Phase II Archaeological Survey and Test Excavation, Historic Pen d'Oreille City (10KA91), Kootenai County, Idaho

A Thesis

Presented in Partial Fulfillment of the Requirements for the

Degree of Master of Arts

with a

Major in Anthropology

in the

College of Graduate Studies

University of Idaho

by

Idah Whisenant

Major Professor: Robert Lee Sappington, Ph.D.

Committee Members: Mark Warner, Ph.D., Linda Hackbarth, M.A.

Department Administrator: Brian Wolf, Ph.D.

August 2018

Authorization to Submit Thesis

This thesis of Idah Whisenant, submitted for the degree of Master of Arts with a major in Anthropology and titled "Phase II Archaeological Survey and Test Excavation, Historic Pen d'Oreille City (10KA91), Kootenai County, Idaho," has been reviewed in final form. Permission, as indicated by the signatures and dates below, is now granted to submit final copies to the College of Graduate Studies for approval.

Major Professor: _____Date: _____

Robert Lee Sappington, Ph.D.

Committee Members: _____Date: _____

Mark Warner, Ph.D.

_____Date: _____

Linda Hackbarth, M.A.

Department Administrator: _____Date: _____

Brian Wolf, Ph.D.

Abstract

Historic Pen d'Oreille City is located at the south end of Lake Pend Oreille in Farragut State Park. The 1866 settlement was associated with (1) transportation and gold rush themes followed by (2) a homestead and settlement period in the late 1800s to early 1900s and the cement industry on Lake Pend Oreille, (3) themes of World War II and (4) Farragut State Park in modern times.

The results of Phase II Pen d'Oreille City investigations are presented. The first phase of the project, a pedestrian surface survey and recording of the site, was completed in September 2015 by a University of Idaho archaeology team from the Alfred W. Bowers Laboratory of Anthropology for Kootenai County under a Certified Local Government (CLG) grant. The primary goals were to identify features and temporally associated artifacts, conduct historical research, and assess the site's eligibility for nomination to the National Register of Historic Places (NRHP). Phase I results concluded that the Pen d'Oreille City (10KA91) is eligible for nomination to the NRHP and that further survey was suggested in the form of shovel test probes, targeted test excavation units, and ground penetrating radar (GPR).

Phase II of the CLG grant was to continue and expand intensive survey, resulting in expanded site boundaries and a larger artifact assemblage. Specific attention was given to cabins, public-use structure locations and features such as depressions, rock alignments, foundations, and roads/trails tentatively identified in 2015. Metal detection survey (MDS), two 50 x 50 cm sub-surface test units, feature recording, diagnostic artifact collection (451 collected and analyzed) and intensive survey, were completed in August 2017. The Phase II testing resulted in a clearer and expanded boundary based on artifact and feature distribution and historic maps.

Artifact assemblages, surface findings and subsurface testing indicate that the site occupants at various time participated in hunting, recreational activities, homesteading, cement making, blacksmithing, military training, and possibly logging. Cultural themes were identified from each period of the site. Surface artifact and sediment disturbance in areas combined with development projects and evidence of intense looting has greatly impacted the site. The investigation clarifies the potential for intact subsurface remains, the processes that disturbed the remains of Pen d'Oreille City, and how to proceed with future archaeological investigation.

Acknowledgements

Funding provided by

The John Calhoun Smith Fund

The Kootenai County Historic Preservation Commission CLG grant

The Roderick Sprague Endowment

The Department of Sociology and Anthropology

To peers, friends, professors, professionals, and supporting communities:

Lead crew members: Renae Campbell, Laurie Mauser, and Cynthia Hannold.

Lead Volunteers: Michael Dixon, Dan Lute, Caroline Herritt, Marci Monaco, and Aaron Torres.

Laboratory volunteers: Kristina Cockerille, Garth Molzahn, Rylee Robertson, and Vincent Wilson.

Lee Sappington, Mark Warner, Linda Hackbarth, Stacey Camp, Robert Moate, John A Larsen, Heather Sargent-Gross, Randall Butt, David Leptich, Robert Singletary, Tom Sandberg, Lorelea Hudson, Jill Wagner, Kevin Lyons, Rodney Frey, Robert Weaver, Nancy Renk, Grant Harley, Bruce Godfrey, Jeffery Hicke, Ken Reid, Dennis Woolford, Nathan May, Dan Polito, Bryce Danner, Dusty Fleener, Shannon Vihlene, Robyn Edwards, the volunteers from the Bayview and Coeur d'Alene community, and Mary Anne Davis.

Thank you so much to all those listed above for your help. This thesis truly is the effort of many that could not have been done without everyone involved. I am humbled to have benefited from the unique capacity with which each of you contributed to this work. Thank you again.

I would especially like to thank Robert Lee Sappington and Mark Warner for their advice and assistance with this work from its beginning to end. Robert Lee Sappington shares with his students a vast wealth of knowledge and takes the time to be involved. He enthusiastically joined in my project and provided support when it was most needed. Mark provides his students the resources to succeed and encourages deep, critical thought. His thoughtfulness has been essential for navigating the M.A. program and his consistent support on this project has been invaluable. Linda Hackbarth allowed this research and deserve copious praise for her contribution to North Idaho history. Linda Hackbarth not only began the project and wrote the book on the topic, but also was kind enough to lend her sources and be on my committee. A huge thank you to Laurie Mauser for the thorough edits and expertise shared to improve this document, as well as her experienced

volunteer work in the field that was essential to the project's completion. I would also like to cordially thank Stacey Camp for initially involving me in the project and suggesting it as a thesis topic. The Kootenai County Historic Preservation Commission, especially Laurie and Robert Singletary are to be generously thanked for their interest and investment. Much appreciation goes to the co-assistants on the project, especially Renae who shared her extensive knowledge in the field and the lab. Thank you to Jill Wagner with the Coeur d'Alene Tribe and Kevin Lyons with the Kalispel Tribe for allowing us to dig on traditional Native American lands and their efforts to assist in the research. Thank you to Dan Lute from Boise for your essential expertise in metal detection. Many thanks to the volunteers from the Bayview, the City of Coeur d'Alene, and Post Falls communities for their support, interest, and investment in volunteer hours.

A tremendous thank you to all those individuals, groups, and institutional funds mentioned below. None of this work would have been possible without your contribution of funding, labor, resources, and/or knowledge. Thank you again.

Additional contributions of knowledge, work, and/or resources from:

Kootenai County Courthouse, University of Idaho Alfred W. Bowers Laboratory of Anthropology, University of Idaho Geospatial Services and Resources, University of Idaho "Idaho Tree Ring Lab", Bonner County History Museum, Craig Mangham, Russ Brown, Bob Ohmstegde, Jim Berube, and May Dooley.

Dedication

John Larsen

and

Robert Moate

Thank you for generously and selflessly sharing a piece of your past and working throughout your lives to make a brighter future. Your interviews on Farragut Naval Training Station were greatly appreciated in the initial stages of my research to gain a better understanding of the 1940s. Much appreciation goes to the Johnson family for their source on Herald Johnson and facilitating an interview with Robert Moate.

Many thanks go to my parents and family who have always been there for me. To my friends and professors thank you for your support, kindness, and friendship. My life has been made richer with each of you.

Table of Contents

List of Figures

List of Tables

1. Introduction

Project Description

The location of the Pen d'Oreille City site (10KA91) is at Farragut State Park on the southern end of Lake Pend Oreille. The area is within Section 9 of Township 53 North, Range 2 West, NW ¼ of NE ¼ of SE ¼ (Figure 1.1).

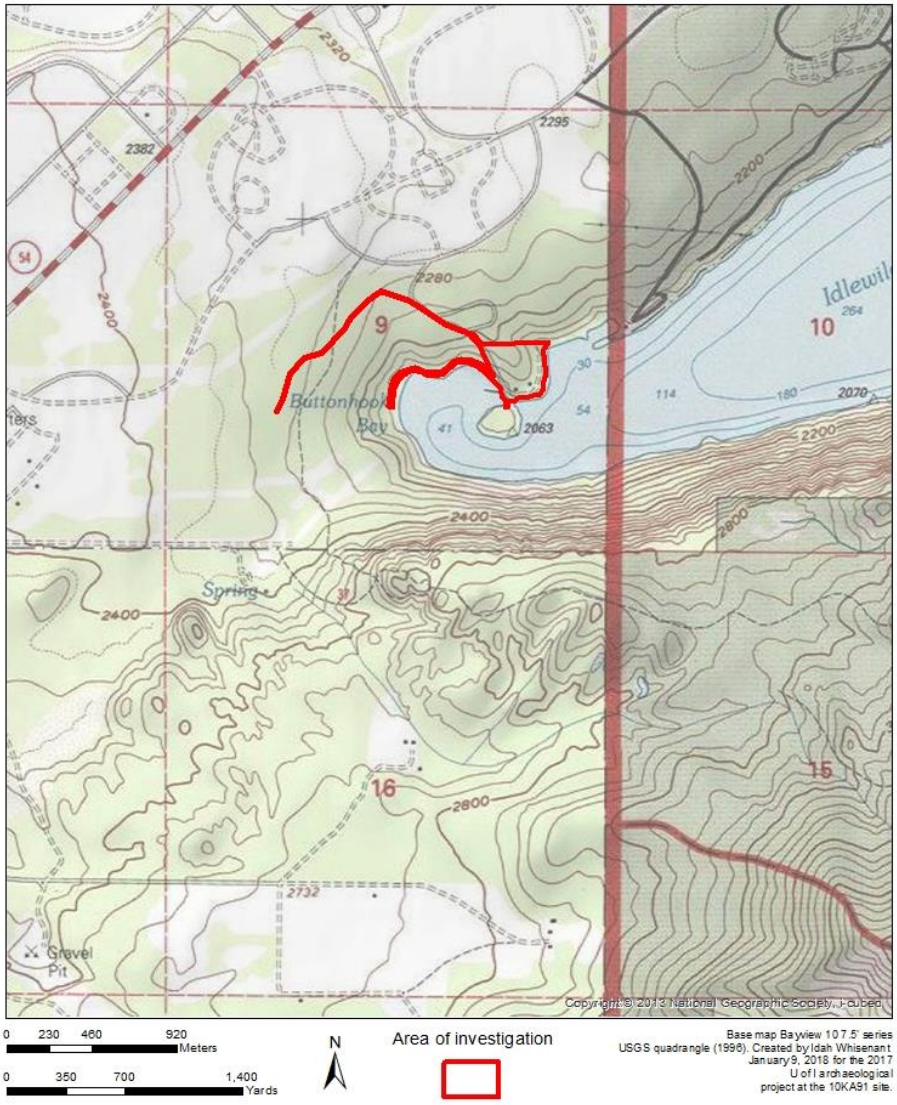

Figure 1.1. Map of project area. Base map taken from Bayview, ID 7.5' series USGS quadrangle (1996), scaled 1:25,000 with area of investigation highlighted, base map courtesy of Tom Sandberg (2017)

The Idaho Department of Fish and Game manages the property. Farragut State Park administers the property as a recreation site. The area was historically part of the lands used by the Kalispel and Coeur d'Alene tribes. Both tribes were consulted prior to testing. A permit was obtained from the Idaho Department Fish and Game to conduct survey and archaeological subsurface ground disturbance.

The Kootenai County Historic Preservation Commission (KCHPC) and a local historian and archaeologist initiated this archaeological investigation to define site boundaries and evaluate the site for nomination to the National Register of Historic Places (NRHP). Funding came from the Kootenai County CLG grant applied for by the KCHPC and educational institution funding from the University of Idaho in the form of the Roderick Sprague Endowment and John Calhoun Smith Fund. Archaeological investigation moved into Phase II, building on the foundation of Phase I surface survey work completed in 2015 by the University of Idaho (U of I) Alfred W. Bowers Laboratory of Anthropology (Camp et al. 2016). The 2015 project did not find conclusive evidence of historic Pen d'Oreille City and was limited by time constraints.

The recommendation in 2015 was that further archaeological work was needed to learn more about early frontier life and Anglo-Indian interactions. The 2017 project goals were to fulfill that need and consult with Tribes, define site boundaries, update the Archaeological Survey of Idaho inventory site form, generate updated maps with features and artifacts, catalog surface artifacts with location, description, and photograph, conduct Ground Penetrating Radar (GPR) survey and analysis, and provide data to support eligibility for the NRHP nomination form. Ground Penetrating Radar equipment malfunction resulted in use of metal detection survey (MDS) to assess new areas of potential interest and to refine boundaries. Project fieldwork provided U of I students with field experience and involved the public. Volunteer metal detectorists, surveyors, and several local individuals familiar with the site history offered information and served to inform archaeologists about site disturbances, as well as its history.

Prior to excavation historic document, map, and photography research was conducted. The field work took place August 13-17th, 2017 in the form of surface survey, excavation of two test units (TUs) (50 x 50 cm), tree coring, cement sampling, feature recording, and metal detection sampling. Efforts were targeted on identifying features and refining boundaries, investigating features identified in the 2015 survey, and evaluating potential for further subsurface work.

Project Area

The main project area is determined by georeferenced historical maps, metal detection sampling, historic photos, and LiDAR. It consists of approximately 13+ acres, stretching 354 meters on the west, 220 meters on the south border, 306 meters east border, and 375 on the north border (Figure 1.1).

Elevation ranges from roughly 2,160-2,080 feet above sea level. Slope percentages are approximately 12% on average, and mostly range 0-40%. The project area is within Section 9 of Township 53 North, Range 2 West, NW ¼ of NE ¼ of SE ¼. The location of the historic Pen d'Oreille City site 10KA91 is near Ocean Spray, a camping spot within the Buttonhook Bay group camping area at Farragut State Park and the south corner of Lake Pend Oreille. A narrow road leads downhill to a peninsula sloping toward Lake Pend Oreille with a bridge connecting the peninsula to a small island (Figure 1.2).

Figure 1.2. Photograph of the Pen d'Oreille City site with some of what was historically called Round Hill (right) pictured. Picture looking east from the trail leading to what was believed to be the location of Forest City (the first cabin built and quickly abandoned). Dense vegetation and forest prevent a clear, up-close photo of the site. Photo courtesy of Camp et al. (2016).

Potential historic trails leading from the main site are also of interest and will be discussed but were not the focus of this project. Existing structures include a boat dock, possible homestead foundation, buried sewer and electrical lines, an inoperable bathroom built in 1967, and rock mound now believed to be a lime kiln (F-06 discussed later in the document).

2. Project Area Setting and Background

Environmental Setting

The Pen d'Oreille City site (10KA91) is within the northern Rocky Mountain Geologic Province (USGS 2017), on the western edge of the boreal forests and within a third subarea of the Columbia Plateau called Eastern Plateau (Camp et al. 2016). Site 10KA91 lies on the southern tip of Lake Pend Oreille, about 30 miles north of the city of Coeur d'Alene. A jut of land and island form a harbor and what appears to be a curlicue or buttonhook. This land forming the harbor is the site location. The Clark Fork River runs west into the north east end of the lake. The Pend Oreille River flows west to the Columbia River from Lake Pend Oreille. Albeni Falls Dam construction and relicensing has generated prehistoric and historic archaeological information for the Pend Oreille River. This river flows from Lake Pend Oreille which is regulated by the dam since 1955. Normal water levels today range from 2,051-2,062 feet above mean sea level (AMSL); however, its extremes are 2049.7-2067.5 feet AMSL. Historically, the water level fluctuated with the season without the dam measuring 2048 feet AMSL from August to March and 2060-2061 AMSL in the spring (Bard 2014; Sandberg 2017). Michael Dixon, a retired physician, Pen d'Oreille City researcher, and frequent visitor to the area, believes the dam may have altered the beaches.

In 1894 and 1948, there was heavy flooding. The 1894 flood took out sections of the Northern Pacific Railroad and set the highest water mark in history at 2075-2075.9 feet AMSL. In 1948, the water level reached the highest recorded level at 2071.62-2071.7 feet AMSL, and in 1936, it reached the lowest record at 2046.27 feet AMSL (Bard 2014; Sandberg 2017; Renk 2012). The fire of 1910 may or may not have affected the Pen d'Oreille City site.

Vegetation consists of ponderosa pine, Douglas fir, and areas of the site contain non-native honey locust trees, located around the rock mound feature (see Chapter 4) Around the northern section of the site and sprinkled throughout the site are young Rocky Mountain maple trees. Historical records also indicate the presence of red cedar at the time of Pen d'Oreille City. Historical records from 1896 identify tamarack, white pine, and hemlock on the site (Camp et al. 2016). Black hawthorn is located on the eastern edge of the site.

Ocean spray brush dominates all other vegetation and is spread throughout the site, though it is concentrated in what is believed to the area of the main street of the settlement and thins out progressively to the north. Apple trees, a couple of juniper trees (within Op-7), knap weed, and asparagus are present near the shoreline. Snowberry is concentrated near the abandoned

bathroom at the southern end of the site. Ninebark, thistle, bunch grass, Oregon grape, Woods rose, and thimbleberry are present. Thick moss covers the forest floor. A June 27, 1866 journal entry from the co-founder of Pen d'Oreille City, Seth Pope (OHS Seth L. Pope Mss 701), indicates that during grading for the settlement and road construction, there was heavy brush with "Service Berry" and "arrow wood." This vegetation combined with "stoney" ground proved difficult to cut clear for building Pen d'Oreille City (OHS Seth L. Pope Mss 701). The rocky terrain made it easier for them to cut vegetation with knives rather than axes. Most trees were estimated to be about 60 years old and many not older than 100 years (Butt 2017). Trees on the edge of the large depression were dated at the dendrochronology lab, giving a date of 1885 or earlier and no later than 1935 (see Chapter 4).

Several deer skulls, an entire deer skeleton, and tufts of deer hair were found in highest concentrations near the southern shoreline near and below the abandoned bathroom. They are likely whitetail deer, as they frequent the area (Camp et al. 2016). As mentioned, beaver is found here as well. Black bear, non-native turkey, raccoon, coyote, mountain bluebird, osprey, bald eagles, and non-native Kokanee salmon are known to visit this area and in Buttonhook Bay. Native fish found in the lake are westslope cutthroat, whitefish, and bull trout. Historically there is record of mules, horses, one account of camels, and Seth Pope's dog, Fanny, at the site. Pope and others mention fishing for and eating trout (silver trout specified in one account on July 11, 1867) from the lake as well. Pope mentions troublesome mosquitos and gnats constantly in his journal entries as well (OHS Seth L. Pope Mss 701).

Lake Pend Oreille formed during the last Ice Age about 14,000 years ago from the Cordilleran Ice sheet extending south from what is now Canada (Camp et al. 2016). The location of Lake Pend Oreille is beneath the lobe that formed a glacier dam backing up water to form Glacial Lake Missoula to the south east behind the Clark Fork River. A minimum of 40 floods from the 3,000-square mile Glacial Lake Missoula drained all the way to the Pacific Ocean. The glacier receded leaving Lake Pend Oreille. Early frontier travelers' roads leading to Lake Pend Oreille and later Pen d'Oreille City followed the natural paths set during the Ice Age that were further refined by early Native Americans (Hackbarth 2014).

The sediment consists of Quaternary Missoula Flood deposits (see Chapter 4) (Camp et al. 2016). A soil report from the United States Department of Agriculture National Resources Conservation Service shows that there is mostly Kootenai cobbly silt loam (USDA 2017: map unit 128) and gravely silt loam (USDA 2017: map unit 127) and slope percentages from 20-45%. The 128

Kootenai cobbly silt loam takes up about 85% of the area of interest and is regarded as farmland of statewide importance with slopes of 0-7% (USDA 2017).

Native Peoples and Precontact Archaeological Context

The area immediately surrounding 10KA91 has had archaeological work done. Archaeological sites are prevalent around the northern portion of Lake Pend Oreille with 393 recorded properties (most prehistoric). Much of the archaeological research in the area was due to the Albeni Falls Dam and Pend Oreille Lake Project and the Calispell Valley Archaeological Project (conducted 15 miles west of the project area). This work provides historic and prehistoric archaeological information for the northern portion of the lake. Human occupation in this area is reported possibly by 10,000 BP, but clearly by 8,000 BP which is the Purcell Phase date range. Since that time, the projectile point style sequence shows continued habitation of the region (Miss and Hudson 1987). The Hoodoo Phase began 8,000 BP and ended approximately 4,500 BP and had Cascade-style lanceolate points. These were likely the first permanent regional inhabitants. The following Cocolalla Phase dates 4,500 BP - 2,500 BP. The phase was notable for marked population increase, innovations, small-game foraging, trade networks with British Columbia, and camas as a food staple. At the Calispell Valley, most sites date within 3,500 years, with a few dating as early as 5,500 BP. The Kalispel'em Phase from 200 BP to 250 BP is the last phase before the Protohistoric/Historic period and is characterized by the use of transportation via rivers and lakes to travel east to west, reliance on valley bottoms for resources, camas trade and processing in bulk, trade, obsidian use, and strong reliance on riverine resources and settlement (U.S. Army Corps of Engineers 2008).

The Kalispel are arguably the tribe most closely associated with the lake as their territory occupies much of the lake and they are frequently recorded in association with this area (Lahren 1998) as well as the Coeur d'Alene tribe. However, other tribes such as the Colville, Spokane, Flathead, and Lower Kootenai also gathered around Lake Pend Oreille. Hackbarth states that the site of Pend d'Oreille City "was an early hunting place of the local Indians" (Hackbarth and Balbi 2003: 1). Another source states that the land around Farragut State Park was reported to be a place of illness according to Native Americans (Kartevold et al. 1990). John B. Leiberg who lived at the eastern edge of Farragut State Park in 1893 was the first to record the petroglyphs on Lake Pend Oreille (Bard 2014: 94; Hackbarth 2014).

Chuck Peterson was an early history enthusiast in the area. His papers held at the Bonner County Historical Society museum in Sandpoint discuss regional archaeology (Bonner County

Historical Society 2017). He mentions Native American remains near Lakeview, but not at the Pen d'Oreille City site. The Sandpoint Archaeology Project conducted by the University of Idaho 2006-2013 for the ITD Sandpoint Byway project provides a volume on the 119 prehistoric artifacts recovered from nearby Sandpoint (Bard 2014). Sandpoint, located on the north end of Lake Pend Oreille, was of significance to the Kalispel, Coeur d'Alene and Kootenai Indian people, all of whom were reported to be in the "vicinity for at least 6,000 years ago or longer," though most projectile points found during the Sandpoint Archaeology project dated later than 4,500 BP (Bard 2014: II,195). No prehistoric artifacts from the Sandpoint Archaeology Project were found in definitively primary depositional context or with prehistoric features (Bard 2014:120).

Reportedly nearby Bayview, just north of Farragut State Park, was a winter village named *Ncame'p meant* which translated means 'the head or gateway to the lake.' The Kalispel at this location may have utilized resources, such as deer, berries, roots, camas, fish, and driftwood (Lyons 2016; Hackbarth 2015b; U.S. Army Corps of Engineers 2008). Petroglyphs are also recorded within Idlewilde Bay on the southeast side of 10KA91 (U.S. Army Corps of Engineers 2008). The Kalispel and Coeur d'Alene spoke an Interior Salish language (Bard 2014:1-3). After the horse was introduced to the Kalispel between-1750 and 1770, men traveled to the plains using the bow and arrow to hunt bison (Bard 2014:11; U.S. Army Corps of Engineers 2008). The Kalispel utilized weirs and other contraptions to kill fish, but also simple spears. They relied more heavily on fish as a food source than many of their neighboring tribes (Bard 2014:11). Other tools included bolas, sunk fish nets used for fishing and awls. Knives and spears were utilized for several functions. Knives were used to cut tule, a plant used for creating mats to cover lodge floors (Fritz 2010; Sappington and Carley 2005). Stone implements were used for food preparation, clothing, and other uses. The Kalispel ate plant-based food, such as camas (their most reliable staple) and other roots, vegetables, and berries. Mortars and pestles were used in food preparation. They used boiling stones to cook fish. They would also use heating stones to cook camas in earth ovens. Stone and bone scrapers were used to prepare hides. Bone needles were used for sewing, likely (Fritz 2010; Sappington and Carley 2005).

The Kalispel used bow and arrows, either bone or stone tipped. Bears in hibernation, elk, deer, and birds were killed with these projectile points or deadfalls. Deadfalls were used for "marten, fisher, mink, weasel, ermine, fox, wolverine, mountain lion, lynx, black bear, and mice" (Sappington and Carley 2005:25). Today Kalispel tribal members feel a connection to the area of the site (Fritz

2010) and the entire area surrounding Lake Pend Oreille is a Traditional Cultural Property (U.S. Army Corps of Engineers 2008).

Coeur d'Alene Tribal lands include the southern tip of Lake Pend Oreille and 10KA91. The site was likely visited during the summer months, when higher elevations would provide cooler temperatures. The Kalispel and Coeur d'Alene were allies and could have crossed paths at the site and shared much of their vocabulary. It only would have been a day's walk, if there had been a good road, from Lake Coeur d'Alene to the southern tip of Lake Pend Oreille, totaling 21 miles (Bard 2014:2-3). David Thompson recorded the Coeur d'Alene, Kalispel, and Kootenai tribes at the mouth of the Clark Fork River at Indian Meadows.

Historical Background

The site 10KA91 is located within Farragut State Park, specifically the jut of land that forms Buttonhook Bay. Pen d'Oreille City's history was completed by Linda Hackbarth, a former Bayview resident and history researcher (Hackbarth 2003, 2014, 2015a, 2015b). Hackbarth was instrumental in raising interest in the site primarily through the book *Trail to Gold: The Pend Oreille Route* (2014). Her goal with archaeological investigation was presentation and interpretation of the site to inform visitors of a piece of the early Idaho territory history. Primary sources from her private collection were reviewed to inform the history below as well.

Fur Trader Exploration 1805

Fur traders from the North West Company entered the region to trap and collect furs to send east in the early 1800s. David Thompson established the Kullyspell House in 1808 as a trading post between Clark Fork and Hope, becoming the most famous early trapper in the area (Hackbarth 2003). One report indicates that trappers may have used the Pen d'Oreille City route as late as 1871 (Hackbarth 2014:85). Some artifacts discovered or shown to archaeologists from private collections of artifacts after the Albeni Falls Dam construction included gunflints, pipes, beads, buttons, marbles, lead bullets and balls, and coins; some historic artifacts date to the 1880s, others to the fur trapping era (Miss and Hudson 1987). The gunflints associated with the fur trapping era may have been used by the Kalispel too, as illustrations of the Kalispel in the *Handbook of North American Indians* shows them with guns (Lahren 1998). In the 1840s, Jesuit missionaries also came to the region to convert the Kalispel and Coeur d'Alene tribe of Indians to Christianity and introduced an agrarian lifestyle, causing a shift in "tribal relations, demographics, settlement, and resource procurement patterns" (U.S. Army Corps of Engineers 2008:E-8).

Pre-1866 Seth L. Pope, not the first

Seth L. Pope kept a journal of his pioneer efforts to establish Pen d'Oreille City and is the source of our knowledge of it. He was a sailor originally, but eventually got a job at the Oregon and Montana Transportation Co. (a subsidiary of the Oregon Steam Navigation Co.) that led him to co-found Pen d'Oreille City (Hackbarth 2014). Zenas Moody, also an Oregon Steam Navigation Co. employee, was near the site reportedly by 1865, likely at Seneacquoteen, northern Idaho's first permanent Euro-American settlement. Pope mentions in a letter to a friend later that a man, frequently referred to as Davidson, who helped build the *Mary Moody* with Zenas Moody before Pope arrived. Pope claims he and his group were the first white people to see that area. Two cabins and cut wood are noted in June 21, 1866 at Davidson's Point (where the naval training station hospital and Leiberg Point was) when Pope first reached this section of the lake (OHS Seth L. Pope Mss 701:June 26, 1866). Pope established a claim with a cabin 130-140 yards west of Davidson's plot and W. H. Blackstone had a claim west of Pope, though they are not labeled on the maps (OHS Seth L. Pope Mss 701:June 26, 1866). Dixon (2017) believes Davidson's claim may have been near where Leiberg built at what was Leiberg/Davidson's Point. Davidson's sign of land ownership stated "Notice is hereby given that I the undersigned claim 100 yards, running up the lake from the notice, running back 150 yards at right angles, for ranching purposes. Signed George Dent Davidson June 26, 1866.

1866-1870 Pen d'Oreille City

Pope surveyed and drew the first known maps of the site (Figures 2.1, 2.2, and 2.3).

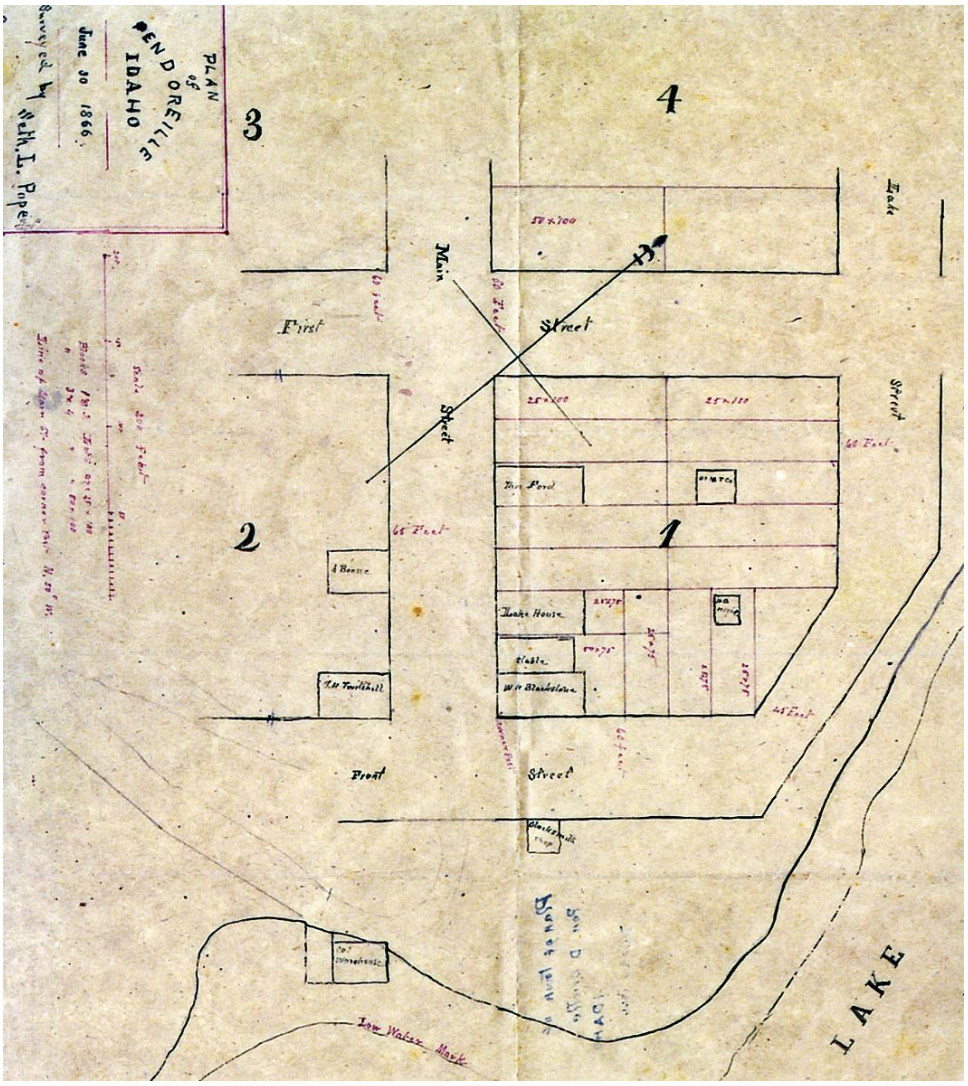

Figure 2.1 Plat map of Pen d'Oreille City June 30, 1866 (OHS Seth L. Pope Mss 701). Some of the buildings are labeled as the following: Top left is A. Boone's Cabin, below that is W. Twitchell's Store, and below that is the Warehouse. This map suggest that the warehouse was supported over the water with an attachment point on land. The middle top column of buildings is "Thos. Ford"'s Cabin, below that is the "Lake House" (hotel), below that the Stable, below that W. Blackstone's saloon, and below that across the lower street is the Blacksmith shop. On the far-right top is the O&MT Co. (Oregon and Montana Transportation Company building), and below that H. A. Hogue's cabin. Upper left-hand writing reads "PLAN OF PEN D OREILLE IDAHO June 30, 1866 SURVEYED BY SETH L. POPE."

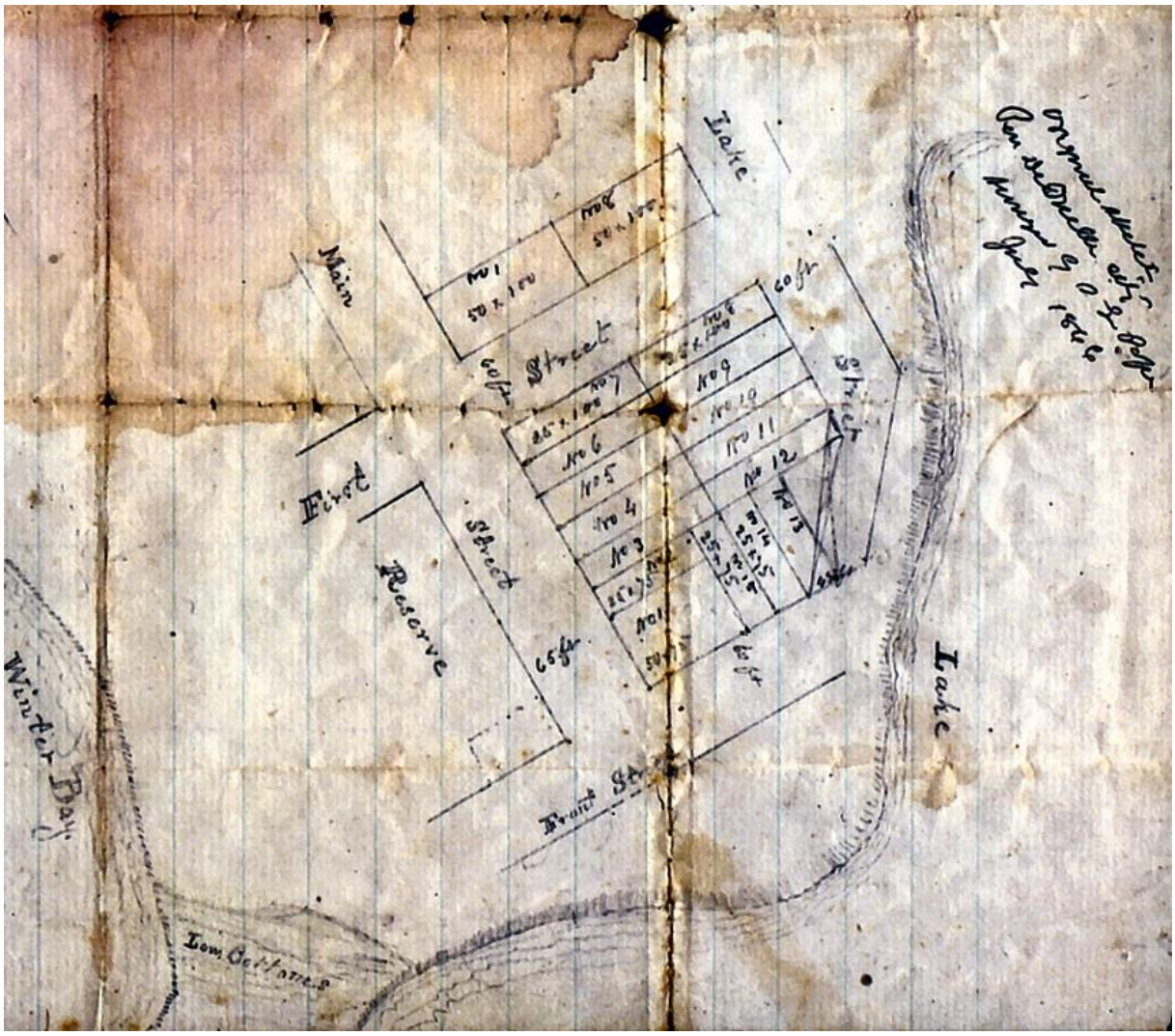

Figure 2.2 Plat maps from July 1, 1866 drawn on the same page as Figure 2.3, courtesy of the Oregon Historical Society (OHS Seth L. Pope Mss 701). This is another draft of the city plan made a few days later and omitting previous structures on the west side of Main Street, possibly not built yet or not included from the June 30, 1866 map (Figure 2.1). The lot layout is more subdivided than the previous map on the east side of Main Street, making it difficult to know which map may represent the true layout of the settlement.

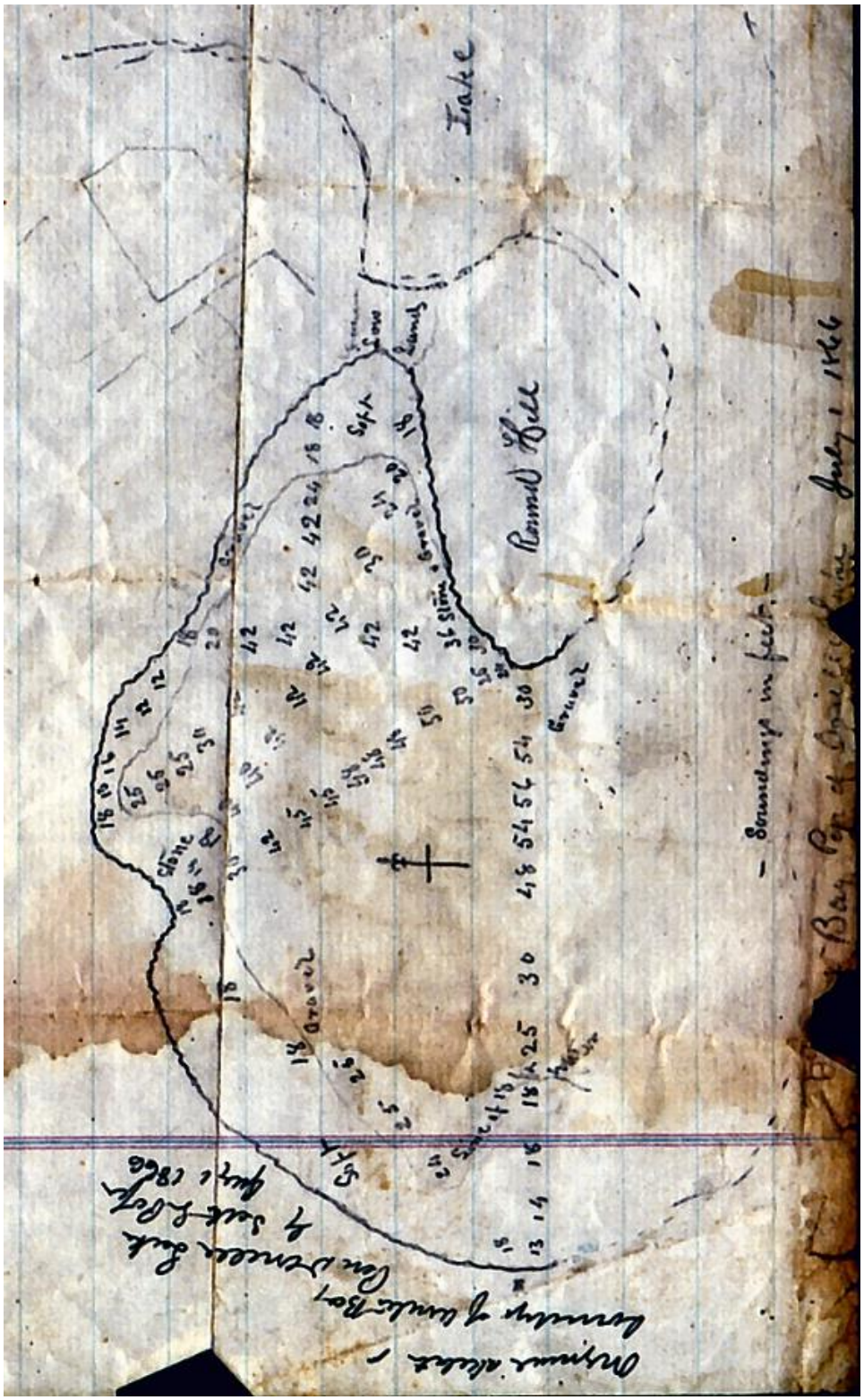

Figure 2.3 July 1, 1866 bay soundings map drawn on the same page as Figure 2.2. Drawn by Seth L. Pope showing a city outline and bay soundings in feet of Buttonhook Bay. Note that the square dot at far west of the harbor is “Forest City” where the first cabin was placed, courtesy of the Oregon Historical Society (OHS Seth L. Pope Mss 701).

Pen d'Oreille City was the second permanent Euro-American settlement in northern Idaho in the mid-late 19th century. The first settlement of Euro-Americans in northern Idaho was Seneacquoteen in 1860s, which served as a crossing point for travelers going along the Wild Horse Trail. The settlement is strategically located for water transportation at the southwest corner of the lake that lead to trails to Rathdrum, or as it was called then Connors Ranch, and further west through a series of trails that could go as far as Portland (Hackbarth 2014). Settled in 1866, Pen d'Oreille City served as a waypoint for gold seekers, supplies, and mail traveling west to the Montana Territory and north to the British Columbia gold mines. Transportation traffic was primarily via water routes. Pen d'Oreille City routes extended to Cabinet Landing, a landing and point of departure to Montana on the northeast end of the lake, and Mud Slough on the north shores of Lake Pend Oreille that served as the entry way to British Columbia. The *Mary Moody* served as the main steamboat for Pen d'Oreille City harbor (at the winter bay on the west side of Round Hill) and transported pack trains across the lake (Camp et al. 2016) (Figures 2.4 and 2.5).

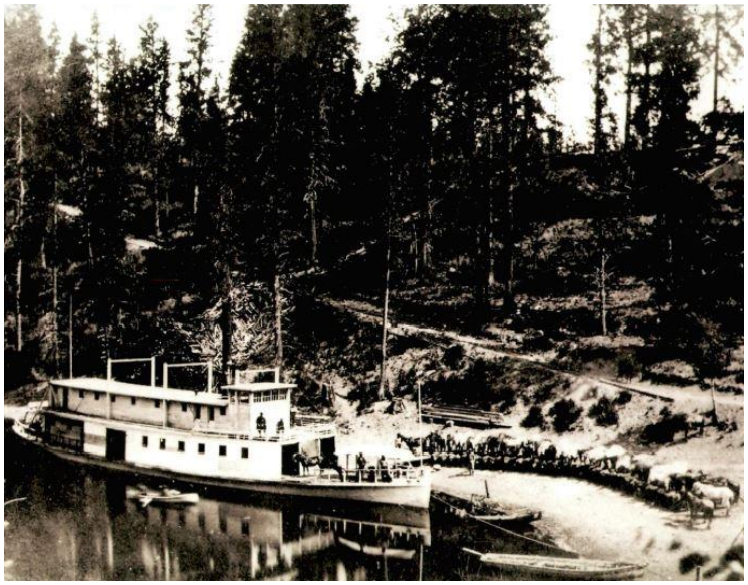

Figure 2.4 1869 historic photograph of the *Mary Moody* taken in April with a possible log chute and wood pile with the background for the steamboat. Note the row of animals, likely a pack train getting ready to board. Photo taken by Montana photographer August Thrasher (OHS Seth L. Pope Mss 701).

Figure 2.5 Photograph of the *Mary Moody* and four historic Pen Oreille City cabins. Photograph taken by August Thrasher in April 1869, and housed at Oregon Historical Society, Portland, OR. (Hackbarth 2014:113; Camp et al. 2016). From left to right, the cabins may have been Boone's Cabin, the Hotel, and Twitchell's store (OHS Seth L. Pope Mss 701).

At the Clark Fork River, two other steamboats were put into place to take travelers further east up the rapids. The Oregon Steam Navigation Co., searching for an edge over competing companies, found alternate routes further east. The Lake Pend Oreille route was easier according to some accounts than the road through Seneacquoteen at the northern part of Lake Pend Oreille or the Mullan road to the south. The trail through Seneacquoteen was reportedly muddy and difficult, however, trail investors and owners of the period unabashedly promoted or criticized the roads and crossing points through advertisements depending on their personal interests, making it unclear which routes were truly preferred by travelers (Hackbarth 2014). Ben Burgunder, a traveler who kept record of his travels through the Northwest states that wagons would reach the "Spokane Bridge, Lewiston, Simiachtine, [Seneacquoteen] and the steamboat landing on the Pend O'Reille [Pen d'Oreille City likely]" and from these departure points, pack trains (mostly mules, but some horses and wagons) would pack further into mining territory (Burgunder and Oliphant 1926:204).

The first settlement, Forest City, was a small cabin, 9 x 11 ft and four logs high, at the west end of the bay (Figure 2.3). Pope is noted to have slept on the *Mary Moody* with others and possibly at Forest City (OHS Seth L. Pope Mss 701). The settlement moved across to its current location and went through various names until it became Pen d'Oreille City. Pen d'Oreille City provided a hotel, store, warehouse to store supplies, saloon, cabins, stable, and a blacksmith shop. The hotel (co-

owned until June 5 when Alphonso Boone took it over), Blackstone's cabin, Seth Pope's cabin, Mr. and Mrs. Henderson's home, Twichell's building/store, and warehouse was established in 1866. The blacksmith shop, Boone's cabin, the stable (possibly just a roof on the saloon and hotel November 13) and Oregon and Montana Transportation Co. building were built in 1867. Other cabins belonged to Thomas Ford and Harvey Hogue. These men and others helped establish Pen d'Oreille City and many were Oregon and Montana Transportation Co. employees. Ownership and uses frequently shifted for these buildings with the season and residents. Twitchell's store had a counter (which Pope took a nap on June 18, 1867), sills, and stove. A road path was built to meet with the road to Davidson's place. A levee is noted along the south shoreline. It is indicated that they made mortar, had saw pits, and Davidons had a ranch (OHS Seth L. Pope Mss:July 11, 1867). Oxen were even kept on Round Hill, though like the horses, often strayed from the settlement requiring seemingly constant corralling (OHS Seth L. Pope Mss 701:July 5 and 6, 1866).

People were regularly coming and going. Pope got into a routine of taking travelers across the lake, which from 1866-70 had a considerable amount of traffic. By 1872, the boats were rotting, and the city had mostly been abandoned (Renk 2017). Pope worked on the boat after he helped establish the city. He often visited his friend William Abrams on the Clark Fork and seemed to enjoy his time at Pen d'Oreille City. It isn't clear what became of Pen d'Oreille City from 1870 to 1880. Its importance may have declined as Montana grew, which made the site less necessary for importing goods.

1880-1900

When rail lines were laid around 1881, the site of Pen d'Oreille City, now called Steamboat Landing, served as a mooring place for the recreational steamer *Henry Villard.* In 1889, the United States granted all of section 9 to the Northern Pacific Railway. Mail continued to be sent across the lake on various steamers. Homesteaders used the land and miners used it as a supply point for traveling to the Coeur d'Alene Mountain's mining industry (Hackbarth:2015a). It retains the name Steamboat Landing on maps as late as 1917 and steamboat transportation continued on the lake as late at 1938 (U.S. Army Corps of Engineers 2008:26).

1900-1930

Most of the surface features and artifacts appear to be from the early 1900s to present. It changed names and purpose after 1880 that time to Steamboat Landing. One source from 1903 titled Steamboat Landing as Idlewild, but all maps identify it as Steamboat Landing 1897-1917 and no other sources found refer to it as Idlewild (Miss and Hudson 1986; Western Historical Publishing Company 1903:1812), though this is the modern name of the bay leading to Buttonhook Bay (Kootenai County 2017; Sandberg 2017). Steamboat Landing served as a point of departure for Lakeview and other settlement on the east side of the lake by steamboats and to Athol on the Northern Pacific railroad. Steamers also ran from Sandpoint to Hope during this time. Mining for silver and limestone for the lime and cement industries emerged in the area and Steamboat Landing was a supply point for miners and homesteaders.

In 1900-30, Bayview developed as a result of the lime and cement industry. For this reason, the Spokane International Railroad extended to Bayview in 1906. The Northern Pacific Railway Co. bought much of the land in the area in 1889 and was responsible for bringing traffic and settlement back. The Great Northern Railroad came through the north part of the lake and river in 1892, which also increased steamboat travel to Steamboat Landing/Idlewild. Mineral prospecting in the Wallace-Kellogg area in mid-1880 also brought more traffic to areas like Lakeview on the east shore and settlements on the north shore (Miss and Hudson 1986). “More Trust C.” bought the land in 1903, which about a month later went to Romie L. Webster. Romie L. Webster sold the land to E. J. Webster, a Civil War veteran, the site and some land above it in 1913 (Figures 2.6 and 2.7) (Kootenai County 2017). The site was sold by the Northern Pacific Railway to an unknown buyer in 1915 along with other land. An orchard and two structures appear to have been at the site in 1935 as well (Figures 2.8 and 2.9). The orchard feature may correlate with Figure 2.8 that shows an orchard from ground level. The depression appears in Figure 2.10, indicating it may be associated with this period or before. Fruit growing, dairy, and lime were growing industries in the region at this time (Western Historical Publishing Company 1903).

Township FIFTY-THREE Range TWO WB. M. KOOTENAI CO., IDAHO.

GRANTOR	GRANTEE	Filed	Inst.	Book	Page	SECTION No. "9" N.E. N.W. S.E. S.W.	REMARKS
United States	N.P.R.R. Co.	12-26-98	Pat	R	414		
N.P.R.R. Co.	A.C. Ninneman	8-30-01	D	4	119		
A.C. Ninneman et ux	Hope Lbr Co.	9-2-01	D	A	328		
Merc Trust Co.	N.P R.R. Co.	9-30-01	Rel	B	467		
Hope Lbr Co.	Muskegon Brewing Co.	7-15-02	M	M	328		
N.P.R.R. Co.	Romie L. Webster	6-27-03	D	8	206		
Merc Trust Co.	N.P.R.R. Co.	7-25-03	Rel	D	86		
Muskegan brewing Co.	Hope Lbr Co.	8-1-04	Rel	D	269		
Hope Lbr Co.	Kenneth Ross	3-3-08	D	28	362		
Kenneth Ross	Hope Lbr & Mfg Co.	3-3-08	D	28	363		
Hope Lbr & Mfg Co.	McGoldrick Lbr Co.	6-6-11	D	44	95		
Romie L Webster et ux	Coeur d'Alene & Pend d'Oreille Ry Co	11/20-11	D	45	324		part of
McGoldrick Lbr Co	do	2-9-12	D	47	193		
T L Webster et ux	E J Webster	5-19-13	D	53	345		

Figure 2.6 Kootenai County Courthouse tract ownership names from 1898 to 1913.

Index to Lands—Kootenai County, Idaho

Sec. 9 Twp. 53 Range 2 West

GRANTOR	GRANTEE	Book	Page	Date Recorded Mo.	Day	Yr.	Instrument	N.E.¼	N.W.¼	S.W.¼	S.E.¼	REMARKS
McGoldrick Lbr Co	Coeur d'Alene & Pend d'Oreille Ry Co	47	193	2	9	12	D					
T L Webster	E J Webster	53	345	5	19	13	D				2	
Romie L Webster	Coeur d'Alene & Pend d'Oreille Ry	45	324	11	20	11	D					
United States	Nor Pac Ry Co	R	414	12	26	98	Pat					
Hope Lbr & Mfg Co	McGoldrick Lbr Co	44	95	6	6	11	D			3	4.5	
E J Webster	Kootenai County	38	500	7	13	14	D	pt				2 tax
Hope Lbr & Mfg Co	Kootenai County	57	215	8	11	14	D			pt		
Nor Pacific Ry	Unknown Owner	60	219	7	27	15	2CD			3	2.45	Min Rights
McGoldrick Lbr Co	Hope Lbr Mfg Co.	94	485	12	26	27	2CD			3	4.5	
Hope Lbr Mfg Co.	Frank Reem	94	486	12	26	27	Deed			3	4.5	
Frank Reem et ux	W. F. Root et al	94	487	12	26	27	Deed			3	4.5	
E J Webster	Zella E Andrews	109	75	2	10	38	WD				2	Except R/W
McGoldrick Lbr Co.	W F Root et al	119	289	4	27	48	QCD			3	4.5	
United States vs.	Selma Gasman et al	C	172	11	30	42	Pat				2.45	

Figure 2.7 Kootenai County Courthouse tract ownership names from 1912 to 1942.

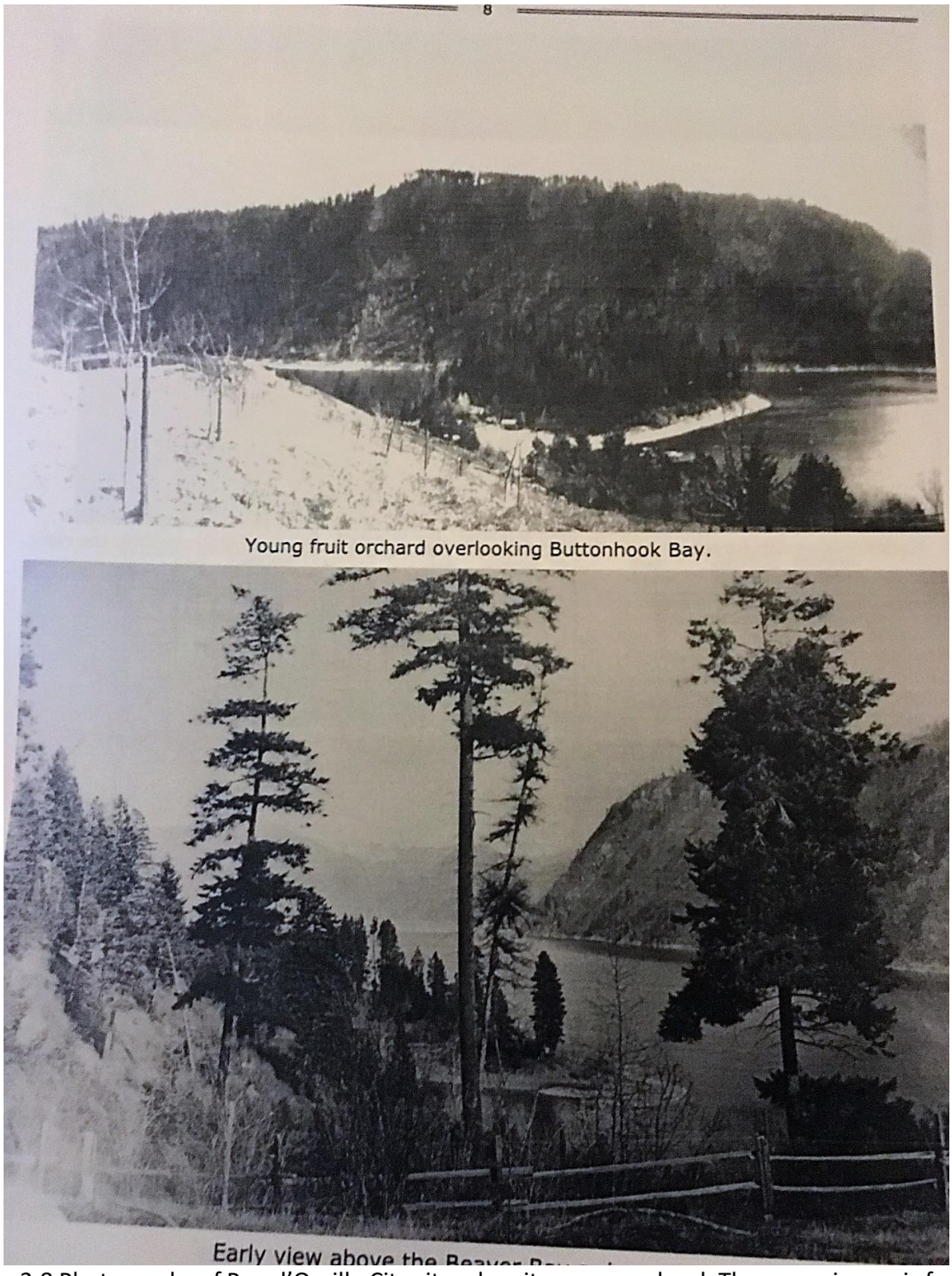

Figure 2.8 Photographs of Pen d'Oreille City site when it was an orchard. The upper image is facing "Round Hill", note the two (possibly 3 cabins) on the island. The lower image is facing east toward Beaver Bay (southeast) from on top of the Pen d'Oreille City site. Date unknown, but likely early 1900s (Hackbarth 2003).

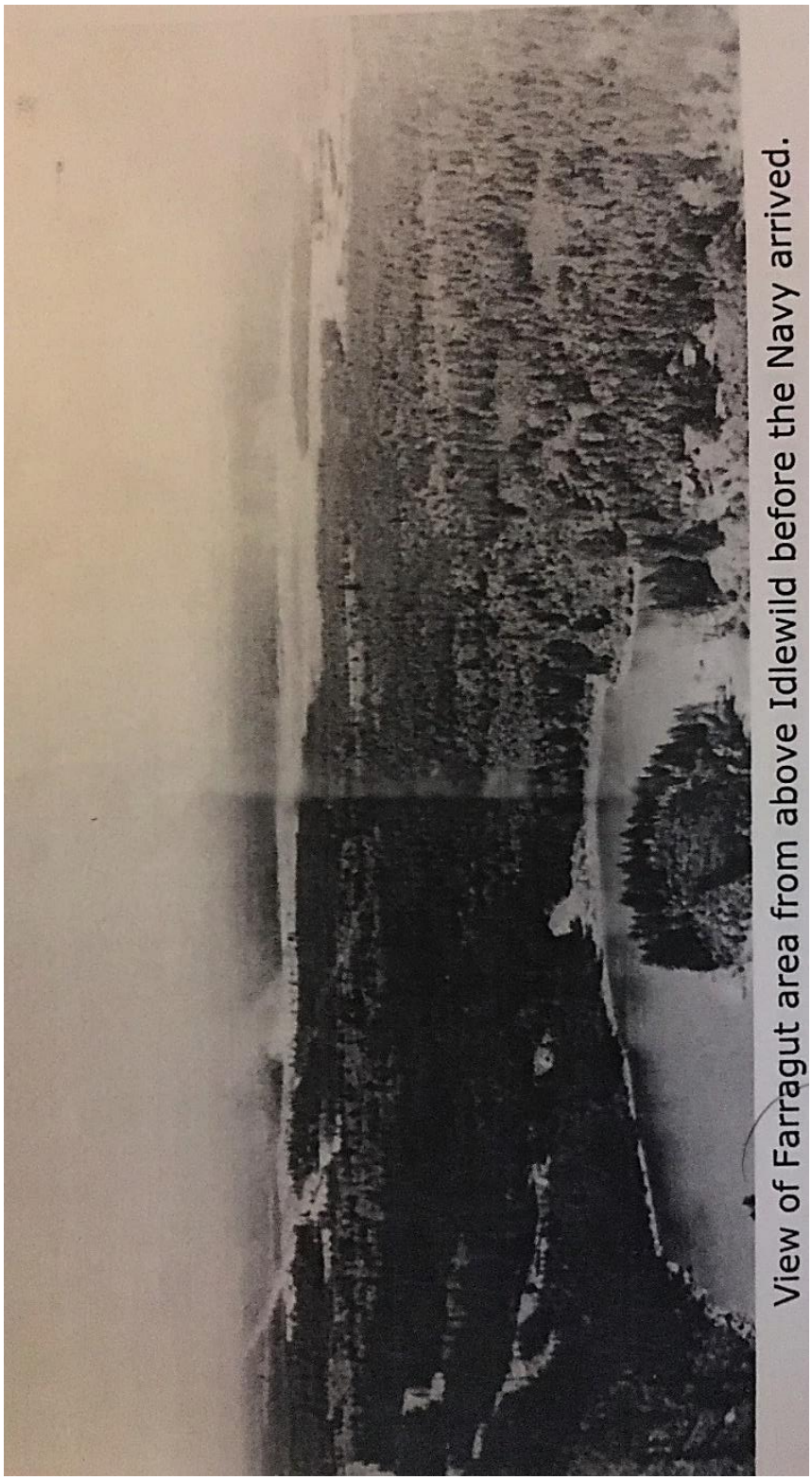

Figure 2.9 Historic photograph taken of Buttonhook Bay facing west. Possibly some homesteads and/or hotel visible lower-right. Date unknown, but possibly the early 1900s before 1941 (Hackbarth 2003). “Idlewild” in the caption is probably short for Idlewilde Bay or because the site was named this by 1903

Figure 2.10. Two angles from a series of 1935 aerial photos of the Pen d'Oreille City site. Note the docks, Steamboat Landing Road, and the large depression. Courtesy of Tom Sandberg (2017). Top aerial is P 447-35, bottom is P 448-35.

1930-1942

E.J. Webster sold 192 acres around Buttonhook Bay to Zelle E. Andrews in 1938. The parcel is shown on the map of land tracts which the naval training station bought (Figures 2.6, 2.7, and 2.11) (Kootenai County 2017). Andrews tried to reclaim the parcel when the naval training station was temporarily used as a technical college for returning veterans using the G.I. bill (Hackbarth 2015a).

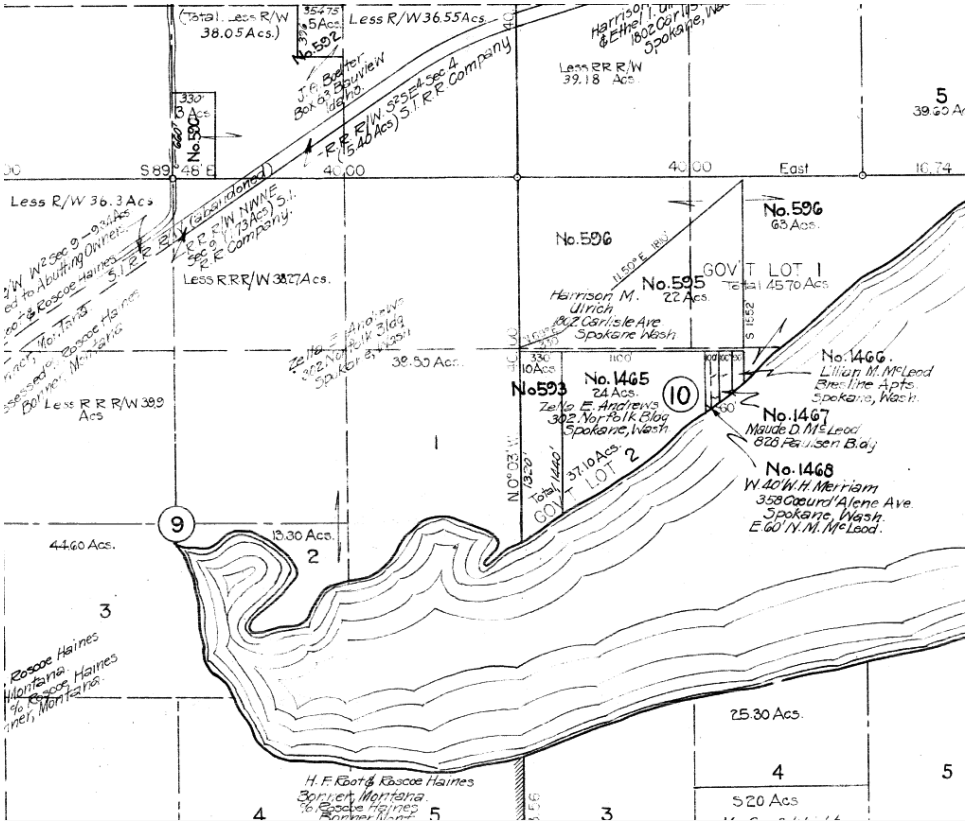

Figure 2.11 "Map of Proposed United States Naval Training Station Pen d' Oreille Lake, Kootenai County Idaho showing ownerships and boundaries," May 1942 (Kootenai County 2017). Zelle E. Andrews is shown to have owned the land in the NW ¼ of SE ¼, and the NW ¼ of Section 9 (the 13.30 acres is near the Pen d'Oreille City site location) and a portion of Section 10 east on the lake's shoreline.

1942-1946 Farragut Naval Training Station

When WWII broke out, a new naval training station was built on the large peninsula, the southern portion on which Pen d'Oreille City was situated. There is little documentary evidence that the navy utilized the site area, though one of the six camps, Camp Gilmore, was near the site. Randall Butt, the park manager, said they shot at aircraft from the Spokane Fairchild Air Force Base for practice (Butt 2017). Popular knowledge claims trainees only used wooden bullets. Archaeological evidence supports use of real ammunition and at least practice shooting at the site. The 2015 survey identified a gun rack (Camp et al. 2016). The Farragut College and Training Institute was short-lived from 1946 to 1949 and succeeded the naval training station after its decommissioning. The buildings from the training station (some of which had been used for the college and faculty residences from Farragut Village) were torn down or sold. Driving through Farragut Village today, it seems possible some of the structures remained, but more research would be needed to make that claim. John Larsen (2016), a trainee who was interview for training at Farragut Naval Training Station, informed that buildings were sent all over the country after it was torn down. Other buildings were distributed locally as well (Hackbarth 2015a). The site itself shows that the area might have been used for recreation, likely for the officers. Figure 2.12 shows two original structures that may have belonged to Zella Andrews, but there is no documentation on who owned or constructed them. These structures may coincide with Figure 2.13.

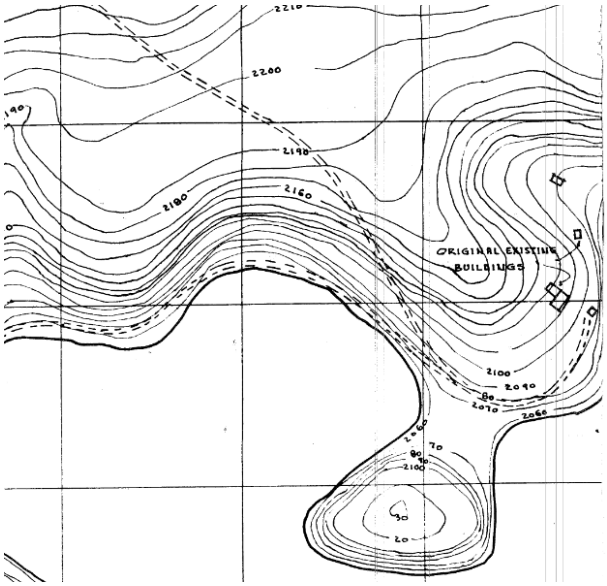

Figure 2.12. U.S. Farragut Naval Training Station Farragut, Idaho Location Plan, approved June 23, 1942. Courtesy of Kootenai County Courthouse and Robyn Edwards. Two original buildings are shown, indicating that these may be the homesteads from the maps and aerial photos. The structures appear to match Figure 2.13.

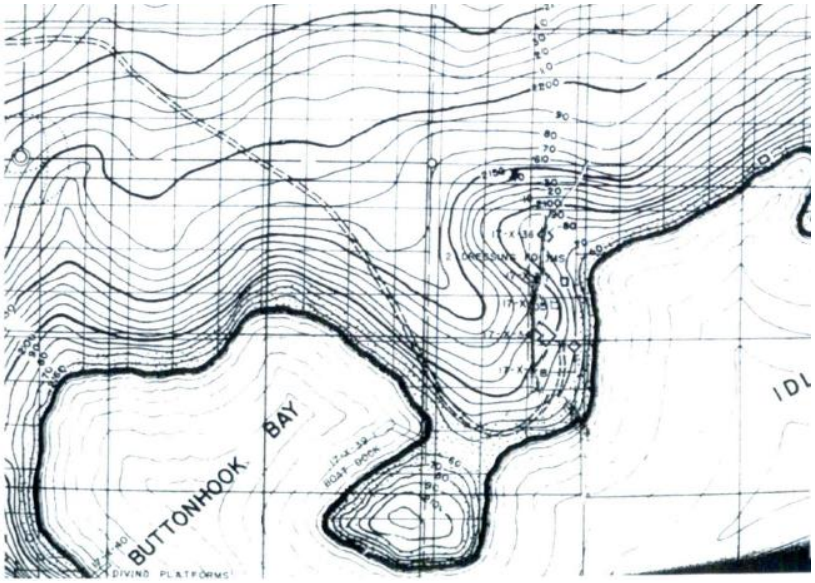

Figure 2.13. Site as part as part of Farragut Naval Training Station 1945 map showing, “Dressing Rooms”. Courtesy of Michael Dixon (Camp et al. 2016). The buildings and dock are given measurements. The map gives measurements, some of which are illegible. The southeast cabin has measurement units reading 17x?8 (ft?). The largest structures measure 57x3?. North of that reads 17x? What appears to be the two dressing rooms is a 17x? structure with a 17x36 structure north of that. This Figure has structures that match with Figure 2.12.

1949-1965 Farragut State Park and Girl and Boy Scout events to present

Farragut State Park is Idaho's largest state park. Idaho Fish and Game Department bought Buttonhook Bay area's 37.9 acres in 1949, and still owns the land of the Pen d'Oreille City site. In 1954, the docks and camping facilities were created and over 4,000 trees were planted for birds and natural reclamation of the Naval Training Station grounds. The Girl Scouts used the Farragut facilities in 1965 for their senior roundup. This provided the impetus for Farragut State Park to be created as a recreational area. The park grew to its present size in 1973 and 1991 when more land was granted to the state (Hackbarth 2015a).

In 1964, a dock was built at Buttonhook Bay for the Girl Scouts. After the Girl Scouts' senior roundup was hosted in 1965, the Boy Scout Jamboree made plans to use Farragut State Park as a facility. The world's second Boy Scout Jamboree hosted in North America began preparation at Farragut in 1966. It was such an important occasion that Neil Armstrong greeted the group from space on Apollo 11. The National Boy Scout Jamboree also used Farragut State Park in 1969 and 1973. The preparations for the jamboree brought in the restrooms at Buttonhook and a permanent water system in 1966-7. A large netted area in the bay was stocked with 20,000 trout and docks were built to allow 150 boys to fish (Figure 2.14) (Hackbarth 2015a). Docks today appear different from those in the 1960s. This is likely when the sewer pipe was put in and possibly an electrical line. The sewer line runs on the west side of Steamboat Landing Road. The electrical line extends from the electrical box west of the abandoned bathrooms and extends northwest.

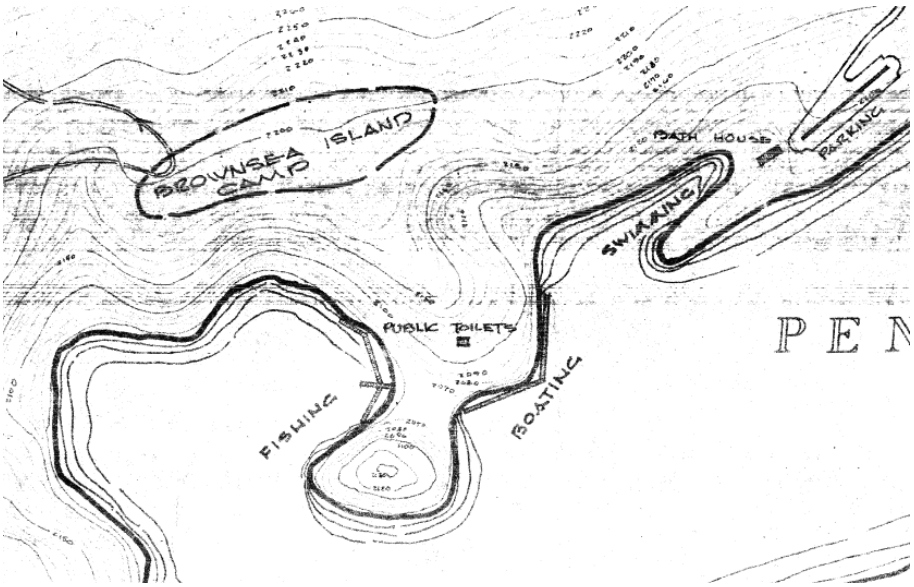

Figure 2.14. Boy Scout Jamboree map, 1966, courtesy of Kootenai County Courthouse (2017). Note the 1966 installed bathrooms and fishing and boating docks.

1967-Today

Today the location of the Pen d'Oreille City remains within Farragut State Park just below the Buttonhook Group Camping area. Some structures remain in the park from the Farragut Naval Training Station such as the brig that is now a museum, pump houses, and magazine storage buildings. According to maps, one or more buildings may have occupied the site and dated to as early as 1897 (Figures 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, and 2.21). Two buildings occupy the site from 1967-1996, one of which may also date earlier (Figures 1.1 and 2.22). The western building is likely the restroom that still exists today.

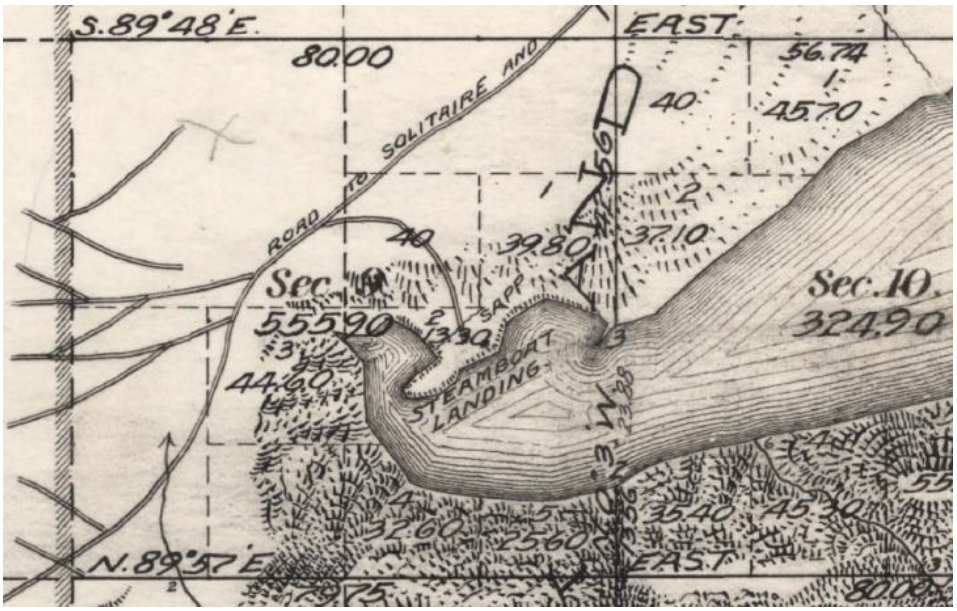

Figure 2.15. General Land Office Original survey plat, T53, R2W. April 19, 1897. Courtesy of Kootenai County Courthouse (2017). A version of this map was likely used to recreate Figures 16 and 19.

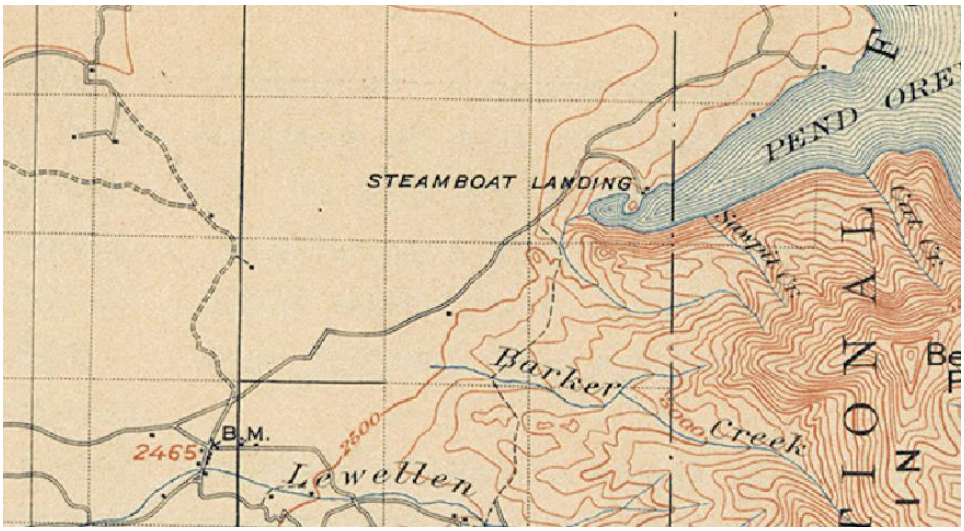

Figure 2.16. U.S. Geological Survey map, 1899-1901, edition 1903 reprinted in 1914. Idaho Rathdrum Quadrangle topographic map, with Steamboat Landing included and shown here. R1W-R5W, T48N-T53N (Kootenai County 2017).

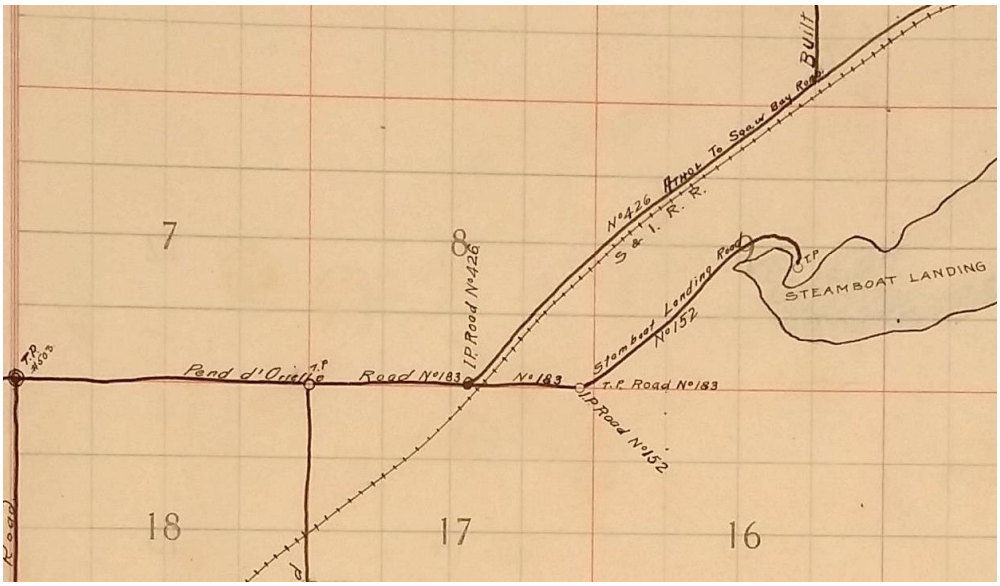

Figure 2.17 Post-1912-1914 map of T53N, R2W. B.M., Kootenai County, Idaho, courtesy of Kootenai County Courthouse (2017). The number-index of county roads in Kootenai County indicates that Steamboat Landing (No. 152) was surveyed 04-24-1903 and declared a highway in 5-6-1903. Pen d'Oreille Road (No. 183) was surveyed in 1-27-1902 and declared a highway in 1-28-1902.

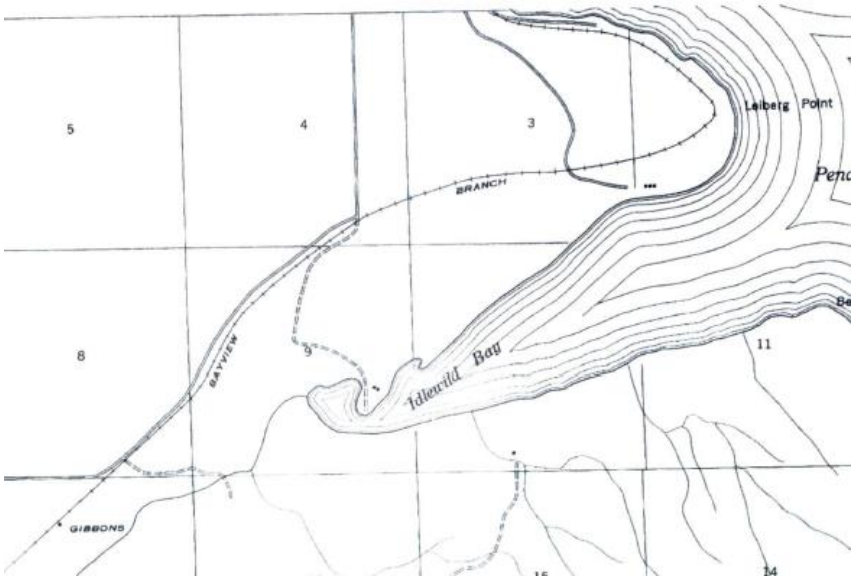

Figure 2.18 A 1935 (or earlier?) to 1942 map of the Coeur d'Alene National Forest by the U.S. Department of Agriculture and Forest Service of part, T 53N, R 2W (noting timber reserves). Note Leiberg Point at the far east of large peninsula. Map courtesy of Michael Dixon (Camp et al. 2016).

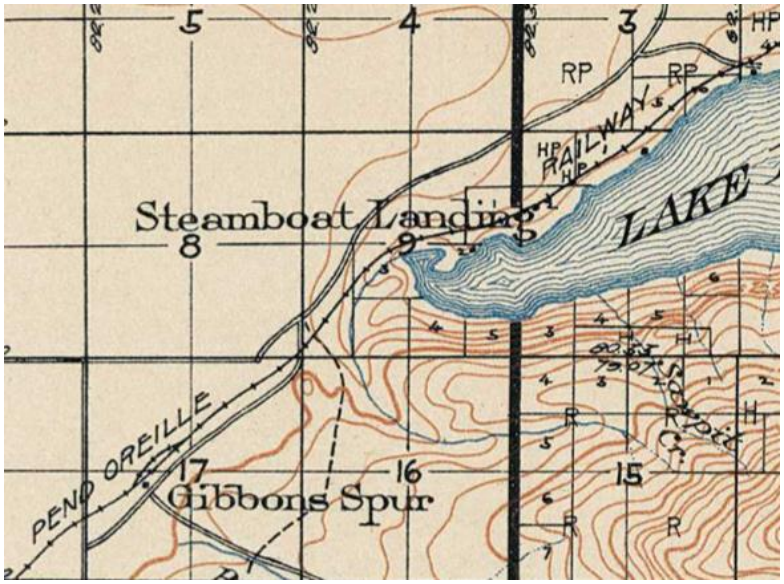

Figure 2.19 General Land Office, USGS, U.S. Forest Service, and other surveys compiled November 1913 at District Office Missoula. Map of "Pend Oreille" T51N-T53N and R2W-R3W. Courtesy of Tom Sandberg (2017).

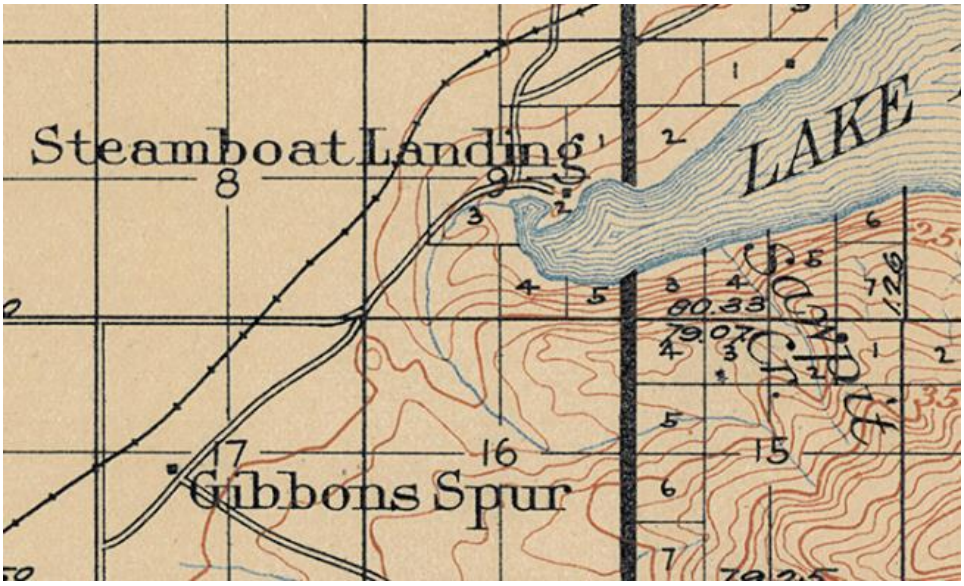

Figure 2.20 Map Coeur d'Alene and Pend Oreille, T51N-T53N, R2W-R3W, 1917. Compiled at District Office, Missoula July 1917, from USGS, GLO, U.S. Forest Service, and other surveys. Courtesy of Tom Sandberg (2017).

Figure 2.21 Site as part of a Kaniksu National Forest map, 1955, by U.S. Department of Agriculture Forest Service, courtesy of Tom Sandberg (2017).

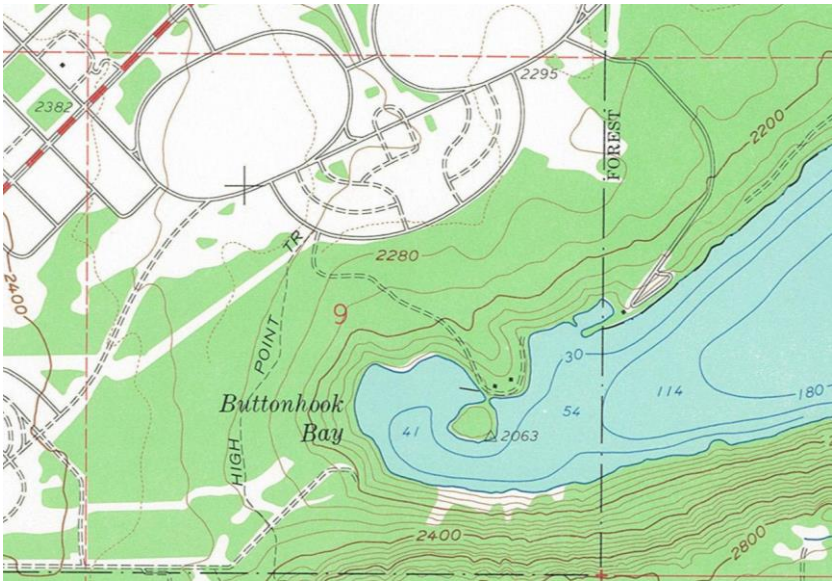

Figure 2.22 Bayview, ID 7.5' series USGS quadrangle, 1967, courtesy of Tom Sandberg (2017).

Previous Cultural Resources Studies

Archaeological investigations in the region began in 1974. The earliest fully documented archaeological investigation within a mile of the site was conducted in 1976. Most of the historic research done for Pen d'Oreille City has been through Linda Hackbarth. Linda Hackbarth's book *Trail to Gold: The Pend Oreille Route* (2014) has the most information on Pen d'Oreille City. Michael Dixon, a retired physician, has assisted both the 2015 and 2017 projects through his decade-long research on Pen d'Oreille City. He georeferenced historic maps, investigated to find Pen d'Oreille City period remains, donated 52 artifacts during the 2017 project, and freely shared his knowledge of the area. Information from other locals aided in research as well. Survey volunteer Russel Brown stated that a high school friend visited the site regularly to metal detect and noted piers in the water at what appears to the location of the warehouse; these piers may have been related to the Boy Scout-era boating dock (Figure 2.14).

A pedestrian survey was conducted by the Alfred W. Bowers Laboratory of Anthropology at the site in 2015 and west across the bay from 10KA91 where they scoped out the general area of Forest City (Figure 2.3). The survey identified 26 features, concluding there was evidence of five NRHP phases from 1855-1960. Features included many of those identified for this project, including a homestead, depressions, pits (possible privies or dumps), rock walls, a trail, a road, the modern restroom, and a rock mound (Figures 2.23 and 2.24).

Artifacts found during surface survey include colorless glass bottle made by Best Foods post-1913, colorless bottle with a post - 1929 Owens-Illinois manufacture mark, a 1940-60 gun rack, soda beverage cans from 1940-60 (including two Shasta brands), two metal cans with "Cola Cragmont Cola" 1970s, stove parts possibly late 1800s, 1970s Budweiser beer can, ceramic improved whiteware post 1913, Coca-Cola glass bottle with Coeur d'Alene Idaho embossing on the base 1950s, stoneware crock late 1800s-early 1900s, metal kerosene can 1920-30, dark olive glass bottle with two piece mold 1810-1880 among other artifacts (Camp et al. 2016). No other known projects have been done at the site.

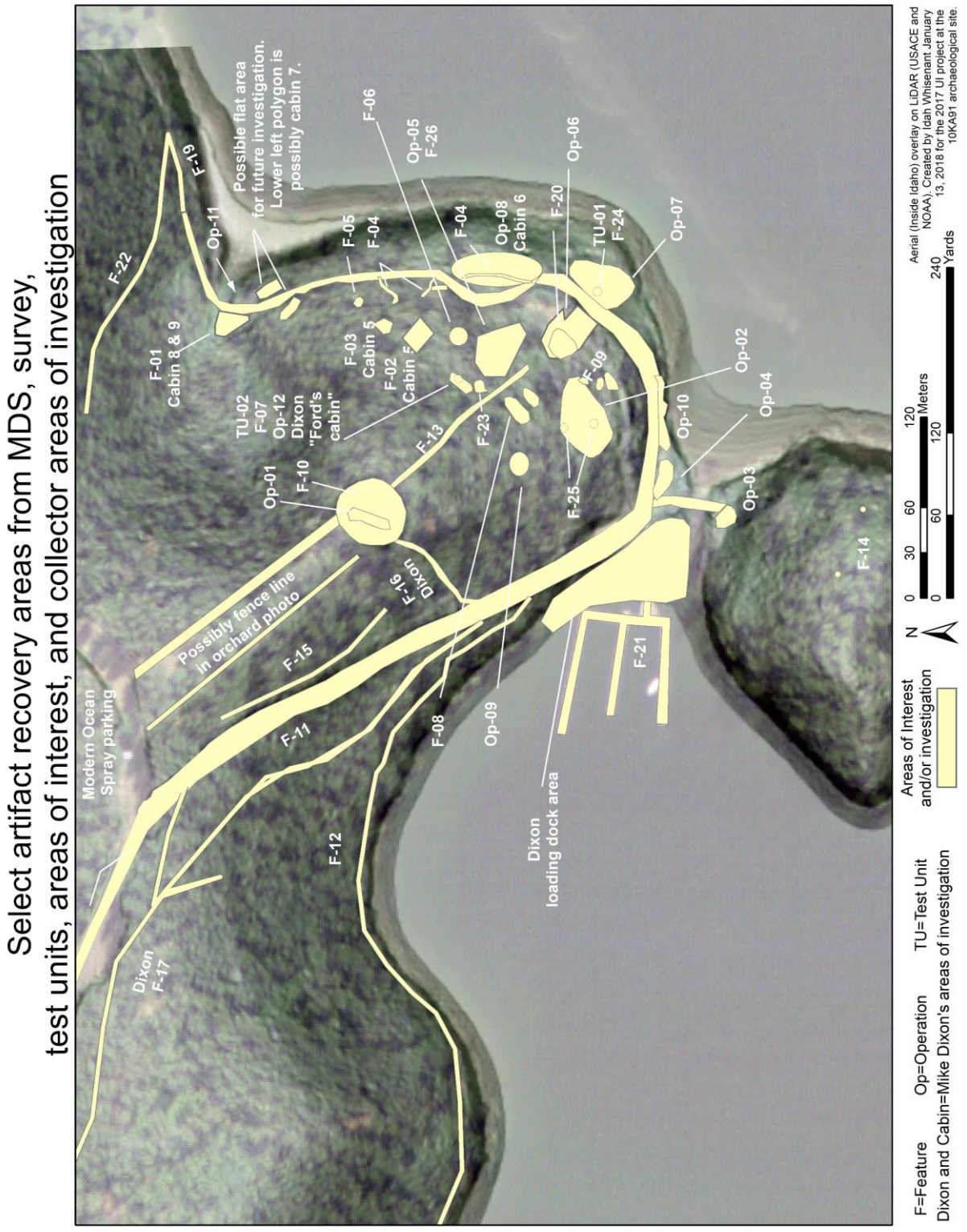

Figure 2.23 Master map of areas of investigation.

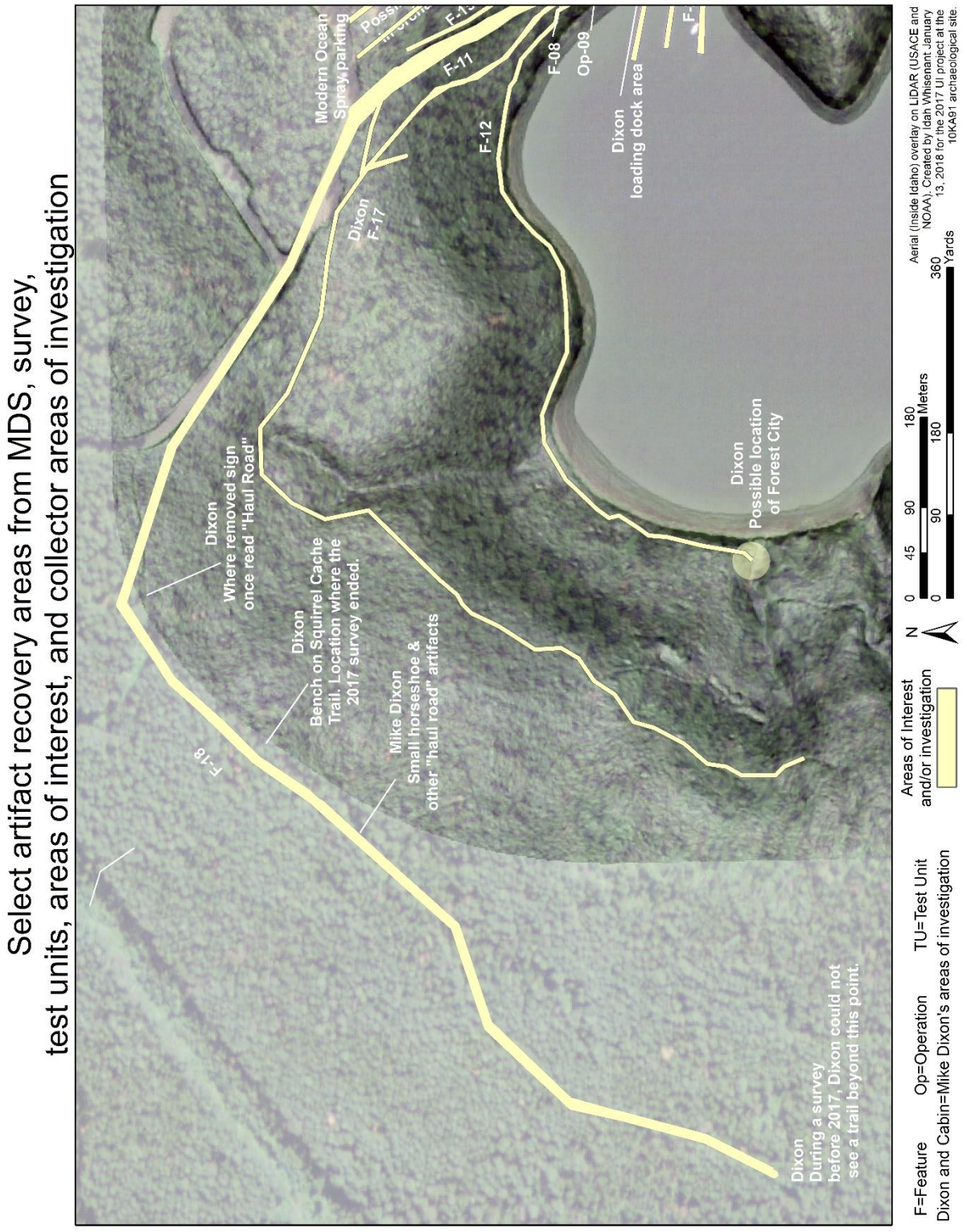

Figure 2.24 West side of master map of areas of investigation.

No known pre-contact sites have been recorded within the immediate area, but prehistoric cultural material could exist subsurface as this area is known as a hunting area (see earlier discussion). Chuck Peterson in a seemingly incomplete form, reported that 10KA91 used to be 10BR47 and there was prehistoric activity, but did not specify more. Although the naval training station structures were north of the site, some buildings are recorded on maps from the period (Figures 2.12 and 2.13). In Bayview, the 1998 survey by T. Weber Greiser, and R. Wayne Thompson recorded one-meter diameter pits, similar to a pit identified during the 2017 work and speculated they may be mining pits or from training activities at Farragut Naval Training Station, such as foxholes or latrines. Possible prospect pits were recorded at Bernard Peak by Thomas Sandberg in 1985 where a known homestead, Boy Scout's Bernard Peak Trail, and small mining camp were located.

Analysis of ten artifact collections informing the Albeni Falls Dam Project have documented occupation for at least the last 10,000 years (Miss and Hudson 1987). Early occupation of the Lake Pend Oreille and river tributaries have been documented with finds of lithic tools, such as flaked and ground stone that combined with raw material types shows Plateau, northwestern Plains, and localized regional cultural influences. Specific finds include bifacial tools, drills, gravers, scrapers, mortars and pestles, bolas stones, nephrite adzes, notched pebbles/net weights, atlatl weight, and carved stone objects.

Most studies on the Lake Pend Oreille region are related to federal highway projects, timber sales and hydropower development projects resulting in recording of prehistoric camas processing and camp sites in riverine locales, historic roads, mining-related sites, and Farragut Naval Training Station related archaeology. The project is near the Lake Pend Oreille Lime and Cement Industry Historic District. Historic sites date to the gold rush and settlement and mining period in the late 1800s to early 1900s. Table 2.1 shows archaeological work done at the 10KA91 site. Studies conducted within a mile of the project APE are summarized in Table 2.2.

Table 2.1 Previous studies conducted at the site (Record Search #18164).

SHPO Report No.	Report Title	Author	Date	Acres	Results/Sites Near Survey Area
2017/532	Historic Pen d' Oreille City	S. Camp., D. Wallen, R. Falzon, L. Evans-Janke	2016	8	10KA91
	(none) included in 2017/532 report	Chuck Peterson,, Signe Johnson, and Diana Rigg	1974-78		10KA91, previously 10BR47
1992/664	A Cultural Resources Assessment of BPA's Proposed Intertie 1992/664 Development and Use, Lake Roosevelt, Lake Pend Oreille, Lake Koocanusa, Dworshak Reservoir, and Hungry Horse Reservoir. Eastern Washington Univ.	Glenn D. Hartmann	1986		

Table 2.2 Cultural resources located within a mile of the project (Record Search #18164).

SHPO Report No.	Report Title	Author	Date	Acres	Results/Sites Near Survey Area	
1997/6	Archaeological Survey of the Navy's Acoustic Research Detachment, Lake Pend Oreille, Idaho	Greiser, T. Weber and R. Wayne Thompson	1996	40	10KA171	CRM project in Bayview.
85-IP-6-8	Cultural Resource Inventory of the Bernard Peak Timber Sale	Sandberg, Thomas	1985	185	Bernard Peak Lookout	CRM project at Bernard Peak
1998/811	Subsurface Archaeological investigations and Cultural Resource Site Documentation at the Navy's Acoustic Research Detachment, Lake Pend Oreille, Idaho	Greiser, T. Weber and R. Wayne Thompson	1997		10KA171	CRM project in Bayview.
2004/285	Cultural resource survey of the proposed Farragut State Park Volunteer Sites Development Project in order to identify, document, and evaluate any cultural resources in the project area in accordance with 36 CFR 800. Farragut Naval Base	Robert Lee Sappington and Caroline D. Carley	2004	2	10KA171	CRM project at Farragut State Park
2018/243	Historic Resources Survey of the U.S. Navy ARD, Bayview, Idaho	EDAW, Inc	1996	22	10KA171	Navy inventory of buildings in Bayview.
	Farragut Naval Base	M. Suckling	1976-1980+		10KA171	Bicycle interpretive bath plans.
1989/4916	Cultural Resources Collection Analysis Albeni Falls Project	C. J Miss and L Hudson	1987			Review of collector's collections. Regional information with a focus on the Pend Oreille River.
2014/273	Historic Properties Management Plan Albeni Falls Dam and Pend Oreille Lake Project					Part of on-going work in select localities around the Albeni Falls Dam project. It is an extensive 600 page source of information.
2014/272	Cultural Resources Assessment For the Farragut State Park Phase Ii Central Sewage Collection System Project	Ann Sharley	2014	9	10KA171	CRM project of along sewer lines at Farragut State Park., northeast of 10KA91

3. Project Design and Methodology

Field Methodology

The project design consisted of intensive surface survey, intuitive surface survey using metal detectors, collection of diagnostic artifacts, detailed site mapping, tree coring, and limited subsurface excavation to append the IAS Inventory site form for 10KA91 completed in 2015. Pedestrian survey and surface collection were separated to specify artifacts collected during the survey using transects and later collection during feature and metal detection recording. Operation areas were defined as areas where metal detection was used. Site features and former building location during survey and survey metal detection was based on historic research, georeferencing historic maps using ArcGIS, and consultation with Linda Hackbarth and Michael Dixon who used historic research and GoogleEarth georefereneced maps. Test excavation units were placed where former buildings are believed to have been located with focused effort on identifying building foundations.

The project area was surveyed on July 17 and 31 in 2017 by the University of Idaho, Idaho Department of Fish and Game, State Park personnel, Kootenai County Historic Preservation Commission, and volunteers to identify state concerns and locations of buried pipelines or other utilities in preparation for the upcoming formal survey and testing. On August 13 and 14, intensive survey was conducted, implementing pedestrian transects spaced 5-10 meters apart generally in an east-west direction utilizing a systematic grid set up and followed by GPS tracking (Figure 3.1). Artifacts and features encountered were flagged for recording, with most artifacts being collected. Artifacts that were redundant in information or occurring in high concentrations were recorded and not collected. Surface artifacts and features were mapped/recorded on the GPS, photographed, measured and collected or left in place. A Trimble GeoExplorer 2008 series GPS unit and Garmin GPSmap 76Cx unit were used during survey to track transects and mark features and artifacts. Tracking and locations from the Trimble unit were differentially corrected later.

Figure 3.1. Map of survey transects at the site.

Artifact bags and features were assigned field identification numbers and logged onto bag and feature forms. Trails and metal detection areas, titled operation areas, were assigned numbers retroactively. In the field, the names that Michael Dixon used from historic research were used to keep areas separate and quickly identifiable. Photographs were logged with corresponding field numbers. The physical extent identified by features, artifacts, and reference to historic maps preliminarily determined the site boundaries (Figure 3.2) and areas where artifacts or features, surface or below surface, were likely to be discovered. These areas were intuitively surveyed using metal detectors, a Fisher Gold Bug II model, a Tesoro, and a Minelab Etrac detector.

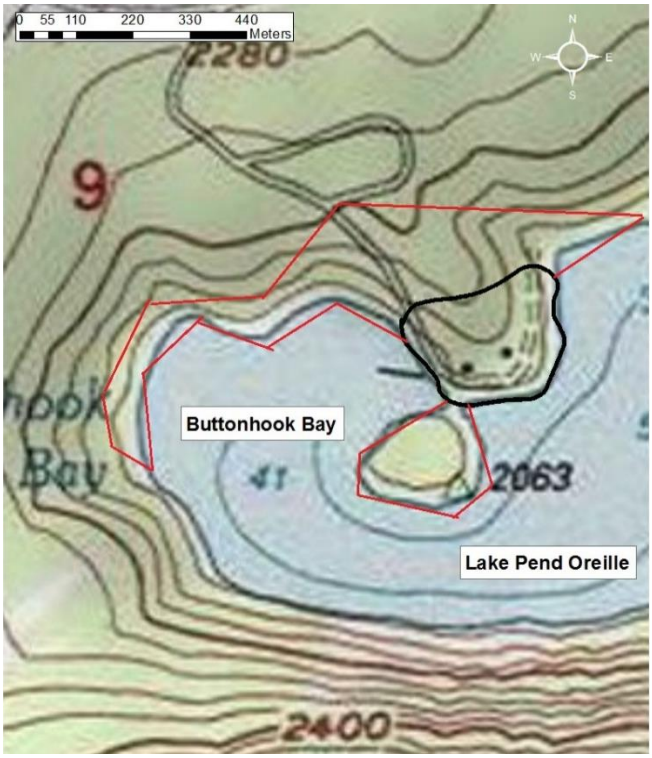

Figure 3.2. Area planned to be investigated in project proposal.

The objective of the survey was to complete the documentation of site 10KA91 by recording and analyzing artifacts and features, refining settlement boundaries, and answering research questions building on historic cultural themes from Chapter 2. Specific research questions for the project include:

What are the boundaries of Pen d'Oreille City and where were the buildings located?

> Redefine site boundaries with intensive survey expanding beyond previous boundaries. To the north, survey up to the Ocean Spray parking lot. To the east, investigate the curve in the trail heading to Beaver Bay. Survey trail going west to the first cabin, Forest City, and investigate trails and island (Figure 2.24).
>
> Further examine leveled areas identified in 2015 for potential sub-surface features and artifacts and identify Pen d'Oreille City features and refine feature boundaries.

For potential feature and artifact discovery outside of the 2015 survey, systematize the surface survey with transects and expand the survey area.

Locate Forest City (Figures 2.3 and 2.24).

How will subsurface finds aid in potential future excavation and/or preservation efforts?

Locate the speculated warehouse, blacksmith shop, saloon, hotel, Twitchell's store, log chute, cabins, and other building/structure.

What can be learned of early frontier life and subsequent periods from the artifacts recovered in 2015 and 2017?

Analyze artifacts to determine date/time period and infer function

Determine patterns from which inferences may be made about the lifeways of Pen d'Oreille City settlers from the assemblage.

What site-formation processes have occurred, e.g., natural disasters, such as floods, and fire, development projects, and vandalism?

Tree ring analysis and sub-surface excavation may reveal natural disaster in tree ring abnormalities

Conduct historic research and consult with IDFG and Farragut State Park personnel

What was the function and age of site features, such as the rock mound, large depression, smaller rock-lined depressions, smaller depressions, and pits?

Is the rock mound a lime kiln and does the cement in the homestead foundation the match the cement in the buckets adjacent to the foundation, suggesting local sourcing?

Determine data and function of the depression.

Analysis of field findings included dendrochronologically analyzed tree cores in-field and in-lab, cataloguing and analysis of artifacts and creation of a digital database, chemical analysis of selected material, creation of an appended digitized site map, creation of a digitized photolog and photo record of artifacts and features.

Diagnostic artifacts were collected, with the exception of large artifacts such as bed frames and large metal objects and where collection would yield redundant information. Where artifact concentrations were discovered during survey and metal detection, artifacts were recorded as a group. Subsurface artifacts were collected and catalogued. All artifacts were recorded, but collection was limited to ensure an appropriate space for curation at the Museum at the Brig at Farragut State Park.

Artifacts collected during survey were placed in paper bags with provenience and detailed information logged. Bags were assigned a number in the field and recorded on a bag log. Where a concentration of artifacts was encountered, the position of the center of the polygon surrounding the concentrations was recorded mapped using GPS. Artifacts not in concentration were individually mapped, described, and/or collected.

Subsurface Test Units and Metal Detection

TU-01 and TU-02

Two test units were placed in building locations. Placement was based on discovery of features and artifact distribution. The goals were to place excavation test units and use excavation techniques to cause the least amount of disturbance, particularly where visible to the public. For this reason, a limited number of 50 x 50 cm units were excavated, presuming that this would lessen disturbance but still potentially yield data and a good visual of the stratigraphy. Units were excavated by trowel and shovel in 10 cm arbitrary levels to a depth of 40-50 cm below surface (cm bs), after two culturally sterile levels or the extent of reach was passed. Material was screened through 1/8-inch mesh, collected on a tarp and returned to the excavated hole, restoring the surface as nearly as possible to its condition before the test. A total of 0.225 m^3 volume of soil was removed. Unit side-walls were sketched and photographed.

Metal Detection

The field crew, trained volunteers, and volunteer metal detectorists worked to identify and record metal detection hits (where results were positive and recorded). One volunteer from Boise,

Dan Lute, has worked with Idaho archaeologists and was contacted because of his positive reputation and expertise. Other metal detectorists were local volunteers with demonstrated experience. Each metal detectorist was accompanied by trained volunteers or field crew members to assist in recording finds. Metal detection equipment included a Fisher Gold Bug II, a Tesoro (model unknown), and a Minelab Etrac detector. Depth of finds identified through metal detection ranged 6-10 inches, though in cases they were shallower and or deeper depending on the metal artifact size. The moisture and mineralization in the soil were not problematic. Artifacts that were not metal were found incidentally and recorded if appropriate. Metal detection occurred across the site to find new information and refine potential feature boundaries; however, its use was heaviest in the blacksmith shop area where metal detection maximized potential discovery of artifacts. Metal detection operation areas were assigned numbers and artifacts, or other discoveries were recorded within those areas and entered on the Metal Detection Log.

Laboratory Methodology

Collected artifacts were transported to the Integrated Research and Innovation Center (IRIC) at the University of Idaho for analysis and cataloging. Artifacts will ultimately return to Farragut State Park. Artifacts were cleaned by undergraduate volunteers and field crew personnel. Glass and ceramics were washed with a wet or dry toothbrush and allowed to completely dry before being re-bagged. Metal artifacts were dry brushed. Most bone was dry-brushed, while some particularly dirty specimens were washed with a wet toothbrush. The author cataloged all the artifacts and was assisted with nail analysis by Cynthia Hannold. All artifacts were given a unique ID with additional information and recorded in Microsoft Access database. A template from the Sandpoint Access database was modified for this project and the Sandpoint lab manual was followed (Haught-Bielmann 2014).

Artifacts were entered into the Microsoft Access database which classifies material by type, descriptive category, and function. The database begins with broad types (ceramic, glass, metal, mineral, multiple, organics, stone, synthetic, or unknown) working progressively to more detailed information. Bone, milled wood, fabric, and mistakenly collected natural debris were categorized into the organic material class. The synthetic material class is slag and the mineral material class is clinker. Stone included potential lithic flakes that upon further analysis were naturally occurring. If items were too fragmentary to determine, the “unknown” choice was selected. Artifacts were researched to the author’s best ability using U of I resources and the internet.

Artifacts were separated by material type, then given their own bag. In cases where artifacts were identical and from the same field bag, they were bagged together. An item description, number of artifacts, provenience information, bag number, and other information from the field bag was transferred to the lab artifact bags, which were returned to the original field bag. Due to the flimsy nature of the paper bags used in the field, these were replaced with plastic bags with all the original information maintained.

Lot and specimen (spec) numbers were given to all material. Lots refer to method of recovery 1= pedestrian survey, 2= surface collection, 3=metal detection, 4= Test Units, 5=collector's collection. The comment section was used to provide the most pertinent information discovered about the artifact. It is more detailed than most sections to fill in descriptive gaps in the form. Artifacts were placed in acid-free bags and acid-free labels with provenience information on each bag. Appendix A presents the catalog of artifact analyses. In a limited number of cases, specific samples were taken to the Chemistry department at the University of Idaho for further analysis. Two samples provided results. Two tree cores were analyzed at the Idaho Tree Ring Lab.

Public Outreach Methods

The Kootenai County Historic Preservation Commission promoted the project by newspaper and newsletter press releases and internet group mailings to the Bayview community, encouraging those interested in learning about the early history of Kootenai County to volunteer for survey or visit the project during the investigations. The result was 35 volunteers which included professional and amateur archaeologists, a silviculturist, metal detectorists, and history-buffs.

Volunteers participating in the field survey and excavations were accompanied by a professional archaeologist. A handbook prepared by the project director was distributed to volunteers. The handbook contained information about the history of the site, artifact information, survey and excavation guidelines, appropriate field behavior, and other contextual information (available on request). Volunteers signed a liability release waiver from the University of Idaho.

4. Results

Pen d' Oreille City 10KA91 Phase II investigations included intensive pedestrian survey of an area totaling 89,700+ sq. meters/965,523 ft^2/ 22 acres, mapping of 26 features, collection of 451 historic objects for analysis, tree coring to date an unidentified depression, excavation of two 50 x 50 cm test units within suspected building locations, and intensive surface survey at feature locations using metal detectors. Laboratory analysis of the artifact assemblage identified materials dating from the late 1800s-to the present. Site boundaries were refined based on the distribution of artifacts and features.

The site area is a heavily vegetated forest with a dense understory of brush with little ground surface visibility and located primarily on a 23% slope or steeper. An intensive survey of the entire site and adjacent area was completed, however, vegetation likely obscured artifacts. The site has been impacted by collecting over the years, a fact verified by Park officials. Collection and looting activities have impacted several areas of the site. This site activity likely skews the data to those artifacts remaining which were deemed less valuable or interesting to a collector.

Some artifacts recorded in the 2015 survey were relocated and re-recorded. Features from 2015 (spelled out as "Feature" to keep separate from the 2017 features which are abbreviated to "F-") that were not found during the 2017 survey were omitted. These 2015 features included the possible location of the warehouse (Feature 2), Forest City (Feature 19), the hotel (Feature 23), the Oregon and Montana Transportation Co. cabin (Feature 8), pit/privy (Feature 16) and a leveled area thought to be a homestead (Feature 1). The can dump (108 on the GIS file) and can dump (106 on the GIS file) were also not identified in 2017. The pit in F-1 (Table 4.1), was believed to be a privy in 2015. The possible hotel area is included in Op-5/F-26 and considered a feature due to the large number of artifacts found and possible alignment with historic maps. Features recorded during survey are defined as structures (e.g. foundations, rock alignments or concentrations, mounds), manually or mechanically modified landscapes (e.g. leveled area, depressions, trails), a labeled location on historic plats and maps, and/or cluster of artifacts. Site features are summarized in Table 4.1.

Table 4.1 Pen d'Oreille City 10KA91 site features referenced in site map (Figures 2.23 and 2.24).

Feature No. 2017	Feature No. 2015	Feature Description	Location/site map reference	Function/ description	Possible component association/date	Work Performed
F-1	Feature 14?	Leveled area, 17 x 24 m	116°34'23.591"W, 47°57'14.713"N	Possible cabin site. (Figures 2.12 and 2.13). Artifacts found near it.	Phase 1 or Phase 2 Statehood, Interwar era, Premodern era	Feature recording
F-1	Feature 14?	Leveled area, 3 x 9.5 m	116°34'23.537"W, 47°57'14.442"N. Center of feature	Possible cabin site	Phase 1 or Phase 2 Statehood, Interwar era, Premodern era	MDS, feature recording
F-1	Feature 15	Pit, 1.5 X 1.1 m	116°34'23.331"W, 47°57'14.631"N	Unknown	Phase 1 or Phase 2 Statehood, Interwar era, Premodern era	MDS, feature recording
F-2	Feature 10?	Rock alignments with mortar foundation, 13.5 x 15 m	116°34'23.759"W, 47°57'11.894"N	Building foundation, wall. (Figures 2.12 and 2.13).	Homestead association, Phase 1 or Phase 2 Statehood, Interwar era	Feature recording
F-3	Feature 11?	Depression and debris scatter 18 (long) x 14 (wide) x 1 (deep) m	116°34'23.3704"W, 47°57'12.4105"N	Possible dump from modern or historic era. (Figures 2.12and 2.13).	Homestead association, Phase 1 or Phase 2 Statehood, Interwar era	Feature recording, 10% artifact collection
F-4	Feature 12	Rock alignment/wall, triangular. North Wall 17 (long) x .8 (wide) x .45 (high) m. South wall 18 (long) x 60 (wide) x .72 m. Triangle 4.5 (long) x .8 (wide) x .61 (high).	Southeast of homestead feature. South wall middle 116°34'22.7163"W, 47°57'11.5245"N.	wall	Homestead association, Phase 1 or Phase 2 Statehood, Interwar era	Feature recording
F-4	Feature 17	Rock alignment/wall, linear, 46 (long) m	South of F-2 within Op-8. South end 116°34'22.556"W, 47°57'10.27"N. North end 116°34'22.534"W, 47°57'11.272"N.	Wall. Possible levee.	Homestead association, Phase 1 or Phase 2 Statehood, Interwar era	Feature recording
F-5	Feature 13?	Pit ~6 x 6 m	116°34'23.009"W, 47°57'12.772"N	Possible privy	Homestead association, Phase 1 or Phase 2 Statehood, Interwar era	Feature photo, one artifact collected
F-6	Feature 9?	Rock mound 7 x 6.25 x 3-4 (high) m	116°34'23.78"W, 47°57'11.344"N	Lime kiln. Pipe in the center of rock mound. Brick	Phase 1 or Phase 2 Statehood	Feature recording, MDS

				associated with the feature according to Mike Dixon and during 2017 survey.		
F-7	Feature 7	Leveled area, 6 x 3 m	116°34'24.665"W, 47°57'11.32"N	Possible Thomas Ford cabin site	Possibly settlement era	MDS, TU-02, feature recording
F-8	Feature 5 (south of 2017 location)	Leveled area, 2 adjacent areas 9 x 6 m	Upper leveled area. 116°34'25.2446"W, 47°57'10.5589"N	Possible Boone cabin site or 1935 structure	Interwar era or earlier	Surface survey
F-8	Feature 5 (south of 2017 location)	Leveled area, 2 adjacent areas 8 x 9 m	Lower leveled area. 116°34'25.046"W, 47°57'10.271"N	Possible Boone cabin site or 1935 structure	Interwar era or earlier	Surface survey
F-9	Feature 4	8x8 m. Depression with rock and artifact cluster surrounding.	West of restrooms 116°34'24.686"W, 47°57'9.514"N	Possible Twitchell store site	Possibly Settlement Era	MDS
F-10	Feature 21	Large depression on hill, 50X50 yards	Top of hill, NW 116°34'27.432"W, 47°57'12.52"N	Water catchment, timber reservoir?	Settlement era-1935?	MDS, tree coring, surface survey
F-11		Road 558 m	From gate at Ocean Spray parking lot to Op-8. East end 116°34'22.576"W, 47°57'9.966"N. West end 116°34'33.519"W, 47°57'15.685"N.	Part of Haul Road/ Steamboat Landing Road?	Settlement era to present	Surface survey
F- 12		Trail 797 x ~1-2 m	West end 116°34'48.399"W, 47°57'7.25"N. East end 116°34'29.378"W, 47°57'10.327"N.	Trail to Forest City from Steamboat Landing Road	Settlement era	Surface survey
F-13		Trail 121 x ~1 m	Going south from large depression (F-10). North end 116°34'26.914"W, 47°57'12.218"N. South end 116°34'24.449"W, 47°57'10.293"N.	Part of Pen d'Oreille City Main Street? Where electrical wire runs from bathroom.	Possibly settlement era	Surface survey
F-14		Depressions	On island. West depression. 116°34'28.865"W, 47°57'5.823"N. East depression 116°34'27.581"W, 47°57'5.479"N.	Shooting barricade?	Navy 1942-46?	Surface survey

F-15	Feature 18 and 24	Linear leveled and depression (identified by Singletary). 137+ x <1 m	Parallel to Steamboat Landing Road. South end 116°34'29.635"W, 47°57'12.253"N. North end 116°34'32.099"W. 47°57'14.694"N.	Trail, original Steamboat Landing Road?	Possibly settlement era	Surface survey
F-16	Feature 20	Linear depression/cleared. 71 m	Adjacent to large depression F-10. East end 116°34'28.142"W, 47°57'12.19"N. West end 116°34'29.468"W, 47°57'10.986"N.	Log chute	Possibly settlement era	Surface survey
F-17		Linear depressions. ~1275 m	West of Steamboat Landing Road. East end116°34'29.91"W, 47°57'10.989"N. West end 116°34'54.76"W, 47°57'6.124"N.	Possible watercourse segments, not intact, that may originate from spring above Forest City and contour to near large depression (F-10)	Possibly settlement era	
F-18		Linear possible road. 1475 m	Likely Steamboat Landing Road that led to Steamboat Landing. May be part of the original trail. East end 116°34'33.519"W, 47°57'15.685"N West end 116°35'8.165"W, 47°57'6.803"N.	Possible road to Rathdrum to the west and Davidson's place to the east in 1866.	Settlement era	Surface survey
F-19		Trail. 347 m	East end 116°34'19.378"W, 47°57'15.536"N West end 116°34'22.458"W, 47°57'10.147"N.	Trail that leads to Beaver Bay beginning at Op-08.	Possibly settlement era	
F-20	Feature 22	Bathroom. ~18 x 18 m	116°34'23.947"W, 47°57'9.803"N	Abandoned bathroom	Modern 1958-present	
F-21		Docks. 80 x 65 m.	116°34'29.876"W, 47°57'8.926"N	Boat docking	Modern 1958-present	
F-22		Trail. 220 +	East end 116°34'19.378"W, 47°57'15.536"N.	Begins at the end of F-19 and goes NW	Possibly settlement era	
F-23	Feature 13?	Pit ~8.5 x 8.5 m	NW of rock mound. 116°34'24.824"W, 47°57'11.012"N	Possible lime source for kiln	Phase 1 or Phase 2 Statehood	Surface survey
F-24	Feature 3	Leveled area and stove parts. Where TU-01 was placed.	116°34'22.802"W, 47°57'9.311"N	Possible blacksmith shop	Possibly settlement era	Surface survey,

F-25	Culverts. ~1 m x 1 m	Within Op-2 North culvert 116°34'25.73"W, 47°57'9.785"N. South culvert 116°34'25.666"W, 47°57'9.372"N.	Sand in circular pattern with metal tub extending down. Possible bathrooms.	Modern 1958-present. May be the left point in Figure 2.22.	MDS, TU-01 MDS
F-26	Op-5. 33 East-West x 40 North-South	116°34'24.054"W, 47°57'10.736"N	East of modern bathroom.	Possibly settlement era	Operation area

Global Positioning System shape files with LiDAR of the site provided a unique opportunity to analyze the surface of the site without vegetation cover. This proved especially helpful considering the moss, dense vegetation, trees, and snow that covers the ground annually. Examination of the LiDAR images suggests, as expected, that the modifications to the surface that appear clearer are more recent. It is possible that the clearer surface features are from continued use, such as Steamboat Landing Road. On-the-ground investigation identified that a possible trail (F-15) (abandoned) may have been located parallel and along the Steamboat Landing Road. Robert Singletary who volunteered during the project noticed a linear leveling above Steamboat Landing Road west of the site.

Data analysis using ArcGIS identified Steamboat Landing Road (F-11) as it descends along the west side of the site as ranging from a 3 to 34% slope. This would have been quite steep for wagons at the steepest points, but other wagon roads are just as steep. It is possible, however, that the historic road ran along the linear depression right above F-11 (possibly where Robert Singletary perceived a road (F-15)), or wagons would have been able to handle the slope over a short distance with assistance of big horse teams. Most wagon roads on the historic Columbia River Highway were between 10 and 20% steep (Historic Columbia River Highway).

In addition to potential trails a linear depression was identified (F-16) during the survey. Background research on log chutes and flumes in North Idaho support the conclusion that F-16 was a log chute associated with what was possibly once a timber reservoir (Sims 1983). This survey has determined that F-16 was likely not a flume as the large depression (F-10) has not yet been determined if it is capable of water retention and the motivations for such infrastructure with a lake nearby is curious. In Sims' (1983) discussion, dry or running chutes (those without water aiding) were created at slopes ranging a 25-100% slope (Sims 1983:46). A linear depression flows west from F-10 with a 25-68% slope suggesting it was a log chute (Figures 2.23 and 2.4).

At the top of the chute is a large depression that was assumed to be connected and to provide water for a flume (a “chute” with water running). Assuming the slope has not significantly changed since 1866, it seems likely that the large depression served some other purpose. However, F-17 a linear depression, might be a water course from a stream that once flowed from 1899 or earlier to 1917 from above the proposed Forest City location (Figures 2.3, 2.18, 2.20, and 2.24), which if true, it would support the idea that the large depression (F-10) was a pond. The pit was determined to date to as late as 1935 due to its presence in the 1935 aerials (Figure 4.1)

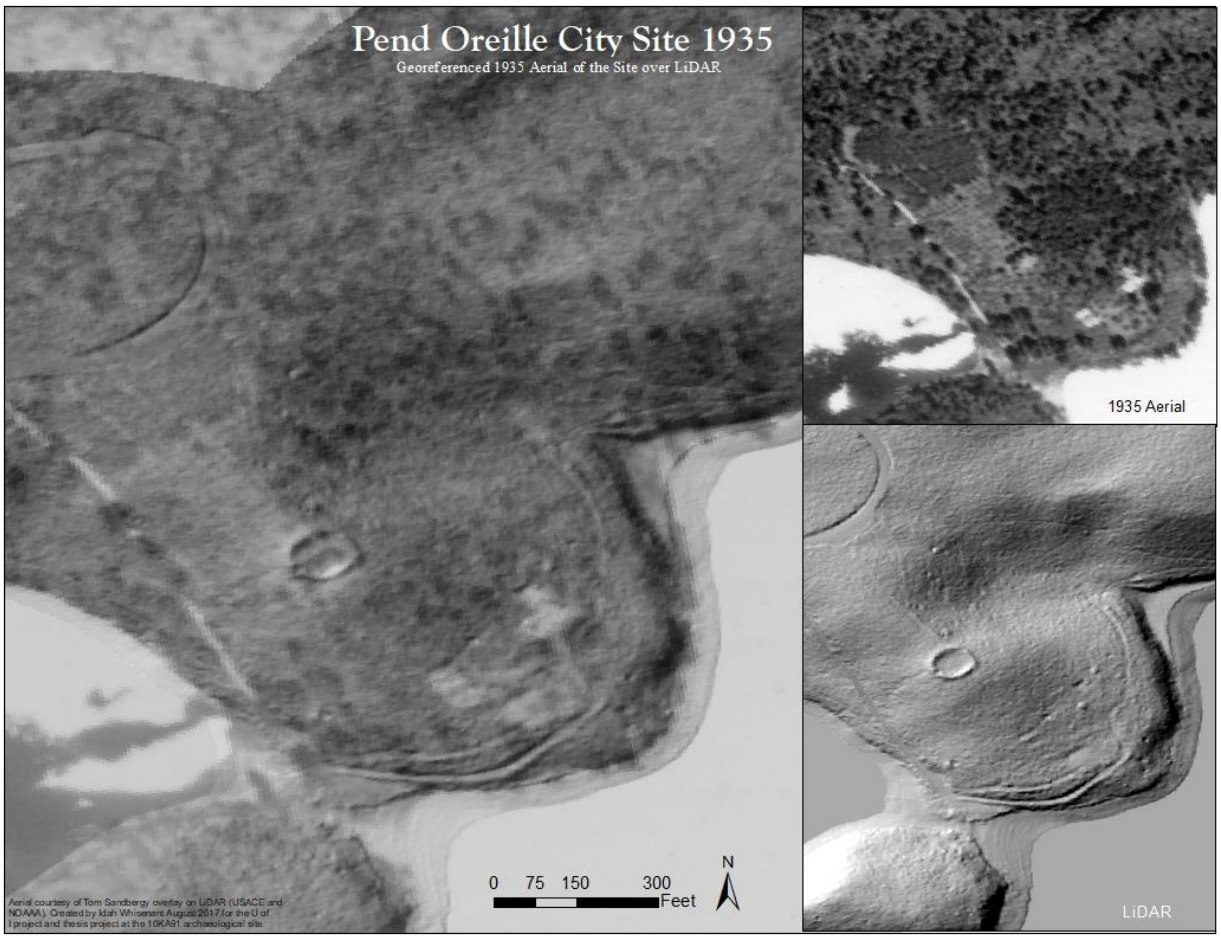

Figure 4.1. A 1935 aerial photo overlaying the LiDAR. Some evidence that the two distinct linear depression may be homesteads from this era

The rock mound was determined to likely be a lime kiln due to the ash on the interior floor, pipe in the center, and bricks found near and on the mound. Mike Dixon (2017) reported these bricks had been there as far back as 2007. The pit (F-23) was speculated may have been where the lime was sourced. Table 4.2 summarizes the collection donated by Mike Dixon and the one artifact

contributed from underwater metal detection. They are correlated with the work done from 2017 to clarify how Dixon's work relates with the 2015 and 2017 investigations.

Table 4.2 Previously collected artifact locations in relation to 2017 identified features and metal detection operation areas.

Feature/operation No.	Description	Artifact Provenience	Mike Dixon Areas	Work Performed by Mike Dixon
F-1	Leveled area and pit		Cabin 8	survey
F-1	Leveled area Northeast cabin 8		Cabin 9	Survey
Op-08	What is possibly the "Hogue" cabin area	See Figures 2.12 and 2.13	Cabin 6	Survey
F-2	Rock alignments with mortar foundation		Cabin 5	Survey
F-3	Depression and debris scatter		Cabin 5	Survey
F-7	Leveled area		"Ford's" Cabin	MDS, survey
F-18	Linear road	1 worn horseshoe, etc.	Possible road to Rathdrum	Survey
	East of Steamboat Landing Road Road	1 draft horse horseshoe	Log chute	Survey, MDS
	East of F-5 and west of F-1.	See Figures 2.12 and 2.13	Cabin 7	Survey
	Beach at docks at low water		Boat loading area/Beach	MDS, survey
Feature No.			Collection area	Work Performed
			Under dock	Underwater metal detection

Other features around the site previously believed to be part of Pen d'Oreille City, may be more recent. "Hogue's Cabin"/Op-08 is now considered possibly one of the buildings in Figures 2.12 and 2.13 and due to the presence of ash, it seems a fire occurred here. Feature 1, in the 2015 survey was identified as the flat area for further investigation in Figure 2.23 and may match the building labeled in Figures 2.12 and 2.13. F-1 from the 2017 survey and Cabin 7 (Figure 2.23) may also be from the naval training station period or before.

Georeferencing is a process used where physical maps or images are overlaid with maps that have information with a real-world location. For maps/images to be accurately layered, points from the maps/images need to be matched with point locations store in physical space. The georeferenced map (Figure 4.2) are exciting but should be read with caution. Without a point or association to match the drawing with the real-world combined with Pope's hand drawn maps (which are very accurate for being hand-drawn, but still are different than maps today) georeferencing is an estimation. Georeferencing has corroborated several historical maps but was not able to pinpoint the exact location of buildings associated with Pen d'Oreille City (Figure 4.2).

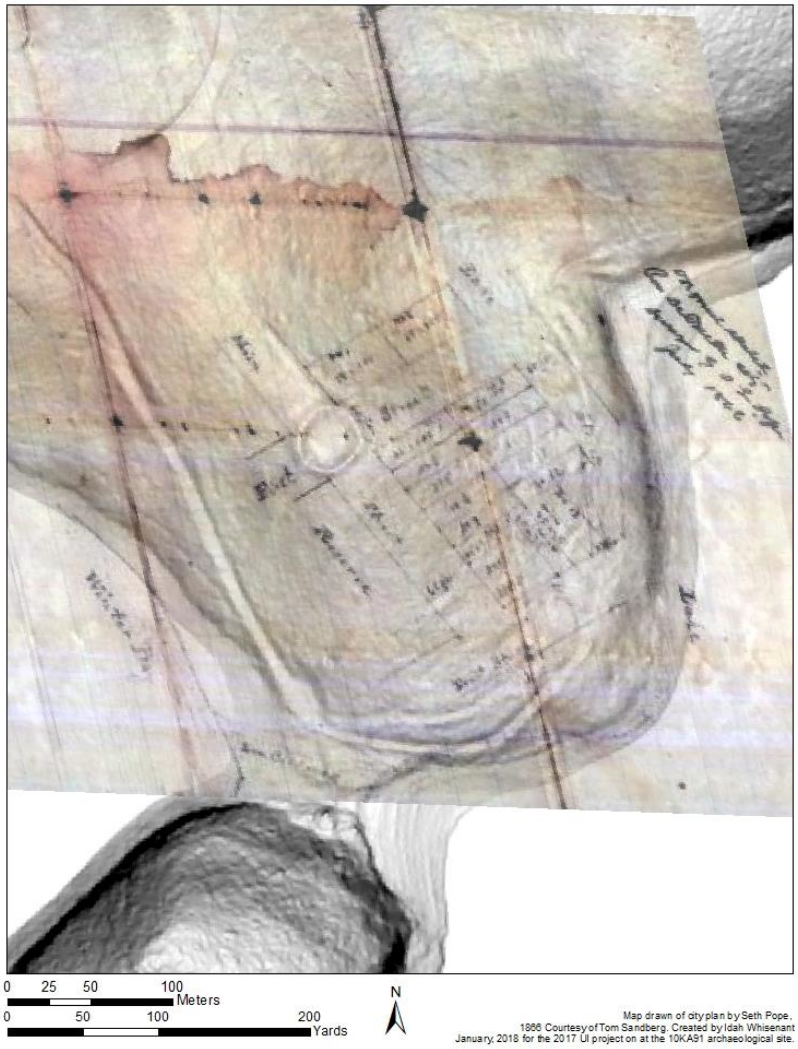

Figure 4.2. Georeferenced historic map city plan drawn by Seth Pope over LiDAR. Map courtesy of Tom Sandberg (2017). The roads may match up with modern trails, but the georeferencing is an estimate and can change drastically with any small altercation. Additionally, the interpretation of this map should be cautious as it is mere a plotting map, not necessarily what was developed.

During the surface survey, most artifacts were collected. Artifacts recorded in association with each other were recorded as such, and if collected, were noted as such. Table 4.3 lists associated artifacts not collected, though note is made when found with collected artifacts.

Table 4.3 Artifacts not collected during surface survey, and their proximity to collected artifacts.

Area/Provenience	FID in ArcGIS	Artifact Count and name	Description *collected	Comments	Not Collected Artifact Count
116° 34′ 26.1389″ W, 47° 57′ 10.7706″ N	173	Can	Punch-opened zipper seam all ferrous can	Corroded. Likely a soda can.	1
116° 34′ 25.1274″ W, 47° 57′ 10.7369″ N	175	Bucket	Bucket with knobs for handle	Corroded.	1
116° 34′ 21.8577″ W, 47° 57′ 11.8356″ N	180	Can	Aluminum Can	“SHAEFE BEER/ Est. in the United States 1842”. Brewed by Stron Brewing Co, Lehigh, Penn.”	1
Concentration. 3meters N-2 by 5m E-W. 116° 34′ 25.5774″ W, 47° 57′ 08.8021″ N	114	5 bricks 1 unknown metal 2 can 1 lid 2 bottles 1 unknown metal	1 soft past brick 3 cement bricks 1 unknown metal – large feature 1 lap seam can * 1 canning jar lid 1 colorless bottle* 1 7 x 6 x 7 inch cement brick/limestone 1 Miller High Life Punch-top can 1 amber bottle – base mark “35 NYY 52 52 [3 or 8]”	1 m downslope from road/trail. Structural. 3 possible domestic debris.	10
Artifacts found within 1 meter diameter of Honey Dew bottle. 116° 34′ 25.0929″ W, 47° 57′ 08.8564″ N	115	1 bottle 2 flat metal 2 can 3 brick/mortar	1 Honey Dew bottle* 2 large sheets flat metal 1 pull tab can 1 spam can frag. 3 brick/mortar frag.		7
Small can scatter. 116° 34′ 25.0111″ W, 47° 57′ 08.6969″ N	116	6 cans	3 4-inch diameter cans with lap seams 1 3-inch can with lap seam, end removed 2 3-inch cans solder-dot, knife punched (milk)		6
1 meter west of an amber crown cap bottle with NW mark. 116° 34′ 24.3284″ W, 47° 57′ 08.9432″ N	117	3 bottles	1 coca-cola 1949 bottle* 1 amber bottle* 1 colorless machine-made bottle with B-in-a-circle mark on base.	Colorless bottle is 1 meter north of point; this mark is 1960-1970s	1
Small area 1 meter diameter within 10 glass sherds. 116° 34′ 23.2692″ W, 47° 57′ 08.8959″ N	119	6 glass sherds	6 sherds of amethyst and aqua glass bases*	historic	
A dispersed amount of artifacts within a 15 meter area downslope. 116° 34′ 21.5839″ W, 47° 57′ 09.8177″ N	120	1 bottle 2 cans 1 bucket 1 cup	1 bottle, sealed with possible match sticks inside. Anchor Hocking mark on base* 1 lap seam, knife (star) opened can 1 aerosol can – big spray	Bottle found at base of slope.	4

		1 large bucket 1 metal cup, tin	
Total	45 Artifact Total		31 not collected total

Subsurface Test Units and Metal Detection Results

Subsurface Test Units

Some similarities emerge between the two 50x50 cm units opened at what was believed to be the blacksmith shop (TU-01) and Ford's cabin (TU-02) (Figure 2.23). In two test units 0.225 m^3 of soil was moved. Levels two and three (levels were defined using arbitrary 10 cm) in both units produced the most artifacts. TU-01 had the most artifacts in level two and the only artifact found in TU-01 was a square cut nail from level two. The majority of wire-drawn nails from the assemblage were from level two of TU-01. Two strata were identified in both units and strata II was noted as more compact than stratum I. Both strata have subrounded-subangular gravel and roots throughout the level. All the sediment was variations of silt loam, except for strata I in test unit 1 (TU-01) which was sandy silt. Strata II in both units begins at 14-21 cm bs. In TU-02, Strata I was a 10YR 4/3 brown sandy silt. Strata II was a 10YR4/4 dark yellowish brown sandy silt. In TU-01, Strata I differed in that it was a 10YR 4/2 very dark grayish brown sandy silt and strata II was a 10YR 6/3 pale brown.

Test Unit TU-01

TU-01 is in the blacksmith shop area (inferred from historic maps). The purpose of placement of this unit was to identify the blacksmith shop location and any remnant features or artifacts. TU-01 gave some evidence of a blacksmith shop, with slag, possible handwrought horseshoe nails, stove parts and what appears to be scrap metal waste. The slag could be from cement/lime production, but close association with metal waste, handwrought nails, and stove part suggests metallurgy. Slag is, according to Haught-Bielmann (2014), "a by-product of working with heated metal (smelting and welding). Slag is most common in the blacksmith and machine shop excavations in Sandpoint. It is a porous material that may have surfaces that are glassy in appearance. Slag can vary in color within a single fragment from tan, pink, brown, and black… [Clinker is] the residue of unburnable coal waste... Color can vary within a single piece from black to brown to white" and is evidence of some form of fire use (Haught-Bielmann 2014:130-31).

TU-01 was excavated to a depth of 50 cm bs, ending when the width of the unit prevented deeper excavation. Two stratigraphic levels were identified. In stratum I, TU-01 was 10YR 4/2 a dark

grayish brown. The 127 Kootenai gravelly silt loam matched TU-01 strata described as silt loam. Sediments were silt loam with sub-rounded sub-angular gravel and roots throughout (Figure 4.3).

Figure 4.3. Photo of TU-01 south wall profile, photo facing west. Note stove door.

Each of the five levels was 10 cm; however, a feature believed to be ash at first was later determined to be a soil change. This feature's levels were contained within the arbitrary 10 cm levels, but artifacts/ecofacts recording was subdivided by what was believed to be a feature at the time. Most artifacts were recovered from level two and consist of cut or wire-drawn nails. Categories for the unit include architectural/construction, hardware, stove/heating, waste, or unspecified (Table 4.4). Artifacts retrieved from the unit include metal waste, 34 of which are scrap pieces made of possibly hand-wrought ferrous metal fragments found in each arbitrary level (Table 4.5) (Figure 4.4).

Figure 4.4. Photograph of select scrap metal from level two of TU-01.

Nails from the unit suggest possible disturbance of the sediment with levels 01 and 02 having cut and wire-drawn nails mixed, and possible hand-wrought nails mixed with cut nails in levels 03 and 04 (Table 4.6). The proximity to the bathroom and likely construction disturbance leads to questioning the date value of artifacts from context, especially considering the limited stratigraphic data. The unit was place over a stove door (Figure 4.5) that was collected after excavation. Another stove part was found near the unit on the leveled area during metal detection and a deer carcass was removed to allow for excavation.

Figure 4.5. Stove lid on surface protruding from the west wall of TU-01.

Table 4.4 Artifacts from TU-01.

Object Name by level	Unspecified	architectural/construction	hardware	stove/heating	waste	Grand Total
Level 01	27	2			3	32
No object Name	8					8
Nail	19					19
scrap metal					1	1
Slag					2	2
window glass		2				2
Level 02	81		1		12	94
No object Name	4					4
faunal	9					9
Nail	68					68
scrap metal					12	12
washer			1			1
Level 03	21				25	46
No object Name	16					16
clinker					2	2
faunal	1					1
Nail	4					4
scrap metal					13	13
Slag					10	10
Level 03, Feat 01	1				3	4
Nail	1					1
slag					3	3
Level 04, feat 01	5		2		6	13
No object Name	2					2
clinker					1	1
nail	3					3
scrap metal					3	3
screw			1			1
slag					2	2
spike			1			1
Level 05					3	3
scrap metal					3	3
Surface Collection	1					1
No object Name	1					1
West Wall Cleaning				2	1	3
scrap metal					1	1

stove part				2		2
Grand Total	136	2	3	2	53	196

Table 4.5 Scrap metal, slag, and clinker count in TU-01.

Levels	clinker	scrap metal	slag	Grand Total
01		1	2	3
02		12		12
03	2	13	10	25
03, Feat 01			3	3
04, feat 01	1	3	2	6
05		3		3
West Wall Cleaning		1		1
Grand Total	3	34	17	53

Table 4.6 Nail artifacts found in TU-01.

Nail description by level	Possibly hand-wrought	Cut	Wire Drawn	Grand Total
Level 01		2	17	19
3d			1	1
6d			5	5
6d; missing tip		1		1
8d, 8d, and 8d			3	3
all 3d			7	7
length unknown; fragment		1	1	2
Level 02		10	58	68
2d			1	1
3d			38	38
4d		3		3
6d		3	7	10
7d			12	12
8d		1		1
length unknown; fragment		3		3
Level 03	2	2		4
5d		1		1
horseshoe nail; 4d	2			2
length unknown; fragment		1		1
Level 03, Feat 01		1		1
4d; missing tip		1		1
Level 04, feat 01		4		4
6d		2		2
length unknown; fragment		2		2
Grand Total	2	19	75	96

Test Unit TU-02

Test unit TU-02 was placed in the Thomas Ford cabin site (Feature 7) (inferred from historic maps) to retrieve data from a domestic area and confirm the location of the Ford cabin. Excavation in the unit was stopped after two culturally sterile levels at 40 cm bs. One cut nail was retrieved from level two (20 cm bs) and oxidized basalt. Throughout the unit roots, sparse charcoal, and subrounded-subangular gravels noted in ~10% of excavated sediment. TU-02 strata I was brown 10YR 4/3 silt loam that became compact silt loam in strata II with a color change to 10YR 4/4 dark yellowish brown (Figure 4.6).

Figure 4.6. Photograph of TU-02 base level 4, photo facing north.

Metal Detection and Recovery

Metal detection in areas where buildings were possibly located resulted in 209 artifacts being recorded with 126 collected and analyzed, and 83 artifacts not collected. Most artifacts collected were retrieved from metal detection. Metal detecting aided in investigating what is believed to be the blacksmith shop, saloon, hotel, stable, and Twitchell's store location. Operation areas are summarized in Table 4.7. Findings are summarized in Table 4.8.

Table 4.7 Operation numbers metal detection descriptions or possible historic areas.

Operation	Description	Work Performed
Op-1	Large depression (Feature 10)	MDS
Op-2	Twitchell Store West	MDS
Op-3	Round Hill/island investigation	MDS
Op-4	Possible area of the "warehouse", west side	MDS
Op-5	Possibly historically the saloon, stable, and Lakehouse/hotel	MDS
Op-6	Possibly the area of Blacksmith Shop/1966 Bathroom	MDS, TU-01
Op-7	Possibly the "Blacksmith" area shoreline	MDS
Op-8	Possibly the "Hogue" cabin area	MDS
Op-9	NW of modern bathroom building	MDS
Op-10	"Warehouse" East Side	MDS
Op-11	Area south of Feature 1	MDS
Op-12	Ford's Cabin	MDS, TU-02

Table 4.8 Collected artifacts and their count by operation area.

Object Name by Operation or MDS at features	Artifact Count
F-1: Leveled area and Pit on east side of PDC site	5
coin	2
nail	3
Op-11: Leveled area southeast of pit	3
coin	1
seal	1
stopper/closure	1
F-7: "Ford's Cabin"	1
Nail	1
F-9: "Twitchell's Store" west of bathrooms	2
nail	1
can	1
Op-1: Large depression on top of hill (F-10)	2
Coin	1
snap	1
Op-10: Historically the area of the "Warehouse" East Side	5
No object name	1
Bottle	3
Spike	1
Op-4: What is historically the area of the "Warehouse" West side	3
No object name	1
Nail	1
Seal	1
Op-5: What was possibly historically the saloon, stable, and Lakehouse/hotel	25
No object name	1
Axe	1

Boot	2
Nail	12
pocket knife	1
Spike	1
barrel hoop	1
Cable	1
Can	3
Faunal	1
scrap metal	1
Op-6: What is historically the area of Blacksmith Shop	13
barrel hoop	2
Bullet	1
Button	1
Can	3
Cartridge	1
machine part	1
Nail	1
Seal	1
Shoe	1
stopper/closure	1
Op-7: What is believed to be the "Blacksmith" area shoreline	59
No object name	3
barrel strapping?	2
Bottle	4
Can	27
Cartridge	7
clothing hardware	1
Nail	13
Nut	1
Tool	1
Op-8: What is possibly the "Hogue" cabin area	4
Nail	3
stopper/closure	1
Op-9: by window NW of modern bathroom bld.	4
Nail	4
Grand Total	126

Artifact Assemblage

Four hundred and fifty-one artifacts from surface survey, metal detection, and two test units were collected and are summarized by method of recovery and material class in Table 4.9. Total artifact numbers including artifacts collected (451), the 83 metal detected artifacts not collected, the 31 artifacts not collected during the surface survey, and the artifacts recorded at F-3 (172) equals 737 (Table 4.10). All artifacts are historical; four stone flakes resembling debitage were collected but determined to be non-cultural. Artifacts donated to the collection equal 65 of the total 451 artifacts in the collection or 14% of the collection (Table 4.11). Metal artifacts dominate this assemblage at 305 artifacts or 68% of the collection, probably because of the use of metal detectors (Tables 4.9 and 4.11). The second most common material type is glass at 68 artifacts or 15% of the collection (Table 4.11). Fifty-six of the 68 glass artifacts are bottle glass totaling 82% of the collection.

Table 4.9 Collected and non-collected artifact count by material class from metal detection.

Material Class	Sum of Artifact Count
Faunal	3
Glass	16
Metal	90
multiple	1
organic	4
plastic	2
Grand Total	116

Table 4.10. Total artifact count including collected and not collected artifacts.

Collected and not collected artifacts	Artifact count
artifacts collected	451
metal detected artifacts not collected	83
artifacts not collected during the surface survey	31
artifacts recorded at F-3 (available on request)	172
Total artifact count	737

Table 4.11 Summary of artifacts recovered or donated by method of contribution to the collection.

Material Class	Collector (Mike Dixon)	Collector (Under-water)	MDS	Ped Survey	Surface Collection	TU-01	TU-02	Grand Total	Percentage of collection
Ceramic	7				13			20	4%
Glass	22		7	22	10	7		68	15%
Metal	34	1	115	3	9	142	1	305	68%
Mineral (clinker)						3		3	0.01%
Multiple			2					2	0.00%
Organics (Bone, milled wood, fabric)	1		2		1	23		27	6%
Stone						4	5	9	2%
Synthetic (slag)						17		17	4%
Grand Total	64	1	126	25	33	196	6	451	100%

Chronology

Table 4.12 shows artifacts and their count as they fall within NRHP periods based on their TPQ. Artifacts that were not dateable or did not all within NRHP periods are not included. Date ranges of theses artifacts are fairly evenly distributed. Ammunition dates back to the Pen d'Oreille City period and may have been associated with the hunting at the site's earliest period or later. Six artifacts consisting of ammunition and a clock may date from to the Pen d'Oreille City period and shortly after (1866-1873). Approximately 7% of the assemblage may date to the 1855-1889 range. Ceramics and ammunition show the earliest dates overall, consisting of whiteware, yellowware, and ironstone eight fragments total with TPQ dates of 1820, 1840, and 1850 respectively. It is important to note that although these artifacts may have period of settlement dates, they may have been deposited later or been made closer to the 1890s era, such as the clock and lock (Table 4.13).

Table 4.12 Artifact count and type by NRHP era or time period.

NRHP era/date	Artifact type	Artifact Count per NRHP era
period of settlement: 1855-1889	ammunition, can, clock, hollowware, lock, plate, and bottles	31
Phase I statehood 1890-1903	can, window glass	21
Phase 2 state hood 1904-1919	9 bottles, 1 cartridge, and 1 salt and pepper shaker, bricks	13
Interwar era 1920-1939	bottle, can jar, penny bank	23
Premodern 1940-1958	bottles, cartridge, coin, cable	17
1958-2008	bottle, coin, glove, seal, stopper/closure	14

Table 4.13 Artifacts dating from 1820 to 1889.

1820-1889	1820	1840	1850	1860	1862	1866	1869	1870	1876	1880	1885	1889	Grand Total
Container glass		**3**	**2**	**2**				**1**					**8**
bottle		3	2	2				1					8
Earthenware, Ironstone			**3**										**3**
lid			1										1
plate			2										2
Earthenware, Whiteware	**3**												**3**
bowl	1												1
plate	2												2
Earthenware, Yellow Ware		**2**											**2**
crock		2											2
Iron/Steel			**5**							**1**	**2**		**8**
can			5							1	2		8
Iron/Steel?						**1**	**2**		1				**4**
cartridge							1		1				2
cartridge						1	1						2
Multiple					**2**								**2**
boot					2								2
Multiple metals									**1**				**1**
clock									1				1
Grand Total	**3**	**5**	**10**	**2**	**2**	**1**	**2**	**1**	**2**	**1**	**2**	**2**	**31**

The M1 Garand clips and soda bottles give a tight date for WWII recreational and potential training at and near the site, assuming artifacts were not moved great distances. Nail analysis suggests 1800-early 1900 cut nails (43% of the assemblage, 65 nails). Wire drawn nails suggest early 1900s (54%, 81 nails) (Hannold 2017). Wire drawn and cut nails suggest construction at various periods was likely. Coins dated to the 1956 “wheat penny” cent (F-1), 1962 cent (F-1), 1967 Canadian penny” cent (F-1), and 1968 dime (F-10). The Canadian cent and dime may coincide with the world jamboree at the site where Boy Scouts from the world came to the site, however, Canadians are frequent visitors of northern Idaho.

Many of the beer bottles at the site are stubbie beer bottles and made by NW Co. which were manufactured in Seattle. A Coca Cola bottle from the 2015 survey had Coeur d’Alene embossed on the bottom. In 2017, three soda bottles were recorded: a Spokane embossed Coca Cola base (1943), a 7-up bottle (1946), and a Honey Dew from Seattle (1949) which all fall within the beginning and decommissioning years of the WWII naval training station. A coffee can and possibly a milk bottle was sourced from Spokane.

Bricks from the site with the mark of Washington Brick and Lime Co. could have come from Freeman, Clayton, or Dishman in Washington, or more likely Bayview. A lime plant in Bayview operated with five large draw kilns from 1902 to 1933 (Renk 1997) (Figure 4.7).

Figure 4.7. Photograph of a stamped Washington Brick and Lime Co. brick embossed with "MADE BY WASH. B. L & MFG Co/SPOKANE WASH" was discovered near and on the kiln (F-6) and near F-4 rock walls where the Oregon and Montana Transporation Co. may have been (Dixon 2017).

See Figures 2.23 and 2.24 for main metal detection areas (operation areas), Dixon's collection areas, one artifact donated from an anonymous source, surface collection, and test units. The blacksmith shop area (Op-7) and the F-3 (depression adjacent to rock wall/foundation F-2) have the oldest artifacts. Because TU-01 also showed signs of antiquity, in addition to the metal detection results, it seems this area is more likely than the others to date to Pen d'Oreille City. Trails were recorded in this project, one trail being a possible road leading to Rathdrum and later called Steamboat Landing Road at least by 1903 (Figures 2.17 and 2.24) (Kootenai County 2017).

Functional Analysis

Table 4.14 shows artifacts using Sprague's artifact classification system (Sprague 1980) to indicated artifact patterns, usage, and behavior. The unknown category or unassigned category means the artifacts were not given a code, because all behavior diversity cannot be inferred, or it was unknown. Waste (54 artifacts) and hardware at (163 artifacts) dominated the assemblage, with food storage following at 26 artifacts. This suggests domestic life when considering the foundation of F-2, construction mostly due to nails, and a possible blacksmith shop within the vicinity of TU-01 and presence of metal waste.

Table 4.14 Collected artifacts and their counts organized by the Sprague classification system.

Sprague Classification	Sum of Count
Artifacts with no assigned Sprague code	124
Artifacts with no artifact description	49
barrel strapping?	2
bottle	23
bowl	1
can	27
faunal	12
plate	7
seal	2
tool	1
accoutrement	1
pocket knife	1
alcohol	11
bottle	9
seal	1
stopper/closure	1
animal/livestock	2
horseshoe	2
architectural/construction	5
brick	3
window glass	2
bottle	1
bottle	1
clothing	1
glove	1
clothing hardware	3
button	1
clothing hardware	1
snap	1
currency	4
coin	4
firearms	12
bullet	1
cartridge	11
food prep/consumption	6
hollowware	2
knife	1
salt/pepper shaker	1
saucer	2
food/food storage	26

bottle	6
can	14
crock	2
jar	2
stopper/closure	2
footwear	3
boot	2
shoe	1
hardware	163
axe	1
cable	1
clevis	1
door fixture	1
machine part	1
nail	151
nut	1
ring	1
screw	1
spike	3
washer	1
misc. container	5
barrel hoop	3
bucket	1
jar	1
pharmaceutical/medical	16
bottle	16
security	1
lock	1
stove/heating	5
stove part	5
time keeping	5
clock	1
clock gear/part	4
toy	1
miscellaneous	1
unknown	2
bottle	1
lid	1
waste	54
clinker	3
scrap metal	34
slag	17
Grand Total	451

Ammunition Artifacts

Firearm-related artifacts in this assemblage consists of nine cartridges, one flattened bullet, and two M1 Garand clips. Three of the cartridges are Lake City ammunition plant 1953 and could be military or surplus used by civilians. 519mg of gun powder from the Twin Cities ammunition plant 1956 cartridge was chemically analyzed and shown to contain, as suspected, gunpowder with a chemical composition of charcoal, sulfur, potassium. It is no longer used (Bodley and Wandruszka 2017). The M1 Garand clips give a tight date within the WWII naval training station period in the 1940s. Four cartridges were recovered with no head stamp indicating they were manufactured pre-1870s (Figures 4.8 and 4.9).

Figure 4.8. Bullet and cartridges recovered (exluding the M1 Garand clips).

Figure 4.9. Photograph of one of the two M1 Garand clips.

Domestic

Several items indicate domestic life at some point the site, which was also concluded by the 2015 survey with items like 1923-64 Hazel Atlas fruit jar, coffee pot, hole-in-top cans, evaporated milk cans, Kerr's canning jar (post 1915), five metal bedframes spread throughout the site (late 1800s-early 1900s), possible spam can (post 1883), improved whiteware spout (early-mid 1900s), two bricks, colorless window glass, milk glass canning jar seal early (1900-present), stove fragments, burned glass and whiteware fragments (early-mid 1900s). Domestic items also came from Dixon's collection, an alarm clock and ceramics.

During the 2017 survey and metal detection, cans and bedframes were also found indicating domestication, in particular the depression (F-3 concentrations 1, 2, and 3) adjacent to the rock wall/foundation (F-2). A coffee can, a key wind key coffee can lid, and milk and food cans were recovered dating from 1840-1980. A milk bottle was also recovered, possibly brought from Spokane, dating from 1910-1940. Ceramics found in the dump next to the rock wall/foundation contained 5 plates, 1 bowl, a yellowware crock, a Bristol glaze crock/jug, and possible privy pot parts, indicating that those with dates range from 1820 to 1930. Stove parts and bed parts may be an indication of settlement as well and were found during the 2015 and 2017 surveys. They are spread throughout the site, many being too large for collection. One stove door was noted near F-1 by a local who said it had an 1800 date on it. Another stove part collected prior to the 2017 survey using an underwater metal detector was a stove lid used as a unit for cooking and was donated to the collection. Seth Pope recorded, "Twitchell got his stove up in the store and things looking quite snug", so it seems likely that there were at least two stoves at Pen d'Oreille City for heating, possibly cooking, and in the Blacksmith Shop (OHS Seth L. Pope Mss 701:November 15, 1866). However, the date of these stove and bed parts is unclear and it is plausible they are from the late 19th/early 20th century as determined in the 2015 survey.

Food consumption at the site consisted of meat, canned goods, beer, coffee, fruits/vegetables, milk, and soda. A steak knife from the Dixon collection was donated. A total of 41 can artifacts were collected and analyzed, mostly consisting of food/food storage usage from the metal detection area Op-7 (what is believed to be the blacksmith shop area) and Op-5/F-26 and F-3 (the depression adjacent to F-2). The majority of the 17 can artifacts that were identifiable, there are fruit, vegetable, or milk cans. Two artifacts may have held syrup or fuel (Table 4.15). Of the artifacts collected, three are complete soda bottles, seven are alcohol bottles, though there is one milk bottle and possible ink or shoe shine bottle as well which was found to hold carbon black (Loucks,

Lily and Ray Wandruszka 2017). These dated primarily to the 1950s and 1960s. A bottle dating 1949-1959 is a Karo brand, likely holding syrup (Figure 4.10).

Table 4.15 Can count by identifiable contents.

Collected Can types	Sum of Count
coffee	2
Fresh beverage	3
fruit, vegetable, or milk	5
meat	2
milk	5
Grand Total	17

Figure 4.10. Photographs of select bottles and cans indicate soda and alcohol consumption dating around the 1950s. All artifacts, but the beer can were collected.

Architectural/construction, scrap, hardware, and wood procurement

Fifty-one architectural/construction, scrap metal, and hardware artifacts comprise 12% of the assemblage. The scrap metal was extracted from TU-01 in the form of small metal fragments. Hardware included a ring, unidentified hardware, wedge-shaped metal, hand-wrought ferrous nut, metal ring, and brick (Figure 4.11). In addition, there are 154 nails in the assemblage. Eighty-one of the nails are wire drawn comprising 53% of the nail assemblage, while 42% (65 nails) of the nail assemblage are cut nails. Other artifacts included a splitting axe head, logging cable, and a draft-sized horseshoe (Figure 4.12).

Figure 4.11. Photograph of a sample of surface finds relating to architectural/construction and hardware items recovered from F-4 (“Twitchell’s Store” west of the bathroom). Items include beginning from left a wedge, an unidentified circular tube, handwrought ferrous nut, and a possible tool.

Figure 4.12. Photographs of a splitting axe-head and draft-size horse horseshoe. The axe head has with flattening at the head from repeated blows and has a tear drop-shaped axe eye, American style. The style originated in 1789. The horse shoe is for the hind leg and is machine made with complete calks on heel and toe. Three horseshoe nails were found within TU-01 and were concluded to possibly be hand-made.

Modification

One artifact shows clear signs of modification. It is uncertain what Figure 4.13 may have been used for, but the Bucket was found in F-3 which may have been associated with the adjacent F-2. The wire ties on the inside of the can extending up the center and 5 knife slits puncture the base.

Figure 4.13. Photograph of a modified bucket, the only artifact showing clear signs of modification in the collection.

Clothing and other items

Several items were recovered relating to clothing, including a suspender buckle, glove, boot/shoe, a penny bank that may have been carried, and a lapel pin badge. A glove was recovered by Michael Dixon prior at what is believed to be the site of Ford's Cabin (F-7) (Figures 4.14, 4.15, 4.16, and 4.17).

Figure 4.14. Photograph of a possible child's glove. It was retrieved at F-7 prior to survey. The glove either shrunk excessively and/or was a child's glove. It appears to be sewn together at the base of the glove, which would prevent use. It may have been white at one point.

Figure 4.15. Photograph of the only shoe found during excavation. It was recovered from Op-5/F-26. It appears to be a boy's or young woman's shoe inferred by the measurements and historic sizing charts (Andersen 1968). It belongs to in the 1862-1926 date range. Note the stacked leather heel and completeness, allowing for fairly accurate measurement.

Figure 4.16. Photograph of a possible child's penny bank retrieved from Cabin 6 (where Op-08 took place in 2017) prior to survey and collected by Michael Dixon. This penny bank dates to the 1940s.

Figure 4.17. Photograph of a medallion set in a lapel pin badge frame reading "Our Earth" on a banner wrapping around a smiling cartoon earth with "Made in Hong Kong" at the bottom. It was found in the large depression about a yard from the 1967 dime found at a similar depth just below surface.

Faunal Analysis

A total of twelve bone fragments at a weight of 142.4 grams were recovered from the site. Ten bones show evidence of burning from TU-01. Two fragments show signs of butchering/sawing. All are likely large mammals weighing 142.4 grams (Appendix A). Two bones are steak cuts, both of relatively high quality, probably cow femurs. The burned bone in TU-01 with evidence of melted metal and glass in level two (20 cm bs) indicates possible burning of waste material. The small size of the assemblage, scattered discovery of bones across the site, and their fragmentary nature does not lead to any meaningful conclusion on community foodways. Deer bones not collected were scattered about the site. An entire skeleton was removed for TU-01.

Dendrochronology Results

Tree cores were analyzed by the Idaho Tree Ring Lab at the University of Idaho (Harley 2018). Two trees were sampled from the edge of the two largest depressions at the site. One Douglas fir and ponderosa pine were sampled at the large depression (F-10), both being sampled on the southwest side of the tree. Dates for the Douglas fir were 1927 ±30-40 years. Similarly, the ponderosa pine dated to 1925 ±30-40 years. A lesson learned: coring should be done at the base of the tree 30 cm above the surface for a dating accuracy of 5 years, which was not done.

The ponderosa pine core indicates there was change in this tree's specific environment 1931-35, 1948-49, and 1956-59. Harley (2018) concluded that a similar pattern in 1988-90 was due to a dry year that was experienced regionally and verifiable by cross-analysis with trees in the area. In 1937, the ponderosa pine either had new growth or there was a fire. The 1937 date is exact in this case.

The Douglas fir shows signs of traumatized growth from the resin ducts visible in the years 1960 (April-May), 1962 (April-May), and 1969 (June-July). This could be due to insect outbreaks, human induced damage to the tree, earthquakes, rock falls, among others. (Harley 2018).

Because the dates have a large margin of error, it is difficult to determine what event era of the site might be associated with the trauma to the Douglas fir and strained growing conditions of the ponderosa pine. Nonetheless, the depression can date to 1885 or earlier and cannot date later than 1935. A rough estimation of the germination date is 1885-1935 or earlier.

5. Conclusions and Recommendations

The 2017 investigations at 10KA91 Pen d'Oreille City established that the site is multi-component site occupied from the Settlement Period (1855-1890) to present. Artifacts recovered, and features identified with more archaeological investigation could represent cultural themes of settlement, transportation, industry, mining, timber, military, recreation, and public land management. Extensive georeferencing with historic maps and consultation with Michael Dixon resulted in the tentative identification of Pen d'Oreille City, some possible original building locations, and inferences on feature functions and dates of use.

The boundaries of site 10KA91 Pen d'Oreille City were expanded to the island, F-1, Op-09, F-10, and F-18, but remain much the same as defined in 2015. TU-01 yielded finds suggesting the blacksmith shop was located as indicated on the historic maps. Map analysis and artifact finds suggests the large depression was perhaps a timber reservoir for logging that occurred in the area and cannot date earlier than 1935. Careful field examination of features indicates the rock mound (F-06) is likely a lime kiln from the evidence of the pipe in the center, brick fragments and ash covering the floor on the interior of the mound.

Locations of former buildings were identified and/or verified through the recovery of surface and subsurface artifacts, test excavation and metal detection, specifically the blacksmith shop, saloon and hotel location. Careful field examination during recording of a rock mound (F-06) revealed that the feature is likely a kiln, evidenced by the discovery of a metal chimney, bricks and interior concentrations of ash/lime. Function of a large depression (F-10) could not be determined but an alternative hypothesis was proposed. Artifacts recovered from the 1820s to the 2000s implies a greater time range of human activities that were previously assumed. However, features could not be confidently dated except in broad ranges. The cement on F-2 may have been from the limestone and cement making era in Bayview from roughly 1900-1930. Chemical analysis of the cement in buckets nearby and the wall did not yield results to support this hypothesis.

The 451 artifacts revealed information about activities at the site representing each time period. Some themes are hunting or practice shooting activities, blacksmithing, resourcefulness, recreating, homesteading, cement making, and wood procurement.

NRHP Evaluation

Site 10KA91 is recommended eligible for the National Register of Historic Places. The remains of the site are significant under Criterion A as they are strongly associated with events that have made a significant contribution to the broad patterns of state and local history. The remains convey and help interpret a historic property associated with significant events including the early settlement of the region and mining, transportation and other cultural themes during several periods of significance, such as the settlement period of Idaho, likely the Lime and Cement Industry Historic District, and the Farragut Naval Training Base.

The site is significant under Criterion B due to Pen d' Oreille City's strong associated with the lives of persons who have made a significant contribution to the state and local history, primarily Seth Pope, who established the ferry landing and townsite. The site retains integrity of location and setting with intact feature remains such as rock walls and trails possibly from the 1860s period and other features from later periods which convey association.

The site is primarily recommended eligible under Criterion D. The archaeological remains have yielded and are likely to yield more important state and local history information. Further research as indicated by the surface finds and limited sub-surface testing conducted for this project may produce a significant repository of archaeological information about the changing patterns of behavior, clues to lifeways and help illustrate the importance of Pen d'Oreille City during several periods of significance.

Recommendations

1) Plans for any land-altering activities within the Pen d' Oreille City footprint should take into account the archaeological resource and the potential for further information about Pen d' Oreille City. Any future development activities should be conducted in coordination with the State Archaeologist.
2) Metal detection, pot-hunting, and surface collection should not be permitted within the site boundaries or in the Buttonhook Bay and Beaver Bay vicinity south of the group camping areas.
3) Management of the site should promote site stewardship and preservation.
4) Further research such as additional excavations and ground penetrating radar are recommended by the Kootenai County Historic Preservation Commission to increase knowledge of the site.

5) Develop an interpretive plan which both protects the site and provides public information about the history of the site and its importance in regional history. Since the repository for artifacts will be located at the Brig Museum, development of records of the site which are accessible to researchers and the public is suggested.

Concluding Thoughts

In 2016, I was contacted by a U of I faculty member who said they had a project for me. Anxious for a thesis topic, I readily accepted. My position in the saga of Pen d'Oreille City is brief and as an outsider. I relied heavily on the help from northern Idaho professionals, such as Linda Hackbarh, Laurie Mauser, Tom Sandberg, and Nancy Renk. Documents on historical archaeology in the west and about Pen d'Oreille City guided my research as well. Most research for this project draws from Linda Hackbarth's numerous works (Hackbarth 2003, 2014, 2015a, 2015b, 2017). The excavation in 2017 is important to lend more insight into the site's use. Research on the Farragut Naval Training Station, in the form of two interviews, a primary and private document, a picture book, personal communication, the Museum at the Brig, and a thesis was consulted. One interview was conducted with a recruit and the other with a construction worker at the site. Herald Johnson was recorded as receiving pay of $1.25 an hour to tear down the station in 1950, a task he indicates was a large effort, considering the drill hall at Camp Ward had 8 tons of steel and as he states "This [building the station] was a Government job and they spent a lot of money" (Johnson 2016). Robert Moate recounts the boon that the station provided to local communities. The station was one of the largest cities in Idaho at the time and a significant employer and source of customers when the recruits were allowed leave. Farragut Naval Training Station recruit John Larsen recounted that the "boots" (recruits) were rarely allowed leave. This leads me to conclude that most of the recreational activity at the Pen d'Oreille City site was enjoyed by officers who had more freedom (Moate 2016; Larsen 2017).

The book, *Historical Archaeology through a Western Lens* (Warner and Purser 2017), provides context for this document's research within historical archaeology in the American West and some parallels can be derived. Warner and Purser (2017) provide insights into the state of research on historical archaeology in the American West. Historical archaeologists can research recent history with less resistance from the professional archaeology community than in years past. Research on the Pen d'Oreille City site, with attention to all time periods aided in understanding why the original "City" has remained elusive. Looting, possible lime and cement industry, homesteading, Boy Scout

events, and the Farragut Naval Training Station are likely the most significant contributions to the site's degradation. Additionally, the time periods following Pen d'Oreille City arguably tell an equally significant story about what shaped northern Idaho.

Warner suggests an American West that challenges the "rough and tumble western frontier stereotype" and disassociation with past cultures (Warner 2017:305). A piano would have been a hassle to transport to rural Silver City, Idaho, but the owners thought it was worth the effort to move, likely as a status symbol and an effort to make a home seem familiar in the west. Similarly, at Pen d'Oreille City, a pool table was miraculously transported by wagon the same year the settlement was established, though perhaps a less subtle symbol of cultural values that the settler's bringing their cultural background to the west. Nonetheless, it is an indication of wishing to bring normalcy to the west and the efforts they would be willing to go through.

The idea that life was not as hard as might be imagined is accurate in other cases. Multiple accounts from Seth Pope's journals indicate that there was leisure time at Pen d'Oreille City. Pope wrote, "Pleasant loafed round most of the morning and in PM Willie Abrams and I went fishing over the other side lake I caught 2 nice trout. Evening Boys in at Browns playing cards" OHS Seth L. Pope Mss 701:September 21, 1867). Another entry states, "Jaquith Pat and Roaring Tom from Yamhill playing Poker for money and are playing for 15 chips at $1. Luck appears to be against some of them" (OHS Seth L. Pope Mss 701:September 23, 1867) A particularly amusing entry reads, "Brown Blackstone and all Brown drove a mule into Blackstones saloon and treated it to whiskey after which all hands got drunk and left for Connors loaded down with whisky" (OHS Seth L. Pope Mss 701:October 31, 1866). However, there is also evidence of hardship fitting within the "rough and tumble" stereotype. A man drowned at "Brave Island" on Lake Pend Oreille. Anderson's son broke ribs in a traveling accident. Pope records eating flour and coffee-when they were traveling to what would become Pen d'Oreille City because they were ran out of other supplies.

From a documented letter Pope wrote to J. Clark, Esquire in April 11, 1890, transcribed by Linda Hackbarth, he reveals his image of living in Pen d'Oreille City as rough. He traveled often and heavily relied on a seemingly close-knit social network for support. He expressed the hope that his letter would give J. Clark "pleasure while recalling the events of nearly a quarter century ago while we were neighbors in the then "Wilde and Wooly West," indicating he saw himself as a pioneer and Pen d'Oreille City, though he left it even before it ceased operation (OHS Seth L. Pope Mss 701:April 11, 1890). Many of the occupants of the settlement were constantly coming and going with the

season or following work opportunities. This resulted in multiple uses of the structures at the site as well, with the use and/or owner fluctuating in many cases.

The second settlement in northern Idaho has been modified in this document to state rather that Pen d'Oreille City was the second permanent Euro-American settlement, and the area was a traditional seasonal ground for at least the Kalispel and Coeur d'Alene tribes. The second settlement in northern Idaho can be misleading as there were settlements by trappers in the early 1800s, though they were less permanent. The purpose of specification was to end a potential misunderstanding of Seth Pope and others settling the town as more influential than Davidson or Native American settlement that preceded them. It is my hope that more credit is given to those who initially used the land. My research was focused on not just the Pen d'Oreille City period, but subsequent eras as well. This is part of an effort to get away from the idea that only the oldest history is the most important. The benefit to this focus resulted in a better understanding of what may have happened to Pen d'Oreille City, a central question in my research.

Layers of diverse history and culture form the core of the section of Lake Pend Oreille that Pend d'Oreille City occupied. This small settlement site is now part of the Farragut State Park but was once a route for early frontier travelers. Historic site occupants at various times show signs of possible blacksmithing, cutting down trees, homesteading, cement making, practice shooting, hunting, and drinking soda and beer. Archaeology has more to offer in learning of northern Idaho's diverse history and deciphering the mystique surrounding Pen d'Oreille City.

References Cited

Alison Kartevold, Dara Rollins, and Dorthy and George Baumgartner
1990 *America's Land Locked Navy: Farragut's WWII Memories*. KSPS Public Television. Spokane, Washington.

Alvarez, Gayle and Dennis Woolford
2009 *Images of America: Farragut Naval Training Station*. Arcadia Publishing place of publication.

Anderson, Adrienne
1968 The Archaeology of Mass-Produced Footwear. In *Historical Archaeology* 2: 56-65.

Bard, James C.
2014 The *Other Side of Sandpoint: Early History and Archaeology Beside the Tracks the Sandpoint Archaeology Project 2006-2013,* Vol 3, *The Ethnography and Prehistory of Sandpoint*. SWCA Environmental Consultants, Oregon.

Bodley, Lilian and Ray von Wandruszka
2017 "Shell Casing Fill" University of Idaho Chemistry Department report, Moscow, Idaho.

Bonner County Historical Society
2017 Research conducted for Chuck Peterson archaeological papers. Bonner County Historical Museum, Sandpoint, Idaho.

Burgunder, Ben and J. Orin Oliphant
1926 The Recollections of Ben Burgunder. The *Washington Historical Quarterly* 17(July): 190-210.

Butt, Randall
2017 Park Manager for Farragut State Park and Coeur d'Alene Lake Parkway. Personal Communication July 31st, 2017.

Campbell, Renae, Nathan Allison, Vicoria Bochniak, Rachel Falzon, Nathan May, Emma Scott, and Mark Warner
2017 *Phase II Investigation and Public Archaeology Mitigation, Fort Boise Military Reservation, Site 10AA161, Ada County, Idaho*. University of Idaho, Moscow, Idaho. Report.

Camp, Stacey, Dakota Wallen, Rachel Falzon, and Leah Evans-Janke
2016 *Historic Pen d'Oreille City*. Alfred W. Bowers Laboratory of Anthropology, University of Idaho, Moscow, Idaho. Report.

Dahlgren, Dorothy. and Simone Kincaid
2007 *Roads Less Traveled through the Coeur d'Alenes*. Museum of North Idaho, Coeur d'Alene, Idaho.

Department of Navy Bureau of Docs and Yards
Building the Navy's Bases in World War II: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946. Electronic source, http://www.ibiblio.org/hyperwar/USN/Building_Bases/bases-11.html accessed Spring 2016.

Dixon, Michael
2017 Personal communication. August 7, 2017.

Fritz, Jane
2010 *Legendary Lake Pend Oreille: Idaho's Wilderness of Water*. Keokee Books, Sandpoint, Idaho.

Harley, Grant L
2018 Idaho Tree Ring Lab, Moscow, Idaho. Website: https://gharley.wixsite.com/itrl/people.

Hackbarth, Linda
2003 *Bayview and Lakeview: after Early Settlements on Southern Lake Pend Oreille*. Museum of North Idaho, Coeur d'Alene, Idaho.

2014 *Trail to Gold: The Pend Oreille Route*. Museum of North Idaho, Coeur d'Alene, Idaho.

2015a *Bayview and the Farragut Story: from Naval Training Station to State Park and Acoustic Research Detachment.* Bayview Historical Society, Bayview, Idaho.

2015b *A Town by the Bay: the History of Bayview, Idaho with supplement on early Lakeview & Chloride*. Bayview Historical Society, Bayview, Idaho

Oregon Historical Society
2017 Seth Pope journals and newspaper articles from Oregon Historical Society library Seth L. Pope Collection, Mss 701 and other sources. Accessed via Linda Hackbarth's copies.

Hackbarth, Linda and Peter Balbi
2003 *A Pictorial History of Bayview and Surrounding Areas 1866-1940*. Bayview Historical Society, Bayview, Idaho.

Hannold, Cynthia
2017 10KA91 Nail Analysis. University of Idaho, Moscow, Idaho. Report.

Haught-Bielmann, Amanda
2014 *Laboratory Manual.* The Other Side of Sandpoint: Early History and Archaeology Beside the Tracks. SWCA Environmental Consultants, Portland, Oregon.

Historic Columbia River Highway
Grading and Alignment. Electronic source, http://sos.oregon.gov/archives/exhibits/columbia-river-highway/Pages/design-grading-alignment.aspx, access December 2017.

Hyder, Marla and Byron King
2002 *North Idaho Then* and *Now.* King's Publishing Group, Inc, Spokane, Washington.

Johnson, Herald
2016 Excerpt from Herald Johnson's life recorded by Sonja Enger and part of the Johnson family's private record.

Kalispel Tribe of Indians
2016 Past, Present, and Future. Electronic source, http://kalispeltribe.com/our-tribe/past-present-future, accessed December 11, 2016.

Kootenai County
2017 Real Estate Department. http://recorder.kcgov.us/, accessed July 2017.

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.

Larsen, John
2016 Recruit at Farragut Naval Training Station. Personal Interview December 21, 2016.

Lindsey, Bill
2009 *Historic Glass Bottle Identification and Information Web Site*. Society for Historical Archaeology. Electronic document, http://www.sha.org/bottle/index.htm, accessed December 2017.

Loucks, Lily and Ray von Wandruszka
2017 Ink Bottle University of Idaho Chemistry Department report. University of Idaho, Moscow, Idaho.

Love, Marianne
Sailors Ahoy! Electronic source, http://www.mariannelove.com/RossHall.html, accessed February 29, 2016.

Lyons, Kevin
2016 Personal communication.

Middleton, Jeffery
2002 *The Farragut Naval Training Station: A History*. Master's thesis, Department of History, University of Idaho, Moscow, Idaho.

Moate, Robert
2016 Personal communication.

Miss, Christian J. and Lorelea Hudson
1986 Cultural Resources Reconnaissance of the Albeni Falls Project, Northern Idaho. Cultural Resource Consultants, Inc., Sandpoint, Idaho. Report.

1987 Cultural Resources Collection Analysis Albeni Falls Project Northern Idaho. Cultural Resource Consultants, Inc., Sandpoint, Idaho. Report.

National Oceanic and Atmospheric Administration and United States Army Corps of Engineers
2010 USACE Lidar: Columbia River (OR,WA) Point Cloud files with Orthometric Vertical Datum North American Vertical Datum of 1988 (NAVD88) using GEOID12A. Electronic source, https://coast.noaa.gov/htdata/lidar1_z/geoid12a/data/1122/, accessed 2016.

Renk, Nancy
1997 *Lake Pend Oreille Lime and Cement Industry Historic District*. National Register of Historic Places Registration Form. Sandpoint, Idaho. Courtesy of Laurie Mauser.

2012 *Ice Age Floods of the Pacific Norwest*. Preservation Idaho: The Idaho Historic Preservation Council. Electronic source, http://www.preservationidaho.org/blog/nancy-foster-renk/ice-age-floods-pacific-northwest, accessed 2017.

2017 Personal communication. July-August 2017.

Sandberg, Tom
2017 Personal files and communication. July-August 2017.

Sappington, Robert Lee and Caroline Carley
2005 *Cultural resource landscape overview of the bureau of land management Coeur d'Alene field office*. University of Idaho, Moscow, Idaho.

Sims, Cort
1983 The Log Chutes of North Idaho, Cultural Resources report No. 8. United States Department of Agriculture Forest Service: Northern Region. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm9_018947.pdf, accessed December 10 2016.

Sprague, Roderick
1980-1981 A Functional Classification for Artifacts from 19th and 20th Century Historical Sites. *North American Archaeologist* 2 (3): 251-261.

United States Army Corps of Engineers
2008 *Historic Properties Management Plan Albeni Falls Dam and Pend Oreille Lake Project*. Seattle District Corps of Engineers, Seattle, Washington.

United States Department of Agriculture Natural Resources Conservation Service (USDA and NRCS)
2017 Custom Soil Resource Report for Idaho Panhandle National Forest, Idaho-Washington Montana, and Kootenai County Area, Idaho. Electronic source, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed 2017.

United States Geological Survey
2017 *Geologic Provinces of the United States: Rocky Mountains*. Electronic source, https://geomaps.wr.usgs.gov/parks/province/rockymtn.html, accessed 2018.

Warner, Mark and Margaret Purser, editors
2017 *Historical Archaeology Through a Western Lens*. University of Nebraska Press, Lincoln, Nebraska.

Western Historical Publishing Company
1903 *An Illustrated History of North Idaho Embracing Nez Perce, Idaho, Latah, Kootenai, and Shoshone Counties State of Idaho*. Western Historical Publishing Company.

Appendix A: Key Information

U of I Project Number

UI 2017-01

Location

Kootenai County, Idaho

USGS QUADS

Bayview 4716-h5

Legal Location of Survey

T53N R2W Section 9 NW ¼ of NE ¼ of SE ¼

Project Area

13+ acres

Project Data

Total artifacts recorded: 737, Artifact total with donated artifacts: 802, Collected and analyzed: 451, Donated artifacts analyzed: 65, Surface survey not collected: 31, Metal detection not collected: 83, Feature 3 artifact recording: 172, Tree cores: 2, Samples: 7, Features: 26

Agency

Kootenai County

Report Prepared for

Kootenai County Historic Preservation Commission, JC Smith Grant, and Roderick Sprague Endowment

Repository

Museum at the Brig, Farragut State Park

Project Dates

August 13-17th, 2017

Project Report Date

May 2018

Conducting the survey were U of I Personnel, volunteers from the community, and Kootenai County Historic Preservation Commission members.

U of I personnel:

Idah Whisenant, B.A. Social Sciences, U of I graduate student, project director

Dr. Robert Lee Sappington, Principal Investigator, U of I professor of Anthropology, archaeologist

Renae Campbell, M.A. historic archaeologist, U of I PhD student

Cynthia Hannold, B.A. Anthropology, U of I graduate student

Caroline Herritt, U of I graduate student

Aaron Torres, U of I undergraduate student

Marci Monaco, U of I graduate student

Professional archaeologist/historian volunteers:

Laurie Mauser, M.A., RPA, archaeologist, Kootenai County Historic Preservation Commission

Tom Sandberg, retired USFS archaeologist

Robert Singletary, Historian, Museum of North Idaho, Kootenai County Historic Preservation Commission

Linda Hackbarth, historian, author

Community volunteers:

Michael Dixon, retired doctor, history researcher

Dan Lute, metal detection technician

Russ Brown, Kootenai County Historic Preservation Commission, metal detection technician

Craig Mangham, avocational archaeologist, metal detection technician

Russ Brown, metal detection technician

Bob Ohmstegde, a retired USFS Supervisor, silviculturist

May Dooley

Jim Berube

Appendix B: Artifact Catalogs

Collected Artifacts

Catalog No	Target/OP	Prove-nience	Le-vel	Ma-terial Class	Ma-terial Type	Object Name	Object Descriptor	Object Category	Sprague Code	Count	TPQ/Date Range Begin	TPQ/Date Range End
10KA91/02/28	Surface Collection			Metal						2		
10KA91/03/27	MDS			Metal	Iron/Steel	tool				1		
10KA91/03/55	MDS			Metal	Iron/Steel	can				13		
10KA91/03/95	MDS			Metal		nail						
10KA91/03/96	MDS			Metal		nail						
10KA91/04/78	TU-01	5311118.52303, 5311118.52303 - 116.573519, 47.953142	03	Stone	Basalt					4		
10KA91/04/93	TU-02		02	Stone	Basalt					3		
10KA91/04/94	TU-02		02	Stone	Unknown					1		
10KA91/03/54	MDS			Glass	Container glass	bottle				1	1860	1885
				Glass								
10KA91/02/02	Surface Collection	None		Metal	Lead					1		

10KA91/02/15	Surface Collection	116°34'23.504"W, 47°57'12.538"N		Metal	Iron/Steel	bucket	None	misc. container		1		
10KA91/02/23	Surface Collection	116°34'23.807"W 47°57'11.958"N		Glass						1		
10KA91/04/57	TU-01	5311118.52303, 5311118.52303	03	Organics	Unknown					2		
10KA91/04/60	TU-01	5311118.52303, 5311118.52303	03	Organics						2		
10KA91/04/92	TU-02	-116.573519, 47.953142	02	Stone	Basalt					1		
10KA91/02/25	Surface Collection	116°34'23.807"W 47°57'11.958"N		Metal						1		1980
10KA91/03/53	MDS			Glass	Container glass	bottle	pharmacy or alcohol			1	1860	1885
10KA91/03/62	MDS			Metal	Iron/Steel	button	None	clothing hardware	1A1a	1		
10KA91/03/63	MDS			Metal	Iron/Steel	snap	None	clothing hardware	1A1b	1		
10KA91/03/25	MDS			Metal		clothing hardware	buckle	clothing hardware	1A1f	1		

10KA91/05/28	Collector (Mike Dixon surface survey and MDS)		Organics	Leather	glove	None	clothing	1A4	1	1977	
10KA91/03/15	MDS		Organics	Fabric	shoe	None	footwear	1B	1		
10KA91/03/100	MDS		Multiple	Multiple	boot	None	footwear	1B2	2	1862	1926
10KA91/05/45	Collector (Mike Dixon surface survey and MDS)		Glass	Container glass	bottle	pharmacy	pharmaceutical/medical	1E2a	12		
10KA91/01/12	Ped Survey	116°34'23.2692"W, 47°57'08.8959"N	Glass	Container glass	bottle			1E2a	1	1850	1890
10KA91/01/13	Ped Survey	116°34'23.2692"W, 47°57'08.8959"N	Glass	Container glass	bottle	pharmacy	pharmaceutical/medical	1E2a	1	1890	1920
10KA91/05/24	Collector (Mike Dixon surface survey and MDS)		Glass	Container glass	bottle	pharmacy	pharmaceutical/medical	1E2a	2	1910	1920
10KA91/02/12	Surface Collection	116°34'23.504"W, 47°57'12.538"N	Glass	Container glass	bottle	pharmacy	pharmaceutical/medical	1E2a	1	1933	1980

10KA91/03/97	MDS	-116.573373, 47.952973	Metal	Iron/Steel	pocket knife	None	accoutrement	1I3	1		
10KA91/05/23	Collector (Mike Dixon surface survey and MDS)		Metal	Iron/Steel	lock	None	security	1L2	1	1890	
10KA91/05/25	Collector (Mike Dixon surface survey and MDS)		Metal	Multiple metals	clock	None	time keeping	2A6	1	1876	
10KA91/05/26	Collector (Mike Dixon surface survey and MDS)		Metal	Iron/Steel	clock gear/part	None	time keeping	2A6a	3		
10KA91/05/27	Collector (Mike Dixon surface survey and MDS)		Metal	Iron/Steel	clock gear/part	None	time keeping	2A6a	1		
10KA91/05/01	Collector (Underwater)		Metal	Iron/Steel	stove part	None	stove/heating	2B10a	1		
10KA91/03/56	MDS		Metal	Iron/Steel	can	fruit, vegetable, or milk		2B1b	1	1850	1920

10KA91/03/57	MDS		Metal	Iron/Steel	can	fruit, vegetable, or milk		2B1b	2	1850	1920
10KA91/03/58	MDS		Metal	Iron/Steel	can	fruit, vegetable, or milk		2B1b	2	1850	1920
10KA91/02/16	Surface Collection		Metal	Iron/Steel	can		food/food storage	2B1b	1	1895	1920
10KA91/02/17	Surface Collection		Metal	Iron/Steel	can	fresh beverage	food/food storage	2B1b	1	1895	1920
10KA91/03/19	MDS		Metal	Iron/Steel	can			2B1b	1	1900	
10KA91/03/12	MDS		Metal	Iron/Steel	can		food/food storage	2B1b	1	1925	
10KA91/03/40	MDS		Metal	Iron/Steel	can			2B1b	3	1925	
10KA91/02/14	Surface Collection	116°34'23.504"W, 47°57'12.538"N	Metal	Iron/Steel	can	Coffee	food/food storage	2B1b1	1	1903	1960
10KA91/03/102	MDS		Metal	Iron/Steel	can	coffee	food/food storage	2B1b1	1	1903	1960
10KA91/03/103	MDS		Metal	Iron/Steel	can	milk	food/food storage	2B1b5	1	1885	
10KA91/03/60	MDS		Metal	Iron/Steel	can	milk	food/food storage	2B1b5	1	1885	
10KA91/03/17	MDS		Metal	Iron/Steel	can	milk	food/food storage	2B1b5	1	1890	1910
10KA91/02/18	Surface Collection		Metal	Iron/Steel	can	milk	food/food storage	2B1b5	1	1917	1929

10KA91/01/15	Ped Survey	116°34'25.5774"W, 47°57'08.8021"N	Metal	Iron/Steel	can	milk	food/food storage	2B1b5	1	1935	1945
10KA91/03/28	MDS		Metal	Iron/Steel	can	meat	food/food storage	2B1b7	1		1895
10KA91/03/13	MDS		Metal	Iron/Steel	can	meat	food/food storage	2B1b7	1	1897	
10KA91/05/18	Collector (Mike Dixon surface survey and MDS)		Glass	Container glass	jar	food	food/food storage	2B1c1	1	1917	1938
10KA91/01/14	Ped Survey	116°34'25.5774"W, 47°57'08.8021"N	Glass	Container glass	bottle	food	food/food storage	2B1d1	1	1949	1959
10KA91/05/22	Collector (Mike Dixon surface survey and MDS)		Glass	Container glass	jar	food	food/food storage	2B1d2	1	1920	1960
10KA91/03/06	MDS		Metal	Iron/Steel	stopper/closure	crown cap	food/food storage	2B1d3	1	1894	2017
10KA91/03/71	MDS		Metal	Iron/Steel	stopper/closure	crown cap	food/food storage	2B1d3	1	1984	
10KA91/03/10	MDS		Metal	Aluminum	stopper/closure	crown cap	alcohol	2B1d3	1	2008	

10KA91/05/29	Collector (Mike Dixon surface survey and MDS)		Glass	Table ware	salt/pepper shaker	None	food prep/consumption	2B1f1	1		1920
10KA91/05/21	Collector (Mike Dixon surface survey and MDS)		Metal	Iron/Steel	knife	None	food prep/consumption	2B1f6	1		
10KA91/02/07	Surface Collection	116°34'23.635"W, 47°57'12.446"N	Ceramic	Earthenware, Yellow Ware	crock	None	food/food storage	2B1h2	2	1840	1900
10KA91/02/08	Surface Collection	116°34'23.635"W, 47°57'12.446"N	Ceramic	Stoneware, Buff Bodied				2B1h3 or 2B1h2	1	1890	1900
10KA91/05/16	Collector (Mike Dixon surface survey and MDS)		Ceramic	Earthenware, Whiteware				2B2a	1	1900	
10KA91/02/04	Surface Collection	116°34'23.635"W 47°57'12.446"N	Ceramic	Porcelain, Soft Paste	plate	Food prep/consumption		2B2a1	1		
10KA91/02/09	Surface Collection	116°34'23.504"W, 47°57'12.538"N	Ceramic	Earthenware, Whiteware	plate			2B2a1	1		

10KA91/05/37	Collector (Mike Dixon surface survey and MDS)		Ceramic	Earthenware, Whiteware	plate	Table or supper		2B2a1	1	1820	1900
10KA91/02/21	Surface Collection	116°34'23.807"W 47°57'11.958"N	Ceramic	Earthenware, Ironstone	plate			2B2a1	1	1850	1930
10KA91/02/22	Surface Collection	116°34'23.807"W 47°57'11.958"N	Ceramic	Earthenware, Ironstone	plate			2B2a1	1	1850	1930
10KA91/05/41	Collector (Mike Dixon surface survey and MDS)		Ceramic	Earthenware, Ironstone	plate			2B2a1	1	1890	
10KA91/02/06	Surface Collection	116°34'23.635"W, 47°57'12.446"N	Ceramic	Earthenware, Whiteware	bowl			2B2a2	1	1820	1930
10KA91/05/35	Collector (Mike Dixon surface survey and MDS)		Ceramic	Earthenware, Ironstone	saucer	None	food prep/consumption	2B2a3	1	1901	1915
10KA91/05/36	Collector (Mike Dixon surface survey and MDS)		Ceramic	Earthenware, Ironstone	saucer	None	food prep/consumption	2B2a3	1	1901	1915

10KA91/02/03	Surface Collection	116°34'23.635"W, 47°57'12.446"N		Ceramic	Earthenware, Whiteware	plate			2B2c	1	1820	1930
10KA91/05/38	Collector (Mike Dixon surface survey and MDS)			Ceramic	Earthenware, Whiteware	hollowware	None	food prep/consumption	2B2d	1	1890	
10KA91/05/39	Collector (Mike Dixon surface survey and MDS)			Ceramic	Earthenware, Whiteware	hollowware	None	food prep/consumption	2B2d	1	1890	
10KA91/03/22	MDS			Glass	Container glass	bottle			2C	1	1916	1893
10KA91/04/11	TU-01	5311118.52303, 5311118.52303	01	Glass	Flat glass	window glass	None	architectural/construction	3B1a1	1	1902	
10KA91/04/12	TU-01	5311118.52303, 5311118.52303	01	Glass	Flat glass	window glass	None	architectural/construction	3B1a1	1	1902	
10KA91/02/26	Surface Collection			Ceramic		brick	hard	architectural/construction	3B1d1	1	1902	1933
10KA91/02/29	Surface Collection			Ceramic		brick	hard	architectural/construction	3B1d1	1	1902	1933
10KA91/02/30	Surface Collection			Ceramic		brick	hard	architectural/construction	3B1d1	1	1902	1933
10KA91/03/01	MDS			Metal		nail	common	hardware	3B2a1	1		

10KA91/03/02	MDS	Metal	Iron/Steel	nail	common	hardware	3B2a1	2
10KA91/03/07	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/23	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/24	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/36	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/37	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/38	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/39	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/44	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/45	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/46	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/47	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/48	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/49	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/50	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/65	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/67	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/68	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/69	MDS	Metal		nail	common	hardware	3B2a1	1
10KA91/03/70	MDS	Metal		nail	common	hardware	3B2a1	1

10KA91/03/72	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/73	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/74	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/75	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/77	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/84	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/85	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/86	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/87	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/88	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/89	MDS			Metal	nail	common	hardware	3B2a1	3
10KA91/03/90	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/91	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/92	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/03/93	MDS			Metal	nail	common	hardware	3B2a1	1
10KA91/04/04	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	3
10KA91/04/05	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	1

10KA91/04/06	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/07	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/08	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	7
10KA91/04/09	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	5
10KA91/04/10	TU-01	5311118.52303, 5311118.52303	01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/19	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1
10KA91/04/20	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1
10KA91/04/21	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	12
10KA91/04/22	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1
10KA91/04/23	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1

10KA91/04/24	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	2
10KA91/04/25	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1
10KA91/04/26	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	1
10KA91/04/27	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	7
10KA91/04/28	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	38
10KA91/04/29	TU-01	5311118.52303, 5311118.52303	02	Metal	nail	common	hardware	3B2a1	3
10KA91/04/49	TU-01	5311118.52303, 5311118.52303	03, Feat 01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/50	TU-01	5311118.52303, 5311118.52303	03	Metal	nail	common	hardware	3B2a1	1
10KA91/04/51	TU-01	5311118.52303, 5311118.52303	03	Metal	nail	horseshoe	hardware	3B2a1	1
10KA91/04/52	TU-01	5311118.52303, 5311118.52303	03	Metal	nail	common	hardware	3B2a1	1

10KA91/04/53	TU-01	5311118.52303, 5311118.52303	03	Metal	nail	horseshoe	hardware	3B2a1	1
10KA91/04/79	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/80	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/81	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	nail	common	hardware	3B2a1	1
10KA91/04/91	TU-02	-116.573519, 47.953142	02	Metal	nail	common	hardware	3B2a1	1
10KA91/05/02	Collector (Mike Dixon surface survey and MDS)			Metal	nail	common	hardware	3B2a1	1
10KA91/05/03	Collector (Mike Dixon surface survey and MDS)			Metal	nail	None	hardware	3B2a1	2

10KA91/05/04	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/05	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/06	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/07	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/08	Collector (Mike Dixon surface survey and MDS)	Metal	nail	None	hardware	3B2a1	3

10KA91/05/09	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/10	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/11	Collector (Mike Dixon surface survey and MDS)	Metal	nail	None	hardware	3B2a1	1
10KA91/05/12	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1
10KA91/05/13	Collector (Mike Dixon surface survey and MDS)	Metal	nail	common	hardware	3B2a1	1

10KA91/05/15	Collector (Mike Dixon surface survey and MDS)			Metal		nail	common	hardware	3B2a1	1	
10KA91/03/80	MDS			Metal		spike	None	hardware	3B2a10	1	
10KA91/03/94	MDS			Metal		spike	None	hardware	3B2a10	1	
10KA91/04/82	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal		spike	None	hardware	3B2a10	1	
10KA91/04/90	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	Iron/Steel	screw	wood	hardware	3B2a2b	1	
10KA91/03/43	MDS			Metal	Iron/Steel	nut	square	hardware	3B2a8	1	
10KA91/04/44	TU-01	5311118.52303, 5311118.52303	02	Metal	Non-ferrous	washer	flat	hardware	3B2a8	1	
10KA91/05/40	Collector (Mike Dixon surface survey and MDS)			Metal	Non-ferrous	door fixture	None	hardware	3B2f2	1	
10KA91/03/100	MDS			Metal	Aluminum	cable	None	hardware	3D1a	1	1950

10KA91/05/30	Collector (Mike Dixon surface survey and MDS)	-116.5826, 47.9544		Metal	Iron/Steel	stove part	None	stove/heating	3F	1
10KA91/04/96	TU-01	5311118.52303, 5311118.52303	West Wall Cleaning	Metal	Iron/Steel	stove part	None	stove/heating	3F1	1
10KA91/04/97	TU-01	5311118.52303, 5311118.52303	West Wall Cleaning	Metal	Iron/Steel	stove part	None	stove/heating	3F1	1
10KA91/05/34	Collector (Mike Dixon surface survey and MDS)	-116.5826, 47.9544		Metal	Iron/Steel	stove part	None	stove/heating	3F1	1
10KA91/05/33	Collector (Mike Dixon surface survey and MDS)	-116.5826, 47.9544		Metal	Iron/Steel	horseshoe	None	animal/livestock	4A1a	1
10KA91/05/44	Collector (Mike Dixon surface survey and MDS)	47 57 15.92N, 116 34 57.65 W		Metal	Iron/Steel	horseshoe	None	animal/livestock	4A1a	1

10KA91/05/14	Collector (Mike Dixon surface survey and MDS)	Loading ramp on Beach	Metal	Copper	cartridge	unknown	firearms	5B2	1	1910	
10KA91/05/42	Collector (Mike Dixon surface survey and MDS)		Metal	Unknown	cartridge	rifle	firearms	5B2	1	1937	1950
10KA91/05/43	Collector (Mike Dixon surface survey and MDS)		Metal	Unknown	cartridge	rifle	firearms	5B2	1	1937	1950
10KA91/03/08	MDS		Metal	Lead	bullet	None	firearms	5B2a	1		
10KA91/03/52	MDS		Metal	Iron/Steel?	cartridge	rifle	firearms	5B2d2	1	1866	1873
10KA91/03/51	MDS		Metal	Iron/Steel?	cartridge	rifle	firearms	5B2d2	1	1869	
10KA91/03/20	MDS		Metal		cartridge	rifle	firearms	5B2d2	1	1869	1870
10KA91/03/32	MDS		Metal		cartridge	rifle	firearms	5B2d2	1	1876	1935
10KA91/03/35	MDS		Metal		cartridge	rifle	firearms	5B2d2	1	1952	
10KA91/03/34	MDS		Metal		cartridge	rifle	firearms	5B2d2	2	1953	
10KA91/03/09	MDS		Metal	Brass	cartridge	rifle	firearms	5B2d2	1	1956	
10KA91/03/99	MDS		Metal	Iron/Steel	axe	None	hardware	5H1m	1		

10KA91/04/13	TU-01	5311118.52303, 5311118.52303	01	Synthetic	Slag	slag	None	waste	5I1	2		
10KA91/03/105	MDS			Metal	Iron/Steel	barrel hoop	None	misc. container	5J2a	1		
10KA91/03/29	MDS			Metal	Iron/Steel	barrel hoop	None	misc. container	5J2a	1		
10KA91/03/61	MDS			Metal	Iron/Steel	barrel hoop	None	misc. container	5J2a	1		
10KA91/01/10	Ped Survey	116°34'23.2692"W, 47°57'08.8959"N		Glass	Container glass	bottle	liquor	alcohol	5J4a2	2	1890	1910
10KA91/01/04	Ped Survey	116°34'22.1751"W, 47°57'11.8723"N		Glass	Container glass	bottle			5J4a2	1	1969	
10KA91/01/03	Ped Survey	116°34'26.4178"W, 47°57'11.7824"N		Glass	Container glass	bottle	unknown	unknown	5J4a2	1	1970	
10KA91/01/09	Ped Survey	116°34'23.2692"W, 47°57'08.8959"N		Glass	Container glass	bottle	wine/champagne	alcohol	5J4a2a	1	1850	1920
10KA91/01/07	Ped Survey	116°34'24.3284"W, 47°57'08.9432"N		Glass	Container glass	bottle	beer	alcohol	5J4a2b	1	1957	
10KA91/01/05	Ped Survey	116°34'22.0514"W,		Glass	Container glass	bottle	beer	alcohol	5J4a2b	1	1960	

		47°57'12.2092"N									
10KA91/01/06	Ped Survey	116°34'22.0514"W, 47°57'12.2092"N	Glass	Container glass	bottle	beer	alcohol	5J4a2b	1	1962	
10KA91/01/16	Ped Survey	116°34'23.9198"W, 47°57'10.5944"N	Glass	Container glass	bottle	beer	alcohol	5J4a2b	1	1963	
10KA91/02/20	Surface Collection		Glass	Container glass	bottle	milk	food/food storage	5J4b1	1	1910	1940
10KA91/01/08	Ped Survey	116°34'24.3284"W, 47°57'08.9432"N	Glass	Container glass	bottle	fresh beverage	food/food storage	5J4b1	1	1943	
10KA91/02/31	Surface Collection		Glass	Container glass	bottle	fresh beverage	food/food storage	5J4b1	1	1946	
10KA91/01/17	Ped Survey	116°34'25.0929"W, 47°57'08.8564"W	Glass	Container glass	bottle	fresh beverage	food/food storage	5J4b1	2	1949	
10KA91/01/01	Ped Survey	116°34'24.7322"W, 47°57'12.2418" N	Metal	Iron/Steel	can	Fresh beverage	food/food storage	5J4b2	1	1954	1970
10KA91/02/01	Ped Survey		Metal	Iron/Steel	can	Fresh beverage	food/food storage	5J4b2	1	1954	1970
10KA91/03/05	MDS		Metal	Aluminum	seal	bottle		5J4c1	1	1965	2017

10KA91/03/76	MDS			Metal	Aluminum	seal	bottle		5J4c1	1	1965	2017
10KA91/03/11	MDS			Metal	Aluminum	seal	bottle	alcohol	5J4d	1	1965	
10KA91/03/26	MDS			Metal	Iron/Steel				5K10e	1		
10KA91/04/59	TU-01	5311118.52303, 5311118.52303	03	Mineral	Clinker	clinker	None	waste	5K6	2		
10KA91/04/84	TU-01	5311118.52303, 5311118.52303	04, feat 01	Mineral	Clinker	clinker	None	waste	5K6	1		
10KA91/04/48	TU-01	5311118.52303, 5311118.52303	03, Feat 01	Synthetic	Slag	slag	None	waste	5K6a	3		
10KA91/04/58	TU-01	5311118.52303, 5311118.52303	03	Synthetic	Slag	slag	None	waste	5K6a	10		
10KA91/04/83	TU-01	5311118.52303, 5311118.52303	04, feat 01	Synthetic	Slag	slag	None	waste	5K6a	2		
10KA91/04/37	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	irregular	waste	5K7	1		
10KA91/04/62	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	half link	waste	5K7	1		
10KA91/04/63	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1		

10KA91/04/64	TU-01	5311118.52303, 5311118.52303	03	Metal		scrap metal	unknown	waste	5K7	1
10KA91/04/66	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/72	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/87	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/88	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/89	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/98	TU-01	5311118.52303, 5311118.52303	West Wall Cleaning	Metal	Iron/Steel	scrap metal	unknown	waste	5K7	1
10KA91/04/15	TU-01	5311118.52303, 5311118.52303	01	Metal	Iron/Steel	scrap metal	rod	waste	5K7a	1
10KA91/04/36	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	bar	waste	5K7a	1

10KA91/04/74	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	bar	waste	5K7a	1
10KA91/03/106	MDS			Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/03/18	MDS			Metal	Iron/Steel	barrel strapping ?			5K7b	1
10KA91/04/65	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/04/68	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/04/69	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/04/70	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/04/75	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7b	1
10KA91/04/16	TU-01	5311118.52303, 5311118.52303	05	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K7c	1
10KA91/04/17	TU-01	5311118.52303, 5311118.52303	05	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K7c	1
10KA91/04/31	TU-01	5311118.52303,	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K7c	1

		5311118.52303								
10KA91/04/32	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K7c	1
10KA91/04/34	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K7c	1
10KA91/04/67	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7c	1
10KA91/04/71	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel	scrap metal	unknown	waste	5K7c	1
10KA91/04/38	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	bar	waste	5K8a	1
10KA91/04/39	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K8b	1
10KA91/04/40	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K8b	1
10KA91/04/18	TU-01	5311118.52303, 5311118.52303	05	Metal	Iron/Steel	scrap metal	triangle	waste	5K8c	1
10KA91/04/30	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K8c	1

10KA91/04/33	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K8c	1	
10KA91/04/35	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	flat sheet	waste	5K8c	1	
10KA91/05/20	Collector (Mike Dixon surface survey and MDS)			Metal	Iron/Steel	miscellaneous	None	toy	6A	1	1940
10KA91/03/03	MDS			Metal	Bronze	coin	US	currency	6A1	1	1956
10KA91/03/33	MDS			Metal	Bronze	coin	US	currency	6A1	1	1962
10KA91/03/04	MDS			Metal	Bronze	coin	US	currency	6A1	1	1967
10KA91/03/64	MDS			Metal	Multiple metals	coin	US	currency	6A1	1	1968
10KA91/04/46	TU-01	5311118.52303, 5311118.52303	02	Glass	Unknown				8A	1	
10KA91/04/55	TU-01	5311118.52303, 5311118.52303	03	Glass	Unknown				8A	1	
10KA91/04/56	TU-01	5311118.52303, 5311118.52303	03	Glass	Flat glass				8A	1	
10KA91/04/54	TU-01	5311118.52303, 5311118.52303	03	Glass	Unknown				8A	1	1920

10KA91/03/81	MDS			Glass	Container glass	bottle		8A1	1			
10KA91/03/82	MDS			Glass	Container glass	bottle		8A1	1			
10KA91/03/83	MDS			Glass	Container glass	bottle		8A1	1			
10KA91/04/86	TU-01	5311118.52303, 5311118.52303	04, feat 01	Glass	Container glass			8A1	1		1925	
10KA91/02/13	Surface Collection	116°34'23.504"W, 47°57'12.538"N		Glass	Container glass	bottle		8A1	1	1840	1905	
10KA91/02/19	Surface Collection			Glass	Container glass	bottle		8A1	1	1840	1905	
10KA91/02/24	Surface Collection	116°34'23.807"W 47°57'11.958"N		Glass	Container glass	bottle		8A1	1	1840	1920	
10KA91/01/11	Ped Survey	116°34'23.2692"W, 47°57'08.8959"N		Glass	Container glass	bottle		8A1	1	1870	1910	
10KA91/05/17	Collector (Mike Dixon surface survey and MDS)			Glass	Container glass	bottle	shoe polish/ink/pharmaceutical	8A1	4	1917		
10KA91/01/18	Ped Survey	-116°34'21.5839 W, 47°57'09.8177 N		Glass	Container glass	bottle		8A1	5	1920	1957	

10KA91/05/19	Collector (Mike Dixon surface survey and MDS)			Glass	Container glass	bottle			8A1	1	1920	1960
10KA91/01/02	Ped Survey	116°34'26.6986" W, 47°57'11.6834"N		Glass	Container glass	jar	unknown	misc. container	8A1	1	1930	
10KA91/02/11	Surface Collection	116°34'23.504"W, 47°57'12.538"N		Glass	Container glass	bottle	liquor	alcohol	8A1	2	1933	1980
10KA91/02/10	Surface Collection	116°34'23.504"W, 47°57'12.538"N		Glass	Container glass	bottle		bottle	8A1	1	1934	
10KA91/03/21	MDS			Glass	Container glass	bottle			8A1	1	1940	
10KA91/03/30	MDS			Metal	Iron/Steel	barrel strapping ?			8C	1		
10KA91/03/41	MDS			Metal	Iron/Steel				8C	1		
10KA91/03/42	MDS			Metal	Iron/Steel				8C	1		
10KA91/03/79	MDS			Metal	Iron/Steel				8C	1		
10KA91/03/98	MDS			Metal	Iron/Steel				8C	1		
10KA91/04/01	TU-01	5311118.52303, 5311118.52303	Surface Collection	Metal	Iron/Steel				8C	1		

10KA91/04/02	TU-01	5311118.52303, 5311118.52303	01	Metal	Iron/Steel				8C	1
10KA91/04/03	TU-01	5311118.52303, 5311118.52303	01	Metal	Iron/Steel				8C	1
10KA91/04/41	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel	scrap metal	None	waste	8C	1
10KA91/04/42	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel				8C	1
10KA91/04/43	TU-01	5311118.52303, 5311118.52303	02	Metal	Iron/Steel				8C	1
10KA91/04/45	TU-01	5311118.52303, 5311118.52303	02	Metal	Non-ferrous				8C	1
10KA91/04/73	TU-01	5311118.52303, 5311118.52303	03	Metal	Non-ferrous				8C	1
10KA91/04/76	TU-01	5311118.52303, 5311118.52303	03	Metal	Iron/Steel				8C	1
10KA91/04/85	TU-01	5311118.52303, 5311118.52303	04, feat 01	Metal	Unknown				8C	1

10KA91/05/31	Collector (Mike Dixon surface survey and MDS)	-116.5826, 47.9544		Metal	Iron/Steel	clevis	None	hardware	8C	1	
10KA91/03/66	MDS			Metal		can			8C2	1	
10KA91/03/101	MDS			Metal	Iron/Steel	can			8C2	1	1880
10KA91/03/16	MDS			Metal	Iron/Steel	can			8C2	1	1933
10KA91/03/31	MDS			Metal	Iron/Steel	can			8C2	1	1933
10KA91/03/59	MDS			Metal	Iron/Steel	can			8C2	1	1933
10KA91/03/14	MDS			Metal	Iron/Steel	machine part	unknown	hardware	8C6	1	
10KA91/05/32	Collector (Mike Dixon surface survey and MDS)	-116.5826, 47.9544		Metal	Iron/Steel	ring	None	hardware	8C6	1	
10KA91/03/78	MDS			Metal	Iron/Steel				8C7	1	1947
10KA91/04/14	TU-01	5311118.52303, 5311118.52303	01	Organics	Wood				8G	6	
10KA91/02/27	Surface Collection			Organics	Bone	faunal			8I1	1	
10KA91/03/104	MDS			Organics	Bone	faunal			8I1	1	

10KA91/04/47	TU-01	5311118.52303, 5311118.52303	02	Organics	Bone	faunal			8I1	9		
10KA91/04/61	TU-01	5311118.52303, 5311118.52303	03	Organics	Bone	faunal			8I1	1		
10KA91/02/05	Surface Collection	116°34'23.635"W 47°57'12.446"N		Ceramic	Earthenware, Ironstone	lid	None	unknown	8K	1	1850	1900
10KA91/04/77	TU-01	5311118.52303, 5311118.52303	03	Organics					8S	3		
Total										451		

Bone Catalog

Catalog No.	Provenience	Level	Method of Recovery	Count	Sprague Code	Trail/Operation/Area	Comments and weight
10KA91/02/27			Surface Collection	1	8I1	West "Twitchell Store" MDS area	14/16" thick, diameter at widest point 2 7/16". Burned white. Sawn. Good steak cut. Large mammal. Femur left. 39.6 grams.
10KA91/03/104			MDS	1	8I1	Operation 5: What was possibly historically the saloon, stable, and Lakehouse/hotel? Part 2	1 14/16" thick, diameter at widest point 2 7/16". Sawn. Steak cut. Tender cut, likely. Large mammal scapula. 96.0 grams.
10KA91/04/47	5311118.52303, 5311118.52303	02	TU-01	9	8I1		Partial burn. Unidentified mammal. 5.0 grams.
10KA91/04/61	5311118.52303, 5311118.52303	03	TU-01	1	8I1		Partial burn. Unidentified mammal. 1.8 grams.
Total				12			142.4 grams