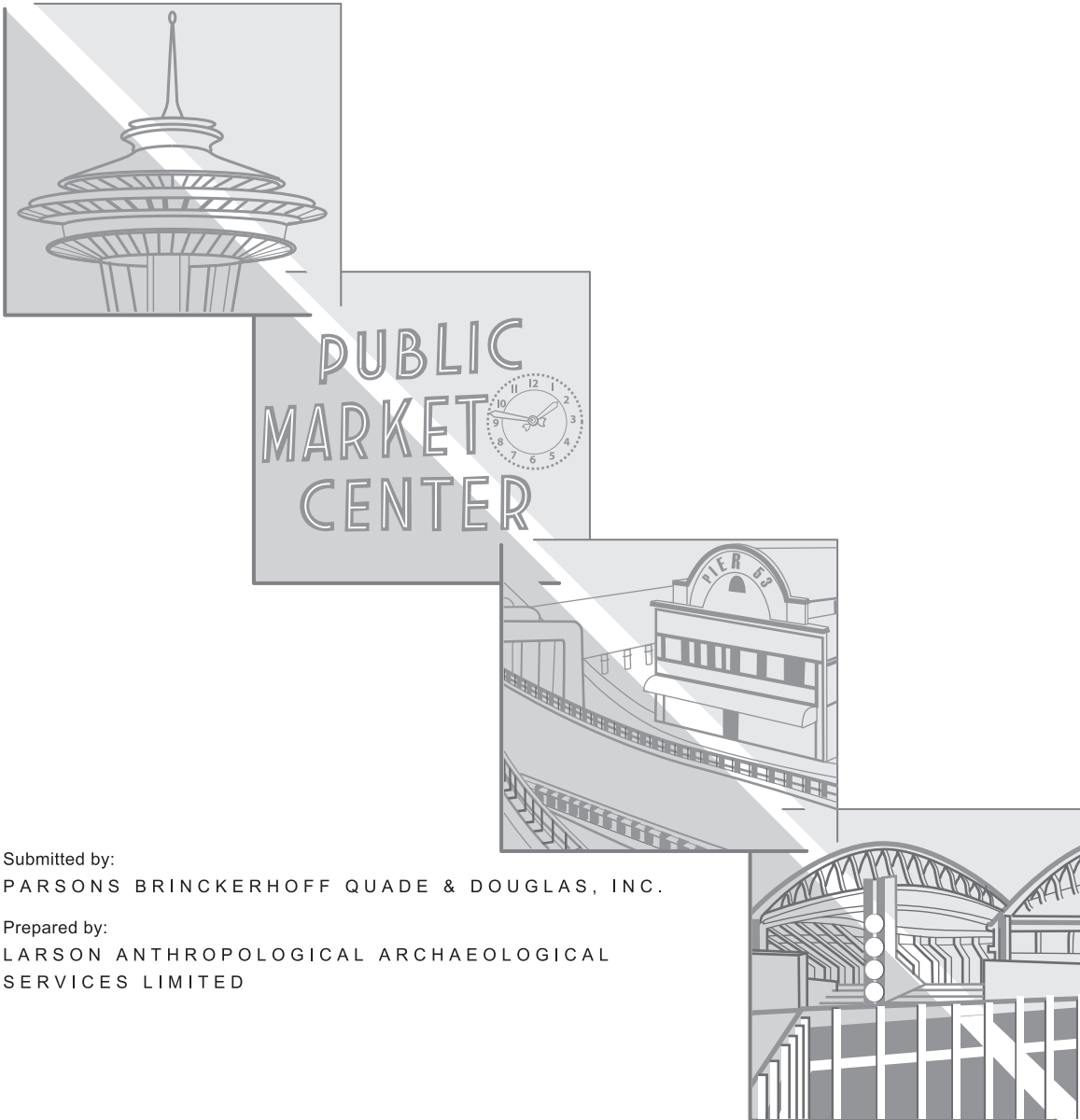


SR 99: ALASKAN WAY VIADUCT & SEAWALL REPLACEMENT PROJECT

Supplemental Draft Environmental Impact Statement

APPENDIX M

Archaeological Resources and Traditional Cultural Places Technical Memorandum



Submitted by:
PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

Prepared by:
LARSON ANTHROPOLOGICAL ARCHAEOLOGICAL
SERVICES LIMITED

JULY 2006

SR 99: ALASKAN WAY VIADUCT & SEAWALL REPLACEMENT PROJECT
Supplemental Draft EIS
Archaeological Resources and Traditional Cultural
Places Technical Memorandum
AGREEMENT NO. Y-7888
FHWA-WA-EIS-04-01-DS

Submitted to:

Washington State Department of Transportation

Alaskan Way Viaduct and Seawall Replacement Project Office
999 Third Avenue, Suite 2424
Seattle, WA 98104

The SR 99: Alaskan Way Viaduct & Seawall Replacement Project is a joint effort between the Washington State Department of Transportation (WSDOT), the City of Seattle, and the Federal Highway Administration (FHWA). To conduct this project, WSDOT contracted with:

Parsons Brinckerhoff Quade & Douglas, Inc.

999 Third Avenue, Suite 2200
Seattle, WA 98104

In association with:

BERGER/ABAM Engineers Inc.
BJT Associates
David Evans and Associates, Inc.
Entech Northwest
EnviroIssues, Inc.
Harvey Parker & Associates, Inc.
HDR
Jacobs Civil Inc.
Larson Anthropological Archaeological Services Limited
Mimi Sheridan, AICP
Parametrix
Power Engineers, Inc.
Preston Gates & Ellis LLP
ROMA Design Group
RoseWater Engineering, Inc.
Shannon & Wilson, Inc.
So-Deep, Inc.
Taylor Associates, Inc.
Tom Warne and Associates, LLC
William P. Ott

This Page Intentionally Left Blank

TABLE OF CONTENTS

Preface.....	v
Chapter 1 Summary	1
1.1 Tribal Consultation.....	2
1.2 Alternatives and Options.....	2
1.2.1 Viaduct Replacement.....	2
1.2.2 Seawall Replacement.....	5
1.3 Area of Potential Effect.....	6
Chapter 2 Methodology	7
Chapter 3 Studies and Coordination.....	9
3.1 Agency Consultation.....	9
3.2 Tribal Consultation.....	9
3.2.1 Duwamish Tribe.....	10
3.2.2 Kikiallus Tribe	10
3.2.3 Muckleshoot Indian Tribe.....	10
3.2.4 Snoqualmie Tribe	11
3.2.5 Suquamish Tribe	11
3.2.6 Tulalip Tribes.....	11
3.2.7 Yakama Nation	12
3.3 Studies.....	12
Chapter 4 Affected Environment	13
4.1 Previous Archaeological Studies	13
4.2 Ethnography/Ethnohistory	13
4.3 History.....	13
4.4 Implications for Land Use and Probability for Hunter-Fisher- Gatherer, Ethnographic Period, and Historic Period	
Archaeological Resources.....	13
4.4.1 Hunter-Fisher-Gatherer Archaeological Resources.....	13
4.4.2 Ethnographic Archaeological Resources.....	13
4.4.3 Historic Archaeological Resources.....	14
Chapter 5 Operational Impacts and Benefits	15
5.1 Tunnel Alternative (Preferred Alternative).....	15
5.2 Elevated Structure Alternative	15
Chapter 6 Construction Impacts.....	17
6.1 Tunnel Alternative (Preferred Alternative).....	17
6.2 Elevated Structure Alternative	17
Chapter 7 Secondary and Cumulative Impacts.....	19
7.1 Secondary Impacts	19
7.2 Cumulative Impacts	19
Chapter 8 Operational Mitigation.....	21
Chapter 9 Construction Mitigation	23
Chapter 10 References	25

LIST OF EXHIBITS

Exhibit 1-1. AWW Project Area	3
Exhibit 1-2. Summary of Effects on Possible Intact Archaeological Resources by Alternative.....	6

ATTACHMENTS

ATTACHMENT A	WSDOT Tribal Consultation
ATTACHMENT B	Tribal Consultation Response Letters

ACRONYMS

APE	Area of Potential Effect
AWV	Alaskan Way Viaduct and Seawall Replacement
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
LAAS	Larson Anthropological Archaeological Services Limited
SR	State Route
WSDOT	Washington State Department of Transportation

This Page Intentionally Left Blank

PREFACE

The technical appendices present the detailed analyses of existing conditions and predicted effects of each alternative. The results of these analyses are summarized and presented in the main text of the Supplemental Draft Environmental Impact Statement (EIS).

The Supplemental Draft EIS appendices are intended to add new information and updated analyses to those provided in the Draft EIS, published in March 2004. Information that has not changed since then is not repeated in these appendices. Therefore, to get a complete understanding of the project area conditions and projected effects, you may wish to refer to the appendices that were published with the Draft EIS. These are included on a CD in the Supplemental Draft EIS. To make it easier to understand where there is new information or analyses, the supplemental appendices present information in the same order as it was presented in the Draft EIS appendices.

The Supplemental Draft EIS and the technical appendices evaluate the effects of three construction plans: the shorter plan, the intermediate plan, and the longer plan. These plans vary in how long SR 99 would be completely closed, in how long the periodic closures may be, and in the total construction duration. For the purposes of the analyses in the technical appendices, two construction plans are evaluated with the Tunnel Alternative and one plan is evaluated with the Elevated Structure Alternative. However, each alternative could be built with any of the three plans. The construction durations and the sequencing would not be the same for a particular construction plan if paired with a different alternative; however, the effects would be within the ranges presented by the analyses.

There are several differences in how the information is presented between the main text of the Supplemental Draft EIS and how it is presented in these appendices. The Supplemental Draft EIS text refers to possible variations within the alternatives as “choices” while these appendices use the term “options.” (For example, Reconfigured Whatcom Railyard versus Relocated Whatcom Railyard is referred to as a design choice in the Supplemental Draft EIS and as an option in the appendices.) In either case, the intent is to describe the various configurations that could be selected and the effects for each design.

One design choice in particular is handled very differently between the Supplemental Draft EIS text and the technical appendices. For the Tunnel Alternative in the central waterfront area, there is a choice between a stacked tunnel alignment and a side-by-side tunnel alignment. In the appendices, to simplify the discussion, these two alignments, as well as the Elevated

Structure Alternative, are each paired with a different set of options throughout the corridor and presented as complete sets that are evaluated separately. The Supplemental Draft EIS text communicates this information differently by describing one Tunnel Alternative and one Elevated Structure Alternative and evaluating the effects of the different design choices (or mix-and-match components) separately. While it may appear that there are three alternatives analyzed in the appendices and two in the Supplemental Draft EIS text, there are in fact only two alternatives. Each alternative has many potential components or design choices that can be made throughout the corridor.

The organization of the analysis of the alternatives is also a little different between the main body of the Supplemental Draft EIS and the appendices. In the Supplemental Draft EIS text, we identify two alternatives: a Tunnel Alternative and an Elevated Structure Alternative. The Supplemental Draft EIS text compares these alternatives directly by comparing effects (for example, the effects of both alternatives on water quality are presented together). The appendices present the effects of each alternative separately (for example, all of the effects of the Tunnel Alternative are presented first, followed by all of the effects of the Elevated Structure Alternative). The substance of both discussions is the same. The organization of the Supplemental Draft EIS technical appendices mirrors that of the Draft EIS appendices, allowing you to more easily find comparable information in the Draft EIS appendices.

Chapter 1 SUMMARY

Larson Anthropological Archaeological Services Limited (LAAS) prepared an archaeological and traditional cultural places technical memorandum (Lewarch et al. 2004) in support of the Draft Environmental Impact Statement (EIS) for five proposed Build Alternatives and a No Build Alternative for the Alaskan Way Viaduct and Seawall Replacement (AWV) Project (WSDOT et al. 2004). Significant recorded archaeological resources or traditional cultural places were not identified within the five project alternatives. Areas with a high probability for hunter-fisher-gatherer, ethnographic, and historic period archaeological resources were identified within the proposed alternatives. Mitigation measures were recommended, including development of a treatment and monitoring plan, development of a programmatic agreement, and construction excavation monitoring. The Draft EIS and supporting documentation were issued on March 31, 2004.

In December 2004, the lead agencies narrowed the five alternatives down to two—Tunnel and Rebuild. They identified the Tunnel Alternative as the Preferred Alternative and carried the Rebuild Alternative forward for analysis as well. Since that time, engineering and design has been updated and refined for the Tunnel and Rebuild Alternatives. Due to the magnitude of the changes in the design of the Rebuild Alternative, it has been renamed the Elevated Structure Alternative. The Elevated Structure Alternative combines elements of the Aerial and Rebuild Alternatives that were evaluated in the Draft EIS.

The Supplemental Draft EIS and this report describe only those changes or substantially different features or characteristics of the project that are relevant to the two proposed alternatives that were carried forward. There have been very few changes that affect archaeological resources and traditional cultural places since the 2004 Draft EIS. Detailed information regarding archaeological resources can be found in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum (Lewarch et al. 2004) prepared for the Draft EIS, which supports the Supplemental Draft EIS.

The proposed AWV Project is in Township 24 North, Range 4 East, Sections 5, 7, 8, 17, and 18; Township 25 North, Range 3 East, Sections 25 and 36; and Township 25 North, Range 4 East, Sections 30 and 31, Willamette Meridian (Exhibit 1-1). Construction for the Tunnel or Elevated Structure Alternative may affect unknown hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources on the former tidflats of Elliott Bay, on the former beach of Elliott Bay, on former bluff tops and the base of bluffs on the historic shoreline of Elliott Bay, and at the east end of a ravine that was

centered on Bell Street. Traditional cultural places would probably not be affected by the alternatives.

1.1 Tribal Consultation

Washington State Department of Transportation (WSDOT) consulted with the Duwamish Tribe, the Kikiallus Tribe, the Muckleshoot Indian Tribe, the Snoqualmie Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Yakama Nation in support of the Supplemental Draft EIS. LAAS monitored excavation of geotechnical borings along Alaskan Way and Aurora Avenue N. to obtain information regarding contents of fill deposits, to identify contacts between fill and surfaces of native soils, and to obtain information on the elevations and contents of old beach surfaces of Elliott Bay (Gillis et al. 2005a,b).

1.2 Alternatives and Options

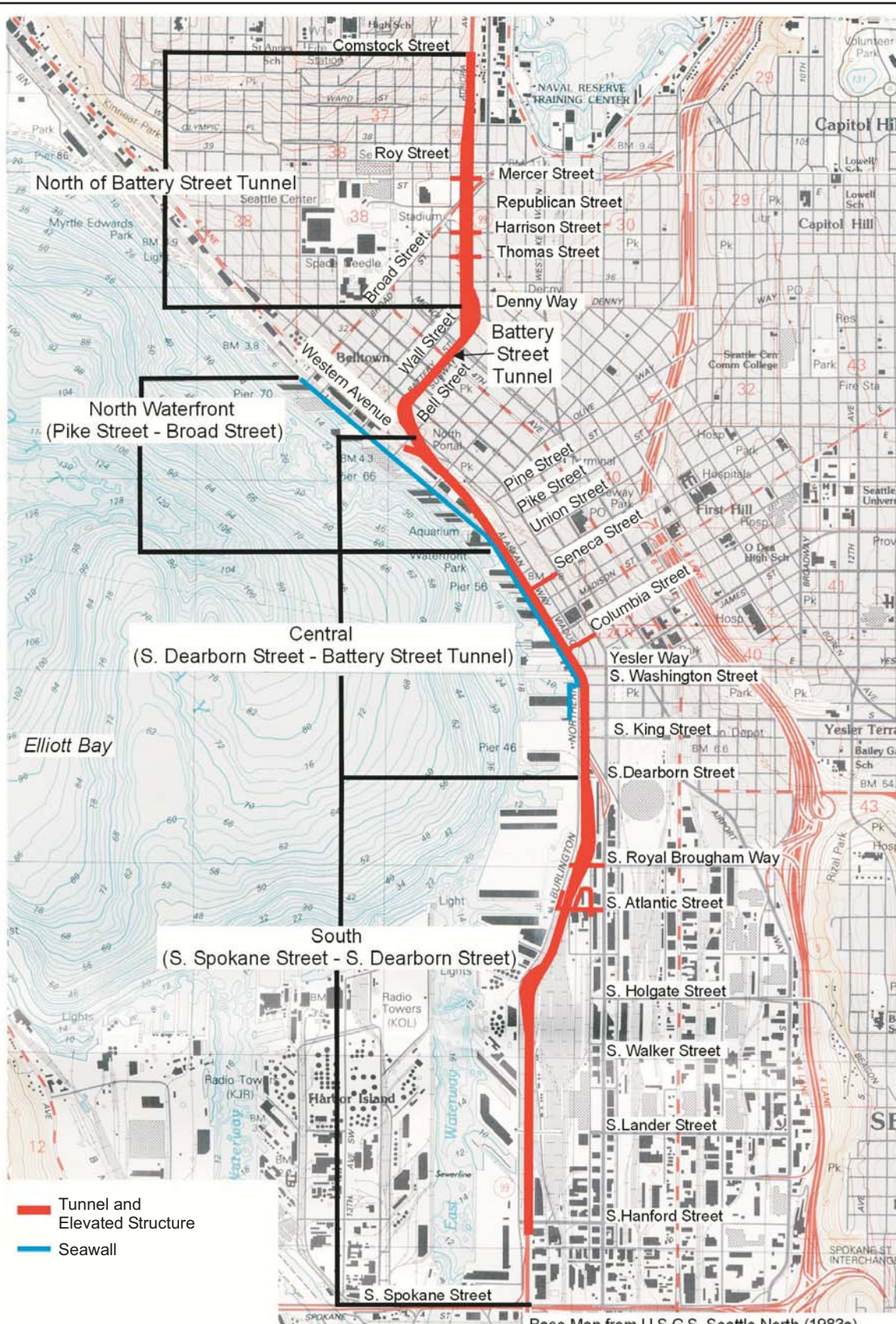
The AWV Supplemental Draft EIS evaluates the updated Tunnel Alternative (the Preferred Alternative) and the Elevated Structure Alternative. The southern terminus of the project is S. Spokane Street. The northern terminus is north of Highland Drive, almost to Comstock Street. The project area was divided into four sections based on location within the AWV Corridor (Exhibit 1-1):

- South – S. Spokane Street to S. Dearborn Street
- Central – S. Dearborn Street to the Battery Street Tunnel
- North Waterfront – Pine Street to Broad Street
- North – Battery Street Tunnel to Comstock Street

1.2.1 Viaduct Replacement

Both alternatives include an at-grade configuration for State Route (SR) 99 with the Whatcom Railyard reconfigured in the south project area. The alternatives include an option for relocating Whatcom Railyard south of S. King Street.

The Tunnel Alternative includes the stacked tunnel as the preferred alignment and the side-by-side tunnel as the optional alignment. Both tunnel alignments would generally have the same effects on archaeological resources, based on estimates of depth and width of construction excavation, locations of ancillary structures, associated pilings, support columns, and construction required for seawall replacement. The Tunnel Alternative's stacked tunnel alignment includes ramps under Elliott and Western Avenues. The optional side-by-side tunnel alignment includes ramps under Elliott and Western Avenues. The Tunnel Alternative in the Draft EIS included ramps that extended north from the Pine Street vicinity to connect to Interbay. The updated Tunnel Alternative eliminates the Interbay ramps, which would be replaced by the ramps at Elliott and Western Avenues.



Base Map from U.S.G.S. Seattle North (1983a) and Seattle South (1983b) Quadrangles, Washington

Alaska Way Viaduct/554-1585-025/510(5102) 6/06 (B)



**Exhibit 1-1
AWV Project Area**

This Page Intentionally Left Blank

The Battery Street Tunnel would be modified under both the Tunnel and Elevated Structure Alternatives to include an increased vertical clearance and fire/life safety improvements while retaining the existing curves. The option to widen curves at both ends of the Battery Street Tunnel is included only with the side-by-side tunnel alignment of the Tunnel Alternative.

North of the Battery Street Tunnel, the Tunnel Alternative would partially lower Aurora Avenue N., with an option to lower Aurora up to nearly Comstock Street. Construction excavation to deepen and widen the alignment would be deeper with the Partially Lowered Aurora Option than was considered in the Draft EIS; however, the additional construction excavation would occur in glacial deposits that have no probability for archaeological deposits. Construction excavation for the Lowered Aurora Option would be deeper than construction excavation for the Partially Lowered Aurora Option included with the preferred alignment.

1.2.2 Seawall Replacement

The existing seawall on the west side of Alaskan Way would be replaced in both alternatives. In the Tunnel Alternative, the west side of the tunnel would replace the existing seawall between S. Washington Street and Union Street. The seawall north of the tunnel, from Union Street to Broad Street, would be rebuilt. In the Elevated Structure Alternative, the entire seawall would be replaced as a separate construction element of the alternative, from S. Washington Street to Broad Street.

For both alternatives, the seawall modifications would extend north only as far as Broad Street, instead of extending to Myrtle Edwards Park as described in the Draft EIS. The seawall replacement would be an L-wall design that is different from the drilled shaft configuration described in the Draft EIS. Soil improvement techniques would affect areas that extend 40 feet (12.2 meters) from the equipment rather than 40 to 60 feet (12.2 to 18.3 meters) as described in the Draft EIS.

Seawall improvements in areas outside of tunnel construction would include removing the existing sidewalk; protecting Elliott Bay with sheet piling; excavating variable amounts of fill to remove abandoned utilities; jet grouting to improve a 40-foot by 40-foot block of soil; placing a lean concrete mud slab on existing timbers to form a setting bed for an L-wall structure; and placing new seawall concrete face panels with H-pile stingers that extend down into firm, glacial, till-bearing deposits. Sediment displaced by soil improvement techniques would be removed and hauled away.

1.3 Area of Potential Effect

The Area of Potential Effect (APE) for archaeological resources will include subsurface construction excavation for (1) roadbeds; (2) utility trenches and vaults; (3) tunnel foundations and foundations for ancillary structures associated with the Tunnel Alternative; (4) shafts for support columns and foundation footings, primarily within the existing footprint of the Alaskan Way Viaduct and adjacent portions of the existing seawall; and (5) ancillary areas, including construction staging areas. Subsurface archaeological deposits also may be affected when pilings are driven for roadbed supports, during soil improvements using jet grouting techniques, and when pilings are driven for concrete face panels for the seawall.

The vertical APE will vary by construction method and location within the proposed AWV Corridor, as described in the Draft EIS and Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum in support of the Draft EIS (Lewarch et al. 2004:5–6). The APE will also vary slightly depending on whether the Partially Lowered Aurora or Lowered Aurora Option is selected.

Exhibit 1-2 lists possible effects of the two alternatives based on estimates of the number and locations of subsurface construction elements that could intersect unknown, intact archaeological deposits using the methodology described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared in support of the Draft EIS (Lewarch et al. 2004:9, 71–78).

Exhibit 1-2. Summary of Effects on Possible Intact Archaeological Resources by Alternative

Alternative	Effects
Tunnel	Effects may result from new pilings, column supports, construction excavation for tunnel foundations and ancillary structures, and improvements for seawall and viaduct supports.
Elevated Structure	Effects may result from new pilings, column supports, grading, and improvements for seawall and viaduct supports.

No secondary or operational impacts on intact archaeological deposits or traditional cultural places would occur with either alternative (Lewarch et al. 2004:69, 81). The project may contribute to cumulative effects on intact archaeological resources in downtown Seattle, as described in documentation prepared for the Draft EIS (Lewarch et al. 2004:81; WSDOT et al. 2004).

Chapter 2 METHODOLOGY

LAAS conducted the archaeological resources and traditional cultural places overview of the proposed AWV Project by reviewing and analyzing literature and archival data as described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:9). After the Draft EIS was published in March 2004, WSDOT consulted with affected Indian tribes to provide updates on the alternatives carried forward for the Supplemental Draft EIS and changes in designs associated with the Tunnel Alternative (the Preferred Alternative) and the Elevated Structure Alternative. The APE for archaeological resources was defined by WSDOT and the Washington State Department of Archaeology and Historic Preservation (DAHP), consistent with Section 106 of the National Historic Preservation Act (Lewarch et al. 2004:11; WSDOT et al. 2004).

After the Draft EIS was published in March 2004, LAAS monitored geotechnical borings excavated along Alaskan Way and Aurora Avenue N. to examine contents of fill, to document elevations and characteristics of interfaces between fill and native soils, and to identify and document contents and elevations of old beach surfaces beneath fill on the shoreline of Elliott Bay (Gillis et al. 2005a,b).

This Page Intentionally Left Blank

Chapter 3 STUDIES AND COORDINATION

3.1 Agency Consultation

Agency consultation was described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:11).

3.2 Tribal Consultation

The Federal Highway Administration (FHWA) delegated authority for compliance with Section 106 of the National Historic Preservation Act to WSDOT (Lewarch et al. 2004:11). WSDOT initiated consultation for the proposed AWV Project with the Duwamish Tribe, the Kikiallus Tribe, the Muckleshoot Indian Tribe, the Snoqualmie Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Yakama Nation. WSDOT is conducting tribal consultation consistent with Section 106 pursuant to 36 CFR 800.2(c)(4) to ensure that FHWA takes into account the effects of the proposed undertaking on properties listed in or eligible for listing in the National Register of Historic Places. The results of WSDOT's consultation efforts between March 2004 and March 2006 are summarized below and are based on the Tribal Consultation Tracking Sheet provided by WSDOT (Attachment A).

In addition to the consultation discussed in the following pages, FHWA, WSDOT, and City of Seattle organized a joint tribal meeting on January 19, 2006 as part of the continued government-to-government consultation. Of the five tribes that were invited, the Tribal Chairs and cultural resources staff of the Muckleshoot and Suquamish Tribes attended the joint meeting. The meeting also included staff from the Governor's Office of Indian Affairs, Department of Archaeology and Historic Preservation, and United Indians of All Tribes. The purpose of the meeting was to:

- Discuss government-to-government consultation.
- Listen to tribal concerns and interests.
- Help foster better communication.
- Develop next steps in consultation on cultural and historic resources.
- Provide updates from the AWV Project, Colman Dock, and City of Seattle.

The following are examples of themes heard from tribal attendees:

(1) continue to work with tribes regarding cultural resources; (2) acknowledge importance of fisheries issues; (3) provide financial assistance for effective tribal participation; (4) consider long-term solutions; (5) consult with the

Tribal Chair as well as tribal staff members; (6) prepare adequate Inadvertent Discovery Protocol; (7) educate workers at construction sites about cultural resources; (8) provide signage for historic tribal settlements; (9) consider creative mitigation; and (10) provide financial resources as mitigation for impacts.

3.2.1 Duwamish Tribe

WSDOT contacted Cecile Hansen, Tribal Chairperson of the Duwamish Tribe, by letter, telephone, and e-mail between May 2004 and June 2005 (Attachment A). Ms. Hansen responded in April 2005 but did not provide additional information regarding archaeological resources or traditional cultural places in the AWV Corridor (Attachment B). On April 3, 2006, WSDOT met with Ms. Hansen and James Rasmussen, member of the Duwamish Tribal Council, to provide project updates and to listen to their concerns. Ms. Hansen expressed concerns regarding the cost of the project, earthquake safety, the decision-making timeline, and traffic impacts. Mr. Rasmussen expressed concerns regarding archaeological resources, excavation techniques, and exercise of treaty fishing rights. He also discussed the use of charettes in the design process, project decision-making, transportation policy, and restoration opportunities along the waterfront. Mr. Rasmussen mentioned the need for funding for the Duwamish Tribe's participation in and review of project materials.

3.2.2 Kikiallus Tribe

WSDOT contacted Paul Lavan, Chief of the Kikiallus Tribe, by letter and telephone between March 2004 and May 2004 (Attachment A). On September 22, 2004, WSDOT received an e-mail with a notification that Mr. Lavan had passed away. WSDOT had consulted with Mr. Lavan because he had a mailing address in Seattle and was a hereditary leader of the Kikiallus Tribe, whose historic territory is on Camano Island. The purpose of the consultation was to identify possible traditional places in the AWV Project. Other surviving members of the Kikiallus Tribe may be enrolled members of the Skagit Tribe, Swinomish Tribe, or Tulalip Tribes, but it is not likely that Kikiallus people have used the AWV Project for traditional cultural practices.

3.2.3 Muckleshoot Indian Tribe

WSDOT contacted the Muckleshoot Indian Tribe by letter, telephone, and e-mail between March 2004 and June 2005 (Attachment A). WSDOT and the City of Seattle met with Donna Hogerhuis, Cultural Specialist; Glen St. Amant, Fisheries Program Manager; and Eric Werner, Fisheries Biologist, on April 13, 2005 and provided project updates. Ms. Hogerhuis asked about WSDOT plans to address cultural resources and whether a cultural resources

survey would be conducted before construction begins. Ms. Hogerhuis also expressed an interest in discussing the potential for archaeological sites in the project area and the need to conduct archaeological test excavations if artifacts are identified.

3.2.4 Snoqualmie Tribe

WSDOT contacted the Snoqualmie Tribe by letter, telephone, and e-mail between May 2004 and May 2005 (Attachment A). WSDOT, the City of Seattle, and FHWA met with Ray Mullen, Economic Development Specialist; Kellie Kvasnikoff, Cultural Resources Director; and Anna Kopitov, Water Resources Director, on April 11, 2005 and provided project updates. Mr. Kvasnikoff asked how construction would take place without losing cultural material, suggested the possible need for additional cultural survey work, and expressed interest in participating in archaeological excavation, if it was necessary.

3.2.5 Suquamish Tribe

WSDOT contacted the Suquamish Tribe by letter, telephone, and e-mail between March 2004 and July 2005 (Attachment A). WSDOT and the City of Seattle met with Richard Brooks, Environmental Program Manager; Robert Purser, Fisheries Director; and Thomas Ostrum, Fisheries Environmental Program Biologist, on June 7, 2005 (Attachment A). Mr. Brooks asked about the participation of the Seattle District of the U.S. Army Corps of Engineers in permits and documentation for the seawall, requested that the Suquamish Tribe be contacted immediately if isolated finds are recovered during geotechnical borings, asked about future cultural resources investigations, and asked which tribes were consulted for Section 106. Mr. Brooks also noted that the Suquamish Tribe would be interested in a Memorandum of Agreement for cultural resources that may occur in the AWV Corridor.

3.2.6 Tulalip Tribes

WSDOT contacted Hank Gobin, Cultural Resources Manager, the Tulalip Tribes, by letter, telephone, and e-mail between March 2004 and December 2005 (Attachment A). WSDOT and the City of Seattle met with Mr. Gobin and Timothy Brewer, the Tulalip Tribes, on August 25, 2005, and provided an update on the project (Attachment A). Mr. Gobin noted the high probability for historic Indian archaeological resources on the Seattle waterfront, near Pioneer Square and the stadiums. Mr. Gobin expressed his concern regarding archaeological resource assessments and mitigation to prevent damage to sites and to safeguard the Indian history that may be represented archaeologically beneath the streets. Mr. Brewer asked how cultural resources work would be performed and what kinds of impacts on cultural resources would be

expected from each alternative. The Tribes requested future archaeological monitoring reports and correspondence.

3.2.7 Yakama Nation

WSDOT contacted Johnson Meninick, Cultural Resources Program Manager, Yakama Nation, by letter, telephone, and e-mail between March 2004 and June 2005 (Attachment A). WSDOT and the City of Seattle met with Mr. Meninick and Bill White, Archaeologist, on June 27, 2005 (Attachment A). Mr. Meninick stated that he would allow local tribes in the Seattle area to take the lead for cultural resources within the AWV Corridor. Kate Valdez, Tribal Historic Preservation Officer, and LaRena Sohappy, Cultural Committee Chairwoman, concurred with Mr. Meninick on January 17, 2006.

3.3 Studies

LAAS combined information from agency and tribal consultation with ethnographic data from more than 10 studies or local histories, 24 previous archaeological studies, and more than 20 histories and archival documents to provide a detailed summary and analysis of archaeological resources that may occur in the project area for the Draft EIS (Lewarch et al. 2004:19–68; WSDOT et al. 2004).

Chapter 4 AFFECTED ENVIRONMENT

The proposed AWV Project Corridor traverses five geomorphological zones in downtown Seattle, as described in the Draft EIS and Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum, and has not changed from the environment that was described in the Draft EIS (Lewarch et al. 2004:15–16; WSDOT et al. 2004).

4.1 Previous Archaeological Studies

Previous archaeological studies were summarized in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:19–26).

4.2 Ethnography/Ethnohistory

Ethnographic studies and data were summarized in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:26–33).

4.3 History

Histories, archival data, and historic maps were reviewed and summarized in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:33–64).

4.4 Implications for Land Use and Probability for Hunter-Fisher-Gatherer, Ethnographic Period, and Historic Period Archaeological Resources

4.4.1 Hunter-Fisher-Gatherer Archaeological Resources

Hunter-fisher-gatherer archaeological resources were summarized in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:64–66).

4.4.2 Ethnographic Archaeological Resources

Probable kinds and locations of ethnographic archaeological resources in the AWV Corridor were described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:66).

4.4.3 Historic Archaeological Resources

Kinds and locations of historic period archaeological resources in the AWW Corridor were summarized in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum prepared for the Draft EIS (Lewarch et al. 2004:66–68).

Chapter 5 OPERATIONAL IMPACTS AND BENEFITS

Direct effects to subsurface archaeological deposits during construction excavation for project facilities of the updated alternatives would be the same as those described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:69). Operation of the project would not affect intact archaeological resources.

5.1 Tunnel Alternative (Preferred Alternative)

Operation of the Tunnel Alternative (the Preferred Alternative) would not affect intact archaeological resources and would have the same operational impacts described for the Tunnel Alternative in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:69).

5.2 Elevated Structure Alternative

Operation of the Elevated Structure Alternative would not affect intact archaeological resources and would be the same operational impacts described for the Rebuild Alternative in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:69).

This Page Intentionally Left Blank

Chapter 6 CONSTRUCTION IMPACTS

6.1 Tunnel Alternative (Preferred Alternative)

The same construction effects to hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources would occur in the current Tunnel Alternative (the Preferred Alternative) as the effects described for the Tunnel Alternative in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:76–77).

Placement of H-piles for the seawall may affect unknown, significant hunter-fisher-gatherer and ethnographic period archaeological deposits at the base of former bluffs on the east shoreline of Elliott Bay and on the former beach of Elliott Bay and significant historic period archaeological deposits associated with wharves, warehouses, and railroad tracks on trestles in Elliott Bay. Other construction effects would be the same as for the soil improvement impacts described in the Draft EIS (Lewarch et al. 2004:77; WSDOT et al. 2004).

6.2 Elevated Structure Alternative

The kinds of construction effects to hunter-fisher-gatherer, ethnographic period, and historic period archaeological resources would be the same as those described for the Tunnel Alternative, with the exception of construction excavation for foundations of tunnels and ancillary structures.

Placement of H-piles for the seawall may affect unknown, significant hunter-fisher-gatherer and ethnographic period archaeological deposits at the base of former bluffs on the east shoreline of Elliott Bay and on the former beach of Elliott Bay and significant historic period archaeological deposits associated with wharves, warehouses, and railroad tracks on trestles in Elliott Bay. Other construction effects would be the same as for the soil improvement impacts described in the Draft EIS (Lewarch et al. 2004:77; WSDOT et al. 2004).

This Page Intentionally Left Blank

Chapter 7 SECONDARY AND CUMULATIVE IMPACTS

7.1 Secondary Impacts

No secondary impacts on significant archaeological deposits would occur, as described in the Draft EIS (Lewarch et al. 2004:81; WSDOT et al. 2004).

7.2 Cumulative Impacts

Cumulative impacts would be the same as those described in the Draft EIS (Lewarch et al. 2004:81; WSDOT et al. 2004).

This Page Intentionally Left Blank

Chapter 8 OPERATIONAL MITIGATION

No mitigation would be required for operation of the AWV Project with either alternative. Operation of the project would not affect subsurface archaeological deposits, as described in Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:83; WSDOT et al. 2004).

This Page Intentionally Left Blank

Chapter 9 CONSTRUCTION MITIGATION

Mitigation measures for construction excavation would be the same as described in the Draft EIS and Appendix M, Archaeological Resources and Traditional Cultural Places Technical Memorandum for the Draft EIS (Lewarch et al. 2004:85–87; WSDOT et al. 2004).

This Page Intentionally Left Blank

Chapter 10 REFERENCES

- Gillis, N., D.E. Lewarch, and L.L. Larson. 2005a. Geotechnical Explorations Project, Monitoring and Review of Geotechnical Borings from South Spokane Street to the Battery Street Tunnel, SR 99: Alaskan Way Viaduct & Seawall Replacement Project. Larson Anthropological Archaeological Services Limited, Gig Harbor, Washington. Submitted to Washington State Department of Transportation, Urban Corridors Office, Seattle, Washington.
- Gillis, N., D.E. Lewarch, and L.L. Larson. 2005b. Geotechnical Explorations Project, Monitoring and Review of Geotechnical Borings from Harrison Street to Valley Street, SR 99: Alaskan Way Viaduct & Seawall Replacement Project. Larson Anthropological Archaeological Services Limited, Gig Harbor, Washington. Submitted to Washington State Department of Transportation, Urban Corridors Office, Seattle, Washington.
- Lewarch, D.E., L.L. Larson, L.A. Forsman, and G.A. Kaehler. 2004. Appendix M, Draft Archaeological Resources and Traditional Cultural Places Assessment Technical Memorandum, SR 99: Alaskan Way Viaduct & Seawall Replacement Project. Larson Anthropological Archaeological Services Limited, Gig Harbor, Washington. Submitted to Washington State Department of Transportation, Urban Corridors Office, Seattle, Washington.
- United States Geological Survey. 1983a. Seattle North Quadrangle. United States Geological Survey, Denver, Colorado.
- United States Geological Survey. 1983b. Seattle South Quadrangle. United States Geological Survey, Denver, Colorado.
- WSDOT (Washington State Department of Transportation), City of Seattle, and U.S. Department of Transportation, Federal Highway Administration. 2004. SR 99: Alaskan Way Viaduct & Seawall Replacement Project Draft Environmental Impact Statement. Washington State Department of Transportation, Urban Corridors Office, Seattle, Washington.

This Page Intentionally Left Blank

ATTACHMENT A

WSDOT Tribal Consultation Tracking Sheet

This Page Intentionally Left Blank

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History			
		Letter	Phone call	Email	Meeting
Duwamish	2001	06/15/01			
		08/06/01	09/07/01		
			09/21/01		
	2002	01/30/02	02/15/02		
		03/06/02			
		04/19/02			
		06/17/02			
	2003	11/19/03	12/22/03		
	2004	03/31/04			
		05/19/04			
		11/15/04			
		12/21/04			
	2005	03/02/05	03/17/05		
			03/24/05		
			03/31/05		
			04/06/05	04/06/05	
		04/14/05			
		05/26/05		06/13/05	
		06/20/05			
		07/18/05			
	2006	10/17/05			
				03/09/06	
			03/14/06		
		03/21/06			
		03/24/06			
	03/29/06				
Kikiallus	2001	06/15/01			
		08/06/01			
	2002	01/30/02			
		03/06/02			
		04/19/02	04/29/02		
		06/17/02			
	2003	11/19/03	12/22/03		
	2004	03/31/04	03/31/04		
			04/26/04		
		05/19/04		09/22/04	

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Contact History					
	Year	Letter	Phone call	Email	Meeting	
Muckleshoot	2001	06/15/01				
		08/06/01				
		08/29/01	08/29/01			
		09/11/01				
	2002	01/30/02		02/15/02		
		03/06/02		03/14/02		
				03/15/02		
		04/19/02				
		06/17/02				
	2003	11/19/03		12/10/03	12/2003	
	2004					02/04/04
						02/17/04
		03/31/04		03/2004		
				03/2004-04/2004		
				05/06/04		
		05/19/04				
		06/01/04		08/2004		08/31/04
		11/15/04			12/15/04	
		12/21/04				
	2005	03/02/05		03/17/05		
				03/24/05		
				03/29/05		
				03/31/05	03/31/05	
				04/06/05		04/13/05
					05/10/05-05/11/05	
					05/23/05	
		05/26/05		06/02/05		
				09/07/05		
				09/20/05		
				09/26/05		
				09/28/05	09/29/05	
				10/04/05		
10/17/05						
			10/20/05			
			10/24/05	10/26/05		
			10/31/05			
		11/01/05				

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History				
		Letter	Phone call	Email	Meeting	
Muckleshoot (continued)			11/03/05			
			11/04/05			
			11/07/05			
			11/08/05			
			11/09/05		11/09/05	
			11/17/05			
			11/18/05			
		11/30/05	11/30/05			
			12/15/05			
			12/19/05			
			12/21/05			
	12/22/05	12/22/05				
	2006			01/09/06		
				01/10/06		
				01/13/06		
				01/17/06	01/17/06	
				01/18/06		01/19/06
01/25/06				03/09/06		
		03/14/06	03/20/06			
Snoqualmie	2001	08/06/01	09/07/01			
					12/17/01	
	2002	01/30/02	02/15/02			
		03/06/02				
		04/19/02				
		06/17/02				
	2003	11/19/03	12/22/03	12/22/03		
			12/23/03			
			12/24/03			
	2004	03/31/04				
		05/19/04				
		11/15/04				
		12/21/04				
	2005	03/02/05	03/17/05	03/18/05		
			03/23/05			
		03/30/05				
		04/04/05				

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History			
		Letter	Phone call	Email	Meeting
Snoqualmie (continued)	2005		04/05/05		
			04/06/05		
					04/11/05
					05/10/05
		05/26/05			
			09/23/05		
			09/27/05		
			09/29/05	09/29/05	
			10/04/05		
		10/17/05	10/17/05		
			10/20/05		
			10/24/05	10/26/05	
			10/26/05		
			10/31/05		
			11/03/05	11/03/05	
				11/09/05	
			11/18/05		
			11/18/05	11/21/05	
		11/30/05	11/30/05		
		12/15/05			
	12/22/05				
2006	01/04/06				
		01/13/06	01/13/06		
			01/17/06		
		01/19/06			
	01/25/06		03/09/06		
		03/14/06	03/20/06		
Suquamish	2001	06/15/01			
		08/06/01	09/07/01		
			09/10/01		
	2002	01/30/02	02/15/02		
			02/26/02		
		03/06/02	03/14/02		
		04/19/02	04/2002	04/29/02	
			06/05/02		
06/17/02					

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History				
		Letter	Phone call	Email	Meeting	
Suquamish (continued)		07/11/02			08/07/02	
		09/05/02				
	2003	11/19/03	12/22/03			
	2004	03/31/04				
		05/19/04			06/01/04	
					06/04/04	
		06/08/04				
		11/15/04				
		12/21/04				
	2005	03/02/05		03/17/05		
				03/22/05	03/22/05	
				03/24/05	03/28/05	
					04/11/05	
				04/21/05	04/21/05	
				04/22/05	04/22/05	
					04/25/05	
					05/31/05	
			05/26/05			06/07/05
					06/15/05	
				07/05/05-07/07/05	08/03-08/08/05	
				09/07/05		
				09/09/05		
				09/16/05	09/16/05	
				09/19/05	09/22/05	
				09/26/05	09/27/05	
			10/17/05			
					10/20/05	
					10/21/05	
					10/24/05	
				10/26/05		
			10/31/05	10/31/05		
				11/09/05		
			11/14/05	11/14/05		
	11/30/05		12/15/05			
		12/21/05				
	12/22/05					

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Contact History				
	Year	Letter	Phone call	Email	Meeting
Suquamish (continued)	2006		01/09/06	01/09/06	
			01/13/06	01/17/06	01/19/06
		01/25/06			
		01/27/06		03/09/06	
			03/14/06	03/20/06	
Tulalip	2001	12/11/01			
	2002	01/08/02			
		01/30/02	02/15/02		
		03/06/02			
		04/10/02			
		04/19/02			
		06/17/02			
	2003	11/19/03	12/22/03		
	2004		02/2004		
			03/2004		
		03/31/04			
		05/19/04			
		06/09/04			
		08/10/04			
		08/25/04	08/25/04		
		11/15/04			
	2005	03/02/05	03/17/05		
			03/24/05		
			04/22/05	04/22/05	
				04/26/05 - 04/28/05	
			05/13/05	05/13/05	
			05/24/05		
			05/25/05	05/25/05	
		05/26/05		06/13/05	
			06/27/05	06/27/05	
		06/29/05	06/29/05		
			07/05/05-07/11/05	07/06/05	
		07/15/05	07/18/05		
		07/18/05	07/20/05		
	07/25/05	07/29/05			

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History				
		Letter	Phone call	Email	Meeting	
Tulalip (continued)	2005		08/04/05	08/19/05		
					08/25/05	
			09/09/05	09/12/05		
			09/15/05			
			09/20/05			
			09/22/05			
			09/23/05			
			09/27/05			
			09/29/05	09/29/05		
			10/04/05	10/04/05		
			10/17/05			
			10/20/05	10/20/05		
			10/25/05	10/25/05		
			10/31/05			
			11/03/05	11/09/05		
			11/18/05			
			11/30/05	11/30/05		
			12/15/05	12/15/05		
			12/22/05			
	2006			01/03/06	01/06/06	
			01/10/06	01/17/06		
				01/19/06		
		01/25/06		03/09/06		
			03/14/06	03/20/06		
Yakama Nation	2001	06/15/01				
	2002	03/06/02				
		04/19/02				
		06/17/02				
	2003	11/19/03	12/18/03			
	2004	03/31/04				
		05/19/04				
		11/15/04				
		12/21/04				
	2005	03/02/05	03/17/05			
			03/24/05			
			04/22/05			

Attachment A: WSDOT Tribal Consultation Tracking Sheet

Tribe	Year	Contact History			
		Letter	Phone call	Email	Meeting
Yakama Nation (continued)	2005	05/26/05	06/13/05		
			06/20/05 - 06/22/05	06/21/05 - 06/22/05	
			06/23/05		06/27/05
				08/12/05	
			09/15/05		
			09/27/05	09/27/05	
			10/04/05		
		10/17/05			
			10/20/05	10/26/05	
			11/03/05	11/09/05	
			11/18/05		
			11/21/05		
		11/30/05	12/15/05		
			12/16/05		
		12/22/05			
	2006				01/09/06
				01/09/06	
		01/11/06	01/11/06	01/11/06	
				01/12/06	
				01/17/06	
		01/25/06		03/09/06	
			03/14/06	03/20/06	

ATTACHMENT B

Tribal Consultation Response Letters

This Page Intentionally Left Blank

COPY

RECEIVED

JUN 20 2005

AWWSP Team Office

April 8, 2005

Stephanie Miller
WSDOT, Environmental Coordinator
Alaskan Way Viaduct and Seawall Replacement Project
Seattle, WA 98204

Dear Ms. Miller:

After much insistence that I comment on the Alaskan Way Viaduct Seawall Replacement Project these are my comments:

1. Yes – the viaduct replacement project is long overdue
2. No – a tunnel is totally wrong, seemingly bizarre and too extravagant
3. Potential earthquakes make the tunnel and seawall seem catastrophic
4. Decision makers are seemingly wearing rose-colored glasses and just opting for the most expensive option
5. The public opinion is mostly being ignored
6. Suggestion: A surface road that starts at Spokane and First Avenue that sweeps along the waterfront and over to the Mercer Street and onto I-5
7. Just a thought: could it be possible that city leaders and officials have only ears for big money land developers who have their hands in the giant pie of money and the voters are left with the crumbs in the long run

Finally, it is my opinion that Mother Earth (City of Seattle whom bares the name of our great Chief) is growing weary. Let's give her a break and not tear her heart out for the sake of progress that should have been done a long time ago maybe even before we built our infamous sport arenas. What is really more important?

From: Cecile A. Hansen, Chairperson
Duwamish Tribe

THE TULALIP TRIBES

Cultural Resources Department

ᵂᵂᵂᵂᵂᵂ

6410 - 23rd Avenue N.E.

Tulalip, WA 98271-9694

(360) 651-3300

FAX (360) 651-3312

The Tulalip Tribes are the successors in interest to the Snohomish, Snoqualmie, and Skykomish tribes and other tribes and band signatory to the Treaty of Point Elliott

RECEIVED

JUN 16 2004

AWSP Team Office

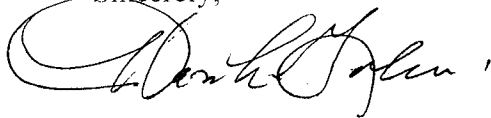
June 9, 2004

Ms. Allison Ray
WSDOT, Environmental Coordinator
Alaskan Way Viaduct & Seawall Replacement Project
Washington State Department of Transportation
999 Third Avenue, Suite 2424
Seattle, WA 98104

Dear Ms. Ray:

The archaeological monitoring plan is a good idea! However, will any of this sea wall activity negatively impact out seasonal fish in that area? We feel it needs to be given some time and thought to reduce negative impacts to our seasonal fish runs. That includes shell fish protection as well.

Sincerely,



Hank Gobin
Cultural Resources Manager