Washington State Department of Transportation

Local Agency Environmental Classification Summary

Part 1 Project Description

Federal Aid Project Number	Route	Date Created	Intent of Submittal
	405	3-28-2007	☐ Preliminary ☒ Final ☐ Re-Evaluate

Agency	Federal Program Title
WSDOT	☒ 20.205 ☐ 20.209 ☐ Other

Project Title
I-405, SR 181 and SR 167 Ramp and Safety Improvement Project

Begin	End		
MP 0.85,2.00	MP 1.04,2.20	Miles 0.23	Townships 23
KP	KP	KM	Ranges 4,5
			Sections SW 24, NW 19

County	Water Resource Inventory Area (WRIA) No. & Name	Within Puget Sound Basin?
King	9 Green/Duwamish & Central Puget Sound	☒ Yes ☐ No

Project Description - Describe the proposed project, including the purpose of need for the project.

See attached Project Description

Part 2 Environmental Classification

NEPA

☐ Class I - Environmental Impact Statement (EIS)
☐ Class II - Categorically Excluded (CE)
CE Type (from 23 CFR 771.117) ________
☐ Projects Requiring Documentation (Documented CE) (LAG 24.22)
☐ Class III - Environmental Assessment (EA)
☒ Programmatic CE MOU

SEPA

☐ Categorically exempt per WAC 197-11-800
CE Type (from SEPA Checklist) ________
☒ Determination of Non-Significance (DNS)
☐ Environmental Impact Statement (EIS)
☐ Adoption
☐ Addendum
☐ Supplemental

NEPA Approval Signatures

Local Agency Approving Authority — Date

Regional Local Programs Engineer / Assistant Secretary — Date

[signature] — 3/13/17

Highways and Local Programs Environmental Engineer — Date

Federal Highway Administration — Date

Completed By (Print Official's Name)	Telephone *(include area code)*	Fax *(include area code)*

Part 3 Permits and Approvals Required

Yes	No	Permit or Approval
☐	☒	Corps of Engineers ☐ Sec. 10 ☐ Sec. 404
		☐ Nationwide Type ______
		☐ Individual Permit No. ______
☐	☒	Coast Guard Permit
☐	☒	Coastal Zone Management Certification
☐	☒	Critical Area Ordinance (CAO) Permit
☒	☐	ESA and EFH Compliance (See Part 5)
☐	☒	Flood Plain Development Permit
☐	☒	Forest Practice Act Permit
☐	☒	Hydraulic Project Approval
☐	☒	Local Building or Site Development Permits
☐	☒	Local Clearing and Grading Permit
☐	☒	Natl. Historic Preservation Act - Section 106
☒	☐	National Pollutant Discharge Elimination System (NPDES) Baseline General for Construction
☐	☒	ROW Acquisition Required

Yes	No	Permit or Approval
☐	☒	Shoreline Permit
☐	☒	State Waste Discharge Permit
☐	☒	Section 4(f)/6(f): Wildlife Refuges, Recreation Areas, Historic Properties
☐	☒	TESC Plans Completed
☐	☒	Water Rights Permit
☐	☒	Water Quality Certification - Sec. 401 Issued by ______
☐	☒	Tribal Permit(s), (If any)
☐	☒	Other Permits, including GMA (List):

Part 4 Environmental Considerations

Will the project involve work in or affect any of the following? Identify proposed mitigation. Attach additional pages or supplemental information if necessary.

1. Air Quality - Identify any anticipated air quality issues.

Is the project included in the Metropolitan Transportation Plan? ☐ Yes ☒ No

If Yes, date Metropolitan Transportation Plan was adopted. ______

Is the project located in an Air Quality Non-Attainment Area or Maintenance Area (for carbon monoxide, ozone, or PM10)? ☒ Yes ☐ No

Is the project exempt from Air Quality conformity requirements? ☒ Yes ☐ No (If Yes, identify exemption below.)

Shoulder improvements WAC 173-420-110-1 (f)
40 CFR 93.126

2. Critical/Sensitive Areas - Identify any known Critical or Sensitive Areas as designated by local Growth Management Act ordinances.

a. Aquifer Recharge Area, Wellhead Protection Area, or Sole Source Aquifer. If located within a sole source aquifer, is project exempt from EPA approval? ☒ Yes ☐ No

Project is over 10-year recharge area for the Cedar Valley Aquifer, but not within the protection area.

b. Geologically Hazardous Area

N/A

c. Habitat. List known fish and wildlife species present and describe general habitat.

N/A

d. Are wetlands present within the project area? ☐ Yes ☒ No If Yes, estimated area of impact in acre(s):

The wetland buffer for the Nelson side channel is within the project area. There will be approximately 0.06 acres of buffer impacts.

Part 4 Environmental Considerations - Continued

3. Cultural Resources/Historic Structures - Identify any historic, archaeological, or cultural resources present with the project's area of potential effects.

Does the project fit into any of the exempt types of projects listed in Sect. 24.82(a) of the LAG Manual? ☒ Yes ☐ No
If **Yes,** note exemption below.

All work between highway and adjacent frontage road per LAG 24.81 (c)

If **No**: Date of DAHP consultation ____________________

Date of Tribal consultation(s) (if applicable) ____________________

Adverse affects on cultural/historic resources? ☐ Yes ☐ No

If Yes, date of approved Section 106 MOA ____________________

4. Flood Plains or Ways

Is the project located in a 100-year flood plain? ☐ Yes ☒ No

If yes, is the project located in a 100-year floodway? ☐ Yes ☐ No

Will the project impact a 100-year flood plain? ☐ Yes ☒ No (If Yes, describe impacts and analysis conducted.)

5. Hazardous and Problem Waste - Identify potential sources and type.

Is the project likely to involve site clean-up? ☐ Yes ☒ No

Will the project create any hazardous waste? ☐ Yes ☒ No (If Yes, describe waste handling and disposal.)

6. Noise - Identify potential sensitive receptors or previous mitigation commitments. Briefly describe your impacts to the sensitive receptor, if present.

See attached Noise Effects Determination

7. Parks, Recreation Areas, Wildlife Refuges, Historic Properties, or Scenic Rivers/Byways, 4(f)/6(f) Lands - Identify any properties within the project limits and, if any are present, describe impacts to properties present.

N/A

Part 4 Environmental Considerations - Continued

8. Resource Lands - Identify any of the following resource lands within 300 feet of the project limits and those otherwise impacted by the project. Describe any impacts to any resource lands identified.

a.

N/A

If present, is resource considered to be prime and unique farmland? ☐ Yes ☐ No

If Yes, date of approval from Natural Resources Conservation Service (NRCS) ______________

b. Forest/Timber

N/A

c. Mineral

N/A

9. Rivers, Streams (Continuous, Intermittent), or Tidal Waters

a. Identify all waterbodies within 300 feet of the project limits or that will otherwise be impacted.

Fisheries WA Stream No. ______________ Ecology 303d Report No. 0WW-134

Reason for 303d listing Oxygen, Fecal, Temperature

Date of Report 6/2/04

Green River - WA-09-1020 is 303d listed
Rolling Hills Creek

b. Identify stream crossing structures by type.

There are no streams crossed by structures associated with this project.

10. Tribal Lands - Identify whether the project will impact any Tribal lands.

No tribal lands will be affected.

11. Visual Quality

Will the project impact roadside classification or visual aspects? ☐ Yes ☒ No (If Yes, identify the impacts.)

Part 4 Environmental Considerations - Continued

12. Water Quality/Storm Water

Has NPDES municipal general permit been issued for this WRIA? ☐ Yes ☒ No

Amount of existing impervious surface within project limits: 93,947 s/f

Net new impervious surface to be created as a result of project: 23,523 s/f

Will this project's proposed stormwater treatment facility be consistent with the guidelines provided by either WSDOT's HRM, DOE's western or eastern Washington stormwater manuals, or a local agency equivalent manual? ☒ Yes ☐ No

If no, explain proposed water quality/quantity treatment for new and any existing impervious surface associated with proposed project.

13. Previous Environmental Commitments

Have previous environmental commitments been made in the project area? ☒ Yes ☐ No

Describe commitments. If commitments are a result of permit conditions, identify issuing agency, permit number and date, and how commitments will be met.

This project will follow commitments made for the I-405, I-5 to SR 169 Stage 1 Widening Project.

14. Long-Term Maintenance Commitments

Are long-term maintenance commitments necessary for this project? ☐ Yes ☒ No
Identify.

15. Environmental Justice

Are minority and/or low income communities impacted by the project? ☐ Yes ☒ No (If Yes, identify the impacts.)

Part 5 Biological Assessment and EFH Evaluations

Answer **ALL** questions. Refer to the Part 5 Biological Assessment Checklist Instructions before completing this section.

Permits

1. Are any of the following environmental permits, as indicated in Part 2, required: HPA, 404 wetlands, or local clearing and grading, shorelines, or permits related to critical or sensitive areas ordinances? ☐ Yes ☒ No

Location

	2. Will any construction work occur within 0.5 miles of any of the following:	3. Does the project involve blasting, pile driving, concrete sawing, rock drilling, or rock scaling activities within 1 mile of any of the following?
Bald eagle nesting territories, winter concentration areas, or bald eagle communal roosts?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Spotted owl management circles or designated critical habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Marbled murrelet nest or occupied stand, or designated critical habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Western snowy plover designated critical habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Federal threatened, endangered, proposed, or candidate plant species locations or documented habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Canada lynx habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Gray wolf habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Grizzly bear habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Brown pelican night roosts?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
Woodland caribou habitat?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know
A mature coniferous or mixed fixed forest stand?	☐ Yes ☒ No ☐ Don't Know	☐ Yes ☒ No ☐ Don't Know

4. Will any construction work occur within 300 feet of Puget Sound, Strait of Juan de Fuca, or the Pacific Ocean? ☐ Yes ☒ No
5. Will any construction work occur within 300 feet of any permanent or intermittent waterbody, **which supports or drains into a listed fish supporting** waterbody? ☒ Yes ☐ No ☐ Don't Know
6. Will any construction work occur within 300 feet of any wetland, pond, or lake that is connected to **any** permanent or intermittent waterbody? ☒ Yes ☐ No ☐ Don't Know
7. Does the action have the potential to directly or indirectly impact designated critical habitat for salmonids (including adjacent riparian zones)? ☐ Yes ☒ No ☐ Don't Know

Stormwater

8. Will this project's proposed stormwater treatment facility be consistent with the guidelines provided by either WSDOT's 2004 HRM, DOE's western or eastern Washington stormwater manuals, or a local agency equivalent manual? ☒ Yes ☐ No

Construction Activities

9. Will any construction waste materials (e.g., asphalt or concrete grindings or byproducts, construction-related chemicals, fill materials, or excavated materials) from the project be disposed of at a location other than a permitted disposal site? ☐ Yes ☒ No ☐ Don't Know
10. Will the project involve any in-water work? ☐ Yes ☒ No ☐ Don't Know
11. Will the project effect the water regime of, or utilize any water from a waterbody, which supports or drains into a listed fish supporting waterbody; or any wetland, pond, or lake? ☐ Yes ☒ No ☐ Don't Know
12. Will construction work occur outside the existing pavement? If Yes, go to 12a. ☒ Yes ☐ No

12a. Will construction activities occurring outside the existing pavement involve clearing, grading, filling, or modifications of vegetation or tree cutting? ☒ Yes ☐ No

Determination

If all the above questions were marked No (with the exception of Question 8a.), or if any of the above items were checked Yes or Don't know, but an adequate justification has been provided to support a no effect determination, then check **No Effect.** If any of the above items were checked Yes or Don't Know (with the exception of Question 8a.), a biologist is required to conduct a review and evaluate the project; complete the section 7 consultation process per section 24.7 of the LAG manual. Note: If a biologist is required to conduct a review and evaluate the project, this does not preclude a no effect determination.

	NOAA Fisheries	USFWS
☒ No Effect		
☐ NLTAA Date of Concurrence		
☐ LTAA Date BO Issued		
Date of First 6 Mo. Update		

Essential Fish Habitat Determination:

☐ No Effect

☐ Adverse Effect. Date of NOAA Concurrence ____________

Analysis for No Effects Determination (Required if any item in Section 5 was checked Yes).

Please see attached No Effects Letter

Part 6 FHWA Comments

Use Supplement Sheet if additional space is required to complete this section.

Environmental Classification Summary
I-405, SR 181 and SR 167 Ramp and Safety Improvement Project

Items not contained within the ECS form, but required to complete the SEPA checklist per the NEPA Categorical Exclusions Implementing Agreement (June, 1996) between Washington State Department of Transportation and the Washington State Department of Ecology, Section III [2(c)]:

i. *Proposed timing of project*
This project is expected to begin construction in July 2007 and conclude by June 2010

ii. *List of future additions, expansions, or further activity related to the project*
This project was included within the Selected Alternative as described in the I-405 Corridor Program Final EIS and Record of Decision (October 2002). There are future phases planned beyond this project to achieve the full build out of the Program. The next known phase is the *Tukwila to Renton Improvement Project, Phase 2*, which is currently going through NEPA/SEPA review.

iii. *List any environmental information that has been prepared, or will be prepared that relates to this project*
Attached to this ESC packet is a memo from WSDOT Cultural Resources staff documenting that the project will have no potential to effect historic properties (March 8, 2007) and also a memo from WSDOT Biology staff documenting the project will have No Effect on endangered species (March 7, 2007).

iv. *Give complete project description, and location information, including zoning classification of site*
This Project will widen three existing ramps along I-405, two ramps at the SR 181 interchange and one ramp at the SR 167 interchange. These improvements address both safety and traffic operations.

The ramp improvements at the SR 181 interchange will widen the off-ramp from northbound I-405 to SR 181. In addition, improvements at the SR 181 interchange will widen the on-ramp from SR 181 to northbound I-405. New ramp meter equipment and a signal cabinet will be installed at the on-ramp. There will be a slight increase in capacity as the new configuration will have two metered general-purpose lanes and an HOV bypass shoulder. The existing configuration has one general-purpose lane and an HOV bypass lane. A new traffic signal with a dual protected left turn arrow will be added to SR 181at the intersection with the I-405 ramp termini.

The ramp improvement at the SR 167 interchange will widen the on-ramp from southbound SR 167 to southbound I-405. New ramp meter equipment and a signal cabinet will also be installed. There will be a slight increase in capacity as the new configuration will have two metered general-purpose lanes and an HOV bypass lane. The existing configuration only has a general-purpose lane.

These improvements add a total of 23,523 square feet of impervious surface. The Highway Runoff Manual will be followed to provide detention and treatment for the new impervious surface. Water quantity detention will be provided by constructing a new detention pond within the southwest quadrant of the SR 181 interchange and modifying the detention pond on the south side of I-405 at milepost 1.90. Water quality treatment will be provided through the construction of new ecology embankments.

The Project occurs entirely within existing WSDOT right-of-way. Therefore, there are no zoning issues.

v. *Earth: give approximate slope of site, soil type, source of fill material, percent of increase impervious surfaces, erosion potential, and measures to reduce erosion.*

The project area at SR 181 slopes approximately 6.0% and the project area at SR 167 slope is generally flat. Both project areas are contained within fill material. The new source of fill material will be either native material available on site or clean imported fill. The new fill will be free of deleterious material, wood, roots, bark or other extraneous material.

The existing project area has 93,947 square feet of impervious surface. The proposed project will add 23,523 square feet square feet of impervious surface for an increase of approximately 25% in impervious surfaces.

This project has some potential for erosion, in particular at the SR 181 area. The project will follow standard BMP's. Below is a list of BMP's the project will follow:

- Develop and implement a temporary erosion and sediment control plan for clearing, vegetation removal, grading, ditching, filling, embankment compaction, or excavation. The BMPs in the plan will be used to control sediment input from all vegetation or ground-disturbance activities.
- Use effective erosion control measures, such as filter-fabric fence, straw mulch, straw bales, and plastic sheeting to prevent silt and soil from entering surface waters (including wetlands).
- Hydroseed bare soil areas following grading per environmental regulations.
- Clearly label streams and stream buffers on the construction plans and in the field.

- Mark clearing limits with orange barrier fencing wherever clearing is proposed in or near critical areas.
- Locate staging areas and equipment storage areas away from sensitive areas (e.g., streams and wetlands).
- Identify and develop staging areas for equipment repair and maintenance away from all drainage courses. WSDOT will require that washout from concrete trucks not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. Thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts. WSDOT will designate a washdown area for equipment and concrete trucks.
- Contain excavated sediment in tanks, or other appropriate containers, to avoid discharge to surface water, and transport the contained sediments to an approved disposal site.

This Project will also be constructed under the provisions of NPDES permit #WAR-006736, issued for the I-405, I-5 to SR 169 Widening Project.

vi. *Water: List and describe any impacts to lakes or other surface waters not included in the ECS form. List any proposed surface or ground water withdrawals, diversions or discharges.*

There are no other water bodies affected by the project, that are not listed in the ECS. The project at SR 181 will discharge through an existing culvert into a wetland referred to as the Nelson Side Channel. The Project at SR 167 will discharge into Springbrook Creek through an outfall built for the I-405, I-5 to SR 169 Widening Project.

Environmental Classification Summary
I-405, SR 181 and SR 167 Ramp and Safety Improvement Project

Noise Effect Determination:

The I-405 Renton Nickel Improvement Project EA identified three receptors near the project areas. At SR 181, the EA identified the Interurban Trail and the Green River Trial. At the SR 167 Interchange, the EA identified a residence at SW 13th.

This project will not impact these receptors.

Washington State
Department of Transportation

Northwest Washington Division
Urban Corridors Office
401 Second Avenue South, Suite 560
Seattle, WA 98104
206-464-1221/Fax 206-464-1189
www.wsdot.wa.gov

March 8, 2007

Jason McKinney
Project Environmental Manager
I-405 Project Team
600-108th AVE NE, STE 405
Bellevue, WA 98004
Tel (425) 456-8562

RE: I-405, I-5 to SR 169 Ramp/Safety Improvement Project

Dear Jason:

Based on a thorough review of the project description for SR 405/SR 169 and SR 405/SR 181 intersection work areas, and of aerial photographs, topographic maps, and a cross-section profile of the SR 405/SR 181 work area, it is my professional opinion that this project has no potential to effect historic properties. This project meets criteria for an exemption from cultural resources assessment under Exemption B-2 under the Statewide Programmatic Agreement working final draft of 2007 to be signed by the Federal Highway Administration, the Washington State Department of Transportation, the Washington State Historic Preservation Officer, and the Advisory Council on Historic Preservation. This project thus may proceed without regard to cultural resources.

Project Description

This project will widen three existing ramps along I-405, two ramps at the SR 181 interchange and one ramp at the SR 167 interchange. These improvements address both safety and traffic operations.

The ramp improvements at the SR 181 interchange will widen the off-ramp from northbound I-405 to SR 181. In addition, the on-ramp from SR 181 to northbound I-405 will be widened to accommodate an HOV bypass, and ramp meter equipment. A new traffic signal with a dual protected left turn arrow will be added to SR 181.

The ramp improvement at the SR 167 interchange will widen the on-ramp from southbound SR 167 to southbound I-405. New ramp meter equipment and a signal cabinet will also be installed. There will be a slight increase in capacity as the new configuration will have two metered general-purpose lanes and a HOV bypass lane. The existing configuration only has a general-purpose lane.

These improvements add a total of 23,523 square feet of impervious surface. The Highway Runoff Manual will be followed to provide detention and treatment for the new impervious surface. Water quantity detention will be provided by constructing a new detention pond within the southwest quadrant of the SR 181 interchange and modifying the detention pond on the south side of I-405 at milepost 1.90. Water quality treatment will be provided through the construction of new ecology embankments.

Lastly, a new retaining wall will be built along the outside edge of the SR 181 off-ramp, south-southeast of the proposed new detention pond.

Project Ground Disturbance and Potential Effects to Buried Historic Properties

All ramp widening improvements involve removal of sod that covers previously placed imported fill and placement of new imported fill. No cutting of substrate below existing fill is planned.

The relative elevations shown on the topographic maps and the cross-section profile for the SR 405/SR 181 off-ramp indicate that both basal elevations for the proposed detention pond and retaining wall will remain within previously placed imported fill. No excavation to an elevation below fill and within native substrate is planned.

No native soil or substrate will be encountered by the proposed project. Thus the project has NO potential to effect historic properties.

Pleas let me know if you require additional information from me. Thanks.

Sincerely,

Kenneth E Juell

Kenneth E. Juell
Cultural Resources Specialist
Urban Corridors Office
401 Second Avenue South, Suite 400, TB85-95
Seattle, WA 98104

cc. Allison Ray, WSDOT
Sandie Turner, WSDOT
Sharon Love, FHWA

Figure 1, SR 167 Ramp Pavement Area, Cultural Resources Memo, 3/08/07

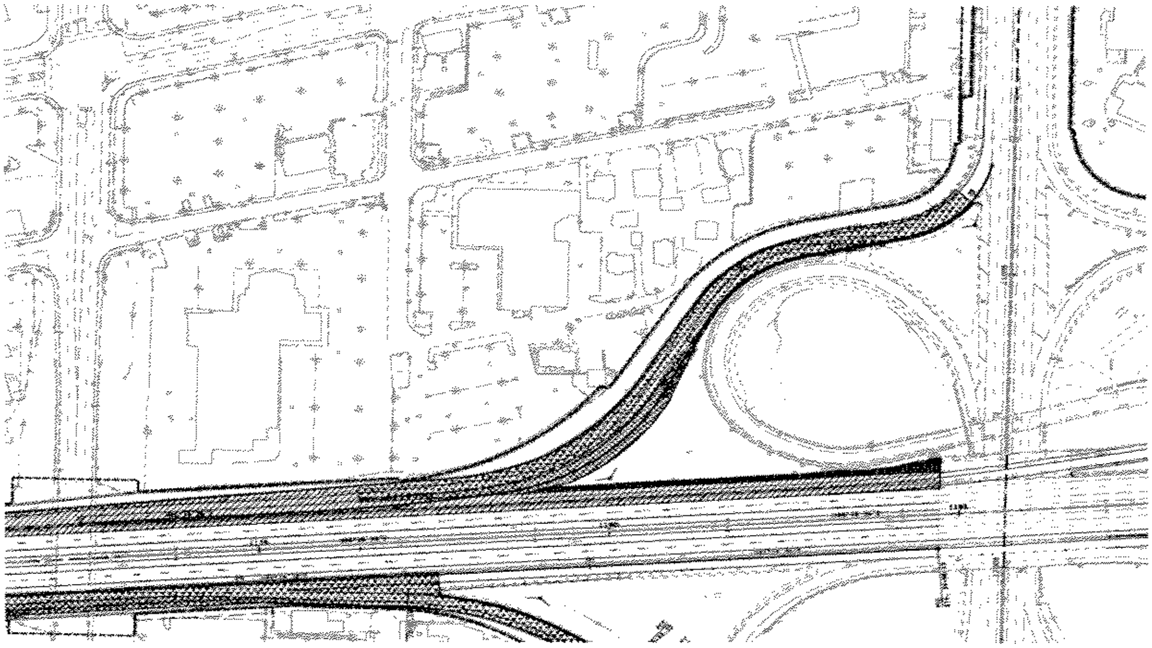


Figure 2, SR 181 Ramps Pavement Area, Cultural Resource Memo, 3/08/07

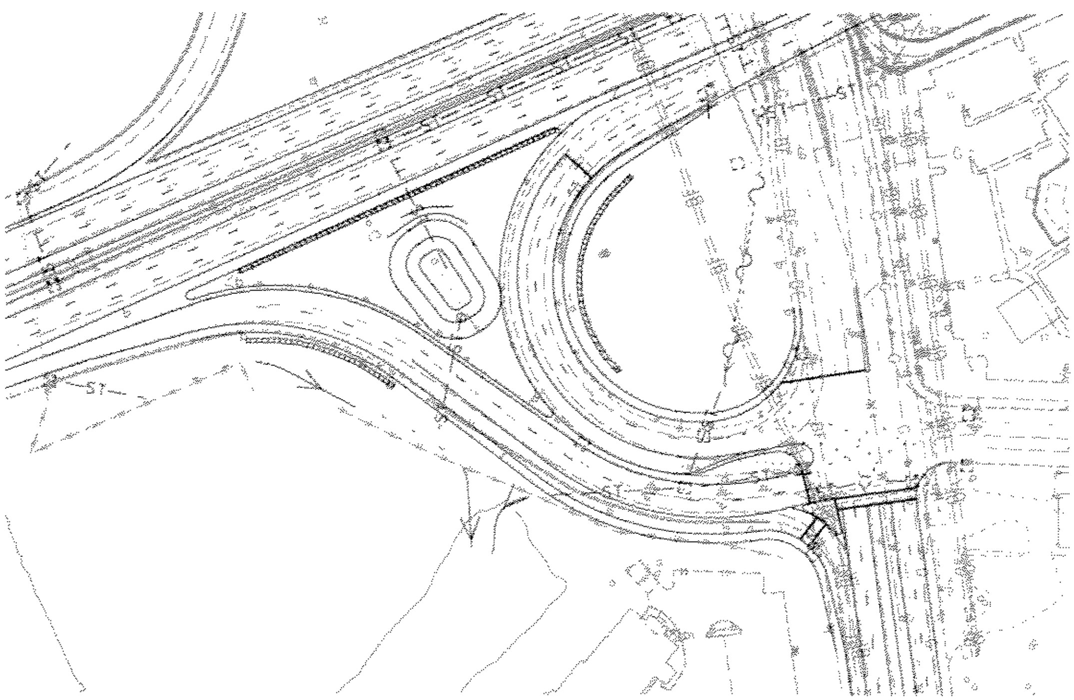


Figure 3, Wall Location, Cultural Resource Memo, 3/08/07

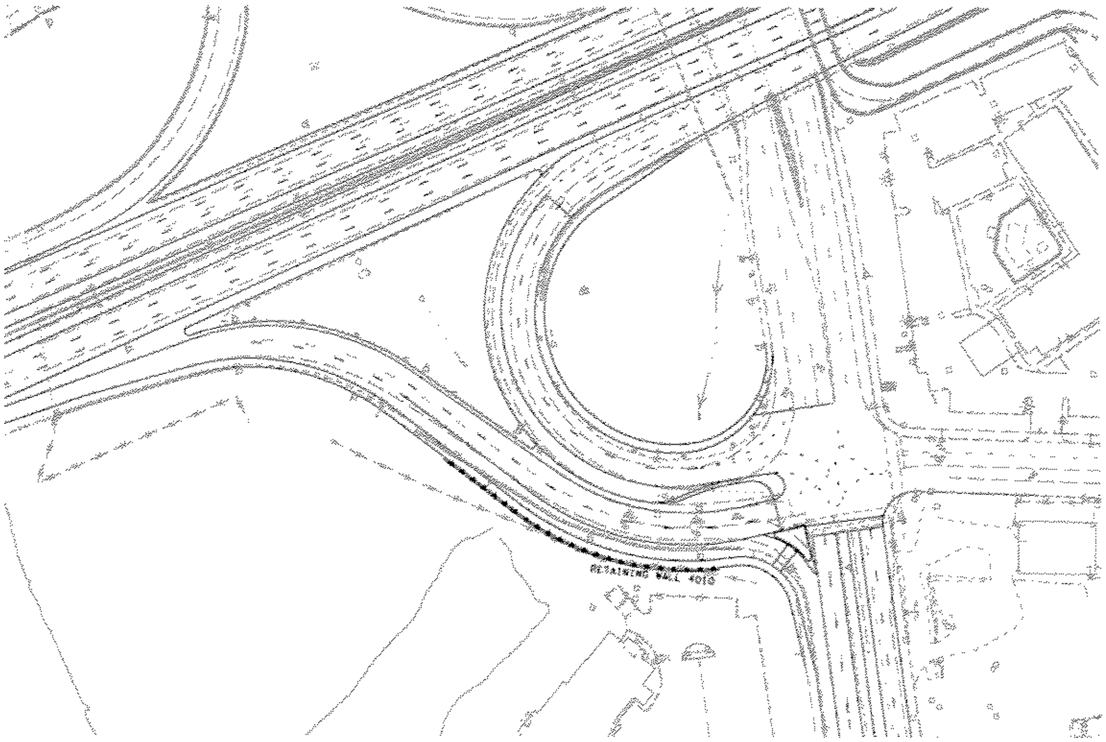
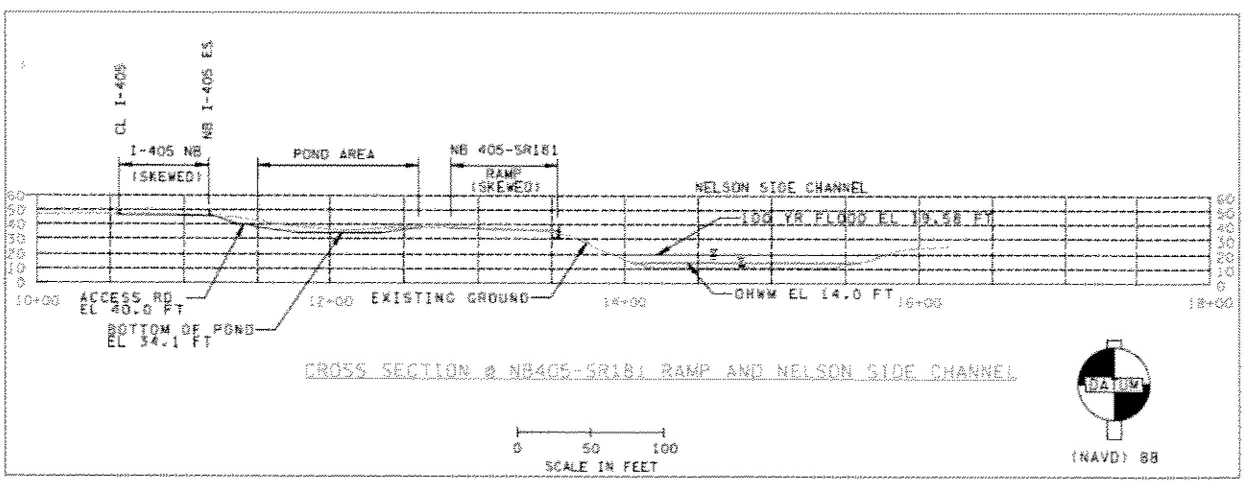


Figure 4, Profile of Excavation, Cultural Resource Memo, 3/08/07



Washington State
Department of Transportation
Douglas B. MacDonald
Secretary of Transportation

Northwest Region
15700 Dayton Avenue North
P.O. Box 330310
Seattle, WA 98133-9710

206-440-4000
TTY: 1-800-833-6388
www.wsdot.wa.gov

March 07, 2007

Mr. Steve Boch
Federal Highway Administration
915 2nd Avenue
Room 3142
Seattle, WA 98174

Re: I-405, I-5 to SR 169 Ramp/Safety Improvement Project

Dear Mr. Boch:

The Washington State Department of Transportation (WSDOT) is proposing to widen three existing ramps along I-405 at the SR181 and SR167 interchanges in the cities of Renton and Tukwila to address both safety improvements and traffic operations (Attachment 1). WSDOT has prepared this no effects letter in response to proposed, threatened, and endangered species listed by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) as having the potential to be in the proposed project vicinity during construction.

The project will be constructed within WSDOT right of way along the existing SR181 and SR167 on and off-ramps to I-405 at mileposts 0.90 and 2.20. The project is located in Section 24 of Range 4E and Section 19 of Range 5E, in Township 23N (HUC# 1711001300).

Project description
The ramp improvement at the SR 181 interchange involves widening the off-ramp from northbound I-405 to SR 181. In addition, the on-ramp from SR 181 to northbound I-405 will be widened to accommodate an HOV by-pass as well as a ramp meter and new signal cabinet. A new traffic signal with a dual protected left turn arrow will be added to SR 181 (Attachment 2). The ramp improvement at the SR 167 interchange involves widening the on-ramp from southbound SR 167 to southbound I-405 (Attachment 3). A new ramp meter and signal cabinet will also be installed. Construction will take place between July 2007 and June 2010.

The project will add a total of 24,123 square feet of impervious surface. The Highway Runoff Manual will be followed to provide detention and treatment for the new impervious surface. All new and some existing impervious surface will be treated for both water quality and flow control. New ecology embankments will provide water quality treatment and reduce pollutant concentrations entering receiving water bodies. Flow control will be provided by constructing a new detention pond within the southwest quadrant at the SR 181 interchange (TDA 1), which will tie into an existing culvert that discharges to the Nelson Side Channel. An existing detention pond on the south side of I-405 at MP 1.90 (TDA 2) will be modified to accommodate additional runoff, which is conveyed through pipes, ditches, and culverts from the interchange west to Springbrook Creek. No new outfalls will be constructed for this project.

Stormwater analysis for the proposed project used the high risk criteria because the project will support traffic volumes in excess of 60,000 average daily vehicle trips. Results of the analysis indicate that the proposed project will result in a minor increase in total mass loading of dissolved zinc and dissolved copper (0.1 pounds per year for each). However, the project will result in reduced concentrations of all pollutants in stormwater runoff at the project level and within both threshold discharge areas, meaning that the proposed project will result in no net increase in the exposure of aquatic receptors to any of the five water quality parameters of concern. Refer to Attachment 4 for a detailed stormwater pollutant loading analysis.

Best management practices and minimization measures

The following BMPs and minimization measures will be implemented to avoid and minimize potential impacts during project activities:

- A Temporary Erosion and Sediment Control (TESC) Plan and a Source Control Plan will be developed and implemented for all projects requiring clearing, vegetation removal, grading, ditching, filling, embankment compaction, or excavation. The BMPs in the plans will be used to control sediments from all vegetation removal or ground disturbing activities.
- The contractor will designate at least one employee as the erosion and spill control (ESC) lead. The ESC lead will be responsible for the installation and monitoring of erosion control measures and maintaining spill containment and control equipment. The ESC lead will also be responsible for ensuring compliance with all local, state, and federal erosion and sediment control requirements.
- WSDOT policy and construction administration practice is to have an inspector on site during construction. The role of the inspector will ensure that the contract and permit requirements are met.
- Vegetation will only be grubbed from areas undergoing permanent alteration and for temporary construction access. All areas grubbed for temporary construction access will be replanted with predominantly native vegetation when construction is completed.
- Project staging and material storage areas shall be located a minimum of 150 feet from surface waters and sensitive areas, or will be situated in currently developed areas such as parking lots or managed fields.
- No paving, chip sealing or stripe painting will occur during periods of rain or wet weather.
- Ecology embankments will provide enhanced water quality treatment for all new and some existing impervious surfaces.
- Flow control will be provided to ensure no adverse impacts to receiving water bodies.

Existing conditions
The project area is highly urbanized and contains very little vegetation. Disturbance levels are high due to large volumes of highway traffic. Land use surrounding the project area is a mix of residential and commercial. Vegetation to be cleared consists primarily of Himalayan blackberry (*Rubus armeniacus*), as well as landscaped grass/shrub areas within the median and WSDOT right of way.

The SR181 interchange is approximately 300 feet from the Green River and adjacent to the Nelson Side Channel. The channel is the old alignment of the Green River prior to construction of I-405 and no longer has any surface water connection to the river.

Action area
The project component with the greatest extent of impact is noise generated by construction equipment. Ambient noise levels in the project vicinity are high due (~86 dBA) to traffic volumes associated with I-405. Equipment to be used for this project includes trucks, backhoes, pavers, front loaders, and graders, which produce noise levels of approximately 90 dBA. Construction noise is expected to subside to ambient levels within approximately 150 feet of the source; therefore, the action area for the project extends 150 feet from the project footprint.

Species occurrence
The National Marine Fisheries Service website lists the potential presence of Puget Sound Evolutionarily Significant Unit (ESU) Chinook salmon (*Oncorhynchus tshawytscha*) and Puget Sound Distinct Population Segment (DPS) steelhead trout (*Oncorhynchus mykiss*) in the project vicinity. The USFWS King County species listing lists the potential presence of Coastal-Puget Sound Distinct Population Segment (DPS) bull trout (*Salvelinus confluentus*), and bald eagle (*Haliaeetus leucocephalus*) in the project vicinity. The possible presence of listed species was further evaluated by reviewing Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) database. Websites and PHS data were accessed on February 21, 2007.

A WSDOT biologist visited the project area on February 21, 2007 to determine the status and availability of suitable habitat for listed species in the action area and to evaluate any potential impacts of the proposed project. Within the project action area there is no potential suitable habitat for any listed species. The PHS database does not indicate any listed species within the action area.

Puget Sound Chinook
The project is located near the Green River and Springbrook Creek. Chinook salmon have been documented in both water bodies. However, the project involves no in-water work or impacts to the Green River or Springbrook Creek. Therefore, the project will have **no effect** on Chinook salmon.

Steelhead
On March 29, 2006, the National Marine Fisheries Service proposed to list Puget Sound steelhead under the Endangered Species Act. Steelhead have been documented in both the Green River and Springbrook Creek. Because the project's stormwater treatment and

detention facilities will result in no adverse effects on the water quality or hydrology of either system, and there is no in-water work, WSDOT concludes that the proposed project **will not jeopardize the continued existence** of steelhead. If steelhead are listed before the completion of the proposed project, the effect determination will be **no effect** on steelhead.

Bull trout
Bull trout have never been documented in Springbrook Creek and only rarely in the Green River. Because the project involves no in-water work or impacts to the Green River it will have **no effect** on bull trout.

Bald Eagles
There are no documented bald eagle nests, nesting territories, or wintering areas within one mile of project activity. Foraging opportunities along the Green River, which is approximately 300 feet from the SR181 ramp and outside the action area, are limited. Because existing disturbance levels in the action area are already elevated due to I-405 traffic, bald eagles in the action area are already accustomed to high levels of noise. No suitable habitat or prey species will be affected by the project. Therefore, the project will have **no effect** on bald eagles.

Essential Fish Habitat (EFH)
The Pacific Fishery Management Council manages the fisheries for Chinook, coho, and Puget Sound pink salmon and has defined EFH for these species to include all those streams, lakes, ponds, wetlands, and other water bodies currently or historically accessible to salmon in Washington. There is no EFH within the action area; therefore, this project will **not adversely affect** Essential Fish Habitat for the Pacific Salmon Fishery.

Critical Habitat Designations
Puget Sound ESU Chinook Critical Habitat
On August 12, 2005, the National Marine Fisheries Service (NMFS) announced the impending publication of *Final Rules Designating Critical Habitat for 12 Evolutionarily Significant Units (ESUs) of Pacific Salmon and Steelhead in Washington, Oregon, and Idaho*. These rules were published on September 2, 2005 (50 CFR Part 226), and became effective on January 2, 2006. Critical habitat for Puget Sound ESU Chinook salmon is designated for areas containing the physical and biological habitat features, or primary constituent elements (PCEs) essential for the conservation of the species or which require special management considerations. Six PCEs have been identified for Chinook salmon critical habitat, including freshwater spawning, freshwater rearing, freshwater migration, estuarine areas, nearshore marine areas, and offshore marine areas.

The project involves no in-water work and there is no Chinook salmon critical habitat within the action area. Therefore, this project **will have no effect** on proposed Chinook salmon critical habitat.

Coastal-Puget Sound Bull Trout Critical Habitat

On September 26, 2005, the U.S. Fish and Wildlife Service (USFWS) published a *Final Rule Designating Critical Habitat for the Coastal-Puget Sound Population of Bull Trout*, which was listed as a threatened species in 1999. This rule became effective on October 26, 2005. For an area to be included as critical habitat it has to provide one or more of the following functions for bull trout: (1) spawning, rearing, foraging, or over-wintering habitat to support essential existing bull trout local populations; (2) movement corridors necessary for maintaining essential migratory life history forms; and/or (3) suitable habitat that is considered essential for recovering existing local populations that have declined or that need to be re-established to achieve recovery.

The project involves no in-water work or impacts to water bodies in the action area; therefore this project will **have no effect** on bull trout critical habitat.

Conclusions
WSDOT has determined that the I-405, I-5 to SR 169 Ramp/Safety Improvement Project will have **no effect** on Puget Sound ESU Chinook salmon, Coastal-Puget Sound DPS bull trout, or bald eagles, and **will not jeopardize the continued existence** of Puget Sound steelhead. Additionally, the project will have **no adverse effect** on Essential Fish habitat for the Pacific Salmon Fishery, and **no effect** on Chinook salmon or bull trout critical habitat.

Project components that support this determination include:

- No listed species or critical habitat have been documented in the action area.
- No suitable habitat for any listed species exists within the action area.
- Ambient noise levels within the action area are high.
- The project involves no in-water work.
- There will be no impacts to water quality or peak flows to any receiving water bodies.

It is our understanding that this satisfies WSDOT's responsibilities under Section 7(a)(2) of the ESA. We will continue to remain aware of any change in status of these species and will be prepared to re-evaluate potential project impacts, if necessary.

Please contact George Ritchotte by phone at (206) 464-1210 or by email at ritchog@wsdot.wa.gov if you require additional information or have any questions.

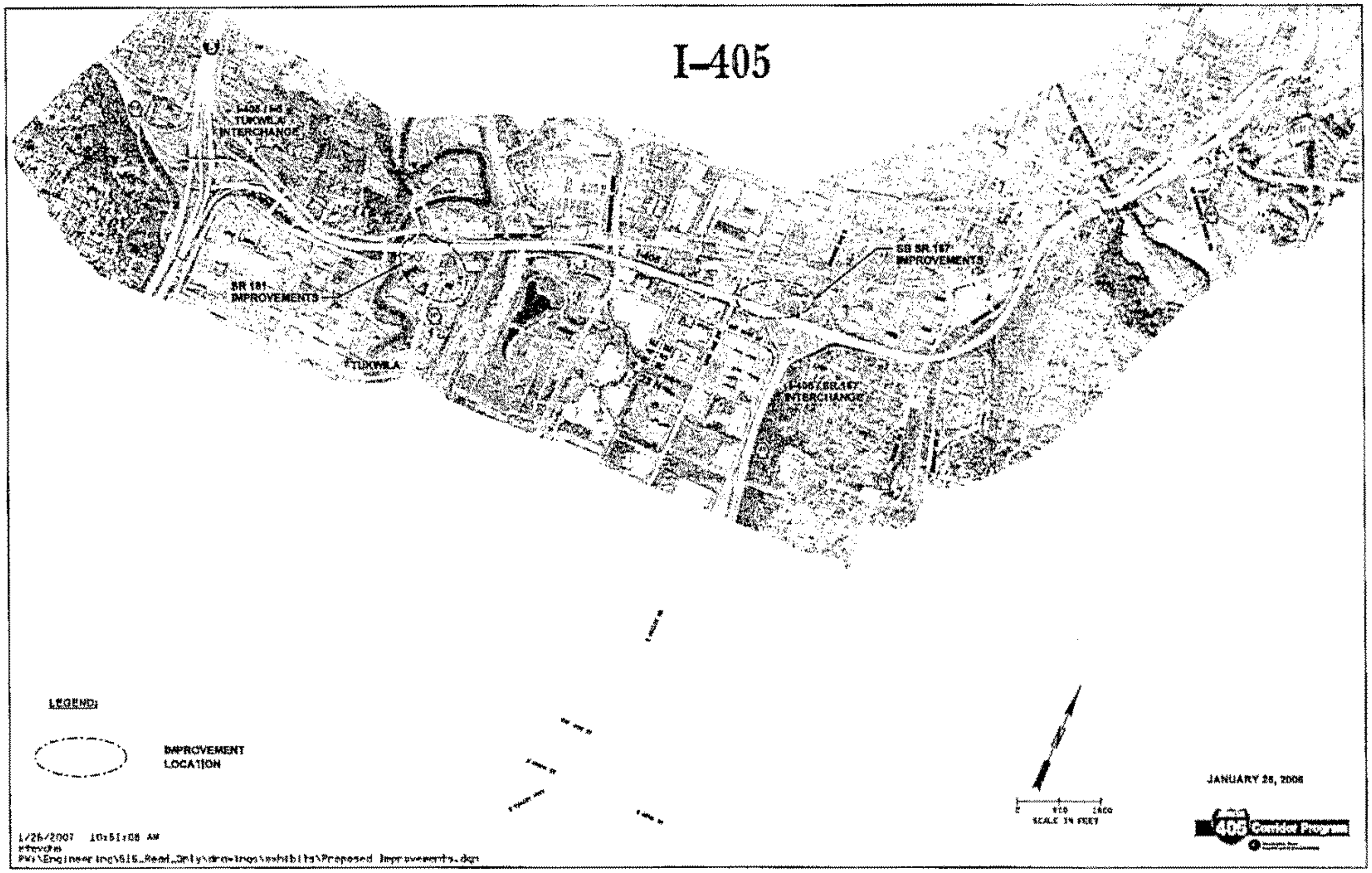
Sincerely,

Michelle Steinmetz

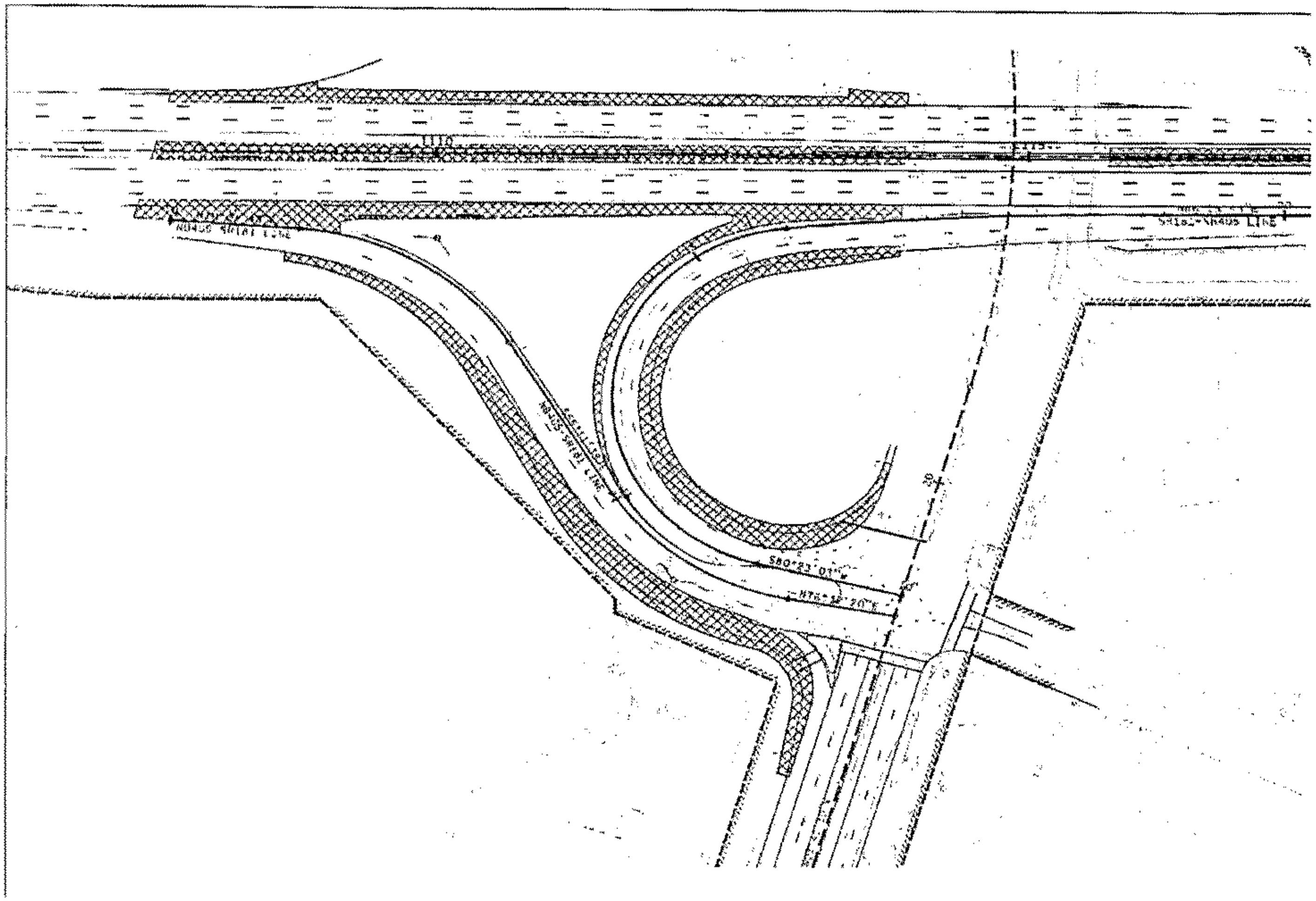
Michelle Steinmetz
Biology Program Manager for the Urban Corridors Office

Attachments: Vicinity maps
Stormwater pollutant loading analysis

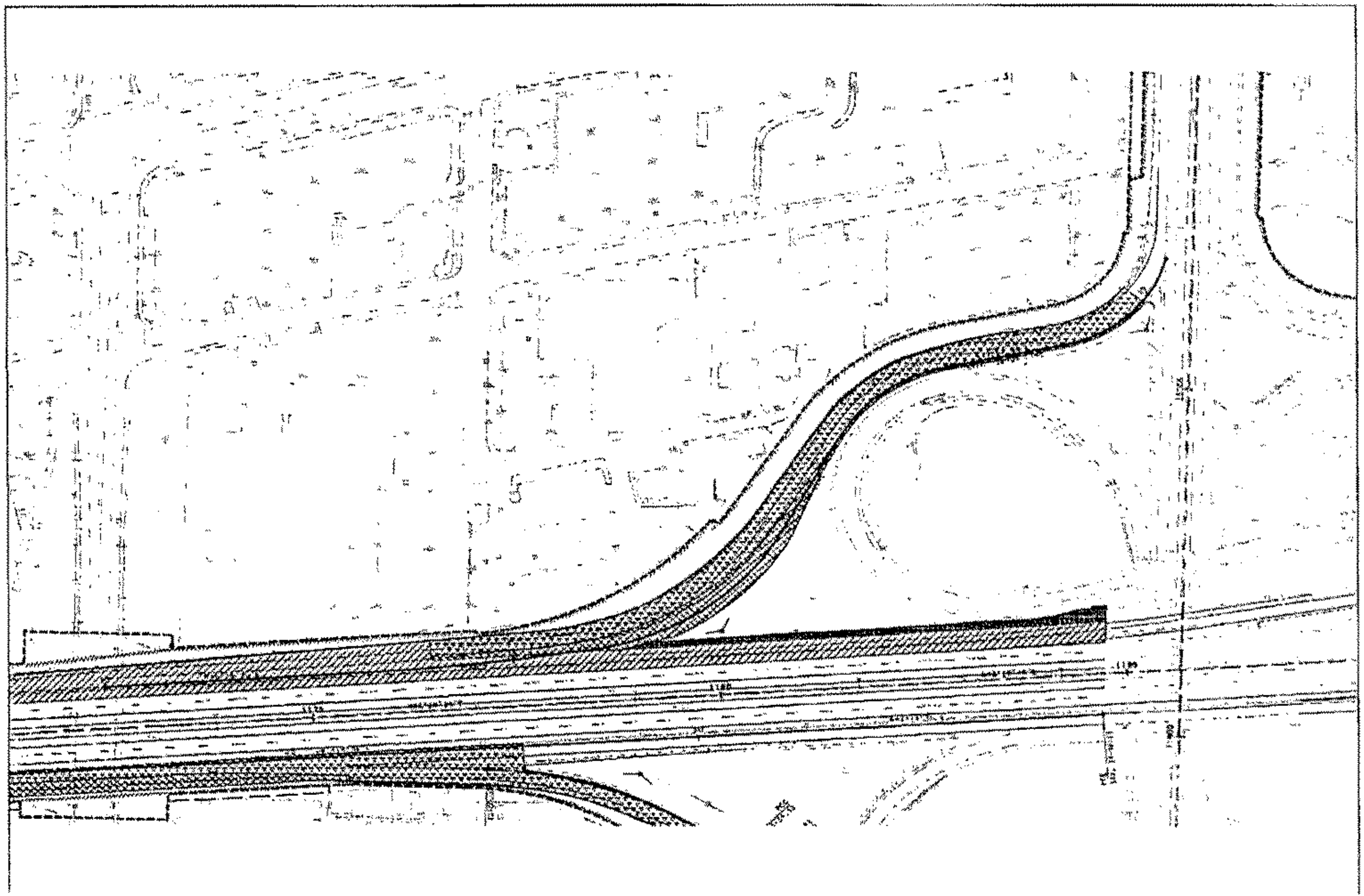
cc: Jason McKinney, I-405 Project Office



Attachment 1. I-405, I-5 to SR 169 Ramp/Safety Improvement Project vicinity.



Attachment 2. Proposed improvements at I-405/SR181 interchange.



Attachment 3. Proposed improvements at the I-405/SR167 interchange.

Attachment 4. Pollutant loading analysis.

	THRESHOLD DISCHARGE AREA (TDA)		*TOTAL (acres)*
	1	2	
EXISTING IMPERVIOUS			
PRE-PROJECT			
Existing **treated** impervious surface **with discharge** to waterbody (acres)	8.39	0.70	*9.09*
Existing impervious surface **infiltrated** (acres)	0.00	0.00	*0.00*
Existing **untreated** impervious surface (acres)	22.82	16.39	*39.21*
Total existing impervious surface (acres)	*31.21*	*17.09*	*48.30*
POST-PROJECT			
Existing impervious surface **retrofitted** for treatment **with discharge** to waterbody (acres)	0.11	0.42	*0.53*
Existing impervious surface **retrofitted for infiltration** (acres)	0.00	0.00	*0.00*
NEW IMPERVIOUS			
New **treated** impervious surface **with discharge** to waterbody (acres)	0.34	0.20	*0.54*
New impervious surface **infiltrated** (acres)	0.00	0.00	*0.00*
New **untreated** impervious surface (acres)	0.00	0.00	*0.00*
Total new impervious surface (acres)	0.43	0.13	*0.56*
TOTAL IMPERVIOUS			
Total impervious surface area **untreated** post-project (acres)	*22.71*	*15.97*	*38.68*
Total impervious surface area **treated** post-project with discharge to waterbody (acres)	*8.93*	*1.25*	*10.16*
Total impervious surface area **infiltrated** (acres)	*0.00*	*0.00*	*0.00*

LOAD CALCULATIONS

LOAD RATES	TSS	TOTAL ZINC	DISSOLVED ZINC	TOTAL COPPER	DISSOLVED COPPER
Mean annual load from untreated surfaces (lbs/acre)	565	1.1	0.4	0.2	0.053
Mean annual load from treated surfaces (lbs/acre)	45	0.28	0.2	0.065	0.035

PROJECT TOTAL	TSS	TOTAL ZINC	DISSOLVED ZINC	TOTAL COPPER	DISSOLVED COPPER
Annual effluent load from existing impervious surfaces prior to project (lbs)	22,562.70	45.68	17.50	8.43	2.40
Annual effluent load from new and existing impervious surfaces after project (lbs)	22,311.40	45.39	17.50	8.40	2.41
NET CHANGE in pollutant loads between pre- and post-project conditions (lbs)	**-251.30**	**-0.28**	**0.00**	**-0.04**	**0.01**

TDA BREAKDOWN	TSS	TOTAL ZINC	DISSOLVED ZINC	TOTAL COPPER	DISSOLVED COPPER
TDA 1					
Annual effluent load from existing impervious surfaces prior to project (lbs)	13,270.85	27.45	10.81	5.11	1.50
Annual effluent load from new and existing impervious surfaces after project (lbs)	13,228.95	27.46	10.85	5.12	1.51
NET CHANGE (lbs)	**-41.90**	**0.00**	**0.05**	**0.01**	**0.01**
TDA 2					
Annual effluent load from existing impervious surfaces prior to project (lbs)	9,291.85	18.23	6.70	3.32	0.89
Annual effluent load from new and existing impervious surfaces after project (lbs)	9,082.45	17.94	6.65	3.28	0.89
NET CHANGE (lbs)	**-209.40**	**-0.29**	**-0.04**	**-0.04**	**0.00**

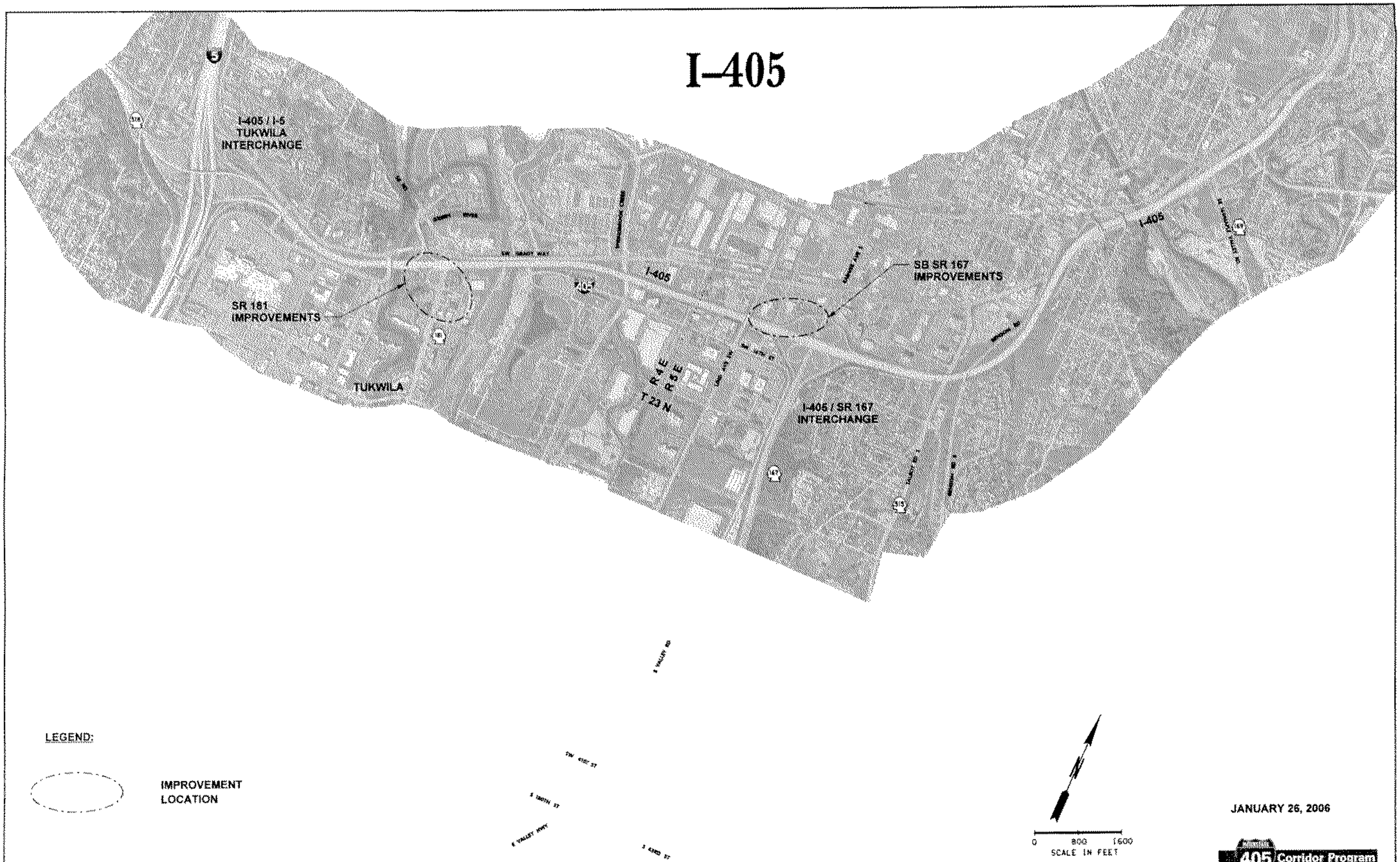
CONCENTRATION CALCULATIONS - High Risk Projects

	TSS (mg/L)	TOTAL ZINC (ug/L)	DISSOLVED ZINC (ug/L)	TOTAL COPPER (ug/L)	DISSOLVED COPPER (ug/L)
Expected pollutant concentrations for UNTREATED runoff	192	350	110	59	14
Expected pollutant concentrations for TREATED runoff	14	67	44.8	12	7.8

PROJECT TOTAL	TSS (mg/L)	TOTAL ZINC (ug/L)	DISSOLVED ZINC (ug/L)	TOTAL COPPER (ug/L)	DISSOLVED COPPER (ug/L)
Pollutant concentration for runoff PRE-project	158.50	296.74	97.73	50.15	12.83
Pollutant concentration for runoff POST-project	154.97	291.13	96.44	49.22	12.71
NET CHANGE in pollutant concentration between pre- and post-project conditions	**-3.53**	**-5.61**	**-1.29**	**-0.93**	**-0.12**

TDA BREAKDOWN	TSS (mg/L)	TOTAL ZINC (ug/L)	DISSOLVED ZINC (ug/L)	TOTAL COPPER (ug/L)	DISSOLVED COPPER (ug/L)
TDA 1					
Pollutant concentration for runoff PRE-project	144.15	273.92	92.47	46.37	12.33
Pollutant concentration for runoff POST-project	141.13	270.71	91.73	45.83	12.26
NET CHANGE	**-2.02**	**-3.22**	**-0.74**	**-0.53**	**-0.07**
TDA 2					
Pollutant concentration for runoff PRE-project	184.71	338.41	107.33	57.07	13.75
Pollutant concentration for runoff POST-project	179.41	329.39	105.02	55.41	13.53
NET CHANGE	**-6.30**	**-10.01**	**-2.31**	**-1.66**	**-0.22**

I-405



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