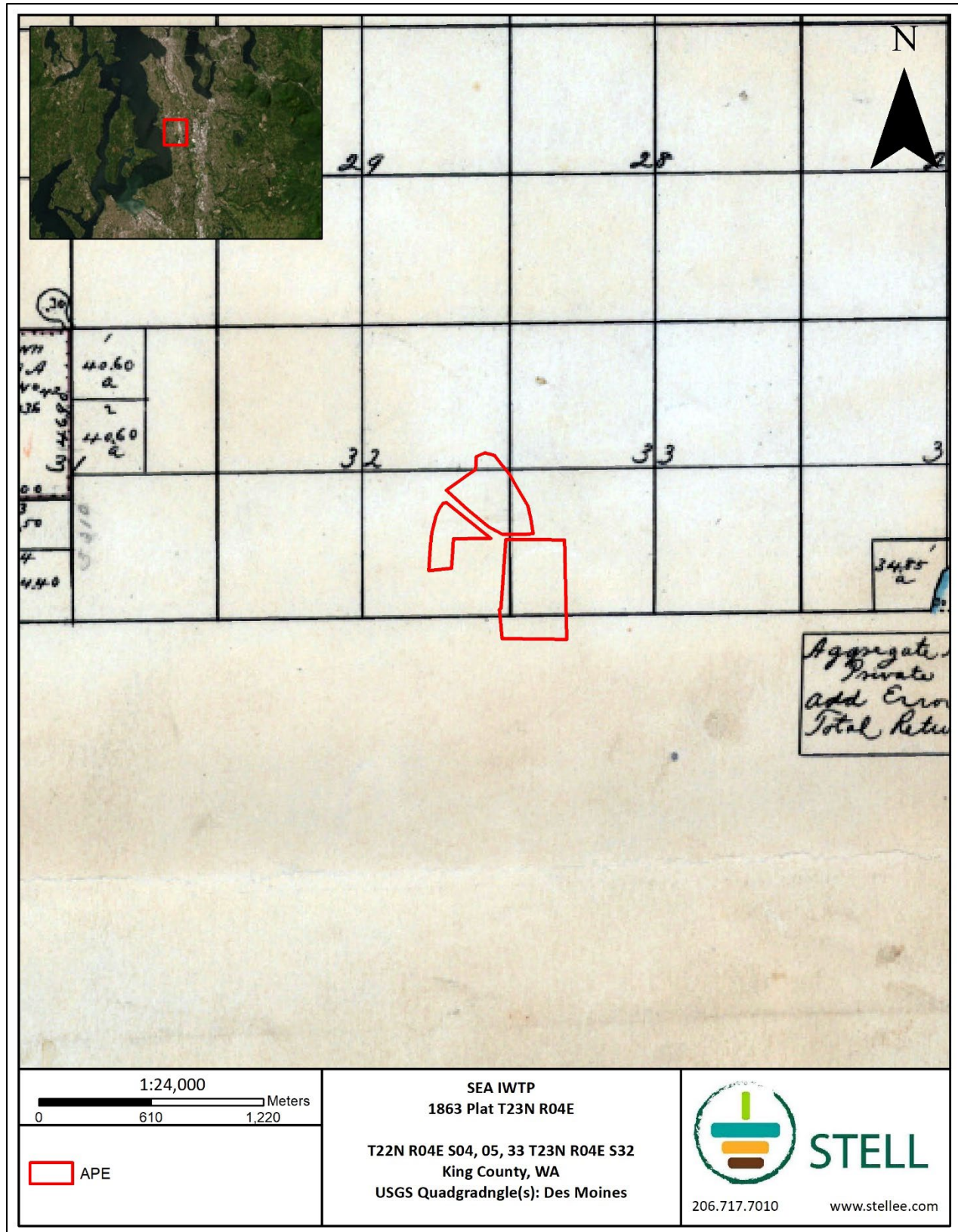


Figure 2-2. 1863 BLM GLO plat map, T23N R4E. (BLM GLO 2025)

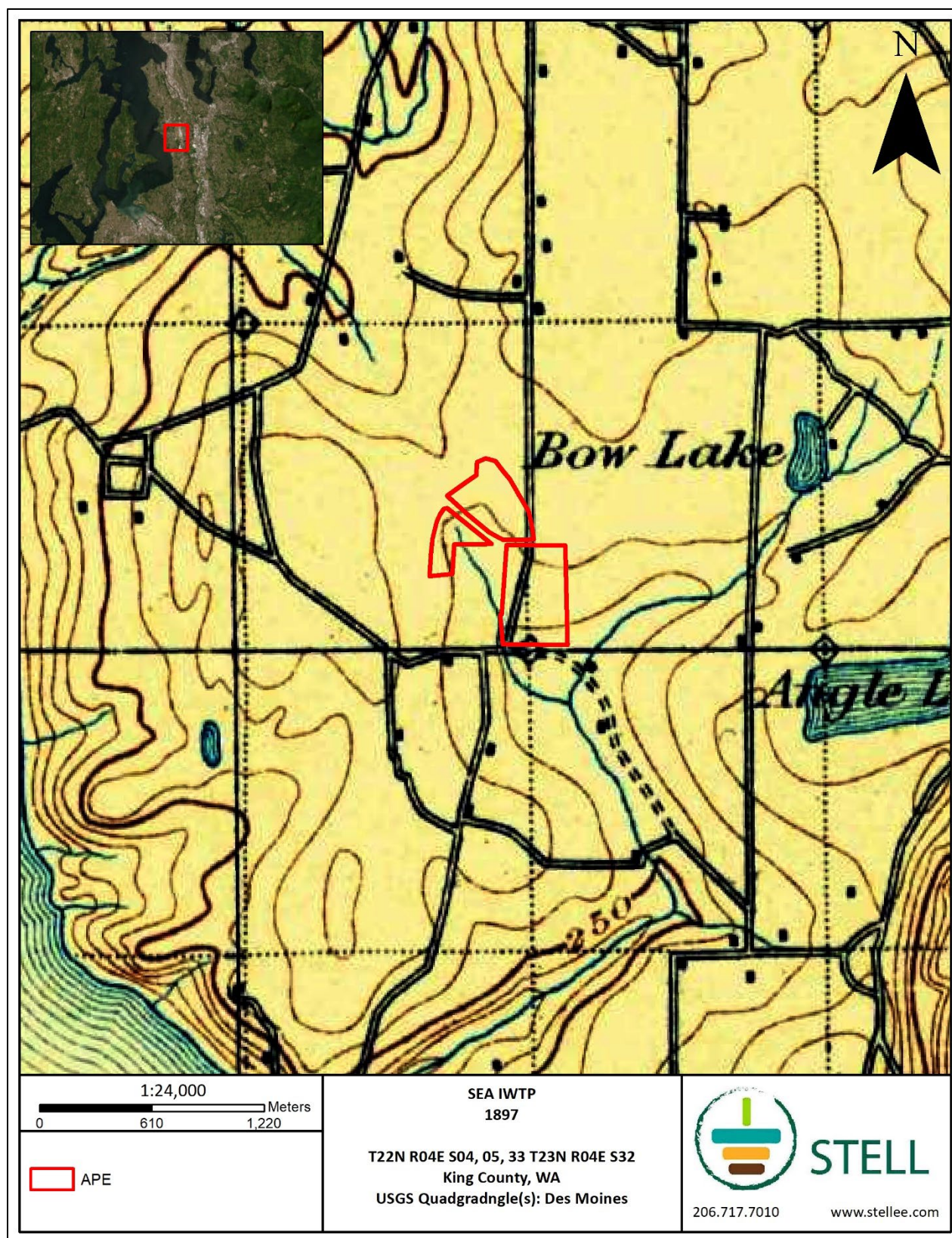


Figure 2-3. 1897 USGS topographic map, Des Moines Quadrangle (USGS 2025)

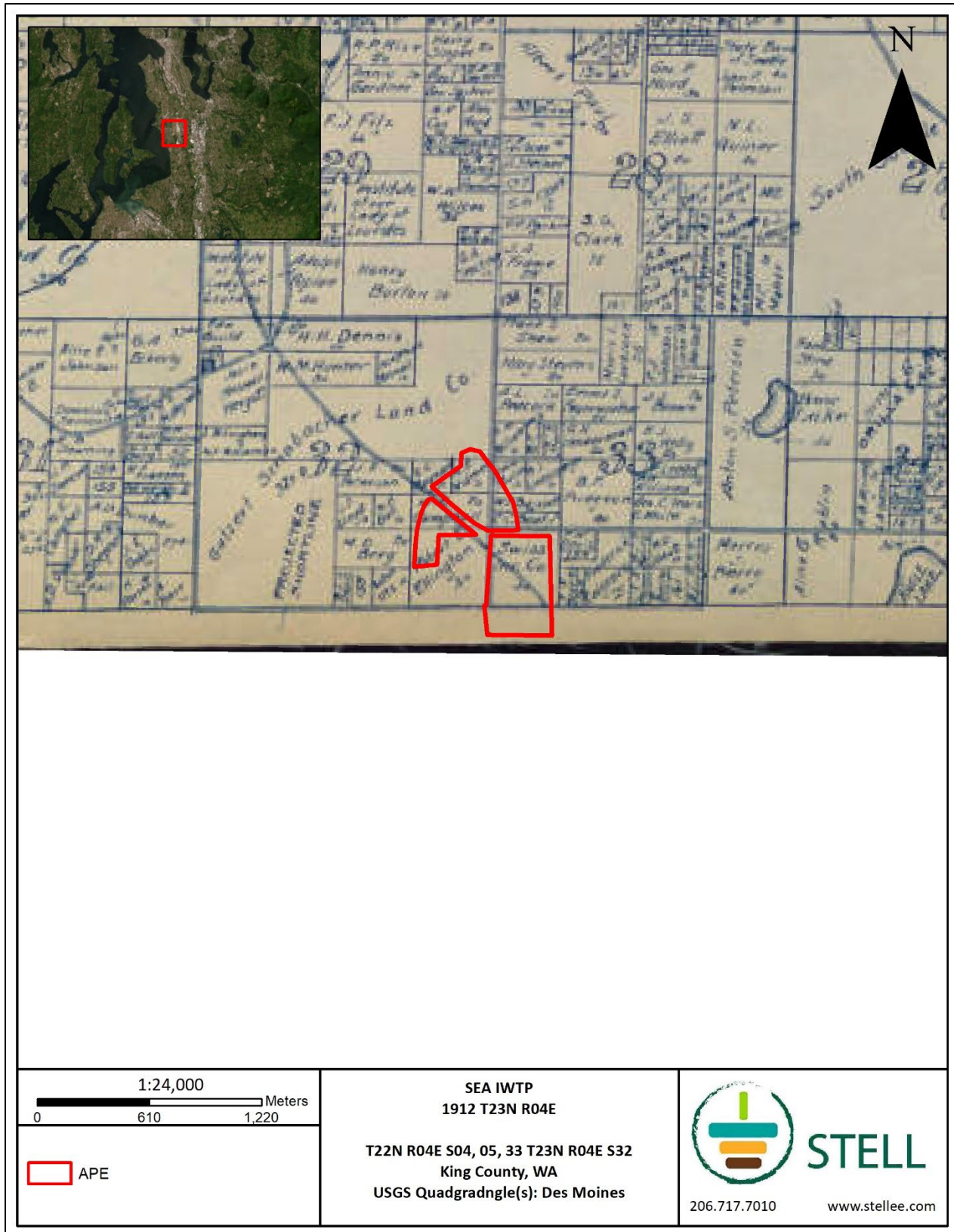


Figure 2-4. 1912 Kroll's Atlas of King County T23N R4E (Seattle Public Library 2025)

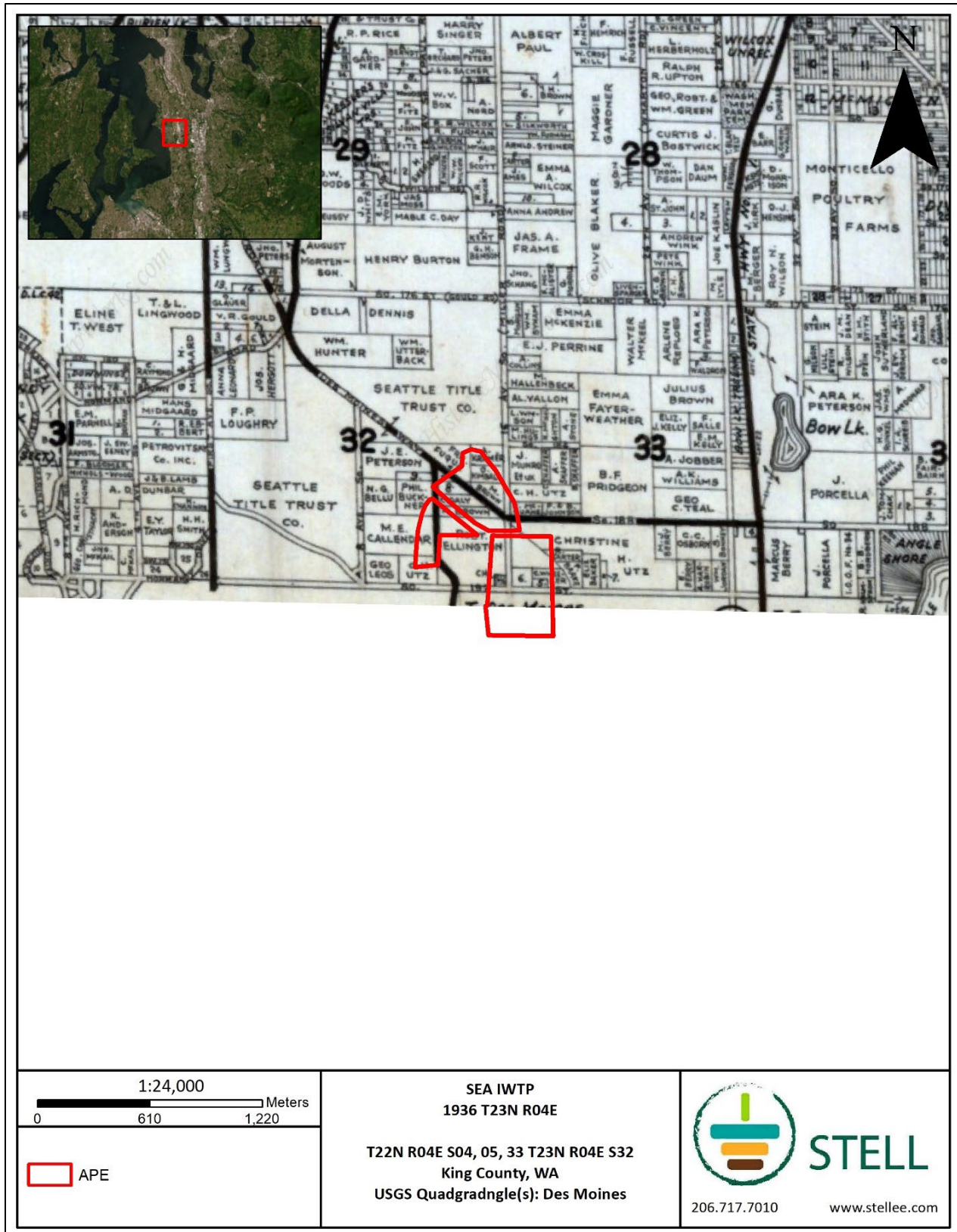


Figure 2-5. 1936 Metsker's Map of King County T23N R4E

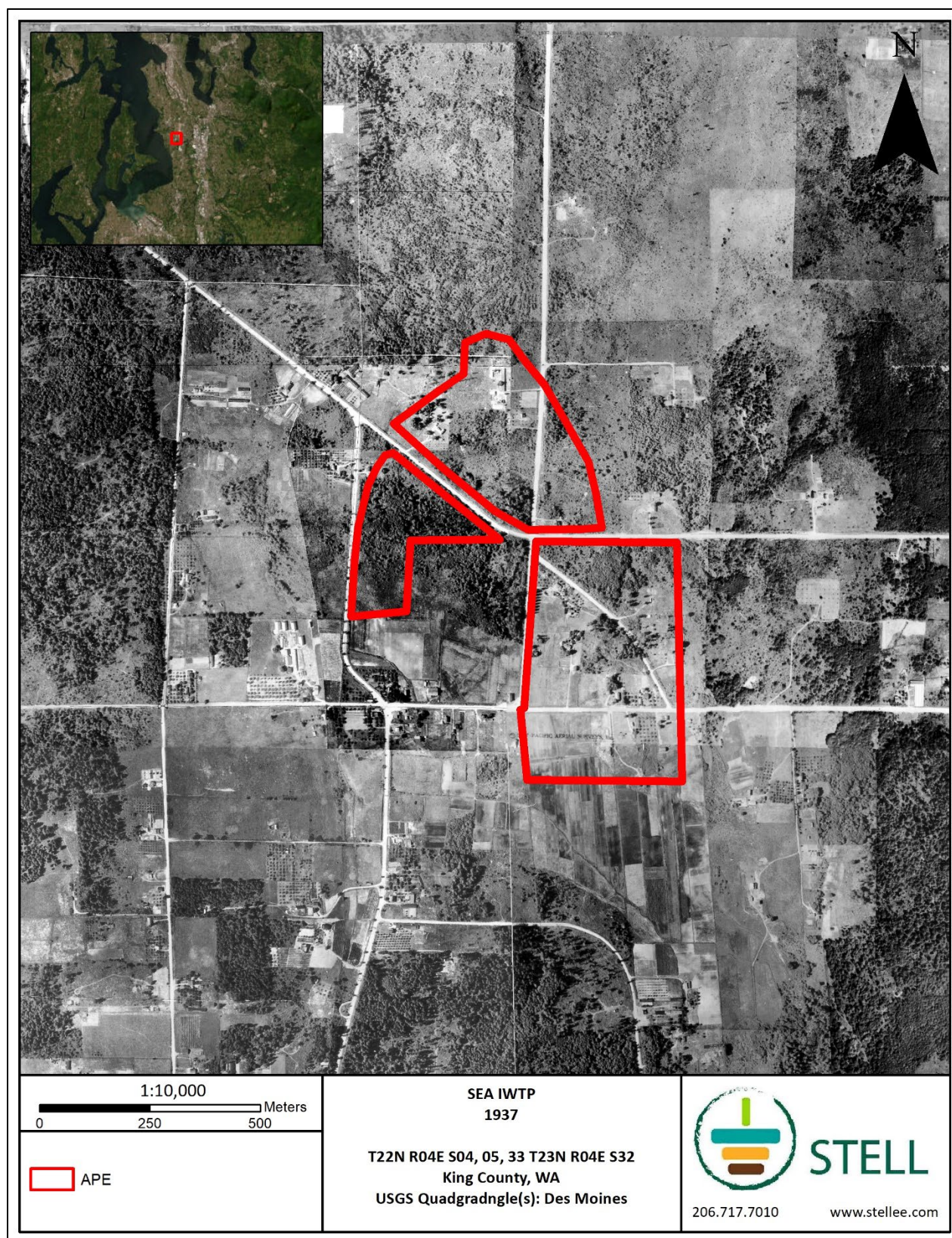


Figure 2-6. 1937 aerial photograph of the APE and surrounding area

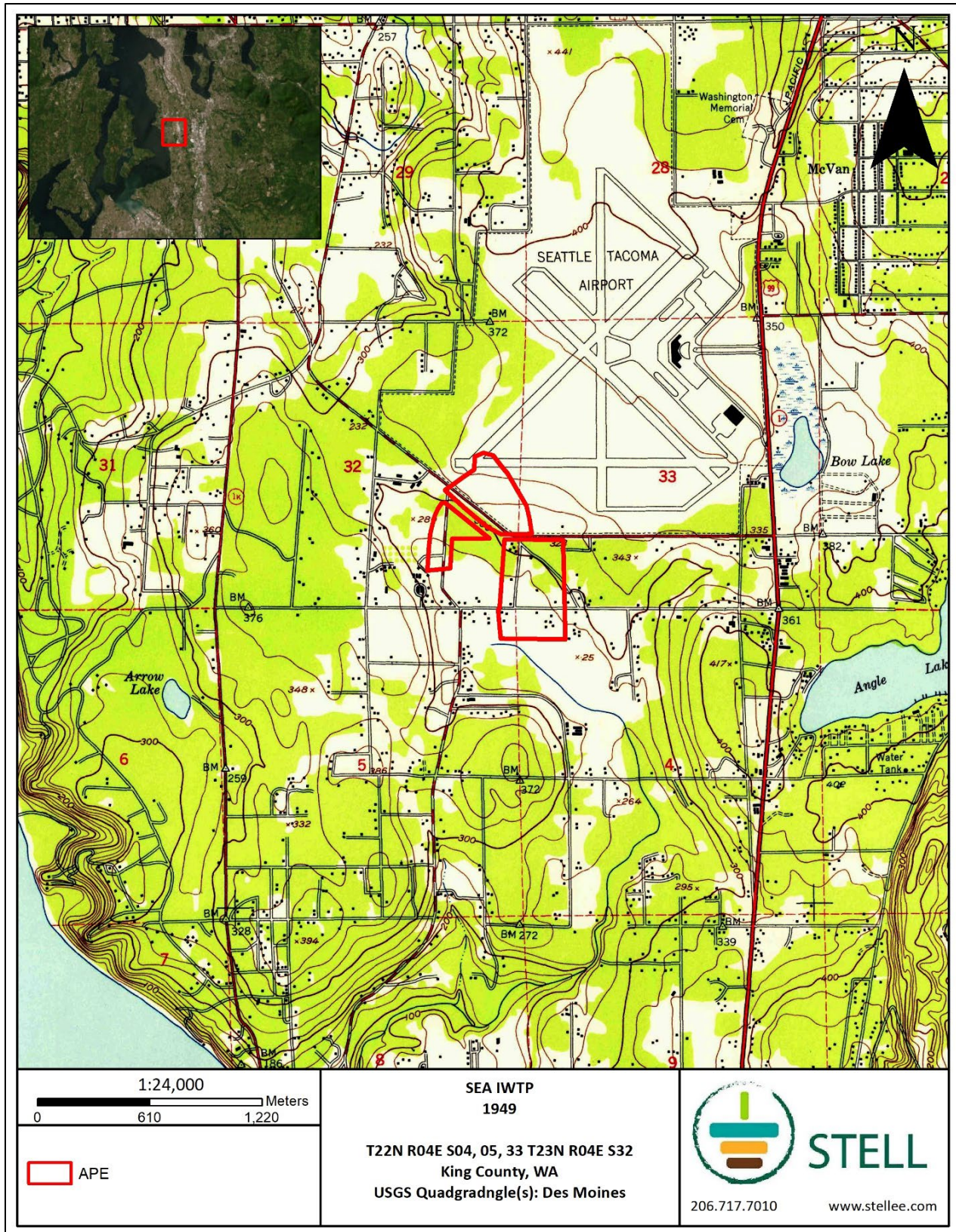


Figure 2-7. 1949 USGS topographic map, Des Moines Quadrangle (USGS 2025)



Figure 2-8. 1965 aerial photograph of the APE and surrounding area

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3. RECORD SEARCH AND LITERATURE REVIEW

Stell conducted a literature review and record search for this Project by consulting the DAHP Washington Information System for Architectural and Archaeological Records Database (WISAARD), historic maps and photographs, and other historical sources. Within one mile of the Project APE, two archaeological sites, 10 cultural surveys, one cemetery, no historic register properties, and 1,055 historic buildings are present. WISAARD's archaeological risk model indicates a moderate to high risk for cultural resources within the APE.

3.1 ARCHAEOLOGICAL SITES

Two previously recorded archaeological sites are within one mile of the APE (**Table 3-1**). Site Hillgrove Cemetery (KI00889) is a historic cemetery located 0.82 miles from the APE dating back to 1898. No archaeological work has been conducted there (Bundy 2021). Des Moines Creek Structure, KI01781, is a historic structure located 0.87 miles from the APE that consists of a simple, utilitarian concrete structure of unknown age (Wardlaw 2025).

Table 3-1. Summary of Previously Recorded Archaeological Sites Within One Mile of The Project APE

Smithsonian Number	Site Name	Determination of Eligibility	Distance from APE
KI00889	Hillgrove Cemetery	Survey/Inventory	0.82 miles
KI01781	Des Moines Creek Structure	Not Eligible	0.87 miles

3.2 CULTURAL RESOURCES SURVEYS

Ten previous archaeological investigations have occurred within one mile of the Project APE (**Table 3-2**). With the exception of the previously mentioned historic Hillgrove Cemetery Site, the Des Moines Memorial Elm Tree Site, located 0.87 miles from the APE (Iversen et al. 2000), and some historic buildings at the 1689693 and 1696075 sites, located 0.8 and 0.38 miles from the APE respectively, no significant cultural resources were found (Ives et al. 2017; Limberg et al. 2021). The earliest investigations within one mile of the APE occurred in 1999, when Courtois, Krafft, and Wickwire conducted surface and limited subsurface surveys to identify possible cultural resources as part of an Environmental Impact Statement for the construction of the Seattle, Tukwila, and SeaTac Link Light Rail but no archaeological sites were detected (Courtois et al. 1999a, Courtois et al. 1999b). In 2015, the 1.6 mile long South 200th Link Extension to the Central Link Light Rail system was completed (Lockwood et al. 2015). Environmental Science Associates monitored the construction for the duration and observed no archaeological resources. Two additional South 200th Street improvements projects had cultural resource investigations within one mile of the APE. Margaret Berger and Patrick Garrison investigated site 1690433 (2018) and Matthew Warren investigated site 1693404 (2020). Neither investigation identified cultural resources.

There were two State Route (SR) 509 freeway extension projects (1689693; 1696075) that conducted cultural resource investigations within 1 mile of the APE. The first was carried out in 2017 by Ryan Ives, Stephen Emerson, and Jennifer Wilson for the construction of a link between SR 509 and I-5 (2017). No prehistoric or historic artifacts were observed during their investigation, but 66 built environment property cultural resources were identified including one residence that

was eligible for listing in the NRHP (Ives et al. 2017). In 2021, a new SR 509 expressway was proposed just 0.38 miles from the Project APE (Limberg et al. 2021). During the course of their investigation, Caitlin Limberg, James Jenks, and Jennifer Thompson surveyed approximately 73 acres and excavated 112 shovel tests and found no culturally significant artifacts. They did identify 36 historic built environment resources, four of which were NRHP eligible.

The closest cultural resource investigation (1339853), just 0.37 miles from the Project APE, was conducted in 2000 by Larson Anthropological Archaeological Services Limited for the proposed construction of a new runway for SEA (Iversen et al. 2000). The only culturally significant site was the Des Moines Memorial Elm Tree Site, a World War I memorial consisting of 81 American elm trees planted in 1921. In 2011, Trish Fernandez and her associates conducted archaeological investigations consisting of a comprehensive pedestrian survey and 10 shovel tests around the construction footprint boundary of the purposed Lake to Sound Trail and found a single lithic flake in heavily disturbed sediment (Fernandez et al. 2011). The final cultural resources investigation was conducted at Hillgrove Cemetery by Anchor QEA, LLC in 2020. Online records, pedestrian survey, and ground penetrating radar (GPR) revealed that there are upwards of 300 burials on the property.

Table 3-2. Summary of Previously Conducted Cultural Resources Investigations

Author*	Date	NADB #	Title	Distance from APE
Courtois, Shirley	11/1/1999a	1339816	Central Link Light Rail Transit Project, Seattle, Tukwila and SeaTac, Washington, Final Technical Report: Historic and Prehistoric Archaeological Sites, Historic Resources, Native American Traditional Cultural Properties, Paleontological Sites	0.90 miles
Courtois, Shirley	11/1/1999b	1339836	Central Link Light Rail Transit Project, Seattle, Tukwila and SeaTac, Washington, Final Technical Report: Historic and Prehistoric Archaeological Sites, Historic Resources, Native American Traditional Cultural Properties, Paleontological Sites	0.86 miles
Iversen, David R.	5/12/2000	1339853	Port of Seattle, Seattle-Tacoma International Airport Master Plan, Proposed Third Runway Archaeological Resources and Traditional Cultural Places Assessment	0.37 miles
Fernandez, Trish	2/1/2011	1681216	Cultural Resource Survey Report Lake to Sound Trail, Segment B	0.96 miles
Lockwood, Chris	11/4/2015	1687388	Sound Transit, Central Link Light Rail, South 200th Link Extension, SeaTac, Archaeological Monitoring and Supplemental Survey	0.75 miles
Ives, Ryan	9/1/2017	1689693	Cultural Resources Survey for the Washington State Department of Transportation SR 509 SeaTac to I-5 Freeway Extension Project, King County, Washington	0.80 miles
Berger, Margaret	5/17/2018	1690433	Cultural Resources Assessment for the Des Moines Memorial Drive/ South 200th Street Improvements Project, King County	0.77 miles

Author*	Date	NADB #	Title	Distance from APE
Warren, Matthew	2/26/2020	1693404	Archaeological Survey Report for the South 200th Street Shared Use Path Project, City of SeaTac, King County, Washington	0.83 miles
Anchor QEA, LLC	5/1/2020	1694662	Hillgrove Cemetery Inventory	0.93 miles
Limberg, Caitlin	8/1/2021	1696075	SR 509/24th Avenue South to South 188th Street – New Expressway (SR 509 Stage 2) Project, King County, Washington	0.38 miles

Note:

*First author

NADB = National Archaeological Database

3.3 CEMETERIES

One cemetery is within one mile of the Project APE. Site KI00889, known as the Hillgrove Cemetery, is a cemetery located 0.82 miles from the APE. It is one acre in size and organized in sections and blocks around a circular driveway (Bundy 2021). It was in use from 1898 to 2011, containing 224 legible monuments and 22 damaged or illegible monuments (Anchor QEA 2020). Online written records report that 377 individuals were buried at Hillgrove while a GPR survey revealed 366 anomalies. The project archaeologists suggest that there could be unmarked graves outside the limit of the GPR survey and recommend minimal ground disturbing activities, the use of an Inadvertent Discoveries Plan, and a professional archaeologist to monitor all ground disturbing activities.

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4. RECOMMENDATIONS & CONCLUSIONS

Stell conducted a literature review and record search for this Project by consulting DAHP's WISAARD, as well as historic maps, photographs, and other historical sources. Within one mile of the Project APE, two archaeological sites, ten cultural surveys, one cemeteries, no historic register properties, and 1,055 historic buildings are documented. According to DAHP's Archaeological Risk Model, APE lies within a moderate to high risk area and archaeological surveys are highly recommended. There are no known cultural resources located within the Project APE:

Due to the hardscaped and the urban land soils present within the Project APE, the history of the area, there is a high likelihood of inadvertent discoveries of precontact, and historic-era cultural materials and/or human remains within the Project APE. The following recommendations are given:

1. A Monitoring and Inadvertent Discovery Plan should be created by a professional archaeologist for those locations outside of the eligible and National Register-listed historic resources boundaries affected by ground-disturbing activities. A monitoring permit may be required by DAHP prior to ground-disturbing activities within the Project APE due to the inability to conduct subsurface archaeological investigations before ground disturbance occurs.
2. Geotechnical borings should be utilized to determine if there are any buried cultural resources that will be impacted by the construction work.
3. The DAHP and all Affected Tribes and interested parties will be consulted regarding further work within the Project APE.

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