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# Discipline Report *Environmental Justice*

Prepared by:

Shapiro and Associates, Inc.

February 2005 (Revised December 2006)



Seattle Department of Transportation  
Agreement No. T01-34

Environmental Assessment  
**Magnolia Bridge Replacement**  
City of Seattle

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## Regulatory Framework

### *Executive Order 12898*

Executive Order 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994) requires federal agencies to take appropriate steps to identify and address disproportionately high and adverse effects of federal activities on the health or environment of minority and low-income populations. The intent of this Executive Order is to promote nondiscrimination in federal programs that may substantially affect human health and the environment, and to provide minority and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment. The Executive Order calls for protections to be implemented to the greatest extent practicable and permitted by law.

A low-income individual is a person whose median household income is at or below the Department of Health and Human Services poverty guidelines for that size household. Low-income populations include any readily identifiable group of low-income individuals who live in geographic proximity to each other and geographically dispersed/transient individuals (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, Federal Highway Administration (FHWA) policy, or activity.

A minority individual is a person who is Black, American Indian/Alaska Native, Asian (including Native Hawaiian/Other Pacific Islander), or Hispanic. A minority population is any readily identifiable group of minority individuals who live in geographic proximity to each other and geographically disperse/transient individuals (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, FHWA policy, or activity.

The President's Council on Environmental Quality (CEQ 1997) and several federal agencies, including the U.S. Department of Transportation (DOT Order 5610.2, 1997) and the Federal Highway Administration (FHWA Order 664.23, 1998) have issued guidance on how to implement Executive Order 12898 and conduct an environmental justice analysis. These orders establish that it is federal policy to avoid, to the extent practicable, disproportionately high and adverse human health or environmental impacts on minority and low-income communities.

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

Executive Order 12898 is supported by Title VI of the Civil Rights Act of 1964, which requires the federal government to consider the impact of its actions on minority populations. Title VI states that:

*"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance" (42 U.S.C. 2000d.)*

## ***Executive Order 13166***

Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency (LEP)* (August 11, 2000), addresses the need to improve access to federally conducted and federally assisted activities for people who are limited in their English proficiency. To assist federal agencies with this, the Department of Justice issued a general guidance document (LEP Guidance), which sets forth the compliance standards that recipients of federal financial assistance must follow to ensure that the programs and activities provided in English are also accessible to LEP individuals and thus do not discriminate on the basis of national origin in violation of Title VI of the Civil Rights Act of 1964, as amended. Executive Order 13166 requires all federal agencies to prepare a plan to improve access to its federally conducted programs and activities by eligible LEP individuals. Executive Order 13166 also requires each agency providing federal financial assistance to draft Title VI guidance specifically tailored to its recipients that is consistent with the LEP Guidance issued by the Department of Justice.

## **Analysis Approach**

Consistent with the FHWA and Washington State Department of Transportation (WSDOT) guidance, this environmental justice analysis uses a two-pronged approach in considering disproportionately high and adverse impacts on minority and low-income populations.

Strategies for public outreach have been created to identify and develop dialogue with minority and low-income individuals and communities in the Magnolia Bridge Replacement Project study area. In addition, methods for providing translation and interpretation services for potentially affected LEP populations have been established. A public involvement process has been in place for the Magnolia Bridge Replacement Project throughout the alternative screening process and Environmental Impact Statement (EIS) scoping. This process and additional strategies for involving minority, low-income, and limited English proficiency populations have been documented in a Public Interaction/Involvement Plan (PIP), which is included in the Final Study Plan for the project. A summary of the PIP is presented in the Enhanced Public Involvement section of this discipline report.

To determine whether environmental justice populations would potentially be affected, a demographic profile of the study area was prepared using data from the U.S. Census Bureau (2000a, 2000b, 2000c, 2000d). Other more recent data, including local school district student composition information, were gathered to augment this study area profile. Research conducted with potentially affected businesses provided general demographics of potentially displaced workers. Census information was also compiled to identify the proportion of populations with limited English proficiency in the study area to determine the likelihood of translation and interpretation needs for the project. All of this information was evaluated relative to the alternatives and their potential impacts to determine the magnitude or intensity of impact and to determine if high and adverse impacts would fall disproportionately on minority or low-income populations.

# ***Studies and Coordination***

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This Environmental Justice discipline report has been prepared consistent with the guidelines contained in Section 458 of the WSDOT Environmental Procedures Manual. Demographic and business relocation information collected for the Social, Economic, and Relocation discipline report (see Section 457 of the Environmental Procedures Manual) has been used to help evaluate potential disproportional impacts on minority, low-income, and limited English proficiency populations.

## **Studies and Data Sources**

Documents and studies reviewed include:

- Assortment of Lifestyles Lends Charm to Area, Mark Higgins, 1997.
- Ballard Interbay Northend Manufacturing and Industrial Center Plan, 1998.
- Basic Industries Cluster Analysis Study, City of Seattle, written by Berk & Associates for the Office of Economic Development, January 2004.
- City of Seattle Comprehensive Plan, 1994-2014.
- Commons/South Lake Union Development Fiscal Impact Analysis, Final Report, Gibson Economics Inc., November 1994.
- Economic Forecaster, Dick Conway and Doug Pedersen, 2003.
- Final Environmental Impact Statement for Central Link Light Rail Transit Project, Central Puget Sound Regional Transit Authority, November 1999.
- King County Economic Profile, Labor Market and Economic Analysis (LMEA) Branch of the Washington State Employment Security Department, March 2001.
- Looking at Neighborhoods – Observations from Successful Neighborhoods in Seattle, Robert Foxworthy, 1997.
- Magnolia Bridge Replacement Project Social, Economic, and Relocation Discipline Report.
- Park is a Slice of Wilderness Inside the City, Mark Higgins, 1997.
- Port of Seattle Harbor Development Strategy 21, 2001.
- Potential Economic and Fiscal Impacts of South Lake Union Development, Draft Report, Paul Sommers, Ph.D., December 2003.
- Preliminary Economic Impact of the Southern Tier Expressway: Western Portion, Southern Tier West Regional Planning and Development Board, Economic Development Research Group, Inc., and Cambridge Systematics, Inc., 2003.
- Puget Sound Milestones: Central Puget Sound Regional Economic Profile, Puget Sound Regional Council, March 2003.
- Queen Anne Plan – The Neighborhood Plan for the Community of Queen Anne, Queen Anne Neighborhood Planning Committee, 1998.

- Seattle's Original North District: Queen Anne, Roberta Cruger, 2002.
- Seattle Parks and Recreation Plan, 2000.
- South Lake Union Development Investments and Revenues Report, Draft Report, City of Seattle Office of Policy and Management, December 2003.

Data sources used include:

- U.S. Census, 2000.
- PSRC Report Tables Compiling U.S. Census 2000 Summary File 3 data for Washington State.
- PSRC Small Area Forecasts of Population and Housing for the Central Puget Sound Region.
- Washington State Office of Financial Management (OFM) 2003 Population Estimates for Washington State.
- 2002 ES-202 employment data from the Puget Sound Regional Council.
- Interviews of affected business owners, county, and city government officials.
- Real estate property tax from the King County Finance and Business Operations Division.
- Regional Economic and Demographic Data Base, Modeling, and Forecasting: Data Base for Puget Sound Region Specification of STEP02 Long-Range Forecasts for Puget Sound Region, Puget Sound Regional Council, 2002.
- Personal property tax (King County Assessors Office and ECONorthwest interviews).
- Sales tax (City of Seattle and ECONorthwest interviews).
- B&O tax (City of Seattle and ECONorthwest interviews).
- Workboat.com
- References USA Business Directory Database from the Library Division of InfoUSA.
- Dun & Bradstreet.
- InfoUSA firm data.

Businesses that were interviewed include:

- Trident Seafoods
- City Ice
- Independent Packers
- Anthony's Seafood Distributing
- Snider Petroleum
- Tsubota Family/Opus.

## Major Assumptions

Because the project alternatives would not create additional traffic capacity, this analysis assumes that the alternatives would not induce population or housing growth in the study area and would not increase demand for public services. The study area is expected to grow at less than 1 percent per year as allowed by current City of Seattle land use plans and zoning (Puget Sound Regional Council 2003c). The same amount of growth would occur under the No Build Alternative and the build alternatives.

This analysis assumes that the Port of Seattle North Bay property would be developed consistent with current industrial zoning for the site, which would allow industrial and commercial development but not residential development.





## **Purpose**

The purpose of this project is to replace the existing Magnolia Bridge structure, approaches, and related arterial connections with facilities that maintain convenient and reliable vehicular and non-motorized access between the Magnolia community and the rest of the City of Seattle. The bridge provides an important link to the Magnolia community in Seattle (see Figure 1 and Figure 2). Because the existing bridge provides the only public vehicular access to the land between North Bay, also referred to as Terminal 91, Smith Cove Park, Elliott Bay Marina, and U.S. Navy property, the project purpose also includes maintenance of access to these areas.

## **Need**

### ***Structural Deficiencies***

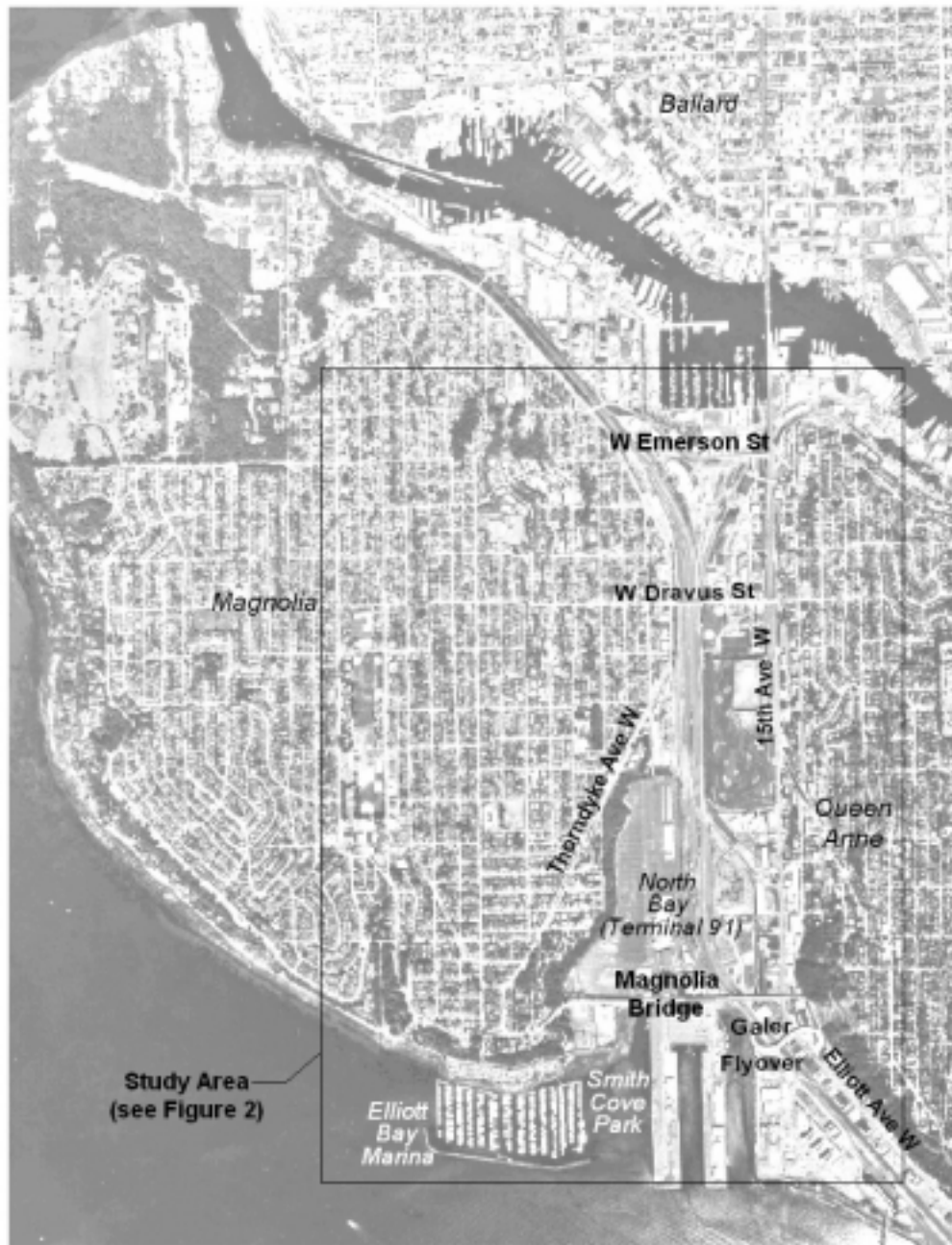
The City of Seattle has identified the Magnolia Bridge as an important bridge that should remain standing following a “design” seismic event (an earthquake with a peak ground acceleration of 0.3g that is anticipated to happen every 475 years and may measure 7.5 on the Richter scale). Even with the repairs completed following the February 2001 earthquake, the existing bridge is susceptible to severe damage and collapse from an earthquake that is less severe than the “design” seismic event.

The original bridge was constructed in 1929 and has been modified, strengthened, and repaired several times. The west end of the bridge was damaged by a landslide in 1997, requiring repair and replacement of bridge columns and bracing, the construction of six additional supports, and a retaining wall north of the bridge to stabilize the bluff from further landslides. Repairs after the 2001 earthquake included replacement of column bracing at 27 of the 81 bridge supports. A partial seismic retrofit of the single-span bridge structure over 15th Avenue West was completed in 2001. The other spans were not upgraded.

Inspections of the bridge conclude that the concrete structure is showing signs of deterioration. The concrete is cracking and spalling at many locations, apparently related to corrosion of the reinforcing steel. The bridge requires constant maintenance in order to maintain its load capacity, but there does not appear to be any immediate load capacity problem. The existing foundations have insufficient capacity to handle the lateral load and uplift forces that would be generated by a “design” seismic event. The existing foundations do not extend below the soils that could liquefy during a “design” seismic event. If the soils were to liquefy, the foundations would lose their vertical-load-carrying ability and the structure would collapse.

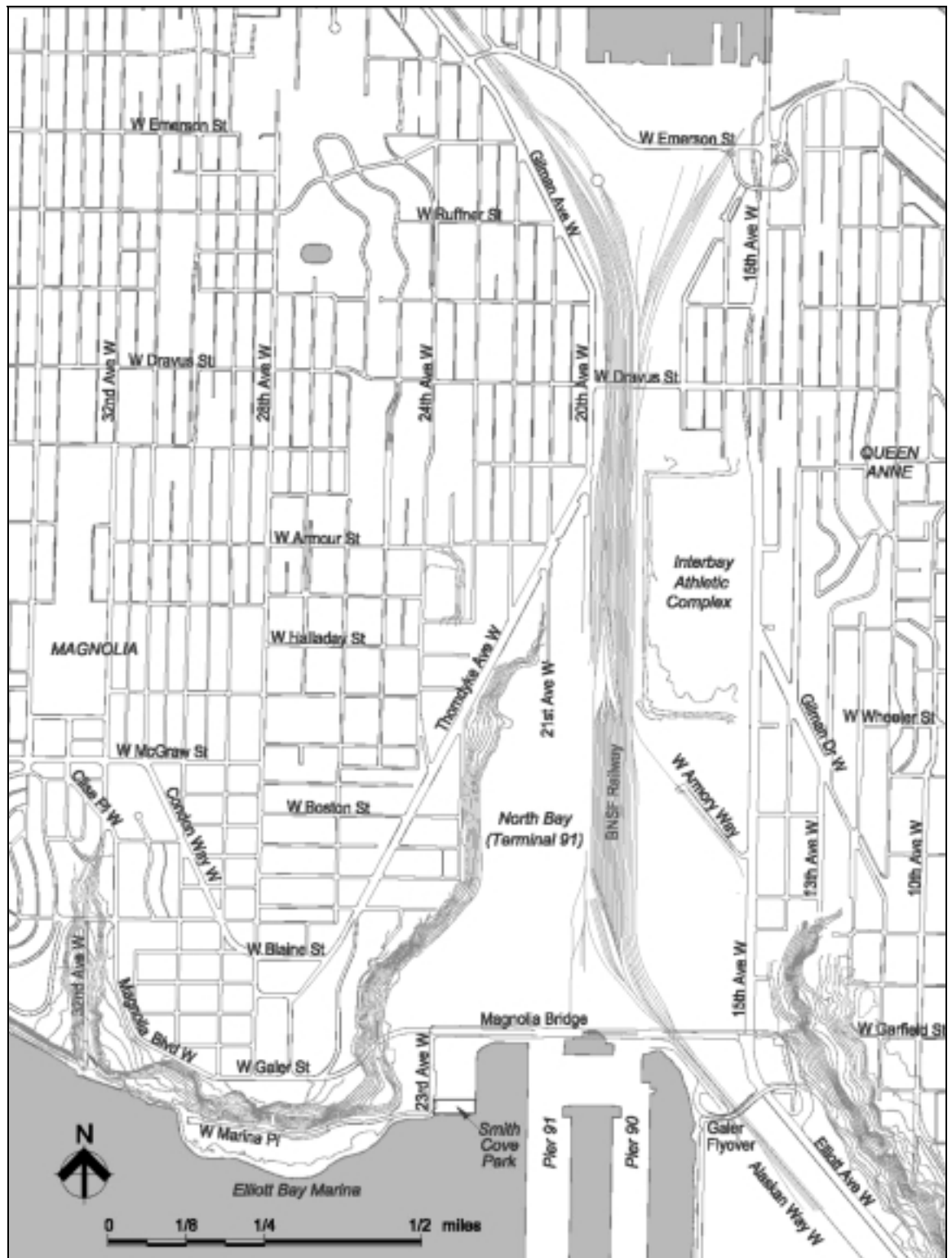
### ***System Linkage***

There are three roadway connections from the Magnolia community, with more than 20,000 residents, to the rest of Seattle. As the southernmost of the three connections, the Magnolia Bridge is the most direct route for much of south and west Magnolia to downtown Seattle and the regional freeway system.



**Figure 1**  
**Vicinity Map**

In meetings with the public and the Seattle Fire Department, the importance of this route for emergency services has been emphasized. The loss of use of this bridge in 1997 and again in 2001 demonstrated to the City that the remaining two bridges do not provide acceptable operation. During the bridge closure following the February 2001 earthquake, the City addressed community concerns about reduced emergency response time to medical facilities outside of Magnolia by stationing paramedics at Fire Station 41 (2416 34th Avenue West) 24 hours a day.



**Figure 2**  
**Study Area**

## *Traffic Capacity*

The three Magnolia community connections to the 15th Avenue West corridor are adequate for the present volume of traffic. Each of the three connections carries 30 to 35 percent of the 60,100 daily vehicle trips (2001 counts) in and out of the Magnolia community. Loss of the use of the Magnolia Bridge for several months after the February 2001 earthquake, and in 1997 following the landslide at the west end of the bridge, resulted in lengthy 15- to 30-minute delays and increased trip lengths for many of the users of the Magnolia Bridge. These users were required to use one of the two remaining bridges at West Dravus Street and West Emerson Street. Travel patterns in the Magnolia community changed substantially resulting in negative impacts on local neighborhood streets. The increase of traffic through the West Dravus Street and West Emerson Street connections also resulted in congestion and delay for the regular users of these routes. Losing the use of any one of these three bridges would result in redirected traffic volumes that would overwhelm the capacity of the remaining two bridges.

## *Modal Interrelationships*

The Magnolia Bridge carries three of the four local transit routes serving Magnolia and downtown Seattle destinations. The topography of the east side of Magnolia, East Hill, would make access to the 15th Avenue West corridor via the West Dravus Street Bridge a circuitous route for transit. Use of the West Emerson Street connection to 15th Avenue West would add significant distance and travel time for most trips between Magnolia and downtown Seattle.

The Magnolia Bridge has pedestrian facilities connecting the Magnolia neighborhood to Smith Cove Park and Elliott Bay Marina as well as to 15th Avenue West/Elliott Avenue West. These facilities need to be maintained. The Elliott Bay multi-use trail connects Magnolia with downtown Seattle through Myrtle Edwards Park. The trail passes under the Magnolia Bridge along the west side of the BNSF rail yard, but there are no direct connections to the bridge.

Bicycle facilities on Magnolia Bridge need to be maintained or improved. Even with the steep (about 6.3 percent) grade, bicyclists use the Magnolia Bridge in both directions. There are no bike lanes on the bridge, so cyclists use the traffic lanes and sidewalks. Once cyclists cross the bridge, they must either travel with motor vehicles on Elliott Avenue West or find a way back to the Elliott Bay Trail using local east-west streets such as the Galer Flyover.

## *Transportation Demand*

The existing Magnolia Bridge provides automobile access for Port of Seattle North Bay (Terminal 91) to and from Elliott Avenue West/15th Avenue West. Truck access between Terminal 91 and Elliott Avenue West/15th Avenue West is accommodated via the Galer Flyover. Future planned expansion of the Amgen facility on Alaskan Way West and redevelopment of underutilized portions of North Bay and other areas of Interbay will increase demand for traffic access to the Elliott Avenue West/15th Avenue West corridor. The Port of Seattle has a master planning process under way (July 2003) for its North Bay (Terminal 91) property and the Washington National Guard property east of the BNSF Railway between West Garfield Street and West Armory Way. This area contains 82 acres available for redevelopment. There are also 20 or more acres of private property available for

redevelopment east of the BNSF Railway between West Wheeler Street and West Armory Way. Redevelopment of the North Bay property will include public surface streets with connections to the replacement for the Magnolia Bridge. Forecasts of future (year 2030) traffic demand indicate that the access provided by the Galer Flyover and West Dravus Street would be inadequate. The capacity provided by the existing Magnolia Bridge or its replacement would also be needed.

## *Legislation*

Seattle Ordinance 120957, passed in October 2002, requires that the Magnolia Bridge Replacement Study: (1) identify possible additional surface roads from Magnolia to the waterfront (avoiding 15th Avenue West and the railroad tracks); (2) obtain community input on the proposed roads; and (3) identify the cost for such roads and include it in the total cost developed in the Magnolia Bridge Replacement Study.



# **Description of Alternatives**

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An alignment study process was implemented to help identify the specific bridge replacement alternatives to be studied in the EIS. Twenty-five concepts were developed and screened against the project goals and objectives. This resulted in nine alignment alternatives, identified as A through I, that merited further analysis. These nine went through an extensive public review and comment process as well as project screening criteria and prioritization. Initially, the top four priority alternatives, A, B, D, and H, were identified to be studied in the EIS. Early on, Alternative B was eliminated because it became clear that it violated City shoreline policies and Federal Section 4(f) criteria. Upon detailed traffic analysis, Alternative H was eliminated because two key intersections were predicted to function at a level of service F and could not be mitigated. The next priority, Alternative C, was then carried forward for analysis in the EIS.

Independent of this project, a new north-south surface street will be constructed on Port of Seattle property connecting 21st Avenue West at the north end of North Bay with 23rd Avenue West near Smith Cove Park. In addition, a southbound ramp will be added to the Galer Flyover to accommodate eastbound to southbound Elliott Avenue West traffic movements. The Galer Flyover ramp has been identified as a needed improvement for expected future development of property west of the railroad tracks. Locations for new surface streets through the Port of Seattle property will be determined through the Port's master planning process for the North Bay property. The north-south surface street and ramp are assumed to exist under any build alternative, but they are not part of this environmental process.

Typical cross sections and plans of the build and no build alternatives are located at the end of this section.

## **No Build Alternative**

The No Build Alternative, shown in Figure 3 and Figure 5, would maintain the existing bridge structure in place with the existing connections at the east and west ends. Long-term strategies for maintaining the existing structure would be required for the No Build Alternative. To keep the existing bridge in service for over 10 years, the following would need to be accomplished:

- An in-depth inspection of the bridge would be required to determine needed repairs and a long-term maintenance program.
- Concrete repairs would be required. These repairs could include injection of epoxy grout into cracks, repair of spalled concrete, and replacement of deficient concrete and grout.
- Preservation measures to slow corrosion of the reinforcement would be required. These measures could include a cathodic protection system.
- Any structural elements that lack the capacity to carry a tractor-trailer truck with a 20-ton gross trailer weight would need to be identified, modeled, and strengthened.

## Alternative A

Alternative A would replace the existing bridge with a new structure immediately south of the existing bridge as shown in Figure 4 and Figure 6. The alternative would construct a signalized, elevated intersection (Alternative A – Intersection) in the bridge’s mid-span to provide access to the waterfront and the Port of Seattle North Bay property from both the east and west. Connections at the east and west ends of the bridge would be similar to the existing bridge.

An optional half-diamond interchange (Figure 7, Alternative A – Ramps) could be constructed in lieu of the elevated intersection to provide access to the waterfront and the Port of Seattle North Bay property to and from the east only.

## Alternative C

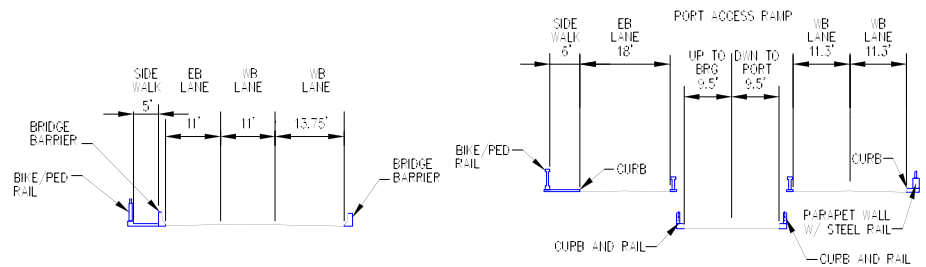
Alternative C would provide 2,200 feet of surface roadway within the Port of Seattle North Bay property between two structures as shown in Figure 4 and Figure 8. The alternative alignment would descend from Magnolia Bluff on a structure running along the toe of the slope. The alignment would reach the surface while next to the bluff before turning east to an intersection with the north-south surface street. The alignment would continue east from the intersection, turning south along the west side of the BNSF rail yard. The alignment would rise on fill and structure, turning east to cross the railroad tracks and connect to 15th Avenue West.

## Alternative D

Alternative D would construct a new bridge in the form of a long arc north of the existing bridge as shown in Figure 4 and Figure 9. Connections at the east and west ends of the bridge would be similar to the existing bridge. This alternative would construct a signalized, elevated intersection (Alternative D – Intersection) in the bridge’s mid-span to provide access to the waterfront and Port of Seattle North Bay property from both the east and west.

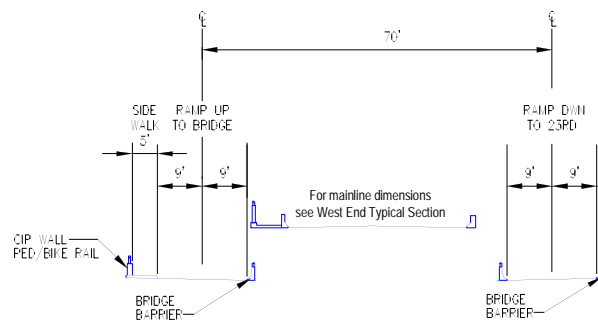
An optional half-diamond interchange (Figure 10, Alternative D – Ramps) could be constructed in lieu of the elevated intersection to provide access to the waterfront and the Port of Seattle North Bay property to and from the east only.



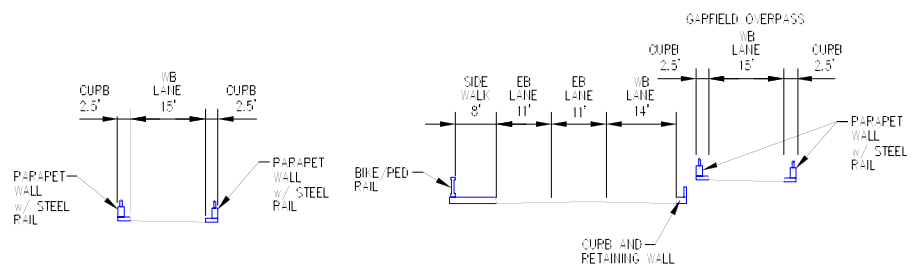


Bridge West End

Ramp to Port Access



Ramps to 23rd Avenue West



Garfield Overpass

15th Avenue West Connection

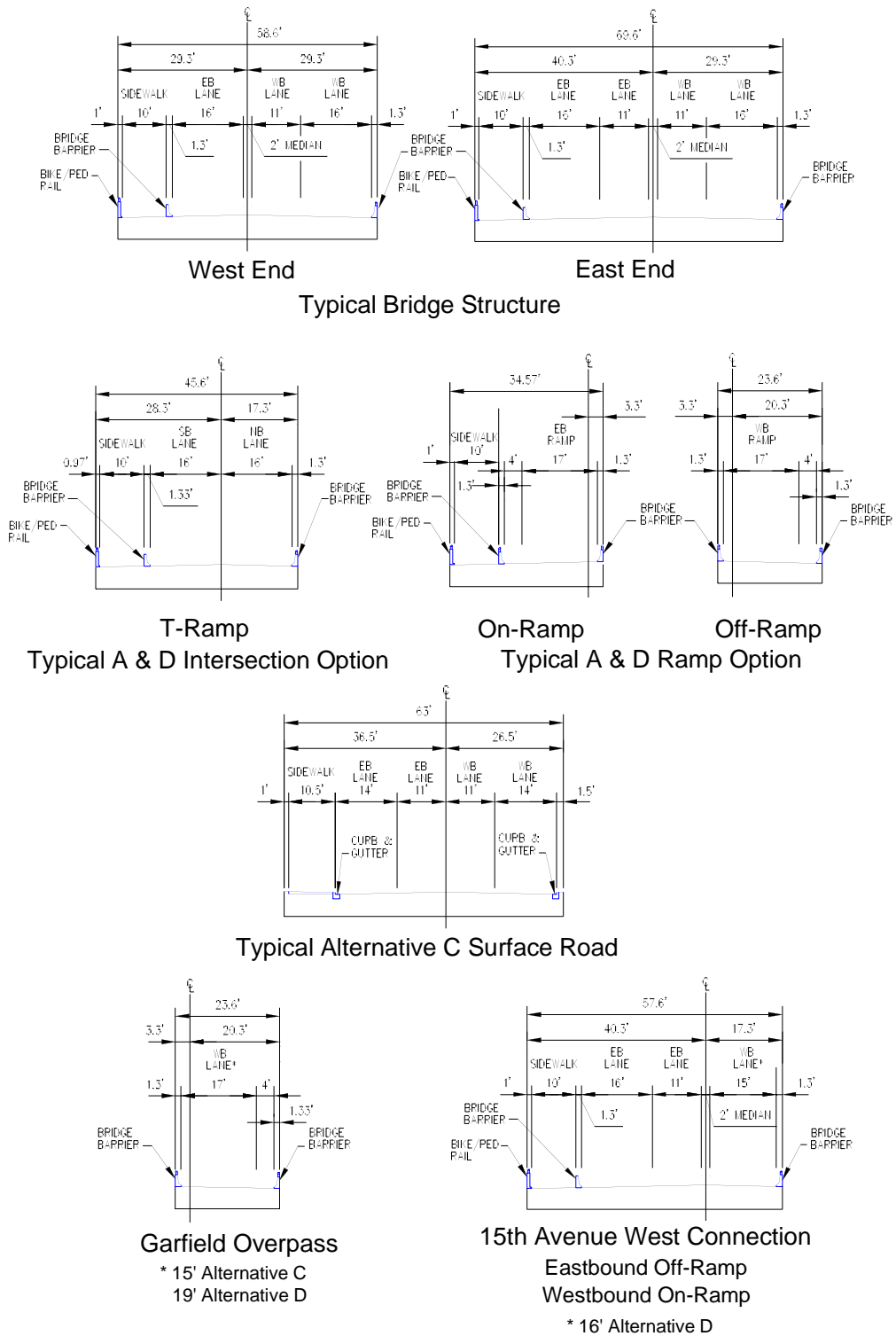
Eastbound Off-Ramp

Westbound On-Ramp

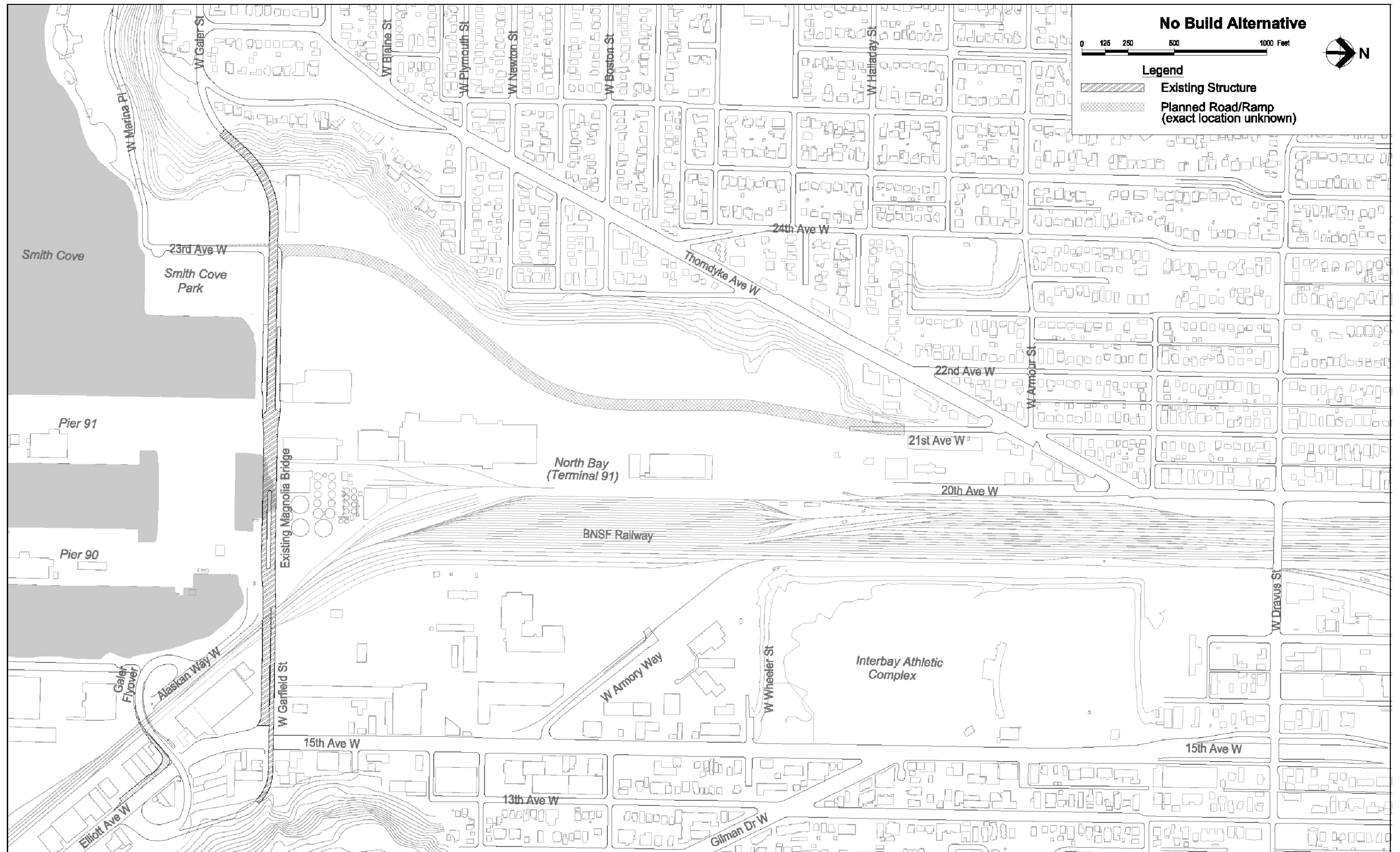
**NOTE:**

Dimensions are approximate and obtained from construction plans and aerial photographs. The information shown has not been field verified.

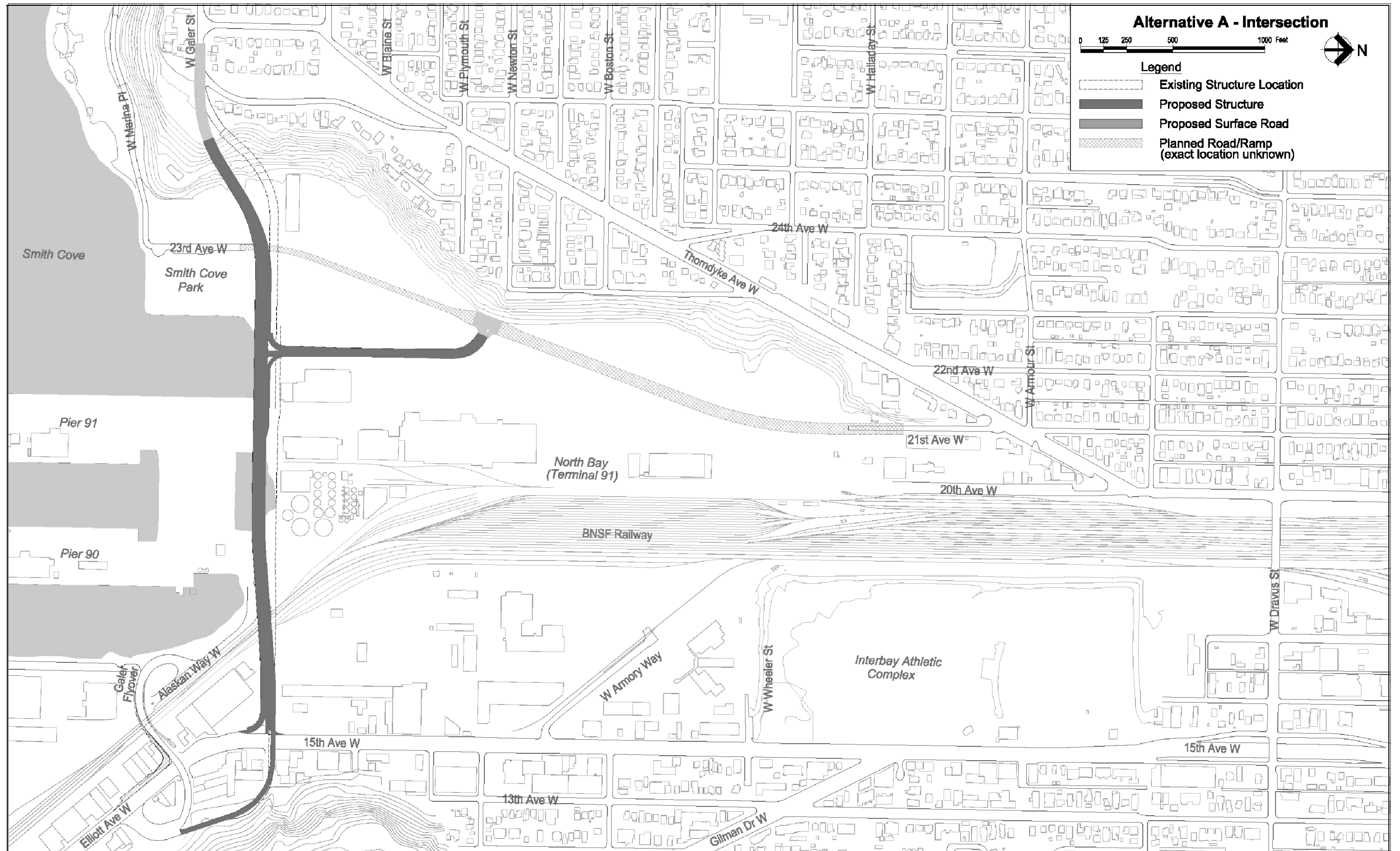
**Figure 3**  
**Typical Sections – No Build Alternative**



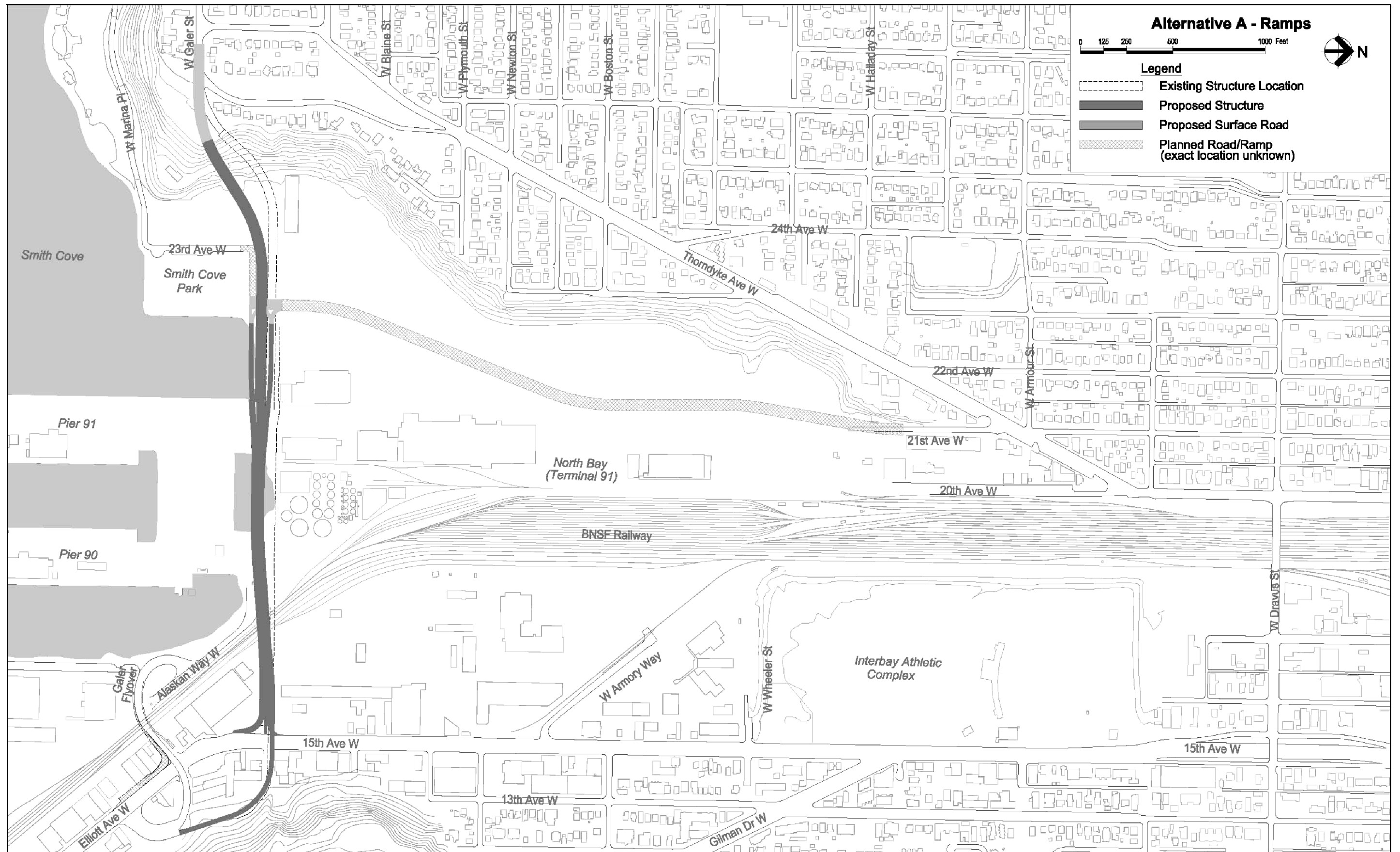
**Figure 4**  
**Typical Sections – Build Alternatives**



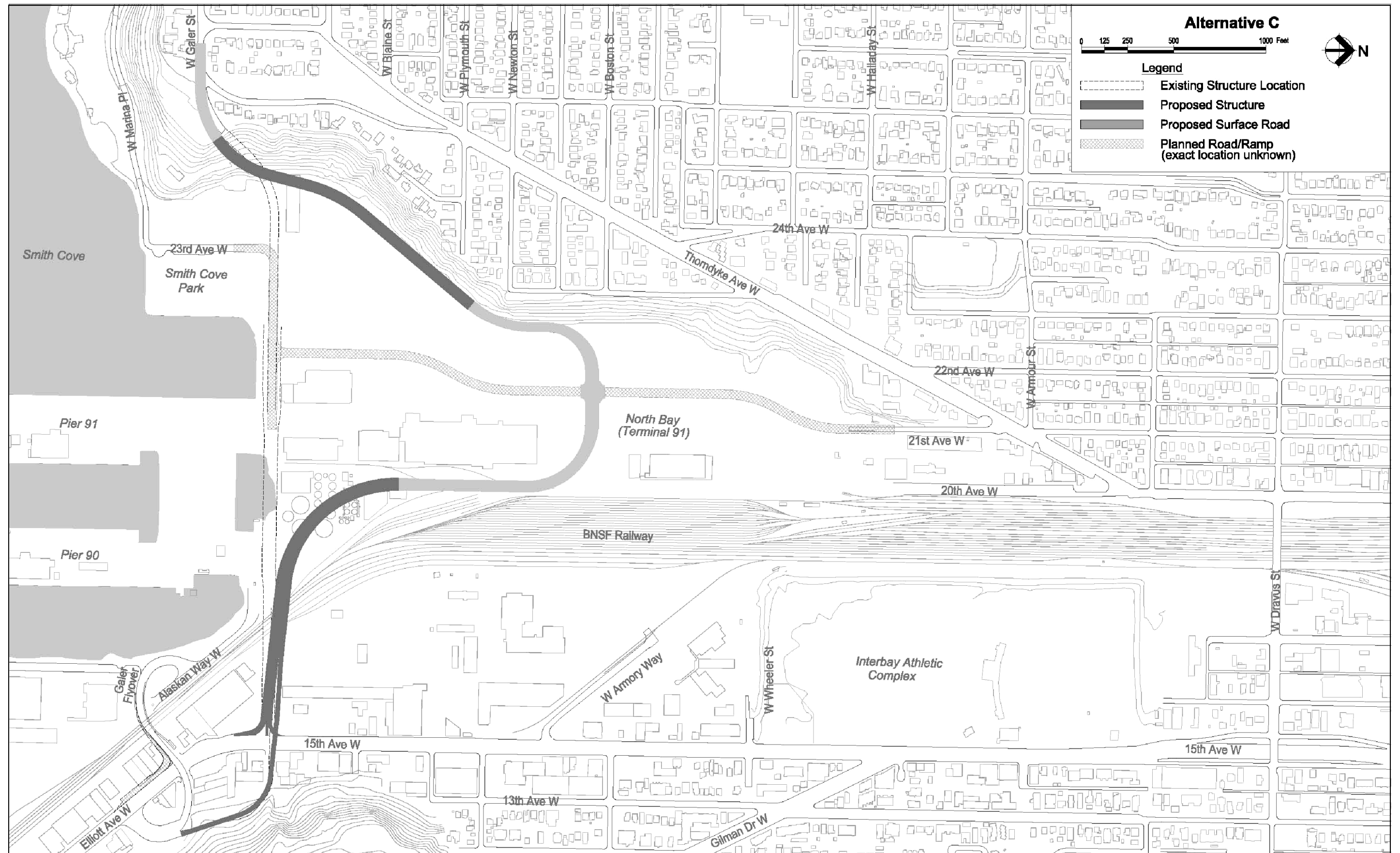
**Figure 5 No Build Alternative**



**Figure 6 Alternative A - Intersection**

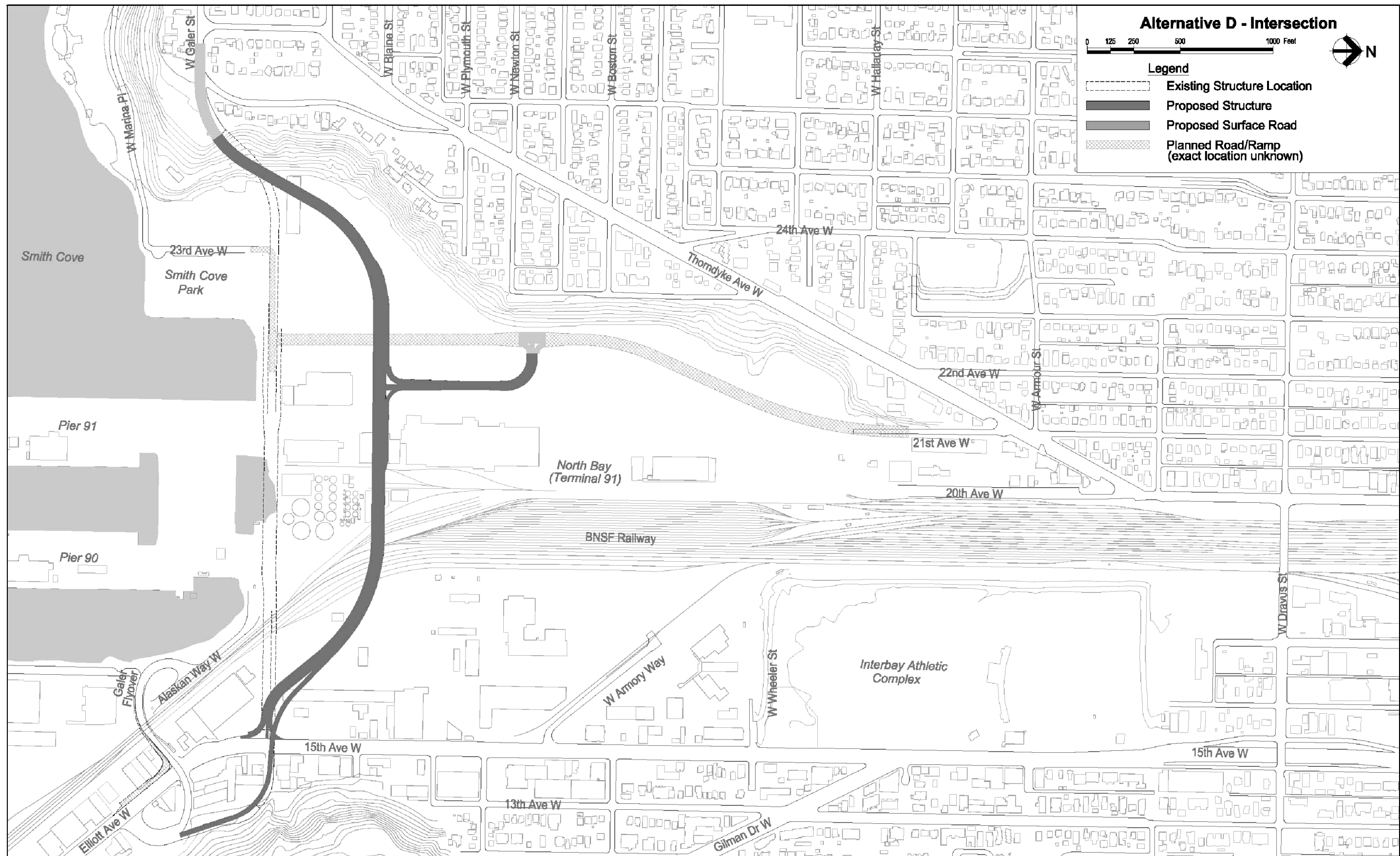


**Figure 7 Alternative A - Ramps**

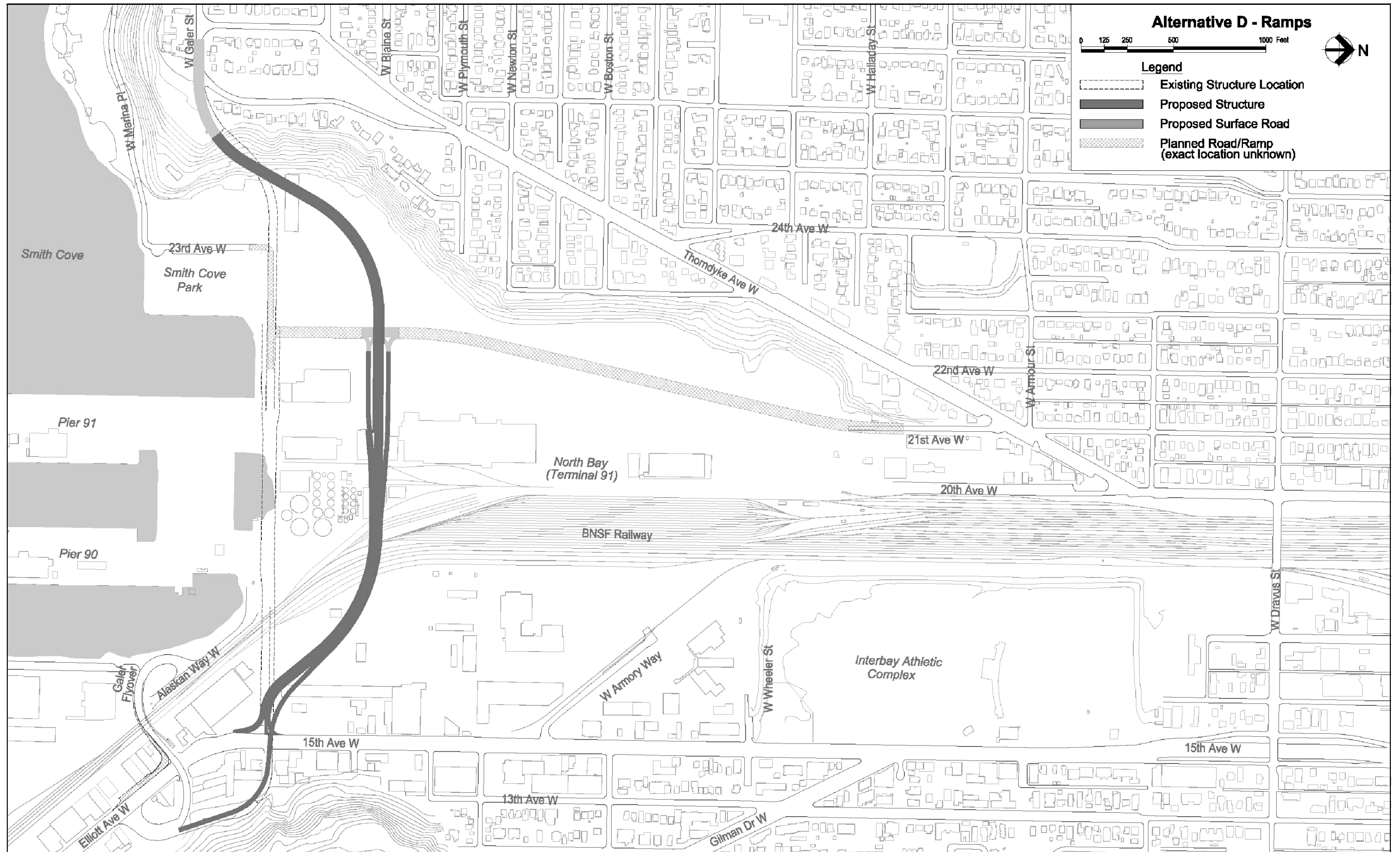


**Figure 8 Alternative C**





**Figure 9 Alternative D - Intersection**



**Figure 10 Alternative D - Ramps**



# Affected Populations

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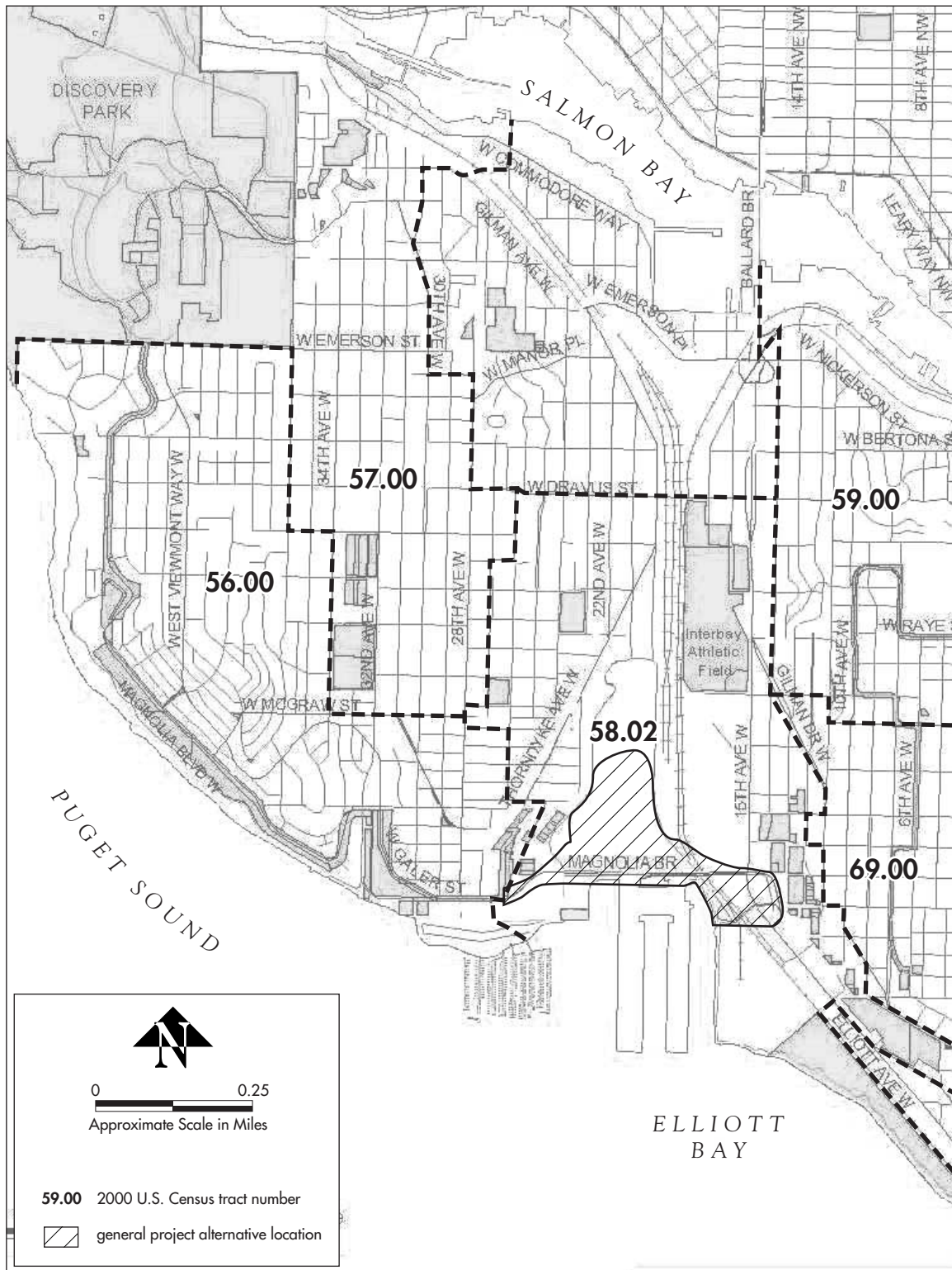
This section provides information regarding the number of low-income and minority residents in the overall study area compared to the City of Seattle and King County. Information in this section has been compiled consistent with the guidelines contained in Section 458 of the WSDOT Environmental Procedures Manual. Section 458 includes Exhibit 458-1, *Environmental Guidance – Conducting an Environmental Justice Analysis Step-by-Step Overview*, which was followed to conduct this analysis. In addition, Exhibit 458-3 contains a checklist identifying items to be evaluated in this discipline report. Appendix A of this report contains a Checklist Summary, which provides a guide to the location of each checklist item in this document or indicates why the item is not applicable to the Magnolia Bridge Replacement Project.

Data collected include 2000 U.S. Census information for the census tracts that compose the overall study area. In addition, data collected from Seattle Public Schools regarding the number of minority students at each local school and the number of students participating in the school lunch program are provided to augment the Census data. Finally, employers in the study area potentially affected by one of the alternatives were interviewed. General information on the demographics of their employees was collected and is summarized in this section.

The purpose of this Affected Populations section is to provide a baseline for analyzing potential adverse and disproportionate impacts to minority and low-income populations from the alternatives. The level of detail provided for each item is commensurate with the information needed to complete the impact analysis, and with potential issues associated with the alternatives. See the Impacts section below for a discussion of factors influencing the types of impacts related to this project.

## Area of Potential Impact

The area of potential impact for purposes of the environmental justice analysis includes a geographic area large enough to encompass locations in which potential impacts are predicted to occur. For the Magnolia Bridge Replacement Project, the study area is the portion of the City of Seattle encompassing parts of the Magnolia, Interbay, and Queen Anne neighborhoods, as defined by 2000 U.S. Census Tracts 56.00, 57.00, 58.01, 58.02, 59.00, and 69.00 (Figure 11). This study area is consistent with the study area used for the Social, Economic, and Relocation discipline report.



**Figure 11**  
**Study Area Census Tracts**

# 2000 U.S. Census Data

## Race and Ethnicity

Table 1 compares the ethnic and racial population components of the study area census tracts with those of the City of Seattle and King County.

**Table 1**  
**Ethnic and Racial Composition**

Area	White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Hispanic or Latino
<b>Local Jurisdiction</b>							
King County	78.9%	6.5%	1.9%	12.5%	0.9%	3.7%	5.5%
City of Seattle	73.4%	9.9%	2.1%	15.0%	0.9%	3.7%	5.3%
<b>Study Area Census Tracts</b>							
Census Tract 56.00	93.2%	1.3%	1.1%	4.7%	0.2%	1.0%	2.3%
Census Tract 57.00	88.7%	2.4%	1.2%	8.7%	0.9%	1.5%	3.1%
Census Tract 58.01	87.1%	3.5%	1.7%	8.5%	0.6%	2.2%	3.9%
Census Tract 58.02	88.1%	3.7%	1.8%	7.5%	0.7%	2.6%	5.3%
Census Tract 59.00	92.3%	1.9%	1.3%	6.2%	0.5%	1.6%	2.9%
Census Tract 69.00	92.6%	2.3%	1.5%	5.3%	0.2%	1.2%	2.4%

Source: PSRC 2003a, 2003b.

Note: Individuals can identify themselves as being of more than one race and Hispanic people can be of any race; therefore, itemizations add up to more than 100%. Races are tallied to include both individuals identifying themselves as one race alone or in combination with one or more other races.

As shown in Table 1, the study area has a smaller percentage of minority residents compared with the rest of the city and King County. Non-minorities account for approximately 90 percent of the population in the study area compared to approximately 73 percent in the city and 79 percent in the county. Based on the U.S. Census data, no particular ethnic or racial group appears to be present in proportionately higher numbers in the study area compared to the city or the county. In Census Tract 58.02, however, more than 5 percent of the population was identified as Hispanic or Latino. Census Tract 58.02 encompasses the project alternative footprints.

## Poverty Status

Table 2 shows the poverty status for individuals in the study area, the City of Seattle, and King County. The Census Bureau uses the federal government's official poverty definition, which involves comparing an individual's total family income with the poverty threshold appropriate for that individual's family size and composition. Poverty status is determined for all people except those who are institutionalized, in military group quarters, in college, or those who are unrelated and under 15 years old (U.S. Census Bureau 2003).

**Table 2**  
**Poverty Status**

Area	Population for Poverty Status Determination	Population Below Poverty	Percentage Below Poverty Level
<b>Local Jurisdiction</b>			
King County	1,706,305	142,546	8.4%
City of Seattle	543,198	64,068	11.8%
<b>Study Area Census Tracts</b>			
Census Tract 56.00	6,227	112	1.8%
Census Tract 57.00	5,932	377	6.4%
Census Tract 58.01	4,538	324	7.1%
Census Tract 58.02	4,370	320	7.3%
Census Tract 59.00	5,122	320	6.2%
Census Tract 69.00	3,831	196	5.1%

Source: PSRC 2002b.

The study area contains proportionately fewer individuals living under the poverty level than within the city and county. Census Tract 58.02, which encompasses the project site, has proportionately more people living under the poverty level than the other census tracts in the study area.

## *Linguistic Isolation*

Table 3 shows the number of individuals classified as linguistically isolated in the study area, the City of Seattle, and King County. Linguistically isolated populations include individuals living in households in which no person age 14 or older speaks only English or speaks English as a second language “very well” (U.S. Census Bureau 2003).

**Table 3**  
**Linguistic Isolation**

Area	Population Age 5 and Older	Linguistically Isolated Population Age 5 and Older	Percentage of Linguistically Isolated Population
<b>Local Jurisdiction</b>			
King County	1,632,553	83,837	5.1%
City of Seattle	537,538	29,940	5.6%
<b>Study Area Census Tracts</b>			
Census Tract 56.00	5,874	50	0.9%
Census Tract 57.00	5,579	47	0.8%
Census Tract 58.01	4,391	201	4.6%
Census Tract 58.02	4,679	85	1.8%
Census Tract 59.00	6,551	47	0.7%
Census Tract 69.00	3,685	32	0.9%

Source: PSRC 2002a.

As shown in Table 3, the study area contains proportionately fewer individuals classified as linguistically isolated compared to within the city and county. The total number of people in the study area classified as linguistically isolated is 462.

# Seattle Public Schools Statistics

In addition to 2000 U.S. Census data, Seattle Public School statistics were gathered to gain additional information on the demographics of the study area. Information gathered included the race and ethnicity of local students, the number of students on the school lunch program, and the number of students identified as having limited English proficiency. This data reflects the October 1, 2003 student population, the most recent data available at the time this document was prepared.

Seattle Public Schools enrolls children in a cluster of schools for elementary education based on the location of their residence. The district allows citywide enrollment for middle and high schools. The information provided in the following sections includes the cluster of elementary schools that serves the Magnolia, Interbay, and Queen Anne neighborhoods. It also includes data for the middle schools located in those neighborhoods and the percentage of middle school students who reside in the middle school choice area. Seattle Public Schools breaks down area resident statistics for each elementary school. This information is not included here because students in the cluster of elementary schools are generally drawn from within the study area; therefore, essentially 100 percent of elementary students are area residents for purposes of this analysis. Data on high school students are not provided because no high schools are located within the study area, and Seattle Public Schools does not provide resident information for high schools. Information on private schools was not collected.

## Race and Ethnicity

Table 4 provides enrollment counts and ethnic distribution percentages for study area schools. This information reflects all students as of October 1, 2003 as reported to the state for the purpose of basic education revenue apportionment. Part-time students and half-day kindergarten students are counted the same as other students.

**Table 4**  
**Enrollment and Ethnic Distribution on October 1, 2003**

School (Grades)	School Enrollment	% Area Resident	White	African American	Native American	Asian	Latino
District Total	46,730	N/A	40.9%	22.5%	2.4%	23.1%	11.1%
Study Area Schools							
Lawton Elementary (K-5)	287	N/A	69.7%	7.0%	0.3%	16.7%	6.3%
John Hay Elementary (K-5)	424	N/A	71.0%	8.5%	1.9%	11.6%	7.1%
Frantz H. Coe Elementary (K-5)	357	N/A	64.1%	5.9%	2.5%	16.0%	11.5%
Catherine Blaine School (K-8)	512	53.7%	71.3%	6.3%	2.0%	10.5%	10.0%
McClure Middle School (6-8)	589	54.8%	47.4%	23.1%	2.5%	16.1%	10.9%

Sources: Seattle Public Schools 2003a, 2003b.

As shown in Table 4, study area schools generally have a smaller percentage of minority residents compared with the rest of the school district. The percentage of minority students at McClure Middle School is similar to that of the district as a whole, but only 54.8 percent of the middle school students reside in the area. Franz H. Coe Elementary school has a higher percentage of Latino students than the district average. The student population in the study area has a greater percentage of minorities than the overall population in the study area. The 2000 U.S. Census data shown in Table 4 indicate that approximately 90 percent of the study area population

is non-minority, while Seattle Public School statistics show a student population that is approximately 60 percent to 70 percent non-minority.

## Students on the School Lunch Program

Table 5 shows the percentage of students eligible for free or reduced-price lunches based on family income. The income requirements depend on the size of the family and are adjusted each year. In 2003, a family of four would be eligible for free lunches if they had an annual income below \$23,928. The income limit for reduced-price lunches for a family of four was \$34,044 (Seattle Public Schools 2003b).

**Table 5**  
**Percentage of Students Receiving Free or Reduced-Price Lunches**

School (Grades)	School Enrollment	% Area Resident	Number Receiving Free or Reduced-Price Lunches	% Receiving Free or Reduced -Price Lunches
District Total	46,730	N/A	18,323	39.2%
<b>Study Area Schools</b>				
Lawton Elementary (K-5)	287	N/A	33	11.5%
John Hay Elementary (K-5)	424	N/A	60	14.2%
Frantz H. Coe Elementary (K-5)	357	N/A	70	19.6%
Catherine Blaine School (K-8)	512	53.7%	89	17.4%
McClure Middle School (6-8)	589	54.8%	246	41.8%

Sources: Seattle Public Schools 2003a, 2003b.

As shown in Table 5, fewer students in study area schools are from families that are eligible for the free or reduced-price lunch program than in the district as a whole. More students at McClure Middle School are eligible for the program than in the district as a whole, but only 54.8 percent of the middle school students reside in the area.

## Limited English Proficiency

Table 6 shows the percentage of students identified as having limited English proficiency. Each student's primary and home languages are obtained at registration. If a parent indicates that the student is less fluent in English than their primary language, the student is given the Language Assessment Scales test to determine English fluency and whether the student is eligible for bilingual services (Seattle Public Schools 2003b).

**Table 6**  
**Students Classified as Having Limited English Proficiency**

School (Grades)	School Enrollment	% Area Resident	Number Classified as Having LEP	% Classified as Having LEP
District Total	46,730	N/A	6,010	13.0%
<b>Study Area Schools</b>				
Lawton Elementary (K-5)	287	N/A	9	3.1%
John Hay Elementary (K-5)	424	N/A	4	0.9%
Frantz H. Coe Elementary (K-5)	357	N/A	39	10.9%
Catherine Blaine School (K-8)	512	53.7%	19	3.7%
McClure Middle School (6-8)	589	54.8%	59	10.0%

Sources: Seattle Public Schools 2003a, 2003b.

Table 6 indicates that fewer students in study area schools are classified as having limited English proficiency compared to the district as a whole. These statistics give some indication of the number of individuals within the study area who have limited English proficiency; however, it is possible that students are proficient in English, but adults in their households are not.

## Employment Composition

During January and February of 2004, the project team interviewed representatives of potentially affected marine businesses in the Interbay area. As part of the interview process, the project team sought information on the demographic characteristics of the businesses' employees.

Major employers on the Port of Seattle property indicated that approximately 73.3 percent of their work force would be considered a member of a minority group. Also, one employer, who would not be displaced under any of the alternatives, estimated that 40 percent of the company's work force would not be considered proficient in English. Another employer said that several of his warehouse employees who have worked their way up from being laborers now act as interpreters for those who do not speak English. Employees in the Interbay area speak a variety of languages, including Spanish and Vietnamese, with no primary language group identified.

Based on estimates from the interviews with potentially affected marine businesses in the Interbay area, the average wage for seafood processors is between \$28,000 and \$36,000 per year. This is substantially lower than the \$54,000 estimated from the 2000 U.S. Bureau of Labor Statistics for the 4,332 covered employees in the sector (see the Social, Economic, and Relocation discipline report for more information). The project team was not able to obtain accurate information regarding poverty status. Although many of the jobs on Port property are relatively low paying, no information is available on employee family size or whether employees are members of households with more than one income. However, it is likely that some employees of the marine businesses would be considered low income.





# ***Enhanced Public Involvement***

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This section describes efforts that have occurred to identify and contact minority, low-income, and linguistically isolated communities and individuals in potentially affected areas. Public involvement activities that have occurred as part of the alternative selection and EIS scoping process for the Magnolia Bridge Replacement Project are summarized. In addition, this section outlines planned, ongoing public involvement activities (for more information see the Public Involvement Plan for this project, which is included as an appendix to the Final Study Plan). The project team's approach to reaching environmental justice populations will continue to evolve as the project proceeds through the environmental review process and design.

## **Project Background**

In the summer of 2002, the Magnolia Bridge project team began to determine preliminary design alternatives for the bridge replacement. As alternatives were developing, it became clear that the replacement alignments would fall outside the existing bridge corridor. For this reason, the project team was advised in consultation with WSDOT and FHWA staff to complete an EIS to assess impacts on the natural and human environment in more detail. Specific public involvement requirements outlined in the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA) helped the team modify the Public Involvement Plan to meet legal requirements.

## **General Public Involvement Activities**

A variety of activities that supported the Public Involvement Plan during the Type, Size, and Location study and EIS scoping phase are described below.

### ***Stakeholder Interviews***

Approximately 25 people identified as stakeholders were interviewed at the project's outset in the fall of 2002 to help the team understand key issues and concerns. Those individuals interviewed were affiliated with local community organizations, businesses, and public service providers.

### ***Comments Database***

At the beginning of the Magnolia Bridge Replacement Project (fall of 2002), an electronic database was created to capture public and agency input submitted in many different formats. This database allowed those entering comments to "code" them based on the topics that they addressed. The database also allowed users to generate mailing and e-mail lists to notify interested people of project updates and opportunities for involvement. Several forms of input were gathered and entered into the database, including information from comment forms distributed at public meetings, comments submitted to the project Web site, e-mails to project team members, letters and attachments, petitions, telephone calls to team members, and scoping meeting transcripts.

## EIS Scoping Meetings

SEPA and NEPA require the publication of official scoping notices through separate, legally mandated processes, and scoping meetings for interested agency personnel and the public are required. Agency and public EIS scoping meetings were held on May 22, 2003. The agency meeting was held in the morning and was followed by a bus tour of the study area. The public meeting was held that evening and included an open house, a presentation, and the opportunity for attendees to make formal oral comments to a court reporter.

## Project Meetings

A series of meetings has been held to acquaint local community, government, and business groups with the project, to keep them informed of progress, and to solicit public input on design alternatives. Meetings held through the beginning of October 2006 are listed in Table 7 along with a brief description of their intent and the date on which each occurred.

**Table 7  
Project Meetings**

Meeting	Description	Date(s)
City of Seattle Council	Briefings of the Transportation Committee	9/25/02, 12/17/02, 3/4/03, 12/2/03, 7/27/04, 4/11/06, 12/12/2006
Public Open Houses	All-community meetings designed to inform the public about the project and solicit input for alternative development	10/9/02, 12/5/02, 11/20/03, 10/26/04, 11/29/05, 9/13/06
Design Advisory Group	Ongoing meetings with representatives from local organizations to solicit input on project alternatives.	10/2/02, 11/6/02, 12/4/02, 1/8/03, 2/5/03, 3/5/03, 5/7/03, 6/3/03, 9/10/03, 11/5/03, 2/4/04, 3/3/04, 5/5/04, 6/2/04, 10/6/04, 2/2/05, 6/1/05/, 10/5/05, 11/2/05, 12/7/05, 4/5/06, 5/3/06, 6/7/06, 7/5/06, 8/2/06, 9/6/06, 10/4/06
EIS Scoping Meetings	Meetings with the public and agency representatives to gather comment on what should be studied during the EIS process.	5/22/03
Seattle Design Commission	Briefing to solicit input on project progress	10/17/02, 4/17/03, 7/15/04, 12/1/05, 10/5/06
Queen Anne Transportation Committee	Project briefing	10/30/02, 9/24/03, 11/30/05
Queen Anne Chamber of Commerce Board	Project briefing	11/5/02
Port of Seattle Commission or Executives	Project briefings at Commission and executive levels to inform and solicit feedback	6/11/02, 11/20/02, 12/10/02, 1/15/03, 2/11/03, 11/11/03, 11/9/06
Port of Seattle Neighborhood Advisory Committee	Project briefing	11/20/02, 10/15/03
Port of Seattle's Transportation Forum	Project briefing	11/6/03
Port of Seattle Public Open House	Project briefing	11/16/04
Magnolia Chamber of Commerce	Project briefing	11/21/02, 2/13/03, 5/11/06
Queen Anne/Magnolia District Council	Project briefing	12/2/02, 4/14/03, 10/14/03, 1/12/04, 7/12/04, 11/14/05

**Table 7  
Project Meetings (Continued)**

Meeting	Description	Date(s)
Ballard Interbay Northend Manufacturing and Industrial Center Action Committee	Project briefing	12/11/02, 4/9/03, 11/12/03, 3/10/04, 11/2/05
North Seattle Industrial Association	Project briefing	6/25/02, 11/25/03
Seattle Freight Mobility Advisory Council	Project briefing	10/21/03
15th Avenue Corridor Business Briefing	Project briefing targeting business people along the 15th Ave/Elliott Ave corridor	12/11/02
Elliot Bay Marina Business Briefing	Project briefing targeting business people from Palisades,/ Elliot Bay Marinas	5/18/06
Mayor's Marine Industrial Conference	Project Briefing	6/30/04
Magnolia Community Club	Project briefing	2/13/03, 3/11/04, 2/10/05
Magnolia Farmers Market	Project briefing	9/27/03, 10/11/03, 7/24/04, 7/31/04, 8/21/04, 9/18/04, 7/16/05, 8/20/05, 9/17/05, 6/24/06, 7/15/06, 9/16/06
Magnolia Summer Festival	Project briefing	8/1/03, 8/2/03, 8/6/04, 8/7/04, 8/6/05, 8/7/05, 8/4/06, 8/5/06
32nd Ave W Neighborhood	Targeted neighborhood briefing	2/19/03
Thorndyke Ave W Neighborhood	Targeted neighborhood briefing	3/11/03
W Wheeler St Neighborhood	Targeted neighborhood briefing	3/19/03
Interbay P-Patch	Targeted neighborhood briefing	5/13/03, 10/21/03
Galer St Neighborhood	Targeted neighborhood briefing	4/16/03, 12/10/03
Trident Seafoods	Targeted employee briefing	5/6/04

Source: City of Seattle 2006.

## Public Involvement Targeted to Environmental Justice

Strategies for engaging environmental justice populations and specific efforts that have occurred to date are described below. As the project proceeds through environmental review and design, efforts will continue to be made to identify and contact minority, low-income, and linguistically isolated populations. The Public Involvement Plan may be amended pending the results of these efforts.

Demographic research in the project area indicates that Census Tract 58.02, which encompasses the alternatives' footprints, contains a population that is over 5 percent Hispanic. Because this percentage is of sufficient size according to Department of Justice guidance to warrant translation and interpretation services (Petersen, pers. comm., 2003), the project team has established strategies to engage the Spanish-speaking population living and/or working in the project area. Census Tract 58.02 also contains a population that is over 5 percent Asian. Although the number and type of individual Asian languages spoken in Census Tract 58.02 are unknown, the City will provide or arrange for foreign language translation services to these populations if requested.

Research conducted in coordination with the economic impact analysis also indicates that some potentially displaced businesses employ a high percentage of minority individuals and could employ a high percentage of low-income employees. Strategies to engage these employees are also discussed.

## *Strategies*

### **Publicity**

As the Draft EIS hearing draws nearer, project publicity pieces will be directed to potentially affected areas and the general neighborhood. All project publicity pieces will contain a message in Spanish directing readers to call a specified telephone number for additional project information. The Seattle Department of Transportation (SDOT) has two employees who are fluent in Spanish and will be able to learn callers' needs and take appropriate steps. This information will be included on posters, display ads, the project Web site, and in e-mails to the project mailing list. Publicity pieces can also be printed in other foreign languages, as warranted, to ensure equal access to all project information.

### **Identifying Residents**

Project information mailings will be targeted to areas of potential impact and additional meetings specifically focused on impact areas will be held. The project team will also distribute handouts and hang posters in these areas.

### **Research**

Research will be conducted with both the City's social service departments and local non-profit organizations to determine if they serve a population that works/lives in the study area and would be affected by one or more of the project alternatives.

### **Engaging Workers**

The project team has interviewed potentially displaced Interbay employers and asked them to identify, if possible, the number of minority, low-income, or linguistically isolated employees in their companies. The majority of employees at these companies commute to work either by automobile or bus, and these workers do not appear to live within the immediate study area. Therefore, onsite public outreach at affected businesses will be important for effective communications. Major Interbay employers (i.e., Trident and City Ice) will be asked to distribute a project summary handout to employees. A project summary will also be available in Spanish for Spanish-speaking employees or in other foreign languages, as necessary. In addition to an overview of the project, the handout will also ask readers if they would like to attend a public meeting. If enough interest is shown, the project team will work with the employers to host an onsite informational meeting during a lunch period or shift change. An interpreter will be available.

### **Other Strategies**

Public involvement and demographic analysis to date have not revealed community disruption impacts related to minority or low-income populations. Also, none of the alternatives would require residential displacements. If through the ongoing environmental process such potential impacts are identified, the project team could use the following additional strategies.

### ***Reaching Students and Parents***

The same handout distributed to potentially affected employees in English and Spanish also would be distributed to students who attend school in the study area. As

with the workers, if there is enough interest, a targeted meeting for parents would be held at the school, and an interpreter would be available.

### *Optional Service*

Depending on demand, the team could set up and monitor a project dialogue center. The center would have a phone number with a message in Spanish (and/or in other foreign languages, as warranted) urging callers to leave their name, phone number, and address along with any questions. The call center could also have a message tree with prerecorded answers to frequently asked questions.

## *Specific Public Involvement Efforts and Results*

Throughout the environmental review, the project team has taken a number of specific steps to reach out to environmental justice populations. These steps have included the following:

- At the November 5, 2003 Design Advisory Group (DAG) meeting, the team asked DAG members if they were aware of any Environmental Justice populations living or working within the study area. The DAG identified Environmental Justice populations in the fish processing industry at Interbay.
- Prior to the November 20, 2003 community meeting, the project Web site featured a section on the homepage that was presented in Spanish, inviting Spanish speakers to attend the meeting. The message explained that an interpreter would be present. The same message was sent to those on the e-mail list. That message asked English speakers to pass the message on to community members who spoke Spanish.
- At the November 20, 2003 community meeting, the project team added a Spanish interpreter and an American Sign Language (ASL) interpreter. As community members entered the building, a sign written in Spanish greeted them and informed them of the interpreter. There was also a Spanish sign-in sheet. The interpreter wore a nametag, which identified in Spanish that she was the interpreter. The ASL interpreter translated the presentation and assisted with individual questions during the open house portion of the meeting.
- As described above in the Affected Populations section, the project team conducted interviews with representatives of potentially affected marine businesses in the Interbay area during January and February of 2004. Major employers on the Port of Seattle property indicated that approximately 73.3 percent of their work force would be considered a member of a minority group. Also, one employer indicated that 40 percent of the company's work force would not be considered proficient in English. The average wages for some seafood processing employees in these businesses are relatively low paying, increasing the likelihood that some employees of the marine businesses would be considered low income.
- In the spring of 2004, the project team contacted social service providers active in the project area to identify potential impacts to each provider's services and constituency. Telephone interviews were conducted with provider representatives. Social service providers contacted included City Team, Washington Council of the Blind, United Blind of Seattle, Queen

Anne Helpline, Society of St. Vincent de Paul, Creative Living Services, United Indians of all Tribes Foundation, Elderhealth Northwest, and Northwest Center. This process did not reveal any specific impacts to minority or low-income populations. Respondents indicated that the bridge replacement would not affect their services, and they did not identify any specific individuals or groups that they served that would be affected by the project.

- In the fall of 2004, SDOT contacted the four fish processing employers in the Interbay area, offering project briefings to their employees with project materials in whatever languages the companies requested. Staff managers at three of the four companies declined briefings, but the fourth company requested Spanish and Vietnamese interpretations. SDOT hosted a briefing for these employees on October 15, 2004, providing a Spanish interpreter and arranging for interpretation by a Vietnamese staff member. Handouts translated into Spanish and Vietnamese were placed in common areas for employees, along with signs advertising an upcoming open house. These handouts were also given to two of the three other fish processing companies in the area. (The third business manager said his staff was proficient in English.)

## Definitions of Adverse and Disproportionate Impacts

Adverse impacts (as defined by USDOT) and as applied to environmental justice, “may include, but are not limited to: 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 service; 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 from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of DOT programs, policies, or activities.” (WSDOT 2004).

An adverse impact is disproportionately high if it is predominantly borne by a minority and/or low-income population, or if the adverse impact that could be suffered by the minority or low-income community is more severe or greater in magnitude than the adverse impact that could be suffered by the non-minority or non-low-income community (WSDOT 2004).

## Assessment of Impacts

Assessments of potential impacts were conducted consistent with the guidelines contained in Section 458 of the WSDOT Environmental Procedures Manual. Section 458 includes Exhibit 458-1, *Environmental Guidance – Conducting an Environmental Justice Analysis Step-by-Step Overview*, which was followed to conduct this analysis. In addition, Exhibit 458-3 contains a checklist identifying items to be evaluated in this discipline report. Appendix A of this report contains a Checklist Summary, which provides a guide to the location of each checklist item in this document or indicates why the item is not applicable to the Magnolia Bridge Replacement Project.

The types of impacts defined by USDOT (above) and listed in the guideline checklist were considered. Section 457 (Social, Economic, and Relocation) of the Manual was also reviewed to identify potential types of impacts that could affect environmental justice populations. Elements evaluated included, but were not limited to: community cohesion; air quality; noise; water quality; park and recreation resources; visual quality; historic and cultural resources; community growth; public services; and pedestrian, transit, and bicycle facilities. Additional guidance documents prepared by FHWA and WSDOT were also reviewed to assist in the impact evaluation. These documents included WSDOT’s 1998 *Environmental Justice Guidelines* (WSDOT 1998), FHWA’s *Transportation and Environmental Justice Effective Practices* (FHWA 2002), and FHWA’s *Community Impact Assessment* (FHWA 1996). Information collected through the public involvement process, as described above in the Enhanced Public Involvement Section, was also an important component in conducting the analysis.

Only one type of disproportionately high and adverse impact to minority or low-income populations has been identified for any of the alternatives. Without

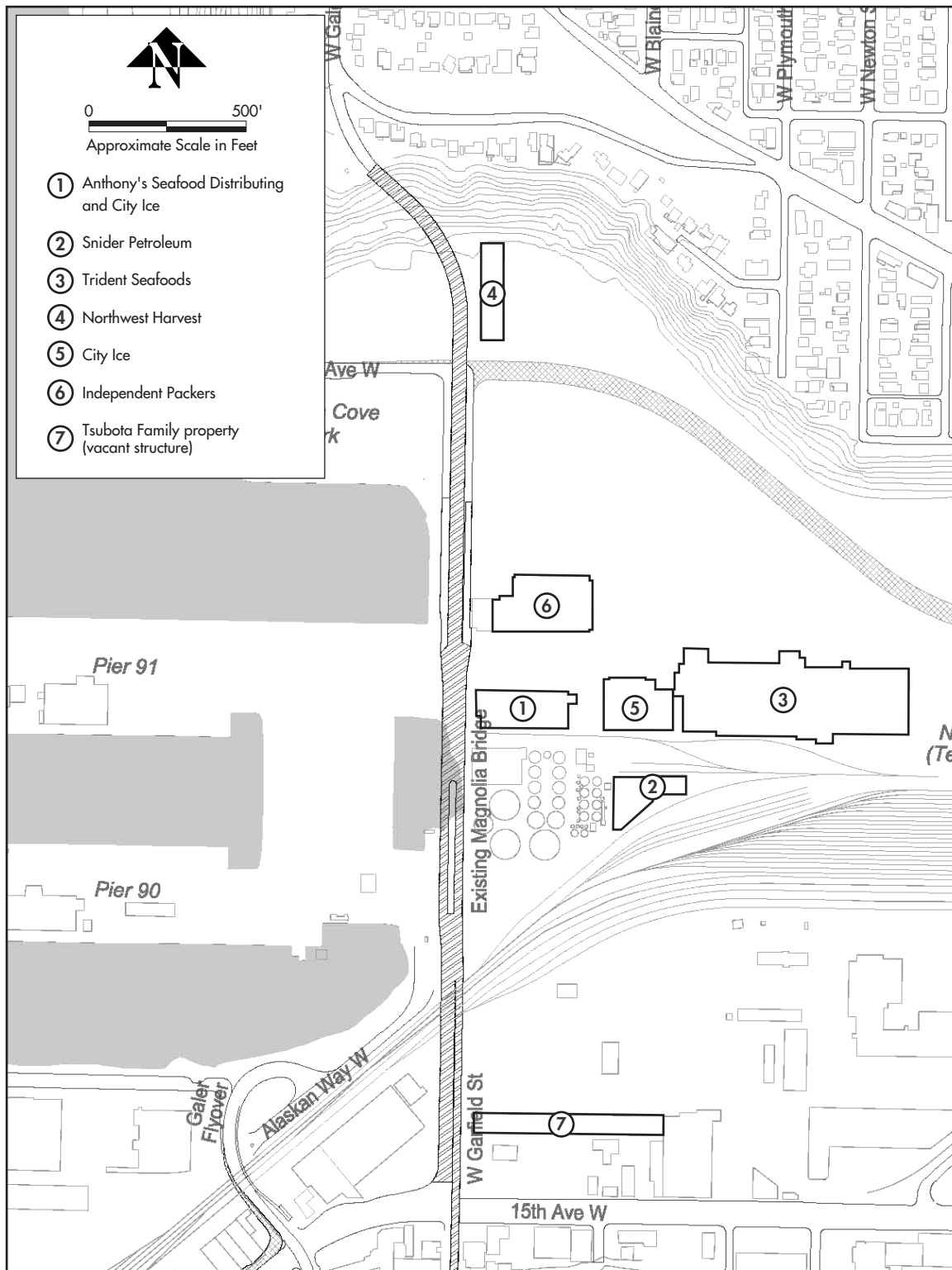
mitigation, the three build alternatives have the potential to create job losses that would disproportionately affect minority and low-income workers. The businesses on Port of Seattle property adjacent to the existing bridge employ a relatively high number of minority and low-income workers, and some of these businesses would need to be relocated under the build alternatives. This impact is described in more detail below for each alternative.

The following factors contribute to the overall low potential for Environmental Justice impacts from the Magnolia Bridge Replacement Project:

- The purpose of the project is to replace a bridge. None of the alternatives increases capacity for vehicle traffic to travel into and out of Magnolia. Traffic volumes in local neighborhoods would not increase as a result of this project. The project would not have an influence on population and housing growth and would not create increased demand for public services or park and recreation facilities in the area.
- All of the alternatives connect to the same termini as the existing bridge. Traffic patterns would not change under any of the alternatives. Therefore, no operational impacts related to community cohesion would occur. Also, pedestrian and bicycle connections in the study area would be maintained and facilities on the bridge would be improved under all of the alternatives.
- Other discipline reports have been reviewed, and largely because the project is a bridge replacement with the same termini as existing conditions, no localized areas of impact have been identified related to air quality, water quality, visual quality, and hazardous materials. Noise thresholds would be exceeded at some residences in 2030, but these noise levels would occur under the No Build Alternative as well as the build alternatives. These noise levels are a result of background traffic volume growth and would be achieved even if the project were not constructed. (see the Noise Discipline Report). Substantial localized impacts related to these elements of the environment have not been identified that would result in disproportionate adverse impacts to minority or low-income populations.
- As described in the Affected Environment section, non-minorities account for approximately 90 percent of the population living in the study area compared to approximately 73 percent living in the city and 79 percent in the county. The study area also contains proportionately fewer individuals living under the poverty level than within the city and county. The likelihood that minority or low-income populations living in the study area would be disproportionately affected is therefore relatively low. Also, the fact that no residential displacements would occur under any of the alternatives and the fact that no localized areas of indirect impacts to residences have been identified limits potential impacts related to Environmental Justice.
- Finally, as described above in the Enhanced Public Involvement section, an ongoing public involvement program has been in place throughout the project. Throughout this process, no disproportionate impacts to minority or low-income populations have been identified other than the potential for job losses at businesses on Port of Seattle property.

A summary of business displacement for each of the alternatives is presented below. Few businesses would be displaced under each alternative (Figure 12).





**Figure 12**  
Potentially Affected Study Area Businesses and Structures

In order to protect the proprietary information of individual businesses, specific employment figures and other statistics are not provided separately. The overall employment demographics of the cluster of businesses are described in aggregate in the Affected Populations, Employment Composition section above. Also, see the Social, Economic, and Relocation discipline report for additional information regarding the interrelationships of the cluster of businesses on Port property.

## *No Build Alternative*

Under the No Build Alternative, the existing bridge would remain in place and no displacements or changes in traffic patterns would occur. No adverse or disproportionate impacts on minority or low-income populations are identified.

## *Alternative A*

Under Alternative A, one business, Anthony's Seafood Distributing, which operates with direct ramp access for its delivery trucks to the existing bridge, would be displaced. Alternative A would no longer provide this business with direct access to the bridge, and to continue with its current operations, Anthony's Seafood Distributing would need to move to another location. Anthony's Seafood Distributing was one of the interviewed businesses that indicated a relatively high percentage of minority employees and a number of relatively low-paying jobs. Anthony's Seafood Distributing employs 12 to 15 full- and part-time staff, including 9 minority employees; the remaining employees at this business are non-minority. All of these employees commute to work by automobile. If relocation of Anthony's Seafood Distributing were to result in a loss of jobs, a disproportionately high and adverse impact on minority and low-income workers would occur.

## *Alternative C*

Under Alternative C, two businesses would be displaced and loading areas at one business would need to be reconfigured. Anthony's Seafood Distributing would need to relocate as described under Alternative A.

In addition, the building housing Snider Petroleum would be removed, requiring that company to relocate. Approximately five full- and part-time employees, all non-minorities, would be affected at this business. All of these employees commute to work by automobile.

Trident Seafood would not need to be relocated; however, loading docks on the eastern side of the building would need to be reconfigured to allow adequate space for the surface road portion of this alternative to run between the railroad tracks and the Trident building. Approximately 83 percent of the 213 employees at Trident Seafood are minorities. About 65 percent of the workforce commutes by automobile, and the remaining 35 percent commutes by bus.

The warehouse currently occupied by Northwest Harvest would be removed under Alternative C; however, because of a short-term lease, the structure is expected to be unoccupied by the time of construction.

These businesses, located on Port property, are among the interviewed companies that indicated a high percentage of minority employees and a number of relatively low-paying jobs. If relocation of these three businesses were to result in a loss of

jobs, a disproportionately high and adverse impact on minority and low-income workers would occur.

## *Alternative D*

Under Alternative D, three businesses would be displaced. Anthony's Seafood Distributing would need to relocate as described under Alternative A. In addition, the building housing Snider Petroleum would be removed, requiring that company to relocate, and one of the five buildings housing City Ice's operations would be removed. Approximately 25 percent of the 85 employees at City Ice are minorities, and all but four of these employees commute to work by automobile. The warehouse occupied by Northwest Harvest also would be removed as described for Alternative C.

These businesses, located on Port property, are among the interviewed companies that indicated a high percentage of minority employees and a number of relatively low-paying jobs. If relocation of these three businesses were to result in a loss of jobs, a disproportionately high and adverse impact on minority and low-income workers would occur.

## **Evaluation**

The public involvement process has not revealed specific community perceptions of potential impacts as they relate to environmental justice issues. The potential loss of jobs created by business displacement on Port of Seattle property is the only identified impact that could have a disproportionately high and adverse effect on minority or low-income populations. Based on the public involvement process and demographic analysis, no other adverse impacts related to environmental justice have been identified.

With mitigation in place, as described in the next section, loss of jobs would be prevented and offsetting benefits could result. New facilities provided for relocated businesses could provide improved working environments for workers compared to existing conditions.

Overall, minority and low-income workers at displaced businesses would not experience adverse impacts that would be appreciably more severe or greater in magnitude than non-minority and non-low-income workers at the same businesses. Interviews with potentially displaced businesses revealed, however, that the Port businesses employ a relatively high number of minority and low-income workers compared to the population of the study area, the City of Seattle, and King County. Therefore, if any of the build alternatives were to create job losses, environmental justice populations would experience an appreciably more severe impact than the rest of the population.



# ***Avoidance, Minimization, Mitigation, and Enhancement***

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## **No Build Alternative**

Under the No Build Alternative, adverse or disproportionate impacts on minority or low-income populations have not been identified and no mitigation would be required.

## **Alternative A**

Under Alternative A, the only identified disproportionate adverse impact on minority or low-income populations would be the potential loss of jobs related to displacement of one business on Port of Seattle property (Anthony's Seafood Distributing). These impacts could be avoided and mitigated if the business were to be relocated so that no loss of jobs would occur. To accomplish this, the City of Seattle and the Port of Seattle would work with the affected business to find a suitable location in which to continue operations. The acquisition and relocation program would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources would be available to all relocated businesses without discrimination.

To avoid a loss of jobs, the new location for the displaced business would need to meet the following criteria:

- The new location would need to either be on the Port's Terminal 91/North Bay property or be located nearby within the City of Seattle so that employee commutes would not be significantly affected. If the new location were too far from the present location, employees might be forced to relocate their residences or seek other employment closer to their homes. The new location would also need to be in an area where the relocated business practices would not result in adverse social, economic, or environmental effects to other environmental justice populations.
- The new structure would need to be completed before the business is relocated so that disruption of business operations would be minimized.
- The new location and structure would need to have adequate facilities and access to infrastructure so that business operations would not be adversely affected in a way that would result in a loss of jobs.

Alternatives that would avoid business displacements were considered in the Magnolia Bridge Replacement Draft Alignment Study (HNTB Corporation 2003) but not advanced for further environmental review. These alternatives included replacing the existing bridge in the same place, constructing a bridge north of the existing structure that would connect with Thorndyke Avenue West, and constructing a surface road along the Elliott Bay shoreline. These alternatives were not considered further because they would have other impacts that would make them impractical. Such impacts included residential displacements, other business displacements, changes in traffic flow that would create community disruptions,

bridge closure during construction for up to four years, and shoreline permitting and environmental impacts. Please see the Alignment Study for additional information.

The public involvement process has not revealed specific perceptions of potential mitigation measures as they relate to environmental justice issues.

## **Alternative C**

Mitigation measures under Alternative C would be similar to those described under Alternative A. Under Alternative C, however, two businesses (Anthony's Seafood Distributing and Snider Petroleum) would need to be relocated and the eastern loading docks for Trident Seafood would be reconfigured. To ensure no loss of jobs, the new locations and reconfiguration for these businesses would need to meet the same criteria as described for Alternative A. Those relocation criteria would also apply to Northwest Harvest if, for some reason, the organization has not moved by the time of construction.

## **Alternative D**

Mitigation measures under Alternative D would be similar to those described under Alternative A. Under Alternative D, however, two businesses (Anthony's Seafood Distributing and Snider Petroleum) and a portion of a third business (City Ice) would need to be relocated. To ensure no loss of jobs, the new locations for these businesses would need to meet the same criteria as described for Alternative A. Those relocation criteria would also apply to Northwest Harvest if, for some reason, the organization has not moved by the time of construction.

## Project Objectives

The purpose of this project is to replace the existing Magnolia Bridge structure, approaches, and related arterial connections with facilities that maintain convenient and reliable vehicular and nonmotorized access between the Magnolia community and the rest of the City of Seattle. Because the existing bridge also provides the only public vehicular access to the land between North Bay, Smith Cove Park, Elliott Bay Marina, and U.S. Navy property, the project purpose also includes maintenance of access to these areas.

## Affected Environment

Executive Order 12898 on environmental justice requires federal agencies to take appropriate steps to identify and address “disproportionately high and adverse” effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Title VI of the Civil Rights Act of 1964 requires the federal government to consider the impact of its actions on minority or disadvantaged populations.

Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency*, addresses the need to improve access to federally conducted and federally assisted programs and activities for people who are limited in their English proficiency. Executive Order 13166 requires all federal agencies to prepare a plan to improve access to its federally conducted programs and activities by eligible LEP individuals.

The study area includes the 2000 U.S. Census Tract that encompasses the project alternative footprints and adjacent census tracts. The study area has proportionately fewer low-income and minority individuals compared to the City of Seattle and King County as a whole. The study area also contains fewer individuals classified as linguistically isolated or with limited English proficiency. Businesses potentially displaced by the build alternatives employ a proportionately high percentage of minority individuals. Also, a proportionately high percentage of jobs at potentially displaced businesses are low-paying, increasing the likelihood that low-income individuals would be affected.

A Public Involvement Plan has been prepared to identify and contact any minority, low-income, and limited English proficiency communities or individuals in the study area that may be affected by one of the alternatives.

## Impacts

No disproportionate or adverse impacts on minority, low-income, or limited English proficiency populations have been identified under the No Build Alternative.

Alternative A would displace one business (Anthony’s Seafood Distributing). Alternative C would displace two businesses (Anthony’s Seafood Distributing and Snider Petroleum) and require reconfiguration of Trident Seafood’s eastern loading docks. Alternative D would displace two entire businesses (Anthony’s Seafood

Distributing and Snider Petroleum) and would require removal of one building that partially houses a third business (City Ice). The warehouse currently occupied by Northwest Harvest would be removed under Alternatives C and D; however, because of a short-term lease, the structure is expected to be unoccupied by the time of construction. Displaced businesses under the build alternatives employ a relatively high percentage of minority individuals. Also, businesses that would be displaced provide a relatively high percentage of low-paying jobs, increasing the likelihood that low-income individuals would be affected.

## **Mitigation Measures**

No mitigation measures related to environmental justice are proposed for the No Build Alternative.

Impacts on minority and low-income employees of displaced businesses under Alternatives A, C, and D would be avoided and mitigated if the businesses were to be relocated so that no loss of jobs would occur. To accomplish this, the City of Seattle and the Port of Seattle would work with the affected businesses to find a suitable location in which to continue operations. The new locations would need to be nearby current locations so that employee commutes would not be significantly affected. Also, any new structures for displaced businesses would need to be completed prior to relocation so that disruption of business operations would be minimized and no loss of jobs would occur.

## **Comparison of Alternatives**

The No Build Alternative would not require any business displacements. Alternative A would require fewer business displacements and would potentially affect fewer minority and low-income employees than Alternatives C and D. However, with the mitigation measures implemented for displaced businesses as described above, no adverse or disproportionate impacts on minority or low-income populations would occur under any of the alternatives. The project would therefore meet the provisions of Executive Order 12898, as supported by Title VI of the Civil Rights Act.



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## ***Appendix A***

### ***Environmental Justice Checklist Summary***

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## Environmental Justice Checklist Summary

Item Number	Applicable	Document Location & Comments
I.	A.	X p. 3, Studies and Coordination (refers to Social Discipline Report and Section 457 of WSDOT Manual)  p. 1, Regulatory Framework (refers to 42 USC 2000d, Title VI of Civil Rights Act and E.O. 12898 and 13166)
II.	A.	X p. 1, Introduction (defines EJ populations) p. 25, Affected Populations, Race and Ethnicity (minority populations by census tracts) pp. 25-26, Affected Populations, Poverty Status (low-income populations by census tract)
	B.	X p. 2, Introduction, Analysis Approach
III.	A.	X p. 23, Affected Populations
	B.	X pp. 23-29, Affected Populations
IV.	A.	X pp. 33-36, Public Involvement Targeted to Environmental Justice
	B.	X pp. 33-36, Public Involvement Targeted to Environmental Justice
	C.	X pp. 35-36, Specific Public Involvement Efforts and Results
V.	A.	X p. 37, Definitions of Adverse and Disproportionate Impacts
	B.	X pp. 37-41, Assessment of Impacts
	C.	X p. 41, Evaluation
	D.	X pp. 40-41, Alternatives A, C, and D
	E.	X p. 41, Evaluation
	F.	X p. 41, Evaluation
VI.	A.	X pp. 43-44, Avoidance, Minimization, Mitigation, and Enhancement
	B.	X pp. 43-44, Avoidance, Minimization, Mitigation, and Enhancement
	C.	X pp. 43-44, Avoidance, Minimization, Mitigation, and Enhancement
	D.	X pp. 43-44, Avoidance, Minimization, Mitigation, and Enhancement
	E.	X p. 44, Avoidance, Minimization, Mitigation, and Enhancement
VII.	A.	X p. 45, Summary of Findings, Project Objectives
	B.	X p. 45, Summary of Findings, Affected Environment
	C.	X pp. 45-46, Summary of Findings, Impacts
	D.	X p. 46, Summary of Findings, Mitigation Measures
	E.	X p. 46, Summary of Findings, Comparison of Alternatives
	F.	The identified disproportionately high and adverse effect on minority and low-income populations created by job losses under the build alternatives can be avoided and mitigated. Therefore, a practicability analysis is not warranted.

Notes: X = Checklist item is applicable to the project. If left blank, item is not applicable  
Source: WSDOT Environmental Procedures Manual, Exhibit 458-3

