

The Washington State Department of Transportation (WSDOT) has well-established design, construction, and operation practices to minimize or avoid adverse impacts on the environment from highway projects. This appendix describes the current anticipated measures that the Federal Highway Administration (FHWA) and WSDOT will include in the project to mitigate anticipated adverse effects. Mitigation measures will be refined as the design is advanced.

### **General**

The proposed SR 167 Extension project has been analyzed under a two-tiered environmental process, with the completion of Tier I Final EIS (FEIS) and a Tier II FEIS. The Tier I FEIS was issued in April of 1999 and a Record of Decision (ROD) was issued in June of 1999. This Tier II Commitments List addresses commitments from the Tier I ROD as well as commitments in the Tier II FEIS.

WSDOT maintains a web site for the SR 167 Tier II EIS project (<http://www.wsdot.wa.gov/projects/SR167/TacomatoEdgewood>), which is updated monthly. The web site contains the history of the project, what is currently being worked on, specific design options, and WSDOT contacts. The web site will remain active for the duration of the project.

### **Tribal Coordination**

WSDOT and FHWA worked closely with the Puyallup Tribe of Indians regarding issues identified during the development of the Tier II FEIS. FHWA and WSDOT are committed to maintaining an open line of communication with the Puyallup Tribe of Indians throughout the design and construction phases of this project.

### **Water Resources (Waterways, Hydrology, Water Quality, Hydrogeology, and Floodplains)**

WSDOT and FHWA will adhere to all relevant regulations and obtain required permits, and mitigating measures will be implemented.

### **Construction**

A Temporary Erosion and Sediment Control Plan (TESC) and Spill Prevention Control and Countermeasures (SPCC) Plan will be prepared and implemented during the project construction, as required by the WSDOT *Highway Runoff Manual* (WSDOT, 2004). As a minimum, the plans will include the following construction best management practices:

- Erosion control measures for cut and fill slopes

- Sediment control measures, particularly for work near streams
- Temporary erosion protection measures for disturbed areas
- Reseeding and stabilization for cut and fill slopes as necessary
- Reseeding and/or replanting of temporarily impacted areas with appropriate native seed mixes/species to the greatest extent possible
- Confining fuels, oils, and other potential contaminants within a berm or barrier when staging areas cannot be located outside of frequently flooded areas
- Limiting fueling and vehicle maintenance near water bodies and sensitive areas
- Identifying proper construction equipment maintenance, cleaning, and access locations
- Requiring proper hazardous and conventional waste disposal
- Scheduling and timing appropriate for the season
- Monitoring and maintaining erosion control BMPs

In addition to the TESC and SPCC Plans, the following project-specific measures will minimize effects on water resources during construction:

- A Stormwater Pollution Prevention Plan (SWPPP) will be fully implemented before, during, and after construction.
- Alternative construction techniques that minimize or avoid dewatering (e.g., sheet piling, cased piers, driven piling, spread footings) will be evaluated.
- A temporary Hylebos Creek diversion channel will be constructed while the creek remains in its existing streambed. Measures to minimize streambank erosion in the temporary channel will be employed.
- Trees and shrubs when present adjacent to the alignment will be preserved provided that roadway clear-zone and sight distance requirements are met.

## **Operation**

### **Public Water Supply Systems**

- An effort to identify other area wells has been undertaken for the FEIS and additional research will be done before this project is constructed.

- Wells that lie directly beneath the project footprint will be decommissioned in accordance with state laws. Water rights transfers and/or new water rights will be obtained from Ecology prior to decommissioning the wells.
- A drinking water well for the City of Fife is on a parcel that is fenced and located on high ground within the proposed riparian restoration area. If access can be provided without jeopardizing the function of the riparian buffer in this area, then consideration will be given to exempting the well and associated buildings from the Riparian Restoration Proposal (RRP). If this is not the case, other mitigation will be negotiated with the City of Fife.

### **Floodplains**

A number of measures (MGS et al., 2004) to reduce flood elevations at the 20th Street East bridge and/or northbound I-5 bridges will be considered during final design. These hydraulic measures include:

- Widening the culvert at 12th Street East;
- Creating an approximately 100-foot-wide off-channel, depressed floodplain (bench cut) adjacent to the south side of Hylebos Creek from SR 99 to 12th Street East;
- Widening the channel immediately downstream of 12th Street East to smooth the transition from the new box culvert to the existing channel;
- Removing debris and maintaining invert elevation of the channel under SR 99.

Embankments and structures will be designed, to the extent practicable, to pass maximum flood flows without substantial change to that experienced today. If necessary, additional flood storage will be provided. A final mitigation plan addressing floodplain mitigation measures will be developed prior to construction.

### **Waterways**

- An approximately 2,000-linear-foot section of Hylebos Creek adjacent to I-5 will be filled due to the construction of the SR 167 I-5 Interchange. This interchange will also require the fill of approximately 1,000 linear feet of Surprise Lake Drain. To compensate for the channel and buffer lost to embankment fill, two new stream channel sections will be constructed.
- Approximately 4,000 linear feet of new Hylebos Creek channel will be constructed and over 87 acres of riparian zone will be preserved.
- The entire section of the Surprise Lake Drain channel, from its confluence with the mainstem of Hylebos Creek to the crossing at Freeman Road, will be restored to improve the quality and condition

of the stream, and to provide flood control and habitat benefits. This amounts to approximately 5,340 linear feet of new channel. Additionally, 29 acres of adjacent riparian area will be protected.

- Stream relocation work will begin with constructing the new channel. The timing of stream relocations will be planned to minimize impacts to fish and other aquatic organisms and to avoid relocating streams to locations that could be disturbed by construction activities.
- The new stream banks will be revegetated with native trees and shrubs to provide future shading and bank stabilization.
- Large woody debris (LWD) will be placed to increase bank stability, allow for the development of pools for refugia, provide favorable substrate for invertebrate colonization, and provide instream cover and shade.
- One of the stream crossings at the Valley Avenue Interchange (preferred) will be designed to span both Wapato Creek and adjacent wetlands to further avoid wetland impacts.
- The new stream crossing of Fife Ditch will be designed to result in no long-term impact to water quality.
- If practicable, proposed bridges or culverts over Hylebos Creek, Surprise Lake Drain, and Wapato Creek (including the wetlands associated with Wapato Creek) will completely span these waterbodies, minimizing in-water work.
- An undersized bridge and bank armoring will be removed at the 8th Street East crossing. An additional undersized bridge will be removed at the 62nd Avenue East crossing, just upstream of the 8th Street East crossing.
- New stream crossings will be designed to pass the 100-year storm event at a minimum. When practicable, these structures will support natural stream processes by minimizing channel constriction and riprap placement.
- WSDOT will continue to keep the drainage districts informed of plans associated with stream relocations and invite them to participate in development of the specific plans.

### **Stormwater Treatment**

- Stormwater generated from the highway will be treated to meet flow and water quality control requirements as described in the most current WSDOT *Highway Runoff Manual*.

- Enhanced treatment for removal of dissolved metals will be provided for those highway surfaces that exceed the traffic volume threshold established in the most current WSDOT *Highway Runoff Manual*.
- Stormwater from the project will be treated for water quality. One or more of the following methods may be used:
  - Biofiltration swales
  - Deep fill infiltration
  - Landscaped fill slopes with composted soils
  - Constructed wetlands
  - Ponds
  - RRP
- The RRP will convert approximately 189 acres of existing farmlands and residences into a riparian landscape by removing encroachments (buildings, roads, culverts and other infrastructure) from the land. The riparian area will be planted with native vegetation. The Riparian Restoration Proposal areas will be preserved as a mix of riparian wetlands, buffers and riparian uplands for the purpose of stormwater flow control.
  - The Hylebos Creek RRP includes approximately 4000 feet of new stream channel and approximately 87 acres of riparian improvements.
  - The Surprise Lake Drain RRP includes approximately 5340 feet of new channel and approximately 29 acres of riparian improvements.
  - The Wapato RRP includes an approximately 9000-linear-foot-long continuous riparian buffer along both sides of the stream, except for a section adjacent to Valley Avenue. The RRP would result in an approximately 300-foot-wide corridor through which Wapato Creek would flow, totaling approximately 73 acres.
- The project will remove six crossings on Wapato Creek and replace up to three crossings at the Valley Avenue interchange. When practicable, these structures will support natural stream processes by minimizing channel constrictions, provided that the existing profile on Freeman Road is not affected.
- A Technical Advisory Group (TAG) will identify recommendations for the ultimate design as well as maintenance and monitoring for the RRP. The TAG will begin by reviewing the goal and objectives of the RRP previously developed and preparing a work plan and schedule that will be used to direct the team. Meetings will be held regularly to share technical information at key points in the planning and design process, to provide project updates, and to gather technical input on important project elements. The intent is to work together toward consensus on the final design, including maintenance and monitoring plans.

- The TAG will be involved throughout design and permitting of the project. The TAG will be informed of construction progress of the RRP and will be informed if any unanticipated issues arise during construction of the RRP.
- The TAG includes agencies such as FHWA, WSDOT, United States Fish and Wildlife Service, the NOAA National Marine Fisheries Service (NOAA Fisheries), the U.S. Army Corps of Engineers (COE), the Washington State Department of Fish and Wildlife, the Washington State Department of Ecology (Ecology), members of the Pierce County Water Program, the Puyallup Tribe of Indians, and the Friends of the Hylebos Wetlands (a local environmental group), who will all be invited to attend the RRP design process and development of maintenance and monitoring requirements.
- The goal of the RRP, as authored by the RRP Technical Advisory Group on June 20, 2005, is to provide stormwater flow control management and compensatory mitigation for stream channel impacts through the creation, restoration, and enhancement of self-sustainable native riparian and in-stream habitat in the Hylebos Creek and Surprise Lake Tributary sub-basin and the Wapato Creek sub-basin. The following objectives meet this goal:
  - Avoid and minimize construction related impacts
  - Allow connectivity of riparian habitat
  - Provide for fluvial processes including natural sediment transport, channel migration, debris passage and LWD placement and recruitment
  - Prevent streambank erosion from damaging infrastructure
  - Prevent increases in flood related property damage
  - Allow ecological interaction with terrestrial habitat
  - Enhance native plant diversity and control invasive plant species
  - Restore natural hydrologic processes
  - Reduce surface water contamination
  - Enhance fish and wildlife habitat function
  - Enhance macro-invertebrate diversity
  - Encourage community-based stewardship of the RRP

**Groundwater**

Initial geotechnical investigation was done to characterize existing soil conditions to understand hydraulic conductivity. It is anticipated that monitoring wells will be installed on both sides of the completed embankment to monitor groundwater. Additional field testing of vertical and horizontal flows under embankments is planned prior to construction.

# Wetlands

## **Construction**

WSDOT and FHWA will continue to consult with the project cooperating agencies, the COE, and the City of Fife through the permitting and construction phase of this project.

WSDOT and FHWA are examining opportunities to support watershed restoration activities as alternative mitigation. WSDOT will pursue partnerships with other agencies, the Tribe, and non-profit groups interested in the Hylebos and Wapato Creek watersheds. WSDOT is pursuing all funding opportunities for enhancing mitigation.

WSDOT will coordinate wetland mitigation site design with the TAG if wetland mitigation sites adjacent to the RRP areas are selected. WSDOT will coordinate wetland mitigation site design with Friends of Hylebos Wetlands for mitigation sites that may be selected within the Hylebos Watershed.

### **Avoidance and Minimization Efforts**

Wetland impacts have been minimized to the greatest extent practicable based on preliminary design. FHWA and WSDOT will strive to incorporate additional minimization measures as project design is completed. Potential opportunities to incorporate additional avoidance and minimization measures may include (but are not limited to):

- Making minor changes to design alignment;
- Using steeper fill slopes;
- Using retaining walls to eliminate fill slopes;
- Using culverts to hydrologically connect wetlands bisected by the highway;
- Using a bridge design that spans the Puyallup River, avoiding the placement of a pier within the river.

### **Wetland Delineations**

- Before initiating permitting or preparing a final wetland mitigation plan, WSDOT intends to reevaluate all wetlands affected by this project, including revisiting wetland delineation and categorizations over three years old.
- Prior to construction, the COE will review the final wetland delineation and categorization in the field.
- Guidance on ditches resulting from the recent U.S. Supreme Court decision (referred to as the Talent decision) has recently become available. Therefore, before initiating permitting, these areas will be

examined to determine if they are jurisdictional under the Clean Water Act Section 104 Program.

### **Final Mitigation Plan**

- A final wetland and stream fill mitigation plan will be developed for this project. The final mitigation plan will compensate for any unavoidable impacts on wetlands and buffers.
- WSDOT will select one or more preferred wetland mitigation site after the ROD is issued and before permitting and a final mitigation plan are completed.
- The general criteria used to identify and evaluate potential wetland mitigation sites in the Conceptual Mitigation Plan (May 2005) will continue to be used in the final mitigation plan. The criteria are:
  - Watershed focus
  - Replacement of functions and values lost
  - Habitat connectivity
  - Reliable hydrology
  - Undeveloped condition
  - Uncontaminated
  - Stakeholder support
  - Satisfies regulatory requirements
- Off-channel habitat potential will be identified at the sites. Off-channel habitat for fish is the top limiting factor in the Puyallup River watershed.

### **Operation**

None proposed.

## **Wildlife, Fisheries, and Threatened and Endangered Species**

### **Construction**

- Current federal laws affecting fish and wildlife include NEPA/SEPA, the Endangered Species Act (ESA), the Federal Fish and Wildlife Coordination Act, the Magnuson-Stevens Act, and the Migratory Bird Treaty Act. Current state laws affecting fish and wildlife include the Revised Code of Washington (HPA) requiring Hydraulic Project Approval (HPA), the Salmon Recovery Planning Act, and the Salmon Recovery Funding Act. All pertinent laws will be considered and complied with during further design and construction. WSDOT will comply with the State Salmonid Recovery Plan, being finalized jointly by several state agencies. WSDOT will work closely with these agencies during mitigation planning.

During design, WSDOT will continue to use all practicable means to minimize impacts to habitats. These efforts may include, but not be limited to:

- Using retaining walls (to prevent fill from entering aquatic habitats);
- Using structures to avoid impacts;
- Refining the alignment by making additional minor shifts to avoid or minimize impact to wetlands or other important habitats;
- Adding low-cost wildlife crossings and using over-sized culverts or clear-spanning structures at appropriate locations;
- Installing culverts at stream crossings that will comply with the project HPAs and will, at minimum, be designed to withstand the 100-year flood event;
- Timing in-water work to avoid adult salmon, bull trout, and steelhead migration, juvenile out-migration, and alevin emergence.

The segment of Hylebos Creek that will be abandoned and filled will be surveyed for presence of freshwater mussels prior to construction. Any freshwater mussels present in the filled segment of Hylebos Creek will be relocated. If it is necessary to relocate mussels during channel filling and new channel creation, monitoring should ensure relocated mussels are not being stressed or smothered by sedimentation or flushed downstream during high flows.

The project would be constructed in stages, sometimes with concurrent work on more than one stage. This work will be coordinated to minimize cumulative impacts of fisheries resources to the greatest extent possible. Coordination with USFWS and NOAA Fisheries would continue as the project is prepared for bid and construction in conformance to the requirements of the ESA. FHWA and WSDOT will ensure that the Biological Assessment (BA) (September 2005) conclusions are not affected by any change in ESA species designation or any change in the use of the action area by threatened or endangered species.

WSDOT and FHWA will apply the minimization measures and performance standards from the BA and comply with the Terms and Conditions from the Biological Opinion (BO) when it is approved by the USFWS and NOAA Fisheries.

In order to ensure the protection of T&E and MBTA species, a biologist knowledgeable in the species of plants and wildlife protected by ESA and the MBTA would survey proposed work areas prior to construction. If any protected species are found, WSDOT would consult with NOAA Fisheries, USFWS, and WDFW as to the best methods to protect and/or relocate them. Monitoring would continue throughout the construction phase to maintain compliance. Also, mitigation designed to offset

wetland impacts would also benefit migratory birds. Approximately 50 acres of new wetlands would be developed as a result of the proposed project.

## **Air Quality**

### ***Construction***

A Fugitive Dust Plan will be prepared by the contractor prior to construction to comply with Puget Sound Clean Air Agency (PSCAA) regulations. This plan will include mitigation measures that will be utilized as appropriate to minimize PM<sub>10</sub>, deposition of particulate matter, emissions of carbon monoxide and ozone precursors, as well as other mobile source air toxics during construction. These measures include:

- Spraying exposed soil with water or other dust palliatives;
- Covering all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck);
- Providing wheel washers to remove particulate matter that would otherwise be carried offsite by vehicles;
- Removing particulate matter deposited on paved, public roads;
- Minimizing delays to traffic during peak travel times;
- Placing quarry spill aprons where trucks enter public roads;
- Graveling or paving haul roads;
- Planting of vegetative cover as soon as possible after grading;
- Minimizing unnecessary idling of on-site diesel construction equipment;
- Locating diesel engines, motors, or equipment away from existing residential areas;
- Locating staging areas away from school buildings and playgrounds;
- Utilizing efficient street sweeping equipment at site access points and all adjacent streets used by haul trucks;
- Limiting hours of operation near sensitive receptor areas and rerouting the diesel truck traffic away from sensitive receptor areas;
- Coordinating construction activities with the Puyallup Recreation Center and other sensitive receptor locations.

Puget Sound Clean Air Agency is recommending a voluntary low sulfur diesel fuel program in the state of Washington. The requirement to use ultra low sulfur diesel fuel at the time of construction will be considered depending upon sufficient availability and comparable cost with other diesel.

### **Operation**

- This project will comply with applicable Environmental Protection Agency (EPA) requirements for controlling mobile source air toxics.

### **Noise**

#### **Construction**

- The contractor will be required by WSDOT to perform noise-generating activities in the daytime, except when it is essential to carry out such activities in the night.
- WSDOT contractors will adhere to local noise ordinances. If nighttime work is necessary, WSDOT and the contractor will apply for a variance to the noise ordinance from local agencies.

#### **Operation**

- A noise barrier will be included in the final design of the preferred Urban Interchange option, which receives most of its noise from traffic on SR 167, SR 512, and SR 161.
- WSDOT and FHWA have committed to the Puyallup Tribe of Indians to provide landscaped noise abatement structures along 48th Street East to mitigate noise impact to residences on Tribal trust land
- WSDOT and FHWA will assist the Puyallup Tribe of Indians in locating new businesses to minimize noise and visual impacts attributable to SR 167 and by sharing noise study data and advising the Tribe about quiet locations, landscaping, and mitigation measures.
- WSDOT will retrofit the houses on Tribal trust land near Valley Avenue with storm windows as mitigation to minimize noise impacts.

### **Energy**

#### **Construction**

None proposed.

#### **Operation**

None proposed.

## **Hazardous Materials**

### ***Construction***

There are multiple buildings that will be demolished during the construction of the preferred alternative and/or widening of existing I-5 right-of-way (ROW). It is possible that some of the structures to be acquired by WSDOT may contain Asbestos Containing Materials (ACM) and Lead Based Paint (LBP). Prior to acquisition, WSDOT will conduct an initial site assessment for each property for potential contamination.

WSDOT and FHWA anticipate that building demolitions will primarily generate non-hazardous construction debris with the exception of ACM and LBP. Such structures will be sampled and analyzed to determine the appropriate disposal facility. Mitigation of ACM includes removal and disposal prior to demolition.

Lead-contaminated paint chips and debris could be generated during demolition of the steel bridge on the SR 161 crossing of the Puyallup River. The project will ensure no loose material or debris enters the water through the use of a containment system.

Underground storage tanks (USTs) will be addressed during project planning. A magnetometer survey will be conducted prior to construction if a UST is suspected on site, and all removal and site assessment activities will follow Ecology's Underground Storage Tank Statute and Regulations (Chapter 90-76 RCW, Chapter 173-360 WAC).

FHWA and WSDOT will determine the appropriate strategy to prevent contamination of Hylebos Creek from the B&L Woodwaste site during final design, in collaboration with the EPA and Ecology.

## **Visual**

### ***Construction***

None proposed.

### ***Operation***

Landscape related mitigation measures will be done in accordance with the Roadside Classification Plan (WSDOT 1996).

## **Public Services and Utilities**

### ***Construction***

- WSDOT will determine the locations of utilities within the construction zone during the design phase. Before construction begins, utility impacts will be closely evaluated and a determination made on whether or not to relocate the utility facilities.

- WSDOT will coordinate with the utility owners, such as the Olympic Pipeline, McChord Pipeline Company, Puget Sound Energy, QWEST, Tacoma Public Works, and the cities of Fife and Milton, to minimize impacts to their utilities.
- Construction activities will be coordinated with the Union Pacific Railroad, the Burlington Northern Santa Fe Railroad, Tacoma Rail, and the Port of Tacoma to minimize disruption of rail operations through the project construction areas.
- Impacts to fire, emergency, and police services during construction will be limited to temporary disruptions of service routes within the construction zone. Service providers affected by construction will be notified in advance of the construction period. Police departments, fire and emergency response services, school districts, and solid waste providers will be notified of construction schedules, access restrictions, and possible detour routes prior to access modification.
- Affected businesses and residents will be notified of construction activities in advance (including any necessary closures and detours), and reasonable efforts will be made to minimize traffic disruptions and access revisions during construction.

### ***Operation***

None proposed.

## **Land, Use, Socioeconomics, and Environmental Justice**

### ***Construction***

- As the design proceeds, opportunities to minimize the impact on existing land uses will be examined.
- Property owners, whose land will need to meet right-of-way requirements, will be compensated at the full current market value in accordance with the Uniform Relocation Act.

### ***Operation***

None proposed.

## **Farmland**

### ***Construction***

- Consultation and coordination with affected farmers will be conducted to ensure that disruptions to farming are minimized and adequate advanced notice of potential disruptions is given. WSDOT will work individually with each farmer to develop circulation options for movement of farm equipment and to provide access to fragmented acreage.

- WSDOT and FHWA will attempt to provide access to local farmers from local streets by way of access roads and/or easements.
- East of the Puyallup Recreation Center, a developer is proposing to build a crossing over the SR 167 mainline. The crossing would connect Valley Avenue to North Levee Road. This crossing would accommodate the size and type of tractors used in the fields. Providing access to the crossroad from the fields would allow for the continued farming of acreage on either side of the roadway. If this crossing is not already in place at the time of construction, WSDOT will determine the alternative mitigation for farmland impacts during the design stage.

### ***Operation***

None proposed.

## **Displacement, Disruption, and Relocation**

### ***Construction***

- Affected businesses and residences will be notified of construction activities in advance (including any necessary closures and detours), and reasonable efforts will be made to minimize traffic disruptions and access revisions during construction.
- Displacements, disruptions, and replacements will be considered during the selection of sites for detailed wetland mitigation design.
- Some displacements may be avoided through final design measures, including the use of retaining walls and other modifications resulting in reduced ROW requirements. These will be determined during final design.
- The contractor will be required to follow approved work zone traffic control plans and contract specifications that minimize disruption impacts from construction activities.
- Where ROW acquisition is needed, the acquisition and relocation program will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. In addition, Chapters 8.08, 8.25, and 8.26 of the Revised Code of Washington govern the process of acquiring property for ROW.

### ***Operation***

None proposed.

# Transportation

## ***Construction***

Staging, detours and temporary traffic control measures are developed during the final design of the project. All plans will meet Federal standards contained in the Manual for Uniform Traffic Control Devices. The timing and extent of closures and/or detours will be determined in the design phase of the project. The detour routing plan will also analyze effects of rerouted traffic on detour routes and develop an operations plan to mitigate the effects of the increases in traffic.

To the extent possible, traffic disruptions from adjacent local improvement projects will be coordinated to minimize delay on the surface streets. I-5 freeway lane closures will be limited to nighttime periods of low traffic volumes.

WSDOT will continue to coordinate the design in this area with all of the affected local agencies as the design progresses. WSDOT currently utilizes the following specific strategies for Transportation Demand Management (TDM) and will continue to use or enhance these TDM strategies at project completion:

- Worksite commute trip reduction
- Rideshare information and assistance
- Effective land use zoning and planning
- Regional and local transit service
- Park and ride lots

Transportation System Management elements that will be incorporated as feasible and per design standard are as follows:

- Signage improvements
- Motorist information systems
- Access control
- HOV lanes
- Channelization improvements
- Signal improvements including synchronization
- Transit system improvements
- Interchange improvements

- Ramp metering
- Traffic camera surveillance
- Traffic incident management

## **Operation**

An Intelligent Transportation System (ITS) may be implemented for this project in accordance with the WSDOT Olympic Region ITS Implementation Plan.

## **Pedestrian and Bike Facilities**

### **Construction**

Work zone traffic control plans will take into account non-motorized route continuity needs including public notification and provisions for safe detour routes wherever reasonable. Any detour route for non-motorized traffic indicated on the Traffic Control Plans will be physically reviewed. The existing surfaces will be repaired within the project limits to accommodate the special needs of non-motorists.

### **Operation**

FHWA and WSDOT recognize the importance of working collaboratively with both Pierce County and the City of Fife on the Pacific National Soccer Park and with the City of Milton on the Interurban Trail. FHWA and WSDOT will also work closely with the City of Fife to address impacts to the Lower Hylebos Nature Park, potentially including access and parking.

WSDOT and FHWA intend to accommodate non-motorized transportation modes in the project area using best practice design. A separate multiuse path is planned north of SR 167 approximately from 54th Avenue Interchange to SR 99. The connection of SR 509 and SR 167 will provide for continued bike and pedestrian travel on the existing facilities of SR 509.

Roadway shoulder improvements will be made to SR 99 at the shared use path terminus north to 70th Avenue East. Shoulder width will be widened to not less than 5 feet and sidewalks and curbs will be considered to control motorized access and provide for safe pedestrian travel on this regionally recognized bike route.

In 2003, the City of Fife purchased 54 acres in the vicinity of the I-5 interchange for the purpose of developing a soccer park. The City of Milton Interurban Trail is located in the same area. WSDOT and FHWA will make every effort to minimize impacts to these properties.

The project will accommodate the Interurban Trail and re-establish the public access connection to the trail in the vicinity of 70th Avenue East

and I-5. The relocated portion of the trail will be ADA accessible—a separated Class I or II non-motorized path linking to the City of Fife trail system. Design modifications to the (Interurban Trail) trailhead connection will be provided with the realignment of 70th Avenue East. Mitigation, if necessary, will be provided for any required use of the developed soccer facility.

FHWA and WSDOT policy is to accommodate non-motorized transportation modes in the study area using best practice design. Towards this goal, FHWA and WSDOT follow a number of general project mitigation measures regarding bicycles and pedestrians:

- Local access roadways within the right-of-way of the SR 167 interchanges will be designed to the local jurisdiction's design standards and often will include paved shoulders and/or sidewalks for bicyclists and pedestrians.
- Local roadways and ramp intersections will, as traffic volumes warrant, be signalized, to include pedestrian crosswalks and activated signal systems.
- Local comprehensive plans will again be reviewed prior to completion of contract plans for construction. This effort will address non-motorized route continuity both at the local level and within the project, consistency, and local jurisdiction coordination. Any such local plans affected by the project and determined to have been completed, progressed to design or construction phase will be evaluated and appropriate measures taken to address impacts.

## **Geotechnical Analysis**

A complete geotechnical investigation will be part of the final design of SR 167.

## **Cultural Resources**

### ***Construction***

As design progresses, efforts will be made to avoid or minimize the impact to cultural and historic resources including the Carson Chestnut Tree and cultural resources associated with ancient ground surfaces.

The Tier I ROD called for design efforts that attempted to save the Carson Chestnut Tree. Accordingly, all options at the SR 161 / SR 167 Interchange were designed to avoid this historic tree, which has been nominated for listing on the Washington Heritage Register. Efforts to minimize any additional detrimental impacts to the Carson Chestnut Tree will be made during design and construction.

Additional cultural resource studies will be conducted at wetland mitigation sites identified for final design. An Archaeological

Monitoring Plan, detailing personnel and methodologies for locating buried cultural resources potentially associated with ancient ground surfaces, will be developed during final design. The Puyallup Tribe of Indians will be consulted prior to any ground disturbing activity in the Valley Avenue Interchange area.

## **Operation**

A Memorandum of Agreement (MOA) was developed in consultation with FHWA, SHPO, the Advisory Council on Historic Preservation, and the Puyallup Tribe of Indians to address adverse effects of the project to the archeological site and four historic structures. If any unanticipated archeological resources (resources above and beyond those identified in the Cultural Resource Survey) are discovered during construction, appropriate action will be taken including notifying and coordinating with the Puyallup Tribe of Indians. The MOA stipulates that FHWA will ensure that the following measures are carried out:

1. WSDOT will plant riparian vegetation on the outer edges of the proposed ramp curve nearest the 3423 Freeman Road historic property to minimize visual effects.
2. Historic Property Recordation: WSDOT will consult with the SHPO regarding appropriate large-format photo documentation to be consistent with Department of Archaeology and Historic Preservation Level 2 standards of historic properties (7001 20th Street East, 6803 20th Street East, and 7717 Valley Avenue East) in the area of potential effect.
3. NRHP-eligible buildings will be offered for sale for a minimum of one year to any buyers willing to move the structures.
4. The project will have no adverse effect upon prehistoric site 45PI488, contingent upon WSDOT:
  - (a) Spanning the site with a bridge whose piers are constructed outside the known boundaries of the site;
  - (b) Monitoring construction for cultural resources in the vicinity. Should cultural resources or human remains be discovered during bridge construction, procedures will be followed per below (items 5 and 6).
5. Review of Effects Determination: During final design and prior to construction of the undertaking, FHWA will review the eligibility determinations to
  - (a) Determine if eligible properties retain the qualities that make them eligible for the National Register of Historic Places;

- (b) Determine if non-eligible properties obtained qualities that would make them eligible for the National Register of Historic Places (i.e. greater than 50 years old).
6. Amendment of the Agreement: If any of the consulting parties to this Agreement determine that the terms of the Agreement cannot be met or believe a change is necessary, they will immediately request the signatory parties to consider an amendment or addendum which will be executed in the same manner as the original Agreement. A copy of the amended Agreement will be filed with the ACHP, pursuant to 36 CFR 800.6(c)(7).

The City of Fife will be notified prior to the purchase of the historic properties subject to protection under Section 106 of the National Historic Preservation Act.

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