CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2022-04-02772

Author: Garth L. Baldwin and Simon Schultheis

Title of Report: A Cultural Resource Assessment of Project 03-143-06, Cascade Shaw, Puyallup, Washington

Date of Report: May 10, 2022

County(ies): Pierce Section: 35 Township: 20N Range: 4E

Quad: Puyallup Acres: ~1.7

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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- Submission of PDFs is required.
- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.

DRAYTON ARCHAEOLOGY

A Cultural Resource Assessment of Project 03-143-06, Cascade Shaw, Puyallup, Washington

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Drayton Archaeology Report: 0422O

May 10, 2022

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A Cultural Resource Assessment of Project 03-143-06, Cascade Shaw, Puyallup, Washington

Authors:	Garth L. Baldwin and Simon I. Schultheis
Date:	May 10, 2022
Location:	Puyallup, Pierce County, Washington
USGS Quad:	Puyallup, WA 7.5-minute USGS Quadrangle (2020)
Township, Range, Section:	T20N, R4E, S35

SUMMARY

Drayton Archaeology (Drayton) was retained by Gil Hulsmann, CEO, Abbey Road Group Land Services Development Company, LLC to conduct an archaeological assessment of the western portion of 808 Shaw Road East (TPN: 0420351003), Puyallup, for the proposed project 03-143-06. The project involves the development of a multi-family residence and all supporting infrastructure. This archaeological assessment was conducted to satisfy compliance requirements under the State Environmental Policy Act (SEPA) and RCW 27.53 through Washington Department of Archaeology and Historic Preservation (DAHP).

Drayton's cultural resources assessment consisted of a thorough background review, field investigation, and production of this report. Background review concluded that the project is located in an area of moderate probability for cultural resources. On-site fieldwork included systematic visual reconnaissance and subsurface investigation of areas of proposed impact. No precontact or historic archaeological deposits were encountered within the project area. As proposed, it appears unlikely that the project will affect cultural resources; therefore no further archaeological oversight is warranted. Drayton recommends the project proceed with no further archaeological oversight.

REGULATORY CONTEXT

This project is subject to the State Environmental Policy Act (SEPA). SEPA requires that impacts to cultural resources be considered during the public environmental review process. Under SEPA, the Washington State Department of Archaeology and Historic Preservation (DAHP) is the sole agency with technical expertise in regard to cultural resources and provides formal opinions to local governments and other state agencies on a site's significance and the impact of proposed projects upon such sites.

If archaeological resources are present, the project is subject to Washington State laws addressing the protection of archaeological sites and Native American burials. The Archaeological Sites and Resources Act (RCW 27.53) prohibits the disturbance of known prehistoric and historic archaeological sites on public or private lands. The Indian Graves and Records Act (RCW 27.44) prohibits the disturbance of American Indian graves and requires re-

interment under the supervision of the affected Indian tribe if inadvertent disturbance by construction or other activity occurs.

PROJECT LOCATION AND DESCRIPTION

The project area consists of an approximately 7.8 acre lot located at 808 Shaw Road E (TPN: 0420351003), Puyallup, Pierce County, Washington in Township 20 North, Range 4 East, Section 35, of the Willamette Meridian (Figures 1 and 2). The scope of the review is focused on the unfilled 1.7 acres at the western portion of the lot. The project involves the development of a multi-family residence and all supporting infrastructure (Figure 3).

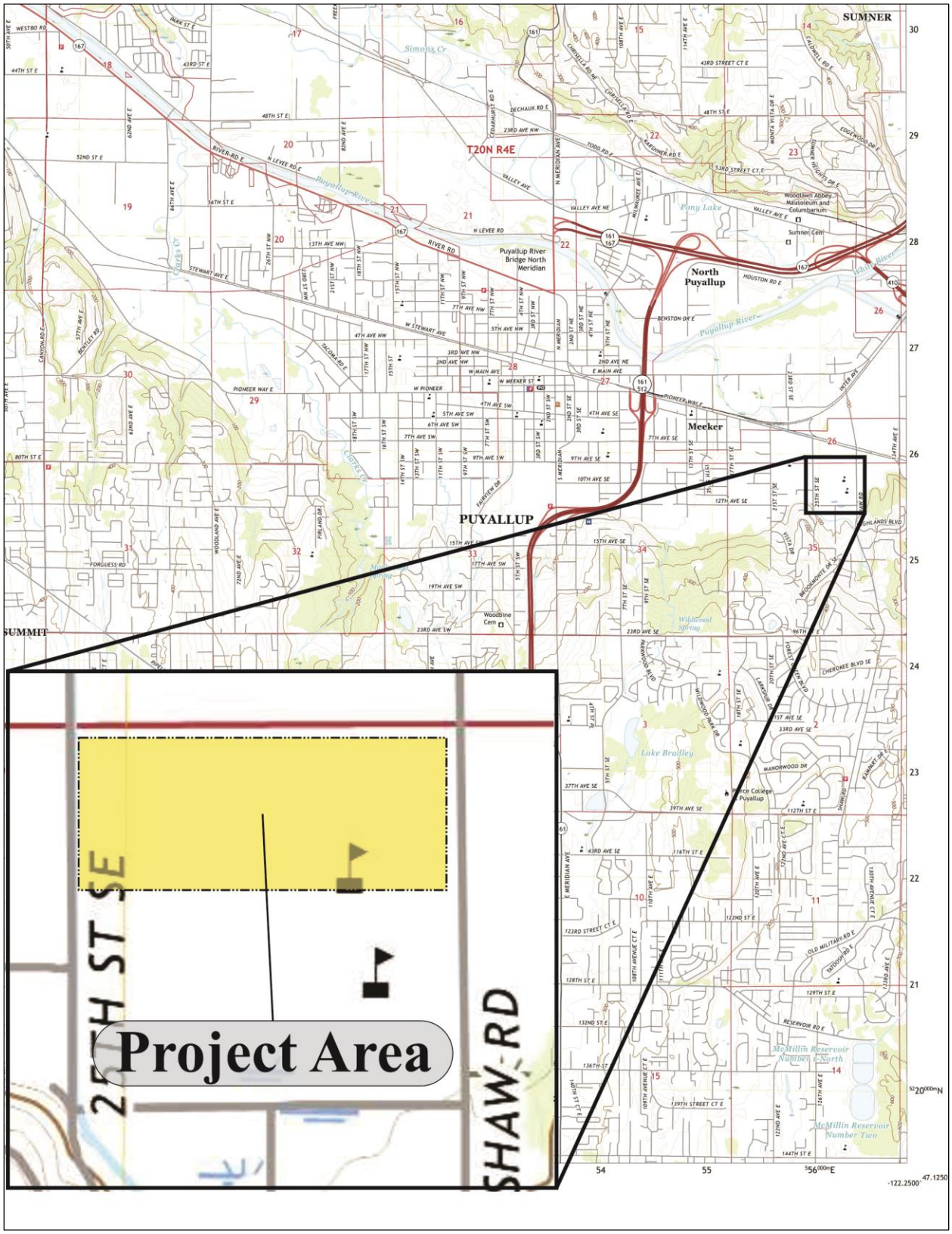

Figure 1. A portion of the Puyallup (2020), WA 7.5' USGS quad map of the project area.

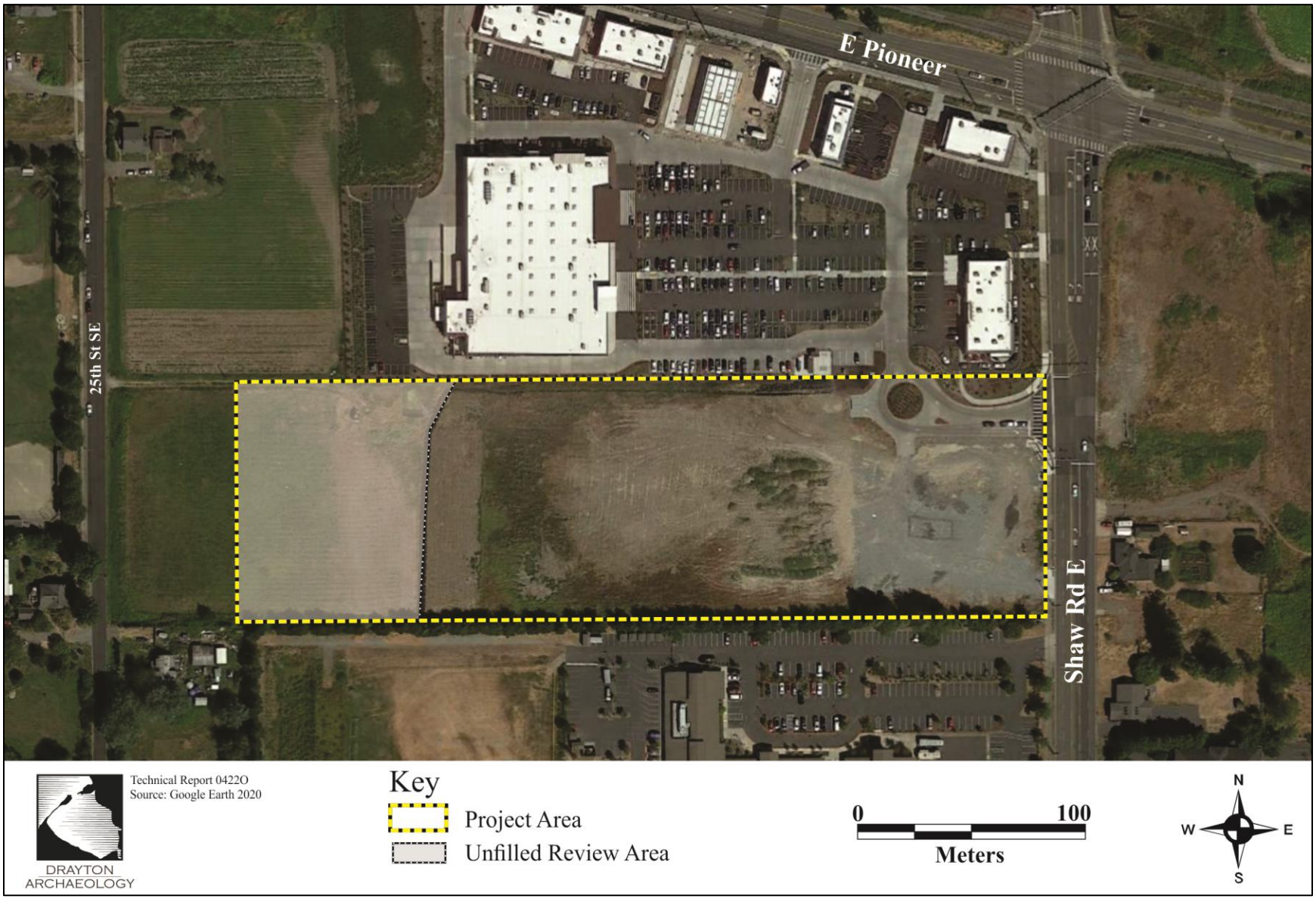

Figure 2. An aerial image illustrating the project area.

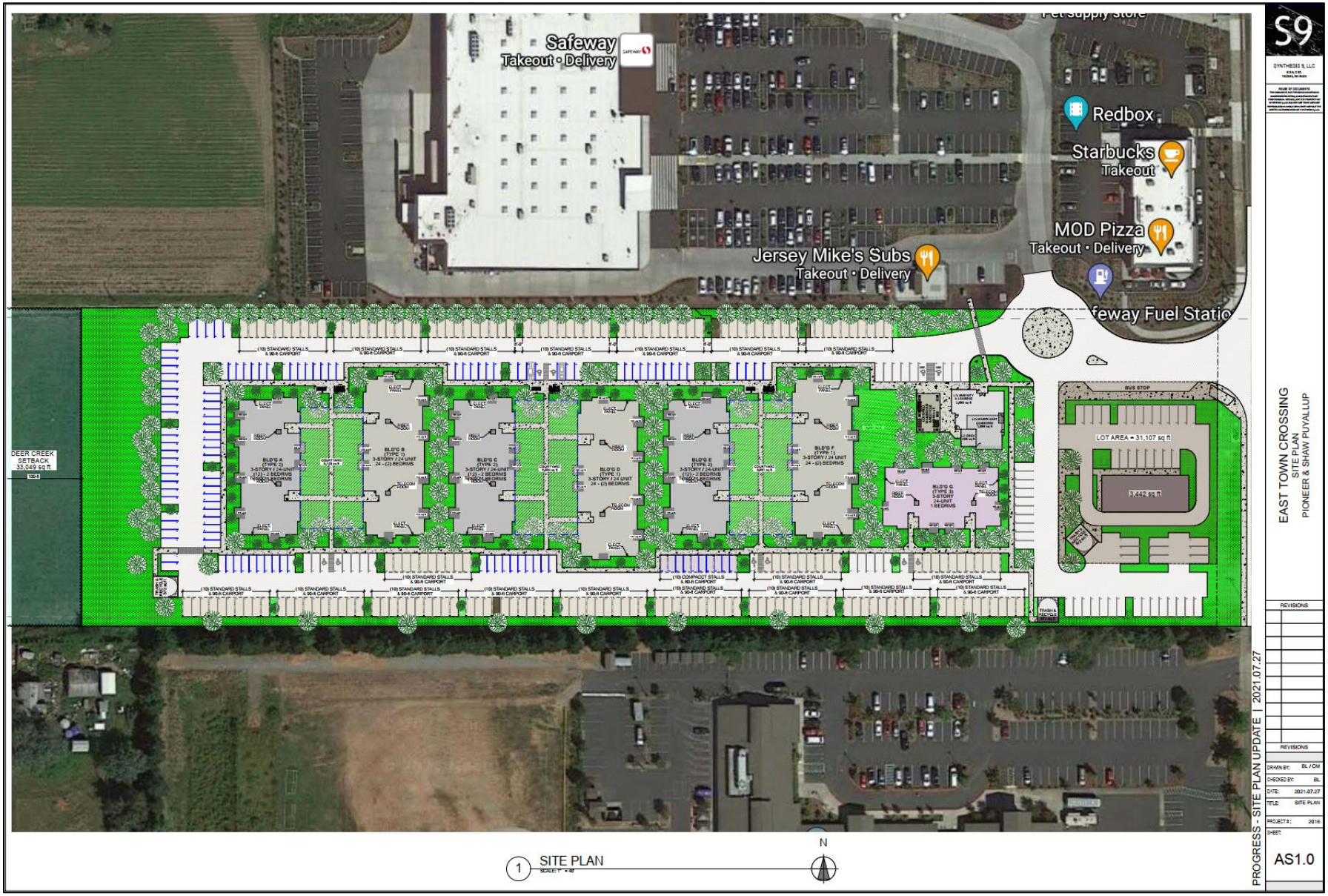

Figure 3. Site plan, courtesy of the client.

BACKGROUND REVIEW

An investigation of archival research informs of the potential for encountering cultural resources within project areas. Drayton's consulted archives include documents related to precontact and historic environmental and cultural contexts, previously recorded cultural resources studies and site records, and selected published local historic accounts. Archaeological records are obtained from the Washington State Department of Archaeology and Historic Preservation's (DAHP) Washington Information System for Architectural and Archaeological Records Data (WISAARD). WISAARD is a restricted-access searchable geographic information system containing locations of previously recorded cultural resources surveys conducted post-1995, archaeological sites, historic sites, National Register of Historic Places (NRHP) sites, and cemeteries and burials. For this project, Drayton reviewed cultural resource archives documented within an approximate one-mile radius of the project area.

The following sections detail the environmental, cultural, and archaeological circumstances that inform Drayton's archaeological assessment of the project area.

Natural Environmental Setting

The environmental setting of the region is presented here to appreciate the unique geologic conditions responsible for the landscape formations that affected the life ways of early inhabitants. Natural geologic conditions also provide baseline context for the cultural resources assessment to better understand how the landscape has been culturally modified by various human activities.

Geology and Topography

The proposed redevelopment project is located within the Puget Lowland. The Puget Lowland is a physiographic province shaped by at least four periods of extensive glaciation during the Pleistocene (Easterbrook 2003; Lasmanis 1991). The bedrock was depressed and deeply scoured by glaciers. Sediments were deposited and often reworked as the glaciers advanced and retreated. A thick mantle of glacial till, drift, and outwash deposits were left across much of the region at the end of the Fraser Glaciation, the last of these glacial periods (Easterbrook 2003).

The Vashon Stade of the Fraser Glaciation began approximately 18,000 BP with an advance of the Cordilleran ice sheet into the lowlands (Porter and Swanson 1998). The Puget Lobe of the ice sheet flowed into the Puget Lowland reaching its terminus just south of Olympia between 14,500 and 14,000 BP (Clague and James 2002; Easterbrook 2003; Waitt and Thorson 1983). The Puget Lobe was thick towards the north and thinned towards its terminus. The depth of the ice near Marysville is estimated to have been approximately 1,200 meters (Easterbrook 2003).

The Puget Lobe began to retreat shortly after reaching its terminus. Marine waters entered the lowlands carved out by the glacier, filling Puget Sound. The remaining ice was floated and wasted away rapidly. Glacial drift dating between 12,500 and 11,500 BP was deposited on the

sea floor across the northern and central Puget Lowland (Easterbrook 2003). The enormous weight of the ice depressed the land and as the crust rebounded, relative sea levels fell exposing some of the drift deposits (Clague and James 2002; Easterbrook 2003).

The project is situated near the junction of the lower Puyallup River and White River valleys. Geomorphology, this area was largely shaped by Pleistocene and early Holocene glacial events characterized by glacial till, moraines, and outwash features. The valleys were created when glaciers retreated north, carving a deep trough through the Puget Lowland. The region became ice-free approximately 10,500 years ago, leaving it suitable for habitation (e.g., Booth et al. 2003; Downing 1983; Dragovich et al. 1994; Kruckeberg 1991:22).

Approximately 5,600 years ago, a landslide originating from Mount Rainer displaced 0.7-miles of soils from the summit as far north as Kent (Crandell 1971; Dragovich et al. 1994; McKee 1972: 206-207). The event, termed the Osceola Mudflow, resulted in the spread of mud and alluvium over existing glacial drift on the lowland plains, infiltrating the channels of the Puyallup, White, and Carbon rivers. The effects of the mudflow entirely changed the course of the White River diverting it away from the Puyallup River.

Depths of the mudflow deposits vary in thickness and typically are thinner the further the distance from Mount Rainier. In Puyallup, Osceola deposits are reported to be 97 feet (30 meters) thick in places (Dragovich et al. 1994:8). Soils of the Osceola Mudflow are heterogeneous and comprised of poorly sorted, hard mixtures of clay, silt, sand, and gravel soils containing boulders and organic debris.

Soils

The University of California Davis Agriculture and Natural Resources (UC Davis), in conjunction with the United States Department of Agriculture Natural Resource Conservation District (USDA-NRCS) developed an interactive soil survey application. According to the UC Davis SoilWeb database (n.d.), soils within the project area are mapped as Briscot loam.

The Briscot series consists of very deep, poorly drained soils formed in recent alluvium on floodplains. Slopes range from 0 to 2 percent. A typical pedon consists of an Ap horizon 0 to 23 centimeters (cm) (0 to 9 inches), dark grayish brown silt loam; a Bg horizon 23 to 43 cm (9 to 17 inches), grayish brown silt loam; a Cg1 horizon 43 to 112 cm (17 to 44 inches), grayish brown finely stratified silt loam, fine sand, and sandy loam which is followed by a Cg2 horizon 112 to 152 cm (44 to 60 inches), dark gray finely stratified silt loam, fine sand and fine sandy loam (UCDavisSoilWeb n.d.).

Flora and Fauna

The Puget Sound Basin lies within the *Tsuga heterophylla* zone. Most areas were heavily timbered with prairies located along river valleys. Native vegetation included an overstory of

western redcedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), Douglas-fir (*Pseudotsuga menziesii*), and red alder (*Alnus rubra*) (Franklin and Dyrness 1973). Understory included bracken fern (*Pteridium aquilinum*), camas (*Camassia quamash*), oceanspray (*Holodiscus discolor*), Oregon grape (*Mahonia aquifolium*), red huckleberry (*Vaccinium parvifolium*), red and blue elderberry (*Sambucus racemosa, Sambucus nigra),* salal (*Gaultheria shallon),* salmonberry (*Rubus spectabilis*), trailing blackberry (*Rubus ursinus*), and vine maple (*Acer circinatum*).

A variety of fauna were abundant and essential to the diets of precontact inhabitants. Fish, such as cutthroat trout (*Oncorhynchus clarkii*), Dolly Varden (*Salvelinus malma*), rainbow trout (*Oncorhynchus mykiss*), steelhead *(Oncorhynchus mykiss),* and suckers were plentiful (Suttles and Lane 1990). Pink salmon (*Oncorhynchus gorbuscha*), Sockeye (*Oncorhynchus nerka),* Chinook (*Oncorhynchus tshawytscha),* Coho (*Oncorhynchus kisutch),* and Chum salmon *(Oncorhynchus keta)* were diversely available within the Puget Sound River valleys and heavily relied upon by native peoples. Shellfish, which could have been brought up the river could include littleneck clam (*Leukoma staminea),* butter clams (*Saxidomus giganteus),* horse clams (*Tresus capax),* cockles (*Clinocardium nuttallii),* geoducks (*Panopea generosa),* bay mussels (*Mytilus edulis*), and native oysters (*Ostrea lurida)* (Suttles and Lane 1990).

Terrestrial mammals in the river valleys included black tail deer (*Odocoileus hemionus*), elk (*Cervus canadensis*), black bear (*Ursus americanus*), mountain goat (*Oreamnos americanus*), beavers (*Castor canadensis*), and other small game frequently hunted by precontact groups. Many species of birds were also abundant in the area depending on the time of year and the distance travelled, grouse would have been available while migratory species of waterfowl like the norther pintail, mallard (*Anas platyrhynchos*), Canadian geese (*Branta canadensis*), and American wigeon (*Mareca americana*), among others, would have been available locally.

Cultural Context

A broad discussion regional land use in the vicinity of the project area provides contextual information regarding past inhabitants and the activities in which they engaged. It is important to note that many of the name designations applied to past peoples (particularly during contact and early historic periods), are those given by European explorers, Euro-American settlers, and others compiling information for treaty purposes.

Human occupation of the Puget Lowland is well documented in a number of archaeological, ethnographic, and oral historic records (e.g., Ames and Maschner 1999; Greengo and Houston 1970; Larson and Lewarch 1995; Moss 2011; Nelson 1990). British Columbia Northwest Coast Culture traditions are closely related and can be viewed in Borden (1950, 1975); Carlson and Dalla Bona (1996); Fladmark (1982); and Matson and Coupland (1995).

Precontact

Puget Lowland archaeology can be subdivided into three time periods: the early (10,500 to 5,000 years BP), middle (5,000 to 1,000 BP) and late periods (1,000 to 250 BP).

The early period is characterized by activities to support habitation within camps along river terraces or outwash channels. Tool technology is primarily characterized by the use of flaked stone tools including fluted projectile points, leaf-shaped points, and cobble-derived tools. These artifacts are often attributed to the "Olcott" phase, named after the site-type near Arlington and Granite Falls (Baldwin 2008; Kidd 1964; Mattson 1985). Suggested by Mattson (1985:83) and Kidd (1964:26), Olcott sites are generally located away from modern shorelines, where occupation took place along terraces of active water courses of the time. Today, these past habitation areas are often found away from modern rivers, as the course of waterways and channels have shifted over time. Besides the lithic assemblage, little faunal or organic evidence dates to this period - likely a result of poor preservation due to the soil composition and elapsed time. The lack of organic evidence and the abundance of lithic materials unintentionally skew the archaeological record to suggest a specialization of terrestrial hunting practices.

The middle period coincides with a stabilization of the physical environment and climate to modern conditions. The middle period is noted for its increased artifact and trait diversity including a full woodworking toolkit comprised of bone and antler implements, art and ornamental objects, status differentiation in burials, and extremely specialized fishing and sea-mammal hunting technologies (Ames and Maschner 1999; Matson and Coupland 1995; Moss 2011; Wessen 1990). Lithic technology becomes specialized to include smaller notched points and ground stone (Moss 2011; Nelson 1990; Wessen 1990). Shell midden sites first appear during this period, indicating a transition to a predominantly maritime-based subsistence pattern (Matson and Coupland 1995; Nelson 1990; Thompson 1978). Although structural elements such as post molds have been identified (Moss 2011; Nelson 1990), habitation structures have not been excavated.

The late period is dominated by a settlement pattern along the coastline, streams, and rivers that show evidence of increased fortification (Ames and Maschner 1999; Matson and Coupland 1995; Moss 2011). Rising sea levels and riparian environments supporting large salmon runs allowed salmon to become a predominant food source (Moss 2011; Wessen 1990). The late period is generally recognized by an apparent decrease in artifact diversity. Stone carving and chipped stone technologies nearly disappear, while trade goods (indicating extensive trade networks along the coast and with inland plateau peoples), increase (Moss 2011; Nelson 1990; Thompson 1978).

Ethnographic

The project area is located in the traditional territory of the Puyallup Tribe of Indians and is also in the traditional use area of Muckleshoot (Castile 1985:20; Smith 1940; Spier 1936:42; Suttles and Lane 1990:485). The Puyallup are Southern Lushootseed speaking people who lived in winter villages located long the Puyallup, Carbon, and White rivers between the Puyallup River delta and Mount Rainier (Smith 1940; Hilbert et al. 2001). Marian Smith recorded several Puyallup villages along the upper and lower reaches of these rivers, generally placed at stream junctions or at their mouths (Smith 1940:4, 9). The Muckleshoot Indian Tribe includes the

descendants of multiple groups living in the Green and White River valleys, including the Skopamish, Smulkamish, Stkamish, Yilalkoamish, and Twakwamish (Suttles and Lane 1990: 488). Their economies were largely based on hunting terrestrial resources such as goat, deer, and elk (Haeberlin and Gunther 1930). Despite living inland several miles from the shores of Puget Sound, salmon was a key resource for these peoples. Five species of salmon and steelhead were caught in the nearby rivers and streams by the Smulkamish. Waterfowl, camas, berries, and shellfish were also procured (Suttles and Lane 1990).

In 2001, the culmination of a long project involving the deciphering of T.T. Waterman's ethnographic notes on native place names in the Puget Sound was published. Hilbert, Miller, and Zahir, along with countless volunteers poured over Waterman's unpublished manuscript, translated the place names into the Lushootseed alphabet, translated definitions, and mapped locations. A list and map of place names located nearest to the current project can be viewed in Table 1, including *Tsu' yat,* referring to the creek running on the west side of the Puyallup River rising below the Soldiers' Home (Hilbert et al. 2001:246-261) and *Sti'lagwats*, which means where the strawberries grow, located within the present city of Puyallup (Hilbert et al. 2001:246-261).

Table 1. Place names located near the project area from Hilbert et al. 2001.

Map #	Waterman Orthography	Waterman Translation	Lushootseed Orthography	Lushootseed Translation
1	Qwatc	Dog fish	kʷačˀ	Dog fish
2	Sti'lagwats	Where strawberries grow	s'iləqʷac	Strawberry plant
3	SExuba'ltᵘ	Dance house	səx̌əbalʔtxʷ	Dance house
4	Cugca'gw L	Little passage for a canoe	šəgʷłagʷiɬ	A canoe path
5	Sta'qwadäts	Where salmonberry bushes grow	stcgʷədac	Salmonberry bush
6	Tsaka'lbadäts	Where gooseberry bushes grow	c'aq'abadac	Gooseberry bush
7	QwE'spL	Trout	kʷəspɬ	Trout; fish
8	Txsadtc	NA	NA	NA
9	TL!xwai-äts	Where dog salmon come out	ƛ̓xʷayʔac	Where dog salmon grow
10	SxweyE'q	A certain supernatural power useful for causing arun off ish	NA	NA
11	Gq 'Lqw L d	Certain black roots	qʷəɬqʷəɬik	Horse tail roots
12	Tsu' yat	Sound made by a wild girl, from "Siatko	NA	NA
13	Tua'wi	Rainbow trout	NA	NA

Historic Period

In 1850, the Donation Land Claims Act encouraged local non-native settlement. Early economies were supported by logging, milling, and farming. By the mid-1850s, non-native settlement drastically affected Indian people and their traditions. In 1854, following the Unites States government negotiations with the Puyallup, Nisqually, Squaxin Island people, the Medicine Creek Treaty led to the abandonment of most southern Puget Sound villages. This act forced the relocation of Native groups to one of three reservations: Puyallup, Muckleshoot, or Squaxin Island (Ruby and Brown 1992). The treaty dissolved Indian title to traditional lands and between 1855-1856, the federal government used military force to contain the Puyallup, Muckleshoot, and other Native people on these reservations despite their dissatisfaction with the poor quality of lands.

Euro-American settlement of the Puyallup and White River valleys began in earnest in the early 19th century. By 1853, William Kincaid settled the junction of the Puyallup and Stuck Rivers, establishing a community that fostered agricultural development of the area. Cultivated crops included daffodils, rhubarb, hops, berries, vegetables, and turf grass (Kirk and Alexander 1990; Phillips 1971). Other settlers (including George Ryan) purchased land for agricultural development to include fruit, vegetables and hops. In 1877, the Northern Pacific Railroad extended to the area. In 1883, John F. Kincaid filed the plat for the town of Sumner on his father's donation land claim. George Ryan constructed a large portion of the town's business district and established a railroad depot. Sumner's downtown and residential areas developed immediately around the depot. In 1891, the town was incorporated, and Ryan was elected as the first mayor, while his wife served as the first post-mistress. The town was originally called Stuck Junction, but was later changed to Franklin. However, it was decided that the name of the town should be changed because Franklin was a common name that confused the U.S. Postal Department. A drawing was held, and the name "Sumner" was chosen, so named for the abolitionist Massachusetts Senator, Charles Sumner Boston.

Euro-American settlement significantly changed the local waterways. According to Muckleshoot accounts, the Stuck River was originally a small stream separate from the white river that could be stepped over during low water (Stein 2001). Seasonal flooding made farming difficult and logjams and bluffs were typically dynamited, particularly in King County. These modifications diverted waters from the White River into the Stuck, flooding farms in Pierce County. In turn, farmers in Pierce County dynamited bluffs in an effort to direct the White River back. This practice continued for years resulting in the widening the Stuck River. In 1898, dynamiting resulted in the destruction of an entire bluff, diverting much of the White River into the Stuck River. King County farmers constructed an embankment to permanently contain the water. Lawsuits ensued and eventually the State Supreme Court ruled against Pierce County upholding lower court rulings that the actions taken by the King County farmers were legal. The floods of 1906 forced the White River back into the Stuck River, which then ceased to exist. Portions of a Pierce and King County map show new alignments of the Stuck, White, and Puyallup Rivers that were formed by channel straightening, dredging, levee and wing wall installments, diversion dams, and spillways.

Hops agriculture was predominant in the Sumner area and by 1884 there were over 100 hops growers following the Puyallup hops boom started by Ezra Meeker in 1877. Meeker cornered the global hops market and considered himself the "Hop King of the World" (Kolano 1976). In 1892, the hops economy was devastated by an infection of hop lice requiring local farmers to diversify their agricultural practices to include berries and bulbs. Some locals completely switched to dairy farming (Kirk and Alexander 1990). Today, Sumner is no longer a farming community rather it supports regional manufacturing.

Cultural Resource Management Inventories and Documented Resources

Previous cultural resources studies and projects conducted in the vicinity of the project area informs the archaeological context for this assessment and assists in the construction of Drayton's cultural resource expectations.

Previous Cultural Resources and Sites

A review of the DAHP's WISAARD database was conducted on April 26. According to the available data on WISAARD, nine (9) cultural resources studies are recorded within a one-mile (1.6 km) radius of the project area (Table 1). These studies were largely conducted to satisfy regulatory compliance related to infrastructure and development projects or occur within site 45PI1360. Site 45PI1360 (Northern Pacific Railway Segment) is a Historic Railroad Property located along the Foothills Trail (Trautman 2015). The site consists of an abandoned 1.5 mile segment of the Cascade Junction – Wilkeson Branch of the Northern Pacific and Cascade Railroad (Trautman 2015). It extends from an access point southeast of Puyallup near the intersection of Pioneer and 134th Avenue East to southwest of the intersection of SR162 and 96th Street East at Alderton (Trautman 2015).

Table 2. Cultural resource studies recorded within an approximate one-mile radius of the project area.

Citation	Report Title	Results
Elliott and Mayer 2019	Cultural Resource Assessment, 2401 Inter Avenue SE, Puyallup, Washington	Negative
Stripe 2016	Van Leirop Property Cultural Resource Survey	Negative
Arthur 2016	Historic Properties Evaluation for the Proposed Pioneer Crossing Project, 2614 E. Pioneer Avenue, Puyallup, Washington	Negative
Flenniken and Trautman 2015	Cultural Resource Survey, Puget Sound Energy, Alderton to White River, Pierce 230kV Expansion, Transmission Project Pierce County, Washington	45PI1360
McClintock et al 2014	Northwest Pipeline LLC Washington Expansion Project - Addendum to Cultural Resources Overview and Survey Report: Survey of Highway 410 Reroute and Temporary Extra Workspace Areas and Easements	Negative
McClintock et al 2013	Northwest Pipeline GP Washington Expansion Project Cultural Resources Overview and Survey Report	Negative
Berger and Gill 2007	Cultural Resources Survey for the Shaw Road Extension Project. Pierce County. Washington	Negative

Citation	Report Title	Results
Shong 2003	Heritage Resources Investigations for the City of Puyallup Riverfront Trail Project – Phase 2 (SR-512 to East Main) Pierce County, Washington	Negative
Cole 2002	Cultural Resources Investigations for the Foothills Linear Park/Trail, McMillan to Meeker (CSM 6169)	Negative

National Registered Historic Places (NRHP)

There are no NRHP eligible properties and 356 Historic Property Inventories (HPI) recorded within a one-mile radius of the project.

Recorded Cemeteries

There are no cemeteries recorded within a one-mile radius of the project.

CULTURAL RESOURCE EXPECTATIONS

Based on the preceding background review, Drayton concludes that the project is located within an area of moderate probability for historic-era or precontact cultural deposits, structures, or isolated items. If precontact materials are present, they may include remnants associated with habitation, subsistence practices, or ceremonial activities. Shell midden, vestiges of temporary camps and dwellings, lithic scatters, trails, hearths, fire modified rock, faunal remains, and other materials associated with precontact life may be represented. Historic-era remnants of early Euro-American settlement and subsequent occupation are also considered.

FIELD INVESTIGATION

Drayton employs standard archaeological field methods to assess the potential for cultural resources within the project area. Field methods include a thorough visual reconnaissance of the property and subsurface examination of soils. Visual reconnaissance includes a detailed surface survey of the areas proposed for ground alteration (or other impact) to examine existing ground disturbances and locate surficial cultural materials or structures with historic or archaeological importance or cultural concern. Subsurface examination through the excavation of shovel probes or large-scale mechanical excavation provides a detailed sample of soil conditions to assess potential for, or presence/absence of, buried archaeological deposits. Subsurface excavation is typically dependent upon considerations of the landform, topography, project proposal, and geologic conditions.

Drayton's archaeological assessment was conducted on April 27, 2022 by archaeologist Simon Schultheis and field technician Emma Graves. Weather conditions were seasonally warm with intermittent rain showers. A pedestrian survey of the project area was conducted to examine the terrain, observe existing ground disturbances, and locate surficial cultural materials (Figure 4). The project area consists of an open agricultural field covered with grass (Photos 1 – 3). Erosion control measures employing landscaping fabric, sandbags, and straw waddles have been used to

secure the approximately 1.2 to 1.5 meter (4 to 5 foot) fill structure covering the eastern ~3/4 of the parcel where development is proposed (Photo 4). A sediment pond is located in the north eastern corner of the project area (Photo 5). Soil exposures across the project area are minimal with exception of a few rodent burrows. No cultural materials were observed during the pedestrian survey.

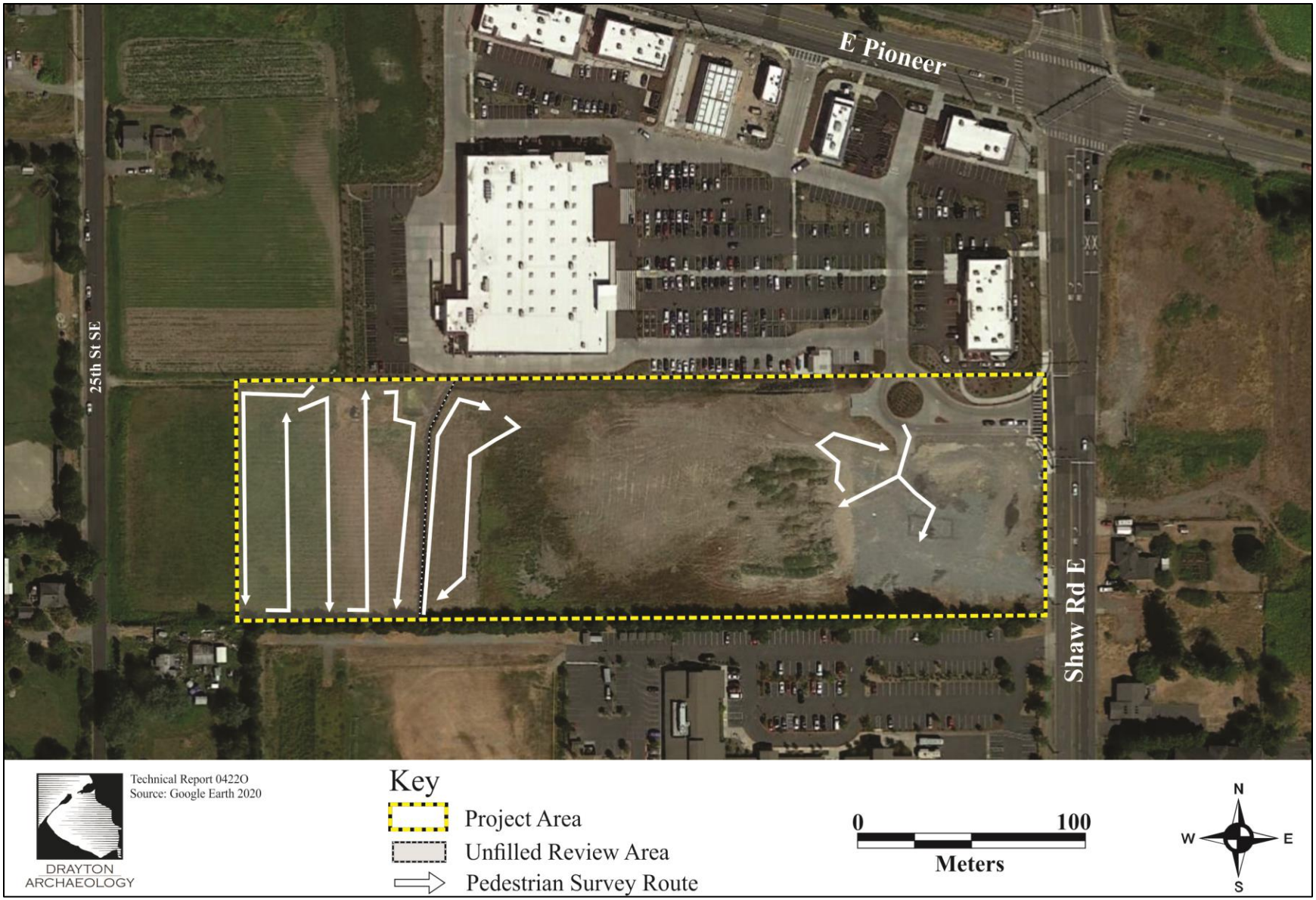

Figure 4. An aerial image illustrating the pedestrian survey route.

Photo 1. Southern overview of the western half of the project area.

Photo 2. Northern overview of the eastern half of the project area.

Photo 3. Western view of access road located along northern project boundary.

Photo 4. Landscaping fabric containing the fill along the eastern project boundary.

Photo 5. Sediment pond observed within the north eastern corner of the project area.

Twelve (12) shovel probes were excavated at 25-meter (82 foot) intervals across the open portion of the parcel where natural soils were not covered with fill (Figure 5). In addition to shovel probes, two shovel scrapes were placed on the walls of the sediment pond. Standard shovel probes consist of cylindrical pits measuring approximately 40 cm (12.75 in) in diameter. No predetermined target depth is set for probing, as depths are based upon geologic conditions, water table, degree of disturbance, and professional judgment. Ideally, shovel probes are considered complete when at least 20 cm (approx. 8 in) of sterile soils are observed or an intact stratum of glacial deposits is encountered. Soils excavated from probes were screened through a shaker screen with quarter-inch hardware cloth. The shovel probes were completely backfilled and the locations marked with a GPS to compose a site sketch map.

Soil profiles were consistent with the previously described soils mapped for the area. Three stratum were generally observed; a top layer of very dark grayish brown sandy loam overlying a stratum of very dark grayish brown to very dark gray mottled very fine loamy sand followed by a final stratum of variegated very dark gray sand with varying gravel content (Photos 6 and 7). A description of the soil sequence and composition of each shovel probe is described fully in Appendix A. No cultural materials were encountered during field investigation.

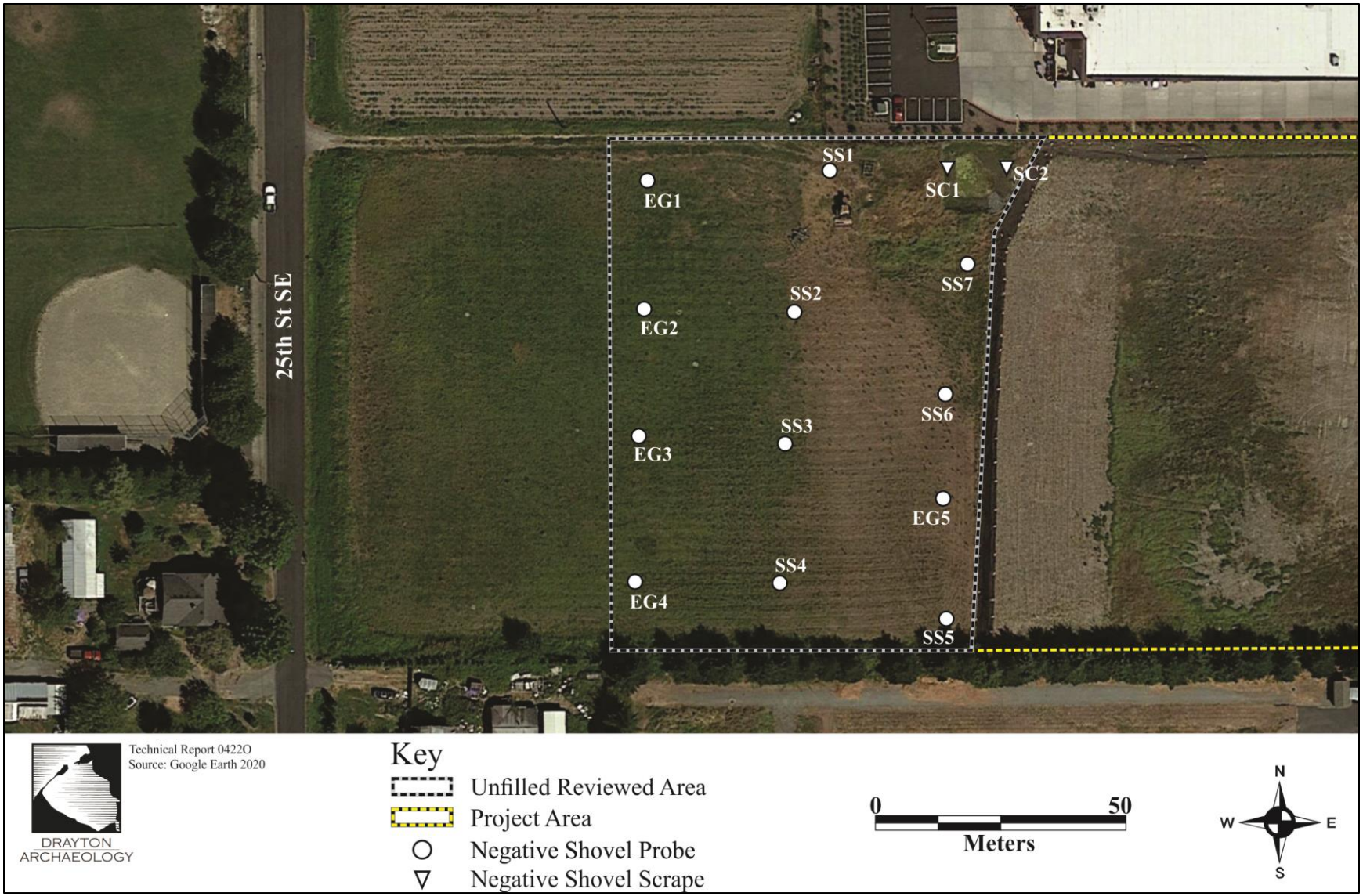

Figure 5. An aerial image illustrating shovel probe locations.

Photo 6. Soil profile observed throughout the project area (SS1).

Photo 7. Soils observed in the bank of the sediment pond (SC1).

CONCLUSIONS AND RECOMMENDATIONS

Drayton's cultural resources assessment consisted of a thorough background examination, field investigation, and production of this report. A professional archaeologist who meets or exceeds the criteria set forth in RCW: 27.53 supervised this review and subsequently concluded that the project is located in an area of moderate for cultural resources moderate probability for encountering archaeological or cultural remnants. This assessment is based on factors that included, but were not necessarily limited to, present and former ecological setting, distance to a major water body, topography, elevation, historic land use, proximity to known archaeological sites and results of previous cultural resource reviews in the vicinity. No cultural materials were located during the field investigation. Based on the results of this review; Drayton recommends that the project proceed without further archaeological oversight.

Shovel testing is employed as a cost-effective means to evaluate subsurface conditions and locate buried cultural resources; however, it is not exhaustive. Therefore, no shovel testing regiment is 100% accurate in recovering or locating buried cultural resources. Regardless, Washington State law provides for the protection of all archaeological resources under Washington State Revised Codes of Washington (RCW) Chapter 27.53, Archaeological Sites and Resources. Be advised that the unauthorized removal, theft, and/or destruction of archaeological resources and sites are strictly prohibited. Further, this statute provides for prosecution and financial penalties, including consultation and the recovery of archaeological resources, for those found in violation. Additional legal oversight is provided for Indian burials and grave offerings under RCW Chapter 27.44, Indian Graves and Records. RCW 27.44 states that the willful removal, mutilation, defacing, and/or destruction of Indian burials constitute a Class C felony. Washington legal code, RCW 68.50.645 - Duty to Notify, provides a strict protocol for the notification of law enforcement and other interested parties if any human remains, regardless of perceived patrimony, are encountered.

The following section, "Inadvertent Discovery Protocols," outlines the recommended procedures that property owners, project managers, construction crews, and others responsible for work should follow if cultural materials are encountered during project activities.

INADVERTENT DISCOVERY PROTOCOLS

Archaeological Resources

If archaeological resources (e.g., shell midden, faunal remains (bones), stone tools, historic glass, metal, or other materials) are observed during project activities, all work in the immediate vicinity must stop and the area secured. The project archaeologist must be contacted immediately to inspect the materials and contact relevant parties. An assessment of the materials and consultation with government and tribal cultural resources staff is a requirement of Washington law. Once the situation has been assessed, steps to proceed can be determined.

Human Burials, Remains, or Unidentified Bone(s)

If human remains or indeterminate bones are encountered, work must stop immediately. The area surrounding the remains must be secured and of adequate size to protect them from further disturbance until the State Physical Anthropologist at DAHP issues a notice to proceed. The discovery of any human skeletal remains must be reported to law enforcement immediately. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains to make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, the State Physical Anthropologist at the DAHP will assume jurisdiction over the remains. The DAHP will notify appropriate cemeteries and all affected tribes of the disturbed remains. The State Physical Anthropologist will make a determination of whether the remains are Native or Non-Native origin and report that finding to appropriate cemeteries and affected tribes. The DAHP will handle all consultation with the affected parties as to the future preservation, excavation, and deposition of the remains and authorize a timeline for the continuation of work.

REFERENCES

Ames, Kenneth M., and Herbert D. G. Maschner

1999 *Peoples of the Northwest Coast, Their Archaeology and Prehistory*. Thames and Hudson Ltd., London.

Arthur, Ed P.

2016 *Historic Properties Evaluation for the Proposed Pioneer Crossing Project, 2614 E. Pioneer Avenue, Puyallup, Washington*. Caldera report prepared for Mead and Hunt, Issaquah, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Baldwin, Garth L.

2008 RE: Archaeological Testing of 45SN417 at the Woodhaven Residential Development, Granite Falls, Washington. Drayton Archaeology Letter Report 0907A. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Berger, Margaret, and Mathew Gill

2007 *Cultural Resources Survey for the Shaw Road Extension Project. Pierce County. Washington.* CRC report prepared for Parametrix Inc., Puyallup, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Booth, Derek B., Kathy Goetz Troost, John J. Clague, and Richard B. Waitt

2003 The Cordilleran Ice Sheet. *Development in Quaternary Science* 1:17-43.

Borden, Charles

1950 "Notes on the Prehistory of the Southern Northwest Coast." *British Columbia Historical Quarterly* 14: 241-246. Victoria.

1975 Origins and Development of Early Northwest Coast Culture to About 3000 B.C. Archaeological Survey of Canada, Paper No. 45. Published by the National Museum of Man Mercury Series, National Museums of Canada, Ottawa.

Carlson, Roy L., and Luke Dalla Bona (editors)

1996 *Early Human Occupation in British Columbia*.UBC Press, Vancouver, BC.

Castile, George P.

1985 The *Indians of Puget Sound: The Notebooks of Myron Eells*. University of Washington Press, Seattle.

Clague, John J., and Thomas S. James

2002 History and Isostatic Effects of the Last Ice Sheet in Southern British Columbia. Quaternary Science Reviews 21:71–87.

Cole, Stephen C.
2002 *Cultural Resources Investigations for the Foothills Linear Park/Trail, McMillan to Meeker (CSM 6169)*. Northwest Archaeological Associates, Inc. report prepared for Pierce County Public Works and Utilities, Tacoma, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Crandell, D. R.
1971 *Postglacial lahars from Mount Rainier Volcano, Washington*. Professional Paper 677. USGS Numbered Series, United States Government Print Office, Washington, D.

Downing, John
2003 *The Coast of Puget Sound.* University of Washington Press, Seattle.

Dragovich, J. D., Pringle, P. T., and T. J. Walsh
1994 Extent and Geology of the Mid-Holocene Osceloa Mudflow in the Puget Lowland – Implications for Holocene Sedimentation and Paleogeography. *Washington Geology* 22(3): 3-26.

Easterbrook, Don J.
2003 Advance and Retreat of the Late Pleistocene Cordilleran Ice Sheet in the Puget Lowland. Paper presented at the Seattle Annual Meeting. Geological Society of America, *Abstracts with Programs* 35(6):215.

Elliott, Patrick, and James Mayer
2019 *Cultural Resource Assessment, 2401 Inter Avenue SE, Puyallup, Washington*. Jacobs report prepared for Inter LLC and Gregory Design. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Fladmark, K. R.
1982 An Introduction to the Prehistory of British Columbia. *Canadian Journal of Archaeology* 6:95-256.

Flenniken, J. Jefferey, and Pam Trautman
2015 *Cultural Resource Survey, Puget Sound Energy, Alderton to White River, Pierce 230kV Expansion, Transmission Project Pierce County, Washington*. Lithic Analysts report prepared for GeoEngineers, Inc. and Puget Sound Energy, Tacoma, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Franklin, J.F., and C.T. Dyrness
1973 *Natural Vegetation of Oregon and Washington*. USDA Forest Service General Technical Report PNW-8, Portland, Oregon.

Greengo, Robert E. and Robert Houston
1970 *Excavations at the Marymoor Site*. Magic Machine, Seattle, Washington.

Haeberlin, Hermann and Erna Gunther
1930 The Indians of Puget Sound. *University of Washington Publications in Anthropology* 4(1) 1-83.

Hilbert, V., Miller, Jay, and Zalmai Zahir
2001 *Puget Sound Geography.* Edited and reprinted with additional material from T. T. Waterman. Lushootseed Press, Seattle.

Kidd, Robert S.
1964 State of Washington Archaeological Site Inventory Form for 45SN30. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Kirk, Ruth and Carmela Alexander
1990 Exploring Washington's Past. University of Washington Press, Seattle, Washington

Kolano, Larry J.
1976 *Puyallup Perspectives*. Graphic Press, Tacoma, WA.

Kruckeberg, Arthur R.
1991 *The Natural History of Puget Sound Country*. University of Washington Press, Seattle.

Larson, L. L., and D. Lewarch (editors)
1995 *The Archaeology of West Point, Seattle, Washington: 4,000 years of Hunter-Fisher-Gatherer Land Use in Southern Puget Sound.* On file at the Department of Archaeology and Historic Preservation, Olympia.

Lasmanis, Raymond
1991 The Geology of Washington. Rocks and Minerals 66:262–277.

Mattson, John L.
1985 Puget Sound Prehistory: Postglacial Adaptation in the Puget Sound Basin with Archaeological Implications for a Solution to the "Cascade Problem". Unpublished Ph.D. dissertation, Department of Anthropology, University of North Carolina at Chapel Hill.

Matson, R. G. and G. C. Coupland
1995 *The Prehistory of the Northwest Coast*. Academic Press, San Diego, California.

McClintock, Robin D., Aaron Fergusson, and Julie Wilt
2013 *Northwest Pipeline GP Washington Expansion Project Cultural Resources Overview and Survey Report*. CH2MHill report prepared for Williams Northwest Pipeline GP. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

McClintock, Robin D., Julie Wilt, Jennifer Gilpin, Carol Schultze, Jenny Dellert and Jordan Pickrell
2014 *Northwest Pipeline LLC Washington Expansion Project - Addendum to Cultural Resources Overview and Survey Report: Survey of Highway 410 Reroute and Temporary Extra Workspace Areas and Easements*. CH2MHill report prepared for Northwest Pipeline LLC. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

McKee, B.
1972 *Cascadia: The Geologic Evolution of the Pacific Northwest.* McGraw Hill Book Company, New York.

Moss, Madonna
2011 *Northwest Coast: Archaeology as Deep History*. Society of American Archaeology Press. Washington, D.C.

Nelson, C. M.
1990 Prehistory of the Puget Sound Region. In *Northwest Coast*, edited by Wayne P. Suttles pp. 481-484. Handbook of North American Indians, Vol. 7, W.C. Sturtevant, general editor, Smithsonian Institute, Washington D.C.

Phillips, James W.
1971 *Washington State Place Names.* University of Washington Press, Seattle, WA.

Porter, S. C., and T. W. Swanson
1998 Radiocarbon Age Constraints on Rates of Advance and Retreat of the Puget Lobe of the Cordilleran Ice Sheet during the Last Glaciation. Quaternary Research 50:205-213.

Ruby, Robert H. and John A. Brown
1992 [1986] *A Guide to the Indian Tribes of the Pacific Northwest*. University of Oklahoma Press, Norman Oklahoma.

Shong, Michael
2003 *Heritage Resources Investigations for the City of Puyallup Riverfront Trail Project – Phase 2 (SR-512 to East Main) Pierce County, Washington*. Northwest Archaeological Associates, Inc. report prepared for Perteet Engineering, Lakewood, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Smith, Marian W.
1940 The Puyallup-Nisqually. *Columbia University Contributions to Anthropology* 32, Columbia University Press, New York.

Spier, Leslie
1936 Tribal Distribution in Washington. *General Series in Anthropology*, Number 3. George Banta Publishing Company, Menasha, Wisconsin.

Stein, Alan
2001 "White River Valley (King County)" – Thumbnail History. HistoryLink.org Essay 3583.

Stripe, Frank
2016 *Van Leirop Property Cultural Resource Survey*. Tera Tech report prepared for Talasaea, Woodinville, Washington. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

Suttles, Wayne and Barbara Lane
1990 Southern Coast Salish. In: *Handbook of North American Indians: Northwest Coast, Volume 7*, pp. 485-502, edited by Wayne Suttles. Smithsonian Institution, Washington, D. C.

Thompson, Gail
1978 Prehistoric Settlement changes in the southern Northwest Coast: A Functional Approach. *Reports in Archaeology #5*, Department of Anthropology, University of Washington, Seattle.

Trautman, Pam
2015 State of Washington Archaeological Site Inventory Form for 45PI1360. On file at the Department of Archaeology and Historic Preservation, Olympia, Washington.

United States Department of Agriculture – Natural Resource Conservation Service (USDA – NRCS)
n.d. Web Soil Survey, Peirce County Area, Washington. Electronic resource, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed April 2022.

United States Geological Survey (USGS)
2020 *Puyallup, WA Quadrangle*. 1:24,000. 7.5-Minute Series. USGS, Washington, D.C.

Waitt, Richard B. Jr., and Robert M. Thorson

1983 The Cordilleran Ice Sheet in Washington, Idaho, and Montana. In The Late Pleistocene, edited by Stephen Porter, pp. 53–70. Late-Quaternary Environments of the United States, Vol. 1, H.E. Wright, Jr., general editor. University of Minnesota Press, Minneapolis.

Wessen, Gary

1990 Prehistory of the Ocean Coast of Washington. In Handbook of North American Indians Vol. 7 Northwest Coast, Edited by W. Settles, PP. 412-421.Smithsonian Institution Press, Washington, DC. Smithsonian Institution Press, Washington, D.C.

APPENDIX A: SHOVEL PROBE INDEX

DEPTH BELOW SURFACE (CM)	SOIL DESCRIPTIONS	RESULTS
SS1		
0-15	Very dark brown sandy loam, small roots	Negative
15-43	Very dark grayish brown to very dark gray very fine sand, mottled	Negative
43-84	Variegated very dark gray to dark gray sand, lightly mottled	Negative
Note: Groundwater encountered		
SS2		
0-40	Dark brown silt loam, no gravel, some small roots	Negative
40-55	Very dark grayish brown to very dark gray very fine sand, mottled	Negative
55-89	Variegated very dark gray to dark gray sand, lightly mottled	
SS3		
0-42	Dark brown silt loam, no gravel, some small roots	Negative
42-70	Very dark grayish brown to very dark gray very fine sand, mottled	Negative
70-81	Variegated very dark gray to dark gray sand, lightly mottled, small gravels present, compacted	Negative
Note: Groundwater encountered		
SS4		
0-38	Very dark brown sandy loam, small roots	Negative
38-64	Very dark grayish brown to very dark gray very fine sand, mottled	Negative
64-81	Variegated very dark gray to dark gray sand, lightly mottled, compacted	Negative
SS5		
0-45	Dark brown silt loam, no gravel, some small roots, compacted	Negative
45-73	Variegated very dark gray to dark gray sand, lightly mottled	Negative
73-84	Variegated very dark gray to dark gray sand, lightly mottled, compacted, many small gravels	Negative
SS6		
0-42	Very dark brown sandy loam, small roots	Negative
45-74	Grayish brown very fine silty sand, mottled	Negative
74-85	Variegated very dark gray to dark gray sand, lightly mottled	Negative
SS7		
0-39	Very dark brown sandy loam, small roots	
39-89	Grayish brown very fine silty sand mixed with variegated dark gray sand, small roots	Negative
EG1		
0-19 cm	Topsoil, sandy loam, no gravel, some small roots, dark grey/brown	Negative
19-70 cm	Very dark grey, mottled, very fine sand	Negative
70-80 cm	Variegated, fine sand, very dark grey	Negative
Note: Groundwater encountered		
EG2		
0-16 cm	Top soil, dark grey/brown, sandy loam, some small roots	Negative
16-49 cm	Very dark grey, very fine sand, mottled	Negative
49-68 cm	Dark grey/brown, very fine sand	Negative
Note: Groundwater encountered		

DEPTH BELOW SURFACE (CM)	SOIL DESCRIPTIONS	RESULTS
EG3		
0-12 cm	Top soil, dark grey/brown, some small roots, no gravel, sandy loam, some charcoal	Negative
12-42 cm	Mottled, very dark grey, very fine sand, some charcoal	Negative
42-64 cm	Grey brown loamy sand	Negative
64-76 cm	Fine sand, very dark grey	Negative
Note: Groundwater encountered		
EG4		
0-16 cm	Top soil, sandy loam, small roots	Negative
16-42 cm	Very dark grey/brown, mottled, very fine sand	Negative
42-82 cm	Fine sand, very dark grey	Negative
Note: Groundwater encountered		
EG5		
0-18 cm	Top soil, dark grey/brown, sandy loam, some small roots	Negative
18-47 cm	Very dark grey, very fine sand	Negative
47-102 cm	Light grey, significant gravel, very fine sand, some charcoal	Negative