CULTURAL RESOURCES REPORT COVER SHEET

Author: Cam Walker and Holly Borth

Title of Report: Cultural Resource Survey for the East Port Regional Forcemain Project, Cowlitz County, Washington

Date of Report: October 14, 2014

County(ies): Cowlitz Section: 6 Township: 6 North Range: 1 West

Quad: *Kalama, WA-OR,* 7.5-minute, 1990 Acres: Approximately 3 acres

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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CULTURAL RESOURCE SURVEY FOR THE EAST PORT REGIONAL FORCEMAIN PROJECT, COWLITZ COUNTY, WASHINGTON

Prepared for
Port of Kalama
Kalama, Washington

October 14, 2014

REPORT NO. 3350

Archaeological Investigations Northwest, Inc.
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CULTURAL RESOURCE SURVEY FOR THE EAST PORT REGIONAL FORCEMAIN PROJECT, COWLITZ COUNTY, WASHINGTON

PROJECT: Placement of a sewer line extension

TYPE: Cultural resource survey

LOCATION: Section 6, Township 6 North, Range 1 West, Willamette Meridian

USGS QUAD: *Kalama, WA-OR,* 7.5-minute, 1990

COUNTY: Cowlitz

PROJECT AREA: Approximately 3 acres

AREA SURVEYED: Approximately 3 acres

FINDINGS: "No Historic Properties Affected"

Archaeological Resources:
- No archaeological resources were identified.

Historic Resources:
- One historic-period resource, the Meeker Drive Bridge, is in the project area surveyed by AINW (project area). The bridge is recommended to be not eligible for listing in the National Register of Historic Places.

PREPARERS: Cam Walker, Ph.D., and Holly Borth, M.A.

INTRODUCTION

The Port of Kalama has proposed to construct a sewer line extension between Haydu Park and an existing City of Kalama pump station in Cowlitz County, Washington (Figure 1). Archaeological Investigations Northwest, Inc. (AINW), was contracted by the Port of Kalama to assess the effects of the sewer line extension. The proposed sewer line extends approximately 3 kilometers (km) (1.9 miles [mi]) along Meeker Drive and Kalama River Road. The project area surveyed by AINW is along Meeker Drive, 151 meters (m) (500 feet [ft]) to the north and south of the Kalama River, with a maximum width of 12 m (40 ft) beyond the edge of both sides of Meeker Drive (Figure 2). The proposed project will result in the new forcemain crossing the Kalama River, by being affixed to the historic-period Meeker Drive Bridge.

The cultural resource study was done to address Section 106 of the National Historic Preservation Act and its implementing regulations for review by the U.S. Army Corps of Engineers (Corps). The areal extent of the project requiring a Corps permit is not defined, but is expected to be near the Kalama River. All work was conducted to meet the Secretary of Interior's Standards and Guidelines in Historic Preservation, the standards of the Washington State Department of Archaeology and Historic Preservation (DAHP). The study was performed

by AINW professional staff meeting the professional qualifications standards of the Secretary of Interior's Standards and Guidelines in Historic Preservation.

AINW undertook a pedestrian survey and excavated five shovel tests within the project area, and completed a historic resource form to document the historic Meeker Drive Bridge, which is within the project area. The Meeker Drive Bridge is recommended to be not eligible for listing in the National Register of Historic Places (NRHP). No archaeological resources were identified by the pedestrian survey and shovel testing. Although archaeological site 45CW127 boundary is nearby, it does not extend into the project area. Therefore, AINW recommends a finding of "No Historic Properties Affected" for the East Port Regional Forcemain project.

ENVIRONMENTAL SETTING

The project area is situated in Section 6 of Township 6 North, Range 1 West, Willamette Meridian (Figure 1). This area, stretching between the Coast Range to the west and the Cascade Mountains to the east, is in the Puget Trough physiographic province (Franklin and Dyrness 1973). The basin-shaped region was produced through a series of glaciations and the Missoula Floods, which began sometime after 19,010 years before present (B.P.) (Allen et al. 2009; Benito and O'Connor 2003; Orr and Orr 1996).

Due to a hydraulic dam (flow constriction) in the Columbia River at present-day Kalama during the Missoula Flood events, temporary ponding north and south of Portland, Oregon, occurred. This created glacial Lake Allison, which flooded the Willamette Valley until the flow constriction eased (Allen et al. 2009). Although the landform on which the project is situated was likely inundated as it is approximately 3 m (10 ft) above sea level (ASL), the floods did not reach much farther inland at this point. The maximum height of floodwaters in Kalama during the Missoula Floods is estimated at 121 m (400 ft) ASL (Allen et al. 1986, 2009).

Regional soil surveys that include the project area show the soils present are from the Pilchuk Series (north of the Kalama River), Clato Series (south bank of the Kalama River), and the Newberg series (south of the Kalama River). The Pilchuk series is a very deep, excessively drained sandy loam formed in sandy and gravelly alluvium formed on floodplains (U.S. Department of Agriculture, Natural Resources Conservation Service [USDA-NRCS] 2006a). The Clato series is a dark yellowish brown silt loam, very deep and well-drained, developed in alluvium from basic volcanic and sedimentary rocks. It is typically found on floodplains and low terraces (USDA-NRCS 2000). Finally, the Newberg series is found 75 to 100 m (247.5 to 330 ft) south of the Meeker Drive Bridge, and beyond. It is comprised of fine sandy loam, formed in loamy and sandy alluvium from sedimentary and igneous rocks. The series is very deep and excessively drained (USDA-NRCS 2006b).

The Kalama River subbasin drains approximately 205 square miles in Cowlitz County, before emptying into the Columbia River at River Mile 73. The river itself is undammed, and has several populations of anadromous species, including Chinook, chum, and coho salmon, steelhead, and Pacific lamprey. Nearly the entire basin is forested, and 96% of the land area is managed for timber production. A portion of the basin is located within the Mount St. Helens National Volcanic Monument, which is the source of the Kalama River. The only urban area in the basin is the town of Kalama, which had a population of 5,300 persons in the year 2000 (Northwest Power and Conservation Council 2004).

The vegetation within the project area has been anthropogenically influenced, although the area is within the *Tsuga heterophylla* zone. Typically, this entails an overstory of Douglas-fir (*Pseudotsuga menziesii*), western hemlock (*Tsuga heterophylla*), and western redcedar (*Thuja*

plicata) (Franklin and Dyrness 1973). Although Douglas-fir trees and an occasional western hemlock were seen adjacent to the project area, the dominant overstory was of bigleaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*). The understory was comprised of mixed grasses and invasive vegetation, including Himalayan blackberry (*Rubus armeniacus*), and occasional Russian globe thistle (*Echinops exaltatus*).

CULTURAL SETTING

Native Peoples – Pre-Contact Period

Researchers are continuing to seek ways to more fully understand the timing and means by which the first human occupation of North America was achieved. There are a limited number of archaeological sites dating to the Paleoindian occupation of Washington, which are mainly isolated discoveries of fluted Clovis-style projectile points, and two sites with extinct megafauna.

Clovis technology commonly associated with North American archaeological sites date from 13,500 to 13,000 years B.P. The earlier Manis site, dated 13,860 to 13,763 B.P., contained a mastodon skeleton with a bone point embedded in a rib, along with butchery marks and stone artifacts (Haynes 1991; Waters et al. 2011). The Ayer Pond site (45SJ454), a bison kill site on Orcas Island, is dated to approximately 11,990 B.P. (Kenady et al. 2010). Additionally, lithic artifacts found beneath a peat deposit from 40 to 50 centimeters (cm) (16 to 20 inches [in]) below the surface in one excavation unit at Bear Creek (45KI839) were dated to approximately 10,000 B.P. (Kopperl et al. 2010). Based on findings at other Paleoindian sites in the region, these people were likely mobile big game hunters, who placed considerable reliance on large prey including mastodons (*Mammut sp.*) and mammoths (*Mammuthus sp.*), while varying their diet with wild plants and small game (Ames and Maschner 1999).

The project area is within a geologically active region. The Columbia River has changed flow and course numerous times in response to rising Holocene sea levels and other events. These factors likely produced episodes of inundation that may have erased or deeply buried low-lying areas within the Portland Basin. Therefore, evidence of human occupation prior to 3,500 years ago is often hidden at lower elevations (Davis and Ames 1994).

Early archaeological sites in the Portland Basin suggest a reliance on fishing and other aquatic resources in the lower valleys and foothills, while the hunting and gathering of terrestrial resources was the focus in the uplands (Ames 1994; Ames and Maschner 1999; Pettigrew 1990). The Late Archaic Portland Basin archaeology has been described in two distinct cultural phases by Pettigrew (1990): The Merrybell and Multnomah Phases. The Merrybell Phase encompasses the time span 600 B.C. to 200 A.D., and is followed by the Multnomah Phase, which ended with large-scale European settlement and widespread epidemics that had substantially altered the lifeways of Native populations in the early and middle 1800s. Settlement and subsistence patterns have remained consistent during the past few thousand years, prior to the introduction of diseases, as subsistence has been focused on fish for food and trade, supplemented with gathering and hunting, also for food and trade (Ames 1994).

Native Peoples – Contact Period

The traditional territories of the Cowlitz people and Chinookan-speaking peoples overlap in the area of the project area. While distinctly differing in language and culture, they shared similar subsistence resources, although Chinookan-speaking peoples lived primarily along the

Columbia River and focused on fish and other riverine resources, while the Cowlitz primarily lived on the uplands, basing their subsistence on hunting and gathering. The lower Cowlitz peoples, whose territory overlaps the project area, spoke a Coast Salish language, while the upper Cowlitz conversed in a Sahaptin language, similar to dialects spoken by Columbia Plateau peoples. By the mid-nineteenth century, however, the upper Cowlitz bands had been absorbed into the lower Cowlitz (Hajda 1984; 1990).

The lower Cowlitz settled in winter villages along major waterways. Cedar plank houses were occupied by several nuclear family groups; and villages were made up of one to several small houses (Hajda 1990). Seasonal camps were established along streams and within prairies where abundant resources could be hunted and gathered at different times of the year. In warmer seasons, people were sheltered by temporary pole frame structures. Salmon was an important food resource, and the beginning of the annual salmon runs on the Cowlitz River was celebrated by the first salmon ceremony. Trout, eulachon, sturgeon, game of all sizes, roots, shoots, and berries were also part of the diet (Hajda 1990).

Ethnographic accounts indicate that Chinookan speakers occupied temporary structures in the summers with light framework and cattail sides, and cedar bark roofs. In winter, large cedar plank houses, some with gabled roofs, were commonly sighted. Subsistence was based on salmon and other seasonal fish runs, including steelhead, sturgeon, and eulachon. Hunting and gathering were also practiced, and in the event of surplus, provided the impetus for trade with surrounding groups (Silverstein 1990).

The Native Americans of the Pacific Northwest had their lifeways dramatically altered by Euroamerican settlement within their traditional lands. The introduction of epidemic diseases such as malaria, influenza, and smallpox severely reduced Native American populations. During the 1770s, a smallpox epidemic spread along the Columbia River as far inland as the Vancouver area. This epidemic may have originated from contact with Spanish explorers along the Washington coast. During 1801, another wave of smallpox arrived, this time from the east, resulting in the loss of one-third of the human population along the Columbia River (Boyd 1985). Another major epidemic also occurred in the 1830s. Once numbering in the thousands, by 1841 the Chinookan speakers in the Columbia River valley had experienced a nearly 90% decline in population from the estimates first provided by Lewis and Clark in 1805-1806 (Boyd 1990).

Historic Background

The project area is outside the town of Kalama, Washington, which was named after John Kalama, a Hawaiian immigrant. He is also the namesake of the Kalama River, north of the town. The town is inextricably linked to the Northern Pacific Railroad (NPR), which began construction of the rails and a townsite in 1871 after NPR engineers had determined it suitable for a port after considering the channel depth of the Columbia River, and that winter ice rarely reached Kalama (Kalama Chamber of Commerce 2011). Eventually, Tacoma was chosen as the NPR western terminus. Track was laid from Kalama to Tacoma, with the first regular rail service beginning in 1874 (Asay 1991; Kalama Chamber of Commerce 2011). A passenger ferry, the Tacoma, operated to transport people and goods between Kalama and Goble, Oregon, from 1884 to 1908, until a completed railroad bridge between Vancouver and Portland made the ferry obsolete. Kalama was the Cowlitz County seat until it was moved to Kelso in 1922 (Kalama Chamber of Commerce 2011). The deepwater port and ready access to rail and wheeled transportation has continued to drive the economy of the city into the present day.

A review of General Land Office (GLO) maps including the area showed that the Kalama River has changed course, and previous land use may have been limited to agriculture. The

1857 GLO map of Township 6 North, Range 1 West, showed the Kalama River flowing in an oxbow to the south in the NW ¼ of Section 6, which holds the area. Additionally, in the SW ¼ of Section is a waterbody called Hensils Lake that no longer exists (GLO 1857). Hensils Lake is also present in the 1863 GLO map of the area, although the oxbow of the Kalama River is not shown, possibly indicating the Kalama River had changed course by that point, to more approximate its current alignment (GLO 1863). The majority of the project area north of the Kalama River was then owned by Joseph Dray (Donation Land Claim [DLC] No. 40; 192.30 acres) and Calvin Dray (DLC No. 41; 264.41 acres) (GLO 1863). By 1865, Calvin Dray had increased his holdings to 322.64 acres, and Joseph Dray to 317.26 acres (GLO 1887). Also holding land within the area was James Rockey, just to the south of the Drays. His DLC (No. 38) was for 321.80 acres (GLO 1863). By 1901, Rockey's landholdings had decreased to 159.98 acres, and the Kalama River is shown in approximately its current alignment. What appeared as unclaimed land to the west and south of Rockey was now owned by Smith Hensill, presumably the namesake of "Hensil" [*sic*] Lake, now absent (GLO 1901). Land to the east is described as "Broken and Mountainous, Unfit for Cultivation" (GLO 1901), and appears unsettled and only mapped in a rudimentary fashion until at least 1901 (GLO 1901). The land within the project area appears to have changed hands a number of times over the years. A 21-m (70-ft) easement for utilities and Meeker Drive has been in place at least since the 1952. Currently, Camp Kalama RV Park and Campground is just to the east of the project area.

PREVIOUS CULTURAL RESOURCE STUDIES

AINW conducted a records review of previous cultural resource studies completed near the project area using the Washington Information System for Architectural and Archaeological Records Data (WISAARD) online database and the AINW library. Supplemental research with GLO and other historic maps at AINW was also conducted.

Just to the east of the current project area is prehistoric archaeological site 45CW127. Recorded in 1953, the site was described as having artifacts such as net weights, a pestle, and a point that were found during land clearing and plowing for agricultural purposes. No artifacts were collected at the time of recording. The site was recommended for testing (Munsell 1953). However, the boundary is inexact, and only a rough sketch map was produced at the time of recording. Despite its proximity, archaeological materials from the site were not found by this project.

Two other sites were recorded in the project vicinity along the Kalama River, to the west of the project area, 45CW4 and 45CW5. Archaeological site 45CW4 is situated on the north bank of the Kalama River, at its confluence with the Columbia River, approximately 2 km (1.25 mi) west of the project area. Six test excavations were dug, but no artifacts were found, despite surface artifacts being identified (Smith and Hudziak 1948a). Site 45CW5 is described as the location of a permanent village on the south bank of the Kalama River approximately 300 m (1,000 ft) west of the project area. Although no artifacts were found at the location, it had been named in the literature by early ethnographers (Smith and Hudziak 1948b).

Approximately 0.8 km (0.5 mi) east of the project area along the north bank of the Kalama River is site 45CW11, exact location unknown. A map is not included on the original site form, and the site was never formally tested, although 60 arrow points, scrapers, knives, and two stone beads were found in a meadow along the north bank of the Kalama River (Warren and Eng 1955). The property owner previously reported that his son had found more than 200 projectile points in a pit he dug (Ozbun 2008).

A cultural resource survey was undertaken for the City of Kalama's Proposed Water Filtration Plant about 250 m (825 ft) northeast of the current project area. A pedestrian survey was undertaken and four auger probes were excavated. No artifacts were found (Musil 2000).

In 2010, eight acres divided amidst two parcels owned by the Port of Kalama were surveyed approximately 1.6 km (1 mi) northeast of the project area for the proposed project. Both parcels were shovel tested. A historic-period archaeological site was identified at one of the two parcels by the shovel testing. The historic-period artifacts appeared to be associated with a former house and privy on the parcel, and the site (45CW232) was recommended to be not eligible for listing in the NRHP (Hambelton and Ozbun 2011).

Approximately 2.4 km (1.5 mi) east of the project area, AINW undertook a 49-acre cultural resource survey for the Haydu Property Development project. A pedestrian survey, shovel, and auger testing, along with archival research was done. No archaeological resources were identified, although several historic-period farm buildings were recorded. None of these was recommended eligible for inclusion in the NRHP (Sharma et al. 2007).

HISTORIC RESOURCE SURVEY

A single historic resource is within the area, the 1952 Meeker Drive Bridge (also known as the Kalama River Bridge). In 1969, the steel structure was moved from U.S. Route 99 approximately 45 m (150 ft) upstream to accommodate growing traffic concerns for the new Interstate 5 (I-5) highway construction project (Washington State Highway Commission 1969).

The Meeker Drive Bridge consists of the original riveted steel Warren through-truss span on a newer concrete substructure (Photo 1) (State of Washington Department of Highways 1952). The riveted steel truss was constructed with steel stringers and lower lateral bracing along the bottom. The top chord has upper lateral bracing that connects over the seven verticals evenly spaced between the alternating diagonals, with each pair of opposing verticals and both end posts connected by a sway strut and frame. The bridge sits upon a substructure of four poured concrete flat panel piers and one set of round section piers placed on concrete or steel piles, built in 1971. The remaining three spans were also constructed in 1971, consisting of pre-cast concrete girders with cast-in-place concrete decks 8.5 m (28 ft) wide. The original picket fence steel handrails are set on the raised curb of the east and west elevations and stretch the length of the 1952 truss, terminating at modern three beam rails on the north and south approach spans.

Moving the steel truss from U.S. Route 99 and adding new approach spans and substructure significantly reduced its association with significant patterns of history regarding transportation and roadways (Criterion A). The bridge has no known associations to significant people of the past (Criterion B), nor is it a distinctive or representative example of a type, period, or method of construction (Criterion C). The bridge has received significant modifications to its original design and lacks historical integrity (Criterion D). Therefore, it does not meet eligibility criteria for listing in the NRHP.

Modifications to the location and plan of the bridge detract from its historical appearance and resulted in a diminished integrity of setting, location, materials, design, workmanship, feeling, and association. The steel Warren through-truss with verticals is the only known historically intact component remaining from the original 1952 bridge. Therefore, AINW recommends the 1952 Meeker Drive Bridge to be not eligible for listing in the NRHP.

Currently, utility conduits are hung on the west side of the bridge. The project proposes to install utilities on the east elevation of the bridge (Photo 2). Since the bridge is recommended to be not eligible for listing in the NRHP, this action will result in no effects to a historic property. AINW recommends a finding of "No Historic Properties Affected" for historic resources. A historic resource form is attached to this report as an Appendix.

ARCHAEOLOGICAL FIELD SURVEY METHODS AND FINDINGS

Archaeological pedestrian survey and shovel testing was done by AINW archaeologists Lea Loiselle, B.A., and Emily Taber, B.A., under the field supervision of Cam Walker, Ph.D. The fieldwork was undertaken September 9, 2014. This project was conducted under the oversight of AINW project manager, Terry L. Ozbun, M.A., R.P.A.

The pedestrian survey was conducted within the project area using transects spaced at approximately 3-m (10-ft) intervals or less (Figure 2). Mineral soil visibility within the project area was variable, with 100% along the floodplain and riverbank on both sides of the Kalama River, but 15 to 20% along the roadway, where mixed grasses and invasive vegetation, such as blackberries and horsetail were predominant. Underground utilities had also been marked, and were present on both the west and east sides of Meeker Drive. Additionally, a chain link fence was present just outside the western road prism of Meeker Drive, serving to separate it from the road prism and shoulder of I-5 (Photos 3 through 6).

To augment the pedestrian survey, five shovel tests (Table 1) were placed at selected points in the project area where intact deposits were expected, and where ground disturbance for the proposed project is slated to take place. Areas directly adjacent to Meeker Drive, previously disturbed areas, and portions of the project area that exhibited obvious modern anthropogenic impacts were avoided during shovel testing.

The shovel tests were 30 cm (12 in) in diameter, and at least 50 cm (20 in) deep. The sediment excavated from the shovel tests was sifted through nested 6.4- and 3.2-millimeter (¼- and ⅛-in) mesh hardware cloth. Locations of the shovel tests were mapped using a Trimble GeoExplorer XH GPS unit. All of the shovel tests were immediately backfilled following excavation.

TABLE 1

SUMMARY OF SHOVEL TESTING

SHOVEL TEST NUMBER	ENDING DEPTH (cm)	ARTIFACTS
ST-1	53	--
ST-2	55	--
ST-3	54	--
ST-4	50	--
ST-5	53	--

The shovel tests held sediments that largely conformed to the soils mapped for the region. North of the Kalama River, the shovel tests held sandy loam near to the river, where the soil profile appeared to have been truncated by bridge construction (ST-1 and 2). The sand at the surface showed little, if any evidence for soil formation, with a near complete lack of an O or A horizon, and few organics present. An abrupt transition to sandy clay occurred below 35 cm (14 in) in depth. By contrast, ST-3, further from the bridge, held what appeared to be a complete soil profile, with a medium gray silt loam and a definitive layer of organics, before transitioning to silty sand below 15 cm (6 in) in depth (Photos 7 and 8). The silty sand transitioned to gray-brown sand below 35 cm (14 in) deep. It appeared that ST-1 and ST-2 were in areas that had approximately 30 cm (12 in) of surface sediment previously removed, as gray-brown sand was the first sediment encountered. This soil stripping was likely due to bridge construction in 1971.

Although attempts were made to find undisturbed soil, it quickly became apparent that both ST-4 (north of the bridge) and ST-5 (south of the bridge) were in fill sediments. Nearly the entire project area was in the road prism or had been previously excavated for the placement of underground utilities.

No archaeological materials were found by the pedestrian survey or shovel testing. The extensive land disturbance associated with the construction of Meeker Drive, ongoing mowing and spraying, and the placement of underground utilities on both sides of the road drastically limit the possibility of intact archaeological materials or deposits being found within the project area.

SUMMARY AND RECOMMENDATIONS

AINW has completed a cultural resource survey for the East Port Regional Forcemain project in Cowlitz County, Washington. The project area was archaeologically surveyed utilizing pedestrian transects and five shovel tests. A single historic-period structure, the Meeker Drive Bridge, was present in the project area, and recorded. AINW recommends that the bridge is not eligible for listing in the NRHP.

No archaeological materials were found by the pedestrian survey and shovel testing. Much of the project area had been previously disturbed by road construction, underground utility placement, and bridge construction. As a result, AINW recommends no further cultural resources work, and a finding of “No Historic Properties Affected” for the project.

If archaeological resources are encountered during construction of the East Port Regional Forcemain project, all ground-disturbing activity near the find should be halted. The DAHP should then be promptly notified to ensure compliance with relevant state and federal laws and regulations. Should evidence of burials be identified, all ground-disturbing activity in the vicinity should be immediately halted, and the DAHP, the Cowlitz County Sheriff’s Office, and the appropriate Tribes should be notified.

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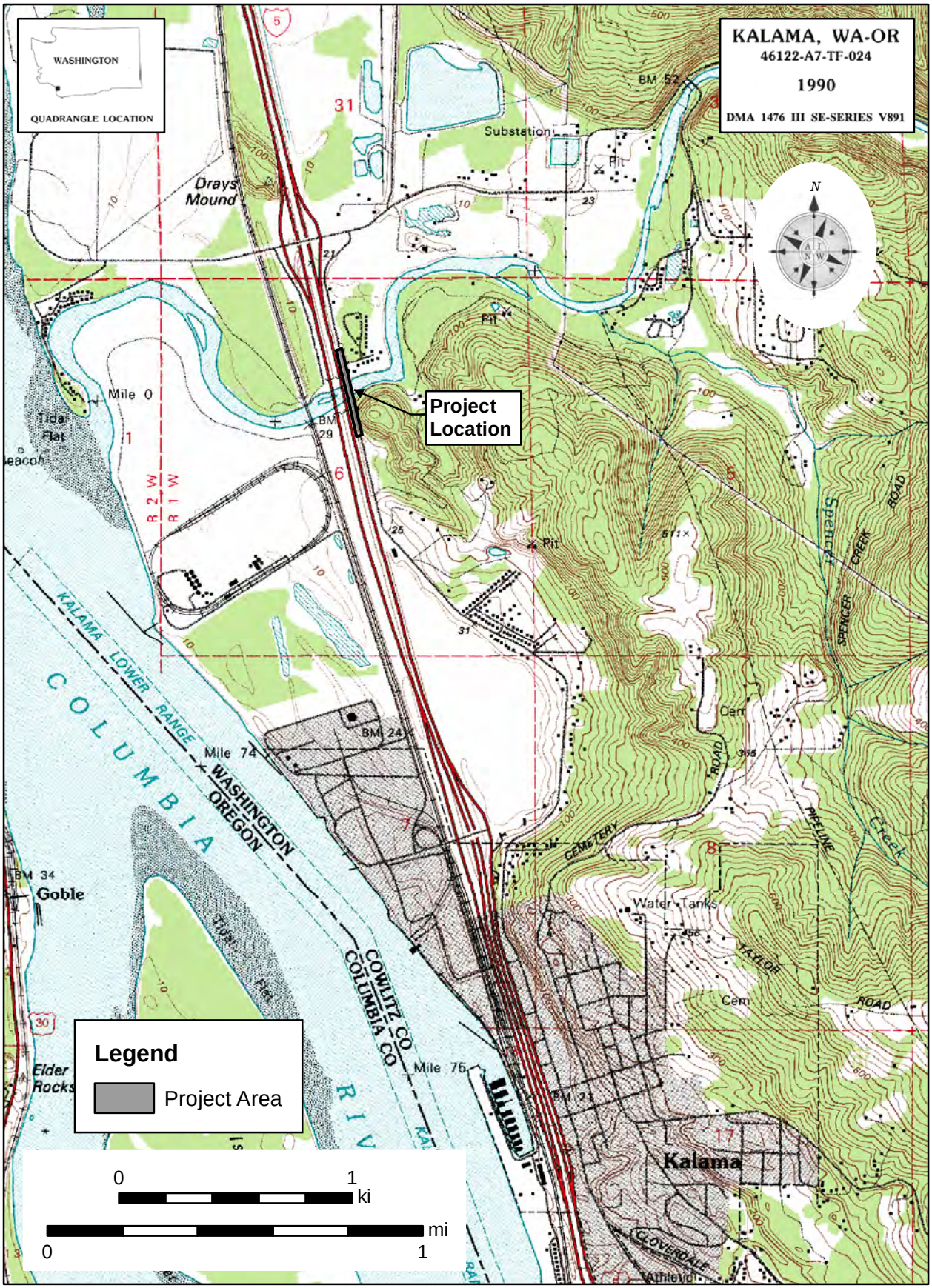

Figure 1. The East Port Regional Forcemain project location.

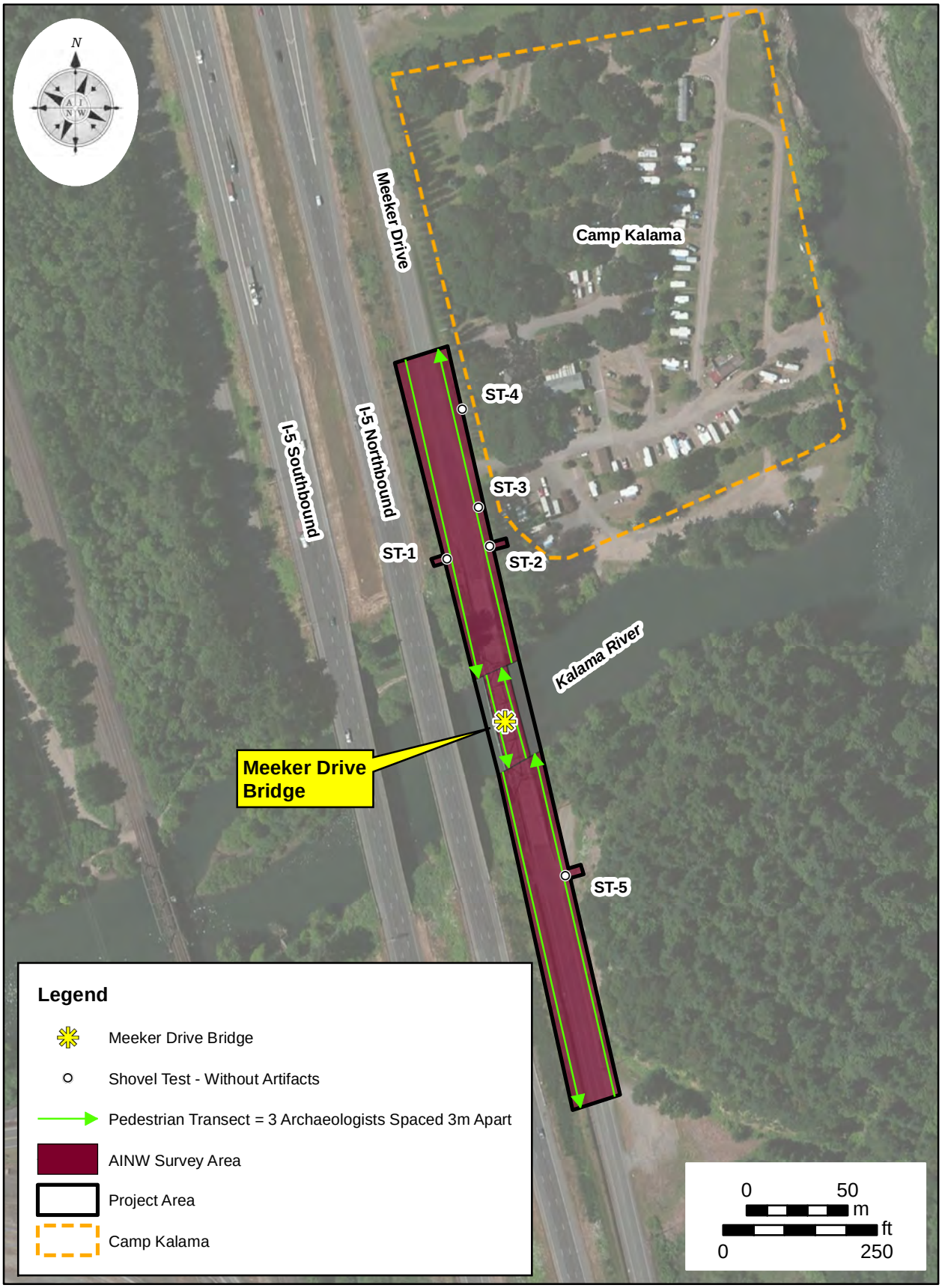

Figure 2. The East Port Regional Forcemain project area, showing the location of the historic Meeker Drive Bridge, pedestrian survey transects, and locations of shovel tests.

Photo 1. The 1952 Meeker Drive Bridge is recommended to be not eligible for listing in the NRHP. The view is towards the south.

Photo 2. The west elevation of the bridge structure where piped utilities will be installed at the bottom chord. The view is towards the east.

Photo 3. The north portion of the Meeker Drive Bridge and the project area is shown. The view is towards the north.

Photo 4. The northernmost portion of the project area is shown. Note the fence along the western aspect of Meeker Drive, and the extensive road prism. The view is towards the north.

Photo 5. The project area from its northernmost point. Note the trenched utilities just outside the road prism. The view is south, with the Meeker Drive Bridge in the distance.

Photo 6. The project area from its southernmost point. Note the fence and trenched utilities on both sides of Meeker Drive. The view is towards the north.

Photo 7. Shovel test ST-3 is shown at completion, 54 cm (21.6 in) below the surface. This was the only shovel test excavated with an intact soil profile.

Photo 8. Shovel test ST-3 is shown in progress, with the Meeker Drive Bridge in the background. The view is towards the south.