EDMONDS CROSSING

Connecting ferries, bus & rail

Appendix H List of Commitments

The Preferred Alternative incorporates all practicable measures to minimize environmental harm. Implementation of the Preferred Alternative includes all mitigation measures identified in Chapter 4 of the Final Environmental Impact Statement. The following lists the mitigation measures and commitments.

Air Quality

- Use water spray as necessary to prevent visible dust emissions, particularly during demolition of brick or concrete buildings by mechanical or explosive methods.
- Minimize dust emissions during transport of fill material or soil by wetting down or by ensuring adequate freeboard on trucks (space from the top of the material to the top of the truck bed).
- Promptly clean up spills of transported material on public roads by frequently using a street-sweeper machine.
- Cover loads of hot asphalt to minimize odors.
- Schedule work tasks to minimize disruption of the existing vehicle traffic on streets.
- Keep all construction machinery engines in good mechanical condition to minimize exhaust emissions.
- Locate construction equipment and truck staging areas away from sensitive receptors as practical and in consideration of potential impacts on other resources.
- Spray exposed soil with water or other suppressant to reduce emissions of particulate matter less than 10 microns in diameter (PM_{10}) and deposition of particulate matter.
- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard to reduce PM_{10} and deposition of particulates during transportation.
- Provide wheel-washers to remove particulate matter that would otherwise be carried offsite by vehicles to decrease deposition of particulate matter on area roadways.
- Remove particulate matter deposited on paved public roads, sidewalks, and bicycle and pedestrian paths to reduce mud and dust.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.

- Route and schedule construction trucks to reduce delays to traffic during peak travel times to reduce air quality impacts caused by a reduction in traffic speeds.

Noise

- Construction operations will be conducted from 7:00 A.M. to 10:00 P.M. on weekdays and from 10:00 A.M. to 6:00 P.M. on weekends.
- If work is to be performed during nonexempt hours, a noise variance will be required from the local municipalities.
- All construction activities shall be in compliance with the Edmonds City Code, Chapter 5.30, and the Town of Woodway Code, Chapter 7.28.

Energy

- Transport equipment and operate vehicles in nonpeak travel hours.
- Turn off vehicles and equipment during periods of nonuse rather than idling.
- Recycle and reuse materials from demolished structures (such as asphalt, concrete, metal, and wood).

Geology and Soils

- Vegetation will be established to decrease erosion from surface runoff.
- Best management practices (BMPs) will be implemented during and after construction until site vegetation has been reestablished, such as stabilized construction entrances, pipe slope drains, check dams, temporary cover (such as mulching or plastic), and strategically installed silt fences.
- Water quality will be monitored to ensure compliance with Washington State Department of Ecology (Ecology) standards.
- A detailed erosion and sedimentation control plan will be included as part of the contract specifications. The plan will include the following measures:
  - phase clearing and grading to minimize the amount of disturbed soil at any particular moment;
  - retain existing vegetation wherever practicable;
  - direct runoff from cleared areas toward areas stabilized against erosion;
  - cover stockpiled soils;
  - landscape exposed areas as soon as practicable; and
  - apply construction methods and materials to minimize erosion.
- Construction will be phased to limit potential temporary impacts related to dust associated with hauling materials to and from the construction area.

- Vegetation will be established to decrease erosion from surface runoff.
- Compacting the relatively loose soil deposits using such methods as vibroflotation or vibrocompaction or by using stone columns or other stabilization systems will mitigate potential impacts of soil liquefaction.
- An evaluation of the stability of the steep underwater slope will be conducted and the need for soil improvement techniques or flattening the slope will be evaluated.

Waterways and Hydrological Systems

- Site runoff will be conveyed in the existing Willow Creek culvert, which would otherwise be abandoned once the new stream channel is constructed.
- Porous paving materials will be used where feasible to reduce the extent of runoff generated on the site.
- A green (vegetated) rooftop system will be considered for the covered parking structure (full buildout), while runoff from the open parking facility in Phase 1 potentially will be routed to a bioretention system to help treat and detain stormwater. The overall site design will be reviewed to incorporate other low-impact and context-sensitive development measures, where applicable.
- Impervious surfaces, such as parking areas, buildings, and walkways, will be located as much as possible in areas where they will replace (or overlie) existing impervious surfaces or hard-packed gravel and earth.
- An offshore floating breakwater will be constructed to reduce by at one-half the height of waves from strong winds from the south quadrant.
- If subsidence is identified as a concern, the timing of dewatering will be restricted and structural controls that reduce the extent of groundwater drawdown beyond the excavation area will be provided.
- The erosion and sediment control plan and the stormwater pollution prevention plan will include the following BMPs:
  - install silt fencing on the perimeter of work areas, along elevation contours;
  - spread mulch or other temporary groundcover in areas where soils would be exposed for a period of time;
  - install sediment traps or ponds to induce settling of suspended sediments in runoff prior to discharge to storm drain systems or receiving waters; and
  - stage clearing and grading work to limit the extent of disturbed soil at any point in time.
- Measures in the erosion and sediment control plan and the stormwater pollution prevention plan to minimize quantities of offsite sediment transport will include the following:

  - assign one or two individuals to maintain and enforce erosion control measures;
  - mark existing storm drain inlets and catch basins on the site prior to clearing and grading work. Protect these inlets with filtration inserts or removable covers to prevent sediments from entering underground storm drainpipes that discharge directly to the marsh or Puget Sound;
  - establish parking and maintenance areas for vehicles and equipment as far from Willow Creek and Edmonds Marsh as possible, and away from storm drain inlets. These areas will be covered with gravel or other material to prevent erosion of underlying soil;
  - limit construction site access roads to the absolute minimum necessary to reduce the extent of sediment tracked offsite. Exit points from the site will be equipped with a tire wash over a gravel pad, for use on all vehicles exiting the site. SR 104 and other heavily used access roads will be swept regularly during periods when excavation and backfill materials are transported on and off the site to minimize sediment washoff into the roadway drainage systems;
  - minimize the removal of vegetation wherever possible, and maintain vegetated buffers along the south edge of Edmonds Marsh;
  - revegetate areas of bare soil as soon as possible;
  - cover stockpiles of soil; and
  - upon completion of construction activities, inspect downstream conveyance systems and new stream channel culverts for evidence of sediment deposition, and remove accumulated materials as necessary.
- In addition to the mitigation measures listed for full buildout, the following mitigation measures will be taken for a phased construction approach:
  - problem areas identified and solutions developed during Phase 1 construction will be documented so that subsequent construction can implement the most effective techniques; and
  - a plan to use permanent stormwater pond facilities for temporary sediment trapping will be developed that allows part of the pond area(s) to function for continuous treatment of runoff from Phase 1 facilities, while part of the area(s) serves as a sedimentation pond for subsequent construction.

Water Quality

- Project design will seek to incorporate low-impact development measures wherever feasible (e.g., bioretention systems and porous pavement) to help treat stormwater runoff and reduce the incidence of runoff.
- To help offset potential impacts related to high temperature water in the treatment pond discharges, shade trees will be established on the periphery of the constructed stormwater treatment pond system.

- Pollutant source control measures (BMPs) that will minimize the adverse effects of normal site operations on receiving water quality include the following measures:
  - prepare a spill prevention, response, and containment plan for the multimodal terminal;
  - following application of traction and deicing materials, sweep all affected areas clean as soon as it is safe to do so;
  - inspect all of the onsite stormwater treatment facilities in accordance with Ecology guidelines to ensure that they continue to function as intended. Of particular importance are removal of debris in treatment pond/outflow structures, maintenance of healthy vegetation in aboveground treatment systems, and removal of accumulated sediments in treatment systems as necessary to prevent subsequent flushing of those sediments during turbulent storm flow conditions;
  - clean out underground catch basins frequently. Sediments in the sumps of catch basins will be removed when the depth of accumulation reaches a threshold specified under current Ecology guidelines, to prevent accumulations of sediments and adsorbed contaminants from being flushed downstream in the conveyance system during high-flow events;
  - sweep parking areas and material storage areas with a high-efficiency or regenerative-air sweeper at least twice per month in the wet season and at least once per month in the dry season to collect and dispose of waste materials and grit;
  - post signs to remind ferry passengers to avoid littering and to avoid performing vehicle maintenance work in multimodal center areas; and
  - develop and implement additional BMPs once the multimodal facilities are operating.
- The erosion and sediment control plan will include the following BMPs:
  - delineate the limits of construction site disturbance with highly visible fencing;
  - install storm drain inlet protection devices in the site vicinity at all locations where sediments could conceivably be discharged into the existing storm drainage system.
  - install silt fencing on the perimeter of work areas, along elevation contours;
  - spread mulch or other temporary groundcover in areas where soils would be exposed for a period of time;
  - provide erosion-control blankets or temporary plastic covering on disturbed earthen slopes;
  - install sediment ponds or traps to induce settling of suspended sediments in runoff; and

  - stage clearing and grading work to limit the extent of disturbed soil at any point in time.

- The following measures would be taken to improve protection of surface-water quality:
  - stock cleanup materials for spills in the designated equipment parking area(s);
  - provide designated disposal facilities (separately) for waste oil, ordinary garbage, and contaminated materials such as used engine parts;
  - use mechanical methods of clearing vegetation rather than applying herbicides; and
  - recycle cleared vegetation on the site for use as mulch in areas of bare soil. If vegetation contains purple loosestrife or other invasive species, the material will be bagged and moved offsite, and approved mulch material will be applied to the site.
- Mitigation measures for in-water construction activities on the Puget Sound shoreline will include the following:
  - before demolition of the existing UNOCAL pier and part of the existing ferry pier, develop a plan in consultation with the representatives of Ecology and the Washington Department of Fish and Wildlife for appropriate BMPs to prevent water quality impacts;
  - avoid or minimize the disturbance of marine sediments during ferry dock construction by using a four-point mooring construction barge that will minimize the use of tugboats;
  - during new dock construction, store toxic materials such as paints, lubricants, oil, coatings, and solvents in a protected onshore location to minimize the potential for accidental spills in the water; and
  - prepare a spill prevention, countermeasures, and control (SPCC) plan for construction work in and adjacent to the waterfront.
- Dewatering plans for the UNOCAL site will include engineering controls to prevent withdrawal of contaminated groundwater present beneath the Harbor Square development. These controls will be mechanisms to cut off the lateral flow of groundwater, such as slurry diaphragm walls, slurry trenches, secant piles, and jet grouting. Monitoring water quality in dewatering discharges will help determine whether contamination problems arise and will support decisions on necessary pollutant removal mechanisms.
- In addition to the mitigation measures listed for full buildout, the following mitigation measures will be taken for a phased construction approach:
  - document problem areas identified and solutions developed during Phase 1 construction so that subsequent construction can implement the most effective techniques;

- develop a plan for a combination stormwater pond facility that allows part of the pond area to function as a wet pond or wetland for continuous treatment of Phase 1 facilities, while part of the area is set aside to serve as a sedimentation pond for subsequent construction;
- design stormwater management systems to ensure that adequate conveyance and treatment is provided for all Phase 1 facilities, while reserving capacity for runoff from additional areas developed as part of full buildout; and
- plan and design stormwater treatment facilities for eventual expansion rather than replacing, totally redesigning, or duplicating them for full buildout.

Wetlands

- Delineate and verify all wetland boundaries within the project area.
- Enhance the disturbed/fill area to the east of detention pond 1 by excavating the fill material, removing exotic species, and planting with native wetland species to provide additional wetland and wetland buffer area.
- Enhance wetland and stream buffer vegetation along Edmonds Marsh, the drainage channel, and the daylighted portion of Willow Creek by planting desirable native species, removing nonnative invasive species, and replacing snags and large woody debris. These measures will enhance wildlife habitat and the water quality improvement and sediment trapping functions of the wetland and buffer area.
- Prepare a final mitigation plan during the permitting process for impacts to wetlands. The final mitigation plan will include landscape drawings, plant specifications, and a monitoring and maintenance plan.
- Create a new tidal emergent wetland in the new daylighted section of Willow Creek, with a net gain of 0.57 acre, to mitigate for impact to tidal emergent wetland associated with the daylighting and relocation of the creek.
- Flag or stake wetlands and wetland buffers before construction so that activities within these areas can be avoided.
- Prohibit storage of all machinery, materials, stockpiled soils, and construction activity in wetlands/wetland buffer and shoreline areas.
- Revegetate cleared upland areas as soon as possible after final grading to minimize erosion and sedimentation impacts.
- Maintain existing wetland hydrology during construction as far as practical; convey runoff from all disturbed areas to sediment ponds or interception ditches prior to introduction to wetland areas.

Vegetation, Fish, and Wildlife

Vegetation

- Avoid the introduction of nonnative invasive species, and remove established invasives, where practical.
- Plant mostly native shrubs and trees along the margins of the realigned SR 104 to mitigate, in part, for the loss of forested habitat associated with construction and to buffer surrounding habitats from human activity and glare associated with operation of the new multimodal center facility.
- Replace snags and other woody debris within the riparian and wetland buffers, and plant native species of trees and shrubs to enhance the vegetative complexity of the habitat, as soon as possible following construction.

Fisheries

- Creosote-treated pilings will be removed during demolition of the UNOCAL and existing ferry terminal piers.
- Wooden portion of the existing ferry pier would be dismantled and removed.
- The shoreline and subtidal areas offshore to -30 feet mean lower low water (MLLW) at the existing terminal will be restored to its natural slope and contours with fill material suitable for eelgrass. Eelgrass will be reestablished through this area for a net increase of 2.6 acres of eelgrass meadow.
- The reach of lower Willow Creek adjacent to the stormwater treatment pond, which will not be impacted by the project, will be restored from its present highly degraded condition. The channel will be made to meander slightly, and receive the full treatment described for the new channel section.
- Interpretive signs will be placed throughout the terminal. The signs will explain the improvements made to the salmon habitat and the uniqueness of the salt marsh to central Puget Sound. Similarly, interpretive signs will be placed on the pier explaining the unique design of the pier.
- A study will be conducted to investigate and evaluate the effects of ferry operations, if any, on under-pier salmon passage at the new terminal. The study design will be developed in collaboration with the jurisdictional agencies and tribal representatives. This information will serve to evaluate future and cumulative impacts for other Washington State Ferries (WSF) projects throughout the region.
- The culvert at Pine Street will be rebuilt to restore salmon passage.
- The underside of the ferry pier will be painted with reflective paint to take full advantage of light reflected upwards from the water at the underside of the decks. The wide spacing of pilings will allow for better light penetration and provides a lowered degree of obstruction to longshore drift.

- Wetlands and wetland buffers would be flagged or staked before construction so that activities within these areas can be avoided.
- Storage of all machinery, materials, stockpiled soils, and construction activity in wetlands/wetland buffer, and shoreline areas will be prohibited.
- As part of the UNOCAL pier removal, the riprap shoreline under the pier will be removed. The shoreline will then be pulled back and restored to match the contours of the adjacent shorelines.
- Macroalgae beds will be reestablished in the nearshore area currently barren due to propeller-wash scour at depths beyond that of the eelgrass plantings. This will start at -30 feet MLLW contour extending out to -50 feet MLLW and covering an area of approximately 3.8 acres.
- All appropriate channel habitat enhancement features, such as large woody debris, boulder placements, and riparian vegetation planting, will be incorporated into the newly built Willow Creek stream channel. Riparian plantings will be made using native species and maintained promoting over-water cover.
- Salt marsh function will be restored to the Edmonds Marsh by opening up the restrictive culvert.

Wildlife

- An oversized, bottomless culvert will be used for the Pine Street overcrossing of Willow Creek. This will allow room for wildlife, including amphibians, reptiles, small- and medium-sized mammals, to pass beneath the road and help maintain the habitat corridor that currently exists along Willow Creek.
- Wetland buffer along the southern forested edges of Edmonds Marsh will be planted with black cottonwood and Douglas fir trees to provide visual screening as well as additional roosting and nesting habitat. In addition, a fence will be installed along the terminal access road, limiting access to this area by humans and pets.
- Impacts associated with human activity and glare will be mitigated using connected vegetated buffers along roads, parking areas, and terminal areas. Buffers will be densely planted with a variety of native evergreen species.
- Educational signage describing nesting heron habits will be added at the viewing platform on the north edge of the Edmonds Marsh.
- Minimize areas to be cleared and clearly mark clearing limits prior to commencement of construction.
- Revegetate disturbed areas with native vegetation as soon as practical following final grading.
- Plant the unforested area between the terminal access road and the Edmonds Marsh with Douglas fir trees and black cottonwoods following soil improvement and installation of a supplemental watering system.

- Construct a fence along the north edge of the terminal access road to prevent humans and pets from accessing the heron nest buffer.
- Use the best available technology for underwater sound intensity reduction during pile driving.
- Have a fisheries biologist present at the construction site when initial pile driving is commenced for each class of piles to conduct hydroacoustic monitoring.
- Schedule in-water marine construction per regulations, to avoid juvenile salmonid nearshore migrations. The in-water work window is currently July 16 through February 15.
- The water work in Willow Creek will be restricted to the period between July 1 and September 30.
- Minimize areas to be cleared and clearly mark clearing limits prior to commencement of construction.

Endangered Species

U.S. Fish and Wildlife Service Terms and Conditions

The U.S. Fish and Wildlife Service (USFWS) believes that the following Reasonable and Prudent Measure (RPM) is necessary and appropriate to minimize the impact of incidental take to bull trout and marbled murrelets:

1. Minimize and monitor the extent of adverse impacts to bull trout and marbled murrelets resulting from pile driving.

In order to be exempt from the prohibitions of Section 9 of the Endangered Species Act, the Federal Highway Administration (FHWA) and the designated nonfederal representative, Washington State Department of Transportation (WSDOT), must comply with the following terms and conditions, which implement the RPM described above. These terms and conditions are nondiscretionary.

The following terms and conditions are required for the implementation of RPM 1:

1. Limit impact pile driving activities to the period between October 1 and February 16.

2. The FHWA shall ensure that a plan is developed and implemented for hydroacoustic monitoring of the peak and RMS sound pressure levels generated during impact-driving of steel piles. This plan must be implemented if no bubble curtain is used. The plan will be developed collaboratively between the USFWS and FHWA. No monitoring or sound attenuation measures will be required for piles driven in the beach exposed at low tides, vibratory driving of any type of pile, or impact driving of wood or concrete piles. During hydroacoustic monitoring, the hydrophone shall be positioned at mid-depths, 10 meters distant from the pile being driven.

i. If, based on hydroacoustic monitoring results, SPLs exceed 150 dB (re: 1 µPa) (0.032 KPa) for fewer than 50 percent of the impacts and never exceed 180 dB peak (re: 1 µPa) (1 KPa), pile driving may proceed without further restriction; or

ii. If, based on hydroacoustic monitoring results, RMS SPLs exceed 150 dB (re: 1 µPa) (0.032 KPa) for 50 percent or more of the impacts, or peak pressures ever exceed 180 dB, pile driving may continue, but only with the use of a bubble curtain. The design of the bubble curtain shall be approved in advance by the USFWS.

3. Within 60 days of completing the hydroacoustic monitoring at any site, a report shall be submitted to the USFWS in Lacey, Washington (attn: Jennifer Quan or acting transportation liaison). The report shall include a description of the monitoring equipment and for each pile monitored, the peak and RMS sound pressure levels with or without a bubble curtain, the size of pile, the size of hammer and the impact force used to drive the pile, the depth the pile was driven, the depth of the water, the distance between hydrophone and pile, and the depth of the hydrophone.

4. The USFWS and FHWA shall collaborate to develop a plan for monitoring the extent of incidental take of marbled murrelets and bull trout. At a minimum the plan should include the following:

   i. Monitoring for behavioral changes of marbled murrelets during impact pile driving activities.

   ii. Monitoring for injured/dead fish or birds during impact pile driving activities,

   iii. The submittal of a summary report including behavioral observations of marbled murrelets before and during pile driving activities, the estimated distances from the pile driving activity, and the number and species of any injured or dead fish/birds that are observed and the estimated distances from the pile driving activity.

The USFWS is to be notified within 3 working days upon locating a dead, injured, or sick endangered or threatened species. Initial notification must be made to the nearest USFWS Law Enforcement Office at (425) 883-8122, or the USFWS's Western Washington Fish and Wildlife Office at (360) 753-9440. Notification must include the date, time, precise location of the injured animal or carcass, and any other pertinent information. Care should be taken in handling sick or injured specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence associated with the specimen is not unnecessarily disturbed.

The USFWS expects that incidental take of bull trout and marbled murrelets will occur. The areas described above are considered by the USFWS to be marine

foraging, migratory, and overwintering habitat for bull trout, and marine foraging habitat for marbled murrelets. The RPMs, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the RPMs provided. The FHWA must immediately provide an explanation of the causes of the taking, and review with the USFWS the need for possible modification of the RPMs.

USFWS Conservation Measure

Section 7(a)(l) of the Act directs the federal agencies to utilize their authorities to further the purposes of Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service recommends the following conservation measures to the FHWA for this project as well as when designing future projects.

CR1. Minimize and monitor the extent of creosote contaminated sediments that will be suspended by the removal of the piles at the existing ferry pier and the UNOCAL pier. To minimize impacts of the potential to expose bull trout and marbled murrelets to creosote and its related constituents we suggest the implementation of the following:

1. Dispose of all creosote-treated material, pile stubs, and associated sediments in a landfill which meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC. Have the contractor provide receipts of disposal to the WSDOT Project Engineer to ensure proper disposal.

2. Contain creosote-treated piling, stubs, and associated sediments on a barge. Place around the perimeter of the barge a row of hay or straw bales, or filter fabric to insure containment.

3. For timber pilings that break or are already broken below the waterline, remove them with a clamshell bucket. To minimize disturbance to bottom sediments and splintering of piling, use the minimum size bucket required to pull out piling based on pile depth and substrate. Empty clamshell bucket of pilings and debris on a contained barge before it is lowered into the water.

4. Surround the work area with an oil containment boom during creosote-treated timber pile removal. Install the boom so that it will also collect any floating debris. Employ the use of oil-absorbent materials if a visible sheen is observed. Maintain the use of the boom until all oily material and floating debris has been collected and sheens have dissipated. Dispose of used oil-absorbent materials in a landfill that meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC. Ensure that the boom is maintained in proper working order. Remove any debris in the containment boom by the end of the workday or when the boom is removed, whichever occurs first. Dispose of captured material in an upland disposal site.

5. Whenever activities will generate sawdust, drill tailings or wood chips from treated timbers, use tarps or other containment material to prevent debris from entering the water. If tarps cannot be used (because of the location or type of structure) a containment boom will be placed around the work area to capture debris and cuttings.

6. Monitor water quality, specifically for creosote and the associated contaminants, during pile removal activities at the existing ferry terminal and UNOCAL site.

7. Within 60 days of completing pile-removing activities report water quality findings to the USFWS in Lacey, Washington (attn: Jennifer Quan or acting transportation liaison). The report should include levels of creosote and the associated contaminants before and during pile removing activities in both the water column and in the surrounding sediments.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the USFWS requests notification of the implementation of any conservation recommendations (USFWS, 2004).

NOAA Fisheries Terms and Conditions

Reasonable and Prudent Measures: National Oceanic and Atmospheric Administration (NOAA) Fisheries believes that the following RPMs are necessary and appropriate to minimize incidental take of Puget Sound Chinook:

- RPM No. 1. The FHWA shall minimize take from water quality degradation.

- RPM No. 2. The FHWA shall minimize take from inwater sound during pile driving.

- RPM No. 3. The FHWA shall minimize take from stormwater runoff caused by additional impervious surface.

- RPM No. 4. The FHWA shall minimize take from disturbance of marine nearshore vegetation caused by the construction activities of the pier, removal of the UNOCAL Pier, removal of the existing ferry infrastructure, and rehabilitation of nearshore areas.

Terms and Conditions: To comply with ESA Section 7 and be exempt from the take prohibition of ESA Section 9, the FHWA, WSDOT, or both, must comply with the terms and conditions that implement the reasonable and prudent measures. Those conservation measures described in the BA, and summarized in this Opinion are incorporated here by reference as terms and conditions of this Incidental Take Statement. The terms and conditions are nondiscretionary.

To implement RPM No. 1 above:

- The contractor will implement the Temporary Erosion and Sediment Control (TESC) plan as shown in the contract documents and construction drawings. The plan will be implemented before the start of any ground-disturbing activities. The plan will be based on the proponents' current BMP plans and will include appropriate measures such as silt fences, straw bale dikes, mulching, water bars, slope breakers, and/or the construction of detention and retention facilities to prevent erosion and the discharge of sediment. A plan will also include arrangements for cleaning the treatment facilities during the construction period should a large spill occur.

- For the period from November 1 through March 1, disturbed ground areas greater than 5,000 square feet that are left undisturbed for longer than 12 hours will be covered with mulch, sodding, or plastic sheeting, A construction phasing plan will be provided to ensure that control measures are installed prior to clearing and grading. Clearing limits will be delineated, staked, and flagged. Disturbed areas along the roadway will be hydroseeded as soon as practical after construction has been completed.

- To minimize the potential for accidents that may result in direct effects to Puget Sound, the proponents or their agent will inform and educate all crew members and all onsite personnel to implement environmental precautions. The contractor will develop and adopt an SPCC plan. These precautions must include clearly marking the work area and following all applicable laws and permit conditions. To minimize the potential for accidents resulting in direct effects to surface-water quality, construction equipment will be fitted with emergency spill kits and construction crews will be trained in their proper use.

- Prior to operating near the shoreline, all heavy equipment operating within 300 feet of any open water shall be checked on a daily basis for potential hydraulic leaks or other mechanical problems that could result in the accidental discharge of toxic materials. Any necessary repairs will avoid delivery of material to waters. A daily inspection log/checklist shall be maintained by the contractor.

To implement RPM No. 2 above:

- Inwater work will be conducted within approved work windows to protect salmonids from coming into contact with construction activities. Marine inwater work will be restricted to the period between July 16 and February 15. Inwater work in Willow Creek will be restricted to the period between July 1 and September 30.

- The FHWA shall ensure that a plan is developed and implemented for hydroacoustic monitoring of the peak and rms sound pressure levels generated during impact-driving of steel piles. The plan shall be reviewed and approved by NOAA Fisheries. No monitoring or sound attenuation measures will be required for piles driven in the dry beach at low tide, vibratory driving of any type of pile, or impact driving of wood or concrete piles. During hydroacoustic monitoring, the hydrophone shall be positioned at mid-depths, 10 meters distant from the pile being driven.

- If sound pressure levels exceed 150 dBrms (re: 1 µPa) (0.032 KPa) for fewer than 50 percent of the impacts and never exceed 180 dBpeak (re: 1 µPa) (1 KPa), pile driving may proceed without further restriction; or

- If RMS sound pressure levels exceed 150 dB for 50 percent or more of the impacts, or peak pressures ever exceed 180 dB, pile driving may continue, but only with the use of a bubble curtain. The design of the bubble curtain shall be approved in advance by NOAA Fisheries.

  - The initial hydroacoustic monitoring to establish the sound pressure levels being produced will not be required if a bubble curtain is used for all piles.

  - If a bubble curtain is deployed, the level of sound attenuation will be determined through hydroacoustic monitoring according to a plan to be developed by the FHWA and submitted for approval by NOAA Fisheries.

- Within 60 days of completing the hydroacoustic monitoring at any site, a report shall be submitted to NOAA Fisheries, Washington Habitat Branch, Lacey, Washington. The report shall include a description of the monitoring equipment and for each pile monitored, the peak and rms sound pressure levels with and without a bubble curtain, the size of pile, the size of hammer and the impact force used to drive the pile, the depth the pile was driven, the depth of the water, the distance between hydrophone and pile, and the depth of the hydrophone.

To implement RPM No. 3 above:

- Design criteria for temporary and permanent stormwater treatment facilities shall meet or exceed current design standards in the Washington Department of Ecology Stormwater Manual for Western Washington (2001) for the treatment of stormwater quality and quantity.

- Construction runoff from disturbed areas will be transported to sediment ponds; interception ditches will be required along the base of all fills; and erosion control fences will be installed at the base of all disturbed areas.

To implement RPM No. 4 above:

- The shoreline and shallow sub-tidal areas out to -30 feet MLLW will be restored to their natural slope and contours with clean fine sand suitable for eelgrass. Eelgrass will be planted through this area for a net increase of 26 acres of eel grass meadow. The probability for reestablishment success at this location is high. This action also increases habitat connectivity between two eelgrass beds divided by the ferry terminal and shallow subtidal propeller-wash-induced scouring action of the ferries.

- Macroalgae beds will be reestablished in the nearshore area currently barren due to propeller-wash scour at depths below those of the eelgrass plantings. This will start at the -30 feet MLLW contour and extend out to -50 feet MLLW covering an area of approximately 164,201 square feet or 3.8 acres. A method that could be used is to scatter 6- to 8-inch rock at a density of two or three

pieces per square meter. This will greatly improve the process of initial colonization of macroalgae.

- Continue a long-term monitoring program to track the effects, if any, of ferry operations on marine resources near the new terminal and recovery at the old terminal. This program will be established through consensus with the jurisdictional agencies. This information will serve to evaluate future and cumulative impacts for other new projects of the WSF System, regionwide. Specifically, the pier design will provide opportunities to study the behavior of juvenile salmonids at piers, particularly the threshold level of illumination needed for passage under piers. The triangular shape of this central pier structure in the upper intertidal zone coupled with the 33-foot-wide pier to the south (all juvenile salmonids in south and central Puget Sound migrate north) gives a range of pier width and associated illumination conditions to incorporate into an experimental design. This is a crucial study need for Puget Sound Chinook salmon (NOAA Fisheries 2004).

Land Use

- Property owners whose land would be acquired for right-of-way will be compensated at fair market value.
- WSDOT will coordinate with local planning agencies to identify potential modifications to comprehensive plans, zoning regulations, or capital facilities plans.
- Permits and approvals will be acquired to ensure that the project is consistent with local comprehensive plans, zoning ordinances, and other applicable regulations.

Social

- All areas within Marina Beach Park disturbed during construction would be returned to pre-construction condition and usability.
- The anticipated reef and the coho salmon net-pen adjacent to the Edmonds Fishing Pier would be moved, if feasible, to avoid or minimize impacts to recreational fishing.
- Acquired parkland will be replaced with property of equal fair market values and recreational utility. Replacement land will be found in the informal recreational area south of Marina Beach Park. Also, the replacement land will be integrated with the existing park. Interpretive signs will be installed within the larger park and along the daylighted sections of Willow Creek. The signs will describe the cultural history of the site, specifically tribes' traditional use of the area; natural resource features, possibly including tribes' traditional uses of native plants still growing in the area; and the role of the creek in salmon survival. Appropriate plantings will be placed adjacent to the terminal access road to buffer habitat and interpretive areas. Continued vehicular and handicap access to the park will be provided.

- WSDOT will encourage provision of onsite recycling programs and onsite collection programs at the multimodal center for recyclable materials such as paper, cardboard, and glass.
- WSDOT will coordinate with project-area water, stormwater, and sewer districts on potential relocations of mains, trunk lines, and other facilities.
- WSDOT will mitigate crossing of overhead and underground transmission and distribution lines as follows:
- Replace wood transmission poles, as necessary, with tall steel poles to provide adequate roadway clearance; and
- Coordinate with Snohomish County Public Utility District No. 1 on the locations of new transmission poles or subsurface lines to ensure that required transmission and distribution line relocations do not result in service interruptions.
- Crossings of gas pipelines will meet Puget Sound Energy standards for protection of pipelines.
- WSDOT will work with Verizon Communications and Comcast to advise them in advance of the need to relocate trunk and distribution lines along and within the areas of proposed right-of-way. Coordination efforts will occur sufficiently in advance of construction to minimize any disruption in telephone or cable television service in the affected area.

Economics

- Signs and information about bus service from the multimodal center to the downtown/waterfront area will be posted to encourage passengers to travel downtown.
- Access to businesses throughout the construction period will be maintained through careful planning of construction activities and maintenance of access during business hours. As part of construction management, access mitigation measures will be prepared and included in the contract specifications for the general contractor.
- Appropriate signs to communicate to potential customers information, such as whether a business is open or how to get to the business, will be provided.
- Daytime street closures will be minimized.

Cultural Resources

- Although archaeological site 45-SN-310 will be unaffected by the project, any indirect effects on the site resulting from introduction of construction crews into the area will be mitigated by designating the area around the site as an “environmentally sensitive area” and restricting access to this area.
- Archaeological monitoring of construction will be carried out in accordance with a Discovery Contingency Plan. If historic archaeological sites are detected

during construction, testing will be required to evaluate their National Register eligibility status.

- If previously undiscovered archaeological remains are encountered during construction activities, all work within 25 feet of the find will temporarily halt and the Office of Archeology and Historic Preservation (OAHP) would be notified immediately in accordance with RCW 27.53.020 (Archaeological Resource Protection). In addition, because the project includes road construction, Section 00170.50 of the Standard Specifications for Highway Construction requires the contractor to cease work immediately at the site of a discovery and to avoid further damages to the resources at the site. The contractor will notify WSDOT personnel, who, in turn, would contact the FHWA and OAHP.
- If any human skeletal remains are discovered during construction, all work in the affected discovery area will stop, and appropriate agencies will immediately be notified (Medical Examiner, WSDOT, FHWA, and OAHP). If the remains are suspected to be of Native American origin, appropriate authorities will include OAHP and tribal authorities (in accordance with RCW 27.44.040, Protection of Indian Graves).

Tribal Fishing

- The tribal parties agree to support Modified Alternative 2 as the preferred alternative in all federal, state, or local regulatory, administrative, and judicial proceedings associated with the selection and implementation of the project.
- Prior to construction of the project, WSF and the tribal parties will develop an operating protocol intended to coordinate ferry operations with tribal fishing activities so as to minimize adverse effects of ferry operations on fishing activities, consistent with safety, security, and other WSF operational requirements.
- Within 1 year of the effective date of the Memorandum of Agreement, WSF and the tribal parties will enter into a Protocol of Inadvertent Discovery of Historic Resources, in coordination with the State Historic Preservation Office, that will govern construction and operation of the project.
- WSF will contribute an amount of $5,000,000 to a tribal mitigation fund. The fund is intended to mitigate or otherwise address the effects of the project on fishery resources in the project area and the continuing exercise of treaty fishing rights at and in the vicinity of the project.
- The tribal parties will release and forever discharge the project proponents from any and all claims, demands, and causes of action of any nature whatsoever against the project proponents for damages or equitable or other nonmonetary relief associated with the effects of the project on their federally recognized treaty fishing rights.
- During the early portion of the in-water work window, structural elements located on the south side of the salmon management area (SMA) 9/10 boundary will be constructed. Construction activity and associated barges will then be shifted to the north side of the terminal during tribal salmon fishery. In this way,

all construction vessels would be on the SMA 9 side of the boundary and out of the way while fishing was conducted on the SMA 10 side.

- Pile driving will be conducted during the day to avoid conflicts with nighttime gillnet fishing.

Hazardous Waste

- An SPCC plan to use in routine operation and maintenance will be adopted.
- Require that possible considered long-term onsite treatment of contamination will not pose a risk to public health or the environment. Require routine monitoring to assure no risk.
- Design project in a manner to avoid areas of known and unacceptable levels of contamination and, if avoidance is not possible, incorporate remedial measures into the project design that are protective of human health and the environment.
- Buildings or structures to be demolished that possibly have the presence of asbestos-containing materials, lead-based paint (LBP), or other regulated materials (e.g., polychlorinated biphenyls [PCBs]) will be identified so that the materials can be abated or removed before demolition activities. If structures that are to be demolished are found to contain these substances, applicable regulations pertaining to the handling and disposal of these materials will be followed.
- Due diligence review of real property or right-of-way to be acquired in accordance with WSDOT or FHWA procedures will be conducted.
- Undocumented underground storage tanks (USTs) and fuel lines will be identified before construction. USTs located within the project site will be decommissioned and properly removed before general construction activities begin.
- Utilities that have to be relocated will be identified. Electrical transformer oil will be handled and disposed of properly according to applicable regulations to avoid a release or accidental spill during the relocation of transformers. If transformer oils encountered have not been certified as PCB-free, testing will have to be done.
- Construction activities after cleanup activities will be phased to avoid contaminated areas. Responsible parties and the regulatory agencies will be communicated with.
- During design, coordinate with liable parties from which cleanup costs may later be recovered.
- In areas near or over where contamination may still be present (e.g., offshore sediments, groundwater in the subsurface) that cannot be avoided, construction techniques to minimize disturbance to the subsurface and prevent the transport of contaminants to uncontaminated areas and to surface water will be implemented.

- Generation and disposal of contaminated sediments related to construction will be addressed. WSDOT will work jointly with all interested agencies in accordance with the Cooperative Sediment Management Program.
- A comprehensive hazardous substance contingency and management plan and a worker health and safety plan will be prepared to minimize the effects of identified and unanticipated hazardous substance impacts from contaminated soil, groundwater, and sediment. Protecting nearby residential and business areas will be addressed. If previously undiscovered contamination is encountered during construction, state and federal response agencies will be notified as specified in state and federal regulations, and an appropriate investigation and possible cleanup will be coordinated.
- Prepare a SPCC plan for construction and maintenance work in or adjacent to water
- The selected construction contractor(s) will be required to follow careful construction practices to protect against hazardous material spills from routine equipment operation during construction. The contractor will maintain a current SPCC plan and will designate an individual on site as an emergency coordinator. The contractor also will be familiar with proper hazardous material storage and handling and know emergency procedures, including proper spill notification and response requirements.

Visual Quality

- The color scheme of the structures on top of the piers, including the overhead walkway, will be largely muted blues and greens or other colors that are consistent with existing waterfront development, marine environment, and scenic landscape features visible beyond the terminal, such as the Olympic Mountains.
- Project landscaping also will reflect the character of the surrounding area by the ferry pier and will relate to the more natural character of the hillside along the access roadway.
- Landscape design would draw on the vegetation types found in Edmonds Marsh and along the hillside.
- The forms, materials, details, and colors of the architecture of the multimodal center will be compatible with the general area context, including the waterfront and existing Edmonds development.
- The enclosure for the overhead walkways will consist of translucent materials to reduce the obtrusiveness of the structures.
- The Phase 1 surface parking lots at the multimodal centers will be screened with landscaping.
- Visual impacts during construction will be reduced by locating material and equipment storage in areas that are not prominent.

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