

**U.S. Department of
Homeland Security**

**United States
Coast Guard**



Commander
Thirteenth Coast Guard District

915 Second Avenue (RM 3510)
Seattle, WA 98174-1067
Staff Symbol: dpw
Phone: 206-220-7282
Email: steven.m.fischer3@uscg.mil

16591/WA

24 January 2018

Randy Abrahamson
Tribal Historic Preservation Officer
Spokane Tribe of Indians
PO Box 100
Wellpinit, WA 99040

Mr. Abrahamson:

The U.S. Coast Guard (USCG) is evaluating the application for a Bridge Permit for construction of new Burlington Northern Santa Fe Railway Company (BNSF) bridges across Lake Pend Oreille and Sand Creek, navigable waterways of the United States, located in and near the City of Sand Point in Bonner County, Idaho. The existing BNSF Lake Pend Oreille Bridge within the project's area of potential effects is recommended eligible for listing on the National Register of Historic Places (NRHP) (See Attachment A: Cultural Resources Inventory for the BNSF Sandpoint Junction Connector Project, Bonner County, Idaho. JACOBS, January 2018). The existing BNSF Sand Creek Bridge within the project's area of potential effects is recommended not eligible for listing on the NRHP.

USCG would like to initiate government-to-government consultation with the Spokane Tribe of Indians for this project. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act (36 CFR Part 800).

The new BNSF Lake Pend Oreille Bridge will be approximately 50 feet west of, and parallel to, the existing bridge. The new bridge will be a fixed, 49-span, 4,874-foot-long bridge made of precast, pre-stressed concrete I-girders, a cast-in-place concrete deck, and pre-cast concrete caps over 48 in-water piers. Each pier will be comprised of six 36-inch diameter open-ended steel pipe piles, for a total of 288 piles below the OHWM.

The new BNSF Sand Creek Bridge will be approximately 35 feet west of, and parallel to, the existing bridge, and will be 505 feet long (approximately 150 feet over navigable areas of Sand Creek) and 21 feet wide. The new bridge will be a fixed, 12-span bridge with pre-cast concrete caps over 11 piers comprised of 24-inch-diameter open steel piles. The total number of pilings is projected to be 64; twenty-two (22) of which will be below the OHWM.

The project's proposed Area of Potential Effect (APE) includes the total anticipated construction footprint for the new main track, new bridges, temporary construction bridges, and installation of signals/switches.

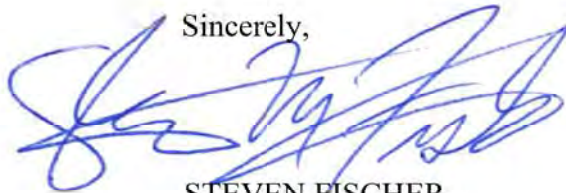
The USCG in accordance with federal statutes (Title 33 U.S.C. 401) is responsible for considering the approval of the proposed bridge modification. As such, and in accordance with the National Environmental Policy Act (NEPA, 42 USC 4332(2)(C)), the USCG has assumed the federal lead agency role for this action and is preparing an Environmental Assessment (EA) to analyze the potential effects of the BNSF Lake Pend Oreille Bridge and Sand Creek Bridge projects.

The USCG has determined that these actions would result in No Adverse Effect to any historic properties (Attachment A). Pursuant to 36 Code of Federal Regulations (CFR) 800, implementing Section 106 of the National Historic Preservation Act, I request your concurrence with the Coast Guard's determination.

Your response to this letter, acknowledging your interest in participating in this undertaking as a consulting party, in identifying any historic properties, including Traditional Cultural Properties (TCPs) that may exist within the project's Area of Potential Effects (APE), and providing any key tribal contacts, is greatly appreciated. We also are inviting comments regarding any other tribal concerns the proposed projects may raise. Please provide a response by February 24, 2018 so that we may discuss this undertaking and any of those identified areas of interest.

Please direct any question regarding this letter to either myself or Mr. John Greene my Environmental Policy Analyst, John.J.Greene@uscg.mil, (206) 220-7277.

Sincerely,



STEVEN FISCHER
Bridge Administrator
U. S. Coast Guard District
By direction

Attachment A: Cultural Resources Inventory
for the BNSF Sandpoint Junction Connector
Project, Bonner County, Idaho.

Cultural Resources Inventory for the BNSF Sandpoint Junction Connector Project, Bonner County, Idaho

Cultural Resources Technical Report

Prepared For:

BNSF Railway Company

Authors:

Michael Chidley, James Mayer, Connie Walker Gray, Jane Wiegand, and Sarah Meyer

Prepared by:

JACOBS®

600 108th Avenue NE, Suite 700, Bellevue, Washington

January 2018

This page intentionally left blank

TABLE OF CONTENTS

Abstract	1
Certification of Results	1
Key Information.....	2
Introduction.....	3
Project Location, Need, and Description	3
Statement of Objectives	5
Regulatory Context	5
National Register of Historic Places	6
Description of Proposed Area of Potential Effects (APE).....	7
Environmental and Cultural Setting	8
Natural Setting	8
Cultural Setting	10
Prehistoric Cultural Context.....	10
Ethnographic Cultural Context	12
Historic Context	13
Pre-Field Research	16
Background Research Sources.....	16
Summary of Previous Cultural Resource Studies.....	16
Historic Structures and Buildings	16
Archaeological Resources.....	17
Description of Previously Identified Cultural Resource Studies	20
Project Area North of Bridge 3.9	20
Bridge 3.9 and Project Area South of Bridge 3.9	29
Native American and Other Consultation	35
Expectations	35
Field Survey Methods and Results	35
Methods	35
Survey Results.....	36
Archaeological Survey Results.....	36
Historic Resources Survey Results	54
Management Conclusions and Recommendations	58
References	61
Appendix A: Proposed APE Detail Figures	
Appendix B: Shovel Test Pit Descriptions	
Appendix C: Idaho State Archaeological Site and Historic Resource Form	

LIST OF FIGURES

Figure 1. Project Overview and Location.....	4
Figure 2. Proposed APE (USGS Sandpoint, ID and Sagle, ID 1:24,000 Map Background)	9
Figure 3. Previously Recorded Cultural Resources in the APE	18
Figure 4. 10BR1026 Site Sketch Map, NWAA 2003	26
Figure 5. Previous Investigations at 10BR1026 (Dog Beach).....	27
Figure 6. 10BR38 Site Sketch Map, NWAA 1998.....	32
Figure 7. Previous Investigations at 10BR38 Vicinity.....	33
Figure 8. Site Locations for 10BR38 and 10BR1026 from UPORAD Nomination Form	34
Figure 9. Current Conditions at North End of the Proposed APE; View to the North	38
Figure 10. Conditions of Proposed APE South of Northern Pacific Depot; View South.....	38
Figure 11. Railroad Fill Prism South of Bridge 3.1; Bridge Overhead is US 95; View to Southeast	39
Figure 12. New Fill Prism East of US95, South of Bridge 3.1; View to South	39
Figure 13. New Fill Prism East of US95, North of Dog Beach; View to North	40
Figure 14. New Fill Immediately North of Dog Beach; View North from Shoreline	40
Figure 15. Photograph of Conditions at 10BR1026 in 2008 from Ferguson et al. 2008	41
Figure 16. View of Conditions at 10BR1026 in 2017, with Trees Cleared (Note the Lack of the Conifers seen in Figure 15), Bank Slump, and Large Fill Placement; View to North-Northeast.....	41
Figure 17. Photograph of Conditions South of 10BR38 in 2008 from Root et al. 2008.....	42
Figure 18. View of Conditions South of 10BR38, Showing Modifications Since 2008; View to Northeast.....	42
Figure 19. Survey Surface Conditions below OHWM at Dog Beach.....	43
Figure 20. Survey Surface Conditions below OHWM at Bridge 3.9 South End.....	43
Figure 21. 2017 Investigation at 10BR1026 Vicinity and Recommended Site Boundaries.....	47
Figure 22. 2017 Investigations at 10BR38 Vicinity and Recommended Site Boundaries.....	48

Figure 23. Site Rock Wall 1 Plan Sketch Map.	52
Figure 24. Rock Wall 1 Overview, Mapping Datum in Foreground; View Northeast	53
Figure 25. Rock Wall 1, Profile with Game Trail Knockdown; View North.....	53
Figure 26. Northern Pacific Depot, South and West Elevations.....	55
Figure 27. Northern Pacific Depot, North and West Elevations.	55
Figure 28. BNSF Bridge 3.0 West Elevation.....	56
Figure 29. BNSF Bridge 3.1 Railing; View South.....	56
Figure 30. BNSF Bridge 3.9, West Elevation.....	57
Figure 31. BNSF Bridge 3.9, East Elevation, South Half	57
Figure 32. BNSF Bridge 3.1, West Elevation.....	58

LIST OF TABLES

Table 1. Known Cultural Resources Within/Adjacent to the Proposed APE.....	19
Table 2. Selected Known Cultural Resources Within 600 Feet (200 Meters) of the Proposed APE	19
Table 3. Selected Cultural Resources Studies Located within 0.5 Mile of the Proposed APE....	20

This page intentionally left blank

ABSTRACT

The BNSF Railway Company (BNSF) is proposing to construct a second mainline track connection between its Algoma Siding track and the Sandpoint Junction, where BNSF and the Montana Rail Link (MRL) mainlines join in and near Sandpoint, Idaho. The project is located on the BNSF Northwest Division, Kootenai River Subdivision, Line Segment 45, in Bonner County, Idaho. Jacobs Engineering Group (Jacobs) was contracted to conduct a cultural resources assessment of the proposed Area of Potential Effects (APE) to identify and provide management recommendations regarding National Historic Preservation Act (NHPA) compliance. As a result of those efforts, two archaeological sites (10BR38 and 10BR1026) were reassessed, one new archaeological site (temporarily named Rock Wall 1) was recorded, four previously recorded historic resources (Northern Pacific Depot, Northern Pacific Railroad, Bridge 3.0, and Bridge 3.9) were revisited, and one new historic resource (Bridge 3.1) was recorded.

Current and previous field results and analyses indicate that the BNSF right-of-way (ROW) does not contain any intact archaeological deposits, and the site boundary for 10R1026 should be truncated to areas outside the BNSF ROW. It is recommended that the project will have no effect to either 10BR38 or 10BR1206. Site Rock Wall 1 is not eligible for the NRHP.

The previously recorded historic properties noted above, each determined eligible or listed on the NRHP, retain their integrity and significance. Bridge 3.1 is recommended not eligible for the NRHP due to a loss of integrity. It is recommended that the project will have no adverse effect on the historic properties.

All survey records are on file at Jacobs Engineering Group, Bellevue, Washington. Photographic prints and site forms will be submitted to the Idaho State Historic Preservation Office, and will be on file at the Idaho State Historical Society, Boise.

Certification of Results

"I certify that this investigation was conducted and documented according to Secretary of the Interior's Standards and guidelines and that the report is complete and accurate to the best of my knowledge."



Michael Chidley, M.A., RPA

08 January 2018

Date

KEY INFORMATION

Project Name: BNSF Sandpoint Junction Connector

Location: Bonner County, ID

USGS Topographic Quadrangle(s): Sandpoint, ID; Sagle, ID

Legal Description: Township 57 North, Range 02 West, Portion of Sections 15, 22, 23, 25, 26, and 36

Project Area: 84 Acres

Acres Surveyed:

Intensive Acres: 84

Reconnaissance Acres: 0.0

Project Data:

08 Previously Recorded Cultural Resources

02 New Cultural Resources Recorded

Report Authors: Michael Chidley, James Meyer, Connie Walker Gray, Jane Wiegand, and Sarah Meyer

Associated Federal Project Number: USCG – TBD; USACE: NWW-2007-1303

Associated Federal Agencies: U.S. Coast Guard (USCG); U.S. Army Corps of Engineers (USACE)

Report Prepared For: BNSF Railway Company

Repository: Jacobs Engineering Group, 600 108th Avenue NE, Suite 700, Bellevue, WA

Principal Investigator: Michael Chidley, M.A., RPA

Report Date: 08 January 2018

INTRODUCTION

Project Location, Need, and Description

BNSF Railway Company (BNSF) is proposing to construct a second mainline track connection between its Algoma Siding track and the Sandpoint Junction, where BNSF and the Montana Rail Link (MRL) mainlines join, in and near Sandpoint, Idaho. The project is located on the BNSF Northwest Division, Kootenai River Subdivision, Line Segment 45, in portions of Sections 15, 22, 23, 25, 26, 27, and 36 of Township 57 North, Range 02 West, Boise Meridian, in Bonner County, Idaho (Figure 1).

The project need is based on continued growth of freight rail service demands in the northern tier, high-volume traffic corridor between the Midwest (Chicago Terminus) and the West Coast. The existing single mainline and portions of the over-water rail bridges date from the early 1900s. Rail traffic volumes have risen steadily for the past three decades in this portion of the interstate mainline becoming a constraint to interstate commerce in this region. This project will relieve system congestion and back-up of rail traffic, and reduce hold times on sidings and wait times at grade crossings both locally and regionally.

Project activities are anticipated to include: construction of a new mainline track west of the existing BNSF mainline track through the project corridor; construction of new bridge over Lake Pend Oreille adjacent to (west of) the existing rail bridge (Bridge 3.9); construction of a new bridge over Sand Creek adjacent to (west of) the existing rail bridge (Bridge 3.1); construction of a new bridge over Bridge Street adjacent to (west of) the existing rail bridge (Bridge 3.0); construction of new fill and ballast prisms for the new mainline track; construction of temporary construction bridges adjacent to (west of) each of the new bridges; adjustment of existing mainline track switches, and installation of new signal/ switch infrastructure. All work will occur within existing BNSF right-of-way (ROW) or existing BNSF easements.



Figure 1. Project Overview and Location

Statement of Objectives

Jacobs Engineering Group (Jacobs) completed background research and conducted a field inventory of the proposed Area of Potential Effects (APE) to revisit known, and record any newly identified, cultural resources; to provide assessments regarding the significance and integrity of present cultural resources; and to provide recommendations regarding National Register of Historic Places (NRHP) eligibility and effects to identified historic properties. This effort was undertaken to support permitting efforts and compliance with Section 106 of the National Historic Preservation Act (NHPA).

The project is located on the southeast side of Sandpoint, Idaho, including the rail corridor extending along the long sand spit on the west side of Sand Creek, the long railroad bridge across the outlet arm of Lake Pend Oreille, and a short distance along the east shore of the lake (at the south end of the rail bridge). The pedestrian, littoral, and subsurface investigation had several interrelated objectives:

- conduct an intensive pedestrian survey of the entirety of the upland portions of the project APE;
- conduct an intensive pedestrian survey of portions of the APE accessible during the Lake Pend Oreille drawdown;
- assess the archaeological potential existing below the engineered fill and within the APE;
- conduct strategic shovel probe excavations in upland portions of the APE to investigate current conditions and confirm previously recorded conditions;
- revisit and document the integrity of the Northern Pacific Depot (aka Sandpoint Burlington Northern Railway Station);
- revisit and document integrity of Bridge 3.0 and Bridge 3.9;
- document and assess Bridge 3.1, and revisit and document condition of Bridge 3.9;
- identify and record historic built environment resources, if present, that have not been previously identified and/or recorded;
- revisit and assess conditions at archaeological Site 10BR38 at the south end of Bridge 3.9; and
- revisit and assess conditions at archaeological Site 10BR1026 at the north end of Bridge 3.9 in the “Dog Beach” vicinity.

Regulatory Context

The BNSF Sandpoint Junction Connector project is a federal undertaking because the project will require a U.S. Coast Guard Bridge Permit and a U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit, and is therefore subject to Section 106 of the NHPA. Section 106 of the NHPA requires that, before beginning any undertaking, a federal agency must take into account the effects of the undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions.

The Section 106 process is presented in 36 Code of Federal Regulations (CFR) 800 and consists of five basic steps:

1. Initiate process by coordinating with other environmental reviews, consulting with the State Historic Preservation Officer (SHPO), identifying and consulting with interested parties, and identifying points in the process to seek input from the public and to notify the public of proposed actions.
2. Identify cultural resources and evaluate them for NRHP eligibility, resulting in the identification of historic properties.
3. Assess effects of the project on historic properties.
4. Consult with the SHPO and interested parties regarding adverse effects on historic properties, resulting in a memorandum of agreement (MOA).
5. Proceed in accordance with the MOA, if necessary.

National Register of Historic Places (NRHP)

The NRHP recognizes properties that are significant at the national, state, and local levels. According to 36 CFR 60, the quality of significance in American history, architecture, archaeology, engineering, and culture exists in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. Properties that are eligible for listing on the NRHP are properties that retain their integrity and meet one or more of the four criteria listed below. In addition, unless a property possesses exceptional significance, it must also be at least 50 years old.

A resource can be considered for inclusion on the NRHP if it meets at least one of the following criteria (36 CFR 60):

- Is associated with events that have made a significant contribution to the broad patterns of our history.
- Is associated with the lives of persons significant in our past.
- Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represents a significant and distinguishable entity whose components might lack individual distinction.
- Has yielded, or might be likely to yield, information important in prehistory or history.

Individually eligible properties and historic districts must retain key character-defining features, or integrity, to convey the significance of a resource. Integrity specifically refers to the ability of a property to convey its significance. In other words, a historic property must have enough intact physical characteristics or features to communicate its significance under one or more of the NRHP criteria. NRHP guidelines recognize seven aspects, or qualities, that define integrity. The Secretary of the Interior defines these aspects as follows (36 CFR 60):

- **Location.** Is the location/site where the resource was originally constructed?

- **Design.** Is the design in its original form, plan, and style of the property intact?
- **Setting.** Have the physical surroundings of a property been compromised?
- **Materials.** Are the physical components used in construction of the property still present?
- **Workmanship.** Is there evidence of craftsmanship?
- **Feeling.** Is the property able to express a sense of time?
- **Association.** Is the “direct link” evident between the property and an important event or person?

For archaeological sites, integrity of location, materials, and association are generally most crucial. To address important research topics, archaeological deposits usually must be in their original location, retain depositional integrity, contain adequate quantities and types of materials in suitable condition to address important research topics, and have a clear association. Associations may be defined at different social scales (e.g., an activity area, a household, or institution) and across various temporal spans (e.g., brief or longer term).

Description of Proposed Area of Potential Effects (APE)

The proposed APE includes the geographic area where the project construction and use may directly or indirectly cause change of character or use of historic properties (e.g., archaeological sites, traditional cultural properties, and/or built environment resources). Potential effects to archaeological sites are anticipated primarily from ground-disturbing activities such as: clearing, grubbing, grading, pile driving, excavation, filling, and staging. Historic built environment resources may be directly affected by such construction activities, as well as indirectly by substantial changes to the visual environment associated with implemented use of project improvements.

The proposed APE was delineated by Jacobs to include the horizontal and vertical extent of all proposed project construction activities. The proposed project will add a second mainline adjacent to the existing track, including corresponding new bridges. The new grade and structures will be of similar visual impact, particularly from a distance. Although historic properties are known to occur in the vicinity, those properties are a considerable distance from the proposed new alignment, and in most cases the existing new multi-lane US 95 byway lies between those historic properties and the new construction. Therefore, because the proposed improvements do not significantly alter the existing railroad and viewshed conditions, other than increasing capacity to accommodate existing rail operations, the proposed APE is defined as the existing ROW and associated easements, and the extent of anticipated construction ground disturbance. The APE includes the total anticipated construction footprint for the new main track, new bridges, temporary construction bridges, and installation of signals/switches. Staging and access areas are presumed to be included within the defined APE or via hard surfaces (Figure 2; see Appendix A for APE detail figures).

Key Personnel

Jacobs cultural resources staff conducted background research and field surveys, recorded and evaluated cultural resources older than 50 years of age for listing on the NRHP, and authored the report. Michael Chidley, M.A., RPA, Senior Archaeologist, served as principal investigator and meets the Secretary of Interior's Standards for a professional archaeologist.

Additional research, fieldwork, and report contributions were completed by Jacobs geoarchaeologist James Mayer, Ph.D., Senior Architectural Historian Connie Walker Gray, and archaeologists Jane Wiegand and Sarah Meyer.

ENVIRONMENTAL AND CULTURAL SETTING

This section describes the environmental and cultural setting of the proposed APE and was used to generate the methods for identifying prehistoric and historical archaeological sites and historical resources, and the expectations regarding archaeological sensitivity. A review of the physical environments that affect human behavior and the cultural setting helped to generate expectations about how archaeological sites could be distributed across the landscape and the kinds of activities that occurred there, and directly influenced the proposed field methods.

Natural Setting

The Sandpoint Junction Connector project (and proposed APE) is located in the Northern Rocky Mountains Physiographic Province (Fenneman 1931). More specifically, the proposed APE is at the southern end of the Purcell Trench, a roughly north-south trending structural valley that was further augmented by repeated glaciation during the Pleistocene (Booth et al. 2003). The southern end of the trench is bound more or less by the Selkirk Mountains to the northwest and the Cabinet and Purcell Mountains to the south and east.

Bedrock geology in the study area is relatively complex. The hills at the south end of the proposed APE are composed of heavily faulted Proterozoic igneous intrusive rocks (Lewis et al. 2006). The northern end of the APE—and most of Sandpoint for that matter—is composed entirely of Quaternary deposits (see below), however hills to the north and west consist of Cretaceous and early Cenozoic granitic rocks that are locally mantled by more recent Quaternary deposits (Lewis et al. 2006).

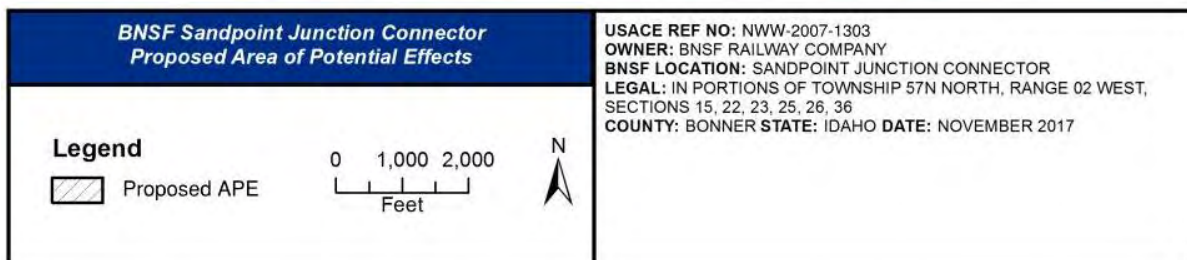


Figure 2. Proposed APE (USGS Sandpoint, ID and Sagley, ID 1:24,000 Map Background)

Quaternary landforms and surficial deposits in and around the proposed APE result largely from regional Pleistocene glaciation. During the Fraser Glaciation (late Wisconsinan), the Purcell Trench lobe of the Cordilleran ice sheet filled the basin where Lake Pend Oreille currently sits. The ice lobe blocked the ancestral Clark Fork River and impounded Glacial Lake Missoula in valleys in western Montana (Pardee 1910, 1942). Catastrophic failure of the ice dam several times during the latest Pleistocene released massive amounts of floodwater across northern Idaho, into eastern Washington, and ultimately down the Columbia River. Surficial geologic mapping in the proposed APE by Lewis et al. (2006) identifies a series of glaciolacustrine and glaciofluvial units that are derived from proglacial lakes and floods, respectively.

Holocene deposits in proximity to the “Dog Beach” portion of the project area consist of lacustrine deposits and beach deposits, and were probably deposited very recently by modern Lake Pend Oreille. The spit that Dog Beach and the Old Sandpoint Townsite are on probably formed due to longshore reworking of sand introduced into the lake by Sand Creek. The spit was artificially augmented historically with manmade deposits. Other notable artificial deposits in both the northern and southern ends of the proposed APE are gravelly and boulder fill introduced during various phases of railroad construction.

Surficial deposits in the Dog Beach area are mapped as Holocene beach deposits (Qbs), described as coarse sand to silty sand and gravel up to several meters thick and deposited on the shoreline of Lake Pend Oreille (Lewis et al. 2006). These beach deposits are relatively young and probably sit directly on older Holocene lake deposits (Qlm) or Pleistocene glaciolacustrine deposits (Qgl). National Resources Conservation Service (NRCS) soil mapping indicates this area is composed of the Mission series, described as moderately well-developed soils formed in glaciolacustrine sediments with a mantle of volcanic ash and loess (Web Soil Survey, accessed 9/28/2017).

The south end of the bridge intersects a small area mapped as Pleistocene glaciofluvial deposits (Qgf), described as coarse silt, sand, and gravel deposits derived from glacial outwash (Lewis et al. 2006). A substantial portion of the south end is composed of gravelly and bouldery fill. NRCS soil mapping indicates this area is composed of the Pend Oreille series, described as moderately well-developed soils associated with foothills, mountain slopes, outwash terraces and lateral moraines (Web Soil Survey, accessed 9/28/2017).

Cultural Setting

Prehistoric Cultural Context

The project area is at the northern end of the Eastern Plateau cultural area, and falls within the Kootenai-Pend Oreille region that includes the drainage basins of the Kootenai, Pend Oreille, and Spokane Rivers (Roll and Hackenberger 1998). Native subsistence and settlement characteristics--such as intensive harvesting and storage of anadromous fish, ungulates and roots, seasonal aggregation and dispersal, and winter housepit villages located in major valleys in the Kootenai-Pend Oreille region when Europeans arrived--were probably in place for at least several millennia. Occupation of the region probably extends back to at least 10,000 years

before present (BP). Indeed, projectile point types and radiocarbon dates from the Pend Oreille basin alone suggest “post-glacial settlement of the Pend Oreille River Valley began around 8000 BP and possibly as long ago as about 10,000 BP (Miss and Kanaby 2012, p. 4). Some sites have produced artifacts from both pre- and post-Mazama volcanic ash contexts and “represent occupation that began before 7000 BP and intensified after that time in response to regional changes in climate, improvements in storage and processing technology, increased population, and to local evolution of the landscape and its resources” (Miss and Kanaby 2012, p. 1). The regional prehistoric cultural chronology summarized below is based largely on that presented by Roll and Hackenberger (1998), with the Middle Period subdivided into early and late subperiods.

Early Prehistoric Period, 10,000-7000 BP

While fluted points are rare or absent in the region, stemmed and lanceolate points indicate a Paleoindian presence in the Pend Oreille River valley (Miss and Hudson 1987) and at Sullivan Lake (Thoms 1987). While some projectile points found in the Kootenai-Pend Oreille region show similarities with later classic Paleoindian components identified on the Northwestern Plains, most complete points show affinities to Windust and other styles more in line with Plateau forms (Roll and Hackenberger 1998, p. 123). Little is known about the subsistence, settlement, and human population dynamics during the Early Prehistoric Period, but the early inhabitants of the region were probably highly mobile hunters and gatherers that “maintained adaptations as catholic as those of their neighbors in habitats that favored diversity over specialty” (Roll and Hackenberger 1998, p. 124).

Early Middle Prehistoric Period, 7000-4500 BP

The Early Middle Period in the Kootenai-Pend Oreille region is characterized in part by lanceolate and side-notched atlatl dart points (Roll and Hackenberger 1998, p. 125) that appear contemporaneously with an inferred regional climatic transition from a continental to maritime climate (Chatters 1998). Human populations in the region were probably still relatively low, and likely characterized by a mobile hunting and gathering subsistence strategy. Roll and Hackenberger (1998, p. 131-132) mention that regional environmental change during the Early Middle Prehistoric Period resulted in an expansion of forest cover that may have had impact on grazing ungulate populations. A reasonable assumption is that this would have created some push for human groups to adjust and/or refocus their subsistence strategy, possibly towards an intensification of plant gathering and processing. Regional data tend to support this notion, with radiocarbon dated camas cooking/processing features indicating camas processing was in regular use by approximately 5500 BP (Thoms 2009). Residential sites apparently emphasized higher river terraces.

Late Middle Prehistoric Period, 4500-1250 BP

The Late Middle Period was characterized by an increase in regional population (Roll and Hackenberger 1998). This occurred during a period of increased relative moisture and concomitant closure of forest canopy (Chatters 1998). As mentioned above, this probably resulted in a decrease in overall resource productivity, however the increase in native

population in the region attests to innovations in subsistence strategies. Camas procurement and processing intensified (Thoms 2009), fishing became increasingly important, and a dependence on food storage began during this period. Settlement intensified along the Pend Oreille River (Miss 2004, p. 5), although high terraces were still occupied as well. Projectile points common to this period are stemmed and corner-notched atlatl dart points.

Late Prehistoric Period, 1250 BP-1750 AD

The Late Prehistoric Period in the region was characterized by an increase in native population; more intensive, probably multi-seasonal residences along river valleys; and further intensification of camas procurement and processing (Thoms 2009). A hallmark of this period across the region is the appearance of small, side-notched and corner-notched projectile points, marking the introduction of the bow and arrow (Roll and Hackenberger 1998, p. 132). Deer or deer-sized mammals dominate Late Prehistoric Period faunal assemblages, though bison remains are known from at least one site in the Kootenai-Pend Oreille region (Roll and Hackenberger 1998).

Ethnographic Cultural Context

Lake Pend Oreille falls within the heart of traditional territory of the Kalispel, speakers of a dialect of Interior Salish (Lahren 1998; Smith 1991; Teit 1930). The Kalispel consisted of two subgroups with a specific geographic area, although neither division was considered a separate tribe in sociopolitical terms. The traditional territory of the Lower Kalispel is the Pend Oreille River drainage downstream/west of Lake Pend Oreille in Idaho to the mouth of the Salmo River in British Columbia. The traditional territory of the Upper Kalispel is around Lake Pend Oreille upstream/east to the Clark Fork River up to its confluence with the Flathead River near Plains, Montana.

The Kalispel followed a traditional, seasonally-based Plateau subsistence and settlement system centered on the procurement of an array of locally available resources including plants, fish, and other game. In the spring, they left their winter villages along the valley bottom and split into smaller groups to hunt, fish, and gather various resources as they became available.

Fish was very important to Kalispel subsistence, and fishing was common along the Pend Oreille River and on Lake Pend Oreille. Native fish caught by the Kalispel included char, chub, suckers, trout, and goldfish. Salmon were found only in the northwest part of Kalispel territory, and Kettle Falls in Washington was an important meeting place during salmon runs.

Camas was the most important plant food of the Kalispel. In late spring and early summer, large groups would gather in the camas fields in the Calispell-Cusick Valley of Washington to gather and roast camas, as well as to trade and socialize. After the camas harvest was over, serviceberries, huckleberries and chokecherries were collected in late summer and fall. Some families would return to fishing and hunting grounds during this time.

Food storage became an emphasis for the Kalispel during the fall and early winter months. Organized game drives were carried out to procure elk and deer heading downslope from

higher elevations. Meat was dried, and camas was cooked and stored for use throughout the winter. These food stores would be the primary sustenance during the winter months, supplemented by deer hunting and fishing along valley bottoms. At the onset of winter, families moved back to winter villages and built lodges along the Pend Oreille and Clark Fork Rivers and Lake Pend Oreille.

Historic Context

BNSF projects in the vicinity have previously provided historic context summaries for the project area, and the following historical context has been adapted from Rain Shadow Research's 2008 survey report associated with BNSF Bridge 3.9 (Ferguson et al. 2008). This context also draws from the comprehensive historic context developed by SWCA Environmental Consultants (SWCA) for their 2014 *The Other Side of Sandpoint: Early History and Archaeology Beside the Tracks, Volume I* publication (Weaver 2014), associated with construction of the US 95 Byway in Sandpoint.

First Contact

Fur traders were active in the region around Lake Pend Oreille beginning in the early nineteenth century. The North West Company, a British fur trading outfit based in Montreal, Canada, sent explorer David Thompson into the region to establish a presence in area. Thompson encountered a large lake, naming it Kullyspell Lake for the Kalispel Indians in the area, though it would soon be renamed Lac Pend Oreille by French Canadian explorers (Ferguson et al. 2008:7). After navigating the extensive lakeshore with Native American guides, Thompson decided on a spot he deemed suitable enough, though lacking in "good earth," and established a log cabin trading post called Kullyspell House at a place now known as the Hope Peninsula (Belyea 1994:108-9, quoted in Ferguson et al. 2008:7). Built in 1810 and intended as a major trade center for native populations including Spokane, Coeur d'Alene, and Salish, the post was abandoned "after only a couple years" of use, and reportedly burned down in 1832 (Losey 1999:408, in Ferguson et al. 2008:7). Stone chimney remains in the area were rediscovered in 1920 through the help of a Kalispel elder and are assumed to be associated with the original building; the site was recorded in 1966 as 10BR6 (Ferguson et al. 2008:7). The David Thompson State Wildlife Preserve is now located on the Hope Peninsula, near Hope, Idaho.

Around the same time Thompson was exploring the surrounding region, including a canoe journey down the Pend Oreille River that landed in the vicinity of the current Dog Beach in Sandpoint, the North West Company established another trading post near current Spokane, Washington, known as the Spokane House.; This post saw much more use and "served as the central supply base" for The North West Company's other posts (Weaver 2014:16). While it too was abandoned in 1826, these forts opened up trade to the region. Later, the Canadian influence on the area saw some decline after 1846 with the establishment of the Canadian border at the 49th parallel (Ferguson et al. 2008:7; Weaver 2014:16-18).

The mid-nineteenth-century Pacific Northwest saw a shift to permanent settlement by Euroamericans, and the Lake Pend Oreille area became a main thoroughfare for prospectors

and suppliers when gold was discovered in Montana and British Columbia (Weaver 2014:18). Pack trails along the lakeshore were muddy and slow, so the Oregon Steam Navigation Company constructed a steamboat in 1866, called the *Mary Moody*, to better serve the needs of travelers (Ferguson 2008:7). The steamer transported prospectors and their goods from the eastern end of the lake, at the mouth of the Clark Fork River, across to Seneacquoten on the Pend Oreille River at the western end of the lake (Ferguson 2008:7).

Isaac Ingalls Stevens served as the first governor of the new Washington Territory. In 1854, he oversaw an effort to systematically remove native tribes from their homeland through treaties for platting and purchase by settlers, but also for a transcontinental railroad (Weaver 2014:18; Ferguson 2008:8). The Treaty of Sandpoint of 1887 was signed by the leader of the Lower Pend Oreille peoples, but was never ratified (Weaver 2014:19). Nonetheless, the subsequent inpouring of Euroamerican settlers into the area forced the native communities out. Earlier Stevens' treaties had established reservations for the Upper Pend Oreille, Flathead, and Kootenai tribes, but the Sandpoint Treaty offered no such thing. It was not until 1914 that a designated reservation for the original inhabitants of Lake Pend Oreille was established near Usk, Washington (Weaver 2014:19).

The Railroad

The northern tier of the transcontinental railroad would span west from the Great Lakes to Puget Sound. Stevens' survey team deemed the "old trail around Lake Pend Oreille and up the Clark Fork" the best route for the rail line through the region (Weaver 2014:18). While settlers had been passing through the area for a few decades, it had only been sparsely settled until the Northern Pacific Railroad line began construction on the Idaho divisions in 1879 (Weaver 2014:19). Commissioned in 1864 and set to begin construction in 1866, the northern transcontinental tier was delayed again and again by financial setbacks, including the Financial Panic of 1873 that halted work for nearly seven years (Weaver 2014:19). The rail alignment in the region surrounding the project area was finalized in 1880, and most of the construction took place during the winter of 1881-1882 (Bilger 1969:34, in Ferguson et al. 2008:8, Weaver 2014:19). The Great Northern Railroad was extended southward to meet the new line in 1882 (Ferguson et al. 2008:8).

The railroad line followed the northern shore of Lake Pend Oreille and crossed Sand Creek and the outlet arm of the lake upstream of the Pend Oreille River. Here, on the east side of Sand Creek, Robert L. Weeks and son "established a store, hotel, bar, and sawmill" in what soon became Sandpoint (Ferguson et al. 2008:8; Weaver 2014:20). Rail crews set up a camp there to complete the rest of the mainline and the trestle bridge across the lake, which required driving over 2,500 piles across a distance of 8,704 feet (Weaver 2014:20). Most of the workers were Chinese, outnumbering the others by more than double (Weaver 2014:20). Once the bridge was completed in March 1882, the crews moved on to the Clark Fork portion of the line, establishing a camp at Hope. Consequently, many Chinese artifacts have been uncovered in the area, and especially during the 1997-98 Ellisport Bay Sewer District Project (Betts 1998, in Ferguson 2008:8, Weaver 2014:20).

Over the rest of the nineteenth century, the railroad continuously advertised settlement along the route, encouraging upstanding people to establish farms and businesses with goods to be shipped by rail, though Sandpoint was largely left out of these brochures (Weaver 2014:21). Through the 1880s and up to 1893, Sandpoint remained a stopover for both trains and steamboats, and was comprised mainly of railroad bunkhouses, saloons, and boarding houses lined up facing the rail line on either side, with the Weeks' store supplying dry goods. The bulk of the population was single men—miners and rail workers—and the town had a reputation as being rougher and wilder than many other towns (Weaver 2014:23). Silver had been discovered around the lake, and three main quartz mining districts were established (Ferguson et al. 2008:8).

A Permanent City

Once the Great Northern Railroad opened its south extension in 1892, telegraphers L.D. and Ella Farmin settled along the rail line on the west side of Sand Creek, acquired an existing but available homestead, and platted the land for “new” Sandpoint in 1898 (Ferguson et al. 2008:8; Weaver 2014:26). Their arrival encouraged other families to settle in Sandpoint, which began a shift away from a Wild West frontier town toward an upstanding community. The few women in town led the charge, establishing a “dedicated schoolhouse, Sunday school meetings, and around 1896 an organized church” (Farmin n.d.:75-76, in Weaver 2014:27). The town's population had doubled in size by 1900, with immigrants from both the eastern United States and Europe, with a few Chinese residents as well (Weaver 2014:29).

Right at the turn of the century, the Sandpoint Mercantile Company (previously Robert Weeks' store) established a mill that became the town's major economic force for over three decades. The company (later changing its name to the Sand Point Lumber Company) began outcompeting the smaller shingle and saw mills that had operated around town since the beginning (Weaver 2014:33). The owners, though, were in over their heads, and the Humbird Lumber Company purchased the plant at the end of 1900 (Weaver 2014:34). A company town was established north of Sandpoint, called Milltown, which housed the millworkers (Weaver 2014:34). By 1903, the Humbird Lumber Company needed to expand further. It purchased the nearby cemetery and paid the costs of dis- and re-internment of the bodies to what is now known as Lakeview Cemetery; some pioneer accounts “suggest that the cemetery contained white, Chinese, and Native American burials” (Weaver 2014:34-37).

With the growth of “new” Sandpoint, the original stretch along the tracks on the east side of Sand Creek became obsolete. The Northern Pacific Railroad decided to raise the grade of the line to protect it from high water, which necessitated relocating a passenger depot to the west side of the creek, as well as abandoning most original buildings except for a few hotels and residences, since the plans for the raised grade rail were “incompatible with most commerce” (Weaver 2014:38).

In 1907, the town leadership changed to a mayoral and council format, officially transforming the Village of Sandpoint to the City of Sandpoint (Ferguson et al. 2008:8).

PRE-FIELD RESEARCH

Pre-field background research was conducted to review the known cultural resources within the proposed APE, and to develop the objectives and strategy for the fieldwork component of the inventory effort. Research was conducted by Michael Chidley and Connie Walker Gray.

Background Research Sources

A records search was conducted through the data requests to the Idaho State Historical Society in Boise. The records search request area included the proposed APE and a 0.5-mile buffer (this was later curtailed to a 200-meter buffer due to the large number of records within 0.5-mile), resulting in archaeological site points, built environment resource points, potentially relevant cultural resource reports, Idaho Historic Sites Inventory Forms, Archaeological Survey of Idaho Site Inventory Forms, and other selected cultural resource site forms. The following sources of information were also consulted as part of the records search:

- Historic and modern topographic maps and aerial photographs
- General Land Office (GLO) records
- NRHP-Listed Properties
- Sandpoint North and South Project, Final Environmental Impact Statement

Summary of Previous Cultural Resource Studies

In summary, the project corridor/APE is immediately adjacent to significant historic archaeological sites (between the railroad and Sand Creek), may contain two prehistoric archaeological sites, and includes the NRHP-listed Northern Pacific Depot (aka Sandpoint Burlington Northern Railway Station) and up to three historic railroad bridges (Figure 3). The rail line itself has also been recorded as an historic resource. A considerable amount of archaeological investigation has been previously conducted immediately adjacent to the BNSF ROW as part of large-scale archaeological data recovery effort. Additional surveys and assessments have been conducted within and adjacent to the BNSF ROW for a variety of BNSF, USACE, Idaho Transportation Department (ITD), and other agency projects and actions. Following is a brief summary of the most relevant of these records; results are also summarized in Tables 1-3 below. More detailed description of these resources follows in the *Description of Previously Identified Cultural Resource Studies* section below.

Historic Structures and Buildings

The proposed APE contains three previously-recorded historic structures/buildings, and one historic structure that has been previously evaluated but not recorded on an Idaho Historic Site Inventory Form:

- The rail line throughout the project corridor has been previously recorded (Archambeault 2007) as an historic resource, identified as the Northern Pacific Railroad.
- The Northern Pacific Depot (also recorded by the common name Sandpoint Burlington Northern Railway Station, and known locally as the Amtrak station) is listed on the NRHP.

- Bridge 3.0, recorded as the BNSF Bridge Street Overpass, has been determined eligible for the NRHP according to Idaho SHPO records.
- Bridge 3.9, which spans Lake Pend Oreille, was evaluated in a 2008 cultural resources evaluation by Rain Shadow Research and recommended eligible for the NRHP under Criteria A and C. However, this resource was not recorded on an Idaho Site Inventory Form, and the SHPO has not concurred with this recommendation.

Archaeological Resources

Three archaeological sites (two prehistoric, one historic in age) and one archaeological district have been previously recorded within or near the proposed APE:

- The eastern boundary of the Upper Pend Oreille River Archaeological District roughly overlaps the southern half of Bridge 3.9, and identifies sites 10BR38 and 10BR1026 as NRHP-eligible contributing archaeological properties.
- Site 10BR38, a prehistoric campsite and associated historic rail line, is located at the south end of Bridge 3.9, and has been determined eligible for the NRHP.
- Site 10BR951 is an abandoned railroad grade at the south end of Bridge 3.9 and has been determined not eligible for the NRHP.
- Site 10BR1026, a prehistoric campsite and historic scatter, is located at Dog Beach at the end of the long sand spit near the north end of Bridge 3.9, and has been determined to be eligible for the NRHP. The location and size of this site has been recorded in different ways in the past, and the site may or may not be within the proposed APE.

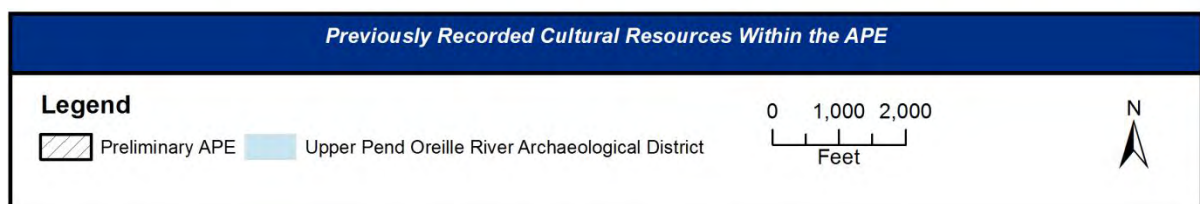


Figure 3. Previously Recorded Cultural Resources in the APE

Table 1. Known Cultural Resources Within/Adjacent to the Proposed APE

Resource #	Description	NRHP Eligibility
2012_781	Upper Pend Oreille River Archaeological District	Determined Eligible (2012)
17-017845	Northern Pacific Railroad	Determined Eligible (2007)
ID RR2008-001	Bridge 3.9	Recommended Eligible (2008)
10BR38	Prehistoric Campsite/Historic Railroad at south end of bridge; Contributing to Upper Pend Oreille River Archaeological District	Determined Eligible (2012)
10BR951	Abandoned railroad grade at the south end of Bridge 3.9	Not Eligible
10BR1026	Prehistoric Campsite/Historic Scatter at Dog Beach; Contributing to Upper Pend Oreille River Archaeological District	Determined Eligible (2012)
17-1199 / 10BR224	Northern Pacific Depot (Sandpoint Burlington Northern Railway Station)	Listed (1973)
17-18087	BNSF Bridge Street Overpass [Bridge 3.0]	Eligible

Source: Idaho SHPO

Table 2. Selected Known Cultural Resources within 600 Feet (200 Meters) of the Proposed APE

Resource #	Description	NRHP Eligibility
Sandpoint Historic District	Sandpoint Historic District; located on west side of US 95	Listed (1984)
10BR2	Prehistoric beach campsite	Undetermined
10BR115	Lumber mill	Eligible
10BR279	1907 W.A. Bernd Block	Listed (1973)
10BR420	Prehistoric scatter, Chinese ceramics, historic scatter	Determined Eligible (2012)
10BR421	Prehistoric scatter, Chinese ceramics, historic scatter	Determined Eligible (2012)
10BR422	Prehistoric scatter, historic scatter	Determined Eligible (2012)
10BR538	Historic scatter	Determined Eligible (2012)
10BR683	Great Northern Railroad Bridge Pilings	Determined Eligible (2012)
10BR859	Prehistoric scatter, Old Sandpoint Townsite	Determined Eligible (2012)
10BR974	Stacked lumber feature	Not Eligible
10BR976	Historic scatter	Determined Eligible (2012)
10BR977	Humbird Planing Mill remains	Determined Eligible (2012)
10BR978	Prehistoric scatter, Chinese laundry	Determined Eligible (2012)
10BR979	Humbird Mill footbridge and historic scatter	Determined Eligible (2012)
10BR991	BNSF and Union Pacific Railroad Connector	Not Eligible

BNSF Sandpoint Junction Connector, Bonner County, ID

Resource #	Description	NRHP Eligibility
	US95, Old North and South Highway	Undetermined
	US 95 Lake Pend Oreille Bridge	Undetermined
	Spokane International Railway	Undetermined
17-18539	Cedar Creek Bridge Public Market	Ineligible
17-1496	Cedar St. Bridge	Undetermined
17-17743	Whitaker House Bed and Breakfast	Eligible (No longer exists)

Source: Idaho State Historical Society

Table 3. Selected Cultural Resources Studies Located within 0.5 Mile of the Proposed APE

Report #	Year	Agency	Title	Authors
2015/146	2014	ITD	The Other Side of Sandpoint, Early History and Archaeology Beside the Track, The Sandpoint Archaeology Project 2006-2013	Bard, Warner, and Weaver
2014/391	2013	USACE	Albeni Falls Dam and Pend Oreille Lake, Sandpoint Water Treatment Plant Bank Stabilization Archaeological Data Recovery at 10-BR-115 (Humbird Mill Site)	Lawr, Kanaby, & Lyons
2012/781	2012	USACE	Upper Pend Oreille River Archaeological District Determination of Eligibility	Miss and Kanaby
2009/315	2008	USACE	Archaeological Survey and Auger Testing of the BNSF Idaho Bridge 3.9 Project Area	Ferguson, McCoy, & Root
2009/316	2008	USACE	Archaeological Survey of the South End of the BNSF Idaho Bridge 3.9 Project Area, Sandpoint, Idaho	Root, Ferguson, & McCoy
N/A	2003		Archaeological Survey of Idaho Site Inventory Form for 10BR1026, Bonner County, Idaho.	Kincaid, Carrilho, & Edwards

Source: Idaho State Historical Society

Description of Previously-Identified Cultural Resources Studies

For the purposes of clarity, the discussion of prior cultural resources studies and their findings is separated into two areas: the area north of Bridge 3.9 and the area south of the bridge. The two areas of the project area have distinct prior study histories and complexities.

Project Area North of Bridge 3.9

On the north end of Bridge 3.9, two previous cultural resources studies appear to have the greatest relevance to the proposed project: one study by Rain Shadow Research in 2008 (Ferguson et al. 2008), and a large-scale data recovery excavation effort conducted for the

Sandpoint North and South Project (US 95 Byway) (Bard 2014; Swords 2014). Also, it is important to note that while these two efforts concerned work at, and in the vicinity of, archaeological site 10BR1026, there does not appear to be any sharing of data between the two reporting efforts. Presumably this is because the individual projects were led by two different proponents, and the long period between the Sandpoint North and South Project fieldwork (conducted in 2006 and 2007) and the reporting of the results (in 2014). This leads to several contradictions between the studies regarding the site contents and condition of Site 10BR1026.

The most intensive archaeological investigation within the project vicinity occurred immediately adjacent to the project area and was related to the Sandpoint North and South Project/US 95 Byway (Bard 2014; Swords 2014). During the course of the development of an Environmental Impact Statement, the highway improvement project was determined to have potential adverse effects to several significant archaeological sites: 10BR538 (prehistoric artifact scatter), 10BR859 (Old Sandpoint Townsite and prehistoric artifact scatter), 10BR976 (historic artifact scatter), 10BR977 (Humbird Planing Mill), 10BR978 (southern Sandpoint Townsite and prehistoric artifact scatter), 10BR979 (Humbird Mill footbridge and artifact scatter), and 10BR1026 (prehistoric camp at Dog Beach).

Data recovery and test excavations were consequently conducted on 10BR538, 10BR859, 10BR977, 10BR978, and 10BR1026 (and vicinity) in 2006 and 2007. These data recovery excavations were predicated upon a decision to focus on 13 target areas identified as having the greatest potential for archaeological significance and data potential, while other areas of the corridor were determined to have less productive or of marginal potential significance. The reporting of the data recovery excavations covers four volumes of history, archaeological interpretations, and archaeological methods and data results. Therefore, only the most relevant portions are summarized here with relation to work within or directly adjacent to the proposed APE.

Archaeological testing was conducted from 2006 to 2008 within the ROW for the Sandpoint North and South Project pursuant to a MOA between the Federal Highway Administration, ITD, and the Idaho SHPO. The data recovery strategy, for the historic archaeological sites located to the west of the byway, focused on toe slope areas and on spaces between mapped building locations to maximize the recovery of artifacts within associable contexts. The presumed general, low-density artifact scatter around the old townsite was valued as being much lower than high-density middens and features (Swords 2014:2-6).

Specifically, the resulting target areas were the: lowland area at the southernmost extension of the town that was occupied by Chinese laborers and a laundry; town's Restricted District (formed by houses of prostitution and two saloons); subterranean ice house; Sand Point Lumber/Humbird Lumber Company store; Northern Mercantile Store and Café; Sandpoint Meat Market and Thompson & White Meat Market; Charles Foss Pharmacy; A.W. Sweet's Jewelry Store; Benjamin Butler's store; Humbird Boarding House area; and Humbird Mill Blacksmith Shop. Excavations were conducted through a variety of unit types, including vibracoring,

backhoe trenches, shovel tests, bucket augers, 1 meter (m) by 50 centimeter (cm) units, and 50 cm units linked into trenches.

In 2006 and 2007, shovel tests and augers, as well as controlled excavation units, were dug on the long spit south of Sand Creek and north of the US 95 Long Bridge over Lake Pend Oreille. In total, 87 shovel tests and two controlled units were excavated within this project area, many of which were located within the currently proposed APE. Results of particular note across the testing and excavation include:

- Investigation near the BNSF ROW found various fill deposits, including coal and ash dumps, but no early (pre-1900) stable surfaces. Approximately 12-16 feet of fill covers the railroad grade, and was brought in prior to the construction of the Northern Pacific Depot/railway station in 1916, and an unknown amount of the original grade has been removed during improvement projects (Swords 2014:17).
- No controlled excavation units were located within the actual BNSF ROW (Bard 2014; Swords 2014).
- Investigations looked for, but did not find, evidence of the Chinese settlement near the BNSF ROW (Swords 2014:23).
- Vibracore sampling adjacent to the railroad fill slope north and east of Bridge 3.1 (within Sand Creek) had limited to marginal results, and does not appear to have recovered any artifacts or identified any sediments with high archaeological potential (Swords 2014:18, 23).
- A backhoe trench and stripped area west of the railroad fill prism (south of Bridge 3.0), identified as OP3 Trench, apparently resulted in marginal artifact recovery (Bard 2014; Swords 2014:18).
- Shovel testing in the corridor between Dog Beach and the north end of Bridge 3.9 found disturbed ground, fill sediments, and displaced artifacts (Bard 2014; Swords 2014:179-194). Excavation was limited to shovel tests and two excavation test units.
- Artifacts recovered from the Dog Beach area appeared to be a mix of prehistoric camp site artifacts and perhaps historic camp remains associated with construction of Bridge 3.9 (Bard 2014:193-194).
- Neither the site limits of 10BR1026 nor 10BR538 were expanded to include any of the area including the recovered artifacts near 10BR1026 (Swords 2014:1247), presumably since these were found to be out of context.

Finally, review of these volumes did not find conclusions or recommendations by the authors suggesting that intact, significant archaeological deposits are likely to occur immediately adjacent or within the BNSF ROW. However, several times the limited archaeological potential near the railroad is implied due to previous grade removals, fill placement, and/or negative or marginal excavation results. However, to be clear, subsurface archaeological investigation actually within the BNSF ROW was very limited.

In 2008, Rain Shadow Research completed a small archaeological survey at the north end of Bridge 3.9 in advance of bridge pier replacement, with associated staging areas and temporary

work trestles. A survey of the Dog Beach area was conducted during relatively low water in October and also included investigatory shovel tests. The study found that, while archaeological deposits belonging to 10BR1026 were nearby, such deposits were absent within the BNSF ROW or covered by more than 90cm of fill material. Bridge 3.9 was recorded as an historic structure and recommended eligible for the NRHP. The bridge pier replacement project was recommended to have no adverse effect to both 10BR1026 and to Bridge 3.9 (Ferguson et al. 2008).

Archaeological Site BR1026

Prior to discussion of this site, it is important to note that conditions on and around the site location have been substantially altered since the original and subsequent recordings, particularly due to improvements to US 95 and BNSF project work. Landforms, landmarks, mapping benchmarks, shoreline, and water levels have either been removed, altered, or are variable, resulting in mapping data that in some cases can only be estimated.

This multi-component site, located on Dog Beach between US 95 and the BNSF main track, was first recorded in 2003 by Northwest Archaeological Associates, Inc. (NWAA) (Kincaid et al. 2003). The site was recorded as an area 80 x 120 m in size containing both prehistoric and historic components. The site was mapped as extending from along the much of the shore of Dog Beach, including a cutbank exposure, and noted as probably continuing into the water (Figure 4).

The prehistoric component was recorded as a surface scatter of two quartzite cores, two metasediment cores, a granite anvil stone, a metasediment hammerstone, 10 cobble-derived quartzite flakes (two of which were edge-modified), and one metasediment flake. A feature consisting of a discrete cluster of more than 20 fire modified rocks (FMR), possibly eroded from the cutbank was also identified at the south end of the site. The historic component consisted of a surface scatter of domestic glass, white-glazed earthenware, a brown terra cotta fragment, round nails, a spiral nail, one .45 caliber cartridge, nuts and bolts, and industrial metal, with a buried component evident in the cutbank. The presence of an amethyst-colored glass fragment suggested the site dated to the period from 1880-1916.

No subsurface testing was conducted at the time, but the exposed cultural horizons were described as follows:

The cutbank exhibits historic fill overlying two occupation levels, the first occupation level appears to be a mixture of historic debris and potentially prehistoric material while the lowermost level appears prehistoric in origin. Both occupation layers appear to be intact. The historic fill is a mixture of rock, sand, metal fragments and wood and is visible to approximately 25 centimeters below ground surface. The upper occupation level is approximately 10 centimeters thick and is comprised of charcoal stained sediments, faunal remains (primarily mammal bone) and fragments of metal, glass and wood. Directly under this occupation level is approximately 20 centimeters of beach sand and then another occupation level approximately 20 centimeters thick is present on top of more beach sand. The second occupation level is comprised of charcoal stained

sediment and fire modified rock. Both occupation layers are visible in the cutbank for approximately 25 meters (Kincaid et al. 2003:1).

In 2006 and 2007, SWCA Environmental Consultants (SWCA) tested the site as part of the Sandpoint North and South Project (Bard et al. 2014: 179-196); all testing efforts are combined here. A survey of the Dog Beach area identified a small scatter of FMR, a green chert shatter fragment, and a ceramic fragment with a Chinese design near the high water line. Investigation of the cutbank, to a total depth of 1 m, identified only the upper cultural horizon recorded by NWAA; an 8- to 10-cm-thick historic horizon, 47-57 cm below surface (cmbs) containing historic metal artifacts. The lower horizon (recorded 80-90 cmbs) was absent, and SWCA concluded that the lower horizon was a “discrete feature of limited horizontal extent” (Bard et al. 2014:183).

In total, 29 shovel test units (STU) and two test units (TU) were excavated around the 10BR1026 site area (Figure 5). STU 29, excavated near the southern limit of the 2003 site boundary, encountered a concrete slab 26 cmbs beneath historic fill deposits. Two prehistoric lithic artifacts were found in the historic fill deposit and were interpreted as redeposited. Testing between US 95 and the railroad prism resulted in recovery of prehistoric lithic artifacts in four STUs and two TUs. These test units were located in the cluster of units seen near the map center (next to the brown pipes seen in the figure; these pipes were not present at that time); the tested area is now covered in deep fill sediments. In total, 1 utilized flake, 1 chert pressure flake, 2 chert flakes, and 4 fragments of FMR were recovered in this cluster of STUs. One TU (2007-TU-2) was negative. 2007-TU-1 recovered a total of 5 pressure flakes, 4 cryptocrystalline silica (CCS) flakes, 1 metasediment flake, and 19 fragments of FMR. The generalized stratigraphy of 2007-TU-1 consisted of:

- 0-9 cmbs, silty fine sand, from modern fill;
- 10-39 cmbs, coarse yellow sand, probably dating to post-early 1960s;
- 40-76 cmbs, a charcoal-stained horizon with yellow sand pockets containing coal waste, slag, railroad ballast rock, FMR, historic and prehistoric artifacts, and calcined bone;
- 70-96 cmbs, medium to coarse yellow sand; and
- 96-255 cmbs, gray sand.

The artifact-bearing, charcoal-stained horizon was interpreted as a disturbed historic deposit with intrusive prehistoric artifacts. The overall deposit was thought to possibly be related to a construction burn pile or burn pit associated with railroad construction dating to the 1950s or early 1960s. The prehistoric artifacts, perhaps dating to as late as the early 1900s, were interpreted as being intrusive, and/or mixed into the historic deposit, and no evidence of intact features or surfaces were identified. As noted above, neither the site limits of Site 10BR1026 nor Site 10BR538 were expanded to include any of the area tested, presumably due to the recent and disturbed depositional and artifact contexts. In other words, although artifacts were recovered in a few units, the soils and sediments were interpreted as recent, mixed deposits versus intact or slightly disturbed prehistoric or early historic soils or sediments.

In 2008, Rain Shadow Research revisited and conducted subsurface investigation of the site area during low water level conditions (2055.25 ft. elevation). The pedestrian survey found that

the cutbank had recently slumped and no artifacts or features were observed in the bank, although portions of the bank were covered in snow. Modern garbage and historic artifacts were seen across the exposed beach, but no artifacts were seen within the APE for that project (essentially the BNSF ROW). Several prehistoric artifacts were found on the surface below the Ordinary High Water Mark (OHWM), but all of these were found on the beach west and south of the project APE. Noted artifacts included metaquartzite percussion flake, a retouched platy metasediment pebble, a metaquartzite flaked cobble core, and a bifacially flaked rhyolite cobble.

A total of 40 auger probes were excavated within the 2008 project APE; no probes were excavated outside the APE. All of these were negative, and Rain Shadow Research suggested a redefined boundary for Site 10BR1026 that only included the western area of the previously defined site limit to account for artifacts seen during the survey and previously recorded in the cutbank (see Figure 5).

Based on the results of the surface and subsurface investigation, Rain Shadow Research found:

...no cultural resources above the 2,055.25 ft. lake elevation in the upper 90 cm of the BNSF ID Bridge 3.9 Project APE [...]. We also determined that the entire project area is covered with a layer of historic-modern fill that is at least 90 cm thick. Intact archaeological deposits may be present below the layer of fill on an original historic land surface, but the proposed undertaking does not involve any subsurface disturbance that will reach below the fill (Ferguson et al. 2008:18-19).

This conclusion is similar to that of SWCA the year prior, although it there appears to be more disturbance of the ground surface during the 2008 effort than during the 2006-2007 work. In 2008, archaeologists found 30 percent ground visibility across much of the APE, although the tree and brush overstory had been cleared and large, disturbed areas with 75-100 percent visibility were present in the 2008 project APE.

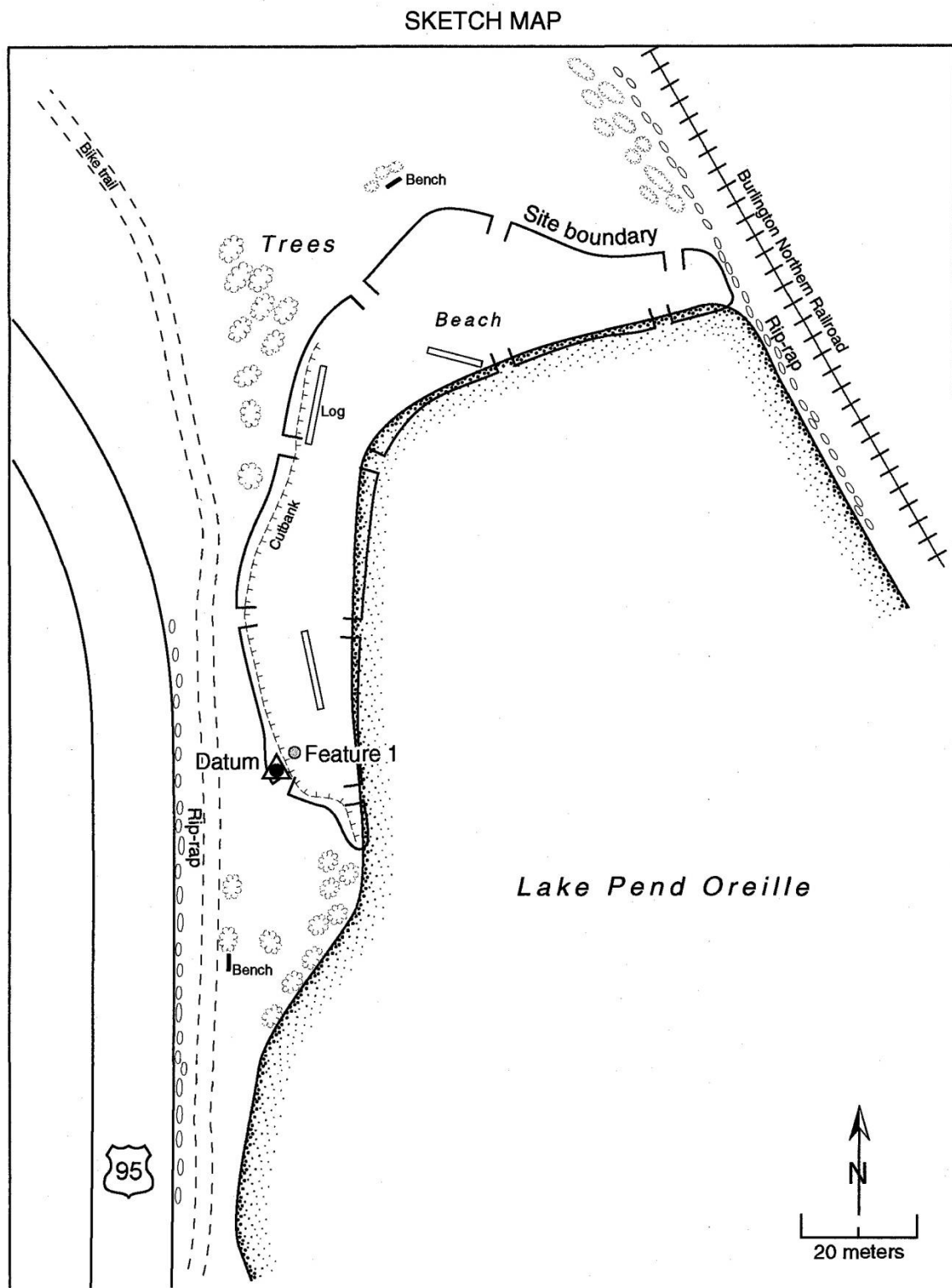




Figure 5. Previous Investigations at 10BR1026 (Dog Beach)

Northern Pacific Depot (ID SHPO 17-001199)

The Northern Pacific Depot, originally constructed in 1916, is listed on the NRHP. The property was recorded with the common name 'Sandpoint Burlington Northern Railway Station', and is listed in the NRHP by that common name. However, in this report, the building is henceforth referred to only as the 'Northern Pacific Depot' (its historic name) to reduce some confusion regarding the name (Burlington Northern Railroad is now BNSF and the building is owned by BNSF, but is known locally as the Amtrak station).

The depot, built of brick with a tile roof in the Gothic Revival Style, is the only remaining passenger depot in Idaho. The building is constructed in three primary sections: a central volume with gables and dormers, and two lower volumes at each end with hipped roofs. The one story structure has an off-center bay window on the platform side, and doors with flattened Tudor arches.

The depot's significance, as described on the 1973 nomination, was based on the unique, rather than formulaic, architectural style, and it is the only Gothic style railway station in the state. Also, the station was associated with the Northern Pacific Railroad, the major developer of the town of Sandpoint (Wells 1973).

An intensive rehabilitation of the station was undertaken pursuant to the 2005 MOA, resulting in substantial improvements to the depot which had fallen into disrepair since its nomination to the NRHP. A 2015 architectural and structural condition report found that the exterior improvements, while not a complete restoration, were well in keeping with the original 1916 drawings. The building has several larger structural cracks (particularly on the interior), but the exterior repointing and brick replacement were done to satisfaction. Overall, the building was thought to be much improved, in keeping with the original construction, and had weathered the adjacent US 95 Byway construction impacts well (Hartmans and McClendon 2015).

Whitaker House Bed and Breakfast (ID SHPO 17-017743)

The Whitaker House Bed and Breakfast property, constructed in 1895, was informally recorded by a local citizen in 1993, so no formal architectural descriptions exist. The property was found to be likely eligible for the NRHP under Criterion C, and possibly Criterion A, by the Idaho SHPO in 1995. However, the property, formerly located at 410 Railroad Ave., no longer exists.

Northern Pacific Railroad (ID SHPO 17-017845; 10BR969)

The Northern Pacific Railroad (NPRR) line, now operated and maintained by BNSF, has been recorded as an historic resource throughout its course in 11 counties, including Bonner County. In 2007, as part of the IDT Trestle Creek Bridge project, the railroad line was recommended eligible for the NRHP under Criterion A due to its association with settlement, mining, and logging within the region (Archambeault 2007).

Portions of the original, abandoned railroad grade have been recorded as a discontinuous archaeological site (10BR969) in the vicinity of Sandpoint and to the south near Cocolalla Lake, but none of these portions are located within the proposed APE (Parvey et al. 2004).

Bridge 3.0 (BNSF Bridge Street Overpass; ID SHPO 17-018087)

Bridge 3.0 was recorded in 2008 as part of the Sandpoint North and South Architectural Bypass Reevaluation Project (Everhart and Johnson 2008). The bridge, constructed in 1937 by the Pacific Northern Railroad, is a concrete and steel rail bridge with poured concrete horizontal and vertical supports and a poured concrete railing. It displays distinctive elements of the Streamline Moderne style that emerged in the 1930s.

The bridge was found to be in good condition and determined by the Idaho SHPO to be individually NRHP-eligible under Criterion C for its design and engineering significance, and was noted to be an ‘excellent example of concrete moderne bridge construction.’

Project Area South of Bridge 3.9

On the south end of Bridge 3.9, two previous cultural resources studies have been conducted within the proposed APE: one study by NWAA (Hudson 1998) and another study by Rain Shadow Research in 2008 (Root et al. 2008). Both of these studies were conducted for BNSF projects.

In 1998, NWAA completed an archaeological and historic resources survey for the BNSF Sandpoint to Algoma Double Track project. The survey covered an area from the south approach of Bridge 3.9 to Sagle, ID, and included an historic records search and pedestrian survey. Subsurface investigation was included in the objectives of the survey, but it does not appear any shovel testing occurred during the survey. As part of the survey, NWAA revisited and updated the site record for Site 10BR38.

In 2008, Rain Shadow Research completed a small archaeological survey at the south end of Bridge 3.9 in advance of Bridge 3.9 pier replacement, with associated staging areas and temporary work trestles. Their survey generally found the BNSF ROW to be heavily disturbed and engineered. Investigation of the shoreline below the OHWM found artifacts associated with Site 10BR38 (Root et al. 2008).

Bridge 3.9

In 2008, Rain Shadow Research evaluated BNSF Bridge 3.9 (ID RR2008-001) (Ferguson et al. 2008). The bridge is well documented in the project report and has an accompanying historic property form.

BNSF Bridge 3.9 is a span deck truss railroad bridge supported by 88 piers and was constructed in 1905. At 4,760 feet long, the bridge spans Lake Pend Oreille on a northwest to southeast trajectory.

Most of the piers and other structural elements were replaced between 1960 and 2010. Most recently, the north and south bridge approach piers were replaced in 2007-2009.

Despite the replacement of several piers, the bridge retains integrity of location, feeling, design, and association. The bridge has been recommended NRHP-eligible under Criterion A for its association with the economic and community growth of the Sandpoint region, and under

Criterion C for its distinctive engineering features, including a swing span (no longer functioning).

Archaeological Site 10BR38

Site 10BR38, a multicomponent prehistoric and historic artifact scatter, is located to the east of the BNSF track and Bridge 3.9 within the low water shoreline of Lake Pend Oreille. The site has been recorded as containing prehistoric lithic artifacts and historic glass, ceramic, and metal fragments.

The site was first recorded in 1974 based upon information from Hope, ID resident Warren “Chuck” Peterson (Johnson 1974). The site location was revisited in 1998 by NWAA (Hudson 1998), where they found FMR fragments, basalt, jasper, and CCS flakes, scrapers, and projectile points, as well as purple and aqua glass fragments and railroad spikes. The prehistoric artifact scatter was found primarily on the south end of the site, and the historic scatter was found adjacent to the bridge approach (Figure 6). They also noted that the site had been monitored for several years by a professional archaeologist (Robert M. Weaver) who owned land adjacent to the site and stated that the prehistoric site density was greatest from just above high water to low water, most of which had eroded onto the beach. The site was recommended not eligible for the NRHP within the report, but was recommended eligible on the site form; no criteria of eligibility were provided.

In 2008, Rain Shadow Research revisited the site as part of a pier replacement project for BNSF on the south end of Bridge 3.9. It should be noted their report does not refer to the 1998 revisit of the site; it is unknown the reason for the omission. Their survey was focused on the relocation of the originally-mentioned (circa-1974) site and whether it was present in the APE, and therefore did not update the 1998 record/site boundary. The survey occurred during lake drawdown conditions, included a close interval transect survey of the 2008 project APE and 12 shovel tests in upland portions of the shoreline. In total, 12 pieces of fire-cracked rock (FCR) and one flake were found on the surface below OHWM, and six FCR fragments, three flakes, and one biface from four positive shovel tests (Figure 7). No historic artifacts were seen during their survey of the beach.

As a result of their effort, they created a new site boundary (restricted to that portion of the site found in the BNSF ROW). Analysis of the results concluded the site was in poor condition and all artifacts had been identified or recovered from secondary contexts/deposits. Further, they recommended the site as not eligible for the NRHP due to a lack of integrity (Root et al. 2008).

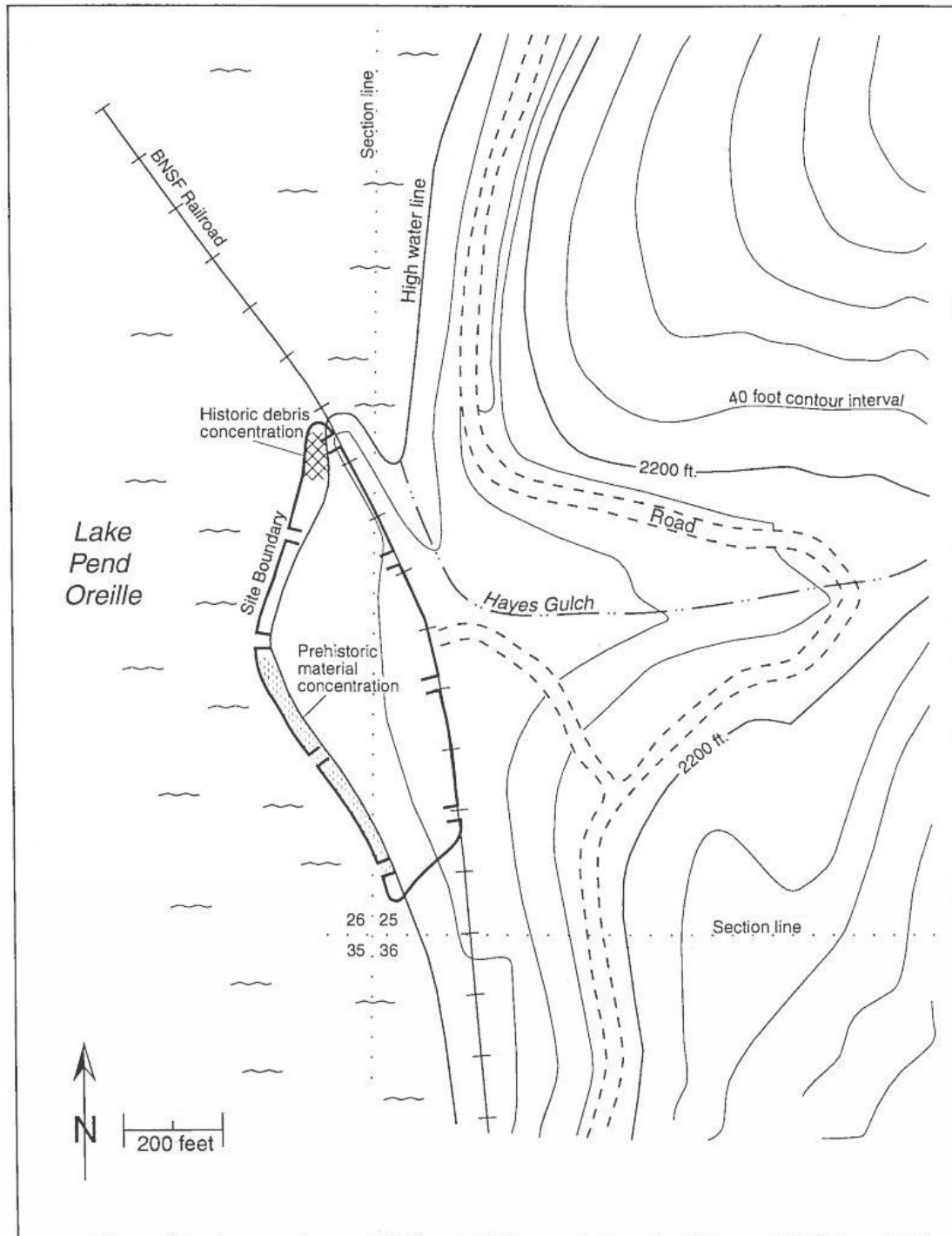
Upper Pend Oreille River Archaeological District (UPORAD)

In 2012, both Site 10BR38 and Site 10BR1026 were included in the Upper Pend Oreille River Archaeological District (UPORAD) when recorded by the USACE (Miss and Kanaby 2012). The UPORAD covers an area of 16,167 acres, following the 2080-ft. contour on both sides of the Pend Oreille River upstream from the Albeni Falls Dam to River Mile 119. The eastern boundary of the UPORAD incorporates both sites (10BR38 and 10BR1026) into the District, and identifies both as contributing properties (although not individually eligible). The nomination form lists Site

10BR38 as an open camp and Site 10BR1026 as a stratified site (Miss and Kanaby 2012:Table 15).

Also, as in other prior recordings of these sites, not all of the preceding work conducted at each of the sites has been included in the UPORAD documentation. In this case, none of the reporting by Ferguson et al. (2008), Root et al. (2008), or the 2006-7 excavations reported in Bard et al. (2014) were included in the site descriptions or references for the UPORAD nomination. Therefore, their conclusions about site extent and integrity were not considered as part of the evaluation of site eligibility or contribution to the District. The mapped location and site boundary for Site 10BR38 is based upon the 1998 NWAA site sketch map. However, the location of Site 10BR1026 appears to be based upon the 2003 NWAA site location, but the site boundary is different from that provided in the 2003 site sketch map (also included in Swords 2014). The source for the site's boundary shown in the nomination form could not be found (Figure 8).

Site: 10-BR-38



Sketch map.

Figure 6. 10BR38 Site Sketch Map, NWAA 1998



Previous Investigations at 10BR38 Vicinity

Legend

- ▲ Rain Shadow Artifacts (2008)
- Rain Shadow STU Locations (2008)
- Rain Shadow Boundary (2008)
- NWAA/SWCA Boundary (2003-2014)



0 100 200
Feet

Figure 7. Previous Investigations at 10BR38 Vicinity
BNSF Sandpoint Junction Connector, Bonner County, ID

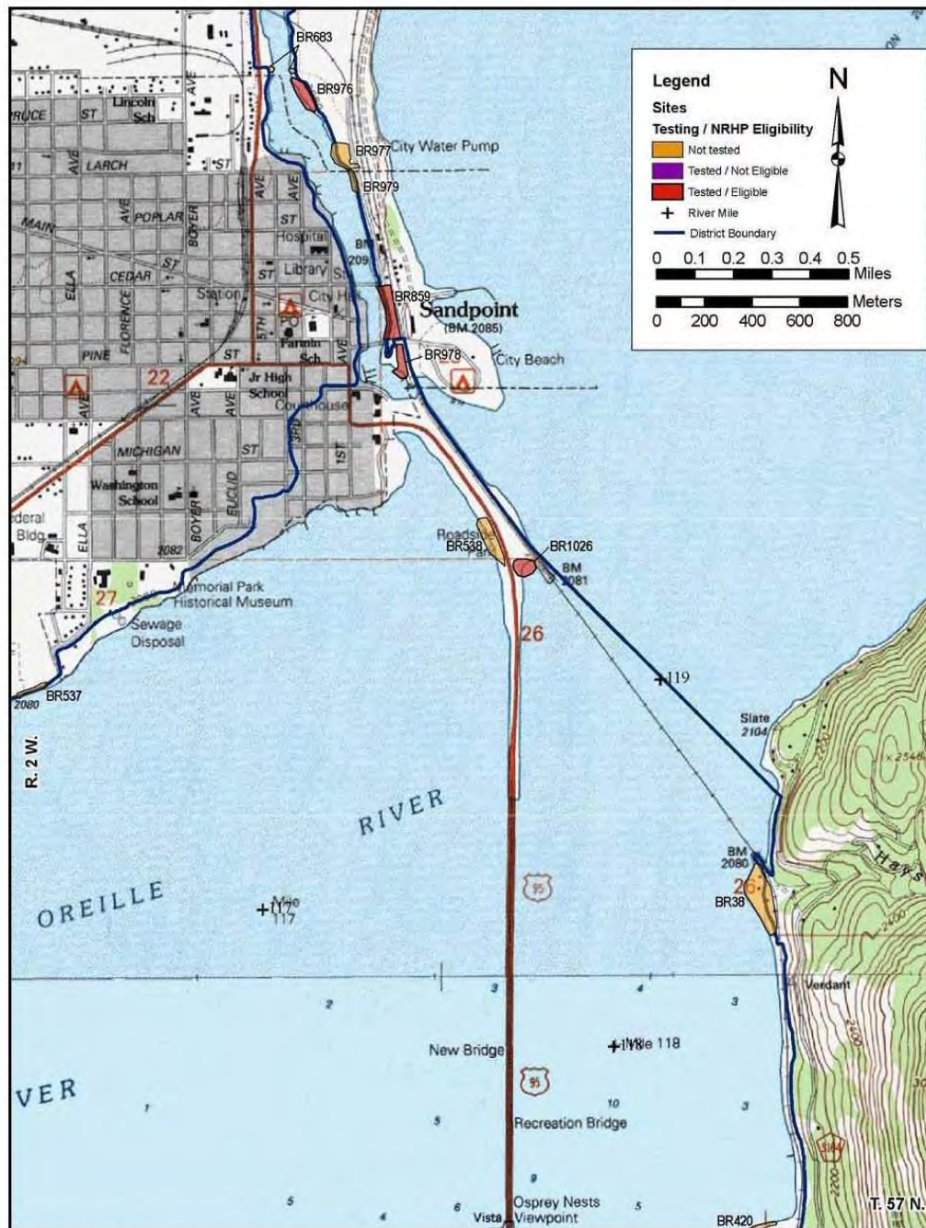


Figure 37. Sites within the Upper Pend Oreille Archaeological District, River Mile 116 to 119 (USGS Sagle, ID, 7.5' Quads., 1996).

Figure 8. Site Locations for 10BR38 and 10BR1026 from UPORAD Nomination Form

Native American and Other Consultation

Native American and other consultation remain under the purview of BNSF and the federal lead agency. To date, BNSF has conducted initial informal, preliminary project description consultation with the Kootenai Tribe of Idaho, the Coeur d'Alene Tribe, the Kalispel Tribe of Indians, and the Spokane Tribe of Indians (Quannah Spencer, personal communication 2017).

Expectations

Based upon the results of the pre-field research and an informal site visit, expectations for the current cultural resources survey were:

- Previous studies and Section 106 undertakings have identified several NRHP-listed and NRHP-eligible archaeological and historic resources within the APE and immediate vicinity.
- A substantial portion of the BNSF ROW appears to be covered with fill sediments and engineered fill.
- Preliminary plans indicate the majority of additional railroad grade will be constructed through the placement of fill materials, with limited grading or cutting.
- The proposed project will not directly contact or alter Bridges 3.0, 3.1, or 3.9.
- Project engineering analysis is being conducted to ascertain potential settling effects that may be caused by construction and operation of the double track.
- Fill sediments and construction of the new US 95 Byway and relocation of Railroad Ave. have essentially filled much of the landscape between those roads and the railroad north of Bridge 3.1.
- As part of the US 95 Byway project, a stretch of new railroad grade has already been constructed within the BNSF ROW north of Dog Beach and south of Bridge 3.1 due to foreseeable loss of access from the new highway alignment.
- At its south end, fill sediments, gravel, and rip rap have been emplaced on the west side of Bridge 3.9, largely burying that portion of Site 10BR38 previously recorded.

FIELD SURVEY METHODS AND RESULTS

Methods

Pedestrian survey and subsurface testing included 100 percent of the upland portions of the proposed APE and those portions of the APE below the OHWM to an elevation of 2054.76 ft. [National Geodetic Vertical Datum of 1929 (NGVD29)]. The upland inventory was completed by Jacobs' archaeologists Michael Chidley (senior archaeologist) and James Mayer (geoarchaeologist) on 26-28 September 2017. The below-OHWM inventory was completed by Jacobs' archaeologists Michael Chidley and Jane Wiegand (archaeologist) on 24-26 October 2017.

The survey consisted of a pedestrian survey of the entire proposed APE (upland, below OHWM, or accessible by boat) and the excavation of shovel test probes (STP) in the Dog Beach vicinity and the south approach of Bridge 3.9. The pedestrian survey consisted of walking surface transects that were spaced approximately 3-5 meters apart throughout the APE (excepting the main track ballast and track). Transects were walked along all areas where ground disturbance is planned. The survey included an examination of the ground surface, cut-bank exposures, beach deposits, and local topography. Indications of historic and modern development were also noted and documented. In areas of poor visibility, crew examined all exposed ground surfaces including railroad or road cuts, erosional features, two-track ruts, rodent backdirt piles, and animal paths. Field conditions were noted and photographs taken to document the variable conditions. Physical characteristics of historic resources within the APE were noted and photographed. Photography of Bridge 3.9 was conducted from a boat to provide close pictures of significant architectural elements.

STPs were strategically placed and excavated in areas judged to have the greatest potential for buried archaeological remains, and which were accessible to standard shovel testing protocols. STPs measured approximately 35 cm in diameter and were excavated to a depth of one meter unless deeper excavation was prevented by impenetrable rock/cobbles, or ground water. Sediment was screened through 0.6-cm (1/4 inch) mesh hardware cloth. Upon completion, the STPs were photographed with a digital camera, any artifacts returned to the base of the hole, and backfilled.

Survey Results

Archaeological Survey Results

The pedestrian survey found that the vast majority (estimated at 95 percent) of the upland areas of the proposed APE is covered by historic and/or modern fill sediments and engineered fill. Additionally, that portion of the proposed APE from the Northern Pacific Depot to immediately north of Dog Beach has been substantially altered and filled by the US95 Sandpoint North and South Project. Without exception in that corridor, the fill prisms and slopes between the highway and the railroad are continuous or immediately adjacent to each other. This makes those areas inaccessible to standard archaeological investigation (pedestrian survey of intact landforms and productive shovel testing), and likely indicates substantially compromised archaeological potential. Additionally, very little of the remaining upland area of the proposed APE has been unaltered by prior construction, filling, and cutting, with little to no evidence of intact native soils or landscapes.

Northern Pacific Depot Vicinity

The proposed APE north of the Northern Pacific Depot consists of graded and filled railroad right-of-way and maintenance access from the Depot north to the end of the APE (Figure 9). Proposed work in this area consists of limited grading adjacent to the existing tracks to accommodate new sub-base and ballast prism at equivalent grade to the existing track.

Pedestrian survey of this area did not yield any artifacts, and the landscape has been entirely reworked and engineered.

The proposed APE south of the Northern Pacific Depot to Bridge St. consists of the railroad prism, which is elevated approximately 20 ft. above the adjacent buildings and Sandpoint City Beach, and blends into a fill prism to the west (Figure 10). Proposed work in this area will add a new mainline track and associated sub-base and ballast prism to match the existing grade, and will reconstruct the existing passenger platform and parking lot. Although the railroad grade adjacent to the Depot and extending to the south is likely original to construction of the Depot in 1916, the majority of this area, including the parking lot and Railroad Ave., fill prism, was reconstructed by the US 95 Bypass project to relocate each of those features to the east to accommodate the new highway alignment. Pedestrian survey of this area confirmed that the majority of this area consists of new construction, and that the base of the railroad fill prism now intersects the relocated parking lot and Railroad Ave.

Bridge St. to Dog Beach Vicinity

Work proposed in this section will add fill to create a new railroad prism to accommodate the new mainline track west of the existing track. The proposed APE in this area consists of the existing elevated railroad prism and areas immediately adjacent to the prism. From Bridge St. south to Sand Creek, the base of the existing prism intersects with the US 95 highway prism, the new highway bridge over Sand Creek approach structure, or Sand Creek (Figure 11). South of Sand Creek, the base of the railroad prism encounters an overflow channel of Sand Creek. This overflow channel is submerged for most of summer when the lake level is high. The overflow channel is bounded on the west side by the fill prism holding a relocated pedestrian path and the new US 95 Bypass. Pedestrian survey in the overflow channel was negative.

South of the overflow channel, the railroad prism intersects a new railroad fill prism added as part of the US 95 highway project and a reconstructed stormwater swale and drainage structure at the new prism's south end. Proposed work in this area will construct the new mainline on the new prism grade and, at the south end, will add fill adjacent to the existing elevated rail prism. Pedestrian survey in this area confirmed this is a newly reconstructed engineered landscape covered in fill or substantially altered by the stormwater swale (Figure 12, Figure 13, and Figure 14).

Conditions in the locations of both archaeological sites are substantially changed from that of 2006 – 2008, and are outlined in greater detail below. Comparison photos of the Dog Beach vicinity and south end of Bridge 3.9 vicinity, respectively, to illustrate the landscape changes, are provided in Figure 15 through Figure 18. Survey conditions below OHWM at Dog Beach and the south end of Bridge 3.9 can be seen in Figure 19 and Figure 20.



Figure 9. Current Conditions at North End of the Proposed APE; View to the North



Figure 10. Conditions of Proposed APE South of Northern Pacific Depot; View South



Figure 11. Railroad Fill Prism South of Bridge 3.1; Bridge Overhead is US 95; View to Southeast



Figure 12. New Fill Prism East of US95, South of Bridge 3.1; View to South



Figure 13. New Fill Prism East of US95, North of Dog Beach; View to North



Figure 14. New Fill Immediately North of Dog Beach; View North from Shoreline



Figure 15. Photograph of Conditions at 10BR1026 in 2008 from Ferguson et al. 2008



Figure 16. View of Conditions at 10BR1026 in 2017, with Trees Cleared (Note the Lack of the Conifers seen in Figure 15), Bank Slump, and Large Fill Placement; View to North-Northeast

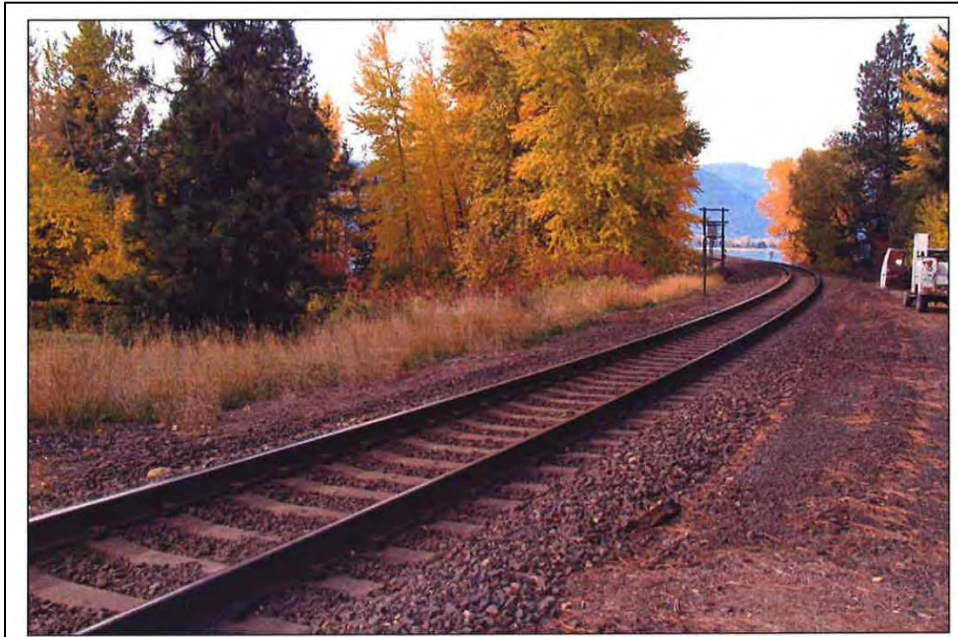


Figure 10. Overview of the project APE above the ordinary high water mark (OHWM) to azimuth 340°.

Figure 17. Photograph of Conditions South of 10BR38 in 2008 from Root et al. 2008



Figure 18. View of Conditions South of 10BR38, Showing Modifications Since 2008; View to Northeast



Figure 19. Survey Surface Conditions below OHWM at Dog Beach



Figure 20. Survey Surface Conditions below OHWM at Bridge 3.9 South End

Dog Beach Vicinity

Work in the Dog Beach vicinity area of the proposed APE will add a new fill prism west of the existing elevated prism to match the existing grade, construct a new bridge, realign the existing pedestrian path, add additional fill and reconstruct the existing construction fill, and construct a temporary construction bridge west of the new bridge. Work is anticipated throughout the existing BNSF ROW.

In this vicinity, deep compact fill or gravel and rock has been placed immediately north of Dog Beach, north to the stretch of new grade already constructed within the BNSF ROW south of Bridge 3.1/Sand Creek. This fill ranges from approximately 3 ft. to more than 8 ft. deep/high of structural rock. This fill is impenetrable to hand tools, so STPs locations were limited to a small area in the northwest corner of the beach area, immediately adjacent to the fill at Dog Beach itself and the beach below the OWHM (see Figure 14).

As noted above, a pedestrian survey of Dog Beach and south end of Bridge 3.9 occurred during the fall drawdown when the water level was at 2054.76' elevation. Surface conditions observed at Dog Beach in the BNSF ROW below the OWHM were beach sands with some standing water and areas of muck, resulting in approximately 85% surface visibility. Modern trash and non-diagnostic bottle/curved glass fragments were observed across the beach. In a couple of instances, beach stones and ballast rocks had been collected and then placed into large 'smiley face' or other patterns and shapes, indicating frequent movement of rocks across the beach deposits, even below the OWHM. In addition, a rock 'pavement', approximately 10 m by 55 m in size and constructed of rocks similar to railroad ballast, is located in the area below the OWHM adjacent to the west side of the existing railroad prism. This ballast 'pavement' appears to remain from construction work related to the replacement of bridge piers in 2009; the 'pavement' was impenetrable to shovel tests.

A concerted effort was made to locate prehistoric or historic artifacts within the BNSF ROW in this area, including lithic artifacts, FCR, or decorated/embossed historic ceramics or glass. None were found in the APE. An informal survey closer to the cutbank did find both FCR fragments and a couple lithic flakes; however, these were outside the BNSF ROW and therefore outside the proposed APE. It should be noted here that this beach is known locally/anecdotally as a place to find artifacts, and it is certainly possible that surface artifacts are frequently collected by beach visitors. In fact, a metal detectorist was observed leaving the beach area during one of the survey visits. Additionally, the presence of "beach art" using rocks at hand also supports the idea that rocks and other materials are being regularly moved around the beach (whether they are artifacts or not).

A total of 18 STPs were completed in the Dog Beach vicinity (STPs DB 1-18) and placed to investigate current conditions and to verify the results reported in Bard et al. (2014) and Ferguson et al. (2008) (Figure 21). The majority of effort focused on the beach and below the OWHM, since the least amount of prior subsurface testing had occurred in that area. All but one STP were negative either for prehistoric artifacts or temporally diagnostic historic artifacts, and

many contained modern trash (see Appendix B for shovel test pit descriptions). One STP on Dog Beach (DB 10) contained a single flake artifact: a small quartzite flake recovered 53 cmbs. Unfortunately, a thin brown bottle glass fragment was recovered below that artifact at 93 cmbs. The bottle glass fragment was embossed with "...LITTE...", and probably was embossed DO NOT LITTER. Although information about the timeframe for this phrase being embossed on glass bottles is scarce, it probably dates the bottle fragment to after the mid-1950s and the anti-litter campaigns joined by companies like the Owens-Illinois Glass Company (Plumer 2006). Due to the recovery of the flake in STP 10, radial STPs were placed at 5 m intervals north, south, and east of STP; BNSF ROW limits precluded radials to the west. None of these recovered any further prehistoric or temporally diagnostic historic artifacts. Altogether, modern trash was found at depth in four STPs: clear curved glass at 45 cmbs and an aluminum condiment packet 75 cmbs in STP 11; plastic fragment at 65 cmbs in STP 15; a curved brown glass fragment and a curved green glass fragment at 20 cmbs in STP 16; and, a thin white (toy?) plastic fragment between 50 cmbs in STP 18.

STPs encountered primarily sandy lacustrine beach deposits displaying minimal visual evidence for soil formation and containing varying amounts of modern debris. The STP results from this area indicate that the majority of this portion of the proposed APE is composed of recent artificial fill and or lacustrine beach deposits (as noted by others). If any older Holocene deposits are present in this portion of the APE, they are either relatively deeply buried or have been removed by erosion. Evidence for the latter in this portion of the APE is seen in the cutbank exposures to the west and south, where terrace deposits are being actively eroded by wave erosion.

South of Bridge 3.9

Similar to Dog Beach, the landscape at the south approach of Bridge 3.9 and to the south has been substantially filled by prior construction work. The majority of the area previously investigated by Root et al. (2008) is covered by impenetrable fill estimated at three to 12 ft. deep. The western ROW south of the bridge is largely covered in very deep fill, while the proposed APE along the eastern ROW coincides with graded areas and hillslopes above cut rock faces.

Surface conditions observed in the ROW below the OHWM were sand, stone, and rock lag deposits, resulting in 100% surface visibility. Modern trash and non-diagnostic bottle/curved glass fragments were observed across the beach; no temporarily diagnostic historic artifacts were observed. Similar to Dog Beach, construction activities during the BNSF bridge pier replacement project resulted in additional rip-rap armoring of the ballast prism, and sheet piles were visible just under the water surface north of the bridge approach rip-rap. At the extreme south end of the APE, the BNSF ROW below the OHWM consisted of beach stone and rock lag deposits; no artifacts or trash were identified on the surface.

The pedestrian survey identified five pieces of FCR; no prehistoric flakes or historic artifacts were observed on the surface. In part, this may be due to the placement of fill and rip-rap at the bridge approach and to the west that covered the 1998-recorded historic scatter and portions of

the shoreline. Only one flake was seen on the beach surface in 2008, and it could not be relocated during the current survey.

Pedestrian survey along the upland BNSF ROW identified a stacked-rock wall feature on the edge of a small field located on the hillslope above a cut rock face. The rock wall is described below as a newly identified archaeological site, temporarily designated Rock Wall 1.

A total of seven STPs were completed at the south end of Bridge 3.9 (STPs SE 1-7) to investigate current conditions and to verify the results reported in Hudson (1998) and Root et al. (2008). STPs in the upland in the south area (STPs SE 1-4) were placed to expand the area investigated with subsurface tests since all upland areas tested in 2008 are now covered in deep fill. STPs below the OHWM (STPs SE 5-7) were placed to search for subsurface materials, reported on the surface by Hudson (1998) and subsurface by Root et al. (2008) (Figure 22). STP results were consistent with soil and geologic mapping and with that reported by Root et al. (2008).

The upland tests encountered relatively dense slightly pebbly silt loam over relatively coarse gravelly sand and sandy gravel. The finer-grained dense silty cap varied between 20 and 85 cm in thickness, and is probably windblown silt reworked to some extent by slope processes. The underlying coarse grained deposit is impenetrable by shovel and is likely a glaciofluvial deposit. One STP proximal to the beach (SE 4) encountered loamy sand over gravelly sand and sandy gravel, and is considered to be beach deposit that is ultimately derived from wave erosion and reworking of the glaciofluvial deposit that was encountered in STPs upslope.

The tests below the OHWM (SE 5 – 7) found sediments essentially identical to that recorded in 2008 below the OHWM (Root et al. 2008: Continuation Sheet 3 of 6). STPs SE 5 and 7 (located furthest to the west) consisted of three strata of wave-reworked gravelly sand and underlying gravelly sand. STP SE 6, located in the narrow space between the water's edge and the rip-rap slope toe, encountered shallow wave-reworked sand overlying rocks. These rocks appeared to be buried structural railroad prism.



Figure 21. 2017 Investigation at 10BR1026 Vicinity and Recommended Site Boundaries

BNSF Sandpoint Junction Connector, Bonner County, ID

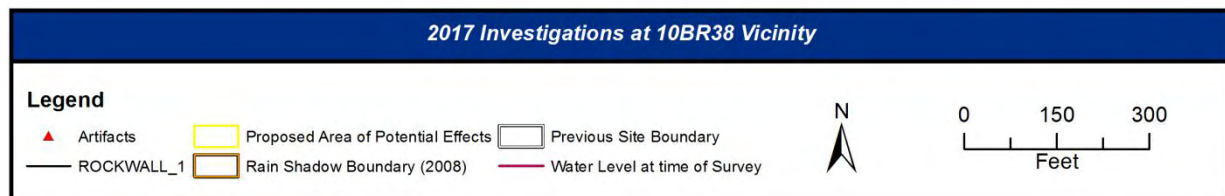


Figure 22. 2017 Investigations at 10BR38 Vicinity and Recommended Site Boundaries

BNSF Sandpoint Junction Connector, Bonner County, ID

Archaeological Site 10BR1026 (Dog Beach Site) Update

Due to a lack of shared data between archaeological surveys, testing, and documentation events, the data for this site is unfortunately contradictory and inconsistent. To concisely reiterate the site history, the site was:

- in 2003, recorded as a multicomponent stratified prehistoric and historic site within and beyond the BNSF ROW, and recommended eligible for the NRHP;
- in 2006-2007, tested within the original site boundary with unsuccessful relocation of the buried prehistoric component, and tests outside the site boundary found mixed deposits;
- in 2008, extensively subsurface tested, with no artifacts found in the BNSF ROW, and the boundary was redefined outside the ROW;
- in 2012, included in the UPORAD nomination, as a contributing NRHP-eligible property with a new site boundary;
- in 2014, recorded with the 2003 boundary when 2006-2007 testing results were reported, without mention of the 2008 results.

In summary, during field investigations subsequent to the original recording in 2003, one archaeological testing program found artifacts in disturbed contexts (2006-2007), one archaeological survey was unable to relocate or identify archaeological materials within the BNSF ROW (2008), and the current survey result was limited to the recovery of a single artifact in disturbed context at the extreme edge of the BNSF ROW.

Results of the current survey found conditions (where accessible) and conclusions very similar to that of 2008 within the BNSF ROW, and therefore the proposed APE. In 2008, auger testing indicated that there was no evidence of archaeological remains in the upper 90cm (2.9 ft.) of the soil column above the 2055.23-ft. lake elevation. Current shovel testing resulted in a similar finding, modified only by the presence of a single quartzite flake in disturbed context at the extreme western limit of the BNSF ROW, and otherwise lack of archaeological materials to a depth of 100 cmbs. In the upland portions of the proposed APE, any potential archaeological materials, whether in disturbed or potentially intact deposits, are now even more deeply buried by fill introduced since 2008. Any such deposits are now buried by an additional three (91 cm) to eight ft. (2.43 m) of fill. Where not covered by fill, current shovel testing found disturbed or recent fill sediments containing modern trash to a depth of 90 cmbs.

Actual artifacts related to Site 10BR1026 were informally observed during this survey within portions of the site mapped in 2003 and 2008, but recording those artifacts is outside the scope of this effort. Based upon the current field results and the 2008 field results, it is recommended that the 2003 and 2008 site areas be merged, representing areas where artifacts have been observed in the cutbank and surface. However, the merged boundary should be truncated to the area outside the BNSF ROW, since artifacts *in situ* or within potentially intact depositional contexts have not been identified within the BNSF ROW since 2003 (as represented in Figure 21).

The site was recommended eligible for listing on the NRHP in 2003, and was identified as a contributing property to the UPORAD in 2012. The current results did not find evidence to modify that recommendation or determination, since the potentially stratified, intact, and NRHP-significant portion of the site has never been recorded within the investigated area.

Archaeological Site 10BR38 (Artifact Scatter) Update

Similar to Site 10BR1026, due to a lack of shared data between archaeological surveys and documentation events, this site has two distinct boundaries derived from different data sets. In 1998, the site was recorded as containing two discrete surface scatters seen on the lake beach: one prehistoric and one historic. The site boundary was drawn to encompass these two scatters, including intervening upland, although the record does not mention a continuous artifact scatter. In 2008, the Rain Shadow Research survey found prehistoric artifacts both on the beach and in upland shovel probes adjacent to the beach, but did not find any surface artifacts where previously recorded and did not investigate the distant prehistoric component.

The current survey results found that the upland portion of the site recorded in 2008 has been covered in deep fill, rock, and rip rap, and shovel testing of the upland vicinity did not find any archaeological material. Pedestrian survey of the beach below the OHWM did relocate several FCR fragments within the site area identified in 2008, but did not relocate any historic artifacts in the vicinity where they were found in 1998. This may be due to the placement of fill; however, no historic artifacts were seen in that area in 2008 either. No artifacts were found in the current STPs below the OHWM, but the soil strata seen were similar to that previously recorded.

Based upon the current field results, the 1998 surface survey, and the 2008 field results, it is recommended that the 2008 site boundary be retained and the 1998 site boundary be truncated to that portion outside the BNSF ROW (as seen in Figure 22). Although this will result in a discontinuous site boundary, it will be representative of site conditions seen in the BNSF ROW since 1998 and the prehistoric component recorded further to the south in 1998. The current survey did not extend outside the BNSF ROW, so confirmation of the site content or integrity beyond the BNSF ROW is not possible.

The results of this survey indicate that the portion of Site 10BR38 within the BNSF ROW is in poor condition, since this portion of the site does not appear to contain *in situ* deposits, and therefore lacks archaeological integrity. It is possible that intact portions of the site exist outside the BNSF ROW, but prior railroad construction (i.e. Northern Pacific railroad) and impacts from variable water levels of Lake Pend Oreille have reduced the archaeological potential of this site.

The 1998 report states, with respect to both Site 10BR38 and 10BR951 (located to the south): “Neither site appears to be eligible for the NRHP. Most of 10-BR-38 is lagged onto the beach. The remaining site area is unlikely to add information important to understanding the prehistory of the Pend Oreille region because of low density and lack of integrity of association” (Hudson 1998:7). However, the site form attached to the report states: “This site does appear to be eligible for the National Register of Historic Places” (Hudson 1998: Site Form Page 2). No criteria of significance were provided.

In 2008, Root et al. do not provide a distinct NRHP-eligibility recommendation (in part due to lack of access to off-BNSF ROW portions of the site), but do state that the proposed project, which would directly impact the artifact bearing areas, would “have no effect on any archaeological sites eligible or potentially eligible for the National Register” (2008:29).

Notwithstanding both statements of integrity loss and recommendations of eligibility by prior work, or direct reference to the 2008 work, the site was determined to be a contributing property to the UPORAD in 2012, though not individually eligible for the NRHP. However, no current evidence was found to modify the description in the UPORAD nomination of the site as an undated prehistoric artifact scatter.

New Archaeological Site Rock Wall 1

This newly recorded resource, temporarily designated Rock Wall 1, is a historic site consisting of a single stacked-rock wall. The site is located south of Bridge 3.9 on the east side of the BNSF ROW (approx. STA946+35), on a hillslope above a cut rock face. The wall consists of dry-stacked, unmodified field rocks, oriented on a north-curving alignment (see Figure 22, Figure 23). The wall is approximately 42 m (138 ft.) long, has an average width of approximately 50 cm (1.6 ft.), and ranges from 30 cm (0.98 ft.) to 60 cm (1.9 ft.) in width (Figure 24). The wall stands approximately 50 cm (1.65 ft.) high; a game trail crosses the wall near its center, which has knocked the upper 30 cm (0.98 ft.) of the wall down (Figure 25).

The wall extends from the edge of the rock face uphill, where it ends at three large boulders at the top of the hillslope. A barbed wire fence also runs along the rock face edge. The wall appears to have been constructed of field rocks available in the immediate area, and similar rocks are present across the hillslope. Approximately half of the wall runs along the southern edge of a small clearing, while the upper half of the wall is in thick brush and timber. The wall appears to be of historic construction since much of the first course of stones is partially buried, and several fallen stones are also partially buried. Moss spanning between stones and brush growing through parts of the wall also convey a sense of age. The wall appears to be in fair condition, and has deteriorated due to abandonment, rock fall, and game trail impacts.

The wall's placement suggests it was constructed to incorporate the rock face/cliff to form two sides of a corral. The upslope side may have been functionally created by the steepness of the slope, but a wall forming a south side was not found during the survey.

The wall is contained entirely within the BNSF ROW, it is unknown when or by whom the wall was constructed, and does not appear to have been maintained since the time of construction. The wall maintains integrity of location and setting, but is limited in its integrity of design, workmanship and feeling due to simple and expedient construction, impacts from vegetation growth and erosion, and the difficulty in reconstructing the actual wall's function or remaining enclosure elements. The wall is not known to be associated with significant events or persons important to history. Recording of the wall has exhausted the site's archaeological potential, and does not have the potential to yield important information to history. Therefore, this site is recommended not eligible for the NRHP.

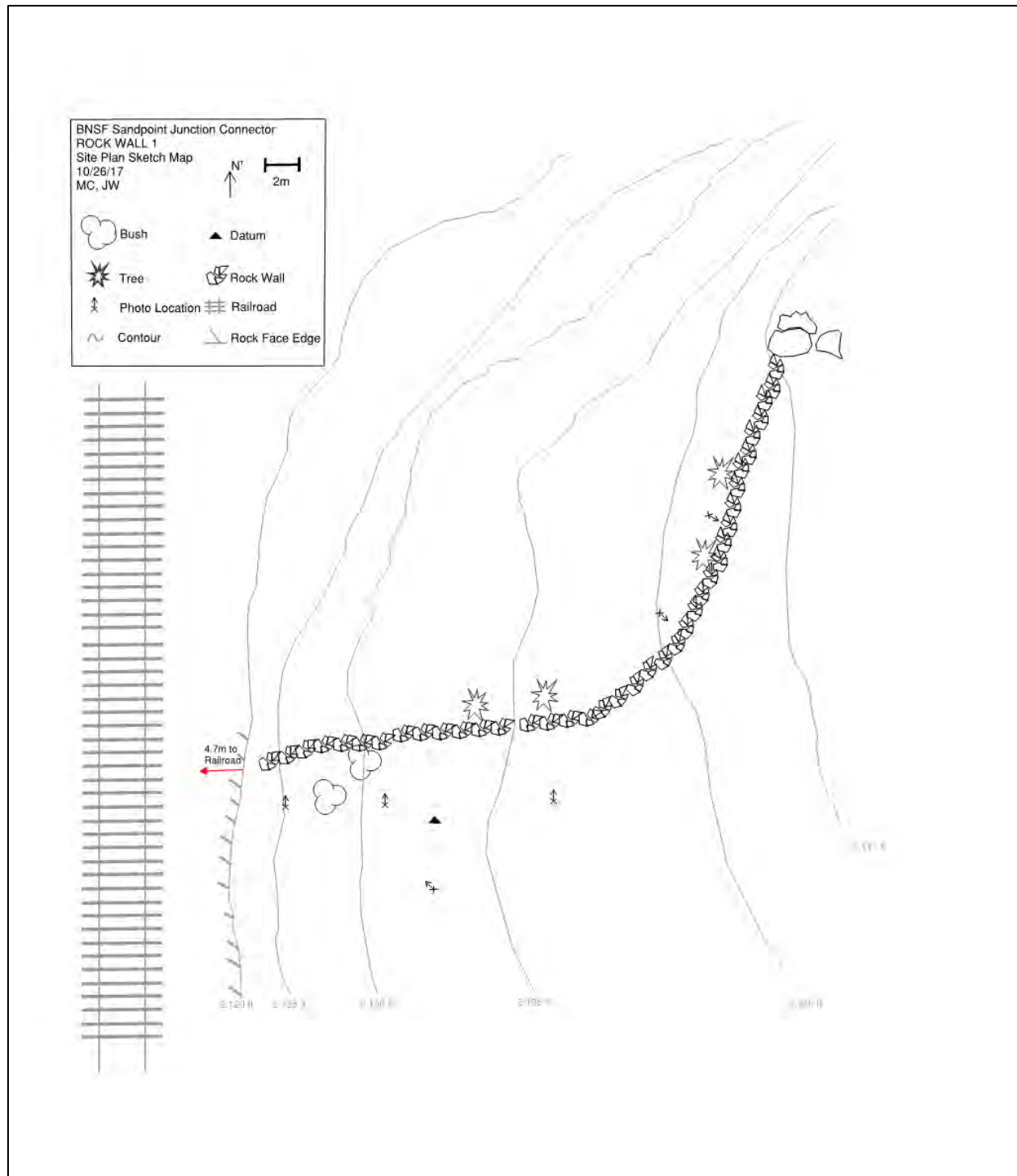


Figure 23. Site Rock Wall 1 Plan Sketch Map

BNSF Sandpoint Junction Connector, Bonner County, ID



Figure 24. Rock Wall 1 Overview, Mapping Datum in Foreground; View Northeast



Figure 25. Rock Wall 1, Profile with Game Trail Knockdown; View North

Historic Resources Survey Results

Assessment of Integrity for Previously Evaluated Resources

Previously evaluated NRHP-eligible resources were reevaluated to confirm that they have not changed substantially and still retain sufficient integrity to convey their historic significance.

Northern Pacific Depot (ID SHPO 17-001199)

The Northern Pacific Depot (aka Sandpoint Burlington Northern Railway Station) appears to be in good condition, and continues to retain its character-defining features that convey its significance. It has not changed substantially since it was evaluated in 2015 (Figure 26 and Figure 27) and *continues to be eligible for listing in the NRHP*.

Northern Pacific Railroad (ID SHPO 17-017845; 10BR969)

Conditions of the Northern Pacific Railroad (NPRR) track, now operated and maintained by BNSF and included in the proposed APE, were not previously described. However, the track is an active and maintained railroad, and overall conditions are likely similar to that presumed in 2007. It continues to retain sufficient integrity to convey its historic significance and *continues to be eligible for listing in the NRHP*.

BNSF Bridge 3.0 (Bridge Street Overpass; ID SHPO 17-018087)

The BNSF Bridge 3.0 Bridge Street Overpass appears to be in good condition, similar to that reported in 2008. The paint on the structure appears to be deteriorating; however no substantial changes were evident. It continues to retain sufficient integrity to convey its historic significance (Figure 28 and Figure 29) and *continues to be eligible for listing in the NRHP*.

BNSF Bridge 3.9 (Temporary ID RR2008-01)

Bridge 3.9 was originally recorded by Ferguson et al. (2008), and sections of the trestles at each end were replaced subsequent to that effort. It continues to retain sufficient integrity to convey its historic significance and *continues to be eligible for listing in the NRHP* (Figure 30 and Figure 31).



Figure 26. Northern Pacific Depot, South and West Elevations



Figure 27. Northern Pacific Depot, North and West Elevations



Figure 28. BNSF Bridge 3.0 West Elevation



Figure 29. BNSF Bridge 3.1 Railing; View South



Figure 30. BNSF Bridge 3.9, West Elevation



Figure 31. BNSF Bridge 3.9, East Elevation, South Half

Evaluation and NRHP Eligibility Criteria of Newly Recorded Historic Resources

BNSF Bridge 3.1

BNSF Bridge 3.1, located just south of BNSF Bridge 3.0, has not been previously recorded. It was originally constructed in 1902, but was highly modified in 1990 (Figure 32). It measures approximately 156 feet long, and was originally constructed with three 50-foot deck plate girder (DPG) spans. There are four concrete piers (two of which are abutments). Maintenance records show that the bridge was highly modified in 1990, with the replacement of the superstructure, concrete pier caps, deck, and walk. It does not retain sufficient integrity of design, workmanship, material, or feeling to meet NRHP-eligibility criteria. It is recommended *not eligible for listing in the NRHP*.



Figure 32. BNSF Bridge 3.1, West Elevation

MANAGEMENT CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations regarding management of historic properties within the APE and the undertaking's potential effect on historic properties are based on the current understanding of project elements. These assumptions include: none of the existing bridges or their components will be directly impacted by the project; new bridges and prisms will be a similar grade and elevation as the adjacent existing bridges and prisms; and the Northern Pacific Depot will be protected and routinely monitored during adjacent construction of the project to ensure no damage to the building integrity occurs.

Archaeological Resource Recommendations

BNSF and the federal lead agency should continue tribal outreach/consultation with interested tribes (Kootenai, Kalispel, Coeur d'Alene, Spokane) to provide project information, to conduct site visits, and to discuss any specific concerns related to cultural resources within the proposed APE and vicinity.

The great majority of the proposed APE is covered by deep engineered or construction fill deposits, and many portions of the existing railroad fill prism intersect with recently-constructed highway fill structures. The proposed ground disturbing work will be conducted by limited excavation in existing fill, reconstruction of existing fill, and placement of new fill. Although this is a large-scale project, very limited grading and cutting is anticipated during construction, and proposed work is identified as restricted to the existing BNSF ROW.

Based upon survey and analysis of the proposed APE, it is unlikely that any intact portions of any site at the north end or south end occur below construction fill in the APE; beyond the fill, the APE contains reworked beach sands and artificial fill sediments. Intact deposits may be present in proximity to the APE in both the north and south areas, but these deposits are beyond the proposed impact of current construction plans.

With regard to Site 10BR38, the project will directly impact the archaeological site through the placement of deep engineered fill on artifact-bearing surfaces and sediments. The site will be permanently buried by the fill, and portions may be additionally impacted by excavation or driving of permanent and temporary piles. The current survey (and that conducted in 2008) found that any archaeological materials are either buried under several feet of fill, or no longer retain archaeological integrity where not covered in fill. That portion of the site within the proposed APE is not a contributing element to the site's archaeological significance or relevance to archaeological research contexts. The site has been determined to be NRHP-eligible as contributing resource to the UPORAD, although it is not individually eligible. Therefore it is recommended that this project will have *no adverse effect* to Site 10BR38.

With regard to Site 10BR1026, the project will directly impact the BNSF ROW through the placement of new, deep engineered fill, by placement of additional fill on previously filled areas, and by pile driving for permanent and temporary structures. Portions of the proposed APE containing artifacts identified in 2006 in disturbed/mixed contexts have since been permanently buried by deep construction sediment and rocks. The current and 2008 archaeological surveys, during both surface and subsurface investigation, were unable to relocate any historic artifacts within the BNSF ROW. A single flake in disturbed subsurface context was identified by the current survey at the extreme western edge of the ROW. Together, these results indicate that no intact prehistoric or historic archaeological materials occur within the BNSF ROW. In the area of the beach within the BNSF ROW where historic artifacts associated with 10BR1026 were once recorded, it is recommended that the archaeological site should not be mapped to include the BNSF ROW, since these artifacts have not been relocated since 2003. Therefore, this project will have *no effect* to Site 10BR1026.

With regard to new archaeological site Rock Wall 1, the site is recommended not eligible for the NRHP due to a lack of integrity and historic significance. Therefore it is recommended this project will have *no effect* to site Rock Wall 1.

No further archaeological evaluation or monitoring is recommended for this project.

Historic Resources

None of the previously recorded historic resources within the APE have changed substantially since recordation, and all continue to be recommended eligible for listing in the NRHP. The single newly recorded historic resource, BNSF Bridge 3.1, is recommended *not eligible for listing in the NRHP*.

The BNSF (Northern Pacific Railroad) track, Bridge 3.0, and Bridge 3.9 will not be directly affected by the project. Indirect effects during construction and operation will be negligible, and are not anticipated to alter or diminish any aspect of the resources' integrity of location, design, materials, workmanship, setting, feeling, or association. The proposed undertaking would have *no adverse effect* on these resources.

The BNSF-Amtrak (Northern Pacific) Depot building would not be directly affected by the project construction. In order to ensure that the building would not be adversely affected by the project, regular and ongoing monitoring and inspection should be conducted throughout construction.

In the unlikely event that archaeological materials are discovered during ground-disturbing activities, a project specific Inadvertent Discovery Plan (IDP) has been prepared and the discovery protocol described will be implemented. Generally, the identification of archaeological remains will result in the halt of excavations in the find vicinity and appropriate parties contacted immediately. If human skeletal remains are discovered, the Bonner County Sheriff and Idaho SHPO should be notified immediately.

REFERENCES

- Archambeault, Julie. 2007. 17-017845, Northern Pacific Railroad. Idaho Historic Sites Inventory Form. On file, Idaho Historical Society, Boise, ID.
- Bard, James C., editor. 2014. *The Other Side of Sandpoint: Early History and Archaeology Beside the Tracks, The Sandpoint Archaeology Project 2006-2013*. Volume 3: Ethnography and Prehistory of Sandpoint. Prepared for Idaho Transportation Department, District 1. SWCA Environmental Consultants, Portland, OR.
- Belyea, B. (editor). 1994. *Columbia Journals*. University of Washington Press, Seattle, WA.
- Betts, Robert C. 1998. *1997-98 Archaeological Monitoring of Construction Activity for the Ellisport Bay Sewer District, Bonner County, Idaho*. SHPO Report No. 1999/740. Vanguard Research, Sandpoint, ID.
- Bilger, Harry Edward. 1969. *A History of Railroads in Idaho*. Unpublished M.A. Thesis, Department of History, University of Idaho, Moscow, ID.
- Booth, D.B., Troost, K.G., Clague, J.J., and Waitt, R.B. 2003. The Cordilleran Ice Sheet. In, *The Quaternary Period in the United States*, A. R. Gillespie, S. C. Porter, and B. F. Atwater, Eds. Developments in Quaternary Science, v. 1, p. 17-43. Elsevier.
- Chatters, James C. 1998 Environment. In, *Handbook of North American Indians*. Vol. 12, Plateau, edited by D. E. Walker, Jr., pp. 29-48. Smithsonian Institution, Washington D.C.
- Everhart, D., and J. Johnson. 2008. 17-018087, BNSF Bridge Street Overpass. Idaho Historic Sites Inventory Form. On file, Idaho Historical Society, Boise, ID.
- Farmin, Ella. No date. *The Days of a Woman: Written by Herself*. Manuscript on file at the Bonner County Historical Society, Sandpoint, ID.
- Fenneman, N. M. 1931. *Physiography of Western United States*. McGraw-Hill.
- Ferguson, Daryl E., Robert R. McCoy, and Matthew J. Root. 2008. *Archaeological Survey and Auger Testing of the BNSF Idaho Bridge 3.9 Project Area, Sandpoint, Idaho*. Submitted to InterMountain Resources and Burlington Northern Railroad. Rain Shadow Research Inc., Pullman, WA.
- Harrison, J. E., Kleinkopf, M. D., and Obradovich, J. D. 1972. *Tectonic Events at the Intersection Between the Hope Fault and the Purcell Trench, Northern Idaho*. United State Geological Survey Professional Paper 719. Washington D.C.
- Hart, Arthur A. 1973. Sandpoint Burlington Northern Railway Station. National Register of Historic Places – Nomination Form. U.S. National Park Service, Washington, D.C..

- Hartmans, Donna, and Sarah McClendon. 2015. 17-001199, *Sandpoint Burlington Northern Railway Station. Historic Structures Report*. Re-evaluation of the Sandpoint Depot, Project # NH-1R-F-5116(068), Key # 01729, US-95, Sandpoint, North & South (Sand Creek Byway Project). On file, Idaho State Historical Society, Boise, ID.
- Hudson, Lorelea. 1998. *Archaeological and Historical Survey Report of the Burlington Northern Santa Fe Railroad Sandpoint to Algoma Double Track, Bonner County, Idaho*. Project Report No. ID97-19. Northwest Archaeological Associates, Inc., Seattle, WA.
- Idaho Transportation Department. 1999. *US95 Sandpoint North and South, Final Environmental Impact Statement*. Project NH-IR-F-CM-5116(068), Key #1729. Submitted by U.S. Department of Transportation, Federal Highway Administration, and Idaho Transportation Department. Idaho Transportation Department, Boise, ID.
- Johnson, Signe. 1974. 10BR38. Idaho Archaeological Site Survey Form. On file, Idaho State Historical Society, Boise, ID.
- Kincaid, S., Y. Carrilho, G. Bishop, and J. Edwards. 2003. 10BR1026. Archaeological Survey of Idaho Site Inventory Form. On file, Idaho State Historical Society, Boise, ID.
- Lahren, Sylvester L., Jr. 1998. Kalispel. In, *Handbook of North American Indians*. Vol. 12, *Plateau*, Deward E. Walker, Jr., ed., pp. 283–296. Smithsonian Institution, Washington D.C.
- Lewis, R.S., Burmester, R.F., Breckenridge, R.M., and McFaddan, M.D. 2006. *Geologic Map of the Sandpoint Quadrangle, Bonner County, Idaho*. Idaho Geological Survey, Moscow-Boise-Pocatello, 1:24,000 scale.
- Losey, Elizabeth Browne. 1999. *Let Them Be Remembered: The Story of the Fur Trade Forts*. Vantage Books, New York.
- Miss, Christian J., and Lorelea Hudson. 1987. *Cultural Resources Collection Analysis, Albeni Falls Project, Northern Idaho*. Submitted to U.S. Army Corps of Engineers, Seattle District. Cultural Resources Consultants, Inc., Sandpoint, ID.
- Miss, Chris, and Kara Kanaby. 2012. Upper Pond Oreille River Archaeological District. National register of Historic Places Nomination Form. On file, Idaho State Historical Society, Boise, ID.
- Pardee, J. T. 1910. The Glacial Lake Missoula. *Journal of Geology*, 18:376-386.
- Pardee, J. T. 1942. Unusual Currents in Glacial Lake Missoula, Montana. *Geological Society of America Bulletin* 53(11):1569-1600.
- Parvey, M., S. Kincaid, Y. Carrilho, J. Edwards, G. Bishop, J. Ray, A. Morrison, T. Hofkamp, S. Mack, and V. Piston. 2004. 17-017845, 10BR969, Northern Pacific Railroad. Site

- Addendum, Idaho Archaeological Survey. On file, Idaho State Historical Society, Boise, ID.
- Plumer, Bradford. 2006. "The Origins of Anti-Litter Campaigns." *Mother Jones*. May 22, 2006. Electronic resource, <http://www.motherjones.com/politics/2006/05/origins-anti-litter-campaigns>, accessed October 31, 2017,
- Rain Shadow Research. 2008. 10BR1026. Cultural Resource Site Update Form. On file, Idaho State Preservation Office, Boise, ID.
- Renk, Nancy F. 1984. Sandpoint Historic District. National Register of Historic Places – Nomination Form. On file, U.S. National Park Service, Washington, D.C.
- Roll, Tom E. and Steve Hackenberger. 1998. Prehistory of the Eastern Plateau. In, *Handbook of North American Indians*. Vol. 12, Plateau, edited by D. E. Walker, Jr., pp. 120-137. Smithsonian Institution, Washington D.C.
- Root, Matthew J., Daryl E. Ferguson, and Robert R. McCoy. 2008. *Archaeological Survey of the South End of the BNSF Idaho Bridge 3.9 Project Area, Sandpoint, Idaho*. Submitted to InterMountain Resources and Burlington Northern Railroad. Rain Shadow Research Inc., Pullman, WA.
- Ross, E. E. A. 2015. The Backwards Earthquakes. *Eos*, 96, doi:10.1029/2015EO041669. Published on 15 December 2015.
- Smith, A. H. 1991. Kalispel Ethnography and Ethnohistory. In, *The Calispell Valley Archaeological Project Final Report*, edited by Paul H. Sanders, William Andrefsky Jr. and Stephan R. Samuels, pp. 8.1-8.154. Project Report No. 16, Center for Northwest Anthropology, Department of Anthropology, Washington State University. Draft Report, submitted to the Washington State Historic Preservation Office, Olympia, WA.
- Swords, Molly E., editor. 2014. *The Other Side of Sandpoint: Early History and Archaeology Beside the Tracks, The Sandpoint Archaeology Project 2006-2013*. Volume 4: Summary of Methods and Data. Prepared for Idaho Transportation Department, District 1. SWCA Environmental Consultants, Portland, OR.
- Teit, James A. 1930 The Salishan Tribes of the Western Plateaus. In, *45th Annual Report of the Bureau of American Ethnology for 1927-1928*, edited by Franz Boas, pp. 23–396. Washington. (Reprinted: Shorey Book Store, Seattle, Wash., 1973.)
- Thoms, Alston V. 1987 *Upland Land Use and the Initial Assessment of 45PO148: The Sullivan Lake Archaeological Project, Northeast Washington*. Center for Northwest Anthropology, Contributions in Cultural Resource Management 19, Washington State University, Pullman, WA.

Thoms, Alston V. 2009. Rocks of Ages: Propagation of Hot-Rock Cookery in Western North America. *Journal of Archaeological Science* 36(3):573-591.

Weaver, Robert M., editor. 2014. *The Other Side of Sandpoint: Early History and Archaeology Beside the Tracks, The Sandpoint Archaeology Project 2006-2013*. Volume 1: Sandpoint Stories. Prepared for Idaho Transportation Department, District 1. SWCA Environmental Consultants, Portland, OR.

Wells, Merle W. 1973. 17-001199, Sandpoint Burlington Northern Railway Station. National Register of Historic Places Nomination Form. On file, Idaho State Historical Society, Boise, ID.

Appendix A

Proposed APE Detail Figures

This page intentionally left blank

**Proposed Area of Potential Effects****Legend**

 Proposed Area of Potential Effects

Page 1 of 6



0 150 300
Feet

**Proposed Area of Potential Effects****Legend**

 Proposed Area of Potential Effects

Page 2 of 6



0 150 300
Feet

**Proposed Area of Potential Effects****Legend**

 Proposed Area of Potential Effects

Page 3 of 6



0 150 300
Feet

**Proposed Area of Potential Effects****Legend**

 Proposed Area of Potential Effects

Page 4 of 6



0 150 300
Feet



Proposed Area of Potential Effects

Legend

 Proposed Area of Potential Effects

Page 5 of 6



0 150 300
Feet



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Proposed Area of Potential Effects

Legend

 Proposed Area of Potential Effects

Page 6 of 6



0 150 300
Feet

Appendix B

Shovel Test Pit Descriptions

This page intentionally left blank

Test #	Width (cm)	Depth (cm)	Description	Artifacts
DB 1	35	0-2	Duff layer composed of conifer needles and deciduous leaves, Oi horizon.	No
		2-25	Very dark gray (10YR 3/1) loamy sand; weak granular structure; common fine rootlets; clear, wavy boundary; A horizon in beach sand.	No
		25-40	Brown (10YR 5/3) medium sand; structureless, single grained; common fine to medium rootlets; clear, wavy boundary; C horizon in lacustrine sand.	No
		40-75	Very dark grayish brown (10YR 3/2) loamy sand; weak, granular structure; common fine to medium rootlets; Ab horizon in lacustrine sand.	No
		75-100+	Yellowish brown (10YR 5/4 to 5/6) moderately well sorted medium sand; structureless, single grained; ≥90% felsic grains; C horizon in lacustrine sand.	No
DB 2	35	0-2	Duff layer composed of conifer needles and deciduous leaves, Oi horizon.	No
		2-35	Very dark gray (10YR 3/1) loamy sand; weak granular structure; few to common fine to medium (~1-5 cm) subangular to subrounded pebbles; common fine to coarse roots; green bottle glass; Ap horizon in mix of fill and lacustrine sand; clear, wavy boundary.	No
		35-75	Brown (10YR 5/3) loamy sand; somewhat compact; structureless, massive to single grained; clear, wavy boundary; C1 horizon in mixed ashy fill and lacustrine sand.	No
		75-100+	Yellowish brown (10YR 5/4 to 5/6) medium sand, moderately well sorted; structureless, single grained; ≥90% felsic grains; C horizon in lacustrine sand.	No
DB 3	35	0-15	Light gray (2.5Y 7/1) laminated silt and clay; abrupt, smooth boundary; bentonite clay slurry?	No
		15-30	Very dark gray (10YR 3/1) fine sandy loam; weak to moderate medium granular structure; common fine to medium roots; clear, wavy boundary; Ap in mix of fill and lacustrine sand.	No
		30-75	Dark grayish brown (10YR 4/2) ashy loamy sand; structureless, massive; common to fine medium roots; gradual, wavy boundary; AC horizon in lacustrine sand.	No
		75-95+	Yellowish brown (10YR 5/4) medium sand, moderately well sorted; structureless, single grained; water at ~90 cm; C horizon in lacustrine sand.	No
DB 4	35	0-35	Very dark gray (10YR 3/1) fine sandy loam; weak, granular structure; many fine to medium roots; few subangular to subrounded gravel; cut ribs and historic debris throughout; clear, wavy boundary; Ap horizon in mix of fill and lacustrine sand.	No
		35-90	Dark grayish brown (10YR 4/2) loamy sand; structureless, massive; common fine to medium roots; few subrounded clasts of decomposed granite; historic debris present; gradual, wavy boundary; AC horizon in lacustrine sand.	No
		90-100+	Yellowish brown (10YR 5/4 to 5/6) medium sand; structureless, single grained; C horizon in lacustrine sand.	No
DB 5	35	0-10	Very dark gray (10YR 3/1) sandy loam; weak, granular structure; many fine roots; clear, wavy boundary; A horizon in lacustrine sand.	No

Test #	Width (cm)	Depth (cm)	Description	Artifacts
		10-60+	Yellowish brown (10YR 5/4 to 5/6) medium sand; structureless, single grained; C horizon in lacustrine sand; water at ~50 cm.	No
DB 6	35	0-5	Very dark gray (10YR 3/1) sandy loam; weak, granular structure; many fine roots; abrupt, wavy boundary; A horizon in lacustrine sand.	No
		5-45+	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; large concrete clast between 10-25 cm; C horizon in lacustrine sand that incorporates at least some fill; water at ~40 cm.	No
DB 7	35	0-22	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		22-24	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		24-110	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
DB 8	35	0-28	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		28-31	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		31-110	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
DB 9	35	0-28	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		28-33	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		33-100	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 100 cm	No
DB 10	35	0-21	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		21-23	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		23-70	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill, 10% gravel; quartzite flake at 53 cmbs	Yes
		70-100	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill, no gravel; amber bottle glass fragment embossed "...LITTE..." at 93 cm; water at 100 cm	Modern
DB 11	35	0-80	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; clear bottle glass fragment at 45cm; tin foil condiment packet at 75 cm; water at 80 cm	Modern
DB 12	35	0-14	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		14-27	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C	No

Test #	Width (cm)	Depth (cm)	Description	Artifacts
			horizon in lacustrine sand that incorporates at least some fill	
		27-45	Grayish brown fine to coarse sand; structureless, single grained; lacustrine sand.	No
		45-64	Organics, twigs, bark	No
		64-78	Brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill, no gravel; amber bottle glass fragment embossed "...LITTE..." at 93 cm; water at 78 cm	No
DB 13	35	0-22	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		22-32	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		32-87	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 87 cm	No
DB 14	35	0-30	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		30-100	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
DB 15	35	0-11	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		11-12	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		12-78	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 78 cm	No
DB 16	35	0-40	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; amber curved glass fragment and green curved glass fragment 0-20 cm; water at 40 cm	Modern
DB 17	35	0-46	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 46 cm	No
DB 18	35	0-11	Brown (10YR 5/4) medium sand; structureless, single grained; A horizon in lacustrine sand.	No
		11-23	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		23-31	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 78 cm	No
		31-33	Yellowish brown (10YR 5/4) medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill	No
		33-78	Grayish brown medium sand; structureless, single grained; C horizon in lacustrine sand that incorporates at least some fill; water at 78 cm; white (toy?) plastic at 50 cmbs; water at 78 cm	No
SE 1	35	0-20	Very dark grayish brown (10YR 3/2) ashy silt loam with common pebbles; moderate, fine to medium granular structure; common subangular to	No

Test #	Width (cm)	Depth (cm)	Description	Artifacts
			subrounded pebbles; clear, wavy boundary; Ap horizon in wind-blown silt mixed with coarse outwash.	
		20-40+	Yellowish brown (10YR 5/4) pebbly silt loam to loam; subangular to subrounded pebbles and cobbles, mainly igneous in origin; impenetrable at 40 cm; glacial outwash?	No
SE 2	35	0-20	Very dark gray (10YR 3/1) ashy silt loam with common pebbles; moderate medium to fine granular structure; common subangular to subrounded pebbles; clear, wavy boundary; Ap horizon in wind-blown silt with some fill.	No
		20-45	Yellowish brown (10YR 5/4) pebbly silt loam; moderate medium subangular blocky structure; common subangular to subrounded pebbles and cobbles; gradual, wavy boundary; E horizon in windblown silt.	No
		45-85	Yellowish brown (10YR 5/6 to 5/8) silt loam to silty clay loam with common subangular to subrounded pebbles; moderate, medium subangular blocky structure; abrupt, smooth boundary; Bw1 horizon in windblown silt over outwash.	No
		85-95+	Yellowish brown (10YR 5/6 to 5/8) pebbly sand; poorly sorted; structureless, single grained; burnt root at 85 cm; 2Bw2 horizon in outwash; refusal on rock.	No
SE 3	35	0-18	Very dark grayish brown (10YR 3/2) ashy silt loam with common subangular to subrounded pebbles; moderate, medium granular structure; clear, wavy boundary; A horizon in windblown silt.	No
		18-40	Yellowish brown (10YR 5/4) silt loam with common subangular to subrounded pebbles; moderate, medium subangular blocky structure; gradual, wavy boundary; E horizon in windblown silt over outwash.	No
		40-55	Yellowish brown (10YR 5/6 to 5/8) silt loam loam with common subangular to subrounded pebbles; moderate, medium subangular blocky structure; abrupt, smooth boundary; Bw1 horizon in windblown silt over outwash; refusal at 55 cm.	No
SE 4	35	0-30	Very dark gray (10YR 3/1) loamy sand with common subangular to subrounded pebbles; weak medium to fine granular structure; many fine to medium roots; coarse clasts are 1-3 cm in diameter and composed largely of granite and gneiss; gradual, wavy boundary; A horizon in reworked outwash.	No
		30-65+	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel; C horizon in reworked outwash; refusal at 65 cm.	No
SE 5	35	0-33	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel; C horizon in reworked outwash	No
		33-65	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel; C horizon in reworked outwash	No
		65-83	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel; C horizon in reworked outwash; refusal at 83 cm.	No
SE 6	35	0-15	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel; C horizon in reworked outwash	No
		15-42	Dark grayish brown poorly sorted gravelly sand to sandy gravel; fill sediment refusal at 42 cm	No

Test #	Width (cm)	Depth (cm)	Description	Artifacts
SE 7	35	0-11	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel underlain by grayish brown silty sand and gravel; C horizon in reworked outwash	No
		11-22	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel underlain by grayish brown silty sand and gravel; C horizon in reworked outwash	No
		22-53	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel underlain by grayish brown silty sand and gravel; C horizon in reworked outwash	No
		53-110	Dark yellowish brown (10YR 4/4 to 4/6) poorly sorted gravelly sand to sandy gravel underlain by grayish brown silty sand and gravel; lacustrine sediments	No

Appendix C
Idaho State Archaeological Site and Historic
Resource Form

This page intentionally left blank

PROPERTY NAME	BNSF Kootenai River Subdivision, Line Segment 45 Bridge 3.1				FIELD#	001	
STREET	BNSF Line Segment 45					RESTRICT	☐
CITY	Sandpoint	VICINITY	☐	COUNTY CD	17	COUNTY NAME	Bonner
SUBNAME		BLOCK		SUBLOT		ACRES	1
TAX PARCEL		UTMZ	11	EASTING	533841	NORTHING	5346643
TOWNSHIP	57	N_S	N	RANGE	2	E_W	W
SECTION	23		1/4, 1/4		1/4		1/4
QUADRANGLE	SANDPOINT			OTHERMAP			
SANBORN MAP	Sandpoint	SANBORN MAP#	1	PHOTO#	DIGITAL		

ASSOCIATED FEATURES	TOTAL # FEATURES

NR REF #		NPS CERT		ACTIONDATE		FUTURE ELIG DATE	0
DIST/MPLNAME1				DIST/MPLNAME2			

CRITERIA A ☐ B ☐ C ☐ D ☐ CRITERIA CONSIDERATION A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐

AREA OF SIGNIF AREA OF SIGNIF

COMMENTS	DESCRIPTION
	This bridgeBNSF Bridge 3.1, located just south of BNSF Bridge 3.0, has not been previously recorded. It was originally constructed in 1902, but was highly modified in 1990. It measures approximately 156 feet long, and was originally constructed with three 50-foot deck plate girder spans. There are four concrete piers (two of which are abutments). Maintenance records show that the bridge was highly modified in 1990.

PROJ/RPT TITLE	Cultural Resources Report for the BNSF Sandpoint Junction Connector	SVY DATE	10/25/17	SVY LEVEL	Reconnaissance
----------------	---	----------	----------	-----------	----------------

RECORDED BY	CONNIE WALKER GRAY	PH	206-718-1095	ADDRESS	2454 OCCIDETNAL AVENUE SOUTH, SUITE 3D. SEATTLE, WA 98134
-------------	--------------------	----	--------------	---------	---

SUBMITTED PHOTOS ☒ NEGS ☐ SLIDES ☐ SKETCH MAP ☐

SVY RPT # ***** FOR ISHPO USE ONLY ***** IHSI# BNSF 45 3.1

MS RPT # SITS#

IHPR # HABS NO. ID- HAER NO. ID- REV#

CS #	IHSI# REF	NR REF# 2	REV# REF	RI	SI	IH
------	-----------	-----------	----------	----	----	----

SVY RPT# 1 SVY RPT# 2 SVY RPT# 3 MS RPT# 1 MS RPT# 2 # # #

ADD'L NOTES

MORE DATA ☒

ATTACH ☒

# OF PHOTOS		NEGBOX#		# OF SLIDES		SHPO DETER		DETER DATE	
-------------	--	---------	--	-------------	--	------------	--	------------	--

INITIALED		ENTRY DATE		REVISE		REVISE		REVISE	
-----------	--	------------	--	--------	--	--------	--	--------	--

IHS# _____

SITS# _____

REV# _____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME	BNSF Kootenai River Subdivision, Line Segment 45 Bridge 3.1	IHSI#	BNSF 45 3.1
FIELD#	001	COUNTY NAME	Bonner
OTHER NAME			
COUNTY CD	17	CITY	Sandpoint
		VICINITY	☐
UTM REF2		UTM REF3	
		UTM REF4	

OTHER MATERIAL2		CULTAFFIL		AGENCYCERT	
SIGNIFDATE		SIGNIFPERIOD		SIGNIFPERSON	
ARCH/BUILD		ARCHPLANS	☐	TAXEASE	☐
OWNERSHIP	Private	PROPOWN	BNSF		
MORE DATA	☒	ATTACH	☒		

DOCSOURCE	
-----------	--

ADD'L NOTES	
-------------	--

COMMENTS	This bridge BNSF Bridge 3.1, located just south of BNSF Bridge 3.0, has not been previously recorded. It was originally constructed in 1902, but was highly modified in 1990. It measures approximately 156 feet long, and was originally constructed with three 50-foot deck plate girder spans. There are four concrete piers (two of which are abutments). Maintenance records show that the bridge was highly modified in 1990, with the replacement of the superstructure, concrete pier caps, deck, and walk. It does not retain sufficient integrity of design, workmanship, material, or feeling to meet NRHP eligibility criteria. It is recommended not eligible for listing in the NRHP. It appears to have been reconstructed, and is unlikely to be considered a historic resource. The in-water piers and approaches appear to be original, but the superstructure appears to be cast concrete girders (i.e. modern replacements).
----------	--

PHOTO LOG	☐	IHSI# REF		INITIALED		DATE ENTERED	
-----------	--------------------------	-----------	--	-----------	--	--------------	--

SKETCH ☐

IHSI#	SITS#	REV#

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME IHSI#
 FIELD# COUNTY NAME

COMMENTS:

This bridgeBNSF Bridge 3.1, located just south of BNSF Bridge 3.0, has not been previously recorded. It was originally constructed in 1902, but was highly modified in 1990. It measures approximately 156 feet long, and was originally constructed with three 50-foot deck plate girder spans.
 There are four concrete piers (two of which are abutments). Maintenance records show that the bridge was highly modified in 1990, with the replacement of the superstructure, concrete pier caps, deck, and walk. It does not retain sufficient integrity of design, workmanship, material, or feeling to meet NRHP eligibility criteria. It is recommended not eligible for listing in the NRHP. It appears to have been reconstructed, and is unlikely to be considered a historic resource. The in-water piers and approaches appear to be original, but the superstructure appears to be cast concrete girders (i.e. modern replacements).

ATTACH ☒

IHSI#	_____
SITS#	_____
REV#	_____

IDAHO HISTORIC SITES INVENTORY FORM

PROPERTY NAME IHSI#
FIELD# COUNTY NAME



Bridge 3.1, West Elevation



Bridge 3.1, East Elevation

**ARCHAEOLOGICAL SURVEY OF IDAHO
SITE INVENTORY FORM**

State No.:

Part A-Administrative Data

1. Link or State No.: 10BR38

2. Agency No.:

3. Temporary No.:

4. Site name(s):

5. County: Bonner

6. Class: ☒ Prehistoric ☒ Historic ☐ Traditional cultural property ☐ Undetermined

7. Land owner: Private - BNSF Railroad

8. Federal admin. unit:

9. Project: BNSF Sandpoint Junction Connector

10. Report No.:

11. Recorder(s): M. Chidley

12. Organization: Jacobs, 2454 Occidental Ave S., Ste 3D, Seattle, WA 98134

13. Date: 1/8/2018

14. Attachments and associated records:

- | | |
|---|---|
| ☒ Topographic map (required) | ☐ Stratigraphic profiles |
| ☒ Site map (required) | ☐ Rock art attachment |
| ☒ Photos with labels/log (required) | ☐ Historical records |
| ☐ Artifact illustrations | ☐ Assoc. IHSI form(s): |
| ☐ Feature drawings | ☐ Other attachments: |

15. Elevation(site datum): 2059 (ft)

16. Site dimensions: 252 m X 47 m Area: 6586 m²

17. UTM at site datum: Zone 11 535251 m Easting 5344639 m Northing using the North American Datum of 1983.

18. UTM source: Corrected GPS/rectified survey (<5m error)

19. Legal description:

Tshp	N/S	Rng	E/W	Sec	10acre1/4	40acre1/4	160acre1/4
57 N		2 W		26 NE		SE	SE

20. USGS 7.5' map reference:

Map	Code
SANDPOINT	4816-c5

21. Access:

The site is along the beach south of railroad Bridge 3.9 south of Sandpoint, ID. All access is private; permission must be gained from BNSF to access within or across BNSF right of way, or a private driveway from Bottle Bay Road.

22. Site description:

Site 10BR38, a multicomponent prehistoric and historic artifact scatter, is located to the east of the BSNF track and Bridge 3.9 within the low water shoreline of Lake Pend Oreille. The site has been recorded as containing prehistoric lithic artifacts and historic glass, ceramic, and metal fragments.

The site was first recorded in 1974 based upon information from Hope, ID resident Warren "Chuck" Peterson (Johnson 1974). The site location was revisited in 1998 by NWAA (Hudson 1998), where they found FMR fragments, basalt, jasper, and CCS flakes, scrapers, and projectile points, as well as purple and aqua glass fragments and railroad spikes. The prehistoric artifact scatter was found primarily on the south end of the site, and the historic scatter was found adjacent to the bridge approach. They also noted that the site had been monitored for several years by a professional archaeologist (Robert M. Weaver) who owned land adjacent to the site and stated that the prehistoric site density was greatest from just above high water to low water, most of which had eroded onto the beach. The site was recommended not eligible for the NRHP within the report, but was recommended eligible on the site form; no criteria of eligibility were provided.

In 2008, Rain Shadow Research revisited the site as part of a pier replacement project for BNSF on the south end of Bridge 3.9. It should be noted their report does not refer to the 1998 revisit of the site; it is unknown the reason for the omission. Their survey was focused on the relocation of the originally-mentioned (circa-1974) site and whether it was present in the APE, and therefore did not update the 1998 record/site boundary. The survey occurred during lake drawdown conditions, including a close interval transect survey of the 2008 project APE and 12 shovel tests in upland portions of the shoreline. In total, 12 pieces of fire-cracked rock (FCR) and one flake were found on the surface below OHWM, and six FCR fragments, three flakes, and one biface from four positive shovel tests. No historic artifacts were seen during their survey of the beach.

As a result of their effort, they created a new site boundary (restricted to that portion of the site found in the BNSF ROW). Analysis of the results concluded the site was in poor condition and all artifacts had been identified or recovered from secondary contexts/deposits. Further, they recommended the site as not eligible for the NRHP due to a lack of integrity (Root et al. 2008).

Due to a lack of shared data between archaeological surveys and documentation events, this site has two distinct

boundaries derived from different data sets. In 1998, the site was recorded as containing two discrete surface scatters seen on the lake beach: one prehistoric and one historic. The site boundary was drawn to encompass these two scatters, including intervening upland, although the record does not mention a continuous artifact scatter. In 2008, the Rain Shadow Research survey found prehistoric artifacts both on the beach and in upland shovel probes adjacent to the beach, but did not find any surface artifacts where previously recorded and did not investigate the distant prehistoric component.

The current survey results found that the upland portion of the site recorded in 2008 has been covered in deep fill, rock, and rip rap, and shovel testing of the upland vicinity did not find any archaeological material. Pedestrian survey of the beach below the OHWM did relocate several FCR fragments within the site area identified in 2008, but did not relocate any historic artifacts in the vicinity where they were found in 1998. This may be due to the placement of fill; however, no historic artifacts were seen in that area in 2008 either. No artifacts were found in the current STPs below the OHWM, but the soil strata seen were similar.

Based upon the current field results, the 1998 surface survey, and the 2008 field results, it is recommended that the 2008 site boundary be retained and the 1998 site boundary be truncated to that portion outside the BNSF ROW. Although this will result in a discontinuous site boundary, it will be representative of site conditions seen in the BNSF ROW since 1998 and the prehistoric component recorded further to the south in 1998. The current survey did not extend outside the BNSF ROW, so confirmation of the site content or integrity beyond the BNSF ROW is not possible.

23. Site type:

- | | | | |
|--|---|---|--|
| ☐ Historic building | ☐ Rockshelter/cave | ☐ Mortuary | ☐ Faunal |
| ☐ Historic structure | ☐ Stacked/placed rocks | ☐ Rock art | ☐ Culturally modified trees |
| ☐ Historic object | ☐ Quarry/lithic source | ☐ Feature(s) | ☐ Other: |
| ☐ Prehistoric residential | ☐ Linear | ☒ Artifact(s) | |

24. Specify themes and time periods:

- | Themes | | Time Periods | |
|---|--|---|---|
| ☒ Prehistoric archaeology | ☐ Military | ☒ Prehistoric-general | ☐ Settlement: 1855-1890 |
| ☐ Agriculture | ☐ Mining industry | ☐ Paleoindian | ☐ Phase 1 statehood: 1890-1904 |
| ☐ Architecture | ☐ Native Americans | ☐ Archaic-general | ☐ Phase 2 statehood: 1904-1920 |
| ☐ Civ. Conservation Corps | ☐ Politics/government | ☐ Early Archaic | ☐ Interwar: 1920-1940 |
| ☐ Commerce | ☐ Public land managemt. | ☐ Middle Archaic | ☐ Premodern: 1940-1958 |
| ☐ Communication | ☐ Recreation/tourism | ☐ Late Archaic | ☐ Modern: 1958-present |
| ☐ Culture and society | ☐ Settlement | ☐ Late Prehistoric-general | ☒ Hist/Mod-general |
| ☐ Ethnic heritage | ☐ Timber industry | ☐ Protohistoric/Contact | ☐ Unknown |
| ☐ Exploration/fur trapping | ☐ Transportation | ☐ Historic Native American | |
| ☐ Industry | ☐ Other: | ☐ Exploration: 1805-1860 | |

25. National Register of Historic Places (NRHP) evaluation (subject to review by SHPO):

- ☐ Individually eligible
 ☒ Contributing in a district
 ☐ Not eligible
 ☐ Insufficient information to evaluate

26. NRHP criteria used: ☐ A: Event ☐ B: Person ☐ C: Design and construction ☐ D: Information potential**27. Comments on significance:**

In 2012, site 10BR38 was included in the Upper Pend Oreille River Archaeological District (UPORAD) when recorded by the USACE (Miss and Kanaby 2012). The UPORAD covers an area of 16,167 acres, following the 2080-ft. contour on both sides of the Pend Oreille River upstream from the Albeni Falls Dam to River Mile 119. The eastern boundary of the UPORAD incorporates 10BR38 into the District, and identifies it as a contributing property (although not individually eligible). The nomination form lists Site 10BR38 as an open camp. (Miss and Kanaby 2012:Table 15).

Not all of the preceding work conducted at the site has been included in the UPORAD documentation. In this case, none of the reporting by Root et al. (2008) was included in the site descriptions or references for the UPORAD nomination. Therefore, their conclusions about site extent and integrity were not considered as part of the evaluation of site eligibility or contribution to the District. The mapped location and site boundary for Site 10BR38 is based upon the 1998 NWAA site sketch map.

28. If not eligible, explain why:

29. Condition (prehistoric component): Poor **Condition (historic component):** Poor

30. Impact agents:

- | | | | | |
|--|--|---|---|--|
| ☐ Agricultural use | ☐ Development project | ☐ Mining/quarrying | ☐ Road/highway | ☐ Vandalism |
| ☐ Building alteration | ☒ Erosion | ☐ No information | ☐ Rodent damage | ☒ Other: <u>Railroad</u> |
| ☐ Deflation | ☐ Grazing | ☐ Recreation use | ☐ Structural decay | |
| ☐ Demolished | ☐ Looting | ☐ Research excav. | ☐ Timber harvest | |

Comments on impacts:

The site has been disturbed by erosion from waves and water level fluctuation on Lake Pend Oreille, and construction of the railroad and associated maintenance.

31. Surface Collection: None

32. Sediments: Over 100 cm

Explain how determined:

- 33. Excavation status:** ☐ Unexcavated ☐ Auger/probe ☐ Test unit ☐ Backhoe, etc.
☐ Surface scrape ☒ Shovel test ☐ Block excavation

Describe collection/excav.: Previous shovel testing in 2008, and shovel test probes in 2017.

34. Excavation volume (indicate liters or cubic meters): _____ **Screen mesh:** _____

35. Additional comments:**Site boundary recommendation:**

Based upon the current field results, the 1998 surface survey, and the 2008 field results, it is recommended that the 2008 site boundary be retained and the 1998 site boundary be truncated to that portion outside the BNSF right of way. Although this will result in a discontinuous site boundary, it will be representative of site conditions seen in the BNSF ROW since 1998 and the prehistoric component recorded further to the south in 1998. The current survey did

not extend outside the BNSF ROW, so confirmation of the site content or integrity beyond the BNSF right of way was not possible.

Part B-Environmental Data

36. Distance to permanent water: 0 m

37. Water source: ☐ Spring, seep ☐ River/stream ☒ Lake ☐ Other:

38. On-site vegetation (estimate percentage of total vegetation for each class and identify species):

Trees: 20 % Species: Douglas fir, ponderosa pine, grand fir, birch

Shrubs: 15 % Species: hawthorn, oceanspray

Forbs: 35 % Species: rose, thimbleberry, snowberry

Grasses: 30 % Species: various

Lichens/mosses: % Species:

Describe vegetation: All identified portions of the site occur below OHWM on the sand beach and below subsequent construction fill. Moderately dense forest is above the OHWM

39. Visible surface area: 51-75%

40. Landform (Describe, including lithology, form, and soil, using locally or regionally appropriate terms):

The site is located on the north side of the alluvial fan that extends from the mouth of Hays Gulch. The creek that created the fan was rerouted by the construction of the railroad and now empties into Lake Pend Oreille at the north end of the fan.

Part C-Prehistoric Sites

41. Phase/period: Undated precontact

42. How classified: Previously recorded precontact and historic artifacts

43. Maximum artifact density: 3 m²

44. Individual artifacts:

Count	Category	Description
4	fire cracked rock	surface scatter below OHWM

45. Lithic debitage - estimated quantity: 1-9

Flaking stages: Decortication Secondary Tertiary Shatter

46. Material types: previously recorded: chert, metaquartzite

47. Additional description:

The current survey results found that the upland portion of the site recorded in 2008 has been covered in deep fill, rock, and rip rap, and shovel testing of the upland vicinity did not find any archaeological material. Pedestrian survey of the beach below the OHWM did relocate several FCR fragments within the site area identified in 2008, but did not relocate any historic artifacts in the vicinity where they were found in 1998. This may be due to the placement of fill; however, no historic artifacts were seen in that area in 2008 either. No artifacts were found in the current STPs below the OHWM, but the soil strata seen were similar to that previously recorded.

48. Features:

49. Additional description:

No features have been recorded on the site

Part D-Historic Sites

50. Cultural affiliation: undated historic

51. Oldest Date: Recent Date:

52. How determined: previously recorded historic artifacts; none observed in 2017

53. Maximum artifact density: _____ m²

54. Individual artifacts:

55. Additional description:

The site location was revisited in 1998 by NWAA (Hudson 1998), where they found FMR fragments, basalt, jasper, and CCS flakes, scrapers, and projectile points, as well as purple and aqua glass fragments and railroad spikes. The prehistoric artifact scatter was found primarily on the south end of the site, and the historic scatter was found adjacent to the bridge.

The current survey results found that the upland portion of the site recorded in 2008 has been covered in deep fill, rock, and rip rap, and shovel testing of the upland vicinity did not find any archaeological material. Pedestrian survey of the beach below the OHWM did relocate several FCR fragments within the site area identified in 2008, but did not relocate any historic artifacts in the vicinity where they were found in 1998. This may be due to the placement of fill; however, no historic artifacts were seen in that area in 2008 either. No artifacts were found in the current STPs below the OHWM, but the soil strata seen were similar to that previously recorded.

56. Features:

57. Additional description:

No historic features have been recorded on the site.



10BR38

Legend

Rain Shadow Boundary (2008)

NWAA/SWCA Boundary (2003-2012)

N

0

40

80

Meters



Figure 10. Overview of the project APE above the ordinary high water mark (OHWM) to azimuth 340°.

Figure 1. Photograph of conditions south of 10BR38 in 2008 (from Root et al. 2008)



Figure 2. View of conditions south of 10BR38, showing modifications since 2008; view northeast.



Figure 3. 10BR38 overview below OHWM at Bridge 3.9 south end; view northeast.



Figure 4. Shovel Test Probe SE6 south profile; refusal at rip rap.



Figure 5. Shovel Test Probe SE 7 south profile.

**ARCHAEOLOGICAL SURVEY OF IDAHO
SITE INVENTORY FORM**

State No.:

Part A-Administrative Data

1. Link or State No.: 10BR1026

2. Agency No.:

3. Temporary No.: 9503-29

4. Site name(s): Dog Beach

5. County: Bonner

6. Class: ☒ Prehistoric ☒ Historic ☐ Traditional cultural property ☐ Undetermined

7. Land owner: 8. Federal admin. unit:

9. Project: BNSF Sandpoint Junction Connector

10. Report No.:

11. Recorder(s): M. Chidley

12. Organization: Jacobs, 2454 Occidental Ave S., Ste 3D, Seattle, WA 98134

13. Date: 1/8/2018

14. Attachments and associated records:

- | | |
|---|---|
| ☒ Topographic map (required) | ☐ Stratigraphic profiles |
| ☒ Site map (required) | ☐ Rock art attachment |
| ☒ Photos with labels/log (required) | ☐ Historical records |
| ☐ Artifact illustrations | ☐ Assoc. IHSI form(s): |
| ☐ Feature drawings | ☐ Other attachments: |

15. Elevation(site datum): 2040 (ft)

16. Site dimensions: 82 m X 35 m Area: 2512 m²

17. UTM at site datum: Zone 11 534350 m Easting 5345646 m Northing using the North American Datum of 1983.

18. UTM source: Corrected GPS/rectified survey (<5m error)

19. Legal description:

Tshp	N/S	Rng	E/W	Sec	10acre1/4	40acre1/4	160acre1/4
57 N		2 W		26		NE	NW

20. USGS 7.5' map reference:

Map	Code
SANDPOINT	4816-c5

21. Access:

The site is located on the east side of Serenity Lee Trail, on the west side of a small cove (commonly known as Dog Beach), west of the BNSF railroad. The site datum was located on a park bench, now absent. Access is gained from public parking for the trail on the south side of Sand Creek. Walk south along the trail to the beach area.

22. Site description:

Prior to discussion of this site, it is important to note that conditions on and around the site location have been substantially altered since the original and subsequent recordings, particularly due to improvements to US 95 and BNSF project work. Landforms, landmarks, mapping benchmarks, shoreline, and water levels have either been removed, altered, or are variable, resulting in mapping data that in some cases can only be estimated. This multi-component site, located on Dog Beach between US 95 and the BNSF main track, was first recorded in 2003 by Northwest Archaeological Associates, Inc. (NWAA) (Kincaid et al. 2003). The site was recorded as an area 80 x 120 m in size containing both prehistoric and historic components. The site was mapped as extending from along the much of the shore of Dog Beach, including a cutbank exposure, and noted as probably continuing into the water.

23. Site type:

- | | | | |
|--|---|---|--|
| ☐ Historic building | ☐ Rockshelter/cave | ☐ Mortuary | ☒ Faunal |
| ☐ Historic structure | ☐ Stacked/placed rocks | ☐ Rock art | ☐ Culturally modified trees |
| ☐ Historic object | ☐ Quarry/lithic source | ☒ Feature(s) | ☐ Other: |
| ☐ Prehistoric residential | ☐ Linear | ☒ Artifact(s) | |

24. Specify themes and time periods:

- | Themes | | Time Periods | |
|---|--|---|--|
| ☒ Prehistoric archaeology | ☐ Military | ☒ Prehistoric-general | ☐ Settlement: 1855-1890 |
| ☐ Agriculture | ☐ Mining industry | ☐ Paleoindian | ☒ Phase 1 statehood: 1890-1904 |
| ☐ Architecture | ☐ Native Americans | ☐ Archaic-general | ☒ Phase 2 statehood: 1904-1920 |
| ☐ Civ. Conservation Corps | ☐ Politics/government | ☐ Early Archaic | ☒ Interwar: 1920-1940 |
| ☐ Commerce | ☐ Public land managemt. | ☐ Middle Archaic | ☒ Premodern: 1940-1958 |
| ☐ Communication | ☐ Recreation/tourism | ☐ Late Archaic | ☐ Modern: 1958-present |
| ☐ Culture and society | ☐ Settlement | ☐ Late Prehistoric-general | ☐ Hist/Mod-general |
| ☐ Ethnic heritage | ☐ Timber industry | ☐ Protohistoric/Contact | ☐ Unknown |
| ☐ Exploration/fur trapping | ☐ Transportation | ☐ Historic Native American | |
| ☐ Industry | ☐ Other: | ☐ Exploration: 1805-1860 | |

25. National Register of Historic Places (NRHP) evaluation (subject to review by SHPO):

- ☐ Individually eligible
 ☒ Contributing in a district
 ☐ Not eligible
 ☐ Insufficient information to evaluate

26. NRHP criteria used: ☐ A: Event ☐ B: Person ☐ C: Design and construction ☐ D: Information potential**27. Comments on significance:**

In 2012, 10BR1026 was included in the Upper Pend Oreille River Archaeological District (UPORAD) when recorded by the USACE (Miss and Kanaby 2012). The UPORAD covers an area of 16,167 acres, following the 2080-ft. contour on both sides of the Pend Oreille River upstream from the Albeni Falls Dam to River Mile 119. The eastern boundary of the UPORAD incorporates 10BR1026 into the District, and identifies it as a contributing property (although not individually eligible). The nomination form lists 10BR1026 as a stratified site (Miss and Kanaby 2012: Table 15).

Also, as in other prior recordings of this site, not all of the preceding work conducted at the site was included in the UPORAD documentation. In this case, none of the reporting by Ferguson et al. (2008) or the 2006-7 excavations reported in Bard et al. (2014) were included in the site descriptions or references for the UPORAD nomination. Therefore, their conclusions about site extent and integrity were not considered as part of the evaluation of site eligibility or contribution to the District. The location of Site 10BR1026 appears to be based upon the 2003 NWAA site location, but the site boundary is different from that provided in the 2003 site sketch map (also included in Swords 2014). The source for the site's boundary shown in the nomination form could not be found.

28. If not eligible, explain why:**29. Condition (prehistoric component):** Good**Condition (historic component):** Fair**30. Impact agents:**

- | | | | | |
|--|--|--|---|------------------------------------|
| ☐ Agricultural use | ☐ Development project | ☐ Mining/quarrying | ☐ Road/highway | ☐ Vandalism |
| ☐ Building alteration | ☒ Erosion | ☐ No information | ☐ Rodent damage | ☐ Other: |
| ☐ Deflation | ☐ Grazing | ☒ Recreation use | ☐ Structural decay | |
| ☐ Demolished | ☒ Looting | ☐ Research excav. | ☐ Timber harvest | |

Comments on impacts:

The site is begin impacted by fluctuations in lake water levels, but probably more substantially by heavy recreational use of the area, and non-focused looting.

31. Surface Collection: None**32. Sediments:** 21-100 cm**Explain how determined:** previous testing results

- 33. Excavation status:**
☐ Unexcavated
 ☒ Auger/probe
 ☒ Test unit
 ☐ Backhoe, etc.
- ☐ Surface scrape
 ☐ Shovel test
 ☐ Block excavation

Describe collection/excav.:

No subsurface testing was conducted in 2003, but the exposed cultural horizons were described as follows: the cutbank exhibits historic fill overlying two occupation levels, the first occupation level appears to be a mixture of historic debris and potentially prehistoric material while the lowermost level appears prehistoric in origin.

In 2006 and 2007, SWCA Environmental Consultants (SWCA) tested the site as part of the Sandpoint North and South Project (Bard et al. 2014: 179-196); all testing efforts are combined here. A survey of the Dog Beach area identified a small scatter of FMR, a

green chert shatter fragment, and a ceramic fragment with a Chinese design near the high water line. Investigation of the cutbank, to a total depth of 1 m, identified only the upper cultural horizon recorded by NWAA; an 8- to 10-cm-thick historic horizon, 47-57 cm below surface (cmbs) containing historic metal artifacts. The lower horizon (recorded 80-90 cmbs) was absent, and SWCA concluded that the lower horizon was a "discrete feature of limited horizontal extent" (Bard et al. 2014:183).

In total, 29 shovel test units (STU) and two test units (TU) were excavated around the 10BR1026 site area. STU 29, excavated near the southern limit of the 2003 site boundary, encountered a concrete slab 26 cmbs beneath historic fill deposits. Two prehistoric lithic artifacts were found in the historic fill deposit and were interpreted as redeposited. Testing between US 95 and the railroad prism resulted in recovery of prehistoric lithic artifacts in four STUs and two TUs. These test units were located in the cluster of units seen near the center of their map; the tested area is now covered in deep fill sediments. In total, 1 utilized flake, 1 chert pressure flake, 2 chert flakes, and 4 fragments of FMR were recovered in this cluster of STUs. One TU (2007-TU-2) was negative. 2007-TU-1 recovered a total of 5 pressure flakes, 4 cryptocrystalline silica (CCS) flakes, 1 metasediment flake, and 19 fragments of FMR. The generalized stratigraphy of 2007-TU-1 consisted of: 0-9 cmbs, silty fine sand, from modern fill; 10-39 cmbs, coarse yellow sand, probably dating to post-early 1960s; 40-76 cmbs, a charcoal-stained horizon with yellow sand pockets containing coal waste, slag, railroad ballast rock, FMR, historic and prehistoric artifacts, and calcined bone; 70-96 cmbs, medium to coarse yellow sand; and 96-255 cmbs, gray sand.

In 2008, Rain Shadow Research revisited and conducted subsurface investigation of the site area during low water level conditions (2055.25 ft elevation). The pedestrian survey found that the cutbank had recently slumped and no artifacts or features were observed in the bank, although portions of the bank were covered in snow. Modern garbage and historic artifacts were seen across the exposed beach, but no artifacts were seen within the APE for that project (essentially the BNSF right of way). Several prehistoric artifacts were found on the surface below the Ordinary High Water Mark (OHWM), but all of these were found on the beach west and south of the project APE. Noted artifacts included metaquartzite percussion flake, a retouched platy metasediment pebble, a metaquartzite flaked cobble core, and a bifacially flaked rhyolite cobble.

A total of 40 auger probes were excavated within the 2008 project APE; no probes were excavated outside the APE. All of these were negative, and Rain Shadow Research suggested a redefined boundary for Site 10BR1026 that only included the western area of the previously defined site limit to account for artifacts seen during the survey and previously recorded in the cutbank).

Based on the results of the surface and subsurface investigation, Rain Shadow Research found: "...no cultural resources above the 2,055.25 ft lake elevation in the upper 90 cm of the BSNF ID Bridge 3.9 Project APE [...]. We also determined that the entire project area is covered with a layer of historic-modern fill that is at least 90 cm thick. Intact archaeological deposits may be present below the layer of fill on an original historic land surface, but the proposed undertaking does not involve any subsurface disturbance that will reach below the fill" (Ferguson et al. 2008:18-19).

This conclusion is similar to that of SWCA the year prior, although it there appears to be more disturbance of the ground surface during the 2008 effort than during the 2006-2007 work. In 2008, archaeologists found 30 percent ground visibility across much of the APE, although the tree and brush overstory had been cleared and large, disturbed areas with 75-100 percent visibility were present in the 2008 project APE.

In 2017, 18 STPs were completed in the Dog Beach vicinity (STPs DB 1-18) and placed to investigate current conditions and to verify the results reported in Bard et al. (2014) and Ferguson et al. (2008). The majority of effort focused on the beach and below the OHWM, since the least amount of prior subsurface testing had occurred in that area. All but one STP were negative either for prehistoric artifacts or temporally diagnostic historic artifacts, and many contained modern trash. One STP on Dog Beach (DB 10) contained a single flake artifact: a small quartzite flake recovered 53 cmbs. Unfortunately, a thin brown bottle glass fragment was recovered below that artifact at 93 cmbs. The bottle glass fragment was embossed with "...LITTE...", and probably was embossed DO NOT LITTER. Although information about the timeframe for this phrase being embossed on glass bottles is scarce, it probably dates the bottle fragment to after the mid-1950s and the anti-litter campaigns joined by companies like the Owens-Illinois Glass Company (Plumer 2006). Due to the recovery of the flake in STP 10, radial STPs were placed at 5 m intervals north, south, and east of STP; BNSF ROW limits precluded radials to the west. None of these recovered any further prehistoric or temporally diagnostic historic artifacts. Altogether, modern trash was found at depth in four STPs: clear curved glass at 45 cmbs and an aluminum condiment packet 75 cmbs in STP 11; plastic fragment at 65 cmbs in STP 15; a curved brown glass fragment and a curved green glass fragment at 20 cmbs in STP 16; and, a thin white (toy?) plastic fragment between 50 cmbs in STP 18.

35. Additional comments:

Deep compact fill or gravel and rock has been placed immediately north of Dog Beach, north to the stretch of new grade already constructed within the BNSF ROW south of Bridge 3.1/Sand Creek. This fill ranges from approximately 3 ft. to more than 8 ft. deep/high of structural rock. This fill is impenetrable to hand tools, so STPs locations were limited to a small area in the northwest corner of the beach area, immediately adjacent to the fill at Dog Beach itself and the beach below the OWHM.

Portions of the area recorded as 10BR1026, containing artifacts identified in 2006 in disturbed/mixed contexts, have since been permanently buried by deep construction sediment and rocks. The current and 2008 archaeological surveys, during both surface and subsurface investigation, were unable to relocate any historic artifacts within the BSNF right of way. A single flake in disturbed subsurface context was identified by the current survey at the extreme western edge of the ROW. Together, these results indicate that no intact prehistoric or historic archaeological materials occur within the BNSF right of way. In the area of the beach within the BNSF right of way where historic artifacts associated with 10BR1026 were once recorded, it is recommended that the archaeological site should not be mapped to include the BNSF right of way. The site boundary should be defined as that portion of the site previously recorded outside the right of way based upon prior documentation; that definition is not provided here, since no investigation occurred off BNSF right of way.

Part B-Environmental Data

36. Distance to permanent water: 0 m

37. Water source: ☐ Spring, seep ☐ River/stream ☒ Lake ☐ Other:

38. On-site vegetation (estimate percentage of total vegetation for each class and identify species):

Trees: _____ % Species:

Shrubs: _____ % Species:

Forbs: _____ % Species:

Grasses: _____ % Species:

Lichens/mosses: _____ % Species:

Describe vegetation:

No vegetation remains in the BNSF right of way in areas previously included in the site boundary. Maintained lawn grass and second growth cottonwoods, aspen, ponderosa pine, alder are present on the remaining site areas.

39. Visible surface area: 51-75%

40. Landform (Describe, including lithology, form, and soil, using locally or regionally appropriate terms):

This location is currently an eroding beach and terrace. The location would have been near the mouth of Sand Creek prior to construction of Albani Falls Dam.

Part C-Prehistoric Sites

41. Phase/period: undated precontact

42. How classified: previous recording; see 2003 site form and 2006 testing data; one tertiary quartzite flake seen in 2017

43. Maximum artifact density: 1 m²

44. Individual artifacts:

Count	Category	Description
1	flake	recovered in shovel test immediately adjacent to BSNF ROW in disturbed context below OHWM

45. Lithic debitage - estimated quantity: 1-9

Flaking stages: Decortication Secondary Tertiary Shatter

Rare

46. Material types: quartzite

47. Additional description:

In 2003, the prehistoric component was recorded as a surface scatter of two quartzite cores, two metasediment cores, a granite anvil stone, a metasediment hammerstone, 10 cobble-derived quartzite flakes (two of which were edge-modified), and one metasediment flake. A feature consisting of a discrete cluster of more than 20 fire modified rocks (FMR), possibly eroded from the cutbank was also identified at the south end of the site. The historic component consisted of a surface scatter of domestic glass, white-glazed earthenware, a brown terra cotta fragment, round nails, a spiral nail, one .45 caliber cartridge, nuts and bolts, and industrial metal, with a buried component evident in the cutbank. The presence of an amethyst-colored glass fragment suggested the site dated to the period from 1880-1916.

No subsurface testing was conducted in 2003, but the exposed cultural horizons were described as follows: the cutbank exhibits historic fill overlying two occupation levels, the first occupation level appears to be a mixture of historic debris and potentially prehistoric material while the lowermost level appears prehistoric in origin. Both occupation layers appear to be intact. The historic fill is a mixture of rock, sand, metal fragments and wood and is visible to approximately 25 centimeters below ground surface. The upper occupation level is approximately 10 centimeters thick and is comprised of charcoal stained sediments, faunal remains (primarily mammal bone) and fragments of metal, glass and wood. Directly under this occupation level is approximately 20 centimeters of beach sand and then another occupation level approximately 20 centimeters thick is present on top of more beach sand. The second occupation level is comprised of charcoal stained sediment and fire modified rock. Both occupation layers are visible in the cutbank for approximately 25 meters (Kincaid et al. 2003:1).

In 2006 and 2007, SWCA Environmental Consultants (SWCA) tested the site as part of the Sandpoint North and South Project (Bard et al. 2014: 179-196); all testing efforts are combined here. A survey of the Dog Beach area identified a small scatter of FMR, a green chert shatter fragment, and a ceramic fragment with a Chinese design near the high water line. Investigation of the cutbank, to a total depth of 1 m, identified only the upper cultural horizon recorded by NWAA; an 8- to 10-cm-thick historic horizon, 47-57 cm below surface (cmbs) containing historic metal

artifacts. The lower horizon (recorded 80-90 cmbs) was absent, and SWCA concluded that the lower horizon was a "discrete feature of limited horizontal extent" (Bard et al. 2014:183). In total, 29 shovel test units (STU) and two test units (TU) were excavated around the 10BR1026 site area. STU 29, excavated near the southern limit of the 2003 site boundary, encountered a concrete slab 26 cmbs beneath historic fill deposits. Two prehistoric lithic artifacts were found in the historic fill deposit and were interpreted as redeposited. Testing between US 95 and the railroad prism resulted in recovery of prehistoric lithic artifacts in four STUs and two TUs. These test units were located in the cluster of units seen near the center of their map; the tested area is now covered in deep fill sediments. In total, 1 utilized flake, 1 chert pressure flake, 2 chert flakes, and 4 fragments of FMR were recovered in this cluster of STUs. One TU (2007-TU-2) was negative. 2007-TU-1 recovered a total of 5 pressure flakes, 4 cryptocrystalline silica (CCS) flakes, 1 metasediment flake, and 19 fragments of FMR. The generalized stratigraphy of 2007-TU-1 consisted of: 0-9 cmbs, silty fine sand, from modern fill; 10-39 cmbs, coarse yellow sand, probably dating to post-early 1960s; 40-76 cmbs, a charcoal-stained horizon with yellow sand pockets containing coal waste, slag, railroad ballast rock, FMR, historic and prehistoric artifacts, and calcined bone; 70-96 cmbs, medium to coarse yellow sand; and 96-255 cmbs, gray sand. The artifact-bearing, charcoal-stained horizon was interpreted as a disturbed historic deposit with intrusive prehistoric artifacts. The overall deposit was thought to possibly be related to a construction burn pile or burn pit associated with railroad construction dating to the 1950s or early 1960s. The prehistoric artifacts, perhaps dating to as late as the early 1900s, were interpreted as being intrusive, and/or mixed into the historic deposit, and no evidence of intact features or surfaces were identified. Neither the site limits of Site 10BR1026 nor Site 10BR538 were expanded to include any of the area tested, presumably due to the recent and disturbed depositional and artifact contexts. In 2008, Rain Shadow Research revisited and conducted subsurface investigation of the site area during low water level conditions (2055.25 ft elevation). The pedestrian survey found that the cutbank had recently slumped and no artifacts or features were observed in the bank, although portions of the bank were covered in snow. Modern garbage and historic artifacts were seen across the exposed beach, but no artifacts were seen within the APE for that project (essentially the BNSF right of way). Several prehistoric artifacts were found on the surface below the Ordinary High Water Mark (OHWM), but all of these were found on the beach west and south of the project APE. Noted artifacts included metaquartzite percussion flake, a retouched platy metasediment pebble, a metaquartzite flaked cobble core, and a bifacially flaked rhyolite cobble.

48. Features:

Count	Category	Description
		none seen in 2017

49. Additional description:

In 2003, one feature, 1.5 x 1.5 meters in dimension, consisting of more than 20 FCR fragments was recorded. The feature has not been relocated since that time.

Part D-Historic Sites

50. Cultural affiliation: Euroamerican

51. Oldest Date: 1880 Recent Date: 2017

52. How determined: previously reported artifacts (see 2003 site form); none seen in 2017

53. Maximum artifact density: m²

54. Individual artifacts:

Count	Category	Description
0		none seen in 2017

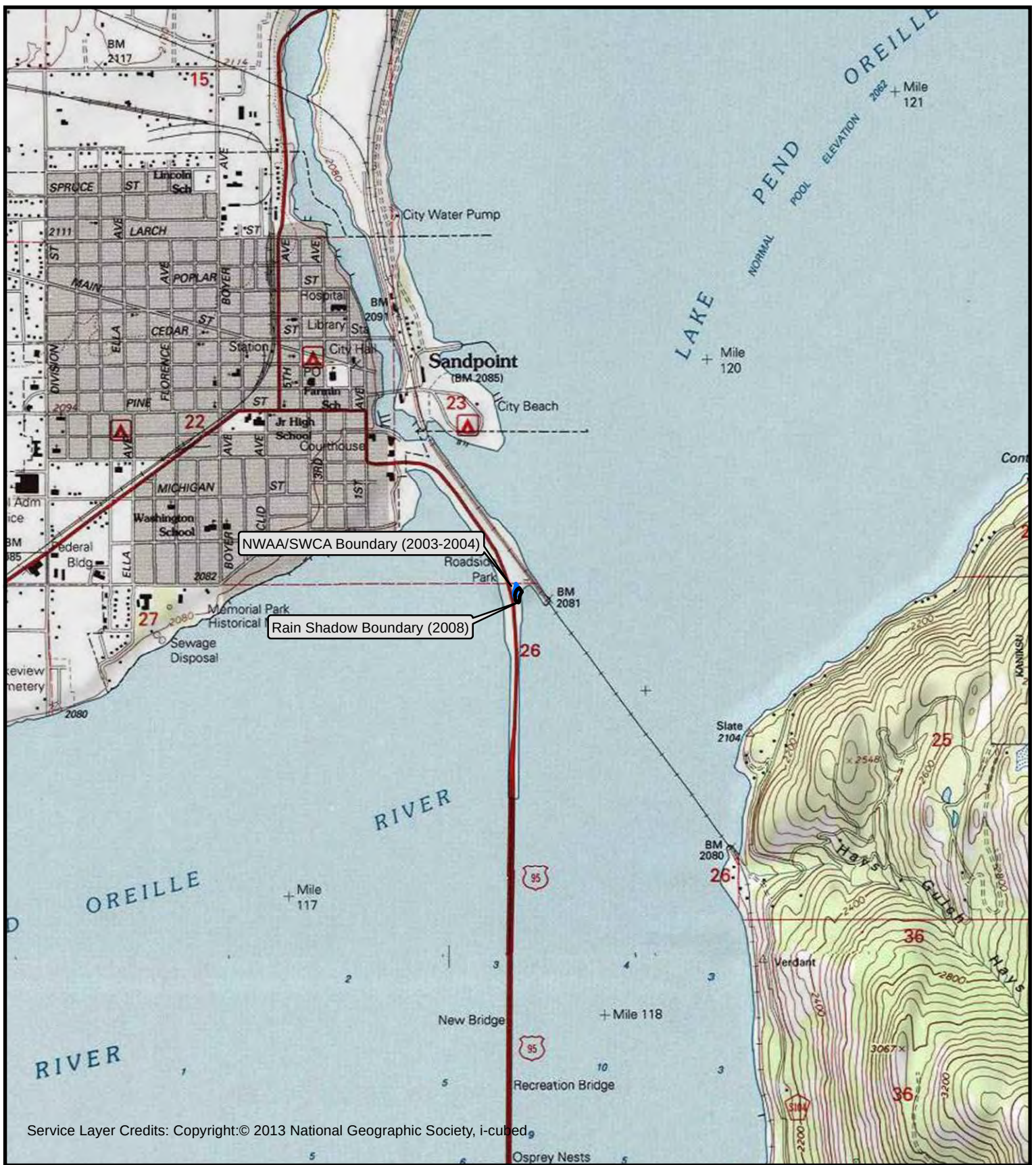
55. Additional description:

Pedestrian survey of Dog Beach and south end of Bridge 3.9 occurred during the fall drawdown when the water level was at 2054.76 elevation. Surface conditions observed at Dog Beach in the BNSF ROW below the OHWM were beach sands with some standing water and areas of muck, resulting in approximately 85% surface visibility. Modern trash and non-diagnostic bottle/curved glass fragments were observed across the beach. In a couple of instances, beach stones and ballast rocks had been collected and then placed into large 'smiley face' or other patterns and shapes, indicating frequent movement of rocks across the beach deposits, even below the OHWM. In 2017, 18 STPs were completed in the Dog Beach vicinity (STPs DB 1-18) and placed to investigate current conditions and to verify the results reported in Bard et al. (2014) and Ferguson et al. (2008). The majority of effort focused on the beach and below the OHWM, since the least amount of prior subsurface testing had occurred in that area. All but one STP were negative either for prehistoric artifacts or temporally diagnostic historic artifacts, and many contained modern trash. One STP on Dog Beach (DB 10) contained a single flake artifact: a small quartzite flake recovered 53 cmbs. Unfortunately, a thin brown bottle glass fragment was recovered below that artifact at 93 cmbs. The bottle glass fragment was embossed with "...LITTE...", and probably was embossed DO NOT LITTER.

Although information about the timeframe for this phrase being embossed on glass bottles is scarce, it probably dates the bottle fragment to after the mid-1950s and the anti-litter campaigns joined by companies like the Owens-Illinois Glass Company (Plumer 2006). Due to the recovery of the flake in STP 10, radial STPs were placed at 5 m intervals north, south, and east of STP; BNSF ROW limits precluded radials to the west. None of these recovered any further prehistoric or temporally diagnostic historic artifacts. Altogether, modern trash was found at depth in four STPs: clear curved glass at 45 cmbs and an aluminum condiment packet 75 cmbs in STP 11; plastic fragment at 65 cmbs in STP 15; a curved brown glass fragment and a curved green glass fragment at 20 cmbs in STP 16; and, a thin white (toy?) plastic fragment between 50 cmbs in STP 18.

56. Features:

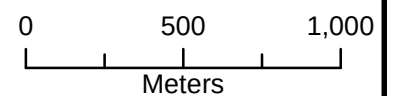
57. Additional description:

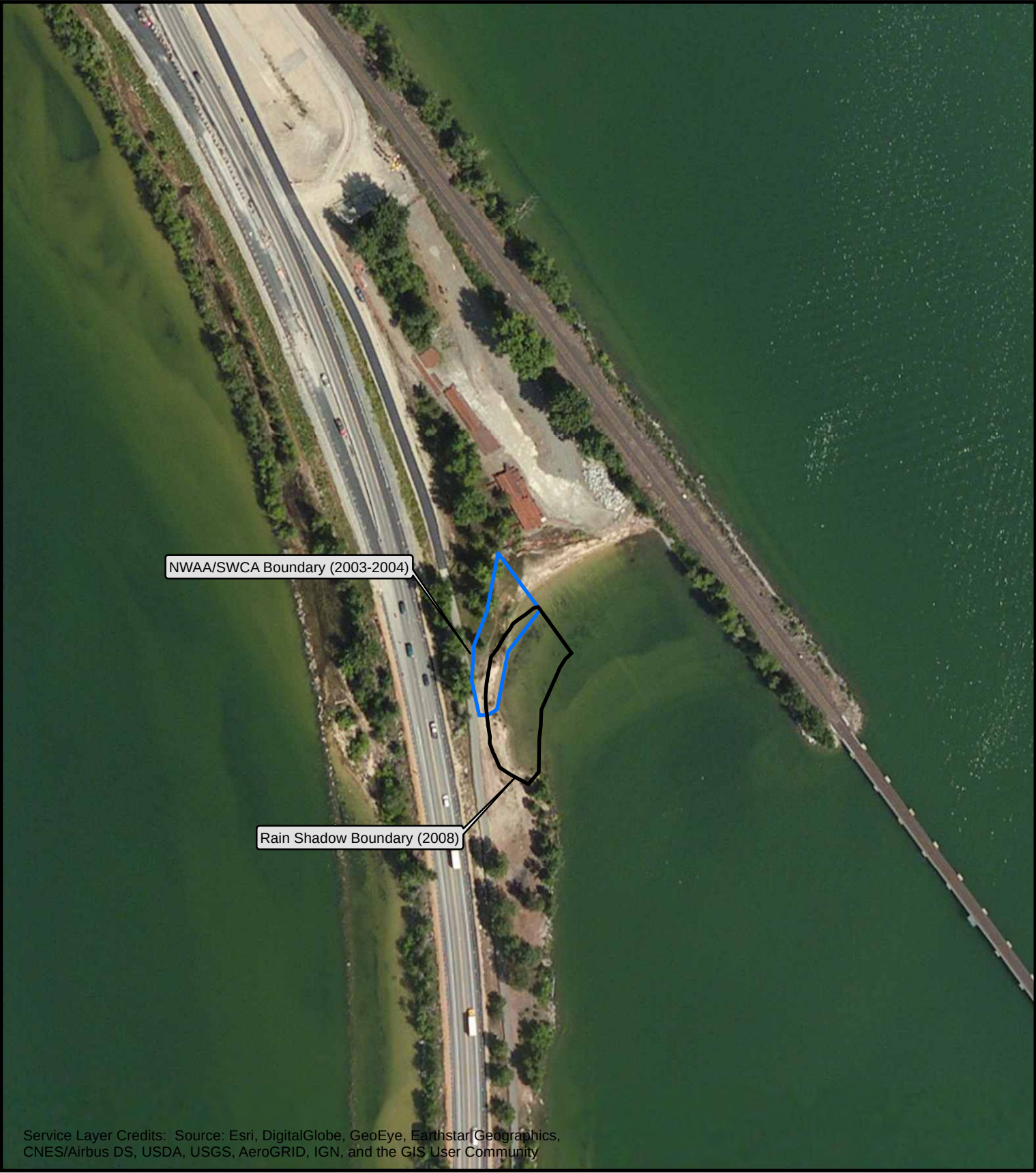


10BR1026

Legend

- Rain Shadow Boundary (2008)
- NWAA/SWCA Boundary (2003-2014)





Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

10BR1026

Legend

Rain Shadow Boundary (2008)

NWAA/SWCA Boundary (2003-2014)

N

0

40

80

Meters



Figure 1. Photograph of conditions at 10BR1026 in 2008 (from Ferguson et al. 2008).



Figure 2. View of conditions at 10BR1026 in 2017, with trees cleared (*note the lack of the conifers seen in Figure 1), bank slump, and large fill placement; view north-northeast during high water. View estimated to be from close to the original datum location.



Figure 3. Location of 10BR1026 from Dog Beach, showing beach and cutbank. Original site datum estimated to have been just left of image center. View southwest during low water.



Figure 4. Low water survey condition at 10BR1026; view north-northwest from near BNSF bridge approach.



Figure 5. Deep fill sediments (3 - 8 ft deep) north of Dog Beach; view north.



Figure 6. Deep fill north of Dog Beach; view north.

**ARCHAEOLOGICAL SURVEY OF IDAHO
SITE INVENTORY FORM**

State No.:

Part A-Administrative Data

1. Link or State No.:

tbd

2. Agency No.:

3. Temporary No.:

Rock Wall 1

4. Site name(s):

5. County: Bonner

6. Class: ☐ Prehistoric ☒ Historic ☐ Traditional cultural property ☐ Undetermined

7. Land owner: Private - BNSF Railway Company 8. Federal admin. unit:

9. Project: BNSF Sandpoint Junction Connector

10. Report No.:

11. Recorder(s): M. Chidley

12. Organization: Jacobs, 2454 Occidental Ave S., Ste 3D, Seattle, WA 98134

13. Date: 1/8/2018

14. Attachments and associated records:

- | | |
|---|---|
| ☒ Topographic map (required) | ☐ Stratigraphic profiles |
| ☒ Site map (required) | ☐ Rock art attachment |
| ☒ Photos with labels/log (required) | ☐ Historical records |
| ☐ Artifact illustrations | ☐ Assoc. IHSI form(s): |
| ☐ Feature drawings | ☐ Other attachments: |

15. Elevation(site datum): 2100 (ft)

16. Site dimensions: 42 m X 1 m Area: 42 m²

17. UTM at site datum: Zone 11 535408 m Easting 5344242 m Northing using the North American Datum of 1983.

18. UTM source: Corrected GPS/rectified survey (<5m error)

19. Legal description:

Tshp	N/S	Rng	E/W	Sec	10acre1/4	40acre1/4	160acre1/4
57 N		2 W		25	SW	SW	SW

20. USGS 7.5' map reference:

Map	Code
SANDPOINT	4816-c5

21. Access:

The site is located above a rock face cut by the BSNF railroad construction, on the east side of the right of way. The site is generally located south of Bridge 3.9, and can be accessed via the timbered slope to the north of the site. Permission and escort from BSNF is required for access to BSNF right of way.

22. Site description:

This site, temporarily designated Rock Wall 1, is a historic site consisting of a single stacked-rock wall. The site is located south of Bridge 3.9 on the east side of the BNSF ROW (approx. STA946+35), on a hillslope above a cut rock face. The wall consists of dry-stacked, unmodified field rocks, oriented on a north-curving alignment. The wall is approximately 42 m (138 ft.) long, has an average width of approximately 50 cm (1.6 ft.), and ranges from 30 cm (0.98 ft.) to 60 cm (1.9 ft.) in width (Figure 24). The wall stands approximately 50 cm (1.65 ft.) high; a game trail crosses the wall near its center, which has knocked the upper 30 cm (0.98 ft.) of the wall down.

The wall extends from the edge of the rock face uphill, where it ends at three large boulders at the top of the hillslope. A barbed wire fence also runs along the rock face edge. The wall appears to have been constructed of field rocks available in the immediate area, and similar rocks are present across the hillslope. Approximately half of the wall runs along the southern edge of a small clearing, while the upper half of the wall is in thick brush and timber. The wall appears to be of historic construction since much of the first course of stones is partially buried, and several fallen stones are also partially buried.

23. Site type:

- | | | | |
|--|---|--------------------------------------|--|
| ☐ Historic building | ☐ Rockshelter/cave | ☐ Mortuary | ☐ Faunal |
| ☒ Historic structure | ☐ Stacked/placed rocks | ☐ Rock art | ☐ Culturally modified trees |
| ☐ Historic object | ☐ Quarry/lithic source | ☐ Feature(s) | ☐ Other: |
| ☐ Prehistoric residential | ☐ Linear | ☐ Artifact(s) | |

24. Specify themes and time periods:

- | Themes | | Time Periods | |
|---|--|---|---|
| ☐ Prehistoric archaeology | ☐ Military | ☐ Prehistoric-general | ☐ Settlement: 1855-1890 |
| ☐ Agriculture | ☐ Mining industry | ☐ Paleoindian | ☐ Phase 1 statehood: 1890-1904 |
| ☐ Architecture | ☐ Native Americans | ☐ Archaic-general | ☐ Phase 2 statehood: 1904-1920 |
| ☐ Civ. Conservation Corps | ☐ Politics/government | ☐ Early Archaic | ☐ Interwar: 1920-1940 |
| ☐ Commerce | ☐ Public land managemt. | ☐ Middle Archaic | ☐ Premodern: 1940-1958 |
| ☐ Communication | ☐ Recreation/tourism | ☐ Late Archaic | ☐ Modern: 1958-present |
| ☐ Culture and society | ☐ Settlement | ☐ Late Prehistoric-general | ☒ Hist/Mod-general |
| ☐ Ethnic heritage | ☐ Timber industry | ☐ Protohistoric/Contact | ☐ Unknown |
| ☐ Exploration/fur trapping | ☐ Transportation | ☐ Historic Native American | |
| ☐ Industry | ☐ Other: | ☐ Exploration: 1805-1860 | |

25. National Register of Historic Places (NRHP) evaluation (subject to review by SHPO):

- ☐ Individually eligible
 ☐ Contributing in a district
 ☒ Not eligible
 ☐ Insufficient information to evaluate

26. NRHP criteria used: ☐ A: Event ☐ B: Person ☐ C: Design and construction ☐ D: Information potential**27. Comments on significance:****28. If not eligible, explain why:**

The wall is contained entirely within the BNSF ROW, it is unknown when or by whom the wall was constructed, and does not appear to have been maintained since the time of construction. The wall maintains integrity of location and setting, but is limited in its integrity of design, workmanship and feeling due to simple and expedient construction, impacts from vegetation growth and erosion, and the difficulty in reconstructing the actual wall's function or remaining enclosure elements. The wall is not known to be associated with significant events or persons important to history. Recording of the wall has exhausted the site's archaeological potential, and does not have the potential to yield important information to history. Therefore, this site is recommended not eligible for the NRHP.

29. Condition (prehistoric component): _____ **Condition (historic component):** Fair**30. Impact agents:**

- | | | | | |
|---|--|---|---|------------------------------------|
| ☐ Agricultural use | ☐ Development project | ☐ Mining/quarrying | ☐ Road/highway | ☐ Vandalism |
| ☐ Building alteration | ☒ Erosion | ☐ No information | ☐ Rodent damage | ☐ Other: |
| ☒ Deflation | ☐ Grazing | ☐ Recreation use | ☐ Structural decay | |
| ☐ Demolished | ☐ Looting | ☐ Research excav. | ☐ Timber harvest | |

Comments on impacts:

The wall is deteriorating from lack of maintenance.

31. Surface Collection: None**32. Sediments:** 0-20 cm**Explain how determined:**

Standing rock wall; rocks are partially buried, but bedrock is apparent nearby

33. Excavation status: ☒ Unexcavated ☐ Auger/probe ☐ Test unit ☐ Backhoe, etc.
☐ Surface scrape ☐ Shovel test ☐ Block excavation**Describe collection/excav.:****34. Excavation volume (indicate liters or cubic meters):** _____ **Screen mesh:** _____**35. Additional comments:**

Part B-Environmental Data

36. Distance to permanent water: 85 m

37. Water source: ☐ Spring, seep ☐ River/stream ☒ Lake ☐ Other:

38. On-site vegetation (estimate percentage of total vegetation for each class and identify species):

Trees: 40 % Species: ponderosa pine, Douglas fir, alder

Shrubs: % Species:

Forbs: 10 % Species: thimbleberry

Grasses: 50 % Species: various species

Lichens/mosses: 10 % Species:

Describe vegetation: Moss spans between rocks in several areas of the wall. The site is located 50% in a grassy clearing, and 50% in timber

39. Visible surface area: 26-50%

40. Landform (Describe, including lithology, form, and soil, using locally or regionally appropriate terms):

The site is located near the base of a long northwest-trending ridgeline off Gold Hill. Hays Gulch lies to the north, and Lake Pend Oreille lies to the west. The immediate landform is a steep slope ending at a rock face drop, immediately to the west of the wall (the drop from the rim effectively forms another barrier). Soils are thin colluvium overlying degraded bedrock and cobbles.

Part D-Historic Sites

50. Cultural affiliation: undated historic

51. Oldest Date: Recent Date:

52. How determined: no known construction date, no associated temporally diagnostic artifacts

53. Maximum artifact density: 0 m²

54. Individual artifacts:

Count	Category	Description
0		

55. Additional description:

56. Features:

Count	Category	Description
1	rock alignment	stacked field stone wall

57. Additional description:

The wall extends from the edge of the rock face uphill, where it ends at three large boulders at the top of the hillslope. A barbed wire fence also runs along the rock face edge. The wall appears to have been constructed of field rocks available in the immediate area, and similar rocks are present across the hillslope. Approximately half of the wall runs along the southern edge of a small clearing, while the upper half of the wall is in thick brush and timber. The wall appears to be of historic construction since much of the first course of stones is partially buried, and several fallen stones are also partially buried. Moss spanning between stones and brush growing through parts of the wall also convey a sense of age. The wall appears to be in fair condition, and has deteriorated due to abandonment, rock fall, and game trail impacts.

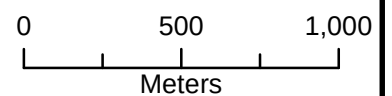
The wall's placement suggests it was constructed to incorporate the rock face/cliff to form two sides of a corral. The upslope side may have been functionally created by the steepness of the slope, but a wall forming a south side was not found during the survey.



Rockwall 1

Legend

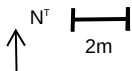
ROCKWALL 1



SITE MAP

Site Name: ROCK WALL 1

BNSF Sandpoint Connector
ROCK WALL 1
10/26/17
Drawn on True North
MC, JW



Bush



Mapping Datum



Tree



Rock Wall



Photo Location



Contour



Cliff

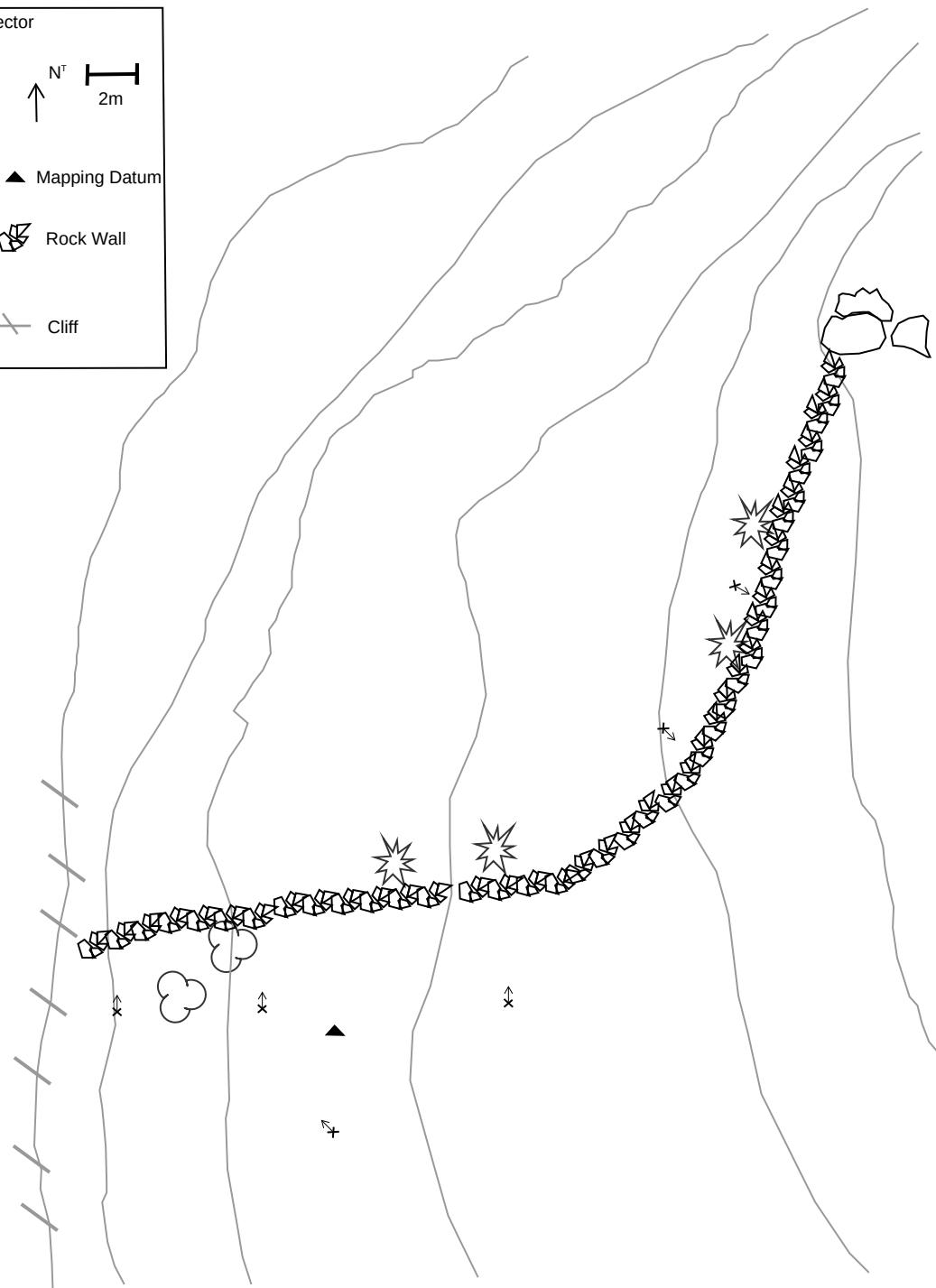




Figure 1. Location of Rock Wall 1 atop rock face; view east from opposite side of railroad.



Figure 2. Profile of west end of wall; view north.



Figure 3. Wall profile on western side; view north.



Figure 4. Wall profile near center of wall with game trail opening; view north.



Figure 5. Wall profile on eastern portion; view southwest.



Figure 6. Wall profile near eastern end; view southeast.