

“About 3 oClock the wind lulled, and the river became calm, I had the canoes loaded in great haste and Set Out, from this dismal niche where we have been confined for 6 days passed, without the possibility of proceeding on, returning to a better Situation, or get out to hunt, Scerce of Provisions, and torents of rain poreing on us all the time.”

- Capt. William Clark, Nov. 15, 1805

4.0 IMPLEMENTATION

4.1 PHASING PLAN

The purpose of the phasing plan is to stage the funding and construction of this project in affordable increments. It could potentially take 10 years to develop the completed Master Plan including all site development, buildings and interpretive features as specified in this document. Nevertheless this is a small project by many standards, taking full advantage of an existing site and developed landscape. The anticipated phases can be identified as follows:

Phase I, Water System Replacement, Master Plan Design, Land Protection Acquisition

Phase I incorporates current activities to prepare the project for development, including the acquisition of land, creation of this Master Plan and the provision of a year-round reliable water supply system for the current and future safety rest area.

Phase II, Western Interpretive Trail and Fencing, Entry Sign

Phase II will construct the Western Interpretive Trail to the Far Western Viewpoint, opening a new and attractive natural area of the site for visitation. A new entrance gateway sign to stimulate local public interest and a sense of something coming in the future, related to the National Park as well as the SRA.
(See Site plan, pg. 52)

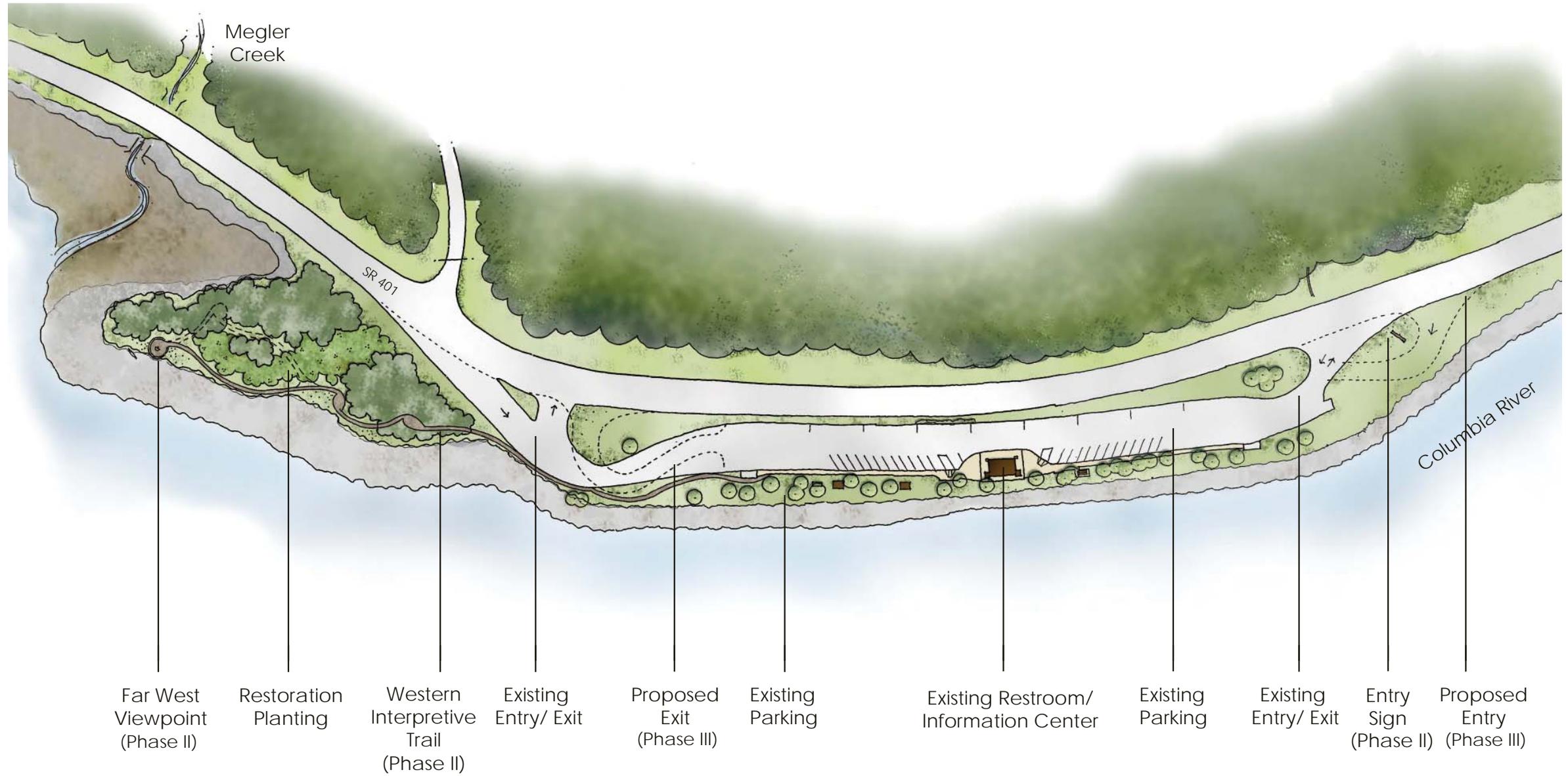
Phase III, Roads, Parking, Landscaping, Fencing, Sewer

Phase III will develop the basic bones of the site with parking, entry, safety and landscape improvements to gain the most value and impact within a very limited budget. Relocate entry and exit roads, reconfigure parking layout, implement final storm water management strategies, trails, and relocate sewer septic system.

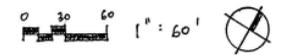
Phase IV: Restroom / Information Building and Dismal Nitch Feature

By developing the Restroom / Information Building and the Dismal Nitch Feature together, the final construction activities that complete the project occur together at the east end of the site. This may allow portions of the remainder of the SRA to function if needed during construction.

(Refer to Section 4.3 for Project Budget)



SITE PLAN
 PHASE II: Western Interpretive Trail and Fencing, Entry Sign



4.2 MATERIALS, DESIGN STANDARDS, LANDSCAPE

National Park-Like Aesthetic

This chapter of the Master Plan is meant to define an acceptable level of quality for the construction of the architectural and landscape components in the Dismal Nitch rest area. These design standard recommendations will guide the budgeting for construction to an acceptable level of quality, but these standards are not meant to be comprehensive and do not cover every element of the project.

Agency Collaboration

All the partnership agencies are committed to creating a park-like setting at this SRA. WSDOT and NPS will work closely together to achieve both the NPS design guidelines and the safety issues of a SRA.

An example of a successful collaboration is the Fort to Sea pedestrian underpass to Hwy 101. Oregon Department of Transportation (ODOT) and NPS worked together to turn the utilitarian underpass into a more park-like feature. This was achieved by ramping the approaches up to keep views of greenery on both sides, stone-like veneer on the walls and adding a site sign to the concrete header. This underpass is a backdrop to many photos taken at the site (See Underpass photo).

Building Systems Aesthetics

Materials are proposed that create a National Park-like setting as well as the performance standards while meeting SRA design standards. We interpret this to mean the use of natural materials like stone and timber, as well as the previously described design goals described in “Architectural Character”. The desired character also will be reinforced by appropriate detailing, color and texture of the materials selected.

Systems Performance / Quality

The Dismal Nitch SRA is exposed to harsh weather including wind driven rain, salt spray, and occasional high winds. Lewis & Clark experienced all of this and more, including hail. High winds and high tides can cause localized flooding, from the salty water of the Columbia River estuary.

The buildings are public and subject to vandalism. Materials systems, toilet partitions, restroom finishes and fixtures, electrical outlets, switches and light fixtures, doors and hardware and window systems all need to be designed for durability and reliable performance, low maintenance, and resistance to salt water, high humidity and bugs. Design should emphasize simplicity of systems and elimination of electronic or motorized devices or controls in favor of natural ventilation and passive systems.

Graffiti resistance and scratch or impact resistance needs to be considered in the materials selection. This can mean durable, cementitious materials, and/or painted systems that can be repainted to cover graffiti.

As mentioned earlier, the buildings should be constructed of fire resistive materials.

Example of Aesthetic Treatment of Transportation Structure



FORT TO SEA TRAIL UNDERPASS-LOCATED NEAR ASTORIA, OREGON. THIS TRAIL CONNECTS FORT CLATSOP MEMORIAL TO SUNSET BEACH.

Materials Guidelines for the buildings:

Building structure and roof deck

Heavy timber construction

Roofing

Standing seam metal roof with compatible trim and gutters.

Wall systems Alternate 1

Metal stud and 5/8 gypsumboard both sides, insulated, with cement plaster exterior finish, painted. Concrete base finished with stone veneer on the exterior will be used in selected areas.

Wall systems Alternate 2

Concrete tilt-up walls with textured exterior finish to match texture of wood siding, painted, insulated, with interior gypsumboard on furring channels. Stone veneer on concrete exterior walls may be used in selected areas.

Windows, Doors and Frames

Galvanized hollow metal frames, doors, fixed windows and louvers. Products to be manufacturers standard, suitable for marine environments.

Restroom finishes

Ceramic tile floors & walls per the attached guidelines. Epoxy paint wall finish to be used above 6'-0". Fixtures per the attached guidelines.

Site/ Landscape

1. Vegetation

There are four categories of vegetation proposed for the site including restoration planting, native plant beds, trees, and turf.

Invasive plant species that exist on the western point, such as blackberry, should be removed and the area restored with plant species native to the area. Rain gardens contain composted soil and specific plants that meet the requirements of the soil moisture conditions, which range from seasonally saturated to mostly dry. Species well suited to rain garden moisture regimes include Red-twig dogwood (*Cornus stolonifera*), Twinberry (*Lonicera involucrata*), Nootka rose (*Rosa nutkana*), Slough sedge (*Carex obnupta*), and Common camas (*Camassia quamash*).

All planting beds besides the raingardens, such as those surrounding the information center and plaza area, should consist of native plant species. The benefits of using native plant species from a sustainable and educational perspective are discussed in more detail later in the report.

The preferred site concept proposes the addition of large deciduous trees to provide buffer between the highway and entry road. Additional trees are recommended to infill those along the shoreline view area that may be impacted during construction. These trees will provide a sense of shelter but should be placed in a way that does not obstruct views of the river from key viewpoint locations or restrict site visibility for security reasons. The use of conifer trees should

be limited so that vehicle sight distances do not become obstructed. Conifers, such as Shore pine, are recommended on the berm adjacent to the Dismal Nitch interpretive feature to create a buffer with some height.

A significant area of the site, primarily adjacent to the entry and exit and along the shoreline, will remain as turf to accommodate pedestrian use and keep views of the river environment open. It is recommended that the 30 to 40 mature ornamental trees (most located along the stretch of land between the parking lot and shoreline) be surveyed by an arborist during the design phase to determine their health and the appropriate protection measures to be taken in order to preserve as many as possible.

2. Site Furnishings

The 1960's-era covered picnic tables should be replaced in like number with covered ADA picnic structures that match the architectural style of the proposed restroom and information center building. Likewise, the character of site elements, such as benches and trash receptacles, should be simple but robust. The design material, and color of site furnishings should be consistent. Site signage, including rules and regulations, could be condensed to minimize clutter.

3. Lighting

It is recommended that the two streetlights on either side of the current restroom building be replaced with a style of light consistent with the look of typical National Park features in the region (See Light Fixture Examples). Site lighting for the parking area, entry, and exit should meet current WSDOT safety standards for lighting without providing any more than is necessary in order to minimize light pollution from this relatively rural location. Illumination at or from the restroom and information building illuminates the surrounding plaza and interpretive viewpoint features adequately so as not to require additional walkway lighting. It is recommended that the western interpretive trail and far west viewpoint not be illuminated.

4. Rails, Fences and Safety Barriers

As stated earlier, WSDOT and NPS will work closely to develop barrier elements that will create both a secure SRA and preserve a park-like setting.

The parking lot is currently enclosed with chain link (3 foot height) fencing which is unsightly and in need of replacement. It is recommended that a barrier system other than chain link be used along the shoreline's rip-rap bank because of the visual focus from the SRA towards the river.

A more decorative barrier rail, such as pipe rail, is recommended (See Railing Example). Pipe rail is a durable, aesthetically pleasing option, frequently used in maritime locations, that can withstand the extreme environmental conditions at the site.

A black, vinyl-coated chain link fencing may be used on the less populated areas of the site (west of the River View Walk and east of the Central Area), which will reduce the cost of a lengthy shoreline barrier. This fencing should be concealed as much as possible with landscaping and other natural elements in these areas.

An existing chain link fencing is used as a barrier between Highway 401 and the SRA parking lot. It is recommended that this fencing be removed and replaced with a custom decorative concrete jersey barrier that meets WSDOT standards.

5. Walkways

We are proposing two types of walkway surface material corresponding to the use-level for that walkway. These materials include asphalt and concrete (for high use), and crushed stone (for medium and low use) (See next page).

High-use sidewalks should either be standard asphalt or specialty concrete. Sidewalks adjacent to the parking area would likely be a continuation of the asphalt parking lot, defined by wheel stops on one side and the rain garden planter on the other. Specialty concrete is proposed for the plaza area starting at the bus drop-off area and extending east around the building to the East Viewpoint. Concrete should be colored slightly to provide warmer, more natural tones consistent with the native rock and soil of the area.

Concrete surfaces within the east and west viewpoint features should be a slightly different tone of the same color used in the plaza area in

order to differentiate the significance of these features and to set the ground plane apart from the rest of the plaza. It is recommended that plaza score and expansion joints be placed in a random and criss-cross manner to alleviate the formality of the expanse of hard surface in this area. Inlays and pressed forms (such as vegetation or fish) can provide texture as well as interpretive meaning to the concrete ground plane as well.

Medium and low-use trails and the Dismal Nitch Interpretive Feature should have a hardened surface of finely crushed stone, likely basalt, which is native to the area. The low-use trails will be located on the western point.

These trails will meet current ADA accessibility guidelines with regards to width, hardness, and cross slope. These 'looping' trails provide access from the parking lot sidewalk to the edge of the rip-rap shoreline.



LIGHT FIXTURE EXAMPLE



CRUSHED STONE TRAIL



CONCRETE PAVING EXAMPLE
(WITH INSCRIBED DESIGN)



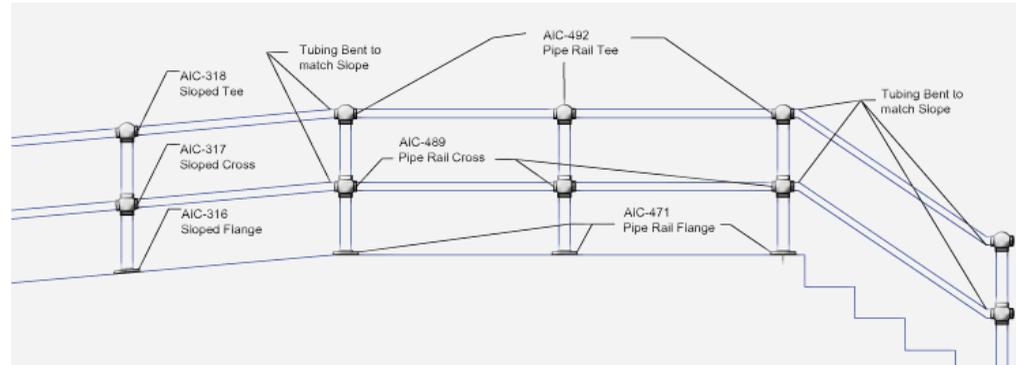
LIGHT FIXTURE EXAMPLE



RAILING EXAMPLE



SEATING EXAMPLE



RAILING ELEVATION

4.3 CONSTRUCTION COST BUDGETING

Construction cost ranges for the primary planning components have been developed in a spreadsheet format. The costs are developed for the components as described in the master plan as construction costs only. Costs are then summarized as construction costs in 2006 dollars. The scope of work in Phase 2 is still under review due to budgetary constraints.

Definition of work by phase:

- Phase I: Master Plan Design, Waster system replacement, Land protection Acquisition (funded)
- Phase II: Western Interpretive Trail and Fencing, Entry sign (funded)
- Phase III: Roads, Parking, Landscaping, Fencing, Sewer (unfunded)
- Phase IV: Restroom/Info. Building, Dismal Nitch Feature (unfunded)

NOTE: The project phases will be built as funds become available.

Estimated Total Project Cost 2006 Dollars

Phase 1 - Water System Replacement/ Master Plan		
Design (funded)		
Master Plan		\$325,000
Water System Replacement		\$265,000
Land Protection Acquisition		\$845,000
	Phase 1 Total	\$1,435,000
Phase 2 - Western Interpretive Trail and Fencing, Entry Sign (funded)		
Design (18%)		\$21,850
Construction		
	Max. Allowable Construction Costs (MACC)	\$121,550
	Washington State Sales Tax (WSST) 8%	
	+ Construction Engineering (CE) 14%	\$26,750
	+ Contingencies (4%)	\$4,850
	Total Construction	\$153,150
	Phase 2 Total	\$175,000
Phase 3 - Roads, Parking, Lanscsaping, fencing, sewer (unfunded)		
Design (18%)		\$93,000
Construction		
	MACC	\$519,000
	WSST (8%) + CE (14%)	\$135,000
	30% Risk	\$161,000
	Inflation/Materials Escalation	\$84,000
	Total Construction	\$899,000
	Phase 3 Total	\$992,000
Phase 4 - Restroom/Info. Center, Dismal Nitch Interpretive Feature (unfunded)		
Design (14%)		\$131,000
Construction		
	MACC	\$935,000
	WSST (8%) + CE (14%) + Contingencies (4%)	\$243,000
	30% Risk	\$283,000
	Inflation/materials Escalation	\$147,000
	Total Construction	\$1,608,000
	Phase 4 Total	\$1,739,000
	Total Project Costs	\$4,341,000

*(Total Construction Costs x 1.44)

**Unit price from SEWER REHABILITATION CONCEPT REPORT August 24th, 2005.

4.4 ENVIRONMENTAL PLANNING

Investigation, consultation, and documentation required for a NEPA Documented Categorical Exclusion (DCE) was performed by the consultant team concurrent with the Master Planning process for the Area of Potential Effect (APE).

The APE for the project was defined as those areas in which construction impacts may occur. These areas include the SRA, the proposed septic drain field location, and the proposed well and water line locations. The DCE is a WSDOT and Federal Highway Administration (FHWA) document.

The scope of the improvements proposed for the Dismal Nitch site was such that the threshold for requiring more in-depth documentation, specifically an Environmental Assessment, was not required.

All standard categories of investigation were completed to the level necessary to achieve the categorical exclusion, with the exception of the cultural resources investigation, which was submitted as a separate report to WSDOT for their submittal to SHPO for review and concurrence. Based on the investigation of standard categories, including environmental and biological resources (in addition to the cultural resources already mentioned), the Local Agency Environmental Classification Summary form was completed, which is included in Appendix 6.1. This documentation was submitted to WSDOT for review and acceptance in December, 2005. Archaeological Investigations Northwest (AINW) performed the cultural resource study in October, 2005.

The findings of this report were incorporated into the NEPA DCE. The cultural resource study included literature review, a pedestrian archaeological survey, and subsurface shovel testing within the APE.

AINW's work was done in compliance with Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800), and according to the requirements of the Secretary of Interior's Standards and Guidelines for archaeology and historic preservation. WSDOT acted as the Cultural Resources Liaison, contacting the appropriate tribes for comment in compliance with Section 106 as well. AINW completed the Cultural Resource Survey report in December, 2005 for submittal to WSDOT for SHPO review.

A determination of "no historic properties affected" was recommended in the Cultural Resource Survey report, which SHPO concurred with after final review and acceptance. It is recommended that if unanticipated archaeological or historical resources be encountered during project construction, all ground-disturbing activity in the vicinity of the find should be halted and the WSDOT and the SHPO should be promptly notified to assure compliance with relevant state and federal laws and regulations.