

# EDMONDS CROSSING

Connecting ferries, bus & rail



## Introduction

This analysis was prepared in compliance with Presidential Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (EO 12898), dated February 11, 1994. The purpose of this analysis is to determine whether or not the proposed Edmonds Crossing project would result in disproportionately high and adverse human health or environmental effects on minority and/or low-income populations. This analysis focuses on the locations of impacts (as reported in the various environmental analysis sections of this Environmental Impact Statement [EIS]) and examines the racial and income characteristics of the populations affected by these impacts. This analysis also discusses the specific outreach efforts that were conducted as part of the EIS process.

## Regulatory Framework

EO 12898, issued by President Clinton in 1994, provides that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.” In the accompanying memorandum, President Clinton urged Federal agencies to incorporate environmental justice principles into analyses prepared under the National Environmental Policy Act (NEPA) and emphasized the importance of public participation in the NEPA process.

In response to EO 12898, the U.S. Department of Transportation (DOT), in its *Order to Address Environmental Justice in Minority Populations and Low-Income Populations* (DOT Order 5610.2), outlined in general terms how environmental justice analyses should be performed and how transportation project decisions should be made to avoid disproportionately high and adverse effect on minority and low-income populations. The DOT Order requires agencies to accomplish the following: (1) explicitly consider human health and environmental effects related to transportation projects that may have a disproportionately high and adverse effect on minority or low-income populations; and (2) implement procedures to provide “meaningful opportunities for public involvement” by members of those populations during project planning and development (DOT Order 5610.2, § 5(b)(1)).

The DOT Order defines “adverse effects” as follows:

*Adverse effects means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the*

*availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of, benefits of DOT programs, policies, or activities. (DOT Order 5610.2, § Appendix 1(f))*

The DOT Order defines “disproportionately high and adverse effect on minority and low-income populations” as follows:

*Disproportionately high and adverse effect on minority and low-income populations means an adverse effect that:*

*(1) is predominately borne by a minority population and/or a low-income population, or*

*(2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.*

*(DOT Order 5610.2, § Appendix 1(g))*

In response to EO 12898 and DOT Order 5610.2, the Federal Highway Administration (FHWA) issued its own order on environmental justice, entitled *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (FHWA Order 6640.23). FHWA Order 6640.23 contains almost identical language to that contained in DOT Order 5610.2.

## **Relationship to Title VI of the Civil Rights Act**

Title VI of the Civil Rights Act of 1964 requires that no person, because of race, color, or national origin, be excluded from participation in, denied the benefits of, or be subjected to discrimination by a Federal-aid program or activity. The *FHWA Guidance for Preparing and Processing Environmental and Section 4(f) Documents* (FHWA Technical Advisory 6640.8A) provides guidance for documenting the potential social, economic, and environmental impacts considered in the selection and implementation of highway projects. EO 12989 is a renewed focus on the Title VI law with respect to minority populations and adds low-income populations as an emphasis area when addressing socioeconomic concerns.

## **Description of the Proposed Action**

The Edmonds Crossing project is intended to provide a long-term solution to current operations and safety conflicts between ferry, rail, automobile, bus, and pedestrian traffic in downtown Edmonds (see Figure G-1 for a vicinity map, which is provided at the end of the main text). FHWA, the Federal Transit Administration (FTA), Washington State Department of Transportation (WSDOT, including Washington State Ferries [WSF]), and the City of Edmonds, in cooperation with the United

States Army Corps of Engineers (Corps), the U.S. Coast Guard, the Suquamish Tribe, the Tulalip Tribe, the Lummi Nation, the Swinomish Tribe, and the Port Gamble S'Klallam Tribe, propose to relocate the existing state ferry terminal from Main Street in downtown Edmonds to another site farther from the downtown core. In the process, a multimodal center would be established that would integrate the ferry, rail, and transit services into a single complex. Access would be provided by a realigned State Route (SR) 104 from its current intersection with Pine Street. The new complex would provide an upgraded ferry terminal designed to meet the operational requirements for accommodating forecast ferry ridership demand; a new rail station designed to meet intercity (Amtrak) passenger service and commuter rail loading requirements; a transit center that would meet local bus system and regional transit system loading requirements; facilities for accommodating both vehicular commuters and walk-on passengers of the available transportation modes (parking, drop-off areas, retail/concessionaire space, and waiting areas); and a system linking these facilities to allow for the safe movement of users.

## **Alternatives Analyzed in the Environmental Impact Statement**

Several alternative sites for the relocated ferry terminal and the proposed multimodal center were evaluated as part of the early screening process. Screening criteria included how well the alternative met project objectives, traffic and safety considerations, environmental impacts, benefits to the community, and ease of implementation.

During this screening process, federal, state, regional, and local regulatory agencies; the City of Edmonds and the Town of Woodway; and residents of the project area provided input regarding issues that could impact the selection of reasonable alternatives. Based on this extensive screening process, two build alternatives were recommended for further analysis in the EIS process. As required by NEPA, a No Action Alternative has also been analyzed.

### ***Alternative 1: No Action***

The No Action Alternative assumes that the present single-slip ferry terminal would be maintained at its existing Main Street location (Figure G-2). The overhead loading bridge and other pedestrian-related improvements that have been made over the last few years would be in place until ferry operations are moved elsewhere. Only normal maintenance activities would occur as part of the No Action Alternative. Without a second ferry slip and other major improvements proposed as part of the build alternatives, it is unlikely that the No Action Alternative would adequately meet future ridership demand or other objectives of the project.

### ***Modified Alternative 2: Point Edwards Site***

Modified Alternative 2, the preferred alternative in this Final EIS, proposes the relocation of the ferry terminal and the development of the multimodal center at Point Edwards, located approximately 2/3 mile south of the Main Street terminal. As shown in Figure G-3, access to the proposed complex would be provided by realigning SR 104 from its current intersection with Pine Street. Realigned SR 104

would traverse the lower portion of the bluffs within the existing Union Oil Company of California (UNOCAL) property. The westbound lanes would include three to eight general purpose lanes and a high-occupancy-vehicle (HOV)/bypass lane that could be used during peak ferry travel periods to hold approximately 820 waiting vehicles, eliminating the need for vehicles to queue along the side of SR 104 south of Pine Street. Two eastbound lanes would carry vehicles leaving the ferries. Realigned SR 104 would cross over the Burlington North Santa Fe Railroad (BNSFRR) tracks and would extend over the Port of Edmonds southern breakwater to a three-slip ferry terminal.

The multimodal center would be located in the lower yard of the existing UNOCAL property. Vehicle access would be provided via a road off realigned SR 104. The center would include a new railroad station with two loading platforms that straddle double tracks; a bus terminal that accommodates up to 10 regular-sized buses; a two-level, 460-space parking garage to accommodate park-and-ride and overnight commuters and a 90-space short-term parking lot; a pedestrian walkway system that would interconnect the various modes and areas within the center; and a weather-protected walkway that would accommodate pedestrian movement between the center and the ferry terminal.

### **Alternative 3: Mid-Waterfront Site**

Alternative 3 proposes the relocation of the ferry terminal and the development of the multimodal center at a site roughly one-third of the way between the existing Main Street terminal and the Point Edwards site. As shown in Figure G-4, access to the proposed complex would be provided by the realignment of SR 104 from its current intersection with Pine Street (similar to that proposed under Alternative 2). Ferry-bound realigned SR 104 would include two to five general purpose lanes and an HOV/bypass lane. During peak ferry travel periods, the lanes could hold up to 810 waiting vehicles. After crossing the railroad tracks, the roadway would descend to ground level, run parallel to and west of the tracks, and extend to a three-slip ferry terminal immediately adjacent to the Port of Edmonds northern breakwater. Two eastbound lanes along realigned SR 104 would carry vehicles leaving the ferries.

The multimodal center would be located adjacent to the BNSFRR tracks north of Dayton Street, west of Edmonds Way, and south of James Street. The center would include a new railroad station with two loading platforms that straddle double tracks.

Buses would approach the center from either Dayton or James Street and would unload passengers adjacent to the eastside rail platform. In order to accommodate short-term parking and park-and-ride and overnight commuters, a three-level, 490-space parking garage would be constructed; approximately 49,000 square feet of retail commercial space would be provided in the ground level of the garage. An overhead pedestrian walkway would interconnect the parking garage, rail platforms, and the ferry terminal and overhead loading facilities.

To facilitate traffic movement along Dayton Street and access to the Port of Edmonds and other waterfront uses, Dayton Street would be reconstructed under the

railroad tracks and the ferry staging/egress roadway and would connect to a realigned Admiral Way.

## Methodology and Approach

The social science of environmental justice has evolved considerably since the issuance of EO 12898 in 1994. As more Federal agencies issue environmental justice guidance documents, and more projects are evaluated for consistency with the executive order, environmental justice analyses themselves have also evolved. This environmental justice analysis was prepared using the latest guidance documents from FHWA and WSDOT, and the best available project-specific and demographic data.

The methodology for this environmental justice analysis was developed to be consistent with the following guidance documents: Environmental Justice Guidance, *Conducting an Environmental Justice Analysis, Step by Step* (Draft), WSDOT; and *Environmental Justice: What You Should Know* (Draft), FHWA. The primary data inputs for this environmental justice analysis were the results of the various environmental analyses conducted for this EIS, and data from the 2000 U.S. Census.

The following describes the steps taken in this analysis:

1. **Define the study purpose and identify the study area.**
2. **Describe the demographics of the study area.** For this analysis, the percentage minority and percentage low-income of the population residing in the study area was determined based on data from the 2000 U.S. Census (see *Study Area Demographics* below).
3. **Identify potential impacts and determine their location in relation to minority and low-income populations.** The locations of environmental impacts identified by EIS authors were mapped electronically using a Geographic Information System (GIS) on Census Block and Block Group maps. The percentage minority and percentage low-income of the population residing in the affected Blocks and Block Groups were determined based on data from the 2000 U.S. Census (see *Project Impacts, Mitigation, and Benefits* below).
4. **Conduct public outreach to supplement the Census data.** To supplement the results obtained from the Census data analysis, telephone and in-person interviews were conducted with the owners of businesses that would be relocated by the project. The business owners were informed about the project and the environmental justice analysis, and were asked a standard set of questions to determine their race, and the race and income of their employees. Questions were also asked to determine the distance employees traveled to arrive at work (see *Additional Public Outreach* below).
5. **Assess whether the project would result in disproportionately high and adverse effects on minority and/or low-income populations.** After reviewing the demographics of the study area and the impacted Blocks and Block Groups, and the results of the business owner interviews, five key questions identified in

the FHWA *What You Should Know* guidance were addressed. These key questions are as follows:

- Is the adverse effect predominantly borne by the environmental justice population?
- Will the adverse effect on the environmental justice population be appreciably more severe or greater in magnitude than the adverse effect on the non-minority or non-low-income population?
- Does the project impact a resource that is especially important to an environmental justice population? Does it serve an especially important social, religious, or cultural function for the environmental justice community?
- Are there mitigation, enhancement measures, or offsetting project benefits to the affected environmental justice population?
- Has the type and severity of adverse effects on non-environmental justice populations been assessed?

After addressing these questions, a final assessment was made as to whether or not the project is likely to result in disproportionately high and adverse effects on minority and/or low-income populations. This final assessment was a subjective one, based on evidence presented, the answers to the five questions, and professional judgment (see *Final Determination and Conclusion* below).

## Study Area Demographics

As described in the *Methodology and Approach* section above, the first step in this environmental justice analysis was to define a study area. The individual study areas from the other environmental analyses conducted for this EIS were overlaid electronically in a GIS to form a single composite geographic area. The contiguous set of Census Block Groups that encompassed this geographic area was set as the environmental justice study area.

The Census Block Groups that comprise the study area, along with the approximate footprints of the two build alternatives, are presented in Figure G-5. This figure also presents the percentage minority and percentage low-income of the population residing in each of these Block Groups based on data from the 2000 U.S. Census. The total population of the study area is 18,175. Of this total, 10.6 percent is minority and 3.7 percent is low-income.

In addition to the population residing in the study area, there are other groups of individuals who, because of their use of marine areas adjacent to the project site, would also be affected by this project, and therefore need to be considered in this environmental justice analysis. These other groups of individuals are the Suquamish, Tulalip, Lummi, and Swinomish Indian Tribes. These Tribes possess treaty rights to fish in the marine waters adjacent to the project site (see the *Tribal*

*Fishing* sections in Chapters 3 and 4 of the EIS). Members of these Tribes are, by the definitions contained in the DOT and FHWA Orders, minority individuals.

## **Outreach to Minority and Low-Income Populations**

EO 12898, DOT Order 5610.2, and FHWA Order 6640.23 require Federal agencies to ensure meaningful participation of minority and low-income populations in the decision-making process. Consequently, a key component of compliance with these Orders is outreach to the potentially affected minority and/or low-income populations in order to uncover issues of importance that may not otherwise be apparent.

During the Draft EIS and early Final EIS phases, no outreach specifically targeted at minority or low-income populations was conducted other than coordination with the Tribes (see *Tribal Coordination* below). The public outreach activities that have been conducted to date were planned and developed based on City of Edmonds staff's understanding and knowledge of the population makeup of the City of Edmonds. City of Edmonds staff and members of the project management team did not believe that there were sufficient minority or low-income individuals in the vicinity of the project to warrant any specific outreach targeted at these populations. Instead, the outreach activities that were conducted were widely advertised and the project materials widely distributed to the general population. The few minority and low-income individuals that do live in the area were exposed to these activities, and therefore were given the opportunity to participate in the decision-making process.

The subsections below describe the general NEPA public outreach activities that have been conducted to date; the tribal coordination activities conducted to date; and some additional public outreach that was conducted during the late Final EIS phase of this project.

### **General Public Outreach Efforts**

Throughout the project development of the Edmonds Crossing project, WSDOT, at the direction of the City of Edmonds, has undertaken extensive public outreach and agency coordination efforts. These efforts included creating several decision-making project committees staffed by project stakeholders; holding several public meetings and open houses where comments on the project were solicited; and publishing and distributing project newsletters. Detailed descriptions of these activities are contained in Chapters 7, 8, and 9, and Appendix A of this EIS. Appendix A also describes the various community involvement activities that have been implemented to provide the public with an opportunity to participate in the project development process.

The public was notified of outreach activities via the following methods:

- A project newsletter was developed and mailed to:
  - 1,450 residences and businesses in the three 98020 mail carrier routes encompassing the project area (roughly Casper Street on the north, Sunset Avenue/3rd Avenue South on the east, Puget Sound on the west, and past the Edmonds/Woodway border).

- 800 organizations and people expressing interest in the project.
- Meeting announcements were included in utility bills sent to customers throughout the city. WSDOT also placed these announcements in the local Edmonds newspaper and other newspapers of general circulation. WSDOT also placed meeting announcements on notice boards aboard ferry vessels.
- Informational project displays were set up aboard ferry vessels.

Five public events were held in connection with the various phases of the project:

- Pre-EIS Phase – Two Open Houses in Edmonds and Kingston in June 1994 to introduce the project to communities of interest;
- EIS Public Scoping Phase – Formal Scoping Meeting in April 1995 to solicit comments on the proposed project and specific EIS alternatives;
- Draft EIS Public Review Phase – EIS Hearing in April 1998 to obtain comments on the Draft EIS; and
- Modified Alternative 2 Development Phase – Open House to present Modified Alternative 2 in January 2003.

At the five public events described above, no participation from minority or low-income individuals was apparent or visible. In addition, there is no documentation that specifically reflects minority and/or low-income attendance at these events. No comments or correspondence have been received to date from any group or organization representing minority or low-income populations, other than communication from the Suquamish Tribe (see *Tribal Coordination* below).

### ***Tribal Coordination***

The ten Indian Tribes listed below were contacted directly by letter for input on the project. Members of Indian Tribes are, by the definitions contained in the DOT and FHWA Orders, minority individuals, and as such are given particular attention in this environmental justice analysis.

- Yakama Indian Nation
- Tulalip Tribes
- Swinomish Tribe
- Lummi Nation
- Suquamish Tribe
- Muckleshoot Tribe
- Skokomish Tribe
- Jamestown S' Klallam Tribe
- Lower Elwha Klallam Tribe
- Port Gamble S' Klallam Tribe

FHWA formally requested the Tribes' input on the project in accordance with requirements of Section 106 of the National Historic Preservation Act (NHPA) associated with consultations with affected Tribes.

Early in the project development, members of the Suquamish Tribe voiced concern over the impact of the project to federally protected Treaty Fishing Rights. In exercise of those rights, many Puget Sound area Indian Tribe members fish in the marine areas adjacent to the existing and proposed ferry terminal sites. (Impacts to Indian tribal fishing are discussed in Chapter 4.) To address this issue, WSDOT initiated an extensive coordination and consultation process with all potentially affected Indian Tribes, including the Suquamish, Tulalip, Lummi, and Swinomish. The original Alternative 2 (as configured and described in the Draft EIS) was modified as a result of numerous one-on-one and group discussions, and assistance provided by the WSDOT Tribal Liaison Office. The modification involved realigning the ferry pier northward to orient it along the Marina Beach Park and Port of Edmonds Marina boundary. Reconfiguring this build alternative resulted in a planned operational routing change for the ferries that would keep the vessels outside of Salmon Management Area 10. This change would reduce the potential physical conflict between ferries and tribal fishing boats and would minimize adverse impacts on the number of fish caught and the larger tribal economy.

### ***Additional Public Outreach***

During the late FEIS phase of this project, some additional public outreach was conducted to supplement the Census data used in the environmental justice review of business displacement impacts. Alternative 2 would not displace any businesses. Alternative 3 would displace a total of 24 businesses. This impact and proposed mitigation is discussed in detail in Chapter 4 of the EIS. The locations of the two commercial buildings housing these businesses are indicated on Figures G-18 and G-21. To supplement the results obtained from the Census data analysis, telephone and in-person interviews were conducted with the owners of these businesses. The business owners were informed about the project and the environmental justice analysis, and were asked a standard set of questions to determine their race, and the race and income of their employees. Questions were also asked to determine the distance employees traveled to arrive at work. These interviews were conducted in April 2003. At that time the total number of businesses occupying the two commercial buildings that would be displaced had dropped to 19. All 19 businesses were contacted. Responses were obtained from 12 of these businesses. Of these 12 businesses, a total of 2 were owned by minority individuals, one of whom was reported to live outside of Edmonds; there were a total of 3 minority employees, one of whom was reported to live 5 minutes away and another was reported to live about 6 miles away; and one part-time low-income employee who was reported to live about 2 miles away. (Detailed results of this outreach effort are documented in FigureG-1 at the end of this appendix.)

# Project Impacts, Mitigation, and Benefits

## *Impacts and Mitigation*

DOT Order 5610.2, § 5(b)(1) requires agencies to explicitly consider human health and environmental effects related to transportation projects that may have a disproportionately high and adverse effect on minority or low-income populations. Under Section 8(b) of the DOT Order, mitigation and enhancement measures may also be considered. Table G-1, which is provided at the end of the main text, briefly summarizes the impacts identified in the EIS analyses as well as proposed mitigation measures to reduce the severity of these impacts. Impacts identified in most of Table G-1 are long-term (i.e., operational impacts). The last row of Table G-1 identifies short-term (i.e., construction impacts). Chapter 4 of this EIS includes complete discussions of project impacts and proposed mitigation. This information is also summarized in Tables S-2 and S-3 of this EIS.

The impacts and mitigation measures identified in Table G-1 were initially presented to the general public, affected Tribes, and reviewing agencies, with the publication of the Draft EIS in February 1998. These reviewing entities were afforded the opportunity to review and comment on the impact analysis and the proposed mitigation. The description of impacts and proposed mitigation in Table G-1, and detailed in Chapter 4 and Tables S-2 and S-3 of this EIS, reflect comments received from the general public, affected Tribes, and reviewing agencies.

To identify who was potentially affected by the project impacts from a race and income perspective, the locations of these impacts were digitized in a GIS and were overlaid electronically over 2000 Census Blocks and Block Groups. Maps depicting the locations of these impacts were prepared and are presented in Figures G-6 through G-28. These maps also contain tables, which list the specific Census Blocks and Block Groups that are affected by the impacts displayed on each map. 2000 Census data in these tables identify the percentage minority population of the individual affected Blocks, and the percentage low-income population of the individual affected Block Groups.<sup>1</sup> The data in these tables give an indication of the race and income status of the populations affected by this project. The columns on the righthand-side of Table G-1 summarize the results of this impact mapping/Census data analysis.

In reviewing the data in Table G-1, the reader needs to be careful to understand what these numbers are saying. The percentages in these columns represent the percentage minority and percentage low-income of the **total population** of the affected Census Blocks and Block Groups, respectively. It is important to note that these numbers **do not** reflect the exact composition of the actual affected population, as in most cases the impacted areas do not fit exactly into individual or even groups of Census Blocks or Block Groups. However, these numbers are useful in giving an indication of the likely composition of the affected population. Take note for

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<sup>1</sup> Poverty data are collected by the Census Bureau from a subset of the total Population (i.e., "Population for whom poverty status is determined). Block level data on poverty are suppressed by the Census Bureau.

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Air Quality Figures G-6, G-7	<p><b>Alternative 1:</b> Dayton Street/SR 104 would exceed the 9 ppm standard in 2015 as a result of projected over-capacity conditions.</p> <p><b>Alternative 2:</b> Decreased air emissions resulting from changed traffic patterns, enhanced multimodal access, and lower numbers of SOV trips.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>	Locations of sensitive receptors to the identified construction phase air quality impacts (see <i>Construction Phase [Short-Term Impacts]</i> below).	9.0	6.4	8.5	6.4	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> None proposed.</p>
Noise Figures G-8, G-9	<p><b>Alternative 1:</b> Increased noise levels from increased traffic. Peak-hour noise levels would remain well below applicable FHWA criteria.</p> <p><b>Alternative 2:</b> Increased noise levels from increased traffic and introduction of vehicular traffic to new areas. Peak-hour noise levels would remain well below applicable FHWA noise criteria.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>	Locations of sensitive receptors to the identified noise impacts.	9.6	6.4	8.7	4.8	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> None proposed.</p>

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Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Energy	<p><b>Alternative 1:</b> Slight increase in energy demand due to longer lines and idling automobiles.</p> <p><b>Alternative 2:</b> Slight increase in energy demand from growth in Edmonds area.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> None proposed.</p>
Geology and Soils Figures G-10, G-11	<p><b>Alternative 1:</b> None anticipated.</p> <p><b>Alternative 2:</b> Slight erosion potential increase.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>	Locations of erosion hazard and soil movement areas.	0.0	8.7	0.0	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Establish vegetation to decrease erosion.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Waterways and Hydrological Systems	<p><b>Alternative 1:</b> Continued deposition of sediments in Edmonds Marsh and Willow Creek because of untreated runoff from impervious surfaces in the waterfront area.</p> <p><b>Alternative 2:</b> Modest long-term sediment deposition in Edmonds Marsh and Willow Creek from developed areas, but to a lesser extent than would occur with Alternative 1.</p> <p>Minor seabed scour from propeller-induced currents.</p> <p><b>Alternative 3:</b> Slight increase in peak rates and volumes of runoff discharge from the site.</p> <p>Seabed scour from propeller-induced currents.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Landscaping, maintenance of natural buffers, and other BMPs to reduce erosion potential.</p> <p><b>Alternative 3:</b> Same as for Alternative 2, although stormwater flow control should be considered for developed areas on the existing UNOCAL site.</p> <p>Increase capacity of Dayton Street storm drain west of the railroad underpass to enable conveyance of multimodal center runoff out to Puget Sound without detention.</p> <p>Scour protection over a limited seabed area might be required to maintain full structural integrity of the Port's fishing pier from erosion.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Water Quality Figures G-12, G-13	<p><b>Alternative 1:</b> Continuing degradation of water quality from contaminated stormwater runoff.</p> <p>Continued turbidity impacts from propeller scour.</p> <p><b>Alternative 2:</b> Long-term water quality improvement as pollutant loadings in runoff would generally be reduced compared to Alternative 1.</p> <p>Lower dissolved oxygen concentrations.</p> <p>Intermittent locally elevated turbidity.</p> <p><b>Alternative 3:</b> Similar to Alternative 2, with reductions in pollutant loadings compared to Alternative 1.</p> <p>Slightly higher average pollutant concentrations in runoff compared to Alternative 2.</p>	Areas of propeller scour. (In-water impact only. No resident human population.)	N/A	N/A	N/A	N/A	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Implement a stormwater treatment system and pollution source control measures.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Wetlands Figures G-14, G-15	<p><b>Alternative 1:</b> SR 104 would continue to act as a barrier between Edmonds Marsh and the smaller marsh to the east of the roadway.</p> <p>Incremental increase in transportation-related pollutants.</p> <p><b>Alternative 2:</b> Affects 0.06 acre of wetland and 0.2 acre of wetland buffer.</p> <p>Potential change in marsh hydrologic regime.</p> <p>Changed functions and volumes within wetland areas.</p> <p>Beneficial impact to fish and wetland wildlife through daylighting Willow Creek.</p> <p><b>Alternative 3:</b> Affects 0.36 acre of wetland and 0.3 acre of wetland buffer.</p> <p>Similar to Alternative 2.</p>	Locations of sensitive wetland resources.	0.0	8.7	0.0	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Plant wetland vegetation along the banks of the daylighted portion of Willow Creek.</p> <p>Enhance wetland buffer vegetation along the southern forested edge of Edmonds Marsh, and plant a wetland buffer along the west side of the marsh.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Vegetation, Fish, and Wildlife Figures G-16, G-17	<p><b>Alternative 1:</b> Incremental increases in transportation-related contaminants would be introduced to wetlands.</p> <p>SR 104 would continue to serve as a barrier to wildlife movement.</p> <p><b>Alternative 2:</b> Loss of approximately 3.56 acres of upland forest habitat, 34,969 square feet of macroalgae habitat, and 11,365 square feet of intertidal and subtidal habitat.</p> <p>Relocation of SR 104 could further weaken the existing linkage between the upland forest and the Edmonds Marsh.</p> <p>Reduced marine food source from pier shading.</p> <p><b>Alternative 3:</b> Loss of approximately 4.9 acres of upland mixed forest.</p> <p>Other impacts to wildlife habitat would be similar to Alternative 2; however, marine fisheries impacts would be much greater.</p>	Locations of sensitive fish and wildlife habitat resources. (In-water impact only. No resident human population.)	N/A	N/A	N/A	N/A	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Partially restore habitat and return wildlife to site through revegetation and site restoration.</p> <p>Daylight Willow Creek.</p> <p>Remove wooden trestle portion of the Main Street ferry pier.</p> <p>Remove the UNOCAL pier.</p> <p>Design pier to facilitate under-pier juvenile salmon passage.</p> <p>Restore salt marsh function to some of Edmonds Marsh.</p> <p>Restore subtidal ferry scour trench at existing ferry pier.</p> <p><b>Alternative 3:</b> Similar to Alternative 2, except macroalgae bed reconstruction would not be as expansive.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Land Use	<p><b>Alternative 1:</b> Continued limited public access between downtown Edmonds and waterfront.</p> <p><b>Alternative 2:</b> Improved local access and mobility.</p> <p>Accommodates redevelopment in accordance with City of Edmonds Comprehensive Plan and other applicable plans and policies.</p> <p>A total of 22.6 acres acquired from four parcels for right-of-way.</p> <p><b>Alternative 3:</b> Same as for Alternative 2, with substantial impact to Olympic Beach Park and local residents.</p> <p>Property acquisition would displace three single-family homes and 24 businesses (22.3 acres acquired from 12 parcels).</p> <p>Ferry holding/egress lanes would create physical barrier to waterfront.</p> <p>Overall degradation of the downtown waterfront neighborhoods.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> See Section 4(f) below for mitigation for Olympic Beach Park impacts.</p> <p>See <i>Relocation</i> below for mitigation for displacement impacts.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Relocation Figure G-18	<p><b>Alternative 1:</b> None anticipated.</p> <p><b>Alternative 2:</b> None anticipated.</p> <p><b>Alternative 3:</b> Displacement of three single-family residences and 24 businesses. Some permanent job loss could occur if displaced businesses cease operation.</p>	Locations of residences and business that would be displaced. (Alternative 3 only)	N/A	N/A	0.0	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> Acquire property at fair market value. Provide relocation assistance in accordance with federal and state laws.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Social Figures G-19, G-20	<p><b>Alternative 1:</b> Planned growth and development could be slowed.</p> <p>SR 104 reinforced as a barrier between downtown Edmonds and waterfront area.</p> <p><b>Alternative 2:</b> Strengthened cohesion between downtown and waterfront areas with improved access.</p> <p>Ferry pier would cover 0.42 acre of Marina Beach Park.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p> <p>Loss of 0.3 acre of upland and 1.2 acres of tidelands in Olympic Beach Park, and relocation of several residences and businesses.</p> <p>Waterfront neighborhood divided into two relatively isolated areas; intra-neighborhood access substantially impaired.</p> <p>Increased congestion in Edmonds Way/Dayton Street area.</p>	Locations of affected social gathering places.	12.0	8.7	10.6	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> See Section 4(f) below for mitigation for Marina Beach Park impacts.</p> <p><b>Alternative 3:</b> See Section 4(f) below for mitigation for Olympic Beach Park impacts.</p> <p>Work with community service and emergency service providers to solve access problems to local neighborhoods.</p> <p>Design Dayton Street underpass to accommodate pedestrian and bicycle usage.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Economics Figure G-21	<p><b>Alternative 1:</b> None anticipated.</p> <p><b>Alternative 2:</b> Improved access to and reduced congestion around existing terminal, waterfront, and downtown could lead to opportunities for additional development.</p> <p>Reduced walkup business for some downtown businesses due to diverted ferry traffic.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p> <p>Loss of jobs and city sales taxes if displaced businesses cannot be relocated nearby.</p>	Locations of business that would be displaced. (Alternative 3 only.)	N/A	N/A	0.0	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Signs and information about bus service to downtown/waterfront area could encourage passengers to travel downtown.</p> <p><b>Alternative 3:</b> Relocate displaced businesses to retail space within proposed parking garage.</p> <p>Provide signs to indicate access and inform passengers about waterfront/downtown businesses.</p>
Cultural Resources	<p><b>Alternative 1:</b> None anticipated.</p> <p><b>Alternative 2:</b> None anticipated.</p> <p><b>Alternative 3:</b> None anticipated.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> None proposed.</p> <p><b>Alternative 3:</b> None proposed.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Tribal Fishing Figure G-22	<p><b>Alternative 1:</b> Ferry route would continue to cross through SMA 9/10 boundary and productive shrimp habitat.</p> <p>Continued potential for collision with tribal shrimp fishers during adverse weather conditions in April fishery.</p> <p><b>Alternative 2:</b> Ferry vessels would operate in SMA 9 and outside SMA 10 tribal fishing area.</p> <p>During the nighttime salmon fishery, ferries would approach and leave the terminal from the northwest, greatly minimizing the potential for ferry boat conflicts with tribal fishers.</p> <p>Proposed ferry lane would cross shrimp harvest area. Most shrimp fishers would move northward near the existing ferry lane to avoid potential collision. Because the harvest area is closer to the shoreline at Point Edwards than farther north, ferry captains would have less ability to avoid shrimp pot buoys</p>	Locations of shrimp fishing impact. (In-water impact only. No resident human population. However, this impact affects Indian tribal fishers who are, by the definitions contained in the DOT and FHWA Orders, minority individuals.)	N/A	N/A	N/A	N/A	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> WSF and tribes would develop an operating protocol to coordinate ferry operations with tribal fishing activities.</p> <p>Within 1 year of the effective date of the MOA, WSF and tribes will enter into a Protocol of Inadvertent Discovery of Historic Resources, in coordination with the State Historic Preservation Office, that will govern state and tribal roles and responsibilities pertaining to the inadvertent discovery of cultural or historic artifacts during the construction and operation of the project.</p> <p>Prior to commencement of construction, WSF would contribute \$5,000,000 into a yet-to-be-determined Tribal Mitigation Fund that will be administered by the tribes.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Tribal Fishing (cont.)	<p><b>Alternative 3:</b> Impacts would be similar to Alternative 1.</p> <p>Ferry vessels would operate in SMA 9 and stay within SMA until reaching the shipping lanes. As currently, ferries would cross through productive shrimp habitat. Most shrimp fishers would move north or south of the proposed ferry lane to avoid potential collision.</p>						<p><b>Alternative 3:</b> Same as for Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Hazardous Waste  Figures G-23, G-24	<p><b>Alternative 1:</b> Continued potential for release of fuel or other hazardous substances used during routine operation and maintenance, or during train/automobile accident at at-grade crossing.</p> <p><b>Alternative 2:</b> Possible contaminated site cleanup required with long-term onsite treatment of soils and/or groundwater.</p> <p>Potential release of hazardous substances from routine facility and ferry operation.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p>	Locations of sensitive receptors to the identified hazardous material spill impacts.	0.0	8.7	0.0	4.8	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Require long-term onsite treatment do not pose a risk to public health or the environment; require routine monitoring.</p> <p>Design project to avoid areas of known contamination or incorporate remedial measures into the project design that are protective of human health and the environment.</p> <p>Prepare and implement a spill prevention, countermeasure, and control plan.</p> <p><b>Alternative 3:</b> Same as for Alternative 2.</p> <p>If continued dewatering of Dayton Street underpass required, and contaminated groundwater present on adjacent properties, prepare groundwater management plan to handle according to regulatory requirements.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Visual Quality Figures G-25, G-26	<p><b>Alternative 1:</b> Visual sense of congestion would be intensified with increased traffic.</p> <p><b>Alternative 2:</b> New pier would decrease visual quality of northern views from Marina Beach Park, but increase visual quality of southern and western views.</p> <p>New pier would visually detract from the Port of Edmonds Marina.</p> <p>Existing UNOCAL property would improve visually as a result of the multimodal center, except buildings would block views from Edmonds Marsh.</p> <p>Ferry access road would disrupt visual continuity of the hillside.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p> <p>New pier would substantially affect water and mountain views from Olympic Beach Park and shoreline residences.</p> <p>Multimodal center would improve visual quality of central commercial area with coherent architecture and defined street edges.</p>	Locations of sensitive receptors to the identified visual impacts.	0.0	8.7	0.0	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Screen ferry access road and multimodal center with landscaping.</p> <p>Incorporate architectural design and color schemes to enhance structure compatibility with surrounding areas.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Section 4(f) Resources Figures G-27, G-28	<p><b>Alternative 1:</b> Additional noise and circulation conflict for divers and other users of Brackett's Landing Park from increased ferry and train traffic.</p> <p>Heavy ferry traffic would perpetuate existing safety risks to divers using Underwater Park.</p> <p>Increased noise levels in City Park along SR 104.</p> <p><b>Alternative 2:</b> Approximately 1.26 acres of parkland acquired.</p> <p>Increased noise and ambient CO levels resulting from increased activity in vicinity could alter Marina Beach Park's current character; however, the project could provide opportunities to create a more expansive and integrated park facility.</p> <p>Increased noise, traffic, structures, and lighting could detract from quality of existing Edmonds Marsh habitat. Visual presence of multimodal center and associated traffic would affect recreational experience of users of interpretive trail system.</p>	Locations of sensitive Section 4(f) resource receptors to the identified recreation impacts.	12.0	8.7	10.6	8.7	<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Replace acquired parkland with property of equal fair market value and recreational utility in the informal recreational area south of Marina Beach Park.</p> <p>Install interpretative signs within the park and along the daylighted section of Willow Creek describing the cultural history of the site, natural resource features, and the role of the creek in salmon survival.</p> <p>Provide stormwater treatment and control facilities to improve water quality in Edmonds Marsh, as well as provide funding for additional interpretative trails and appropriate plantings to protect and enhance habitat.</p> <p><b>Alternative 3:</b> Similar to Alternative 2. Reconnect portions of Olympic Beach Park by means of an at-grade crossing of, or an elevated structure over, the ferry holding lanes; replace acquired property</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
	<p><b>Alternative 3:</b> Approximately 1.5 acres of Olympic Beach Park acquired. Park would be bisected into two smaller sections. Access would be made more difficult. Increased noise and ambient CO levels resulting from increased activity in vicinity could change current character of park and diminish its present value. Vehicles, loading structures, and the large pier would dominate views from the park. Fishing conditions from the public pier might become less favorable. Ferry scour could damage the fishing pier itself.</p> <p>Impacts to Edmonds Marsh would be similar to Alternative 2, but potentially greater.</p>						<p>with comparable waterfront property.</p> <p>Facilitate access to marina waterfront and Edmonds Marsh trail through pathways, signage, and other measures.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Transportation	<p><b>Alternative 1:</b> Increased ferry operations would result in increasing conflicts between vehicle, pedestrian, transit, and railroad movement in the downtown Edmonds area.</p> <p>Single-slip ferry terminal would provide little schedule adherence tolerance, with no operations redundancy should the slip become disabled.</p> <p>Increased railroad-related ferry loading disruptions and blockages from increases in railroad traffic.</p> <p><b>Alternative 2:</b> 2030 peak queues would be largely accommodated in the proposed onsite staging and holding areas.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Prepare a traffic management plan to manage access during all demand periods.</p> <p>Prepare a parking management plan to prevent abuse of waterfront-area free parking resources.</p> <p>Provide signage at marina entrance to caution boaters to the possible presence of a ferry.</p> <p>Implement a ferry operations informational program for marina users and guests.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Transportation (cont.)	<p>Revised traffic circulation patterns would improve safety.</p> <p>Three-slip ferry terminal would provide sufficient loading capacity to minimize ferry schedule adherence impacts and operations redundancy.</p> <p>Closure of access to the terminal via Pine Street east of SR 104 would eliminate traffic impacts on Pine Street and other local streets.</p> <p>Slight increase in potential for ferry/small craft collisions due to increased marine traffic.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p> <p>Several parking lots in the waterfront area would be eliminated but replaced with a 490-space, paid-parking garage.</p>						

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
Construction Phase (Short-Term Impacts)	<p><b>Alternative 1:</b> None anticipated.</p> <p><b>Alternative 2:</b> Temporary traffic congestion and delays resulting from street closures and traffic detours.</p> <p>Temporary marine traffic restrictions resulting from required safety clearances at in-water and near-shore construction sites.</p> <p>Increased erosion potential from earthmoving operations.</p> <p>Temporary increases in noise and dust from construction activities.</p> <p>Increased risk of release of hazardous substances to the environment.</p> <p>Permanent and temporary disruption of wildlife and wildlife habitat.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p>						<p><b>Alternative 1:</b> None proposed.</p> <p><b>Alternative 2:</b> Provide traffic informational signage to guide motorists and emergency service vehicles.</p> <p>Provide marine vessel operators with construction information to reduce on-water conflicts.</p> <p>Implement approved erosion and sedimentation control BMPs.</p> <p>Implement approved dust control measures.</p> <p>Restrict construction to daytime hours.</p> <p>Prepare and implement a comprehensive hazardous substance contingency and management plan, and a spill prevention, countermeasures, and control plan.</p> <p>Restrict construction activities to regulatory agency work windows and implement approved BMPs to minimize habitat impacts.</p> <p><b>Alternative 3:</b> Similar to Alternative 2.</p>

**Table G-1  
Impacts and Mitigation Summary and Results of Impact Mapping/Census Data Analysis**

Element of the Environment <sup>a</sup>	Alternatives Impact Summary	Impacts Mapped	Alternative 2 <sup>b</sup>		Alternative 3 <sup>b</sup>		Mitigation Summary
			Minority Percentage	Low-Income Percentage	Minority Percentage	Low-Income Percentage	
BMP	best management practice						
CO	carbon monoxide						
ppm	parts per million						
SMA	salmon management area						
SOV	single-occupancy vehicle						
SR	state route						
UNOCAL	Union Oil Company of California						
<i>Data Source: 2000 U.S. Census</i>							
<i>Notes:</i>							
<sup>a</sup> <i>Shaded areas in this table indicate no Impact Mapping/Census Data Analysis results are available. For these elements of the environment (i.e., Energy, Waterways and Hydrological Systems, Land Use, Cultural Resources, Transportation, and Construction Phase), there were either no environmental impacts, impacts were positive, or impacts were not readily mappable.</i>							
<sup>b</sup> <i>Numbers in these columns represent the percentage minority and percentage low-income of the total population of the affected Census Blocks and Block Groups respectively. It is important to note that these numbers <u>do not</u> reflect the exact composition of the actual affected population, as in most cases the impacted areas do not fit exactly into individual or even groups of Census Blocks or Block Groups. However, these numbers are useful in giving an indication of the likely composition of the affected population. Please see the discussion in the Impacts and Mitigation subsection.</i>							

example; in Table G-1 the Census data analysis reports that for Alternative 2 the population of the Census Blocks that would be affected by the noise impacts is 9.6 percent minority. The data behind this number are shown in the Census Block table on Figure G-8. As shown on Figure G-8, the total population of the 6 Census Blocks affected by the noise impacts of Alternative 2 is 302. This **does not** mean that 302 individuals, 9.6 percent of which are minority, are affected by the noise impacts resulting from Alternative 2. The actual size of the population affected by the noise impacts of Alternative 2 is not known. However, whatever the actual size of this affected population, since these individuals are located within these 6 Census Blocks, it is reasonable to assume that approximately 9.6 percent of these individuals are likely to be minority. By the same logic, 90.4 percent of this affected population is likely to be non-minority. The percentages in Table G-1, therefore, are useful to give an indication of the likely minority versus non-minority and low-income versus non-low-income ratios of the affected populations. These ratios are useful when examining whether the adverse effects of the project are predominantly borne by minority or low-income populations.

Mitigation for the impacts identified in the EIS is discussed in detail in Chapter 4. Figures G-29 and G-30 identify the locations of key mitigation measures.

## ***Project Benefits***

This project will generate a series of transportation benefits for the communities of Edmonds and Kingston, and the traveling public as a whole. The following list briefly describes the benefits of the project:

- Improved overall safety through revised traffic circulation patterns and removal of the at-grade railroad crossing.
- Accommodation of most of the 2030 peak vehicle queues within the proposed onsite staging and holding areas, as opposed to vehicle queuing on the side of Edmonds Way as is the case currently.
- Increased passenger operations capacity resulting from a slip design that would accommodate the use of new larger ferry vessels.
- Improved ferry schedule adherence and operations redundancy resulting from the increased loading capacity and the three-slip ferry terminal design.
- Better integration of ferry, bus, and train travel modes due to the design of the ferry terminal.
- Better integration of the downtown Edmonds areas with the shoreline areas resulting from ferry traffic being routed away from downtown.

## **Final Determination and Conclusion**

To make a final determination on whether or not a project will result in disproportionately high and adverse impacts on minority and/or low-income population, the FHWA *What You Should Know* guidance recommends careful

consideration of five key questions. This section addresses these questions with respect to the information on the Edmonds Crossing project presented in this report thus far, and makes a final determination.

**Question 1: Is the adverse effect predominantly borne by the environmental justice population?**

Based on the Census data analysis of the locations of the project impacts, with the exception of the tribal fishing impact, the adverse effects of this project would not be predominantly borne by minority or low-income populations. In fact, as indicated by the low percentages in Table G-1, the Census data analysis indicates that few minority or low-income individuals would be affected by this project in comparison with the numbers of non-minority and non-low-income individuals that would be affected by this project. The one impact that would be predominantly borne by a minority population is the tribal fishing impact. The tribal fishers are, by the definitions contained in the DOT and FHWA Orders, minority individuals.

**Question 2: Will the adverse effect on the environmental justice population be appreciably more severe or greater in magnitude than the adverse effect on the non-minority or non-low-income population?**

For all of the identified impacts of this project, with the exception of the tribal fishing impact, the adverse effect on minority and low-income populations would not be appreciably more severe or greater in magnitude than the adverse effect on the non-minority or non-low-income population. The one impact that is an exception to this is the tribal fishing impact. As this impact would exclusively affect minority individuals, it by definition could be considered to be appreciably more severe and greater in magnitude than the effect on the non-minority or non-low-income population.

**Question 3: Does the project impact a resource that is especially important to an environmental justice population? Does it serve an especially important social, religious, or cultural function for the environmental justice community?**

For all of the identified impacts of this project, with the exception of the tribal fishing impact, the adverse effects do not impact resources that are especially important to minority or low-income individuals, any more than these resources are important to non-minority or non-low-income individuals. Nor do they impact any resources that serve especially important social, religious, or cultural functions for minority or low-income individuals to any greater degree than non-minority or non-low-income individuals. The one exception to this is the tribal fishing impact. The impacted resource (the tribal fishery) is especially important to a minority population (i.e., the Indian Tribes). This resource serves an especially important social and cultural function for the tribal community.

**Question 4: Are there mitigation, enhancement measures, or offsetting project benefits to the affected environmental justice population?**

The project benefits, described in the *Project Benefits* subsection above, will accrue to the communities of Edmonds and Kingston, and the general traveling public, including minority and low-income individuals.

The tribal fishing impact has and continues to be addressed by WSDOT through an intensive government-to-government coordination and consultation process with the affected Indian Tribes (see the *Tribal Coordination* subsection above). This process resulted in a major change in the design of Alternative 2, which addressed the concerns of the tribal fishers and has garnered the support of tribal leaders. A Memorandum of Agreement between FHWA, WSDOT, the City of Edmonds, and the affected tribes has been negotiated detailing the operational relationships between these entities.

**Question 5: Has the type and severity of adverse effects on non-environmental justice populations been assessed?**

The Census data analysis of the locations of the project impacts conducted for this analysis reviewed the type and severity of adverse effects on both minority and low-income populations, and non-minority and non-low-income populations.

The final determination was based on the following:

- A review of the location, intensity, and duration of the anticipated impacts resulting from the Edmonds Crossing project as documented in this EIS and summarized in Table G-1;
- An impact mapping and Census data analysis, which reviewed “who” from a minority and low-income perspective would be affected by the impacts of the Edmonds Crossing project, the results of which are presented on Figures G-6 through G-28, with minority and low-income percentage data summarized in Table G-1;
- A review of the results of interviews held with business owners whose businesses would be displaced by the Edmonds Crossing project as documented above in the *Additional Public Outreach* sub-section;
- A review of the proposed mitigation for the identified impacts of the Edmonds Crossing project as documented in this EIS and summarized in Table G-1 and mapped on Figures G-29 and G-30;
- A review of the anticipated benefits of the Edmonds Crossing project as documented in this EIS and summarized above in the *Project Benefits* subsection;
- A review of the tribal coordination activities that have occurred to date as documented in this EIS and summarized above in the *Tribal Coordination* subsection;
- And finally, careful consideration of the five FHWA *What You Should Know* guidance questions as documented above.

Based on a review of this evidence, the findings of this analysis are summarized in the four points below:

1. The Edmonds Crossing project would result in a variety of environmental impacts; however, these impacts would be reduced or eliminated by the implementation of effective mitigation measures.
2. With the singular exception of the tribal fishing impact (see item 4 below), the Edmonds Crossing project would not result in adverse effects predominantly borne by minority or low-income populations; moreover, as indicated by the low percentages in Table G-1, the Census data analysis indicates that few minority or low-income individuals would be affected by this project in comparison with the numbers of non-minority and non-low-income individuals who would be affected by this project. This is also reflected in the results of the business owner interviews, where it was apparent that more non-minority and non-low-income individuals would be affected by the project than minority or low-income individuals.
3. The Edmonds Crossing project would result in a series of transportation benefits that would accrue to the communities of Edmonds and Kingston, and the general traveling public, including minority and low-income individuals.
4. The Edmonds Crossing project, and the tribal fishing impact in particular, would uniquely affect a minority population (i.e., members of Indian Tribes who fish in the marine areas adjacent to the project). This impact has and continues to be effectively addressed by WSDOT through an intensive coordination and consultation process with the affected Indian Tribes. This process resulted in a major change in the design of Alternative 2, which addressed the concerns of the tribal fishers and has garnered the support of tribal leaders. A Memorandum of Agreement between FHWA, WSDOT, the City of Edmonds, and the affected tribes is being negotiated.

Based on these findings, this analysis concludes that it is very unlikely that the Edmonds Crossing project would result in disproportionately high and adverse effects on minority and/or low-income populations.

## References

Clinton, William J., President of the United States. Executive Order 12898. February 11, 1994. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Federal Register, Vol. 59, No. 32, Wednesday, February 16, 1994, 7629-7633. Washington D.C.

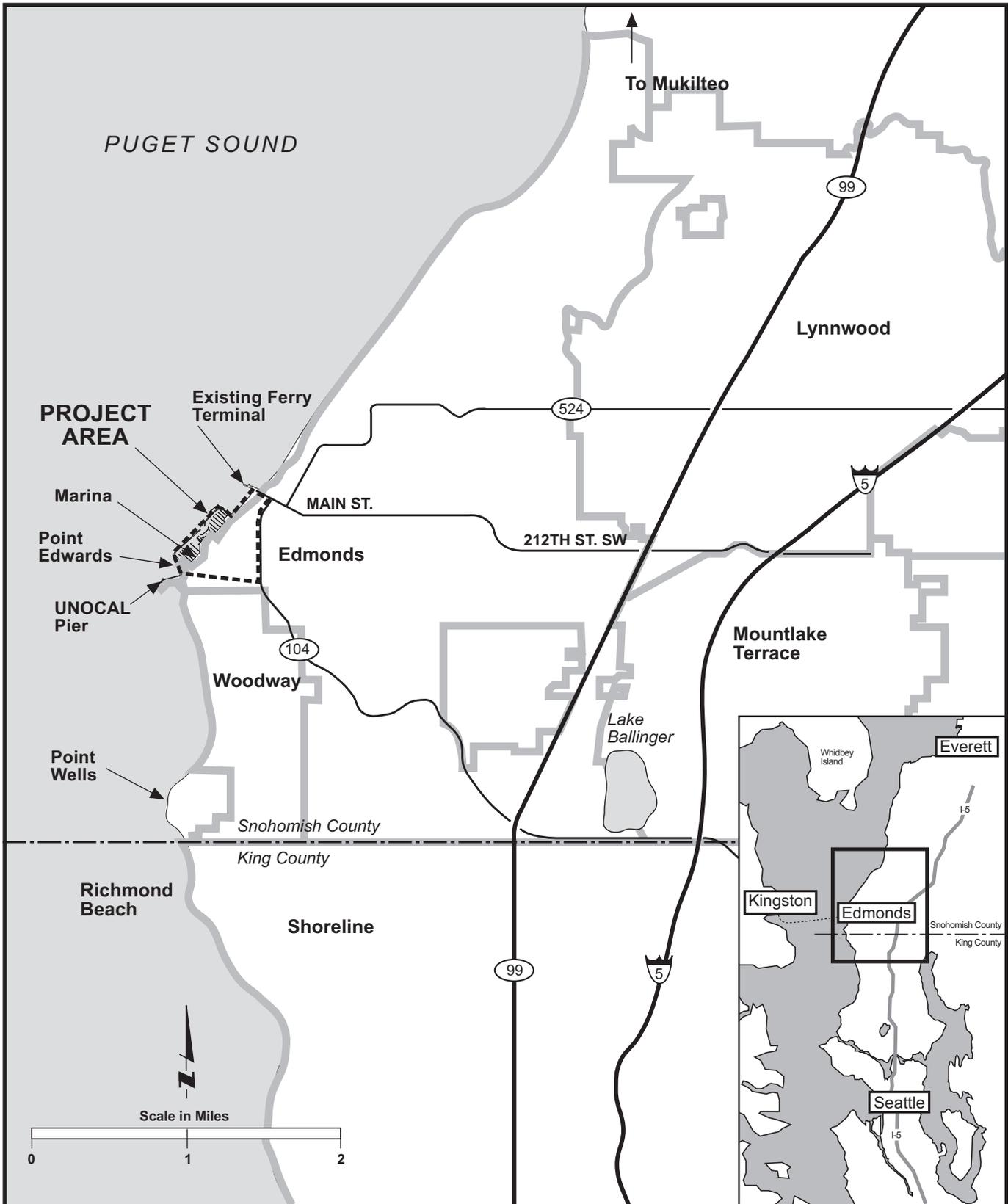
U.S. Department of Transportation. April 15, 1997. Order 5610.2, DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations. Federal Register, Vol. 62, No. 72, Tuesday, April 15, 1997, 18377-18381. Washington, D.C.

U.S. Department of Transportation, Federal Highway Administration. December 2, 1998. Order 6640.23, FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Federal Register.

SEA31009908199.doc/043010038

***Figures***

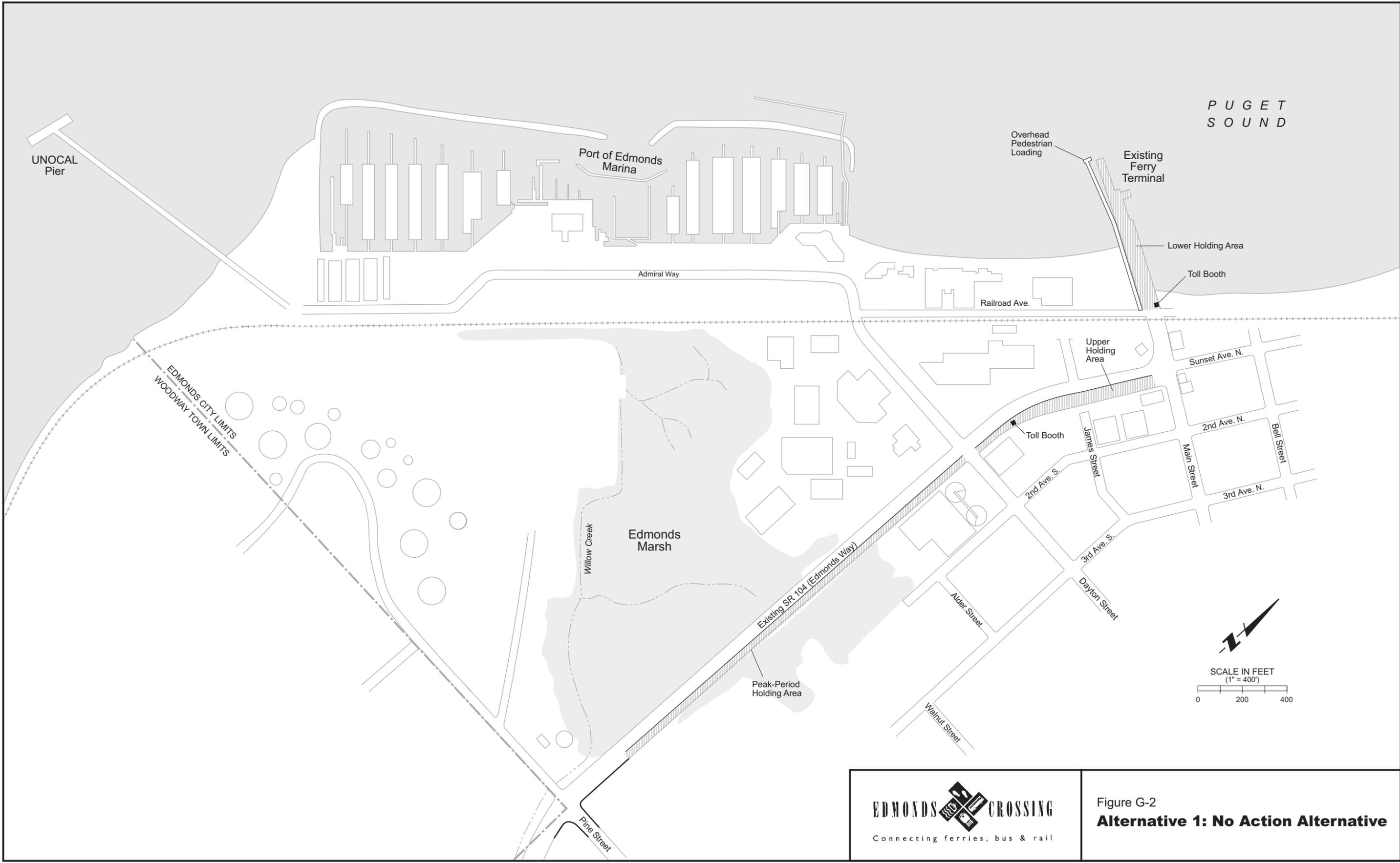
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154090.G1.02.A1\_T092004007SEA • G-1 Vicinity Map • 9/24/04 • dk/gm

**EDMONDS CROSSING**  
 Connecting ferries, bus & rail

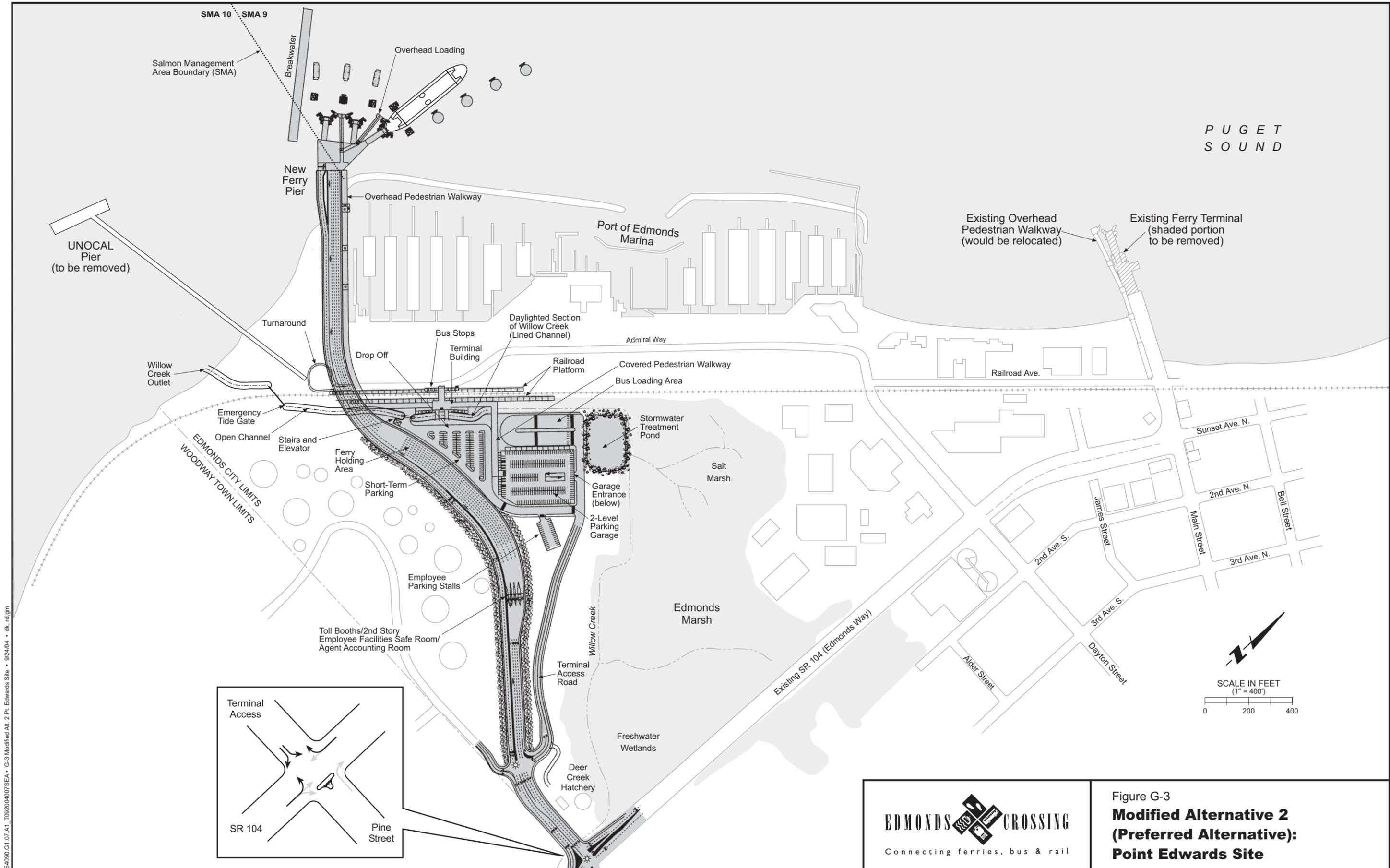
Figure G-1  
**Project Vicinity Map**



154090.G1.07.A1\_T009200407SEA • G-2 Alt. 1 No Action • 9/24/04 • dk.gm

**EDMONDS CROSSING**  
 Connecting ferries, bus & rail

Figure G-2  
**Alternative 1: No Action Alternative**

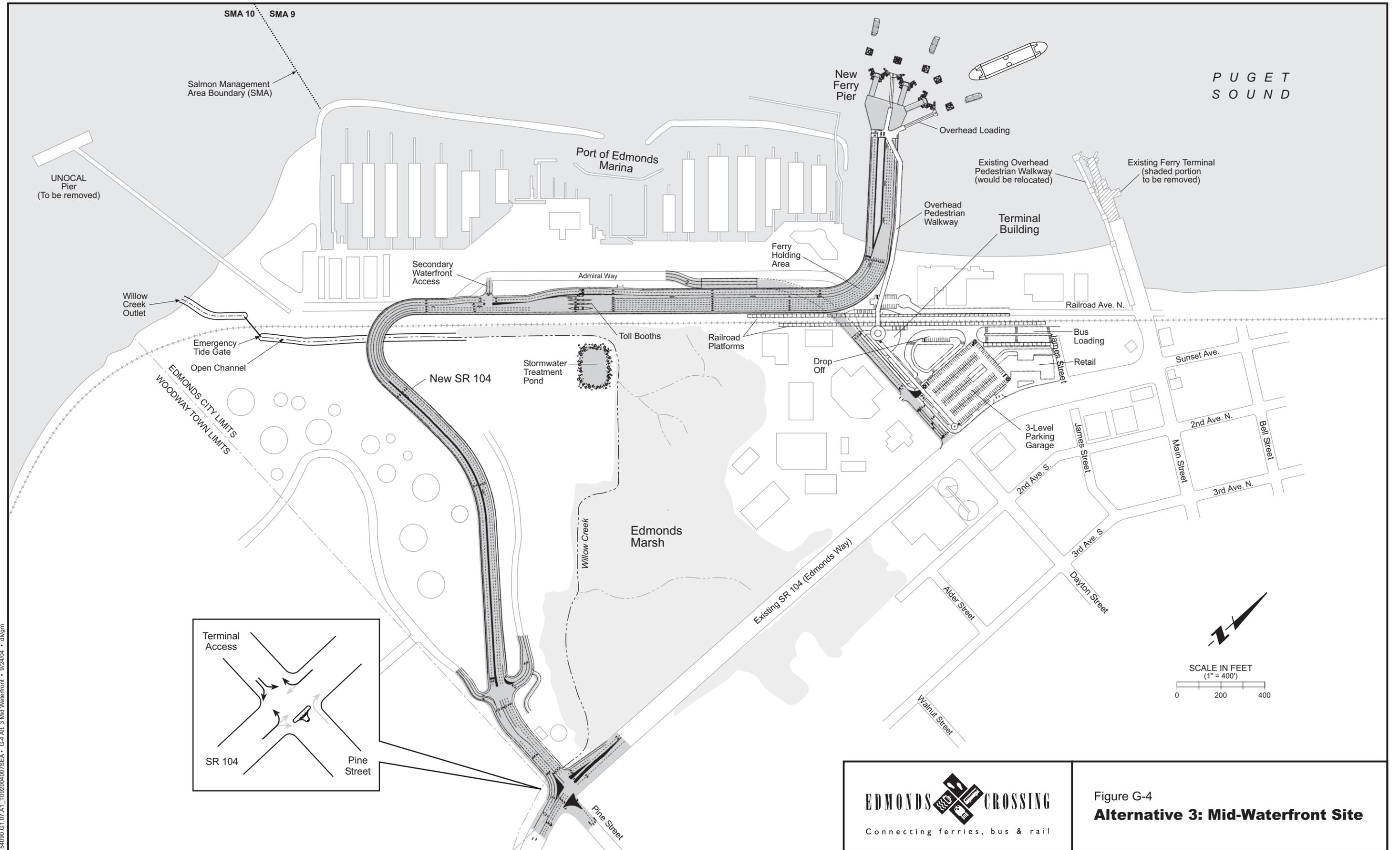


154090.G1.07.A1\_T0920407SEA - G-3 Modified Alt. 2 Pl. Edmonds Site - 9/24/04 - dk\_rdg.m

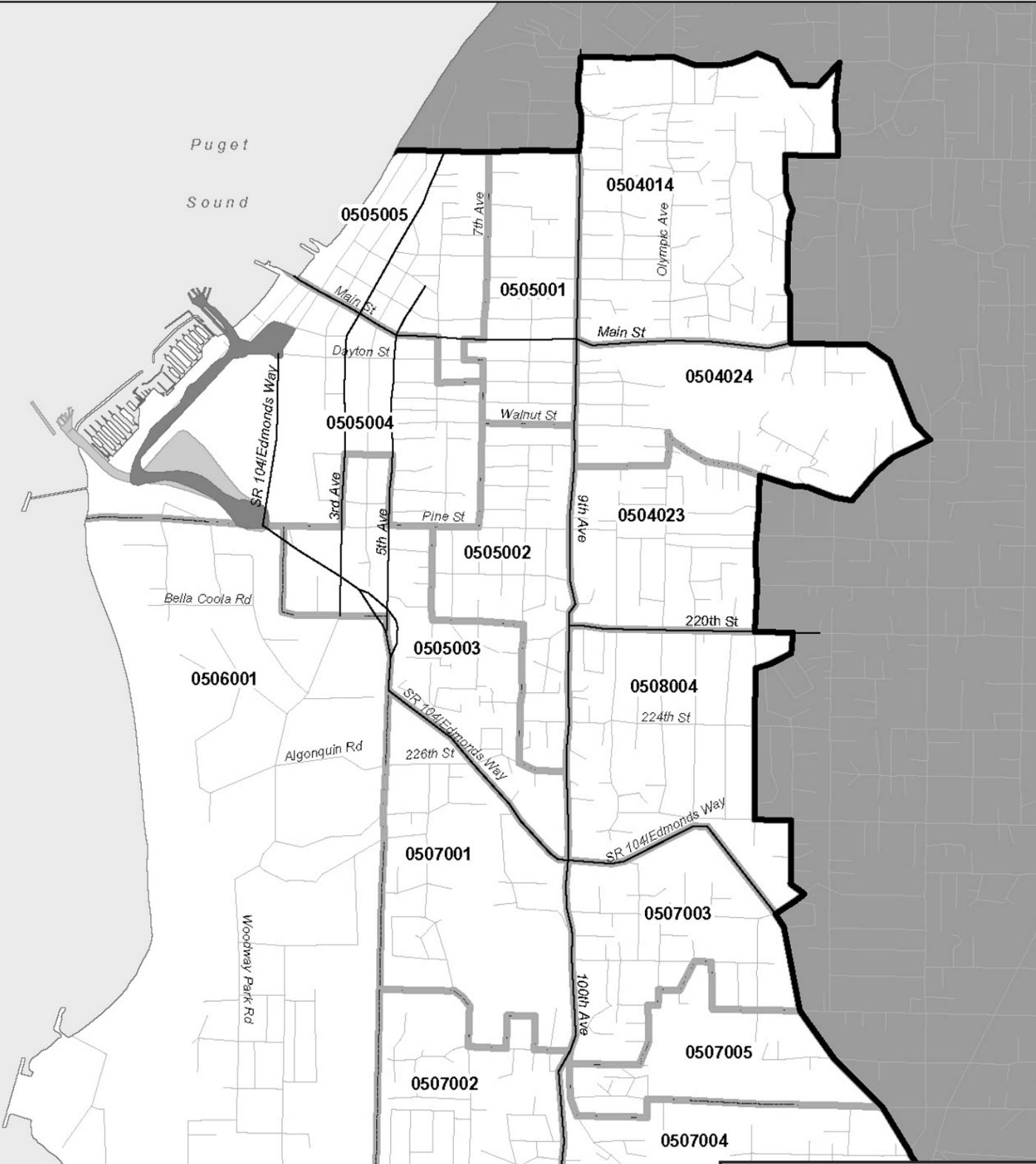
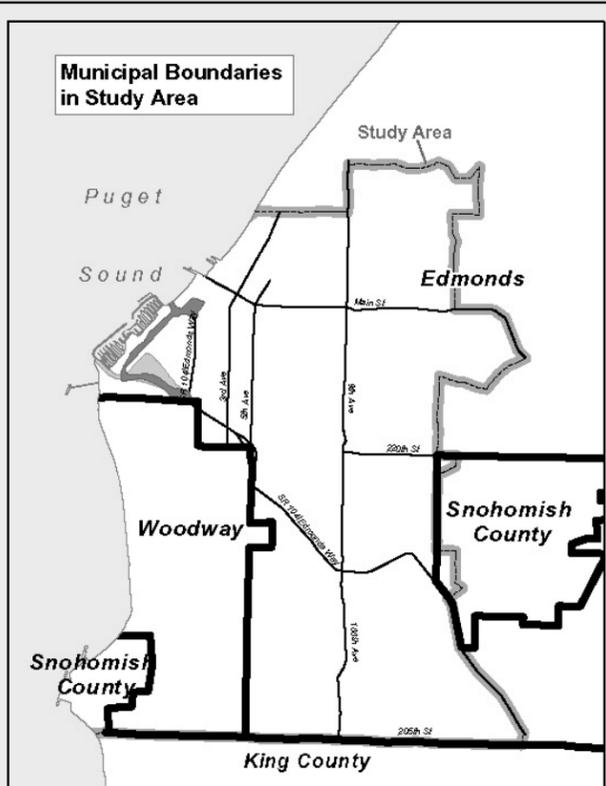
**EDMONDS CROSSING**

Connecting ferries, bus & rail

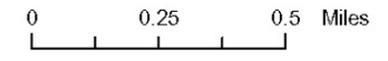
Figure G-3  
**Modified Alternative 2  
 (Preferred Alternative):  
 Point Edwards Site**



154090.G1.07.A1\_T092004007SEA - C-4 Alt. 3 Mid Waterfront - 9/24/04 - dk/gm



- Legend**
- Major Roads
  - Roads
  - Study Area
  - Block Groups - Study Area
  - Approximate Site Footprint - Alt. 3
  - Approximate Site Footprint - Alt. 2



Data Source:  
2000 Census, US Census Bureau

Block Group	Total population	Percent Low-Income	Percent Minority
0504014	1537	6.8	8.0
0504023	1110	2.1	6.6
0504024	981	3.7	10.8
0505001	739	1.5	6.2
0505002	975	0.0	6.4
0505003	1726	2.6	7.9
0505004	1553	8.7	7.3
0505005	1253	2.7	4.9
0506001	912	2.4	6.3
0507001	857	2.2	9.3
0507002	972	3.4	6.6
0507003	1453	4.5	13.3
0507004	1957	5.9	26.1
0507005	653	3.6	16.4
0508004	1497	0.0	12.9
<b>Total</b>	<b>18175</b>	<b>3.7</b>	<b>10.6</b>

Source: 2000 Census



Figure G-5  
**Environmental Justice Analysis Study Area**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
0506001	910	22	2.4
<b>TOTAL</b>	<b>2435</b>	<b>155</b>	<b>6.4</b>

Source: 2000 Census

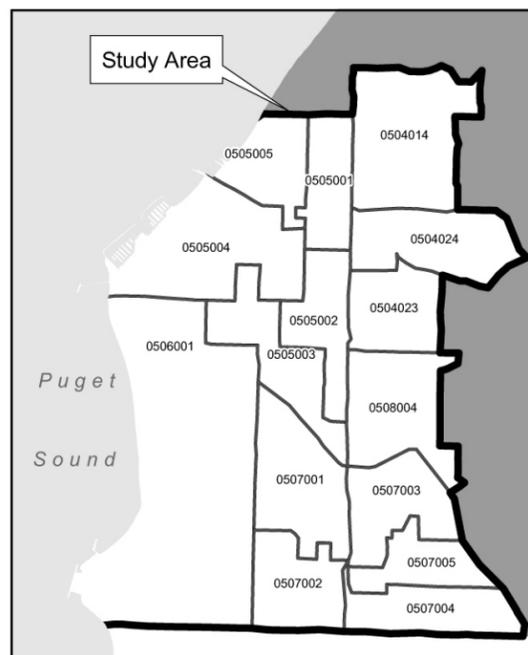
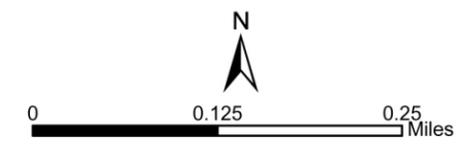
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004014	242	213	12.0
505004015	0	0	0.0
505004999	0	0	0.0
506001002	60	60	0.0
506001003	0	0	0.0
506001005	29	28	3.4
506001006	123	112	8.9
<b>Total</b>	<b>454</b>	<b>413</b>	<b>9.0</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



154090.G1.02.A1\_T072001006SEA - G-6 Air Quality - 7/8/03 - dk/gr/gm



Figure G-6  
**Air Quality Impacts from Construction with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
0506001	910	22	2.4
<b>TOTAL</b>	<b>2435</b>	<b>155</b>	<b>6.4</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004011	31	31	0.0
505004012	0	0	0.0
505004013	0	0	0.0
505004014	242	213	12.0
505004015	0	0	0.0
505004999	0	0	0.0
506001002	60	60	0.0
506001003	0	0	0.0
506001005	29	28	3.4
506001006	123	112	8.9
<b>Total</b>	<b>485</b>	<b>444</b>	<b>8.5</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

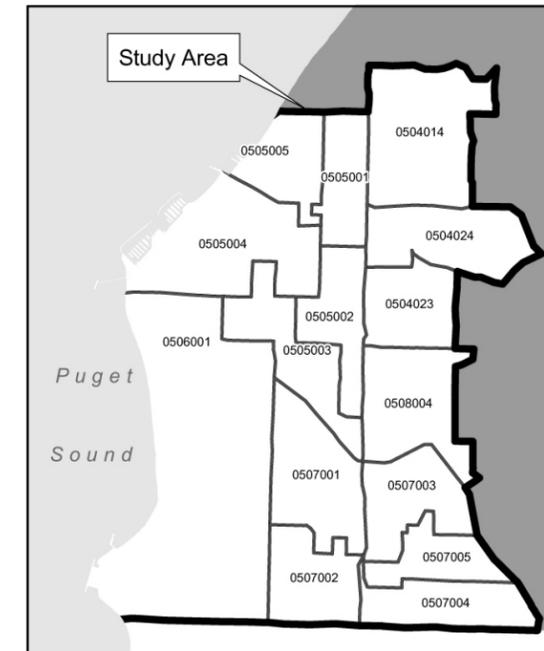


Figure G-7  
**Air Quality Impacts from Construction with Alternative 3: Mid-Waterfront Site**

154090.G1:02.A1\_T072001006SEA - G-7 Air Quality Alt 3 - 7/14/03 - dkj/gr/gm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
0506001	910	22	2.4
<b>TOTAL</b>	<b>2435</b>	<b>155</b>	<b>6.4</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0
505004014	242	213	12
505004015	0	0	0
505004999	0	0	0
506001002	60	60	0
506001003	0	0	0.0
<b>TOTAL</b>	<b>302</b>	<b>273</b>	<b>9.6</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Operation Impacts
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

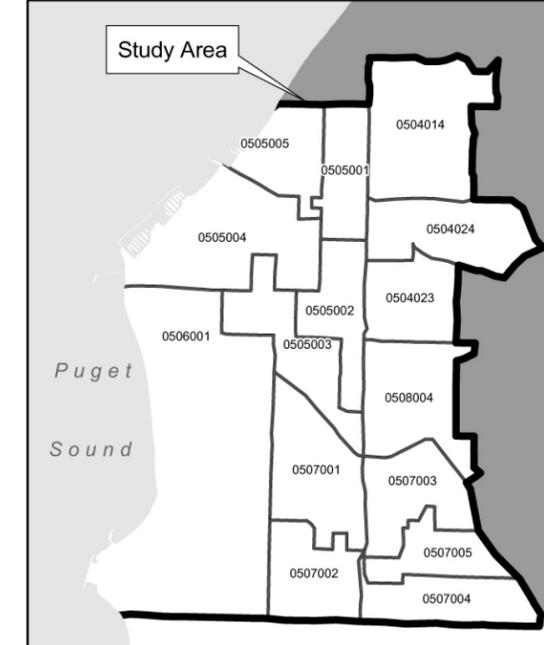
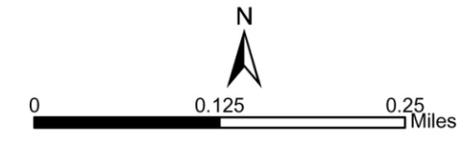


Figure G-8  
**Noise Impacts from Construction and Operation with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

154090.G1.02.A1\_T072001006SEA - G-8 Noise Impacts - 7/8/03 - dkj/grgm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
0506001	910	22	2.4
<b>TOTAL</b>	<b>2435</b>	<b>155</b>	<b>6.4</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004011	31	31	0
505004012	0	0	0
505004014	242	213	12
505004015	0	0	0
505004999	0	0	0
506001002	60	60	0
506001003	0	0	0.0
<b>TOTAL</b>	<b>333</b>	<b>304</b>	<b>8.7</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Operation Impacts
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

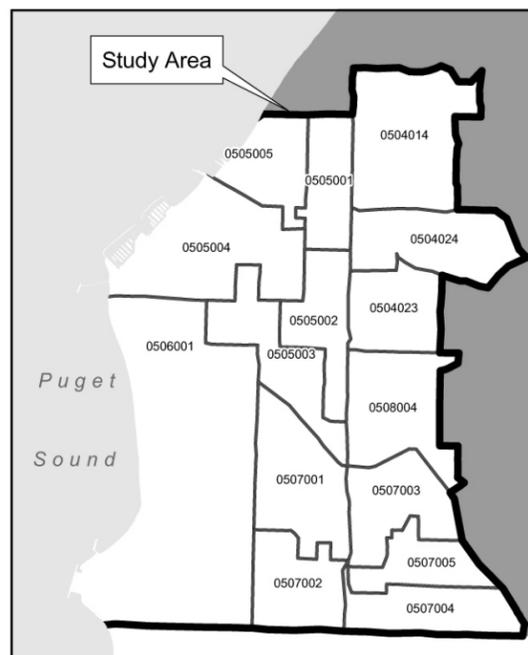


Figure G-9  
**Noise Impacts from Construction and Operation with Alternative 3: Mid-Waterfront Site**

154090.G1.02.A1\_T072001006SEA - G-9 Noise Impacts Alt 3 - 7/8/03 - dk/gr/igm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

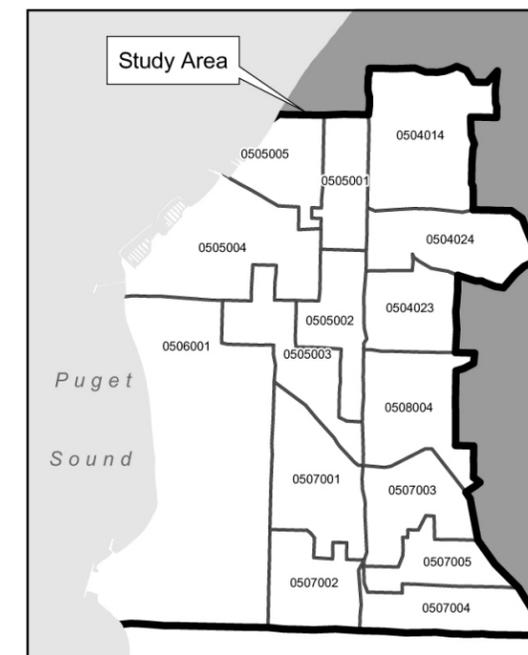
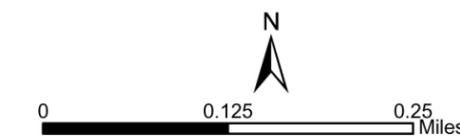
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004013	0	0	0.0
505004029	0	0	0.0
505004030	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



**EDMONDS CROSSING**  
Connecting ferries, bus & rail

Figure G-10  
**Geology and Soil Impacts from Construction with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

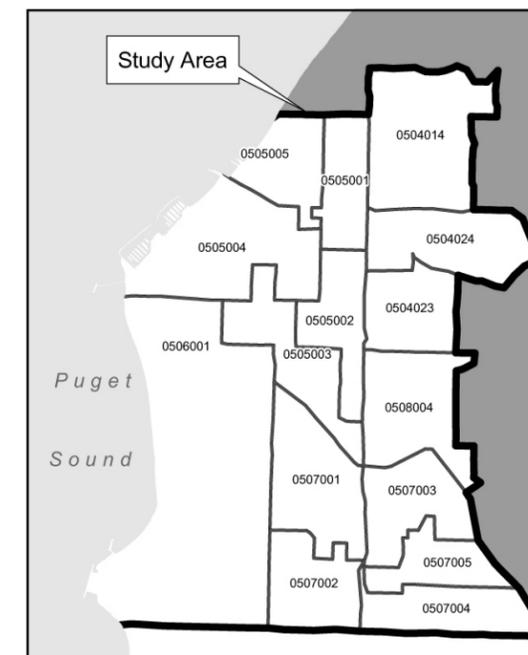
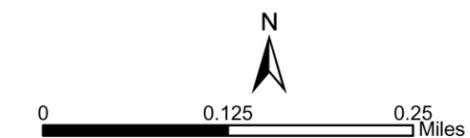
Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004013	0	0	0.0
505004029	0	0	0.0
505004030	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census



Figure G-11  
**Geology and Soil Impacts from Construction with Alternative 3: Mid-Waterfront Site**

154090.G1.02.A1\_T072001006SEA - G-11 Geology, Soil Impacts Alt 3 - 7/14/03 - dkj/rgm

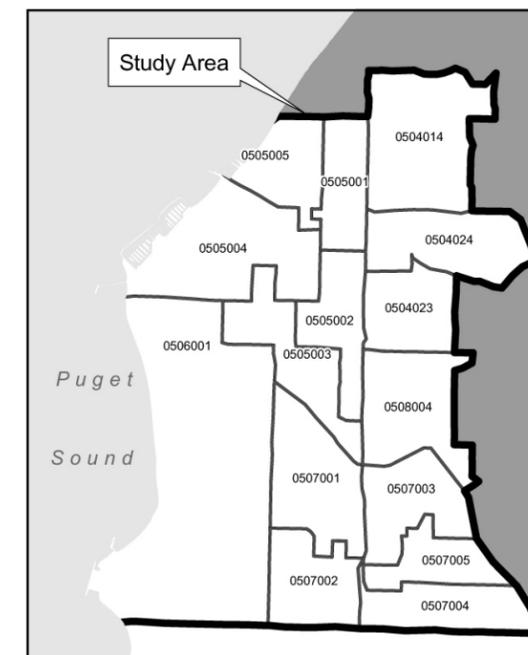
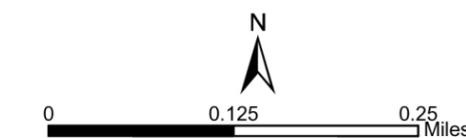
Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



Predicted Area of Propeller Scour

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

EDMONDS CROSSING  
Connecting ferries, bus & rail

Figure G-12  
**Water Quality Impacts from Operation (In-Water Impacts Only) with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

Predicted Area of Propeller Scour

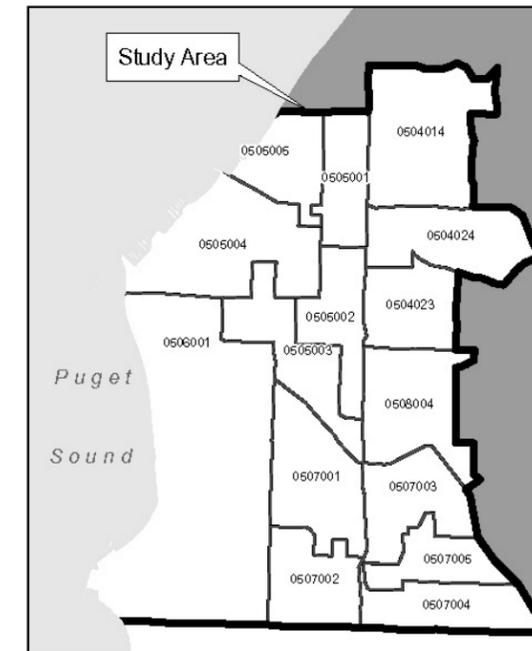
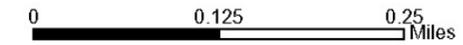
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



**EDMONDS CROSSING**  
Connecting ferries, bus & rail

Figure G-13  
**Water Quality Impacts from Operation (In-Water Impacts Only) with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004030	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

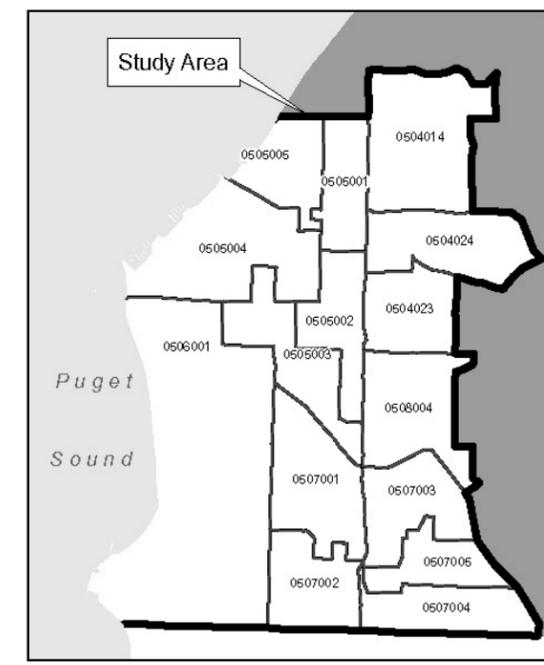
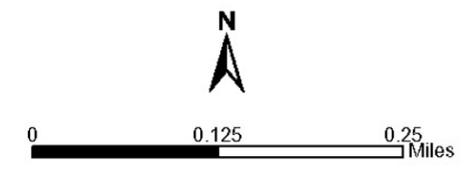


Figure G-14  
**Wetland Impacts from Construction and Operation with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

154090.G1.02.A1\_T072001006SEA - G-14 Wetland Impacts - 7/8/03 - dkj/rgm

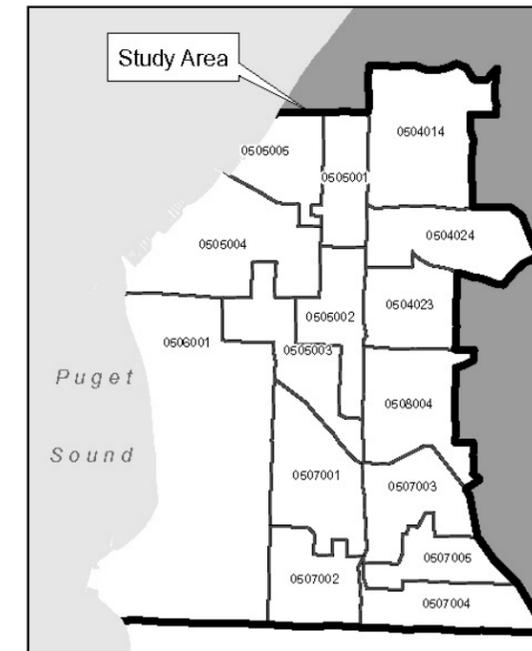
Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004030	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census



Figure G-15  
**Wetland Impacts from Construction and Operation with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

Salmon & Fisheries Habitat

Project Footprint  
Pile Driving Area

Unocal Pier Removal

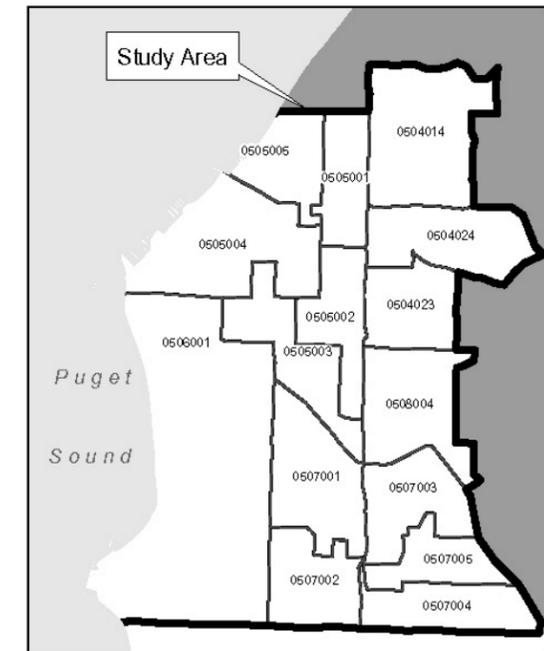
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



**EDMONDS CROSSING**  
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Figure G-16  
**Vegetation, Fish, and Wildlife Impacts from Construction (In-Water Impacts Only) with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

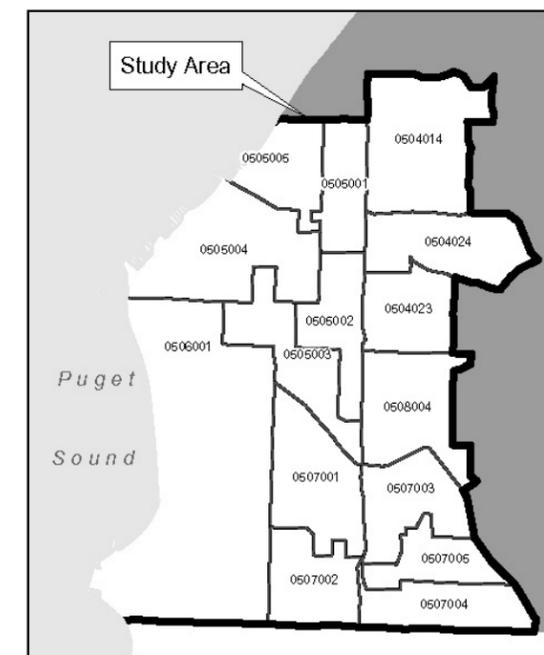
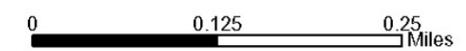


Figure G-17  
**Vegetation, Fish, and Wildlife Impacts from Construction (In-Water Impacts Only) with Alternative 3: Mid-Waterfront Site**

154090.G1.02.A1\_T072001006SEA - G-17 Vegetation, Fish, and Wildlife Impacts Alt 3 - 7/14/03 - dk/gr/gm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004009	0	0	0.0
505004011	31	31	0.0
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0.0</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

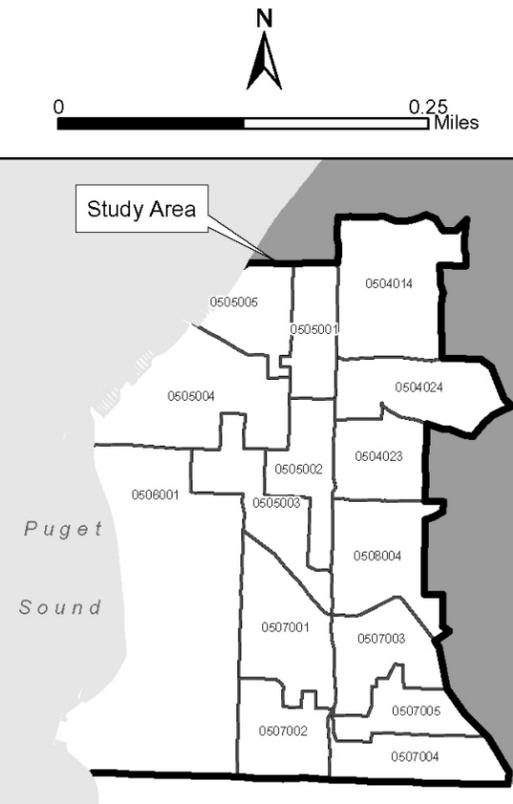


Figure G-18  
**Relocation Impacts from Operation with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004014	242	213	12.0
505004015	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	<b>242</b>	<b>213</b>	<b>12.0</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

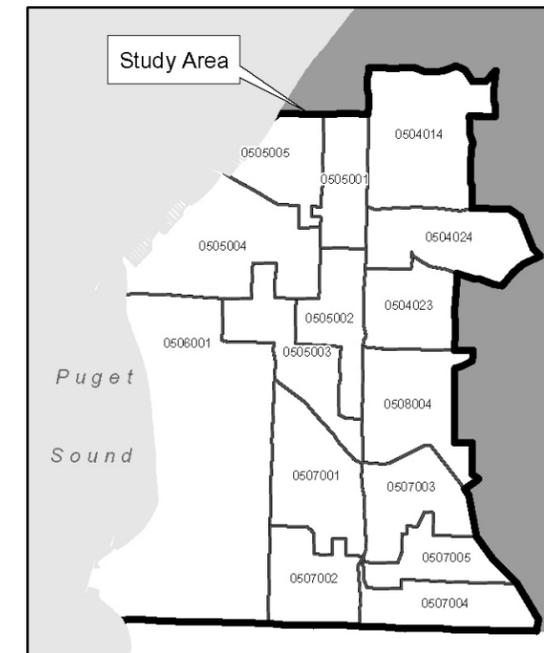


Figure G-19  
**Social Impacts from Construction and Operation with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**



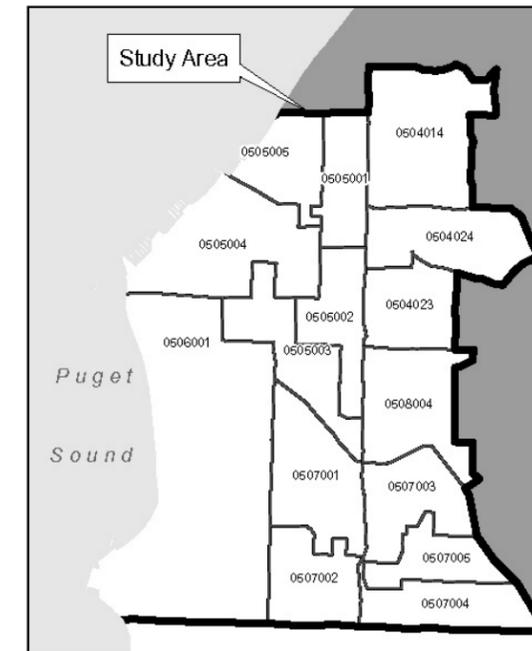
Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004009	0	0	0.0
505004011	31	31	0.0
<b>Total</b>	31	31	0.0

Source: 2000 Census



Figure G-21  
**Economic Impacts from Construction and Operation with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

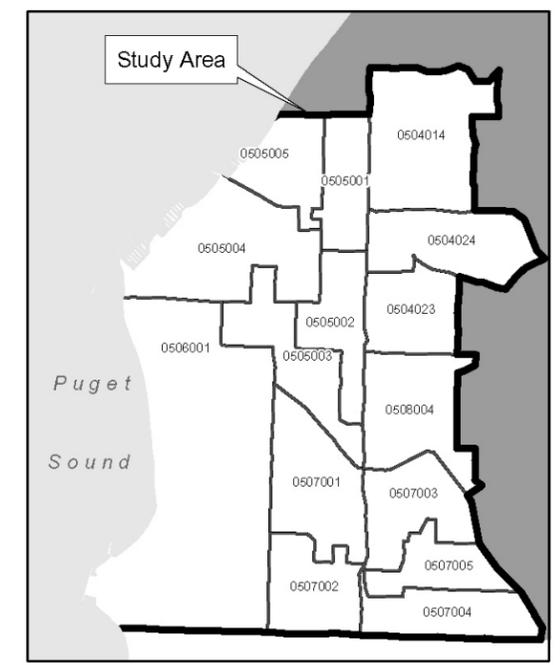
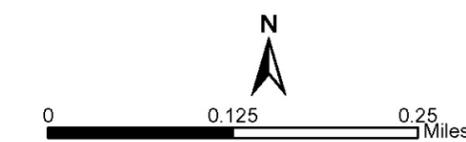
Source: 2000 Census



### Legend

- Block Groups - Study Area
- Blocks - Study Area
- Operation Impacts
- Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004999	0	0	0.0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0.0</b>

Source: 2000 Census

Connecting ferries, bus & rail

Figure G-22  
**Tribal Fishing Impacts from Operation (In-Water Impacts Only) with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

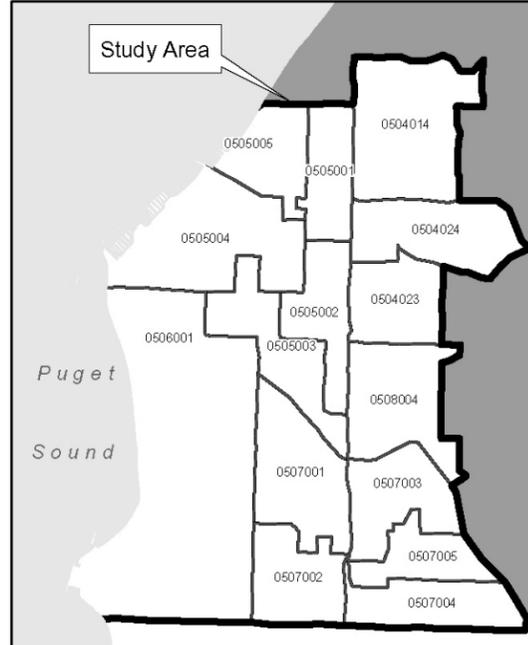
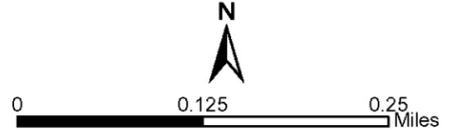
Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

Figure G-23  
**Hazardous Waste Impacts from Construction with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

154090.G1.02.A1\_T072001006SEA - G-23 Haz Waste Impacts - 7/10/03 - dkj/grgm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004007	9	9	0.0
505004011	31	31	0.0
505004012	0	0	0.0
505004013	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	<b>40</b>	<b>40</b>	<b>0.0</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

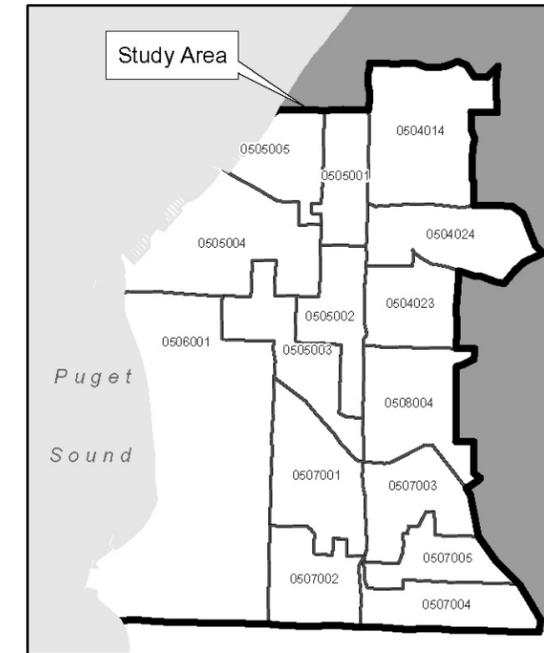


Figure G-24  
**Hazardous Waste Impacts from Construction with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	1525	133	8.7

Source: 2000 Census

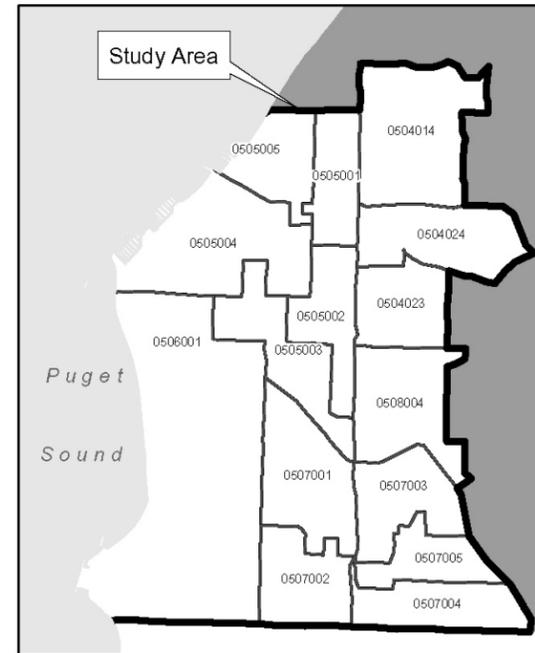
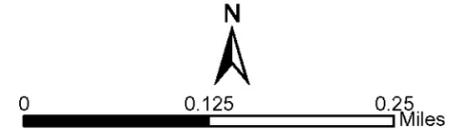
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	0	0	0.0

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



**EDMONDS CROSSING**  
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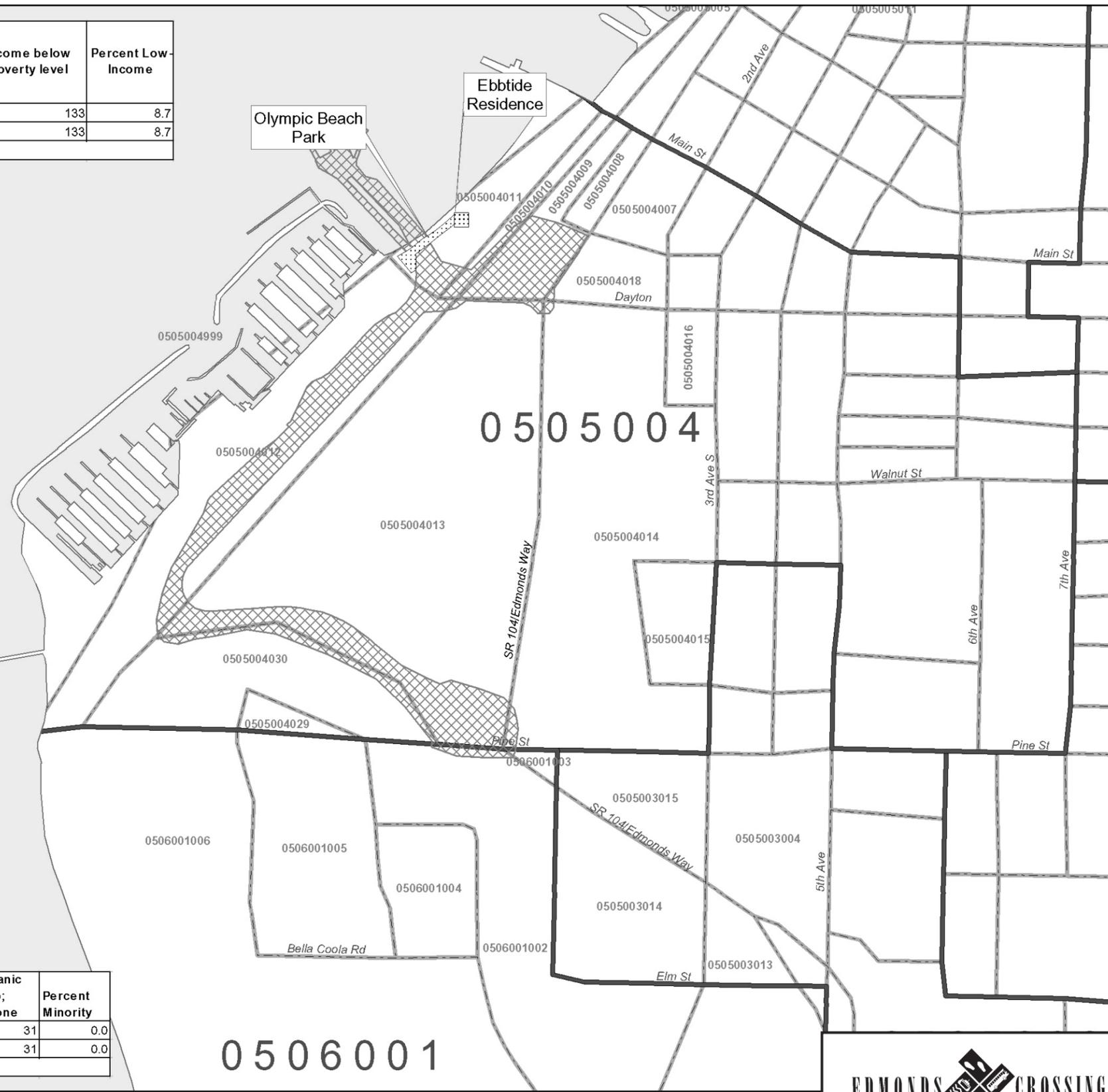
Figure G-25  
**Visual Quality Impacts from Operation with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004011	31	31	0.0
<b>Total</b>	<b>31</b>	<b>31</b>	<b>0.0</b>

Source: 2000 Census



### Legend

- Block Groups - Study Area
- Blocks - Study Area
- Operation Impacts
- Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

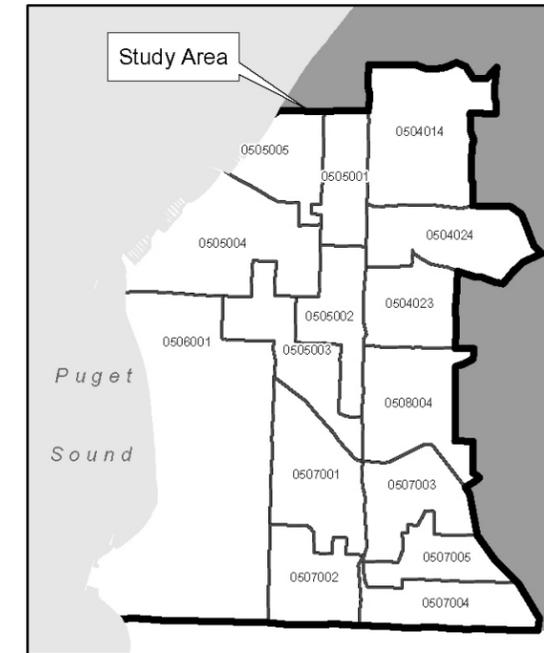


Figure G-26  
**Visual Quality Impacts from Operation with Alternative 3: Mid-Waterfront Site**

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004012	0	0	0.0
505004013	0	0	0.0
505004014	242	213	12.0
505004015	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	<b>242</b>	<b>213</b>	<b>12.0</b>

Source: 2000 Census

- ### Legend
-  Block Groups - Study Area
  -  Blocks - Study Area
  -  Construction Impacts
  -  Construction & Operation Impacts
  -  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.

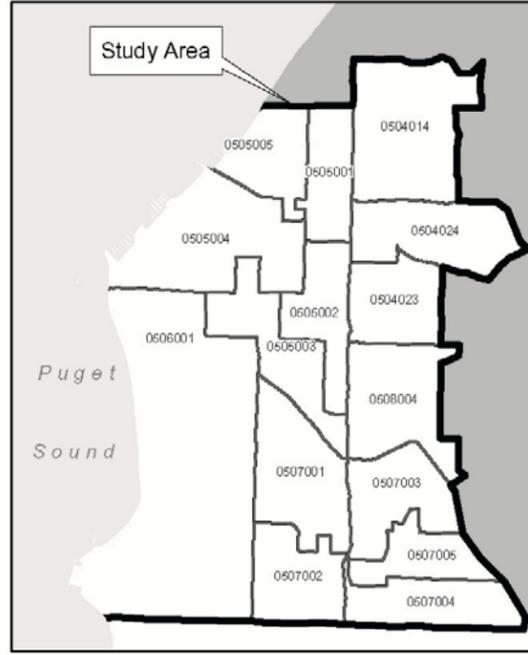
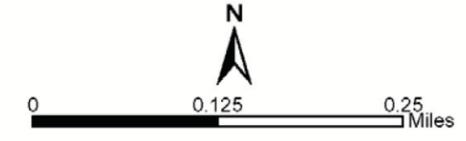


Figure G-27  
**Section 4(f) Impacts from Construction and Operation with Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

154090.G1.07.A1\_T072001006SEA - C-27 Section 4(f) Impacts - 9/24/04 - dkj/grgm

Block Group	Population for whom poverty status is determined	Income below poverty level	Percent Low-Income
0505004	1525	133	8.7
<b>TOTAL</b>	<b>1525</b>	<b>133</b>	<b>8.7</b>

Source: 2000 Census

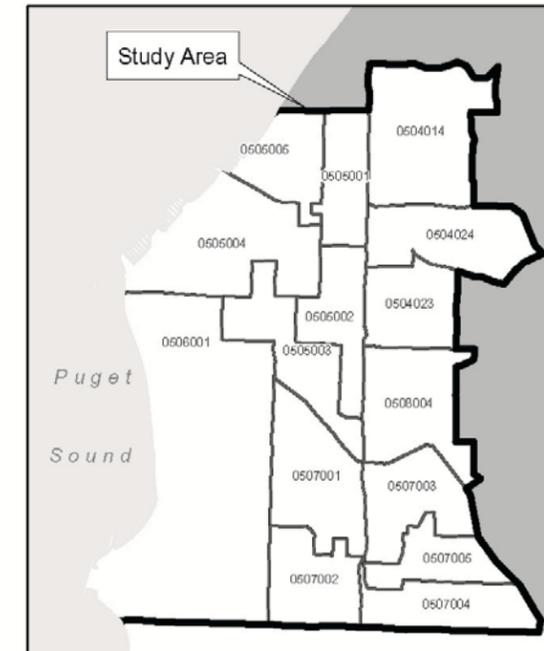
BLOCK	Total population	Not Hispanic or Latino; White alone	Percent Minority
505004011	31	31	0.0
505004012	0	0	0.0
505004013	0	0	0.0
505004014	242	213	12.0
505004015	0	0	0.0
505004999	0	0	0.0
<b>Total</b>	<b>273</b>	<b>244</b>	<b>10.6</b>

Source: 2000 Census

### Legend

-  Block Groups - Study Area
-  Blocks - Study Area
-  Construction Impacts
-  Construction & Operation Impacts
-  Approximate Site Footprint

\*Note: Street grid is based off Census TIGER files. Therefore, street locations may appear distorted.



**EDMONDS CROSSING**  
  
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Figure G-28  
**Section 4(f) Impacts from Construction and Operation with Alternative 3: Mid-Waterfront Site**

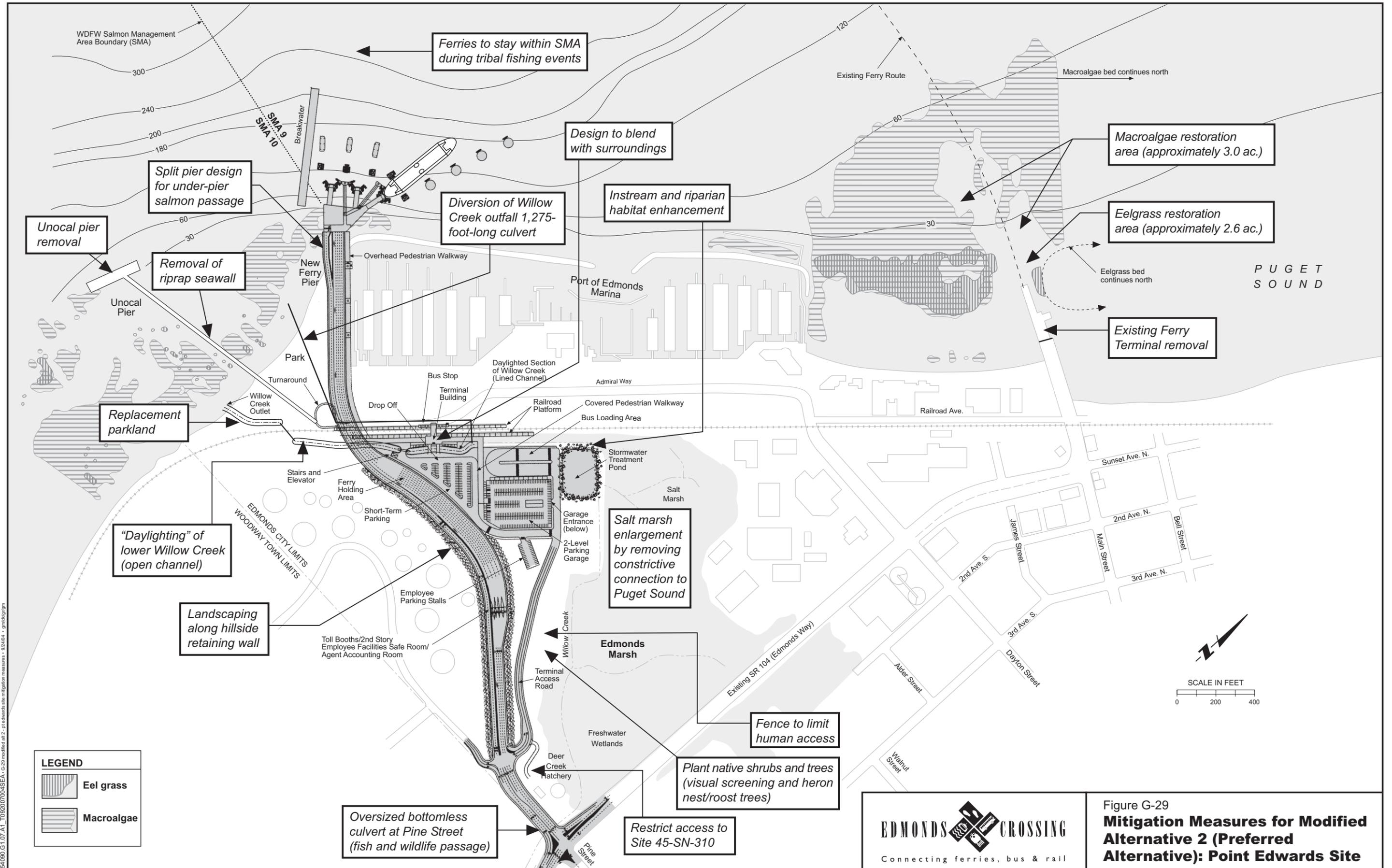
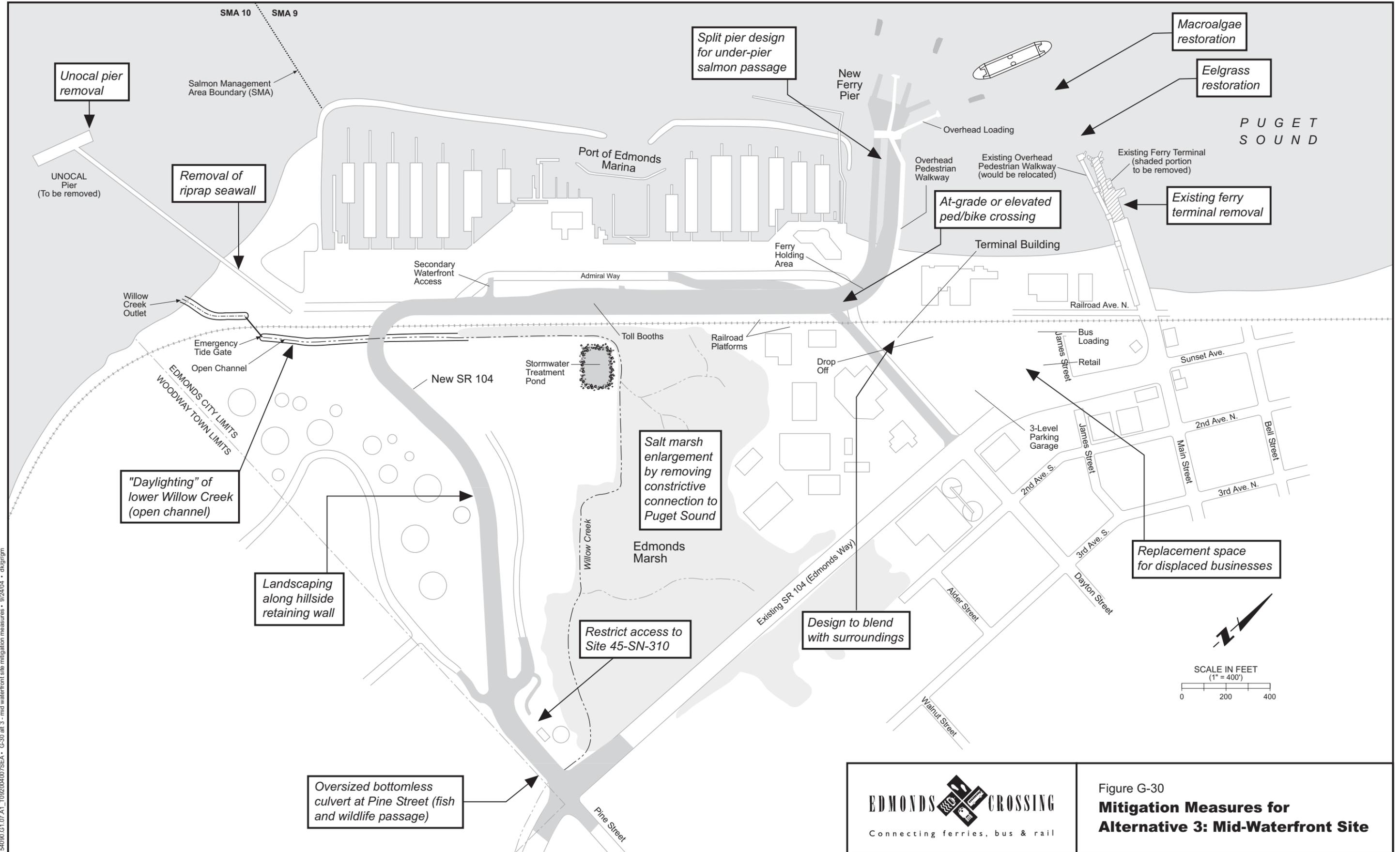


Figure G-29  
**Mitigation Measures for Modified Alternative 2 (Preferred Alternative): Point Edwards Site**

154090.G1.07.A1\_T092070045EA-G-29 modified at 2 - pt.edmonds site mitigation measures - 9/24/14 - gmk/gjg/m



154090.G1.07.A1\_T092004007SEA - C-30 alt 3 - mid waterfront site mitigation measures - 9/24/04 - dkg/rgm

SCALE IN FEET  
(1" = 400')

0 200 400

**EDMONDS CROSSING**

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Figure G-30  
**Mitigation Measures for Alternative 3: Mid-Waterfront Site**

***Attachment G-1  
Environmental Justice Outreach  
to Business Owners***

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## Introduction

During the late Final Environmental Impact Statement (EIS) phase of this project, some additional public outreach was conducted to supplement the Census data used in the environmental justice review of business displacement impacts. This report details the results of this outreach.

## Methodology

As described in the Final EIS, Alternative 2 would not displace any businesses. However, the Final EIS reports that Alternative 3 would displace a total of 24 businesses. This impact and proposed mitigation is discussed in detail in Chapter 4 of this Final EIS. The locations of the two commercial buildings housing these businesses are indicated on Figures G-18 and G-21 of Appendix G, of which this Attachment G-1 is a part. To supplement the results obtained from the Census data analysis performed for the environmental justice review, telephone and in-person interviews were conducted with the owners of these businesses. The business owners were informed about the project and the environmental justice analysis, and were asked a standard set of questions to determine their race, and the race and income of their employees. Questions were also asked to determine the distance employees traveled to arrive at work. These interviews were conducted in April 2003. At that time the total number of businesses occupying the two commercial buildings that would be displaced had dropped to 19. All 19 businesses were contacted.

The following questions were posed to the business owners either in-person or over the telephone:

1. Is the owner of this business minority (i.e., any other race than white)?
2. If so, how far does he/she live from the business?
3. How many employees currently work at this business?
4. How many of the employees are considered to be minorities?
5. How far do the minority employees live from where they work?
6. How many of the employees are considered to be low-income?
7. How far do the low-income employees live from where they work?

## Results

The following tables summarize the findings of the business owner interviews by building and name of business.

SEA31009908199.doc/043010038

<b>Building - Sunset Square Shopping Center</b>	
<b>Business Name</b>	<b>Contact Results</b>
Goodies Mini-Mart	Spoke with employee, Choi (minority), owner is Xong GiLim (minority). According to the employee, this business owner does not live in Edmonds. Attempted unsuccessfully to contact owner.
Thai Park Restaurant	Attempted unsuccessfully to contact owner, Christian Hour (minority). From previous contact during the Final EIS phase, this person was assumed to be minority.
Edmonds Maytag Laundry	Spoke with owner, David Kenyon (non-minority). No other employees at this business.
Waterfront Antique Mall	Spoke with owner, Valerie Weber (non-minority). One part-time employee described to be low-income. This employee lives about 2 miles away and takes the bus to work. No employees are minorities.
Ursa Foundation	Spoke with secretary, Linda Mazzuca (non-minority), doctor is Loren Rex (non-minority). No employees are minorities or low-income.
Waterfront Physical Therapy	Attempted unsuccessfully to contact owner, Bill Reynolds.
Scrub-A-Pub	Spoke with the owner, Carla Molzahn (non-minority). One employee is a minority, and lives 5 minutes away.
Mike the Mover	Spoke with owner, (non-minority). No employees are minorities or low-income.
Heritage Panel Graphics	Spoke with owner, (non-minority). No employees are minorities or low-income.

<b>Building – Edmonds Bay Building</b>	
<b>Business Name</b>	<b>Contact Results</b>
Mariculture Systems	Spoke with owner, Dave Meilahn (non-minority). No employees are minorities or low-income.
Content Works LLC	Attempted unsuccessfully to contact owner.
Wiggins, Inc.	Contacted owner, Rick Wiggins, chose not to participate in survey.
Camp Brotherhood	Attempted unsuccessfully to contact owner, Randy Stiem.
Groeschell and Associates	Attempted unsuccessfully to contact owners, Marty Groeschell and Michelle Wood.
Tom P. Conom	Attempted unsuccessfully to contact owner.
Bitco Software, Inc.	Spoke with owner, Corey Jurgenson (non-minority). No employees are minorities or low-income.
Insight International	Spoke with owner, Carrie Wilson (non-minority). No employees are minorities or low-income.
MacFarlane Lumber Co.	Spoke with owner, Alan MacFarlane (non-minority) retiring 5-30-2003. No employees are minorities or low-income.
Ocean Garden Products	Spoke with employee (secretary), Janneth Machellari (minority). This employee lives about 6 miles away. No other employees were minorities or low-income. Unable to contact owner to determine if minority.

SEA31009908199.doc/043010038