

4.12 ARCHAEOLOGICAL AND HISTORIC RESOURCES

The Project is subject to approval by the Federal Highway Administration (FHWA) and as such it must comply with Section 106 of the National Historic Preservation Act, as amended, and the implementing regulations in 36 CFR Part 800. Section 106 requires federal agencies take into account the effects of federally funded or permitted projects on historic properties. A historic property is typically aged 50 years or older, and includes prehistoric or historic districts, sites, buildings, structures, objects, and properties of traditional religious and cultural importance that are listed or are eligible for listing on the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. If historic properties are identified within the APE (see explanation of APE in next paragraph), then potential adverse effects to the historic properties must be assessed, and a resolution of adverse effects recommended.

4.12.1 What Methods, Assumptions and Resources Were Considered in the Evaluation of Archaeological and Historic Resources?

How Was the Study Area Defined?

The procedures under Section 106 require identification of an Area of Potential Effects (APE), identification of any historic properties that may be located within the APE, and evaluation of a project's effects on historic properties. An APE is defined as a geographic area within which a project may directly or indirectly cause alterations in the character or use of historic properties. The APE includes the planned horizontal and vertical direct impact areas, as well as a one-parcel buffer around the Project footprint on private lands, and a 200-foot buffer around the Project footprint on federal lands in order to account for indirect effects. It also includes a 200-foot offset from

I-5 in the South Study area where a build alternative has not yet been established. The APE is shown in Figure 4.12-1. For purposes of this EA, the APE shown in Figure 4.12-1 reflects both the North and South Study Areas.

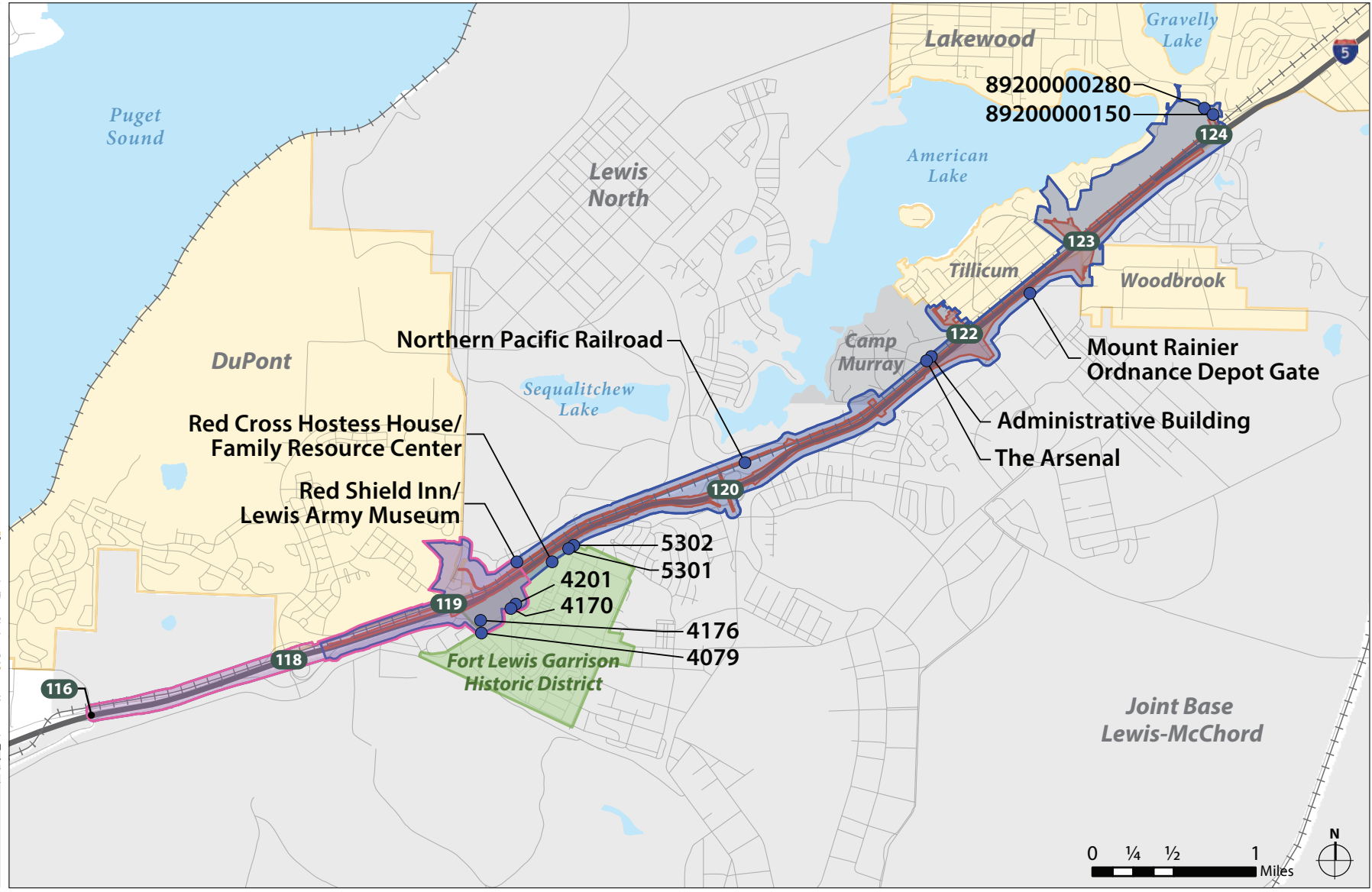
Impacts associated with the Build Alternative in the North Study Area are identified and evaluated in this section at a project specific level.

The South Study Area has been inventoried and evaluated at a corridor level in Chapter 5. Archaeological and historic resources located in the South Study Area will be further evaluated at a project specific level during the next tier evaluation once a proposed footprint has been identified. A programmatic agreement is anticipated to establish future analysis and evaluation commitments for the South Study Area once a build alternative is identified.

The Section 106 process seeks to accommodate historic preservation concerns on Federal undertakings through consultation among the agency officials and other parties with an interest in the effects of the undertaking on historic properties. Consultation letters were sent to the Department of Archaeology and Historic Preservation, Army National Guard Camp Murray, Joint Base Lewis-McChord, the Nisqually Indian Tribe, the Puyallup Tribe of Indians, the Squaxin Island Tribe, and the Yakama Nation.

Prior to cultural resources fieldwork, an Archaeological Investigations permit was prepared for archaeological survey activities on JBLM,

NOTE TO READER: *This EA provides a tiered environmental review. Chapter 4 evaluates the project specific environmental impacts associated with construction of the North Study Area Build Alternative (See Section 3.4 for description). Chapter 5 provides a corridor level discussion of the South Study Area (See Section 3.5). Specific project footprint improvements are not currently defined for the South Study Area.*



- Historic Structure
 - Area of Potential Effects - North Study Area
 - Area of Potential Effects - South Study Area
 - Historic District
 - Build Alternative Footprint
- Note: Archaeological resources are not mapped per RCW 42.56.300.*

- INTERCHANGES**
- 116 Mounts Drive interchange
 - 118 Center Drive interchange
 - 119 Steilacoom-DuPont Road interchange
 - 120 Main Gate interchange
 - 122 Berkeley Street interchange
 - 123 Thorne Lane interchange
 - 124 Gravelly Lake Drive interchange



Figure 4.12-1
 Area of Potential Effects
 for Archaeological and
 Historic Resources

as required by the Archaeological Resources Protection Act. JBLM Cultural Resources Program and Camp Murray Environmental Program staff provided technical expertise on resources in the APE. The Nisqually Indian Tribe Cultural Resource Department met with project staff to discuss cultural resources and survey plans prior to initiation of fieldwork. Nisqually staff also participated in archaeological investigations.

Research methods included desktop research, pedestrian survey, and subsurface testing. A variety of readily available sources were consulted to create a preliminary inventory of cultural resources in the APE and assess the potential for encountering undocumented historic properties. Data from previous cultural resource surveys, documented historic properties, and information on the local environment and cultural settings were compiled to create a database of documented archaeological and historic sites, as well as to produce models of the research gaps within the APE.

Because of its history, much of the APE is considered to have moderate to high probability for historic properties. Desk-based analysis and communication with WSDOT and JBLM staff identified the majority of properties located in the APE which appear to be 45 years old or older. An archaeological survey was completed, and an architectural history survey was conducted for the entire APE. The archaeological survey research design was intended to identify direct impact areas associated with the Build Alternative footprint in the North Study Area that have the potential to contain archaeological materials.

A pedestrian survey was conducted across the entirety of the Build Alternative direct impact areas in order to determine the locations of above-ground resources. The archaeological survey also included shovel probe testing to define areas of low, moderate, and high archaeological probabilities. A total of 319 shovel probes were

conducted. Sediments were screened though ¼ inch mesh and returned to the probe area upon completion. Cultural materials were returned to shovel probes. Historic Property Inventory forms or Archaeological Site or Isolate forms were completed for each identified historic property that had not been updated in the last five years.

Further information about the identification and evaluation of historic and cultural resources is included in the *Joint Base Lewis-McChord Vicinity, I-5 Improvement Project Cultural Resources Assessment* (see Appendix B for access information), which by reference is made a part of this Environmental Assessment.

How Are Properties Determined to Be Historic?

The National Park Service (NPS) administers the NRHP, which is the official list of the nation's historic places worthy of preservation. In order to be eligible for listing on the NRHP, a historic property must be significant in American history, architecture, archaeology, engineering, or culture. Additionally, to be considered eligible a historic property must meet one or more of the four NRHP criteria:

- ◆ Criterion A: Be associated with events that have made a significant contribution to the broad patterns of our history.
- ◆ Criterion B: Be associated with the lives of persons significant in our past.
- ◆ Criterion C: Embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- ◆ Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history.

The integrity of a historic property is a key consideration in NRHP eligibility. Integrity is the ability of a historic property to convey its significance through historic qualities such as location, design, setting, materials, workmanship, feeling, or association. The degree of integrity is taken into consideration when evaluating resources under the NRHP criteria. For example:

- ◆ If eligible for historic associations under Criterion A, a resource should retain substantial aspects of its overall integrity, although design and workmanship may not weigh as heavily as those aspects related directly to its historic associations.
- ◆ To be eligible for association with a prominent person under Criterion B, the resource should retain some aspects of integrity, although design and workmanship may not be as important as the other considerations.
- ◆ To be eligible for architectural merits under Criterion C, a resource must retain its physical features that constitute a significant construction technique or architectural style. Critical aspects of integrity for such properties are design, workmanship, and materials. Location and setting would also be important for those resources whose design reflects their immediate environment.
- ◆ Resources significant under Criterion D may not have the type of integrity described under the other criteria. Location, design, materials, and workmanship are generally the most important aspects of integrity for Criterion D resources.

4.12.2 What Are the Existing Archaeological and Historic Resources in the APE?

History of the Area

The area has hosted a variety of significant historic events of local, regional and national importance. It is the traditional territory of

the Nisqually Indian Tribe, Puyallup Tribe of Indians, Squaxin Island Tribe, and Steilacoom Indian Tribe. The 1854 Medicine Creek Treaty secured certain rights of the Nisqually, Puyallup, and Squaxin tribes, while ceding traditional territories to the United States. Traditional use of the area is generally oriented toward resource locations such as fresh water, terrestrial and marine food resources, forests, and other suitable terrain. Coast Salish villages were often located along major waterways and at heads of bays or inlets, where abundant resources of coastal, riverine and inland environments supported a relatively rich, diverse, and reliable subsistence base.

The landscape of the area has been radically transformed over the last 150 years, transitioning from old-growth forest, timberland, and farmland, to its current use as a high volume transportation corridor. The shift of land use is typical of western settlement patterns and illustrates the rapid rate of changing priorities in western and local culture.

The first non-native immigrants to the area were European, Hawaiian, and Metis employees of the Hudson's Bay Company who arrived in the early 1800s with the development of trading posts and agricultural stations. Fort Nisqually, located approximately one mile west of the APE, served as the headquarters for the agricultural subsidiary of the Hudson's Bay Company. Encouraged by the Donation Land Claim Act and Homestead Acts, a wave of Euro-American settlers arrived in the later part of the 1800s to settle the area.

The advent of Fort Lewis and McChord Air Force Base in the early 20th century had a substantial long-term impact on the development of the local economy and landscape. The history of Fort Lewis can be summarized by three periods of development on the installation: World War I (1917-1919), building a permanent Fort Lewis (1927-1939), and World War II (1940-1948). Camp Lewis was established in 1917,

following the condemnation and purchase of 70,000 acres of private and tribal land by Pierce County, and subsequent donation to the Army. Camp Lewis served as a mobilization, training, and supply station in anticipation of U.S. entry into World War I (WWI). Following WWI, Fort Lewis developed into a permanent Army post. In the years leading up to World War II (WWII), the fort rapidly expanded as troops prepared for war. Thousands of buildings were constructed during this period, but few remain at JBLM. The development of McChord Air Force Base closely followed that of Fort Lewis in the 1920s.

The area has contained important transportation features for at least 170 years. Although accurate maps of the local landscape were not available until surveys of the area began in the 1870s, Hudson's Bay Company era maps indicate a transportation network was well developed in this area by the 1840s. By 1893, local routes had shifted into the project corridor, and State Route (SR) 1, the precursor to I-5, was designated by the Washington State Legislature as one of the first of a handful of important state transportation routes. In 1913, at a time when few automobiles were on roads, SR 1 was recognized as a Primary State Highway and named Pacific Highway. In the lead-up to America's entry into WWII, local population and traffic increased dramatically creating bottlenecks on Pacific Highway at Fort Lewis. The 1941 Defense Highways Act supported construction of a viaduct spanning Pacific Highway, connecting Fort Lewis to the new 41st Division Cantonment on the west side of Pacific Highway. Further improvements were made following the National System of Interstate and Defense Highways Act of 1956, which provided for limiting access to interstate highways as a means of alleviating congestion caused by driving hazards related to new technology and rapidly expanding roadside developments. At this time, I-5 was built along the alignment of Pacific Highway between Mounts Road and Gravelly Lake Drive.

The long history of use of the area for transportation and military operations results in a concentration of archaeological and historic resources along the corridor.

ROAD OF REMEMBRANCE

Between 1929 and 1932 the Tacoma Garden Club planted approximately 500 trees as a "living memorial" to commemorate the sacrifices of those who served in the armed forces of the Allies in World War I. Today, 66 oak trees remain, many of which are located within the Project APE. A Historic Inventory Report for the Road of Remembrance was completed by WSDOT as part of the analysis and documentation for this Project. The report concluded that the Road of Remembrance does not retain integrity sufficient to meet NRHP eligibility requirements. The State Historic Preservation Office (SHPO) concurred with the determination that the resource is not eligible for the NRHP. The current design indicates that at least six and up to 12 trees may be impacted by proposed Project elements. The trees are located on the southbound side of I-5 between the Berkeley and Thorne Lane interchanges. As Project design is further developed, additional avoidance and mitigation of impacts to this resource may be possible.

Archaeological and Historic Resources in the APE

Background research, pedestrian survey, and shovel probe survey resulted in the identification of nine archaeological sites or components; one historic district; and 60 historic-age structures, buildings, sites, and objects in the APE. Of these surveyed properties, 17 are recommended eligible for or previously listed on the NRHP:

HISTORIC RESOURCES

- ◆ The Mount Rainier Ordnance Depot Gate is recommended eligible under Criteria A and C. This gate was constructed at the entrance to Fort Lewis Mount Rainier Ordnance Depot in

1942. The structure is considered eligible for the NRHP for its association with WWII ordnance supply efforts.

- ◆ The residences at 16, and 29 Forest Glen Lane SW (parcels 8920000150 and 8920000280) in Lakewood are eligible under Criterion C. The house at 16 Forest Glen Lane SW was constructed in 1957, and is considered a fine example of the contemporary ranch style of single family dwelling. The house at 29 Forest Glen Lane SW was constructed in 1948 and is considered eligible for the NRHP as an example of a 1940's ranch dwelling.
- ◆ The Camp Murray Arsenal (Building #2) and Administration Building (#1) are recommended eligible under Criteria A and C. The Camp Murray Arsenal was built in 1916, and is recognized as a historic property for its association with Adjutant General Thompson and the development of Camp Murray. The Administration Building, built in 1927, reflects the characteristics of mission style architecture and was designed by Frederick Heath and is also associated with the development of Camp Murray.
- ◆ The Fort Lewis Garrison Historic District (45DT00190) is listed on the NRHP, and is significant under Criteria A and C. The district is significant for its military park landscaping, which includes picturesque landscaping, formal spatial relationships, and period vegetation and plantings. Contributing buildings in the district include two warehouses (#4079, #4170), the Quartermaster Gasoline Filling Station (#4176), the Red Cross Hostess House (#4274), and NCO Quarters (#5302) and Garage (#5301). Each of the buildings are also individually eligible for the NRHP.
- ◆ The Salvation Army Red Shield Inn (Building #4320) is listed on the NRHP under Criteria A and C. The Salvation Army Red Shield Inn was constructed in 1919 by the Salvation Army, as

a recreation and guest facility for Camp Lewis soldiers. The building is significant for its architecture, association with Fort Lewis and Salvation Army history, and its influence on the Greene Park amusement area.

- ◆ The Northern Pacific Railway was determined eligible for the NRHP, and is significant under Criteria A and B. The rail line was constructed in 1873, and is considered eligible for its influence on the economic and residential development of the Pacific Northwest. The line is also eligible for the NRHP for its association with architect E.S. Skookum Smith.

ARCHAEOLOGICAL RESOURCES

- ◆ The Murray Farmstead (45PI00521) is eligible for the NRHP. The site was considered eligible for the NRHP under Criterion D for its potential to contribute significant historical information on the pre-Camp Lewis period of pioneer settlement of the area.
- ◆ The Greene Park archaeological site (45PI01316) is considered eligible for the NRHP by JBLM. The site consists of refuse, structural remnants, roadways, landscaping, and other features associated with the historic use of the Greene Park amusement area.

Table 4.12-1 summarizes the historic and archaeological resources in the APE and identified effects of the Build Alternative.

4.12.3 What Impacts Are Associated with the No Build Alternative?

Under the No Build Alternative no improvements to I-5 would be made, therefore no impacts to archaeological and historic resources would occur.

Table 4.12-1 *Historic and Archaeological Resource Impacts*

Site Name	Build Alternative Effect
Historic Resources	
Mount Rainier Ordnance Depot Gate	No Effect
Residence at Parcel 8920000150	No Effect
Residence at Parcel 8920000280	No Effect
Camp Murray Arsenal	No Effect
Camp Murray Administration Building	No Effect
Fort Lewis Garrison Historic District	Temporary Indirect Effects Indirect Minor Erosion of Setting
Warehouse (#4079)	No Effect
Warehouse (#4170)	No Effect
Quartermaster Gasoline Filling Station (#4176)	Temporary Indirect Effects
Red Cross Hostess House (#4274)	Temporary Indirect Effects
Red Cross Field House (#4201)	Temporary Indirect Effects due to minor erosion of setting during construction
NCO Quarters (#5302)	No Effect
NCO Garage (#5301)	No Effect
Salvation Army Red Shield Inn	Temporary Indirect Effects due to minor erosion of setting during construction
Northern Pacific Railroad	No Effect
Archaeological Resources	
Murray Farmstead (45PI00521)	Direct Effect due to construction of new roadway
Greene Park (45PI01316)	Direct Effect due to construction of shared use path

4.12.4 What Would Be the Long-Term Impact of the Build Alternative?

Two types of effects on register-eligible historic properties may occur during construction: 1) direct physical effects and 2) indirect effects due to noise, mud, vibration, traffic congestion, construction traffic, loss of parking, visual changes to the setting, and limited access to buildings. Archaeological Resources located in the Build Alternative footprint would be directly impacted by construction activities.

The Build Alternative would directly impact the Greene Park and Murray Farmstead archaeological sites. Impacts to the Greene Park site would include cut and fill for construction of a pedestrian path, and utility and fence installation along a historic-age road and roadbed. However in their already existing state, this historic-age road and roadbed, as well as possible archaeological materials in the roadbed, do not retain their integrity to convey the significance of this historic archaeological site.

Impacts to the Murray Farmstead would include construction of new roadways. Previous testing at the Murray Farmstead indicates the construction activities will encounter precontact and historic archaeological materials in a disturbed context. However in their already existing state, these materials do not retain their integrity to convey the significance of this multi-component archaeological site.

4.12.5 What would be the Short-Term or Construction Impacts of the Build Alternative?

As designed, the Build Alternative avoids indirect impacts to historic properties.

4.12.6 How Can Impacts of the Build Alternative Be Minimized or Mitigated?

Under the Build Alternative, no adverse effects to historic properties are anticipated. In order to avoid potential vibration impacts to the Red Shield Inn, WSDOT will prohibit dynamic compaction within 100 feet of any portion of the building, and prohibit loaded trucks within 20 feet of the building.

4.12.7 Would There Be Any Unavoidable Adverse Impacts from the Build Alternative?

Based on the results of the Section 106 assessment, a No Adverse Effect determination is recommended for the Build Alternative.

4.12.8 How Has Compliance with Section 106 of the National Historic Preservation Act Been Addressed?

FHWA has been the lead federal agency for Section 106 consultation. This consultation has included FHWA, SHPO, JBLM, WSDOT, as well as the Nisqually, Puyallup, Yakama and Squaxin Tribes. Consultation has resulted in a determination of no adverse effect for the North Study Area. For the South Study Area, a project specific Programmatic Agreement was executed on May 17, 2017 between FHWA, SHPO, WSDOT, JBLM as well as the Nisqually and Squaxin Tribes. The Programmatic Agreement stipulates future Section 106 consultation steps to be taken as the South Study Area APE becomes further defined.