CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2021-05-02899

Authors: Michael Lorain and Teresa Trost

Title of Report: Archaeological Survey for the Brown Strauss Steel Site Development Project, Woodland, Washington

Date of Report: July 29, 2021

County: Cowlitz Section: 13 Township: 5 North Range: 1 West

Quad: *Deer Island, OR-WA,* 7.5-minute, 2017 Acres: Approx. 24

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 #:

ARCHAEOLOGICAL SURVEY FOR THE

BROWN STRAUSS STEEL SITE DEVELOPMENT PROJECT,

WOODLAND, WASHINGTON

Prepared For
Gibbs & Olson
Longview, Washington

July 29, 2021

REPORT NO. 4633

Archaeological Investigations Northwest, Inc.

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ARCHAEOLOGICAL SURVEY FOR THE BROWN STRAUSS STEEL SITE DEVELOPMENT PROJECT, WOODLAND, WASHINGTON

PROJECT:	Construction of a light industrial steel distribution facility and associated improvements.
TYPE:	Archaeological survey
LOCATION:	Section 13, Township 5 North, Range 1 West, Willamette Meridian
USGS QUAD:	*Deer Island, OR-WA,* 7.5-minute, 2017
CITY:	Woodland
COUNTY:	Cowlitz
PROJECT APE:	Approximately 24 acres
AREA SURVEYED:	Approximately 24 acres
FINDINGS:	• No archaeological resources were identified during survey, and the survey results indicate a low probability for the presence of an archaeological resource within the project area. • AINW recommends no further archaeological investigation is necessary for the project.
PREPARERS:	Michael Lorain, B.A., and Teresa Trost, M.A., R.P.A.

INTRODUCTION

Brown Strauss, Inc., plans to develop their privately owned Lot 6 (adjusted) in the Johnson Short Plat, Woodland, Washington, with a light industrial steel distribution facility, private paved parking and drive aisles, stormwater management facilities, and essential underground utilities. The proposed Brown Strauss Steel Site Development project is subject to the State Environmental Policy Act (SEPA). Consulting parties requested an archaeological survey be conducted. Archaeological Investigations Northwest, Inc. (AINW), was retained by Gibbs & Olson Inc., on behalf of Brown Strauss, Inc., to perform the survey.

The survey was conducted by AINW staff meeting the professional qualifications of the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and was done to Washington State Department of Archaeology and Historic Preservation (DAHP) Standards. The survey consisted of a background records search, a pedestrian survey of the 23.9-acre project area, and excavation of 11 shovel tests within the project area. No evidence of archaeological materials, historic-period buildings or structures, or inhabitable buried surfaces were found during the survey. Based on

these findings, AINW recommends no further archaeological investigations are required for the project and no archaeological monitoring is required during development of the project area.

CONSULTATION

Professional archaeologist Teresa Trost, M.A., R.P.A., attended a meeting hosted by Gibbs & Olson Inc. and attended by members of the Cowlitz Tribe at which the upper soil stratum described in the geotechnical report for the project (Columbia West Engineering 2021) was discussed, as well as the potential for imported fill to be present. The proposed archaeological field survey objectives and methods were presented. The tribal staff members requested they be informed real time of any inadvertent discovery of archaeological material during the survey. The survey date was communicated to the tribal staff by email (Appendix A).

LOCATION AND ENVIRONMENTAL SETTING

The project is located 1.68 kilometers (km) (1.05 miles [mi]) northwest of downtown Woodland in Section 13 of Township 5 North, Range 1 West, Willamette Meridian, in Cowlitz County, Washington (Figure 1). It consists of a 23.9-acre grass-covered field bordered by Port Way to the south, Schurman Way to the west, and railroad tracks to the north and east (Figure 2). The project area is in southwest Washington and within the Puget Trough physiographic province. It is near the convergence of several physiographic provinces, with the Southern Washington Cascades to the east, the Willamette Valley to the south, and the Coast Range to the west. The southern Puget Trough is a broad, low basin situated between the Cascade Range and the Coast Range (Franklin and Dyrness 1973:17). The project area is 6 meters (m) (20 feet [ft]) above sea level, east of the Columbia River. The surface geology of the local area is mapped as Holocene and Pleistocene alluvium, including unconsolidated poorly sorted to well-sorted massive to laminated floodplain deposits. More localized areas may contain fine-grained lacustrine, aeolian, organic-rich marsh deposits, or artificial fill (Evarts 2002). The nearest water is an unnamed tributary to Burris Creek 100 m (330 ft) to the north of the project area. Burris Creek flows into the Columbia River, which is 2.53 km (1.57 mi) to the northeast of the project area. Additional meandering streams are present on the floodplain between the Columbia River and the Lewis River (Clark County 2013), which is 1.32 km (0.82 mi) to the east of the project area.

The project area is within the *Tsuga heterophylla* Zone (Franklin and Dyrness 1973:44-45). This vegetation zone is characterized by subclimax Douglas-fir (*Pseudotsuga menziesii*) and climax western hemlock and western red cedar (*Tsuga heterophylla* and *Thuja plicata*). Other tree species present in this zone in smaller numbers include grand fir (*Abies grandis*), Sitka spruce (*Picea sitchensis*), and western white pine (*Pinus monticola*). Hardwoods such as alder (*Alnus* sp.), bigleaf maple (*Acer macrophyllum*), and oak (*Quercus* sp.) are generally associated with disturbed locations, often following fires or logging (Franklin and Dyrness 1973:201). The historical cadastral survey map (Figure 3) indicates that the project area and close vicinity were "Rich bottom land mostly prairie and subject to inundation from summer floods," but "Timbered along the rivers and sloughs with Balmgilead Ash, Oak, Willows & c [sic]" (GLO 1854). The graphics show that the project area was within a "prairie wetland," likely because of the annual inundation of the prairie by floods (GLO 1854). Native vegetation in the project area has been substantially altered by cultivation, currently for hay production, and other vegetation in the project area largely consists of weeds.

Most of the project area is mapped as Clato silt loam (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA-NRCS] 2000) with Maytown silt loam (USDA-NRCS 2017) present in the northeast corner of the project area. Clato series soils are well drained and form in alluvium deposited on floodplains and low terraces (slope of 0% to 3%) at elevations from 9 to 91 m (30 to 300 ft). Clato soils usually consist of dark brown and yellowish-brown silt loam, and they primarily support hay production, crop production, pasture, and timber production. Maytown series soils are moderately well-drained soils formed in alluvium on flood plains and stream terraces (slope of 0% to 10%) at elevations from 0 to 150 m (492 ft). Maytown soils usually consist of very dark brown, grayish brown, and yellowish-brown silt loam and silty clay loam, and they primarily support hay production, livestock grazing, and crop production. The results of a geotechnical survey indicate a "topsoil" from 0 to as deep as 60 cm (2 ft) overlying Clato or Maytown loams. However, photographs in the report showed that some test pits have a thin dark layer or lens at around 2 m below the surface (Columbia West Engineering 2021).

CULTURAL SETTING

Native Peoples – Precolonial Period

The earliest evidence of human occupation in Western Washington dates to at least 11,000 years before present (B.P.) and was found at sites including the Ayer Pond site (45SJ454) on Orcas Island, the Manis Mastodon site (45CA218) on the Olympic peninsula, and the Bear Creek site (45KI839) in the City of Redmond, King County (Kenady et al. 2011; Kopperl et al. 2015; Waters et al. 2011). However, evidence for ancient occupations in southwest Washington is scant. During the Pleistocene/Holocene transition, the lower Columbia River was affected by numerous glacial outburst floods and rising sea levels, which would have erased or deeply buried any signs of human occupation in low-lying areas near the Columbia River and along the Pacific coast.

In southwest Washington, evidence of human occupation becomes more common during the Archaic Period (11,000 to 5500 B.P.). Commonly found material culture of this period includes large, stemmed projectile points and leaf-shaped bifaces. Archaeological sites found at the end of this period reveal evidence of changing subsistence and mobility strategies. Throughout the Archaic Period, human occupation was highly mobile and utilized a broad spectrum of resources. The end of the Archaic is marked by a reduction in mobility and the beginning of resource specialization (Ames and Maschner 1999).

The Archaic Period was followed by the Pacific Period (5500 to 500 B.P.), which was marked by further specialization of resources, the use of storage technologies, and increasing human populations living in sizeable semi-permanent villages. Specialized tools for fishing, woodworking, and plant processing appear in the archaeological record. Subsistence during this period focused on gathering seasonally abundant resources such as salmon and camas in excess, and then preserving the food for use throughout the year (Ames and Maschner 1999). This collector economic strategy is called the Developed Northwest Coast Pattern, which continued until the beginning of the reservation era in the United States.

In the past, the general area in which the project is located was primarily occupied and used by Sahaptin-speakers of the Cowlitz people and Chinookan-speaking peoples (Hadja 1990:504-505; Ray 1966:A-1–A-2; Part III, C [maps]). By the Pacific Period and at the time that European explorers investigated what is now Oregon and Washington, native people living in the vicinity of the Columbia

River had permanent villages along the river and its tributaries, often at river confluences and on islands. These villages usually consisted of several cedar plank houses that were large enough to accommodate multiple nuclear family units. In the spring, groups would disperse from the village to collect plant and animal resources as they came into season (Ray 1966:B-28–B-30; Silverstein 1990:536-538). Structures at seasonal encampments were typically constructed of a lightweight pole framework covered with mats or bark (Hadja 1990:509; Silverstein 1990:538). Hunting occurred year-round, but the focus on hunting was influenced by the seasonal abundance of other resources. Along the Columbia, fishing occurred primarily during seasonal abundance of migrating fish, such as salmon. In spring to late fall, a wide variety of tubers, berries, reeds, and other plants were collected (Hadja 1990:505-506; Ray 1966:B-28–B-30; Silverstein 1990:536-537).

Colonial Period Settlement and Development

The earliest European Americans to travel through southwest Washington included William Broughton in 1792 and Lewis and Clark in 1805. William Broughton documented a "very large Indian Village" near the mouth of the Lewis River in October of 1792 (Vancouver 1798:756). In November 1805 and March 1806, the Lewis and Clark party would describe the "Quathlapotle" village with 14 large wooden houses around the same general location as described by Broughton. These accounts correspond to the Cathlapotle Village Site (45CL1) located 8.3 km (5.2 mi) south of the project area (Ames et al. 1996). Fur traders working for the North West Company and the Hudson's Bay Company followed these initial explorers, and Fort Vancouver was built during the winter of 1824-1825. As the fort grew to become the headquarters of the Hudson's Bay Company Columbia District, farms, roads, and bridges were established throughout the area to support the enterprise. The first settler in the area was Hudson's Bay Company retiree Adophus Le Lewes, who settled on the Lewis River in 1849 with his brother Frederick and opened the first store in the area on their land claim (Urrutia 1998:43).

The earliest historic-period use of the area is a federal land patent (Land Patent WAOAA 084722 Doc# 186), which encompasses the project area and was issued to Mary Ann Strong and Solomon Strong in 1866 (Bureau of Land Management 1866). The Strong's land claim was next to the Squire Bozarths' frame house, named the "Woodland Farm House," which would provide the name for the town that would later grow there (Urrutia 1998:43). The 1854 GLO map of Township 5 North, Range 1 West shows rudimentary roads or trails, "marshy prairie" land, small streams, and a cultivated field, but no buildings, within 1.6 km (1 mi) of the project area (Figure 3). The GLO survey occurred in the months of April and probably October (GLO 1854). Additional roads are present around the general location of Woodland by 1881, with Guild Road, a road running east-west south of the project area, mapped in its general modern configuration (U.S. Coast and Geodetic Survey 1881).

Twentieth-century aerial photographs show that the project area was pastureland or farmland since at least 1951 (Google Earth 1990, 1994, 2000; U.S. Geological Survey 1951, 1970, 1977), and has likely been farmland since the early homestead era (Figure 4). No evidence that a building ever stood within the project area was found. By 2000, the project area was surrounded by urban/industrial developments, based on the size mass of buildings; by 2003, the project area resembled the current field, in outline and vegetation (Google Earth 1990, 1994, 2000, 2003). Ground disturbance in the general shape of a large pile of sediment found in the southeast corner of the project area occurred between 2000 and 2003. Since 2003, various alignments of a dirt road have gone to, from, over, and around the pile (Google Earth 2005, 2007,

2011, 2013, 2014, 2016, 2020). Schurman Way and Port Way bordering the west and south sides of the project area, respectively, were built between 1994 and 2000.

PREVIOUS CULTURAL RESOURCE STUDIES

A literature search and records review were conducted using DAHP's Washington Information System for Architectural and Archaeological Records Data (WISAARD) online database and AINW's library to determine if archaeological resources have been identified in or near the project area. AINW's research also included a review of previous archaeological studies that have been done in or near the project area. DAHP's statewide predictive model shows the project area as having a very high risk for encountering archaeological resources in the project area. No cultural resources have been recorded within the current project area and no recent (post-1995) cultural resource studies had been completed within the project area prior to this study.

Twelve previous cultural resource studies have been performed within 1.6 km (1 mi) of the project area for the purpose of road improvements (Dellert and Bialas 2015; Dinwiddie et al. 2015; Lloyd-Jones and Fagan 2009, 2010; Tuck et al. 2019), commercial development (Foutch et al. 2009), industrial development (Smith and Gall 2016), church construction (Gall and Smith 2009), storage unit construction (Gauthier and Gall 2019), office building construction (Holschuh and Gall 2012), and high school construction (Moret-Ferguson and Donovan-Boyd 2012). One of the study reports was not available but was cited in the archaeological resource form for historic archaeological site 45CW301 (Gall and Smith 2021). No other archaeological material was identified by these investigations. The surveys nearest the project area, Smith (2016) and Lloyd-Jones (2010), were approximately 244 m (800 ft) to the southeast.

One archaeological resource (45CW301) is recorded within 1.6 km (1 mi) of the project area. It is a historic debris scatter 0.33 km (0.2 mi) south of the project area (Gall and Smith 2021). The site consists of household artifacts embedded in concrete chunks found in sediment at a small residential parcel. The concrete is likely from the foundation of a residence that was built by 1943 (Gall and Smith 2021). Gall and Smith (2021) recommended that the site is not culturally significant. The nearest pre-contact archaeological site to the project area is 45CL1136 which consists of two pieces of lithic debitage found in a single shovel test probe at a depth of 20 cm (7.9 in) below the surface (Mastrangelo and Holschuh 2014). The site is in the uplands above the Lewis River 4 km (2.5 mi) to the southeast of the project area.

SURVEY EXPECTATIONS

The background research indicates a low probability for an archaeological resource to be present within the project area. Prior to urban development, the project area was a "marshy prairie" with meandering streams and was subject to annual flooding events (GLO 1854). These flood events could potentially cap archaeological resources, protecting them in place, or floods and streams could erode archaeological resources. Wetter lands are not conducive to habitation, although apparently a location near the project area could be cultivated, and no specific resource was identified that would draw people to the project area. These environmental characteristics suggest that use of the area prior to the colonial period would have been ephemeral, with evidence of use likely being in the form of dropped objects,

detritus from manufacturing stone tools, and abandoned hearths or roasting ovens. Use of the project area during the colonial period appears to have been only as a field. The placement of the trail or road shown on the 1854 GLO map is suspect, other than at the quadrangle boundaries. Distance from the project area to the hill formation to the northeast and the oxbow of the Lewis River to the southeast do not match the topographic map, which suggests features inside the boundaries were sketched rather than surveyed. Since the advent of the colonial period, the project area appears to have only been used as farmland, which leaves little evidence aside from a plow zone in the sediment profile.

ARCHAEOLOGICAL FIELD SURVEY METHODS AND FINDINGS

The pedestrian survey and shovel testing were carried out on July 1, 2021, by AINW Senior Archaeologist Teresa Trost, M.A., R.P.A, and Staff Archaeologist Michael Lorain, B.A., and on July 2, by Michael Lorain, Rand Michie, B.S., and Shelby Saper, B.A. The project was under the overall supervision of Teresa Trost.

AINW completed a pedestrian survey of the project area by walking transects spaced no more than 15 m (49.2 ft) apart (Figure 2). The project area was a mix of cut and uncut hay grass with greater ground surface visibility (20%) in the cut sections than in the uncut sections (~1%) (Photo 1). Scattered mole holes were the primary opportunity to view the native soil in the uncut sections, which made up roughly 70% to 80% of the project area. There was slightly elevated large pile of soil in the southeast corner of the project area that is surrounded by shallow depressions (Photo 2). The vegetation in the elevated area was different in that there was greater quantity and variety of weeds. The pile of soil and depressions appear to be the result large excavators pushing and digging sediment. The project area overall is mostly flat, and it is a few feet lower in elevation than the surrounding area to the north, south, and west. Scattered modern trash was observed on the surface. No other surface cultural material was observed. No buildings or structures were observed.

Once the pedestrian survey was complete, eleven shovel tests were excavated across the project area (Figure 2; Photos 3 and 4). Shovel tests were 30-centimeter (cm) (12-inch [in]) diameter cylindrical holes dug to a depth of at least 60 cm (24 in) below the ground surface (Table 1). Shovel tests ST-1, ST-6, and ST-11 were excavated deeper using a 6-inch auger to ascertain the origin of a thin, dark layer of sediment visible in photographs of some geotech test pits (Columbia West Engineering 2021). This layer was reached in shovel tests ST-1 and ST-11 and is either not present in ST-6 or is deeper than the auger could reach. Excavated soil was screened using nested 6.4- and 3.2-millimeter (1/4-and 1/8-in) mesh hardware cloth. Once completed, the shovel tests were backfilled, and their locations were plotted using the GPS receiver in a Samsung Galaxy XCover Pro. Information regarding soil stratigraphy, excavation depth, and other field observations were recorded on standardized forms, and photographs were taken of each shovel test and its location.

No archaeological material was identified in the shovel tests. Sediments observed in the shovel tests were somewhat different, mostly in color, than the description of Clato soils. The stratigraphy was roughly consistent across the project area with the most variability in the form of the depth at which transitions between strata occurred. Most of the shovel tests had a dark gray brown slightly sandy silt layer that ranged from the surface to depths of 35 to 60 cm (14 to 24 in) below the surface (Photo 4). The

TABLE 1

RESULTS OF SHOVEL TESTS

Shovel Test No.	Depth of Excavation (cm)	Archaeological Materials
ST-1*	217	No Artifacts
ST-2	70	No Artifacts
ST-3	65	No Artifacts
ST-4	66	No Artifacts
ST-5	68	No Artifacts
ST-6*	206	No Artifacts
ST-7*	100	No Artifacts
ST-8	65	No Artifacts
ST-9	66	No Artifacts
ST-10	64	No Artifacts
ST-11*	275	No Artifacts

*Shovel test were excavated deeper using an auger.

layer was slightly sticky, slightly plastic, contained very fine and fine roots, and usually had less than 1% gravels. This layer is interpreted to represent an agricultural plow zone.

This upper stratum was most often underlaid by a tan and orange mottled silty loam that was present beginning from 35 to 60 cm (14 to 24 in) and continued to depths of 48 to 85 cm (19 to 37 in) below the surface; the boundary between this and the upper layer was abrupt. Below this layer was a light gray sand with 0% to 50% orange mottling, which was present beginning from 48 to 95 cm (19 to 37 in) below the surface to depths of 64 to 206 cm (25 to 81 in) below the surface. Probes were terminated in this stratum in the shallow shovel tests (shovel tests ST-2 through ST-5 and ST-7 through ST-10) and shovel test ST-6. Naturally occurring fine charcoal flecks were rare.

In shovel tests ST-1 and ST-11, the sand stratum was followed by a light gray silty or clayey loam that had 30% to 50% orange mottling and was present beginning from 100 to 178 cm (39 to 70 in) below the surface to depths of 145 to 237 cm (57 to 93 in) below the surface. This layer was followed by a thin, dark gray very fine slightly sandy silt that was present from 145 to 148 cm (57 to 58 in) below the surface in shovel test ST-1, and fine silt 237 to 240 cm (93 to 94 in) below the surface in shovel test ST-11. The sediments were very slightly sticky and very slightly plastic, and contained dispersed, fine to very small, decayed organics in shovel test ST-11. This sediment in shovel test ST-1 broke into granular peds. This layer was underlaid by a layer of light gray silty loam, with 30% to 50% orange mottling, that was present beginning from 148 to 240 cm (58 to 94 in) to depths of 175 to 252 cm (69 to 99 in) below the surface. The basal layer was a gray sand that was present beginning from 175 to 252 cm (69 to 99 in) below the surface to termination, and was wet due to the presence of groundwater.

In addition to the profiles described above, shovel tests ST-3 and ST-7 had a dark gray brown silty sand with 10% sub angular gravels from the surface to depths of 18 to 20 cm (7 to 8 in) below the surface. The gravels were as large as 7 cm (3 in) maximum diameter. Shovel test ST-3 was just 25 m from both Schurman Way and Port Way and had temporally non-diagnostic brick fragments and a short piece of wire in this layer. This is likely associated with road construction. Shovel test ST-7 was located on the mound and the presence of fill was attributed to the mound's creation.

No archaeological material was identified in the shovel tests. Sediments appeared to be native, although affected by plowing. Some imported fill was found on or near the surface in limited areas within the project area. Sediments under the plow zone appear to have been deposited by massive flood events and accretion in a wetland setting.

SUMMARY AND RECOMMENDATIONS

The results of the background research and the field survey indicate a low probability for the presence of an archaeological resource being present in the project area. The deeply buried, thin, dark layer(s) of sediment is indicative of a wetland A horizon and not sediment of anthropogenic origin. This sediment could potentially date to the early Holocene because the overlying sediment appeared to be native. The uppermost stratum appeared to be a plow zone, with some imported fill near roads and in the pile of dirt that dates to the early 2000s. The underlying sediments, except for the wetland A horizon, appeared to be alluvium deposited in massive flood events. The project area was found to only have been used for farmland or fallow field. Additionally, twelve other surveys in the vicinity of the project area identified only one archaeological resource, which was not considered culturally significant.

AINW has completed an archaeological survey consisting of a background records search, a pedestrian survey of the project area, and excavation of eleven shovel tests for the Brown Strauss Steel Site Development project. No evidence of an archaeological resource was found during the survey. No historic-period buildings or structures are present in the project area. Based on these findings, AINW recommends no further archaeological investigations are required for the project and no archaeological monitoring during development of the project area.

REFERENCES

Ames, Kenneth M., William L. Cornett, and Stephen C. Hamilton
1996 *Archaeological Investigations (1991-1995) at 45CL1 (Cathlapotle): Clark County Washington: A Preliminary Report.* Wapato Valley Archaeology Project Report Number 6, Department of Anthropology, Portland State University and US Fish and Wildlife Service.

Ames, Kenneth M., and Herbert D. G. Maschner
1999 *Peoples of the Northwest Coast: Their Archaeology and Prehistory*. Thames & Hudson, New York.

Ames, Kenneth M., and Elizabeth A. Sobel
2013 Houses and Households. In *Chinookan Peoples of the Lower Columbia*, edited by Robert T. Boyd, Kenneth M. Ames, and Tony A. Johnson, pp. 125-145. University of Washington Press, Seattle and London.

Balbas, Andrea M., Aaron M. Barth, Peter U. Clark, Jorie Clark, Marc Caffee, Jim O'Connor, Victor R. Baker, Kevin Konrad, and Bruce Bjornstad
2017 *10Be dating of late Pleistocene megafloods and Cordilleran Ice Sheet retreat in the northwestern United States. Geology* 45(7):583–586.

Bureau of Land Management
1866 *Land Patent for Mary Ann Strong and Solomon Strong*. Electronic document, https://glorecords.blm.gov/details/patent/default.aspx?accession=WAOAA %20%20084722& docClass=SER&sid=islux2fp.gjk, accessed June 29, 2021.

Clark County
2013 *WA Clark LiDAR Project Spring 2013-Reflight*. Electronic database, https://lidarportal.dnr.wa.gov/#45.90824:-122.76299:15, accessed June 29, 2021.

Columbia West Engineering
2021 *Geotechnical Site Investigation Brown Strauss Steel, Woodland, Washington*. Columbia West Engineering, Inc., Vancouver, Washington. Prepared for Gibbs & Olson, Longview, Washington.

Dellert, Jenny, and Catherin Bialas
2015 *Archaeological Monitoring Report for the SR 503/Scott Avenue Intersection Project, City of Woodland, Cowlitz County, Washington*. Historical Research Associates, Portland, Oregon. Submitted to SCJ Alliance Consulting Service, Lacey, Washington.

Dinwiddie, Joshua, Natalie Perrin, and Catherin Bialas
2015 *Cultural Resources Survey for the State Road 503/Scott Avenue Intersection Project, Cowlitz County, Washington*. Historical Research Associates, Portland, Oregon. Submitted to SCJ Alliance Consulting Service, Lacey, Washington.

Evarts, Russell C.
2002 *Geologic Map of the Deer Island quadrangle, Columbia County, Oregon and Cowlitz County, Washington.* U.S. Geological Survey Miscellaneous, Pamphlet to accompany Field Studies Map MF-2392, U.S. Department of the Interior.

Franklin, Jerry F., and C. T. Dyrness
1973 *Natural Vegetation of Oregon and Washington*. Pacific Northwest Forest and Range Experiment Station, U.S. Forest Service, Portland, Oregon.

Foutch, Amy E., Michele Punke, and John L. Fagan
2009 *Archaeological Survey for the Woodland Wal-Mart Facility Project, Cowlitz County, Washington*. Archaeological Investigations Northwest, Inc. Report No. 2381. Prepared for PACLAND, Portland, Oregon.

Gall, Alexander, and Mike Smith
2009 *Archaeological Survey for the Woodland Old Apostolic Lutheran Church project (Parcel #508540101), Woodland, WA*. Archaeological Services of Clark County, LLC Survey Report No. 09581. Prepared for HFI Consultants, Battle Ground, Washington.
2021 Site form for 45CW301. On file, Department of Archaeology and Historic Preservation, Olympia, Washington.

Gauthier, Brendan, and Alexander Gall

2019 *Section 106 Cultural Resources Survey of the Burris Creek Mini Storage Expansion project area, Cowlitz County, Washington.* Archaeological Services, LLC Report No. 19888. Prepared for Loowit Consulting Group, Castle Rock, Washington.

General Land Office (GLO)

1854 *Plat of Township No. 5 North, Range No. 1 West, Willamette Meridian*. Electronic document, https://www.blm.gov/or/landrecords/survey/yPlatView1_2.php?path=PWA&name=t050n010w_001.jpg, accessed June 29, 2021.

Google Earth

1990 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date July 14, 1990. Image U.S. Geological Survey.

1994 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date August 9, 1994. Image U.S. Geological Survey.

2000 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date July 23, 2000. Image U.S. Geological Survey.

2003 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date June 2, 2003. Image USDA Farm Service Agency.

2005 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date June 29, 2005. Image USDA Farm Service Agency.

2007 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date May 6, 2007. Image USDA Farm Service Agency and 2021 Maxar Technologies.

2011 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date August 1, 2011. Image USDA Farm Service Agency.

2013 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date July 22, 2013. Image Landsat / Copernicus.

2014 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date July 14, 2014. Image Landsat / Copernicus.

2016 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date July 23, 2016. Image Landsat / Copernicus.

2020 Aerial photo at latitude of 45.917953 and longitude of -122.759665, vicinity of Woodland, Washington. Imagery date August 13, 2020. Image Landsat / Copernicus.

Hajda, Yvonne P.

1990 Southwestern Coast Salish. In *Northwest Coast*, edited by Wayne Suttles, pp. 503-517. Handbook of North American Indians, Vol. 7, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Holschuh, Dana, and Alexander Gall

2012 *Cultural Resources Survey of the HCT Properties and Equipment project area, Cowlitz County, Washington*. Archaeological Services of Clark County, LLC Report No. 12747. Prepared for HCT Properties & Equipment, LLC, Brush Prairie, Washington.

Kenady, Stephen M., Michael C. Wilson, Randall F. Schalk, and Robert R. Mierendorf
2011 Late Pleistocene butchered *Bison antiquus* from Ayer Pond, Orcas Island, Pacific Northwest: Age confirmation and taphonomy. *Quaternary International* 233(2):130-141.

Kopperl, Robert E., Amanda K. Taylor, Christian J. Miss, Kenneth M. Ames, and Charles M. Hodges
2015 The Bear Creek Site (45KI839), a Late Pleistocene-Holocene Transition Occupation in the Puget Sound Lowland, King County, Washington. *PaleoAmerica* 1(1):116-120.

Lloyd-Jones, Jeff, and John Fagan
2009 *Archaeological Survey of the Washington State Department of Transportation Right-of-Way at Dike Access Road, Cowlitz County, Washington*. Archaeological Investigations Northwest, Inc. Report No. 2367. Prepared for PACLAND, Portland, Oregon.
2010 *Archaeological Survey for the Port of Woodland Guild Road Improvement Project, Cowlitz County, Washington*. Archaeological Investigations Northwest, Inc. Report No. 2459. Prepared for Port of Woodland, Woodland, Washington.

Mastrangelo, Liz, and Dana L. Holschuh
2014 Site form for 45CL1136. On file, Department of Archaeology and Historic Preservation, Olympia, Washington.

Moret-Ferguson, Celia, and Adrienne Donovan-Boyd
2012 *Cultural Resources Assessment for the Future Woodland High School, Cowlitz County, Washington.* SWCA Cultural Resources Report No. 12-317. Prepared for Woodland School District, Vancouver, Washington.

O'Connor, Jim E., Victor R. Baker, Richard B. Waitt, Larry N. Smith, Charles M. Cannon, David L. George, Roger P. Denlinger
2020 The Missoula and Bonneville floods—A review of ice-age megafloods in the Columbia River basin. *Earth Science Reviews* No. 208 (2020). Available, https://www.sciencedirect.com/science/article/pii/S0012825220302270?via%3Dihub, accessed June 29, 2021.

Ray, Verne F.
1938 Lower Chinook Ethnographic Notes. *University of Washington Publications in Anthropology* 7(2):29-165.
1966 *Handbook of Cowlitz Indians*. Northwest Copy Company, Seattle, Washington.

Ruby, Robert H., John A. Brown, and Cary C. Collins
2010 *A Guide to the Indian Tribes of the Pacific Northwest: Third Edition*. University of Oklahoma Press, Norman.

Silverstein, Michael
1990 Chinookans of the Lower Columbia. In *Northwest Coast*, edited by Wayne Suttles, pp. 533-546. Handbook of North American Indians, Vol. 7, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Smith, Michael, and Alexander Gall
2016 *Cultural Resource Survey of the Guild Road Industrial Park project area, Port of Woodland, Cowlitz County, Washington*. Archaeological Services, LLC Report No. 16346. Prepared for Ecological Land Services, Inc., Longview, Washington.

Tuck, Janna, Josh Dinwiddie, Cathy Bialas, and Emily Ragsdale
2019 *Archaeological Survey for the Howard Way Extension and Guild Road Widening Project, Cowlitz County, Washington*. Historical Research Associates, Portland, Oregon. Submitted to Gibbs & Olson, Inc., Longview, Washington.

Urrutia, Virginia
1998 *They Came to Six Rivers: The Story of Cowlitz County.* Cowlitz County Historical Society, Kelso, Washington.

U.S. Coast and Geodetic Survey
1881 *Columbia River Sheet No.5, Kalama to Fales Landing.* Electronic map, https://historicalcharts.noaa.gov/image=cp1999c, accessed July 7, 2021.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS)
2000 *Clato Series*. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLATO.html, accessed June 29, 2021.
2017 *Maytown Series.* Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MAYTOWN.html, accessed June 29, 2021.

U.S. Geological Survey (USGS)
1922 *St. Helens, Oreg.* 15-minute map. Electronic document, https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=b47e51b7961d2893a5707de8c9b87165, accessed June 29, 2021.
1941 *St. Helens, Oreg.* 15-minute map. Electronic document, https://ngmdb.usgs.gov/ht-bin/tv_browse.pl?id=dcfb237f5c93d081fe3a5ccee1fac2f2, accessed June 29, 2021.
1951 Aerial photograph of Woodland, Washington. Photo ID: 1QP0000030075. EarthExplorer. Electronic user interface, https://earthexplorer.usgs.gov/, accessed June 29, 2021.
1970 Aerial photograph of Woodland, Washington. Photo ID: 1VCOA00010223. EarthExplorer. Electronic user interface, https://earthexplorer.usgs.gov/, accessed June 29, 2021.
1977 Aerial photograph of Woodland, Washington. Photo ID: 1VEMJ00010002. EarthExplorer. Electronic user interface, https://earthexplorer.usgs.gov/, accessed June 29, 2021.

Vancouver, George
1798 *A Voyage of Discovery of the North Pacific Ocean and Round the World*. Volume II. G.G. and J. Robinson, London.

Waters, Michael R., Thomas W. Stafford, Jr., H. Gregory McDonald, Carl Gustafson, Morten Rasmussen, Enrico Cappellini, Jesper V. Olsen, Damian Szklarczyk, Lars Juhl Jensen, M. Thomas P. Gilbert, and Eske Willerslev
2011 Pre-Clovis Mastodon Hunting 13,800 Years Ago at the Manis Site, Washington. *Science* 334: 351-353.

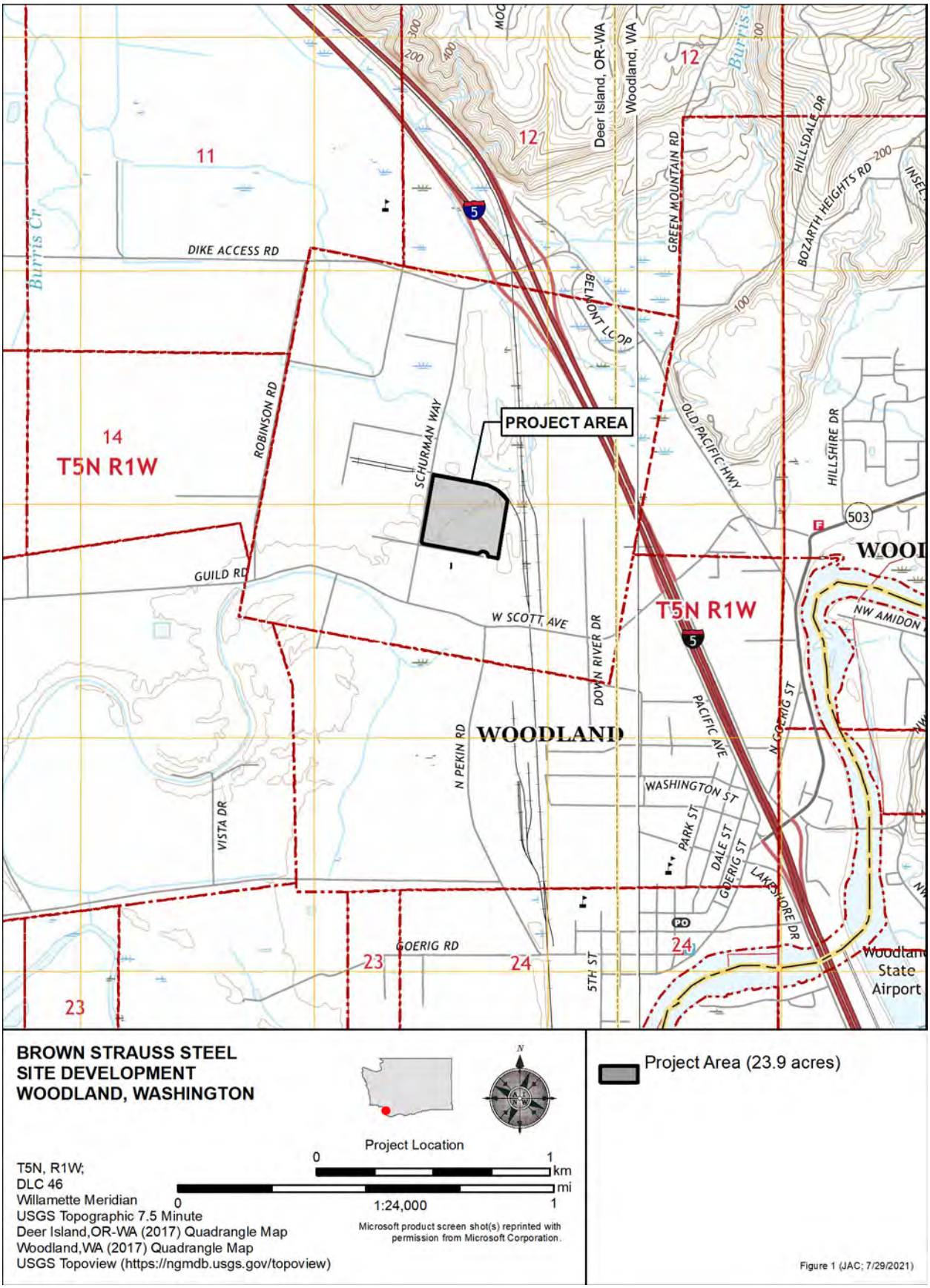

Figure 1. Location of the Brown Strauss Steel Site Development project, in Woodland, Cowlitz County, Washington.

Figure 2. Location of pedestrian transects, shovel tests, and previously excavated geotechnical test pits and cone penetration tests at the Brown Strauss Steel Site Development project.

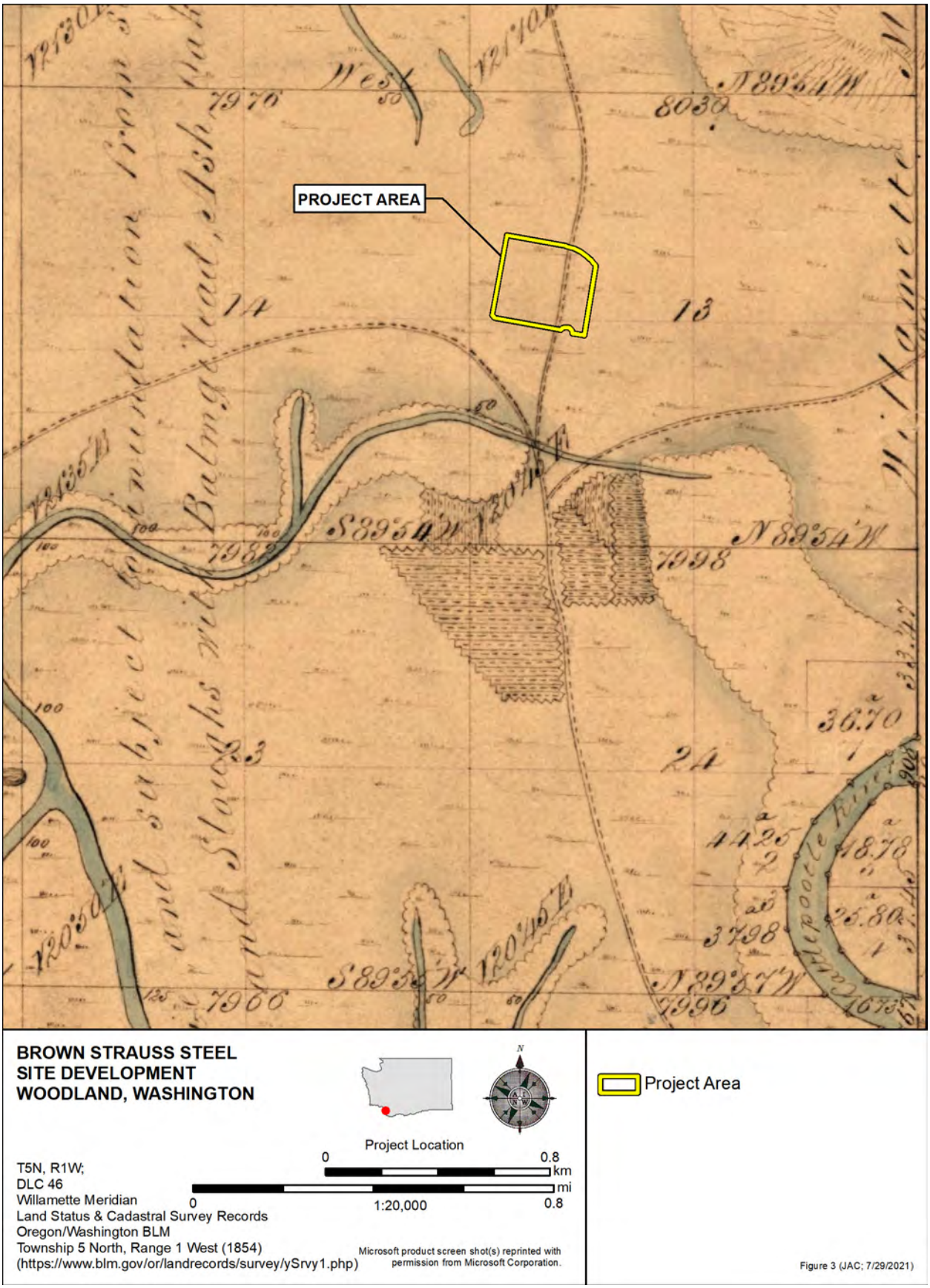

Figure 3. The Brown Strauss Steel Site Development project location overlaid on the 1854 General Land Office map of Township 5 North, Range 1 West, Willamette Meridian.

Figure 4. A 1951 aerial map of where the Brown Strauss Steel Site Development project area is located.

Photo 1. Overview of the central portion of the project APE. The view is towards the north.

Photo 2. Overview of the pile of soil in the southeast corner of the project APE. The view is towards the east.

Photo 3. Overview of shovel test ST-1. The view is towards the south.

Photo 4. The typical stratigraphic profile for the project area (ST-2). Note the abrupt transitions from the dark gray brown slightly sandy silt to the tan and orange mottled silty loam at 35 cm (14 in), and to the gray sand at 52 cm (20 in).

APPENDIX

NOTICE OF SURVEY EMAIL

Teresa Trost

From: Teresa Trost
Sent: Monday, June 28, 2021 9:31 AM
To: permitreview@cowlitz.org; jwalker@cowlitz.org; James Gordon
Cc: Rich Gushman
Subject: Archaeological Survey in Woodland

Good morning,

Hope everyone is surviving the heat. We are planning to be at the site 7:30 AM Thursday July 1st. Work will probably start at the same time Friday.

Best regards,

Teresa Trost, M.A. | **AINW** PM/Senior Archaeologist
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