



Cultural Resources Investigation for the Strong Heights Subdivision Development Project, Marion County, Oregon

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PREPARED FOR
Ward Development

PREPARED BY
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CULTURAL RESOURCES INVESTIGATION FOR THE STRONG HEIGHTS SUBDIVISION DEVELOPMENT PROJECT, MARION COUNTY, OREGON

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MANAGEMENT SUMMARY

Ward Development, LLC, proposes to construct housing for the Strong Heights Subdivision Development Project on Tax Lot Numbers 83W11A00100, 83W11A002000, and 83W11A00300 at the corner of Old Strong Road and Reed Road SE in Salem, Oregon. The properties will be developed into conventional single-family housing on fee simple lots. Sewer, storm drain, and water utilities will be developed during construction, involving excavation ranging from 24 inches to up to 8 feet below the current ground surface. The project encompasses approximately 4.46 acres of privately owned land in Sections 2, 11, and 12, Township 8 South, Range 3 West, Willamette Meridian, in Marion County, Oregon. Project development is planned to occur in one phase, with work planned to start in fall 2021 and be completed by late spring 2022.

To determine whether cultural resources would be affected by the proposed project, SWCA Environmental Consultants (SWCA) conducted background research and a literature review for the project area. Additionally, SWCA completed archaeological field investigations on August 5 and 6, 2021, that included pedestrian survey and subsurface testing of the project area to determine if subsurface cultural deposits were present in the project area prior to the start of project activities. No significant cultural resources were identified during the field investigations. SWCA archaeologists observed fragments of remnant foundations and debris associated with a 1950s-era house and outbuildings as well as debris associated with the demolition of the Fairview Training Center.

Three archaeological resources had been previously recorded within the immediate project area potentially associated with a mid- to late 1800s farm. SWCA archaeologists were unable to find these archaeological resources and no cultural materials dating prior to the 1950s were observed either on the surface or during subsurface testing. Subsurface testing indicates the stratigraphy within the project area has an upper horizon of mixed native and fill material including debris associated with the Fairview Training Center, the last buildings of which were demolished in 2016. The upper horizon is up to 45 cm deep and is mostly modern. Additionally, the surface is covered with a layer of concrete rubble measuring 30 cm deep. Native soils were observed starting at 45 cmbs though with evidence of disturbance throughout the matrix. Based on these observations, the proposed project-related activities will not impact significant cultural resources.

However, because the Fairview Training Center holds historical importance for the area, and with a now-demolished associated building located within the project area, **SWCA recommends the City of Salem inadvertent discovery plan be followed if cultural resources are encountered during project-related activities.** Further, **SWCA recommends an experienced archaeologist facilitate a pre-construction meeting** with the construction contractor to discuss information on the legal context of cultural resources protection and on the pre-contact, ethnographic, and historical cultural resources that may be present in the construction area.

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INTRODUCTION

Ward Development, LLC, proposes to construct housing for the Strong Heights Subdivision Development Project on Tax Lot Numbers 83W11A00100, 83W11A002000, and 83W11A00300. The project area is located along 2250 Old Strong Road SE in the city of Salem, encompassing approximately 4.46 acres of privately owned land in Sections 2, 11, and 12, Township 8 South, Range 3 West, Willamette Meridian, in Marion County, Oregon (Figures 1 and 2).

Ward Development, LLC, proposes to develop the 29-lot subdivision in one phase, with work planned to start in fall 2021 and be completed by late spring 2022. Housing will be conventional single-family housing on fee simple lots. Depths of the proposed work will vary by task and will follow these parameters: the deepest street cut will be approximately 24 inches, the deepest sewer cut will be approximately 8 feet, the deepest storm drain cut will be approximately 4 feet, and the deepest water line cut will be approximately 4 feet.

REGULATORY CONTEXT

This project is required to comply with state statutes (Oregon Revised Statute [ORS] 358.905–955 and 97.740) that protect archaeological sites, objects, and human remains on both public and private lands in Oregon. Due to the presence of significant cultural resources within 0.5 mile of the project area, the City of Salem requested that a cultural resources assessment be conducted for the project, including contacting the Tribes and conducting archaeological survey and subsurface testing prior to project implementation.

Although the project is located on privately owned land, several previously recorded resources are located within and adjacent to the project area; therefore, an Oregon State Historic Preservation Office (SHPO) Archaeological Permit is required for the project. Per ORS 390.235 and 358.920, a person may not excavate or alter a known archaeological site on public or private lands without first obtaining a permit issued by SHPO. Archaeological Permit (AP-3016) was obtained from SHPO before subsurface testing took place within the project area.

Project Area Description

The Strong Heights Subdivision Development project area encompasses approximately 4.46 acres at the corner of Old Strong Road and Reed Road SE in the city of Salem. The project area is located south of Old Strong Road, and northwest of Reed Road SE. The project area is generally flat with an upper and lower section connected by a very slight west to east slope and an average 8- to 10-foot change in elevation. The upper, western portion of the project area ranges between 240 and 250 feet above mean sea level (amsl) and the lower, eastern portion of the project area is between 224 and 235 feet amsl. The northern boundary is steeply sloped south to north down to Old Strong Road with an average 17-foot change in elevation. The northern ridge elevation is 235 feet amsl and Old Strong Road is 218 feet amsl. The project area is between commercial/industrial properties to the north and residential apartment complexes to the south. The Salem Municipal Airport is 0.48 mile north-northeast of the project area. Mill Creek is approximately 1.2 mile east of the project area.

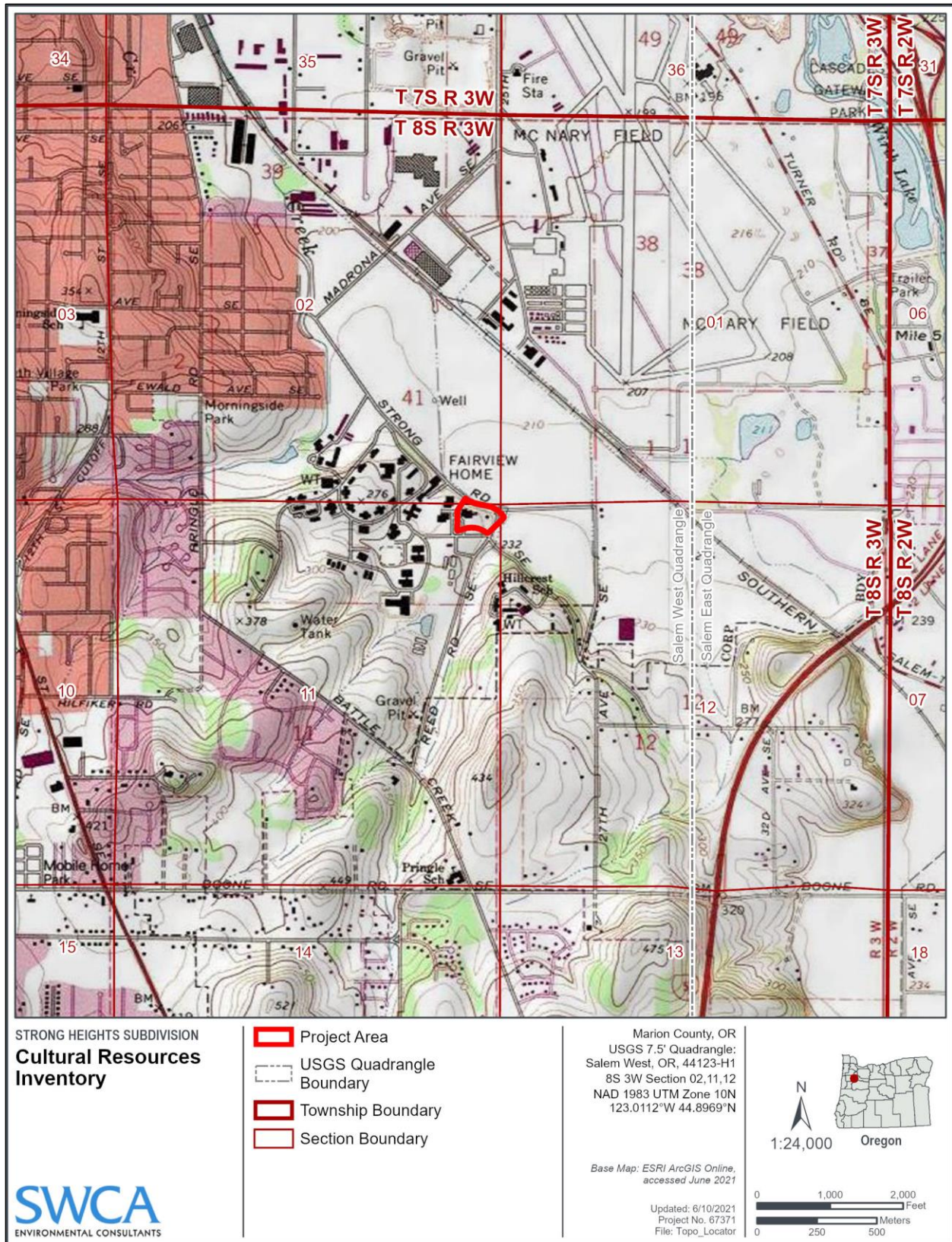


Figure 1. Topographic map showing the project location.



Figure 2. Aerial view of the project area.

ENVIRONMENTAL AND CULTURAL CONTEXT

Environmental Context

Geology and Soils

The project area lies within Oregon's Willamette Valley. The geologic origin of the Willamette Valley began 35 million years ago (mya) when a subducting portion of the oceanic crust became attached to the continental margin, and consequently, the volcanic mountain range moved farther to the east, leaving the attached oceanic crust to be covered by shallow sea water (Hulse et al. 2002). The Coast Range rose when the subducting oceanic plate forced the western edge of the continent upward, forming dry land by 20 mya (Hulse et al. 2002). Basaltic lava flows, ice, floods, and fluvial processes further shaped the Willamette Valley into its contemporary form (Hulse et al. 2002).

According to O'Conner et al. (2001), four distinct Quaternary geologic developments occurred within the Willamette Valley and ultimately created the physiographic region as we know it today. Fluvial sands and gravels deposited between 2.5 and 0.5 mya are the oldest and most widespread surficial deposits in the valley (O'Conner et al. 2001). Additionally, the tectonic lowering of the Willamette Valley led to increased lacustrine and fluvial fill during the period ranging from 420,000 to 12,000 years ago (O'Conner et al. 2001). From around 15,000 to 12,700 years ago floods from Glacial Lake Missoula flowed up the Willamette Valley from the Columbia River, depositing gravel, sand, silt, and clay (O'Conner et al. 2001). Beginning roughly 12,000 years ago, the Willamette River tributaries changed flow regimes, evolving to the incised and meandering rivers that created the floodplains and gravelly channel deposits we know today (O'Conner et al. 2001). The Willamette Valley is now a north-south-oriented valley measuring about 30 km wide and 160 km long with the Cascades and Coast Ranges flanking it to the east and west (Aikens et al. 2011; Franklin and Dyrness 1973:15).

Most of the Willamette Valley's alluvial deposits were deposited by the late Pleistocene Missoula Floods. Glacial Lake Missoula formed when the Clark Fork River was dammed by a portion of the late Pleistocene Cordilleran ice sheet in western Montana. Between 19,000 and 13,000 years before present (B.P.) this glacial dam repeatedly failed, sending cataclysmic floodwaters across the channeled scablands of eastern Washington and down the Columbia River valley to the Pacific Ocean (Benito and O'Connor 2003:624, 637). This ice dam re-formed and failed numerous times, producing an estimated 40 to 89 catastrophic floods that are collectively known as the Missoula floods (also known as the Spokane or Bretz floods) (Benito and O'Connor 2003). The floodwaters were temporarily blocked at various narrow points along the Columbia River valley, causing water to collect behind those constrictions. One such constriction was the Kalama Gap northwest of Portland, which caused water to spill south into the Willamette Valley as far as Eugene (Minervini et al. 2003). The floodwaters that collected in the Willamette Valley reached an estimated maximum height of 400 feet amsl (O'Connor et al. 2001:20) and would have completely inundated the project area at an elevation of roughly 220 feet amsl.

Surficial sediments in the project area are mapped as Willamette silt loam. The Willamette Series consists of very deep, well drained soils that formed in glaciolacustrine deposits. The Ap and AB horizons are typically 13 to 24 inches thick, with the Bt horizon being 33 to 45 inches thick, followed by the C horizon, which is typically present between 53 to 60 inches below the surface (Natural Resources Conservation Service 2021).

Flora and Fauna

Native vegetation within the project area would likely have been typical of the Willamette Valley, characterized by black cottonwood (*Populus trichocarpa*), willow (*Salix* sp.), big-leaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), and Oregon ash (*Fraxinus latifolia*) (Franklin and Dyrness 1973). Current uncultivated areas in the vicinity of the project area contain vegetation such as Douglas-fir (*Pseudotsuga menziesii*), Oregon white oak (*Quercus garryana*), and various grasses and shrubs.

The Willamette Valley contains rich faunal diversity. According to Hulse et al. (2002), there are an estimated 18 native amphibian species, 15 reptile species, 154 bird species, and 69 mammals currently inhabiting the Willamette Valley. Common fauna of this region includes western chorus frog (*Pseudacris triseriata*), California red-legged frog (*Rana draytonii*), non-native bullfrog (*Lithobates catesbeianus*), northwestern salamander (*Ambystoma gracile*), Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), gadwall (*Mareca strepera*), wood duck (*Aix sponsa*), black-tailed deer (*Odocoileus hemionus*), coyote (*Canis latrans*), river otter (*Lontra canadensis*), and racoon (*Procyon lotor*) (U.S. Fish and Wildlife Service 2021). Before they were extirpated due to Euro-American settlement, at least six additional well-known species called the Willamette Valley home: the California condor (*Gymnogyps californianus*), yellow-billed cuckoo (*Coccyzus americanus*), Lewis's woodpecker (*Melanerpes lewis*), black-crowned night heron (*Nycticorax nycticorax*), grizzly bear (*Ursus arctos*), and gray wolf (*Canis lupus*).

Cultural Context

Pre-contact Archaeology

Oral traditions of Pacific Northwest Tribes place them in this area since time immemorial. For thousands of years, taphonomic processes acted on cultural materials people left behind so that archaeological evidence of human occupation of the region in the deep past is rare and isolated. However, there is substantial evidence of human occupation in southeastern Oregon dating to at least ~14,000 years ago, and the archaeological record of the Willamette Valley region indicates people have been successfully thriving and subsisting on this landscape since at least the early Holocene (Aikens 1993; Aikens et al. 2011).

Archaeological evidence of the early Holocene, from 10,000 to 7600 B.P., indicates the people of the Willamette Valley practiced a mobile hunter-gatherer lifestyle, emphasizing both large and small game. At sites such as the Hannavan Creek Site in the southern Willamette Valley, there is also an abundance of evidence for the exploitation of plant resources, including fragments of ground stone implements for grinding plant foods and numerous camas roasting pits (Aikens 1993). Diagnostic stone tools representative of this period includes willow-leaf-shaped Cascade points. Toward the end of this period, thick, large, side-notched points appear, reminiscent of Northern Side-notched style points from the Columbia Plateau and Great Basin regions (Aikens 1993).

The early Holocene is separated from the middle Holocene by an important geologic event seen stratigraphically throughout the Pacific Northwest: the Mount Mazama eruption at approximately 7700 B.P. (Aikens et al. 2011). Archaeological sites of the middle Holocene, dating from 7600 to 1700 B.P., are characterized by the manufacturing of large points similar to the Northern Side-notched type as well as large, stemmed points (Aikens 1993). These projectile points have been associated with the use of atlatl and dart technology elsewhere in Oregon, and they could relate to similar technology within the Willamette Valley as well (Aikens 1993).

The archaeological record of the late Holocene, from 1700 to 200 B.P., is characterized by the manufacture of small, triangular, and stemmed points, marking the adoption of the bow and arrow. These same styles of arrow points continued to be made into the ethnographic/historic period. European materials, such as metal tools and glass beads, start to appear in the archaeological record at the end of this period (Aikens 1993). Sites from this period are more numerous than sites from previous periods and are more widely distributed over the landscape; archaeological evidence from this period shows more regional stylistic variation and implies a growing population (Aikens 1993).

Traditional Lifeways

The Native peoples of the region were recorded by early Euro-Americans as belonging to two bands of the Kalapuyan peoples, the Yamhill to the south and Atfaltoi to the north, though there were many more groups of people throughout the Willamette Valley (Zenk 1990). The peoples of the Willamette Valley were all closely related but differentiated by language dialects (Thompson and Kinkade 1990).

During the winter months, the people of the Willamette Valley occupied permanent villages on the major tributary systems of the Willamette River, around the shores of lakes and other wetlands, and on prairies. Villages consisted of clusters of rectangular houses occupied by one or more families. The house walls were banked on the outside with dirt to provide additional insulation, and the floors were excavated to a depth of 2 to 3 feet below surface (Jacobs 1945; Zenk 1990).

During the drier part of the year, families moved out of the villages and lived in temporary camps near resource-gathering areas; these temporary camps were often nothing more than shelters in a grove of trees or brush windbreaks (Zenk 1990). Western redcedar was used for house planks, posts, beams, and canoes, wherever available, and western hemlock and Douglas-fir saplings were used for poles and weirs. Red alder was used for utensils and dishes, and vine maples were used for small tools (Suttles 1990).

The most important plant food resources to the Kalapuya were camas, tarweed, and wapato. The Kalapuya burned the grasslands every year to maintain an open environment, a practice that likely began thousands of years earlier and created the prairie and oak savanna that was characteristic of the valley (Aikens et al. 2011; Beckham 1977). Other secondary plant resources gathered by the Kalapuya included hazelnuts and various berries. Game resources used by the Kalapuya included small mammals, black-tailed and mule deer, elk, and black bear. Other non-plant foods included lamprey, grasshopper, and certain types of caterpillars. Grasshoppers were gathered from the burned-over prairies, and caterpillars were either pit-roasted or boiled (Zenk 1976, 1990).

The Kalapuyan way of life was greatly affected by European presence in North America, even before Euro-Americans began to settle in the Willamette Valley. In the 1770s, a smallpox epidemic devastated the Native American population of western Oregon, with an estimated mortality rate of 30 percent or more. Further epidemics struck the area through the 1850s, with an outbreak of malaria in the 1830s that killed an estimated 90 percent of the total Kalapuya population. By 1840, only approximately 600 Kalapuyans remained (Boyd 1990). Brown (1977–1978) describes a horrific measles outbreak in 1847, affecting the Chemeketa and Chemawa people residing in their winter camp located at the northern edge of Marion Square in Salem, extending south to Mill Creek. Brown (1977–1978) states that because of the disease outbreak, nearly half of the residing Chemeketa and Chemawa lost their lives and were buried “in the flat above the Capitol Lumbering Mill” (Brown 1977–1978:30).

One of the first recorded contacts between Kalapuyans and Euro-Americans took place in 1812, when a Pacific Fur Company expedition, led by Donald Mackenzie, scouted the Willamette Valley for fur resources (Mackie 1997). By the 1830s, the first Euro-American settlers and missionaries had arrived in the Willamette Valley and established permanent settlements. Euro-American settlement of the region

increased, and by the early 1850s, the Native groups of the valley signed a series of treaties in which they ceded ownership of most of their traditional lands to the U.S. government (Beckham 1990; Mackey 2004). Many of the Native Willamette groups were removed to the Grand Ronde Reservation, where their descendants still live today (Zenk 2019).

Historical Background

EURO-AMERICAN SETTLEMENT

The historic period in the Willamette Valley began with the arrival of trappers and traders from the United States, Europe, and Canada in the first decades of the nineteenth century. John Jacob Astor's Pacific Fur Company sent the first Euro-American expeditions to the Willamette Valley in the early 1810s; these groups explored as far as the southern part of the valley, trapping for furs and trading with Native peoples along the way (Beckham et al. 1981:193). The Pacific Fur Company later sold its Willamette Valley operations to the Montreal-based North West Company, which in turn merged with the Hudson's Bay Company in 1821. The Hudson's Bay Company continued to expand its fur trapping activities in the Willamette Valley along with exploration of the region (Beckham et al. 1981).

Euro-Americans began to settle in the Willamette Valley in the early 1840s. Word of the valley's rich soils and moderate climate quickly spread, inspiring others to make the overland journey from the eastern United States. Most of the migrants arrived in the valley by way of the Oregon Trail, generally departing from Missouri and crossing to The Dalles, where they then traveled down the Columbia River or travelled overland to the Willamette Valley (Bassett et al. 1998). Others chose to travel via the Applegate Trail, which forked off from the California Trail in Nevada and provided a southern route into the Willamette Valley (Marschner 2008).

At the time that Euro-Americans first settled in the Willamette Valley, the Oregon Territory was officially occupied jointly by the United States and Great Britain, an arrangement that lasted from 1818 to 1846. In 1843, settlers of the Willamette Valley area met at Champoege to form a provisional government and create laws (Corning 1956). After the United States took control of the Willamette Valley, thousands of additional settlers were drawn to the valley with the passage of the Donation Land Claim Act of 1850. This law promised male U.S. citizens up to 320 acres of land (or 640 acres for married couples) if they lived upon a parcel for 4 years and made improvements to it (Oregon History Project 2018).

Euro-American Settlement and the City of Salem

The Willamette Valley was one of the primary destinations for the first Euro-American settlers in the Pacific Northwest. In the 1830s, the first Euro-Americans arrived in what is now Salem. Reverend Jason Lee established the Willamette Mission just north of present-day Salem, with the first log buildings constructed in 1834. In 1841, Lee built a two-story house along Mill Creek and named the new settlement Chemeketa. The settlement was later purchased by William H. Willson and renamed Salem (Lewis 2021). The Jason Lee house was the first non-Native settlement in the region and one of the earliest Euro-American settlements in Oregon (Lewis 2021). Lee established the Methodist Mission Great Reinforcement, located near the Kalapuyan village of Tchimikiti, with the goal of converting Native peoples to Christianity (Lang 2018a). The Methodist mission brought many Euro-American families to the region in 1840 to assist with this goal (Lang 2018a; Lewis 2021). Among those arrivals was Gustavus Hines, who was instrumental in the creation of the Oregon Institute in 1842, which eventually became Willamette University (Lang 2018b).

Beginning in 1841, the population of the Willamette Valley and city of Salem increased greatly due to the arrival of the thousands of migrants traveling the Oregon Trail. This influx of migrants rapidly transformed the mission into an urban city. William H. Willson, the “founder” of the city of Salem, platted the town in 1846. Salem became the territorial capital in 1851, and by 1864 it was the official state capital (Lewis 2021).

Historical Land Development in and Around the Project Area

SWCA archaeologists reviewed historical documents, General Land Office (GLO) maps, and historical aerial images to better understand the history of land use in the project area.

The 1852 GLO cadastral map (Figure 3) shows two homesteads within 0.25 mile of the project area. Approximately 380 feet northwest of the project area, a field in the southeast quadrant of Section 2, Township 8 South, Range 3 West is identified as belonging to Joseph E. Parrot. Approximately 1,200 feet to the east of the project area a field is identified as belonging to Enoch Garrison. The Parrot house once stood approximately 0.3 mile to the northeast of the project area and the Garrison house stood approximately 0.7 mile to the southeast of the project area. Currently commercial properties and an industrial park occupy these areas. An unidentified road runs north-south through the eastern half of Section 12 (GLO 1852). The GLO cadastral map also indicates a north-south road approximately 1.25 miles northwest of the project area that aligns with present day Liberty Road S.

An 1878 Metsker Map (Figure 4) shows the project area was within the Payne family plat in the northeast quadrant of Section 11. A house is located approximately 0.17 mile south of the project area within the Payne family plat (Historic Map Works 2021). Currently, a residential apartment complex occupies much of what was the Payne plat outside the project area.

In 1907, the land immediately to the west and northwest of the project area became home to the State Institution for the Feeble-Minded. By 1908, the first patients began arriving as transfers from the Oregon State Hospital (Pomeroy 1968). Between 1909 and 1915 there were 29 documented burials on the property. It is possible more burials occurred from 1911 to 1915 due to an administrative change in filing procedures (Darby 2004). The original institution consisted of an administration building, a laundry, a boiler, and a dormitory (Oregon Secretary of State Archives 2020). During the following years, nine cottages were built and a section of land was cleared for farming purposes. The institution underwent improvements and name changes through the 1930s and 1940s. In 1965 it became the Fairview Hospital and Training Center, which was eventually changed to Fairview Training Center. Agricultural use was subsequently phased out and by the late 1970s all the farming elements of the property were removed.

SWCA also conducted a review of historical aerial imagery dating from 1954 through 2020 (Historic Aerials 2021). Aerial photography from 1954 and 1955 depicts a farmhouse in the northeast corner of the project area with three outbuildings. The aerials also indicate the eastern end of the project area had been graded with a driveway and access roads by this time. The footprint of the 1950s-era farm indicates how extensively it dominated the landscape of the eastern half of the project area (Figure 5). A main road running north-south along the eastern boundary of the project area predates modern-day Reed Road, which was not constructed until after 1994. Google Earth aerial imagery shows the main road transecting the eastern end of the project area in March 1994 (Figure 6). By September of 2000, Reed Road had been constructed, reshaping the intersection with Old Strong Road (Figure 7). Notably, two fire hydrants currently on the property reflect this redirection of traffic. One hydrant dated 1990 is located near the old road prior to the construction of Reed Road and the second hydrant dated 2010 currently located along the northwest side of Reed Road (Figure 8). The land between the project area and the hospital grounds to the west appears open and agricultural during the 1950s. The southern- and easternmost outbuildings were removed some time between 1955 and 1967.

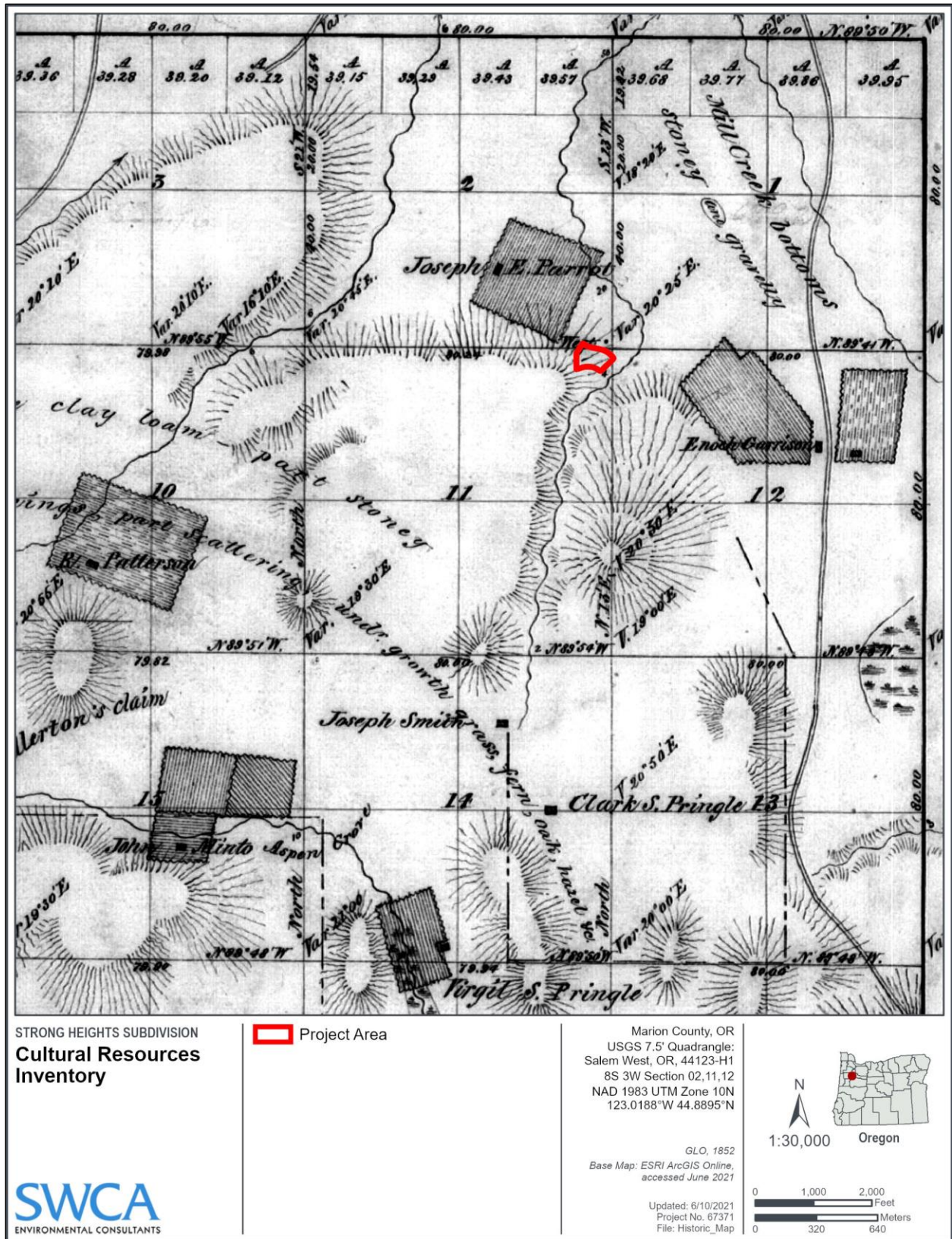


Figure 3. GLO map, 1852, showing the project area (GLO 1852).

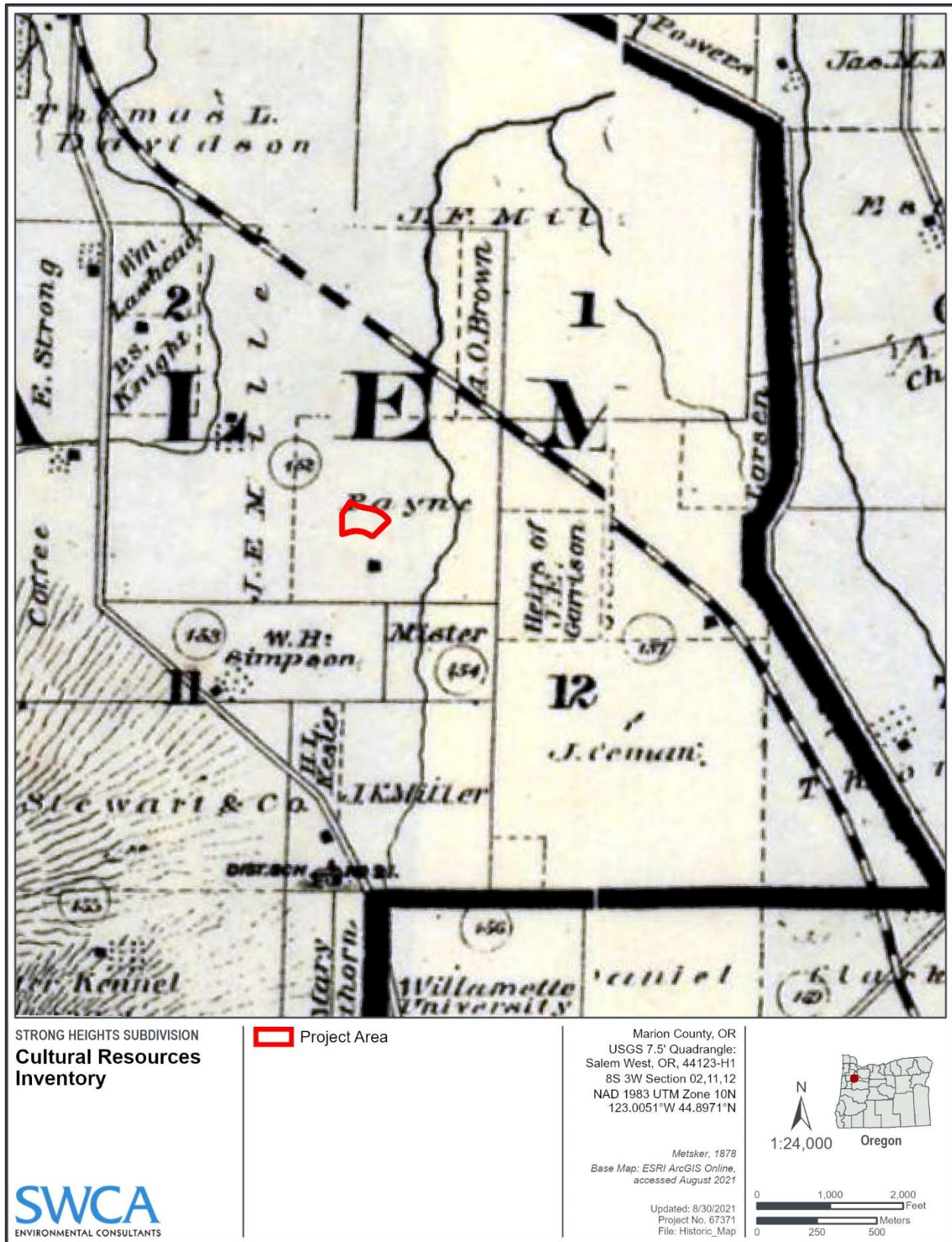


Figure 4. Metsker map, 1878, showing the project area.



Figure 5. Footprint of 1950s house and outbuildings in relation to current project area: a. house, b–e. outbuildings, f. graded surfaces and roads, based on aerial imagery from Google Earth (2020).

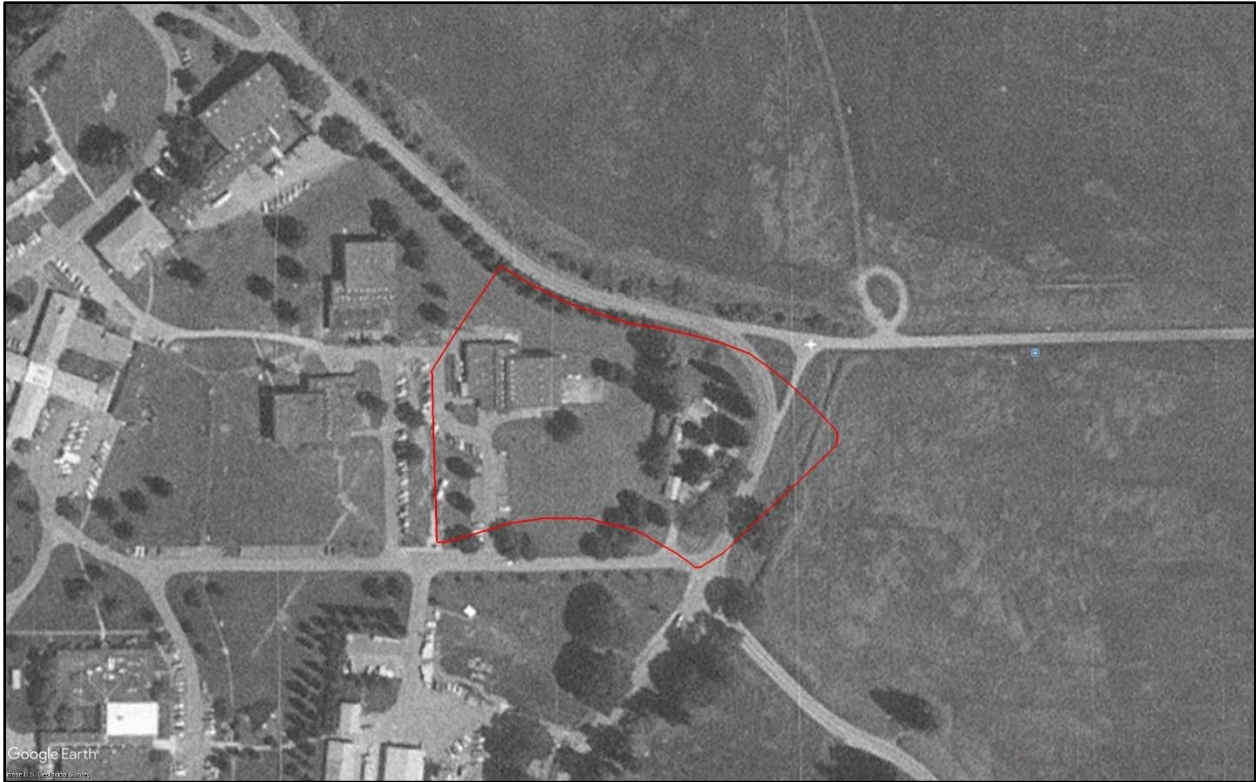


Figure 6. Historical aerial imagery from 1994 showing original roads layout (Google Earth 1994).

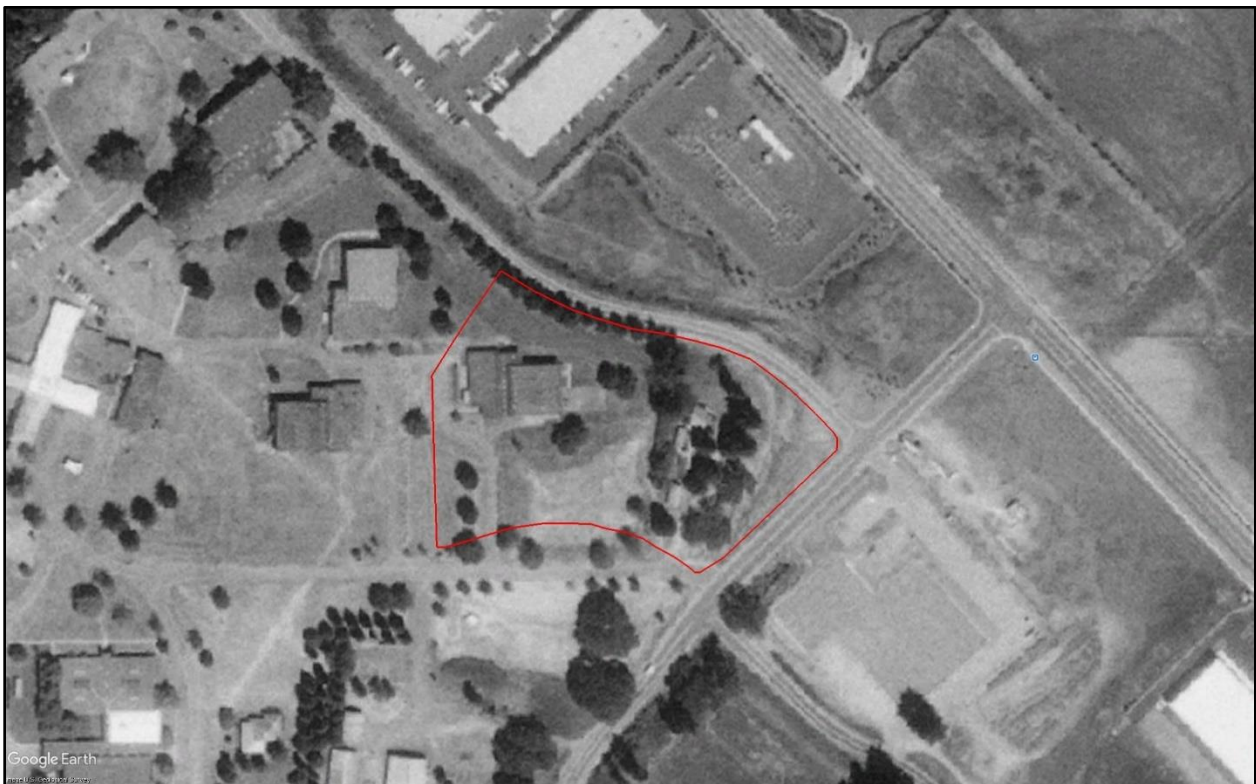


Figure 7. Historical aerial imagery from 2000 showing new Reed Road and Old Strong Road intersection (Google Earth 2000).



Figure 8. Modern aerial imagery of the project area, 2020, depicting the two fire hydrants (yellow squares) located associated with old and new roads (Google Earth 2020).

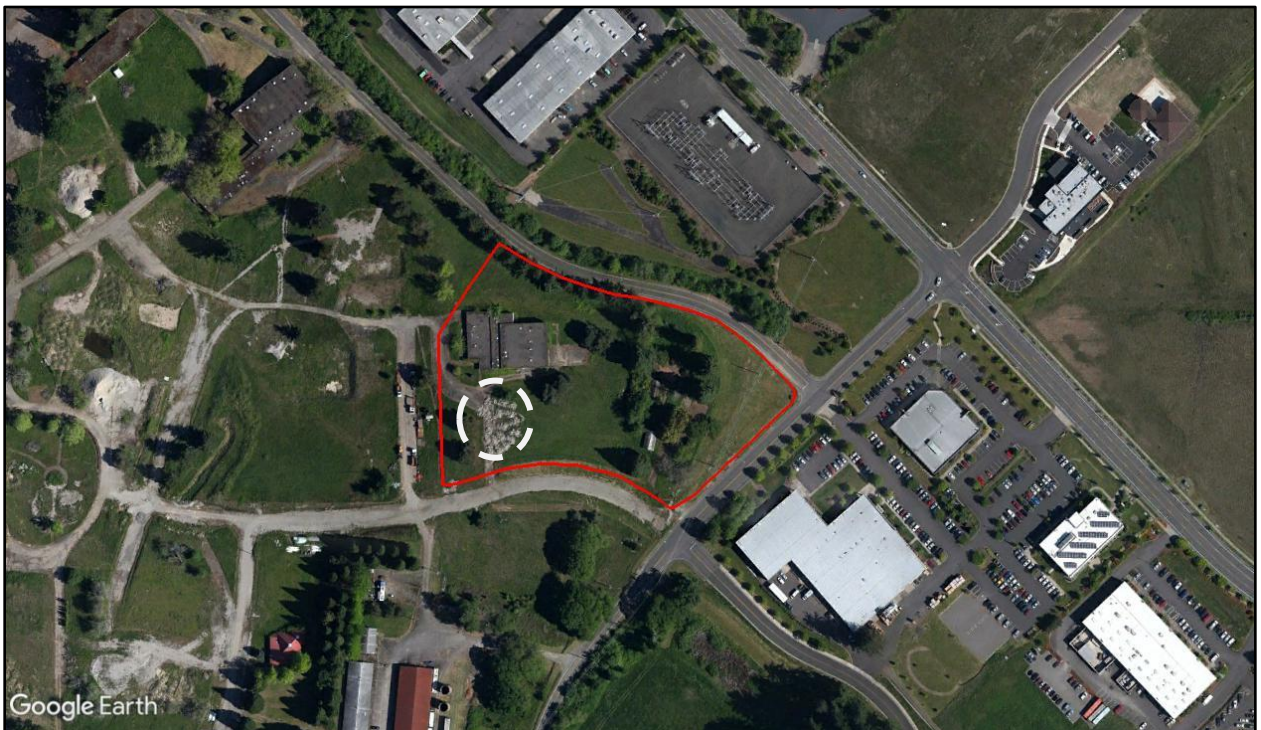


Figure 9. Aerial imagery of the project area, 2013. Note rubble piles in the southwest corner (Google Earth 2013).

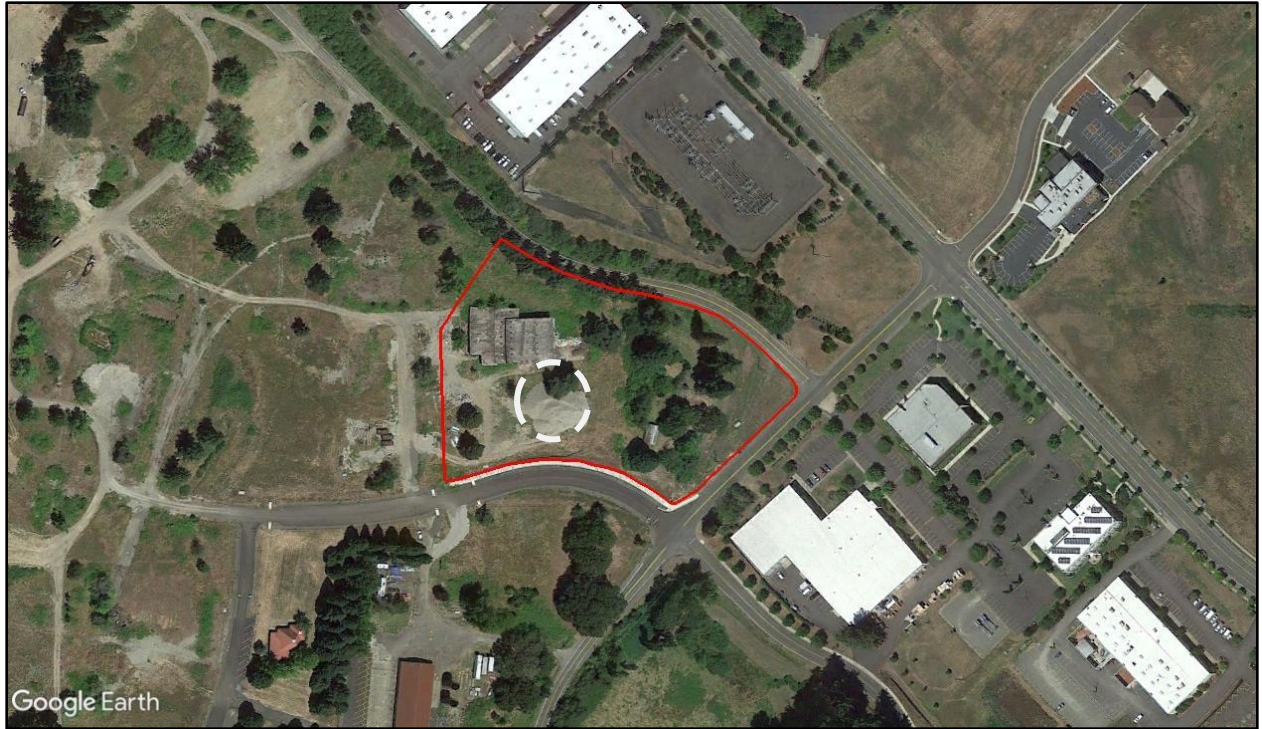


Figure 10. Aerial imagery of the project area, 2016. Note gravel pile in south center of project area (Google Earth 2016).

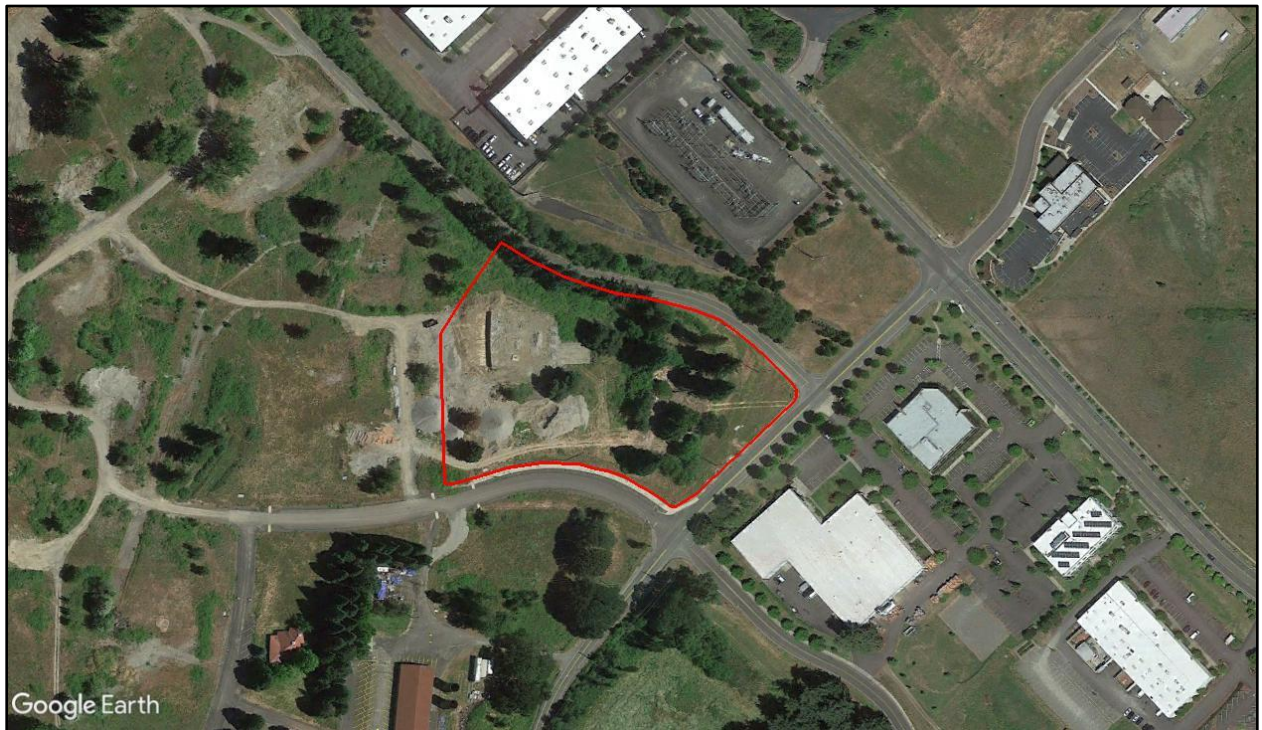


Figure 11. Aerial imagery of the project area, 2017. Note that all structures have been demolished (Google Earth 2017).



Figure 12. Modern aerial imagery, 2020 showing extensive grading of the project area, along with cobbles and debris spread across the property (Google Earth 2020).



Figure 13. Google Street View photograph, 2014, showing utility construction in the southeast corner of the property (Google Maps 2014).

In the 1960s, the state hospital expanded into the project area. By 1967, aerial photographs show the agricultural field had been transformed into hospital grounds with a building and a driveway accessing what is now Strong Road.

The hospital was closed on March 1, 2002. Aerial photography indicates that demolition of structures occurred between 2012 and 2017 (Figures 9 through 12). In 2012, piles of concrete rubble appear within the southwest corner of the project area. Paved areas were removed, though not entirely, during this time as well. The debris piles were spread throughout the project area by 2019. In 2014, extensive utilities construction occurred in the eastern half of the project area that raised the elevation of the ground, especially in the southeastern corner (Figure 13). By 2017, the hospital building in the western half of the project area was demolished. The 1950s-era farmhouse and remaining outbuildings were demolished by 2017 as well.

BACKGROUND RESEARCH

Previous Cultural Resource Studies and Results

To gain more understanding for archaeological conditions in and near the project area, SWCA archaeologists reviewed records from the Oregon SHPO online records database (OARRA) to inventory the types of cultural resources previously recorded in or near the project area, and to determine if any cultural resource surveys have been conducted in the vicinity of the project area (Table 1). There have been 23 previously conducted cultural resources studies within 1 mile of the project area. A total of three previously conducted studies overlap the project area (Ellis 1994; Darby 2004, 2007).

Ellis’s (1994) survey and testing program included the area just north and east of the current project area and extended to the northwest, northeast, east, and southeast of the current project area. Several resources were recorded and updated as a result of this survey and testing effort (see section below). Darby’s (2004) survey included the current project area and extended to the west and south; several archaeological sites and isolated finds were recorded and updated during this survey including three resources located within the project area (see section below). Darby (2007) also conducted a remote sensing study that overlapped the project area and identified three possible locations for the historic-period Feeble Minded Cemetery, all of which are at least 0.25 mile south of the project area.

Table 1. Previous Cultural Resources Investigations in and Within 0.5 mile of the Project Area

SHPO No.	Methods	Survey Project Citation	Distance from Project Area	Resources Within 0.5 Mile of Project Area
14618	Literature review, pedestrian survey, subsurface testing	Cultural Resource Evaluation of the Proposed Fairview Industrial Park, Salem, Oregon. <i>Ellis 1994</i>	Overlaps	35MA142, 35MA144, IS-93/125-1, IS-93/125-5, IS-93/125-7
19012	Literature review, pedestrian survey, subsurface survey	Archaeological Cultural Resources Inventory and Assessment – Fairview Training Center. <i>Darby 2004</i>	Overlaps	35MA142, 35MA193, 35MA194, 35MA195, ISO-1, ISO-2, ISO-3, ISO-4, ISO-5

Cultural Resources Investigation for the Strong Heights Subdivision Development Project, Marion County, Oregon

SHPO No.	Methods	Survey Project Citation	Distance from Project Area	Resources Within 0.5 Mile of Project Area
24555	Remote sensing	Cultural Resources Remote Sensing Report for the Cemetery for the Feeble Minded and the Cary Family Cemetery <i>Darby 2007</i>	0.29 mile NW and 0.3 mile SW	None
23693	Literature review, pedestrian survey, subsurface survey	Cultural Resources Investigation of the Northern Section of the Simpson Hill Development Site, Marion County, Oregon <i>Hale and Roulette 2010</i>	0.2 mile SW	None
16758	Literature review, pedestrian survey, subsurface survey	Cultural Resources Survey of Level 3's Proposed Fiber Optic Line from Eugene to Portland, Oregon. <i>Fagan, Chapman, Zehendner, Kritzer, Reese, Ball, and Mills 1998</i>	0.25 mile NE	None
20805	Damage Assessment	Summary of AARs Damage Assessment of Archaeological Sites 35MA142 and 35MA193 at the Pringle Creek Community Development Site, Salem, Oregon. <i>Roulette 2007</i>	0.26 mile NW	35MA142, 35MA193
22415	Literature review, pedestrian survey, subsurface survey	Archaeological Survey of Part of the Simpson Hill Development Site, Marion County, Oregon <i>Hale and Roulette 2009</i>	0.4 mile SW	35MA277
1292	N/A	Personal notes on artifact possession – Unknown author	0.45 mile W	None
13616	Pedestrian survey, subsurface testing	Cultural resource investigations at the proposed Pringle Road Middle School Site, Salem, Oregon. <i>Burnett and Fagan 1993</i>	0.5 mile W	None
28612	Construction monitoring	Cultural Resources Monitoring Report: City of Salem CWPTC Project <i>McClintock and Sheldon 2016</i>	0.6 mile E	None
27476	Literature review, pedestrian survey, subsurface survey	Cultural Resources Survey for the Kuebler Boulevard Widening Project <i>Dinwiddie and Perrin 2015</i>	0.7 mile S	None
7554	Pedestrian survey, subsurface survey	Cultural Resource Overview and Inventory of the Hayesville Interchange-Battle Creek Interchange Pacific Highway, Marion County, Oregon. <i>Minor and Beckham 1986</i>	0.75 mile SE	None
8981	Subsurface testing	Data Recovery Plan: Mill Creek Prehistoric Site Complex, Interstate 5 and Santiam Highway Interchange, Marion County, Oregon. <i>Minor 1988</i>	0.75 mile SE	None
21168	Literature review, pedestrian survey	Archaeological Survey of Bridge 07440A (Interstate 5 over the Union Pacific Railroad at Milepoint 252.13), Marion County, Oregon. University of Oregon Museum of Natural and Cultural History Research Report No. 2007-024 <i>Cabebe 2007</i>	0.75 mile SE	None
21172	Literature review, pedestrian survey	Archaeological Survey of Bridge 07441A (Interstate 5 over Marietta Street SE at Milepoint 251.79), Marion County, Oregon. University of Oregon Museum of Natural and Cultural History Research Report No. 2007-027 <i>Cabebe 2007</i>	0.75 mile SE	None
21173	Literature review, pedestrian survey	Archaeological Survey of Bridge 07538A (Interstate 5 over Boone Road SE at Milepoint 251.34), Marion County, Oregon. University of Oregon Museum of Natural and Cultural History Research Report No. 2007-028 <i>Cabebe 2007</i>	0.75 mile SE	None

SHPO No.	Methods	Survey Project Citation	Distance from Project Area	Resources Within 0.5 Mile of Project Area
5809	Pedestrian survey	Report on the archaeological survey of the proposed South Commercial-North Santiam Highway Project, Marion County. <i>Pettigrew 1984</i>	0.8 mile S	None
6353	Pedestrian survey	Report on the additional archaeological survey of the proposed South Commercial-North Santiam Highway Project, Marion County. <i>Pettigrew 1984</i>	0.8 mile S	None
6354	Pedestrian survey, subsurface survey	Archaeological Reconnaissance of the Salem Parkway, Marion County, Oregon. <i>Pettigrew 1985</i>	0.8 mile S	None
15114	Literature review, pedestrian survey, subsurface survey	Archaeological Testing and Evaluation of The Pringle Creek Site, 35MA136. <i>Ozbun and Fagan 1996</i>	0.8 mile W	None
21109	Literature review, pedestrian survey	Archaeological Survey of the Proposed I5 @ Kuebler Interchange Project, Marion County (ODOT Key No. 14054, Museum report 2007-010). <i>Connolly 2007</i>	0.8 mile SE	None
26658	Literature review, pedestrian survey, subsurface survey	Cultural Resource Survey for the Madrona Avenue / 25th Street SE Improvement Project, Marion County, Oregon <i>Davis, Perrin, and Punke 2014</i>	0.8 mile N	None
27371	Literature review, pedestrian survey, subsurface survey	Additional Cultural Resource Survey for the Madrona Avenue / 25th Street SE Improvement Project, Marion County, Oregon Memorandum <i>Davis 2015</i>	0.8 mile N	None
25068	Literature review, pedestrian survey, subsurface survey	Cultural Resource Survey for the SE Kuebler Boulevard Development Project Marion County, Oregon <i>Windler and Held 2012</i>	0.9 mile S	None

Note: All documents are available in OARRA.

The OARRA database indicates there are three previously identified archaeological resources, including one site and two isolates, within the project area (Table 2). An additional 21 resources have been previously recorded within 0.5 mile of the project area, consisting of eight prehistoric sites, one historic-period site, nine isolated finds, and three possible locations of the historic-period Feeble Minded Cemetery (see Table 2).

One multicomponent archaeological site located within the project area, 35MA195, was identified during cultural resources investigations by Darby (2004). Darby (2004) also recorded two isolates within the project area. ISO-2 is composed of three fire cracked rocks, and ISO-3 is a flow blue ceramic fragment that dates to the turn of the nineteenth to twentieth century and was found in an isolated context in spite of good visibility due to mole hills. Darby (2004) also recorded and updated records for several resources within 0.5 mile, of the current project area including five prehistoric sites, two of which are lithic scatter and campsites, two are rock cairn sites, and one is a petroglyph site; two additional historic-period isolated finds and one multicomponent isolated find; and three possible locations for the historic-period Feeble Minded Cemetery.

Ellis conducted an extensive survey north of the project area in 1994 and recorded and updated records for two sites and three isolated finds within 0.5 mile of the project area. Site 35MA144 is roughly 0.04 mile east of the project area and was recorded by Ellis (1994) as a prehistoric lithic scatter and possible campsite due to the presence of fire-modified rocks. Test excavations revealed that artifacts had been

disturbed by agricultural activities and resulted in site dimensions of 100 m (N-S) × 70 m (E-W). Test excavations at 35MA142 revealed several intact strata and produced 101 artifacts with two obsidian hydration readings suggesting a Late Archaic date for the site of less than 1,100 years ago (Ellis 1994).

The remainder of the previously recorded archaeological sites are more than 0.25 mile from the project area (Table 2) and will not be affected in any way by the current project. There are no built environment resources within the project area, however two historical properties are within 1 mile of the project area (Table 3).

Table 2. Archaeological Sites Within Approximately 0.5 Mile of the Project Area

Resource No.	Type	Description	NRHP Eligibility	Distance from Project Area
35MA195	Multi-component site	Cartwright/Payne House Site	Unevaluated	Within
ISO-2	Prehistoric Isolate	Fire-modified rock	Not eligible	Within
ISO-3	Historic-period isolate	Ceramic fragment	Not eligible	Within
35MA144	Prehistoric	Lithic scatter	Not eligible	0.04 mile E
93/125-5	Prehistoric isolate	Six flakes	Not eligible	0.11 mile NE
ISO-1	Historic-period isolate	Window glass	Not eligible	0.12 mile NW
ISO-5	Multicomponent isolate	Historic refuse and 1 flake	Not eligible	0.23 mile NW
N/A	Historic-period	Possible location for Feeble Minded Cemetery	Unevaluated	0.25 mile SW
35MA142	Prehistoric	Lithic scatter and camp site	Unevaluated	0.26 mile NW
N/A	Historic-period	Possible location for Feeble Minded Cemetery	Unevaluated	0.27 mile S
Site 4	Prehistoric	Rock cairn	Unevaluated	0.28 mile S
Site 3	Prehistoric	Rock cairn	Unevaluated	0.3 mile S
IS-93/125-7	Prehistoric isolate	Notched net weight	Not eligible	0.3 mile N
AAR 979-1i	Prehistoric isolate	CCS flake	Not eligible	0.31 mile S
N/A	Historic-period	Possible location for Feeble Minded Cemetery	Unevaluated	0.33 mile SW
35MA193	Prehistoric	Lithic scatter	Unevaluated	0.34 mile NW
ISO-4	Historic-period isolate	Flat head nails	Not eligible	0.34 mile SW
AAR 790-3i	Prehistoric isolate	2 CCS flakes	Not eligible	0.36 mile S
35MA13	Prehistoric	Lithic scatter	Unevaluated	0.38 mile NE
IS-93/125-1	Multicomponent isolate	Lithic scatter and ceramic fragment	Not eligible	0.4 mile NW
35MA194	Prehistoric	Rock art – petroglyph on boulder	Unevaluated	0.43 mile SW
35MA136	Prehistoric	Lithic scatter	Unevaluated	0.46 mile W
35MA277	Historic-period	Refuse scatter/possible homestead	Unevaluated	0.46 mile S
AAR 790-4i	Prehistoric isolate	Projectile point and flake	Not eligible	0.48 mile S

Note: CCS = cryptocrystalline silicate; NRHP = National Register of Historic Places.

Table 3. Built Environment Resources Adjacent to the Project Area

SHPO No.	Property Address	Build Date	NRHP Eligibility	Distance from Project Area
649412	2450 Strong Rd SE, Salem, OR	1950	Eligible/contributing	0.16 mile S
654042	1361 Kipling Cr SE, Salem, OR	1910	Non eligible/non-contributing	0.86 mile NW

Archaeological Expectations

Prior to fieldwork, SWCA formulated expectations for the archaeological sensitivity of the project area. SWCA based these expectations on a review of the background information presented above, including the geomorphology and hydrology of the project area; the pre-contact and historic-period context of the vicinity, with information on the types, ages, and contents of previously recorded sites; and consideration of more recent disturbances that may have impacted cultural resources (e.g., landform alteration).

The project area is expected to have remnants of the demolition of the Fairview Training Center hospital building and a 1950s-era residential house. Historic-period resources may include isolated implements related to the hospital and domestic remains from historic-period debris scatters or refuse dumps. More specifically, typical markers of residential historical activity, dating prior to the 1960s, include milled lumber, masonry features, concrete, glass, ceramic, brick, metal fragments, bottles, nails, wire, or other evidence of early historical occupation. As noted in the previous section, one multicomponent archaeological site was previously identified by Darby (2004) within the project area. Darby (2004) documented the Cartright/Payne House Site, 35MA195, by the presence of window glass possibly dating to 1850 to 1860 (Darby 2004). No other artifacts or structures were identified by Darby as being associated with the Cartright/Payne House. Additionally, Darby (2004) identified isolate ISO-3, a flow blue ceramic fragment that dates to the early 1900s. The location of this ceramic fragment near mole hills suggests it may have been in secondary depositional context.

Based on the background research and assessment of the project area using historical and modern aerial imagery, the likelihood of encountering intact pre-contact cultural deposits within the project area was considered low due to substantial disturbances resulting from the construction and eventual demolition of the hospital building and residential house. Darby (2004) identified a cryptocrystalline silicate (CCS) core fragment and a possible basalt flake within 35MA195. Further, Darby (2004) also identified one possible pre-contact isolate ISO-2, consisting of three pieces of fire-modified rock. All materials identified during Darby's (2004) survey appear to have been exposed during construction of the 1950s residential house.

Based on the above factors along with the previously conducted cultural resources investigations completed near the project area, the probability of encountering historic-period artifacts was considered moderate, while any pre-contact archaeological resources identified would likely be identified in secondary or otherwise disturbed context. However, archaeological materials possibly associated with pre-contact activities might include concentrations of lithic debris from stone tool manufacturing activities, discarded shell and/or faunal bone, fire-modified rock, flaked or ground stone tools, burned earth, fragments of cordage or fiber, charcoal, ash, and non-local rocks and minerals.

TRIBAL COORDINATION

On June 14, 2021, letters were sent via email to the Confederated Tribes of Grand Ronde, the Confederated Tribes of Siletz Indians, and the Confederated Tribes of the Warm Springs Reservation in Oregon, informing them of the project and asking if they had any questions or concerns about potential cultural resources in the project area. The archaeological permit application for AP-3136 was also reviewed by the Tribes listed above. Additionally, on August 4, 2021, SWCA staff notified the Tribes (via email sent to the representatives from their cultural resources departments) of when SWCA's field crew was scheduled to conduct fieldwork so they could attend if interested.

METHODS

Archaeological Investigations

The archaeological field investigations followed Oregon SHPO guidelines and the AP-3139 permit conditions. The field methods included a pedestrian survey and subsurface testing of the entire 4.46 acres of the project area. Observations about topography, vegetation, surface visibility, and disturbances were recorded in the project field notebook. Overview and close-up photographs were taken, and each photograph was recorded on a standardized photo log.

Subsurface testing involved shovel probes (SPs) measuring approximately 30 cm in diameter, and all sediments excavated from the SPs were screened through ¼-inch hardware mesh screens. SWCA staff excavated each SP to a minimum of 50 cm below surface (cmbs). Attempts were made to hand auger SPs to depths of 100 cmbs. Measurements of SP depths were rounded to the nearest centimeter. Soils and sediments were thoroughly documented, and the SPs were then backfilled.

The layout for SP testing was based on the location of archaeological site 35MA195, the project area terrain, and previous ground-disturbing activity associated with building demolition and utility placement. SPs 1 through 7 were placed at the northeast end of the project area where historic-period artifacts were observed by Darby in 2004 and described as material from the Cartwright/Payne house. A large asphalt driveway and concrete parking pad covered much of the project area associated with the Cartwright/Payne house. SPs 8 and 9 were placed on the southeastern end of the project area on either side of the driveway in attempts to find intact native soil.

The western two-thirds of the project area was covered almost entirely with a thick bed of concrete rubble associated with the demolition of the Fairview Training Center building. SPs 10 and 11 were placed in the center of the project area to determine the depth of concrete debris cobble and fill material.

SP testing was impractical along the boundaries of the project area. A new sidewalk, drainage ditch, utility lines, and a push berm covered the southern project boundary. The western project boundary was covered with compact gravel road and the remnant asphalt parking pad associated with the Fairview Training Center. The eastern project boundary contained numerous utility lines and utility vaults interspersed throughout. The northern project boundary along Old Strong Road, on the western two-thirds of the property, was steeply sloped and covered in thick blackberry brambles.

Survey data and SP locations were recorded using a Samsung tablet computer equipped with ArcGIS Collector software. All field notes and photographs are on file at the SWCA Portland office under Project No. 67371.

RESULTS

Archaeological Investigations

SWCA archaeologists Colin Christiansen and Martin Nelson-Harrington conducted the pedestrian survey and subsurface testing of the project area on August 5 and August 6, 2021. The weather was warm and clear, with temperatures of approximately 90 degrees Fahrenheit. Christiansen and Nelson-Harrington surveyed the area by first walking along the perimeter of the project area and then along east-west transects spaced 10 m apart through the length of the project area. The lot surface was covered with concrete cobble, tall grasses, and blackberry at the time of the survey. Surface visibility was approximately 10 percent.

The southern boundary of the project area has been heavily landscaped. An approximately 15-foot-wide strip running east-west includes a new ditch filled with ballast rock, a sidewalk, buried utilities, and push piles (Figure 14). The southeast corner of the property is raised as a result of the utilities construction in 2014. The eastern end of the project area is flat and has undergone extensive utility development (Figures 15 through 17). The northern boundary is steeply sloped and covered in blackberry (Figure 18). The western boundary is very compact gravel with portions of intact asphalt from the old hospital building parking lot (Figure 19). Extensive blackberry brambles cover the southwest corner of the project area.

The western two-thirds of the property is slightly higher in elevation relative to the eastern one-third, which is approximately 10 feet down slope. The western section is covered with concrete debris cobble that has been spread and compacted (Figure 20). The depth of the concrete debris cobble is approximately 1 foot on average but it thins out on the periphery to 1 to 2 inches thick. The slope between the western section and the eastern section consists of debris and soils that have been pushed from the western section.

The eastern one-third of the property can be divided into two distinguishable sections. The first is the former 1950s house property and the second is the northeast corner where the former road existed prior to the construction of Reed Road.

The house and outbuildings are no longer present; however, some evidence remains. The concrete patio foundation on the house's north end remains in place, though a section of it has been dislodged from its footing (Figure 21). The driveway and parking pad are still intact, running north-south along the property. The southern end of the asphalt drive has been covered with a push pile (Figures 22 through 24). There is a footprint where an outbuilding stood southwest and adjacent to the house. A second footprint was observed toward the southern end of the property, including concrete footing and a metal conduit pipe (Figure 25). A section of 6-inch concrete sewage pipe is exposed near the second footprint (Figure 26). Additionally, a bed of pea gravel was observed running north from the second footprint toward the house footprint. A remnant portion of a barn door from the 1950s property was observed on the surface near the second footprint (Figure 27). An uncovered storm sewer access was observed in the center of the property. The storm sewer appears to have been filled with dirt and is no longer in service. No cultural material dating prior to the 1950s house was observed during the pedestrian survey.



Figure 14. Overview of southern boundary of the project area. A 2009 fire hydrant in the foreground. View to the east.



Figure 15. Eastern end of the project area. View to the west.



Figure 16. Eastern end of the project area. View to the west.



Figure 17. Eastern end of the project area. View to the south.



Figure 18. Slope along the northern boundary of the project area. View to the east.



Figure 19. Remaining asphalt from hospital parking lot. View to the west



Figure 20. Concrete rubble surface typical across the project area.



Figure 21. Remaining concrete patio from 1950s house. View to the northwest.



Figure 22. Asphalt driveway covered by push pile on southern end. Dashed lines show edges of the driveway up to push pile. View to the south.



Figure 23. Overview of asphalt driveway. View to the north.



Figure 24. Overview of asphalt drive and parking pad at north end (edges marked by bushy grass). View to the northwest.



Figure 25. Close-up of 1950s outbuilding foundation (paralleling scale pole) and metal conduit pipe (marked by arrow).



Figure 26. Exposed 6-inch concrete sewer pipe (marked by arrow).



Figure 27. Fragment of 1950s outbuilding door.

Following the pedestrian survey, Christiansen and Nelson-Harrington conducted subsurface testing by excavating 11 SPs that were strategically placed in an attempt to encounter intact native soil, determine the extent and depth of fill materials in the project area, and test for the presence of historic-period artifacts as recorded by Darby in 2004 (Table 4).

Auger attempts were made on SP 1 through 5, however the sandy silt was too fine for the bucket to hold. SPs 1 through 7 indicate a horizon of native fill material from 0 to 45 cmbs with brick fragments, round modern nails, and pane glass shards present in SPs 1, 2, and 6 (Figure 28). Native sandy silt was observed at 40 to 45 cmbs. Due to unsuccessful auger attempts, SP 6 was excavated to 100 cmbs to determine the stratigraphic profile. Native sandy silt was observed at approximately 30 cmbs. SPs 8 and 9 exhibited a shallower fill horizon to only to 20 cmbs (Figure 29). Native sandy silt was observed from 20 to 50 cmbs. No cultural materials were observed in the native soils.

SPs 10 and 11 were excavated in the center of the project area to determine the depth of the concrete debris cobble spread (Figure 30). The concrete debris cobble is approximately 30 cm (1 foot) deep and sits on top of compact fill material consisting of gravelly sandy silt. The fill horizon in SP 10 extended to 50 cmbs (Figure 31). Extreme compaction and time constraints limited the excavation of SPs 10 and 11 with SP 10 terminating at 50 cmbs and SP 11 terminating at 30 cmbs.

The general stratigraphy observed across the project area can be described as up to 45 cm of fill material on top of native soils consisting of sandy silt. Much of the project area surface is covered with a concrete cobble debris originating from the demolition of the hospital building. The fill material is not imported, but rather a mix of local demolition debris and disturbed native soils.

Table 4. Results of Shovel Probes

SP No.	UTM (Zone 10N NAD83)*		Maximum Depth (cmbs)	Soil Description/Comments	Materials	Results
	Northing	Easting				
1	499160.8	4971502.6	50	<p>0–45: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>45–50: Stratum II – Brown silt with common subangular to subrounded pebbles. Attempted auger hole unsuccessful. Material would not stay in bucket for removal.</p>	<p>Modern glass 0–10 cmbs and 10–20 cmbs</p> <p>Modern nails 10–20 cmbs</p> <p>Modern nail 30–40 cmbs</p>	Negative
2	499167.8	4971501.3	50	<p>0–45: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>45–50: Stratum II – Brown silt with common subangular to subrounded pebbles.</p>	<p>Modern nail 10–20 cmbs</p> <p>Modern glass 20–30 cmbs</p> <p>PVC drainage pipe and pea gravel 40–50 cmbs</p>	Negative
3	499161.2	4971509.9	50	<p>0–40: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>40–50: Stratum II – Brown silt with common subangular to subrounded pebbles. Attempted auger hole unsuccessful. Material would not stay in bucket for removal.</p>	<p>Modern brick fragments 0–10 and 10–20 cmbs</p>	Negative

SP No.	UTM (Zone 10N NAD83)*		Maximum Depth (cmbs)	Soil Description/Comments	Materials	Results
	Northing	Easting				
4	499159.3	4971516.3	50	<p>0–35: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>35–50: Stratum II – Brown silt with common subangular to subrounded pebbles.</p> <p>Attempted auger hole unsuccessful. Material would not stay in bucket for removal.</p>	None	Negative
5	499150.2	4971521.8	50	<p>0–20: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>20–50: Stratum II – Brown silt with few subangular to subrounded pebbles.</p> <p>Attempted auger hole unsuccessful. Material would not stay in bucket for removal.</p>	None	Negative
6	499147.9	4971516.5	100	<p>0–35: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>45–100: Stratum II – Brown sandy silt with few subangular to subrounded pebbles. Native soil.</p>	Modern brick fragments 0–10 and 10–20 cmbs	Negative
7	499139.1	4971520.1	50	<p>0–45: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>45–50: Stratum II – Brown silt with few subangular to subrounded pebbles. Native soil.</p>	None	Negative
8	499153.1	4971453.6	50	<p>0–28: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>28–50: Stratum II – Brown sandy silt with few subangular to subrounded pebbles. Native soil.</p>	None	Negative
9	499129.8	4971463.4	50	<p>0–30: Stratum I – Brown silty gravel with common small to large subangular pebbles. Common roots 0–35 cmbs. Extremely compact. Fill material.</p> <p>30–50: Stratum II – Brown sandy silt with few subangular to subrounded pebbles. Native soil.</p>	None	Negative
10	499094.4	4971511.1	50	<p>0–50: Stratum I – Brown silty gravel with many small to large subangular cobbles. Extremely compact. Fill material.</p>	Concrete fragments, brick fragments throughout	Negative
11	499091.9	4971482.2	30	<p>0–30: Graded construction surface – Concrete rubble. Extremely compact. Fill material.</p> <p>Excavated surface cover to determine depth of concrete rubble.</p>	None	Negative

* UTM = Universal Transverse Mercator.



Figure 28. Aerial imagery of the project area showing the shovel probe results.



Figure 29. SP 8 overview. View to the north.



Figure 30. Excavating surface rubble at SP 11.



Figure 31. Compact material below rubble surface at SP 10. View to the north.

Site 35MA195

Site 35MA195, the Cartright/Payne House Site, is a previously recorded multicomponent archaeological site originally identified by Darby (2004) during pedestrian survey. The site consisted of square nails, window glass, brick fragments, crock fragments, vessel fragments, a mirror fragment, one CCS core fragment, and one basalt flake (Darby 2004). Darby dated the window glass using thickness as an indicator for age according to Karl Roenke's (1978) methods for dating flat glass for the nineteenth century in the Pacific Northwest. Based on the window glass, the site had a potential date between 1850 to 1860. Darby (2004) did not identify any structures or other temporally diagnostic artifacts associated with the site.

SWCA field crews attempted to find the archaeological materials associated with this house site but could not relocate any historic-period materials as described by Darby (2004). SWCA placed seven shovel probes within and near the reported location of the previously identified artifacts and identified only modern debris consisting of modern nails, glass, polyvinyl chloride (PVC) drainage pipe, and modern brick fragments from the demolition of both the 1950s house and hospital building associated with the Fairview Training Center.

Further, the historical maps show a structure on the Payne plat in the 1878 Metsker Map (Metsker 1878). Darby (2004) associates the historic-period debris scatter with the Theo Cartright and the Payne family dwelling structure; however, overlaying the project area over the historical map shows the structure located south of the current project area (see Figure 4). No historic-period materials were identified during pedestrian survey or subsurface testing. As Darby (2004) notes, the modern house built in the 1950s within the project area could have destroyed the site, or have been built on top of the structure.

ISO-2

ISO-2 is an archaeological isolate identified by Darby (2004) during pedestrian survey consisting of three pieces of fire-modified rock. SWCA field crews attempted to find the isolate, but could not identify any fire-modified rock within the project area. The isolate may have been moved eastward due to demolishing activities on the hospital building.

ISO-3

ISO-3 is an archaeological isolate identified by Darby (2004) during pedestrian survey consisting of one flow blue ceramic fragment. Additionally, Darby (2004) identified isolate ISO-3, a flow blue ceramic fragment that dates to the early 1900s. The location of this ceramic fragment near mole hills suggests it may have been in secondary depositional context. SWCA field crews attempted to find the isolate, but could not identify the ceramic fragment within the project area. The isolate may have been moved eastward due to demolishing activities on the hospital building.

CONCLUSIONS AND RECOMMENDATIONS

SWCA's archaeologists conducted background research, intensive pedestrian survey, and subsurface testing for the Strong Heights Subdivision Development Project. During the background research for the project, SWCA staff reviewed records from three previously recorded cultural resources located within the proposed project area. Darby (2004) recorded two archaeological isolates and one archaeological site 35MA195, all identified during pedestrian survey. SWCA archaeologists were unable to find the isolates during the 2021 pedestrian survey. The isolates were likely displaced during surface grading and demolition activities after 2004, as shown on aerial imagery of the project area. The Cartright/Payne House Site, 35MA195, was documented by Darby (2004) based on the presence of historic-period debris possibly dating to 1850 to 1860 (Darby 2004). However, SWCA archaeologists did not identify archaeological materials associated with 35MA195 during pedestrian survey or subsurface testing of the project area. Further, records and historical maps indicate the Payne house was located south of the project area and the location of a Cartwright home could not be established.

The 1950s-era home and outbuildings located in the northeast portion of the project area were demolished in 2017. SWCA archaeologists observed an asphalt driveway, and a few foundation elements remain. The hospital building in the western half of the project area was also demolished between 2016 and 2017. SWCA noted much of the concrete rubble associated with the demolition of the hospital building was spread eastward across the project area. No temporally diagnostic cultural materials associated with the 1950s-era home or hospital building were identified during the archaeological survey for the project, though associated debris was noted during subsurface testing.

Subsurface testing indicates the stratigraphy within the project area includes an upper horizon of mixed native and fill material including debris associated with the Fairview Training Center, which had been demolished by 2016. The upper horizon is up to 45 cm deep and is mostly modern. Additionally, the surface is covered with a layer of concrete rubble measuring 30 cm deep. Native soils were observed starting at 45 cmbs though with evidence of disturbance throughout the matrix. Based on these observations, the proposed project-related activities will not impact significant cultural resources.

However, because the Fairview Training Center holds historical importance for the area, and with a now-demolished associated building located within the project area, **SWCA recommends the City of Salem inadvertent discovery plan be followed if cultural resources are encountered during project-related**

activities. Further, **SWCA recommends an experienced archaeologist facilitate a pre-construction meeting** with the construction contractor to discuss information on the legal context of cultural resources protection and on the pre-contact, ethnographic, and historical cultural resources that may be present in the construction area.

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