SR 519 Intermodal Access Project Phase 2: South Atlantic Corridor

Land Use Discipline Report

Prepared for

U.S. Department of Transportation
Federal Highway Administration

Washington State Department of Transportation

Prepared by

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February 2008

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LIST OF EXHIBITS

APPENDIX

Acronyms and Abbreviations

	A
AWVS	Alaskan Way Viaduct and Seawall
	C
C2	General Commercial 2
	F
FHWA	Federal Highway Administration
	I
IC	Industrial Commercial
IG2	General Industrial 2
IDM	International District Mixed
	N
NEPA	National Environmental Policy Act
	P
PSM	Pioneer Square Mixed
	S
SEPA	State Environmental Policy Act
SODO	South of Downtown
SR	State Route
	U
UI	Urban Industrial
	W
WSDOT	Washington State Department of Transportation

Summary

What is the proposed project and why is it needed?

The Washington State Department of Transportation (WSDOT) proposes to construct improvements to State Route (SR) 519 in Seattle as Phase 2 of the SR 519 Intermodal Access Project. The project would include three components:

- A proposed new Interstate 90 (I-90) off-ramp to South Atlantic Street (I-90 off-ramp)
- A proposed new South Royal Brougham Way railroad overpass (BNSF Railway overpass)
- Roadway widening along the existing South Atlantic Street east of First Avenue South and improvements to the intersection of First Avenue South and South Atlantic Street

SR 519 is an important thoroughfare for cars, trucks, and pedestrians in Seattle's South of Downtown (SODO) district. In 2004, WSDOT opened Phase 1 of the SR 519 project, consisting of the South Atlantic Street overpass (Edgar Martinez Drive) and a new on-ramp from South Atlantic Street to I-5 and I-90. The Proposed Action (SR 519 Intermodal Access Project – Phase 2: South Atlantic Corridor) would complete the SR 519 project by providing a direct westbound connection from the I-5/I-90 freeway system to the Seattle waterfront and Port of Seattle. Currently, westbound traffic from the freeway exits at Fourth Avenue South and follows a circuitous route to South Atlantic Street to cross safely over the BNSF Railway tracks located just east of Safeco Field and Qwest Field. Vehicular and pedestrian traffic on South Royal Brougham Way must use an at-grade railroad crossing. New

roadway structures are needed to allow vehicles and pedestrians to reach their destinations safely, quickly, and directly.

The Proposed Action would connect the existing westbound off-ramp from I-5 and I-90 to the current South Atlantic Street overpass, and it would construct improvements at the intersection of First Avenue South and South Atlantic Street and widen South Atlantic Street to accommodate traffic along this new route. A grade-separated crossing over the railroad tracks at South Royal Brougham Way would also be built.

This project would increase traffic mobility and safety by improving connections between Interstates 5 and 90 and Port of Seattle terminals, the Washington State Ferries terminal at Colman Dock, waterfront commercial interests, and the stadium area. The project would also allow people to walk more safely to and from the stadium area.

What is the affected environment?

The project team defined the study area as approximately the area bounded by I-5 to the east, Dearborn Street to the north, SR 99 to the west, and South Holgate Street to the south. The affected environment includes the footprint of the project, all construction and staging areas, and all areas where direct and indirect effects could occur.

How were the effects of the project on land use analyzed?

The project team used various applicable land use and transportation plans, policies, regulations, and maps from the City of Seattle to identify existing and potential future land uses in the study area and to assess the project's consistency with those plans, policies, and regulations. The Seattle Comprehensive Plan, Seattle's zoning code, the Livable South Downtown Report, the Greater Duwamish Neighborhood Manufacturing and Industrial Center Plan, the City of Seattle's Transportation Strategic Plan and Freight Mobility Plan, and the Port of Seattle's Container Terminal Access Study were reviewed to evaluate the relationship of the Proposed Action to

existing regulations and policies. The project team met with planners from the City of Seattle to discuss the proposed project and review current and potential future land uses in the study area. The goals of Destination 2030, the transportation element of Vision 2020, were reviewed, and the project team visited and thoroughly explored the site.

What land use effects would occur during construction of the project, and what mitigation is proposed?

Construction activities would take approximately 3 years, from 2009 to 2012, to complete. Temporary street closures and detours would be needed to accommodate construction equipment and vehicles. Construction equipment and activities may affect adjacent businesses and property owners during construction. This may result in loss of access to existing land uses along the project route. Proximity effects such as increases in noise levels or dust from construction activities would also occur. Effects such as these could temporarily discourage the public from visiting the area. However, construction activities would be stopped before, during, and after sporting and other special events to help ensure that public attendance at, and enjoyment of, these events is not impaired.

What land use effects would occur during operation of the project, and what mitigation is proposed?

Apart from small right-of-way acquisitions totaling about 5,415 square feet required to build the project, and the conversion of vacant WSDOT property zoned IG2 to transportation use, operation of the proposed project is not expected to affect or influence any existing or future land uses.

What cumulative effects would there be on land use?

The small right-of-way acquisitions noted above would convert about 5,415 square feet of land from industrial or commercial to a transportation land use, but this conversion could actually help to reduce the cumulative adverse effect on land use of past and future projects in the study area. Past projects have contributed to a proliferation of nonindustrial uses in the study

area, making it less conducive to sustained industrial use. By improving freight movement, the Proposed Action could help to offset this effect, making it more likely that industrial and freight-dependent businesses will choose to remain in the area.

Are any of the identified effects considered substantial?

The Proposed Action would not have any substantial effects on land uses in the study area.

What effects on land use would occur if the Proposed Action is not built?

With time, land use in the study area would continue to change under the No Build Alternative, but for reasons unrelated to SR 519. Land use adjacent to the roadway in the study area could be negatively affected by increased congestion due to continuing conflicts between the BNSF Railway and vehicular traffic, which raises operating costs of freight movement and could discourage patronage of local businesses and attendance at stadium events, making these land uses less viable.

Chapter 1 Introduction

1 Why is land use considered in this report?

The purpose of this Land Use Discipline Report is to evaluate the SR 519 Intermodal Access Project – Phase 2 for effects on land use within the land use study area (see Chapter 3). The analysis includes a comparison of how the Proposed Action and No Build Alternative would affect current and planned land uses and an evaluation of consistency with existing city and regional land use plans and development regulations. The report also suggests a range of mitigation measures to relieve negative effects on land use during project construction. Analysis of land use effects is required under the National Environmental Policy Act (NEPA) for actions sponsored, funded, permitted, or approved by federal agencies. The State Environmental Policy Act (SEPA) requires analysis of a project's impact on the natural and built environment.

2 What are the key points of this report?

Construction and operation of the Proposed Action would not result in any adverse effects on land use. The Proposed Action is consistent with, and would assist in implementing, goals and objectives found in the applicable land use plans and regulations. Construction and operation of this project would be compatible with planned development in the study area. The Proposed Action is designed to improve westbound access between Interstates 5 and 90 and the Seattle waterfront and would improve freight mobility and the movement of products to and from the Port of Seattle terminals.

The SR 519 study area is located near the northern edge of the Greater Duwamish Manufacturing and Industrial Center. The study area is situated where Seattle's downtown meets the

industrial area, and it includes a mix of industrial, manufacturing, warehouse, and commercial and office uses. It has historically been an industrial, manufacturing, and warehousing area, dependent on freight mobility. However, over the last few decades, other uses, such as sports stadiums and commercial businesses, have been sited in the area because of its proximity to the downtown core. These new uses are not compatible with the historic uses. They have led to increased traffic congestion that inhibits freight movement, and higher land values that affect the viability of manufacturing and industrial land uses. A major purpose of the Proposed Action is to increase freight mobility for the freight-dependent businesses in the area, thereby increasing viability for those land uses.

Chapter 2 Description of Alternatives

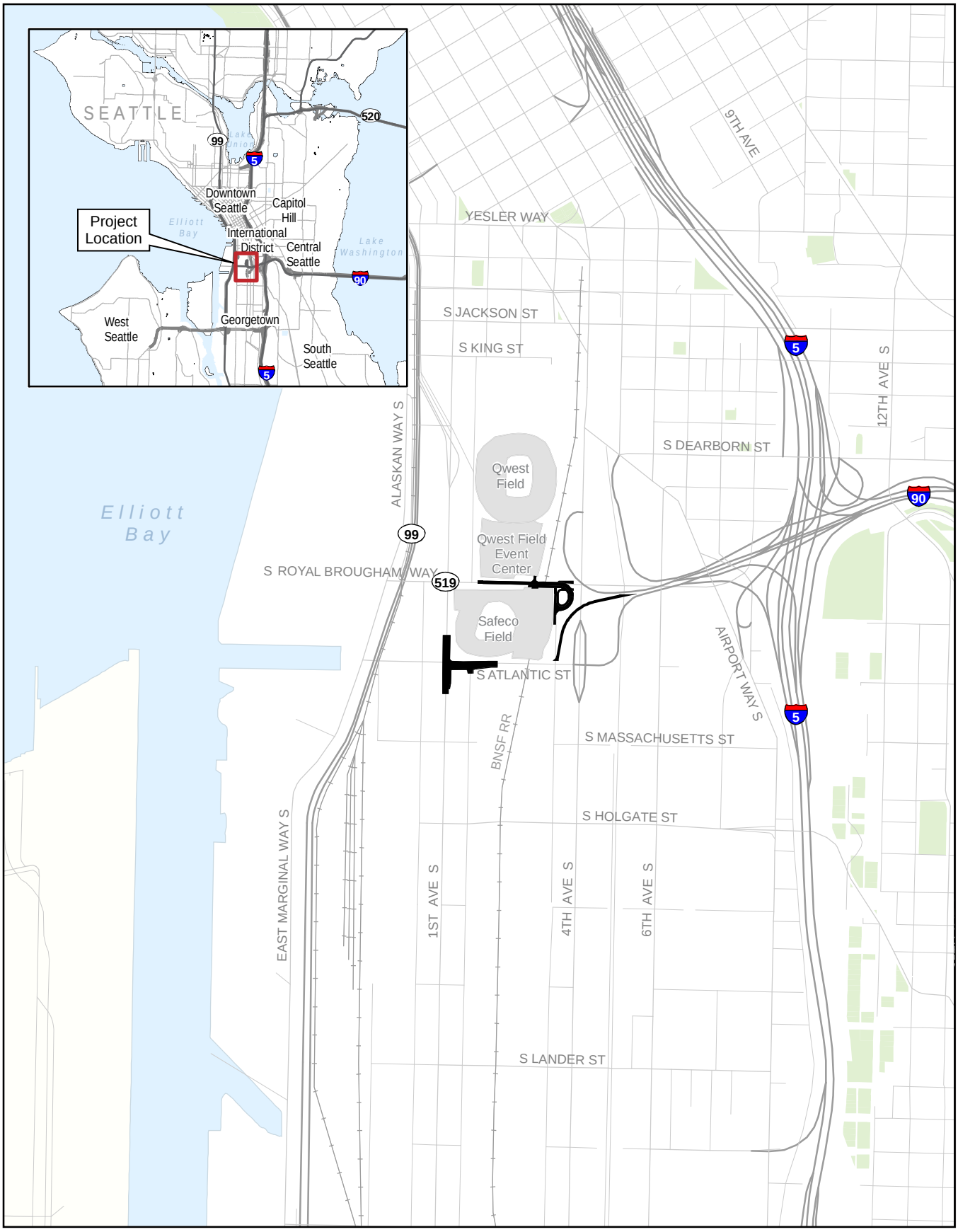
SR 519 is an important thoroughfare for cars, trucks, and pedestrians in Seattle's South Downtown (SODO) district (Exhibit 2-1). In 2004, WSDOT opened Phase 1 of the SR 519 project, consisting of the South Atlantic Street railroad overpass (Edgar Martinez Drive South) and a new eastbound on-ramp from South Atlantic Street to I-5 and I-90. The overpass separates road and railway traffic at Third and Fourth Avenues South and improves access to the freeway system from important waterfront facilities such as the Port of Seattle terminals, railroad freight yards, and the Washington State Ferries terminal at Colman Dock.

New South Atlantic Street overpass built in SR 519 Phase 1

The Phase 1 project had four main components which:

- Provided the eastbound connection from the waterfront to I-5 and I-90 via South Atlantic Street
- Removed the old eastbound I-90 ramp on Fourth Avenue South
- Made improvements to South Atlantic Street between First Avenue South and the Alaskan Way South/East Marginal Way intersection
- Constructed the South Weller Street Pedestrian Bridge

When Phase 1 opened, eastbound freight, ferry, and event traffic immediately moved more freely, because connections from the Port of Seattle, waterfront, and stadium area to the freeway system were improved.



Source: City of Seattle (2007) and King County (2006)

Stadiums
Project

N
0 1,000 Feet

Exhibit 2-1
Vicinity Map

1 Why is the Phase 2 project needed?

SR 519 provides a vital roadway system for east-west traffic through Seattle, but it currently does not assist in the efficient westbound movement of cars, trucks, trains, and pedestrians through Seattle's SODO district. The route passes through an area that has changed so much in recent years that the roadway arrangement is not well suited to present conditions. A new design and new roadway structures are needed to allow vehicles and pedestrians to reach their destinations safely, quickly, and more directly.

This project would help to resolve several issues:

- Safety concerns from traffic and people crossing surface-level railroad tracks in the stadium area
- The expected increase in rail traffic and pedestrian crossings at South Royal Brougham Way when Sound Transit Central Link light rail service begins in 2009, resulting in safety concerns and travel delays
- Poor westbound access between I-5/I-90 and the Seattle waterfront, especially the Port of Seattle terminals and the Washington State Ferries terminal at Colman Dock
- Delays in moving products between Port of Seattle terminals and local, regional, and national markets

2 What is the purpose of the project?

This project would improve traffic mobility and safety by improving westbound connections between I-5/I-90 and the Port of Seattle terminals, the Washington State Ferries terminal at Colman Dock, waterfront commercial interests, and the stadium area. The project would allow people to walk more safely to and from the stadium area.

The purpose of the project is to:

- Provide a more direct route between I-5/I-90 and the Seattle waterfront, so that westbound freight, commuters, and local traffic can move more safely and efficiently through the stadium area

- Improve safety and reduce railroad and vehicle delays at the surface-level rail crossing on South Royal Brougham Way west of Fourth Avenue South
- Improve safety for people walking to events, work, and neighborhood destinations
- Reduce truck and rail traffic conflicts so that freight operators can move products more efficiently between Port of Seattle terminals and markets

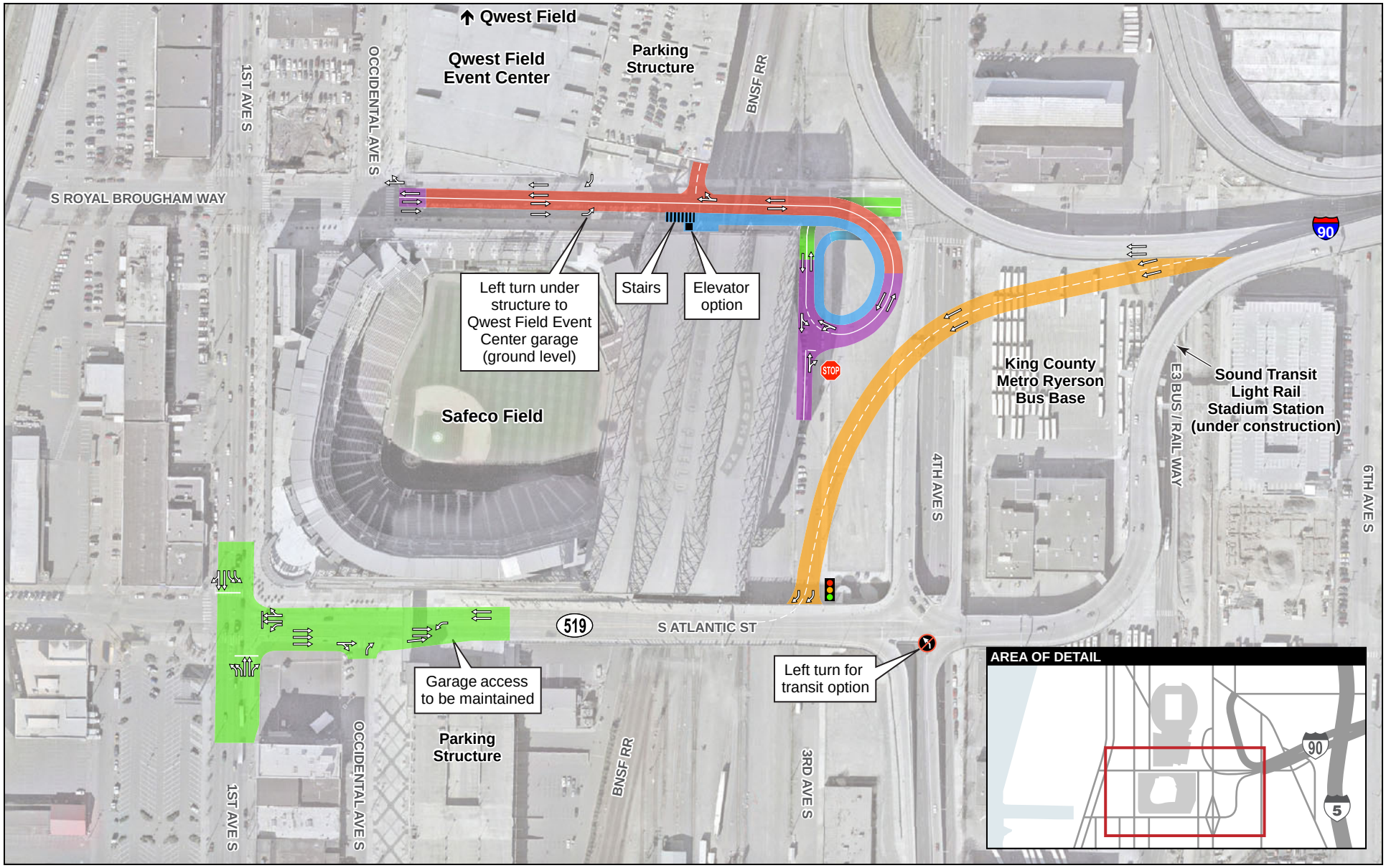
3 What are the project alternatives?

Two alternatives were analyzed for this report: the Proposed Action and the No Build Alternative. The Proposed Action, which has been designed to meet current and projected future traffic conditions, was developed following the completion of an earlier NEPA Environmental Assessment and associated Finding of No Significant Impact (FONSI) (USDOT et al., 1997) and builds on the more recent screening and evaluation of 21 preliminary Phase 2 options by WSDOT in a feasibility study (KPFF et al., 2006).

Proposed Action

The Proposed Action (SR 519 Intermodal Access Project Phase 2: Atlantic Corridor) would connect the existing westbound off-ramp from I-5 and I-90 to the existing South Atlantic Street overpass. It would also provide improvements at the intersection of First Avenue South and South Atlantic Street to accommodate traffic more efficiently along the route. In addition, it would build a grade-separated crossing over the railroad tracks at South Royal Brougham Way. These proposed improvements are described in more detail below and are illustrated on Exhibit 2-2. Traffic flow with the proposed improvements in place is shown in Exhibit 2-3. All proposed improvements would comply with the Americans with Disabilities Act of 1990 (ADA).

I-90 Off-Ramp to South Atlantic Street. A new two-lane elevated ramp connection would be built from westbound I-90 to terminate at a signalized T-intersection on the South Atlantic Street railroad overpass.

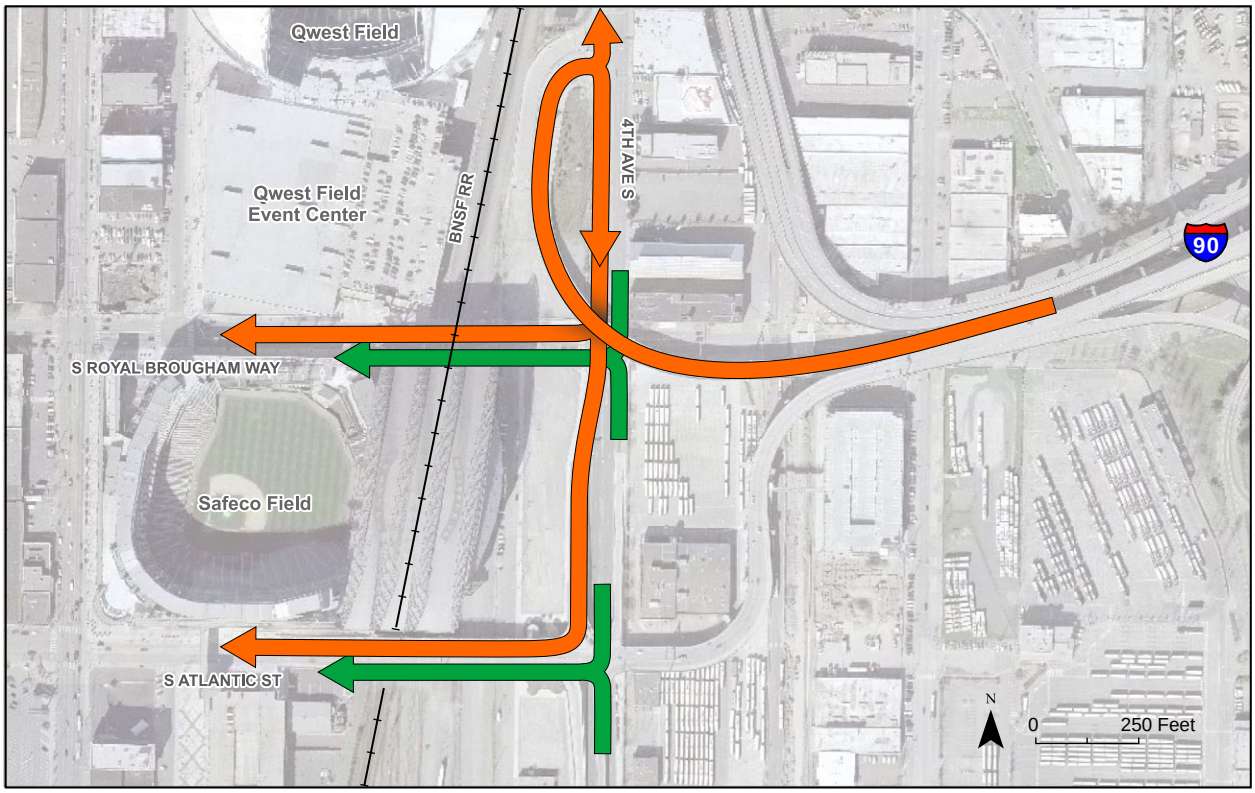


Arterial Bridge
Elevated Ramp
Pedestrian Bridge
Surface Improvements
Fill Embankment

N
0
250 Feet

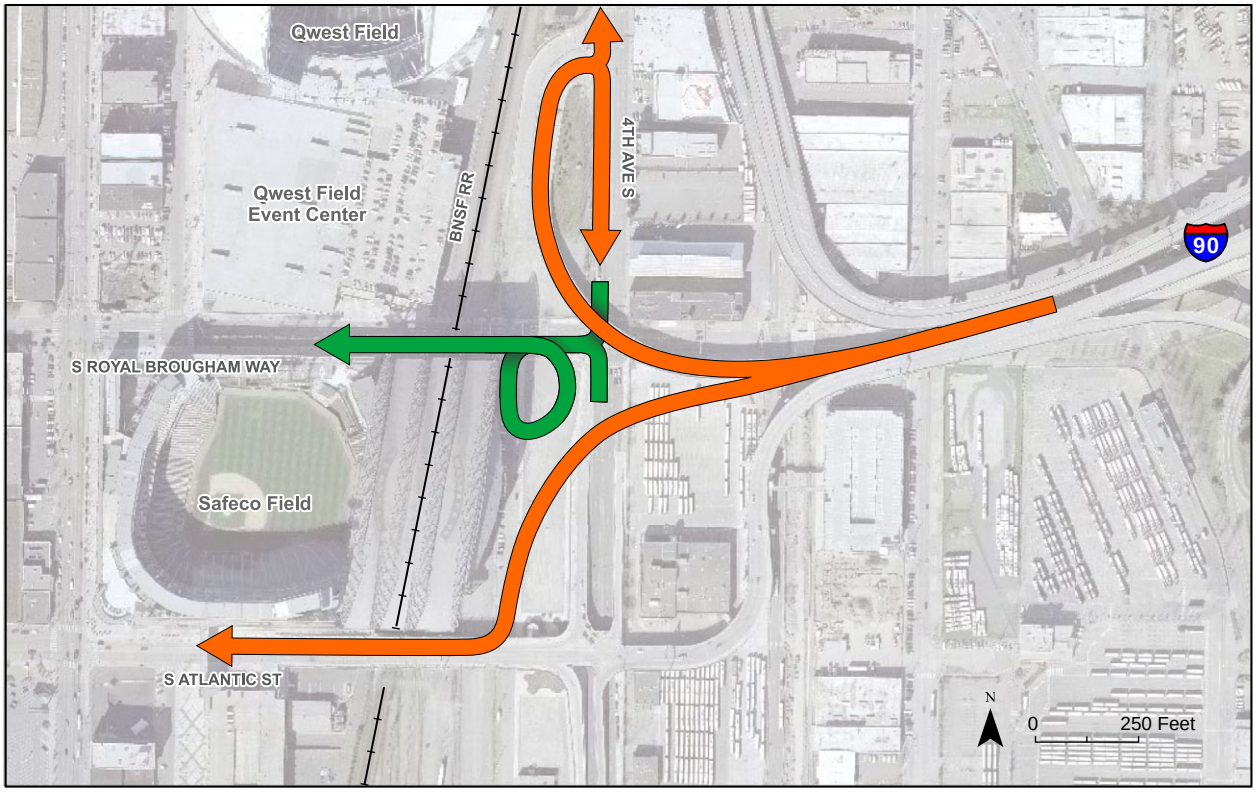
Exhibit 2-2
Project Elements

SR 519 Intermodal Access Project - Phase 2
February 2008



Existing Westbound Regional Routes
Existing Westbound Local Routes

Existing Westbound Travel Routes



Proposed Westbound Regional Routes
Proposed Westbound Local Routes

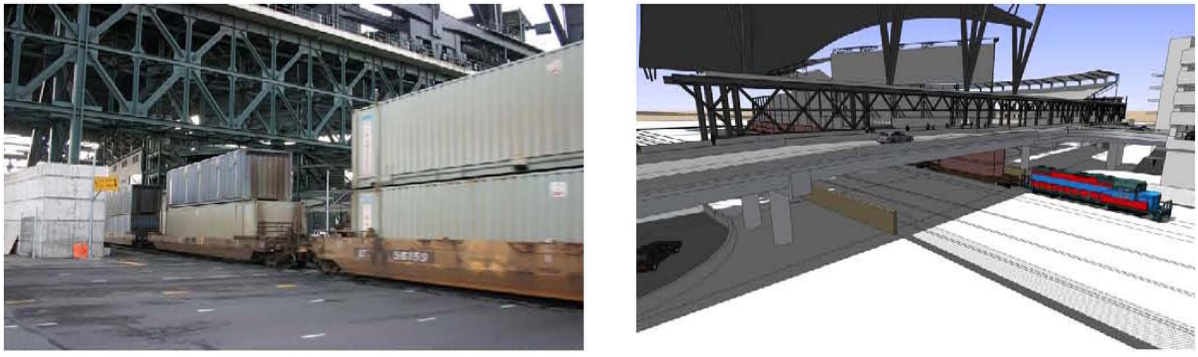
Proposed Westbound Travel Routes

Exhibit 2-3
Existing and Proposed Westbound Travel Routes

The new South Atlantic Street connection would serve westbound freeway traffic exiting I-90 and I-5. The new ramp would be entirely elevated, passing over Fourth Avenue South and Third Avenue South and connecting to the South Atlantic Street overpass southeast of Safeco Field. Exiting northbound I-5 traffic would be routed to South Atlantic Street, while exiting southbound I-5 traffic would have the option of using either the new off-ramp to South Atlantic Street or the existing I-90 off-ramp to Fourth Avenue South.

South Royal Brougham Way Railroad Overpass. The South Royal Brougham Way at-grade railroad crossing would be closed, but it could possibly be opened to public services in the event of a major emergency in the vicinity. A new two-lane elevated structure would be built, connecting Occidental Avenue South to Third Avenue South. The new overpass would transport vehicular, pedestrian, and bicycle traffic over the railroad tracks and provide a new connection and entrance from South Royal Brougham Way to the second level of the Qwest Field Event Center parking garage. The new ramp would accommodate local two-way traffic and provide ADA-compliant access.

Proposed ramp at east end of South Royal Brougham Way railroad overpass



South Royal Brougham Way existing at-grade railroad crossing (left) and proposed overpass (right)

Improvements to the Intersection of First Avenue South and South Atlantic Street. The project would widen the intersection by adding additional turn lanes to each approach. Existing parking lanes along First Avenue South would be converted into travel lanes, with a new eastbound lane added to South Atlantic Street. Sidewalks along the southern edge of

South Atlantic Street east of First Avenue South would be relocated to the south to accommodate the added eastbound lane.

Construction Components

Construction of the SR 519 Phase 2 project could take about 3 years, and WSDOT is exploring ways to accelerate this schedule. Construction would involve three project components:

- Improvements to the intersection of First Avenue South and South Atlantic Street could begin first, with construction starting in 2009 and lasting 6 to 9 months.
- Construction of the new I-90 ramp connection to the South Atlantic Street overpass could last 15 to 18 months and could begin as improvements to the intersection of First Avenue South and South Atlantic Street are underway.
- Construction of the new South Royal Brougham Way railroad overpass, most likely beginning in 2010, could overlap with construction of the new I-90 off-ramp and last 18 to 21 months.

Proposed Construction Schedule

Access for emergency service vehicles would be maintained at all times. A construction management plan (CMP) would be developed to optimize the sequencing of the SR 519 Phase 2 project elements. The CMP would identify approaches that best

coordinate with and minimize unwanted effects on the following:

- Stadiums and Event Center activities
- Port of Seattle container operations
- Washington State Ferries
- BNSF Railway mainline and yard operations, AMTRAK mainline operations, and Sound Transit commuter rail operations
- Sound Transit Link light rail operations, Sounder commuter rail service, and Regional Express bus operations
- King County Metro Ryerson Bus Base operations and Metro bus service throughout the affected area, including through-routes operating within the area, and access to the bases and downtown Seattle transit tunnel
- Greater Duwamish Manufacturing and Industrial Center freight operations

Temporary construction staging areas would be required to store equipment and materials during construction. A gravel lot owned by WSDOT, bounded by South Atlantic Street and South Royal Brougham Way, and Third Avenue South and Fourth Avenue South, would serve as the primary construction staging area for the SR 519 Phase 2 project. This lot is vacant, and no adverse environmental effects are expected from staging at this location. Other temporary staging areas would be determined through consultation with King County and the City of Seattle during project design.

No Build Alternative

Under the No Build Alternative, the three proposed Phase 2 components discussed above would not be built. Westbound traffic exiting from I-5 and I-90 would continue to flow as shown in Exhibit 2-3.

4 What permits would be required to build the project?

The SR 519 Phase 2 project would be built under close regulatory scrutiny. WSDOT would apply to the State of Washington, King County, and the City of Seattle for a number of permits and approvals. They would most likely include, but not necessarily be limited to:

- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit (Washington State Department of Ecology)
- Wastewater Discharge Approval (King County)
- Street Use Permit (City of Seattle)
- Side Sewer Permit (City of Seattle)
- Noise Variance (City of Seattle)

WSDOT will confirm the requirement for these and other permits as engineering design and construction planning proceed in coordination with the permitting authorities.

Chapter 3 Methodology

1 What is the study area for land use and how was it selected?

The project team defined the study area as roughly the area bounded by Interstate 5 to the east, Dearborn Street to the north, State Route 99 to the west, and South Holgate Street to the south (Exhibit 3-1). The team selected this as the study area because direct and indirect effects of the Proposed Action, during construction and operation, could occur there.

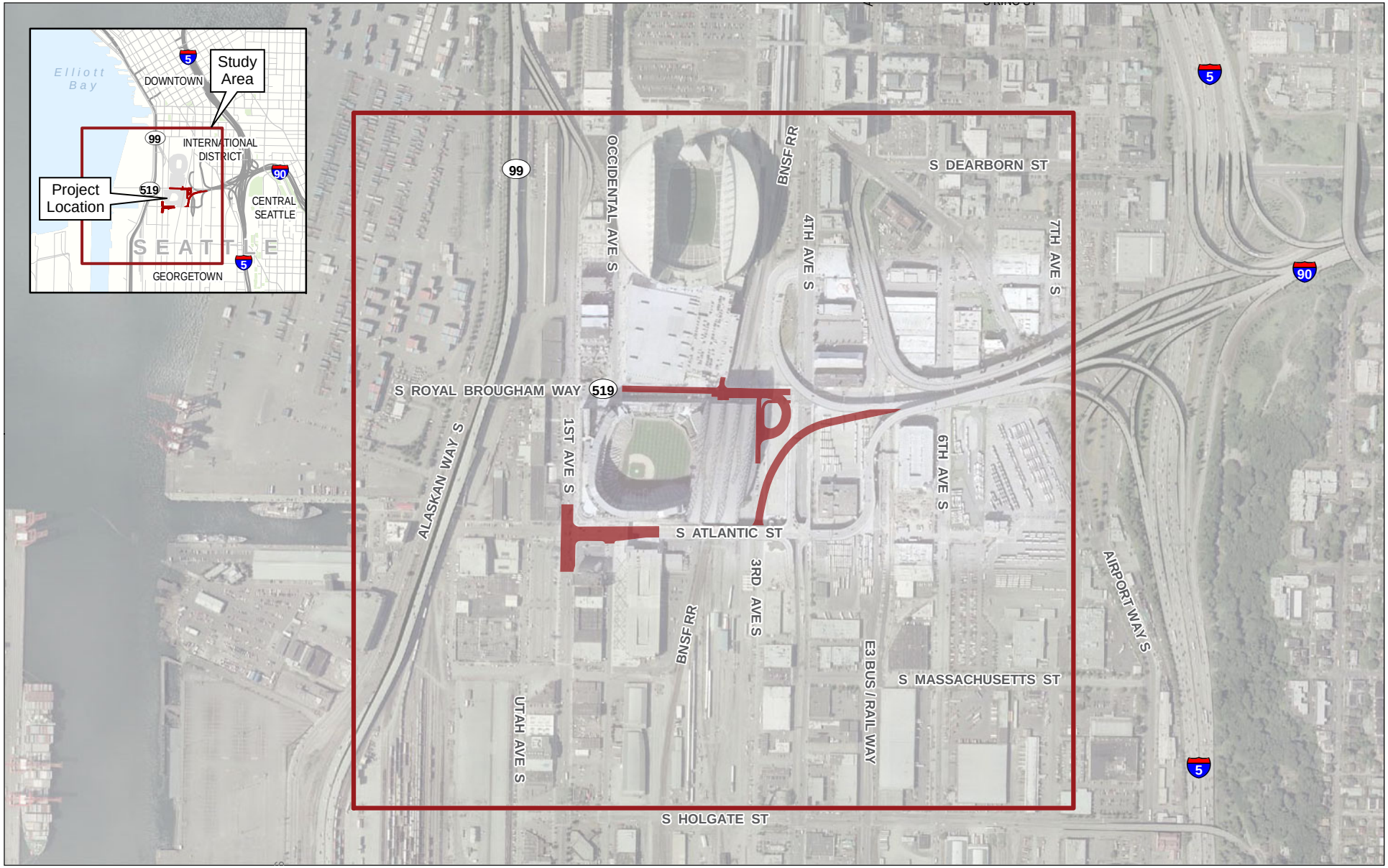
2 What information did the project team collect and review?

The project team collected and reviewed regional and local plans, regulations, and maps from the City of Seattle to identify the existing and potential future land uses within the study area, and to evaluate the Proposed Action's relationship to existing plans and regulations and any effects on existing and future land uses. Plans and regulations reviewed include:

- *Vision 2020 and Metropolitan Transportation Plan*, Puget Sound Regional Council, 1995.
- *Destination 2030 Update,* Puget Sound Regional Council, 2007
- *City of Seattle Comprehensive Plan, Toward a Sustainable Seattle, City of Seattle*, 1994, as amended 2004.
- *Freight Mobility Action Plan*, 2005 Plan Update, City of Seattle, Department of Transportation, 2005.
- *Greater Duwamish Manufacturing and Industrial Center Plan*, City of Seattle, 1999.
- *Container Terminal Access Study*, Port of Seattle, 2003.

What is a comprehensive plan?

Comprehensive plans are mandated for cities and counties by the Washington Growth Management Act (RCW 36.70A). These plans must provide specific guidance for growth and land use in their communities and include discussion of the following elements: land use, housing, capital facilities, transportation, economic development, and parks and recreation. Comprehensive plans must be updated at least every 7 years.



Source: City of Seattle (2007) King County (2006) and King County (2002)

Project

Study Area

N

0 1,000 Feet

Exhibit 3-1
Study Area

- *Livable South Downtown Phase I Staff Report*, City of Seattle, 2006.
- Seattle Municipal Code, Title 23, Land Use, City of Seattle Department of Planning and Development.
- *Transportation Strategic Plan* (as amended 2005). City of Seattle Department of Transportation, 2005.

The project team also met with planners from the City of Seattle to discuss the proposed project and examine current and proposed land use in the study area.

3 What methods were used to evaluate the potential effects of the Proposed Action and the No Build Alternative

The project team used the guidance in Chapter 451 of the WSDOT *Environmental Procedures Manual* (2007) to evaluate the potential land use effects in the study area. The project team compared the existing land uses with the Proposed Action to determine if there would be any changes to land use. The Proposed Action was also compared with the plans and regulations to determine if the Proposed Action would be compatible.

4 What would be considered a "substantial" effect on land use?

A substantial effect on land use would occur if an alternative would prevent or severely limit the ability of multiple property owners to use their property for an existing or allowed land use, if it was not consistent with relevant plans and regulations, or if it would induce land use not compatible with existing plans.

Chapter 4 Affected Environment

1 What are the current land uses within the study area?

Exhibit 4-1 shows current land uses in the study area. The primary land uses in the immediate area of the project are industrial/terminal/warehouse (Port of Seattle Terminals, King County Metro bus bases), recreational/entertainment (Qwest Field, Qwest Field Event Center, Safeco Field), and office and parking uses. Other uses in the study area include but are not limited to retail/service businesses, offices, and a small number of residences (multi-family).

The majority of the study area is located within an area designated by the City of Seattle as the Greater Duwamish Manufacturing and Industrial Center, the largest center for industry in Washington State and the location of approximately 72,700 jobs. The boundaries of this center extend from approximately South Dearborn Street in the north to the Tukwila city limit in the south. The neighborhood plan for this area, the *Greater Duwamish Manufacturing and Industrial Center Plan* (Greater Duwamish Planning Committee, 1999), indicates that primary land uses should consist of manufacturing and industrial.

2 What is the current zoning within the study area?

The study area is entirely within the city limits of Seattle, and therefore City of Seattle zoning regulations apply. Current zoning in the study area consists of the following zones, which are illustrated on Exhibit 4-2.

Industrial Commercial (IC) – This zone is intended to promote development of businesses that incorporate a mix of industrial and commercial activities, such as light manufacturing and research and development facilities, while also allowing a wide range of other employment activities. Examples include sports and recreation facilities, food processing and craftwork, warehouses, and heavy commercial sales and service.

What is zoning?

Land use regulations enacted by a city or county to create districts or zones that establish permitted and special uses within those zones. The basic zoning categories are: agricultural, residential, commercial and industrial. Land uses in each district are regulated according to type, density, height, lot size, placement, building bulk, and other development standards.

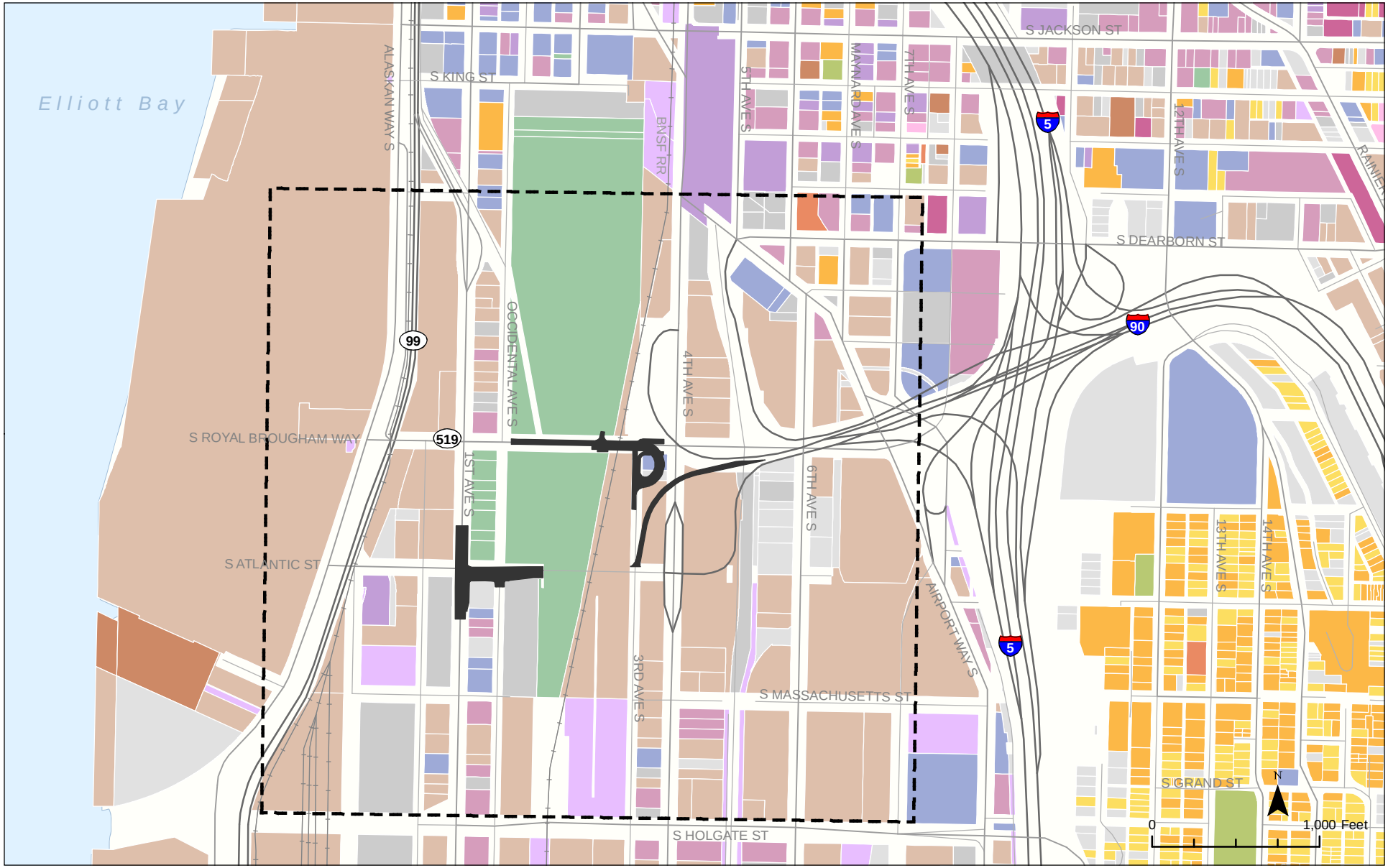


Exhibit 4-1
Existing Land Use

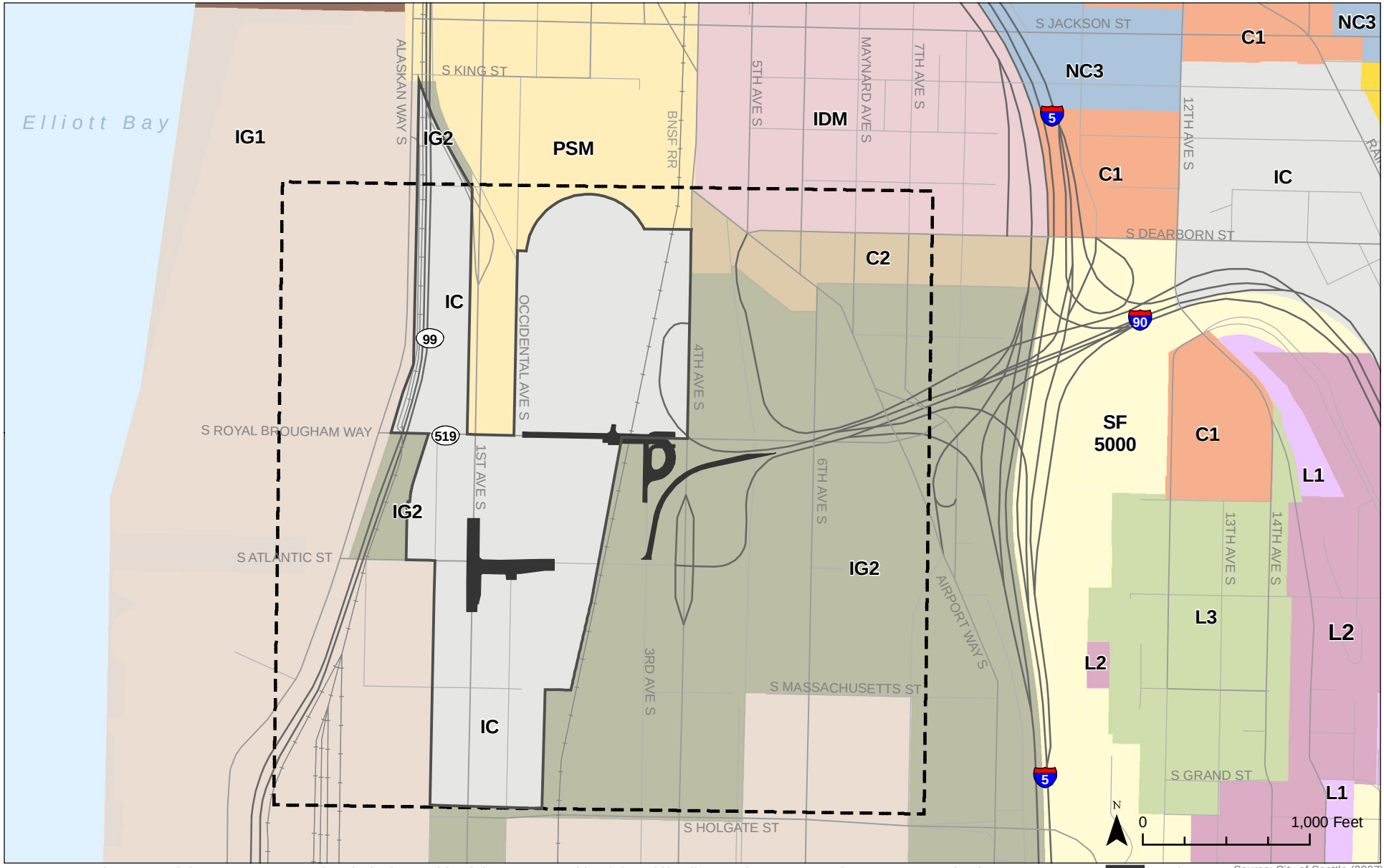


Exhibit 4-2
Zoning

- General Industrial 2 (IG2) – This zone allows for a broad range of industrial uses where additional commercial activity could improve employment opportunities and the physical condition of the area without conflicting with industrial activity. Examples include eating and drinking establishments, heavy commercial sales and service, sports and recreation facilities, hospitals, and heavy manufacturing.
- General Industrial 1 (IG1) – This zone allows for a broad range of industrial uses that are more intensive and less commercially oriented than IG2. Examples include community and family support centers, heavy commercial sales and service, warehouses, cargo terminals, and heavy manufacturing.
- Pioneer Square Mixed (PSM) – This zone provides for less intensive uses than surrounding zoning in keeping with the historic designation of the Pioneer Square District. All uses are allowed except more intense uses such as heavy manufacturing, skating rinks and bowling alleys, and heavy commercial sales and service.
- General Commercial 2 (C2) – The C2 zone is an auto-oriented, primarily non-retail commercial area that permits a wide range of commercial activities serving a city-wide function. These areas provide employment opportunities, business support services, and locations for light manufacturing and warehouse uses, and may also provide for residential uses at limited densities. Examples include theater and spectator sports facilities, multi-purpose retail sales, schools, and warehouses.
- International District Mixed (IDM) – This zone is characterized by a mix of uses contained in low- and medium-scale structures in keeping with the historic designation of the International District. All uses are allowed except more intense uses such as heavy manufacturing, skating rinks and bowling alleys, and heavy commercial sales and service.

- Stadium Overlay Transition Area – The intent of this district is to improve the pedestrian environment of the area while also protecting the surrounding industrial uses and encouraging uses complementary to a stadium. Uses such as museums and religious facilities are allowed, while uses related to heavy manufacturing, schools, solid waste management, and drive-in businesses are not allowed.

3 What are the current land use, shoreline, critical area, and transportation plans related to the study area?

Land use in the study area is regulated through a number of regional and local land use and transportation plans and development regulations for implementing local plans. The project team determined the project's consistency with regional and City of Seattle land use and transportation plans by evaluating the Proposed Action and by assessing whether these changes support the type of growth and meet the needs of the community, as outlined in the overall land use and transportation plans.

There are no shorelines within the study area. The nearest shoreline is approximately 900 feet west of the study area boundary and approximately 2,000 feet from the project limits. Since there are no parcels associated with the Proposed Action that would require any shoreline regulations, no discussion of shoreline plans is required.

Regional Land Use and Transportation Plans

Vision 2020/Destination 2030

Vision 2020, prepared by the Puget Sound Regional Council (PSRC, 1995), is the long-range growth and transportation strategy for the Central Puget Sound Region. *Vision 2020* provides guidance for the region's land use and transportation planning decisions. *Vision 2020*'s focus is to contain growth, concentrate new employment into urban centers, and link the centers with a high-quality multimodal transportation system. *Vision 2020* contains many goals and policies that are directly and indirectly applicable to the Proposed Action.

Destination 2030 is the regional transportation planning document that serves as the basis for state and federal transportation expenditures within the region. The transportation-related plans of the cities, counties, transit agencies, and the region form the basis for the *Destination 2030* plan.

Specific policies related to the Proposed Action included in *Vision 2020* and *Destination 2030* include:

- RT-8: Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.
- RT-8.34: Support the development of roadways when they are needed to provide more efficient connections for a comprehensive road network to move people and goods when such roads will not cause the region to exceed air quality standards.
- RT-8.35: Support appropriate development of freight access improvements for greater reliability and efficiency in the movement of freight and goods. Such improvements may include but are not limited to consideration of exclusive freight access facilities and/or preferential freight access where appropriate.
- RT-8.36: Transportation investments in major facilities and services should maximize transportation system continuity and be phased to support regional economic development and growth management objectives.

Local Land Use and Transportation Plans

Seattle Comprehensive Plan

Seattle's Comprehensive Plan: Towards a Sustainable Seattle (2004-2024) is a 20-year plan to guide growth and development in Seattle, which makes basic policy choices and provides a flexible framework for adapting to real conditions over time. The plan can be amended annually to address changes in specific goals and policies for land use, transportation, economic development, and specific objectives

for the City's neighborhood planning areas. The plan designated the Greater Duwamish Manufacturing/Industrial Center as an industrial area, with a focus on providing family-wage industrial type jobs and limiting incompatible uses such as residences and gathering places for the general public.

The project team reviewed the relevant goals and policies of the Greater Duwamish Manufacturing/Industrial Center (GD) and Transportation (T) elements of Seattle's Comprehensive Plan. The relevant goals and policies include:

- GD-G2: Public infrastructure adequate to serve business operations in the Duwamish Manufacturing/Industrial Center is provided.
- GD-G9: A high level of general mobility and access is attained within the Duwamish Manufacturing/Industrial Center.
- GD-G10: The transportation network in the Duwamish Manufacturing/Industrial Center makes appropriate connections and minimizes conflicts between different travel modes.
- GD-G12: The transportation network in the Duwamish Manufacturing/Industrial Center emphasizes the mobility of freight and goods.
- GD-P21: Strive to enhance access throughout the Duwamish Manufacturing/Industrial Center by means such as signal coordination, roadway channelization, grade separation, and pavement rehabilitation.
- GD-P27: Pursue opportunities and develop partnerships to provide grade separations between rail and auto/truck traffic along key east-west routes for enhanced speed and reliability while maintaining safety for both travel modes.
- GD-P31: Strive to facilitate east-west freight movement in the Duwamish Manufacturing/Industrial Center, particularly through the Royal Brougham, Spokane Street, and Michigan Street corridors. (This goal was adopted from the Greater Duwamish Manufacturing and Industrial Plan,

which was written in 1999. At that time, the section of South Atlantic Street east of First Avenue South did not exist. Since then, it has become a major freight transportation corridor and should be included with the preceding corridors.)

- GD-P32: Strive to maintain efficient freight movement along the designated truck routes in the Duwamish Manufacturing/Industrial Center.
- GD-P35: Strive to minimize disruptions to freight mobility caused by construction (including construction of transportation facilities) in the Duwamish Manufacturing/Industrial Center. (See Chapter 5 for a summary of options to mitigate temporary construction-related effects.)
- TG6: Promote efficient freight and goods movement.
- TG19: Preserve and improve mobility and access for the transport of goods and services.

Duwamish Manufacturing/Industrial Center Plan

Neighborhood plans augment the Seattle Comprehensive Plan city-wide perspective, to more specifically address individual neighborhood planning areas. The Greater Duwamish Manufacturing and Industrial Center (M and I) Plan was created in 1994 through the adoption of the 20-year Seattle Comprehensive Plan. The Duwamish Manufacturing/Industrial (M and I) Center Plan's goals and policies relevant to the Proposed Action include:

- LU3.3: Protect and improve landside access for freight (particularly east-west access).
- Goal T1: Improve general mobility and access.
- T1.2: Maintain and improve area-wide access throughout the M and I Center through the use of signal coordination, roadway channelization, grade separation, elimination of modal conflicts, and pavement rehabilitation to the existing roadway system.
- Goal T2: Eliminate conflicts between modes.

- T2.1: Grade separate major east-west corridors within the M and I Center to reduce and/or eliminate conflicts between vehicular and rail modes to improve safety and mobility for pedestrians, bicycles, vehicles and trucks.
- Goal T3: Maintain and improve freight mobility within the M and I Center.
- Pol T3.1: Maintain and improve east-west mobility throughout the area, particularly along three major east-west corridors for moving freight and goods: Royal Brougham Way (SR 519), Spokane Street, and Michigan Street. This plan was written in 1999. At that time, the section of South Atlantic Street east of First Avenue South did not exist. Since then, it has become a major freight transportation corridor and should be included with the preceding corridors.
- Pol T3.2: Improve designated truck routes and roadways within the M and I Center to maintain efficient movement of freight.
- Pol T3.6: Maintain and enhance intermodal freight connections between the State highway system, rail yards, barge terminals, Port terminals and facilities, airports, and warehouse/distribution centers.
- Goal T6: Provide safe transportation infrastructure.
- Pol T6.1: Reduce or eliminate conflicts between travel modes.
- Pol. T7.3: Grade separate mainline rail crossings through the Duwamish M and I Center to enhance speed and reliability for passenger and freight rail operations.

Transportation Strategic Plan

The Transportation Strategic Plan (TSP) (City of Seattle, 1998) describes the actions the Seattle Department of Transportation (SDOT) plans to take to accomplish the transportation goals and policies in the Comprehensive Plan, and the Puget Sound Regional Council's Vision 2020/Destination 2030 plan. It is the overarching policy document for SDOT's transportation

planning and actions. Strategies related to the Proposed Action include:

- S1.2: Evaluate and implement capital improvement projects on arterial streets to enhance traffic operations (e.g., improving direct linkages with highways and freeways, and constructing grade separations where appropriate).
- W1.3: Consider overpasses over major pedestrian barriers.
- GS1: Maintain a street and highway network for trucks.
- GS1.5: Pursue grade separation of key truck streets at heavily used railroad crossings.
- GS3: Improve freight access to manufacturing and industrial areas.
- GS6.1 Build arterial street projects to benefit freight.

Freight Mobility Plan

The *Freight Mobility Strategic Action Plan* (FMP) (City of Seattle, 2005b), the most recent such plan, included a list of actions to be carried out by SDOT to benefit freight mobility pursuant to the *Seattle Comprehensive Plan* and the *Seattle Transportation Strategic Plan.* Actions included railroad grade separations, truck guide signing, street improvements, and ongoing communication with the Seattle freight community. Actions related to the Proposed Action included:

- Action 12: Pursue grade-separation of key truck streets at heavily used railroad crossings.
- Action 13: Design and construct 2005 capital improvement projects that benefit freight.
- Action 14: Identify measures to minimize conflicts between trucks and other transportation modes.

Container Terminal Access Study

The *Container Terminal Access Study* (CTAS) (Port of Seattle, 2003) includes a list of regional transportation objectives. One of the major objectives is to ensure long-term effective access to airport and seaport facilities. Two actions noted that support this objective are:

- Improve safety at railroad crossings
- Fix traffic bottlenecks

Environmentally Critical Areas

The City of Seattle adopted its Environmentally Critical Areas regulations (ECA), SMC 25.09, to help ensure safe, stable, and compatible development that avoids adverse environmental effects and potential harm to properties, neighborhoods, and drainage basins. The ECA identifies the study area as subject to a seismic hazard and liquefaction-prone. Although seismic hazards such as seismic-induced ground shaking, surface rupture, liquefaction, and tsunamis exist within the project study area, these hazards would either be mitigated or are too distant or infrequent to pose a substantial risk. For example, seismic-induced ground shaking and liquefaction could be mitigated through such measures as improving the characteristics of the ground or by strengthening the bridge structure to resist the earthquake loads. Please refer to the *SR 519 Intermodal Access Project – Phase 2 Geology and Soils Discipline Report* for more information on these hazards.

4 What are the development trends in the area?

The City of Seattle has initiated a planning project for several of the neighborhoods located south of downtown Seattle, including Pioneer Square, Japantown Hill, Chinatown, Little Saigon, South of Dearborn, and the Stadium Area. This planning project is an effort to identify City land use actions that may result in a more livable community by encouraging residential and job-related development in appropriate ways, and by balancing local and regional uses while respecting the rich culture and history of the area. Objectives relevant to the Proposed Action include:

- Minimize traffic effects on freight mobility.
- Meet public objectives such as east-west pedestrian connections.
- Ensure that new development relates well to the surrounding stadium and neighborhood areas, and that new

development would not cause unanticipated congestion limiting or obstructing freight mobility.

- Limit potential traffic effects and conflicts with freight movement, particularly in areas towards the south end of the plan area.

Chapter 5 Environmental Consequences and Mitigation Measures

This chapter discusses the short-term (construction) and long-term (operational) effects of the Proposed Action and the No Build Alternative on land use in the study area.

1 How would project construction temporarily affect land use in the study area?

Proposed Action

Direct Effects

Direct effects on land use are those that are caused by the project and occur at the same time and place. Construction of the Proposed Action would last for approximately 3 years and would occur in phases so that no one area would be under construction for the entire construction period.

Property acquisition for the Proposed Action (i.e., right-of-way requirements for intersection configurations) would occur before construction. Parcel acquisition is considered part of the operational effects because it is a long-term effect, and is discussed under *How would the project permanently affect land use in the study area?* below.

Construction staging areas would have temporary effects on surrounding land uses by limiting business or enjoyment of outdoor activities or events because of noise, dust, vibrations, changes in access to individual properties, and traffic delays. Staging areas would be located within private property and WSDOT rights-of-way. These rights-of-way include the property bounded by Third and Fourth Avenues South, South Massachusetts Street, and South Royal Brougham Way. WSDOT would secure temporary construction easements (TCEs) to locate staging areas within private property. TCEs

may be secured at King County Ryerson Bus Base, BNSF property near Third Avenue South and South Atlantic Street, a BNSF crossing at Third Avenue South and South Royal Brougham Way, Qwest Field, Safeco Field parking garage, and a vacant parcel at First Avenue South and South Atlantic Street.

Temporary construction effects on users of adjacent properties and the local street system can be caused by noise, dust, vibration, glare, traffic detours, traffic delays, and visual disturbance. The severity of the effects depends on the duration and intensity of the construction. Traffic disruptions that affect land use may be caused by temporary construction easements and changes in access due to detour routing to allow for construction. Traffic delays and restricted mobility during construction might temporarily affect a variety of land uses in the study area, such as commercial businesses and the stadiums, by limiting business and enjoyment of outdoor activities. WSDOT would require the construction contractor to minimize traffic delays and to maintain access and mobility during construction because rerouting of traffic could affect businesses. South Royal Brougham Way would be closed for short periods during construction and would require detours at those times. South Royal Brougham Way would be reduced to one lane of traffic in both directions during construction of the vehicle and pedestrian overpass. Certain construction activities would require temporary closure of the roadway between Occidental Avenue South and Fourth Avenue South; however, access would be maintained for emergency vehicles at all times. There are no businesses along the section of South Royal Brougham Way that would be closed between Occidental Avenue South and Fourth Avenue South. Nearby businesses could still be accessed by other roadways in the study area. Also, construction would be scheduled to avoid events at the stadiums and Qwest Field Event Center. As most of the outdoor uses that are more vulnerable to noise, dust, and visual disturbance are open for business almost exclusively during large events, these construction effects would be minimal. Construction would also be coordinated with the King County Metro Ryerson bus base to avoid potential

conflicts with bus operations and to minimize effects such as displacement of bus parking during construction. For complete information on possible economic effects, refer to the *SR 519 Intermodal Access Project – Phase 2 Socioeconomic Technical Memorandum*.

Indirect Effects

Indirect effects are those effects caused by a proposed action that are later in time or further removed in distance, but are still reasonably foreseeable. Businesses outside of the study area are unlikely to be affected indirectly during construction. South Royal Brougham Way would be closed intermittently during construction, but other arterials would provide alternative access routes to surrounding businesses.

No Build Alternative

The No Build Alternative would not produce construction-related effects on the study area.

2 How would the project permanently affect land use in the study area?

Proposed Action

Direct Effects

The Proposed Action would not produce a permanent effect on land use other than small right-of-way acquisitions necessary to build the project and the conversion of vacant WSDOT property zoned IG2 to transportation use. A large portion of the WSDOT property located between Third and Fourth Avenues South, and South Royal Brougham Way and South Massachusetts Street, including the Atlantic Street ramp, would be covered by the proposed South Royal Brougham Way overpass, and an additional portion of this lot could be used for stormwater treatment. WSDOT would not vacate this lot. The project would be consistent and compatible with existing zoning and land use plans. In the reasonably foreseeable future, some commercial uses might convert to industrial/warehouse uses, or vice-versa, with or without the Proposed Action. These land uses are already present and allowed by zoning. No change in zoning or amendment to an existing land use plan would be required by the Proposed Action.

Land Acquisitions

The Proposed Action would require small, site-specific, and partial property acquisitions that would convert portions of parcels currently in industrial or commercial use to transportation use (see Exhibits 5-1 and 5-2).

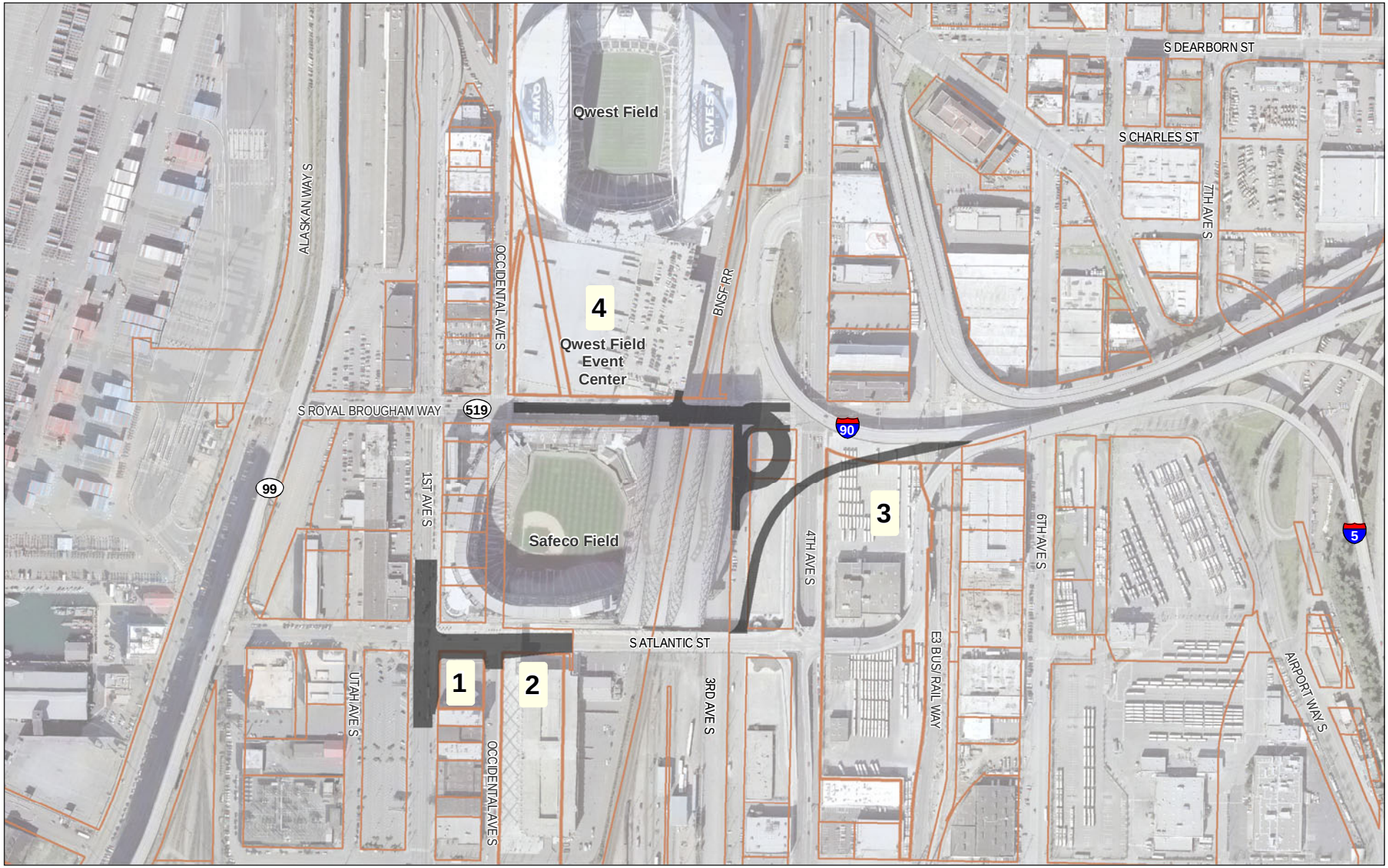
These conversions would not require relocations or changes in land use, and existing and proposed land uses would still occur on the parcels involved. However, the small pieces of land acquired for this project would be permanently changed from the existing use to a transportation use. Air rights would also be acquired over a few properties (Exhibit 5-1). Acquisition of these air rights would not affect the current land uses; however, it could limit the height and placement of new structures if any of the properties are redeveloped.

Approximately 5,415 square feet of land would be acquired for construction and operation of the Proposed Action. This land would be converted from industrial or commercial use to transportation use. When comparing the size of the acquisition to the size of the parcel, one can see that the acquisitions would be minimal, with only one parcel experiencing a reduction in size that is greater than the mean of about 3.5 percent for the industrial and commercial parcels that would be converted to transportation. It is likely that two parking spaces at King County Metro Ryerson bus base would be used for placement of a column intended to support a portion of the new Atlantic Street off-ramp. The placement of this column has been carefully chosen to produce the least effect possible on the bus base. Construction of the ramp would require temporary closure of two rows of parking (25 to 30 stalls) and modification of the flow plan within the base that could require elimination of additional parking stalls. Use of the base would continue throughout the entire project. The acquisitions would not affect the current or planned uses of any of the properties.

EXHIBIT 5-1. PROPERTY ACQUISITIONS REQUIRED TO BUILD PROPOSED SR 519 ROADWAY STRUCTURES

Property Number	Owner	Current Use of Property	Tax Parcel #	Zone	Size of Property (square feet)	Approximate Area To Be Acquired (square feet)[a]	Approximate % of Parcel To Be Acquired[a]	Will It Affect Land Use?
1	Baseball Club of Seattle	Vacant (used during events)	7666206430	IC	27,900	3,799 (land)	13	No
2	Washington State Baseball Stadium	Parking	7666206525	IC	145,527	1,817 (land)	1.2	No
3	King County	Metro bus base	7666204685	IG2	36,833	505 (land) 6,841 (air rights)	1.3	No
4	Public Stadium Authority	Parking garage	7666204876	IC	1,341,856	384 (land) 1,151 (air rights)	<0.01	No

Notes:
NA = not available
TBD = to be determined
[a]Numbers subject to change.



Note: See Exhibit 5-1 for parcel description and acquisition information.

Source: City of Seattle (2007) and Port of Seattle (2006)

1 Parcel Affected by Small Right-of-Way Acquisition

Project

N

0 500 Feet

Exhibit 5-2

Acquisitions for Project Right-of-Way

Indirect Effects

The Proposed Action would not affect land use indirectly or induce land use change. By improving freight access in the study area, the Proposed Action could encourage retention of existing freight-dependent land uses.

No Build Alternative

The No Build Alternative would not change existing land uses in the study area.

3 What has been done to avoid or minimize adverse effects of the Proposed Action on land use?

During construction of the Proposed Action, WSDOT would implement measures to ensure that traffic flow is maintained and negative effects on land uses minimized.

Construction Mitigation

Recommended mitigation measures to avoid or minimize adverse effects could include:

- Preparing and implementing a Transportation Management Plan (TMP), requiring the contractor to post signs showing detour routes during any required road and/or lane closures.
- Coordinating in advance with property owners and businesses within the study area including the Port of Seattle, BNSF Railway, Safeco Field, Qwest Field Event Center, King County Metro, as well as Washington State Ferries, and providing advance notice of construction activities, any required utility disruptions, and any required detours.
- Avoiding construction during scheduled events at the stadiums and Qwest Field Event Center to prevent conflicts with event traffic.

Operational Mitigation

Because the Proposed Action would support and be consistent with adopted plans and regulations, no mitigation would be required during project operation.

4 Are any of the identified effects considered substantial?

A substantial effect on land use would occur if an alternative would prevent or severely limit the ability of multiple property owners to use their property for an existing or allowed land use, if it was not consistent with relevant plans and regulations, or if it would induce land use not compatible with existing plans. Neither the Proposed Action nor the No Build Alternative would have a substantial effect on land use. The Proposed Action would improve safety and freight mobility in the study area and would not result in new or incompatible land uses.

5 Is the project consistent with local and regional plans and regulations?

As described in Chapter 4, there are many plans and regulations that affect the study area. Plans and regulations such as Vision 2020/Destination 2030, the Seattle Comprehensive Plan, the Duwamish Manufacturing and Industrial Center Plan, the Transportation Strategic Plan, and the Freight Mobility Plan focus on the efficient movement of freight, people, and goods. They also focus on safety for all travel modes. Guidance from the Environmentally Critical Area regulations would be followed as demonstrated in the *SR 519 Intermodal Access Project – Phase 2 Geology and Soils Discipline Report.* The Proposed Action is consistent with and would assist in fulfilling goals of these plans and regulations. The Shoreline Master Plan was considered, but the study area is not within the boundaries for that plan, so the Proposed Action need not comply with its regulations. Because the Proposed Action was found to be compatible with local and regional plans and regulations, no mitigation would be required for compliance.

Chapter 6 Cumulative Effects

1 What are cumulative effects, and why are they important?

Cumulative effects are important because they help us to understand the project in terms of a "bigger picture." They can reveal possible unintended consequences of the Proposed Action or No Build Alternative that might not be apparent when we look at the project by itself. Because of this, cumulative effects help us to evaluate how sustainable the project is likely to be in future years, and how it might interact with other projects that are planned but have not been built yet.

What are cumulative effects?

Cumulative effects are impacts on the environment that result "from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Defined by FHWA and Council on Environmental Quality (CEQ) regulations (40 CFR 1508.7)" (WSDOT, 2006).

2 How did the project team identify expected cumulative effects on land use?

The project team identified expected cumulative effects of the Proposed Action and No Build Alternative by following a process recommended by the President's Council on Environmental Quality (CEQ, 1997) and as identified in Chapter 412 of the WSDOT *Environmental Procedures Manual* (WSDOT, 2007). First, the team considered other past and present projects that have already affected land use. These past and present actions have changed land use in and around the SR 519 study area from its original condition and continue to influence current trends. Next, the expected direct and indirect effects of the project on land use, discussed in Chapter 5, are added. Finally, the probable effects of other projects that are planned but not yet built are considered. The project team combined past and present actions and RFFAs with the expected direct and indirect effects of each of the two alternatives to produce a cumulative picture of how land use

might be affected, with and without the Proposed Action, in the future.

Past and Present Actions

The SR 519 study area is located within the Greater Duwamish Manufacturing and Industrial Center (City of Seattle, 2006b). *Toward a Sustainable Seattle*, the City's comprehensive plan as amended through 2005 (City of Seattle, 2005a), and the *Greater Duwamish Manufacturing and Industrial Center Plan* (Greater Duwamish Planning Committee, 1999) consistently emphasize industrial activities as the preferred and dominant land use within the area. Their policies prioritize manufacturing, warehousing, marine uses, transportation, utility, construction, and similar uses. Despite its historic economic strength, the viability of the Greater Duwamish Manufacturing and Industrial Center is threatened by pressure to convert the unique and irreplaceable industrial lands to nonindustrial uses. Factors contributing to the increasing conversion pressure include the general strength of the local and national economies, the Greater Duwamish Manufacturing and Industrial Center's location close to downtown, the low vacancy rates in nonindustrial zones, and the current land use code which permits a broad range of nonindustrial uses.

The land in the project study area maintains many traditional industrial and manufacturing businesses, but it is the area where the pressure to convert is the greatest. There are pockets of ancillary commercial, retail, restaurant, office, and general service uses in this area. As shown on the historic aerial photos and maps in Appendix A, the first nonindustrial development in the project study area was the Kingdome in 1976. Although the Kingdome has since been demolished, Safeco Field, Qwest Field, and the Qwest Field Event Center have been developed in its place and have stimulated a rise in property values to commercial levels, making new industrial development less cost-effective and blurring the line where downtown proper ends and the Greater Duwamish Manufacturing and Industrial Center begins (Greater Duwamish Planning Committee, 1999).

Transportation conflicts and the proliferation of non-industrial developments in industrial areas are two of the critical issues

identified in the *Seattle's Industrial Lands: Background Report* (City of Seattle, 2007a). SR 519 is the essential transportation route for moving freight between the Seattle waterfront and I-5 and I-90. Consequently, a major purpose of the Proposed Action is to ensure that freight moves efficiently through the study area in the future. The Proposed Action would help sustain industrial and freight-dependent commercial businesses in the area.

In addition, urban development is increasing in portions of the South Downtown area immediately north of the study area. This South Downtown area, which includes portions of Pioneer Square and the International District neighborhoods and a portion of the stadium area in the Greater Duwamish Manufacturing and Industrial Center, is currently the subject of a major planning effort by the City of Seattle's Department of Planning and Development. An EIS currently in preparation will examine future growth scenarios under different zoning alternatives. The final EIS is scheduled to be published early in 2008, with legislation forwarded to decision-makers in the fall of 2008 (City of Seattle, 2007b).

The major past and present land uses in, near, or affecting the study area are associated with the Port of Seattle; Safeco Field, Qwest Field, and Qwest Field Event Center; and transportation linked to Interstates 5 and 90, the Alaskan Way Viaduct (SR 99), BNSF Railway, Sound Transit, Amtrak, and the Washington State Ferries terminal at Colman Dock. These land uses have cumulatively contributed to traffic congestion in the northern portion of the Greater Duwamish Manufacturing and Industrial Center. The Proposed Action has been designed to reduce this congestion (see Chapter 2).

Direct and Indirect Effects of the Proposed Action

As discussed in Chapter 5, the Proposed Action is not expected to produce any permanent direct or indirect effects on land use other than small right-of-way acquisitions necessary to build the project. During construction, local roadway closures and traffic detours could inconvenience local businesses, but these effects would be temporary and mitigated through close

coordination between the South End Alaskan Way Viaduct Replacement Project and the proposed SR 519 improvements.

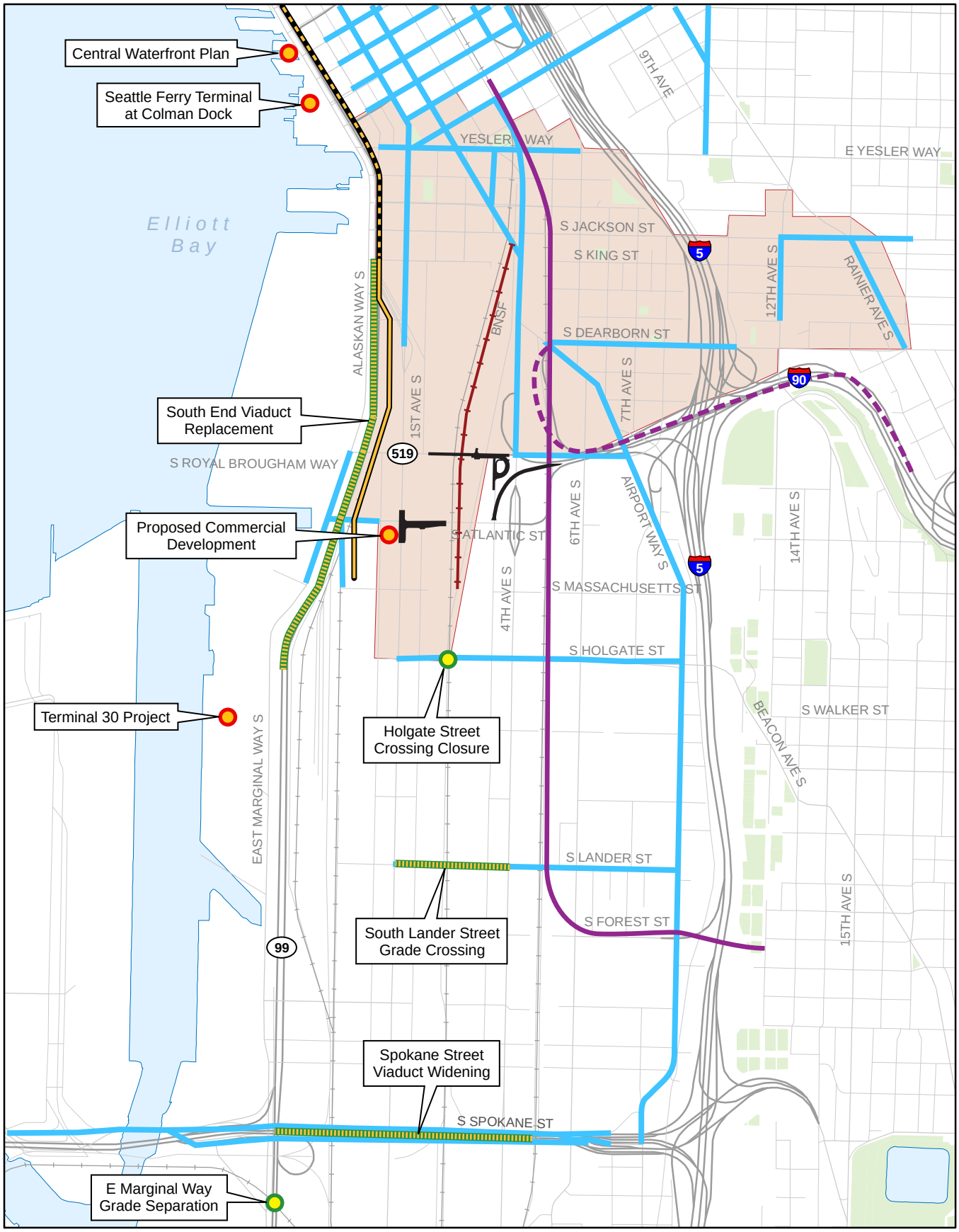
Direct and Indirect Effects of the No Build Alternative

The No Build Alternative would not produce direct or indirect effects on land use. However, by not improving freight access, the loss of industrial and freight dependent businesses in the area may continue.

Reasonably Foreseeable Future Actions

Exhibit 6-1 shows the approximate locations of some of the larger reasonably foreseeable future actions (RFFAs) that could add to or interact with the Proposed Action to contribute to cumulative effects on land use. Exhibit 6-2 briefly summarizes information about these projects. They include, but are not limited to:

- The South Holgate Street to South King Street Viaduct Replacement Project, and the two-phase Electrical Line Relocation Project, which are Moving Forward projects within the Alaskan Way Viaduct and Seawall Replacement Program
- The South Spokane Street Viaduct project
- Completion of BNSF Railway track improvements
- Sound Transit light rail projects
- Closure of the South Holgate Street rail crossing
- Conversion of the Port of Seattle's Terminal 30 to a container terminal
- The East Marginal Way Grade Separation Project
- The City of Seattle's Central Waterfront Plan
- The City of Seattle's Bridging the Gap paving projects
- Washington State Ferries Terminal Improvements at Colman Dock



Source: City of Seattle (2007) and King County (2006)

- Project
- Livable South Downtown Study Area (Approx.)
- BNSF Railway Completion
- Electrical Line Relocation Phase 1 and Phase 2
- Sound Transit Central Link
- Proposed Sound Transit East Link
- Bridging the Gap Paving Project
- Road Project
- Development Project

N

0 1,000 Feet

Exhibit 6-1
Reasonably Foreseeable Future Actions

SR 519 Intermodal Access Project - Phase 2
February 2008

EXHIBIT 6-2. REASONABLY FORESEEABLE FUTURE ACTIONS IN OR NEAR THE STUDY AREA

Project[a]	Location	Purpose	Proponent	Expected Construction Time Frame[b]
South Holgate Street to South King Street Viaduct Replacement Project	SR 99 from South Holgate Street to South King Street	Build new SR 99 between South Holgate Street and South King Street. Includes South Atlantic Street and South Royal Brougham Way grade separation, detour routes, and temporary connections	Washington State Department of Transportation	2009-2012
Electrical Line Relocation	Phase 1: South Massachusetts Street to South King Street Phase 2: South King Street to Union Street	Remove network distribution lines and transmission lines that are located under the existing Viaduct before it is demolished	Washington State Department of Transportation	Phase 1: Construction scheduled for 2008-2009. Phase 2: To be determined.
Completion of BNSF Railway Improvements	King Street Station to South Royal Brougham Way	Reduce rail transportation conflicts along the BNSF right-of-way; increase safety at the BNSF crossing of South Royal Brougham Way	BNSF Railway	Improvements at South Royal Brougham Way have been completed; with additional improvements along the BNSF right-of-way currently in progress.
Central Link Light Rail	Downtown Seattle to Sea-Tac Airport	Provide light rail service between downtown Seattle and Sea-Tac Airport	Sound Transit	2008-2009
East Link Light Rail	Downtown Seattle to Redmond	Provide light rail service between downtown Seattle, Mercer Island, Bellevue, and Redmond	Sound Transit	Construction not scheduled. Environmental impact statement scheduled for release in fall 2009.
Proposed Commercial Development	South side of South Atlantic Street between First Avenue South and Utah Avenue South	Provide office and retail uses	Gull Industries	2010-2012
Livable South Downtown Planning Study	The study examines growth and planning issues specific to Pioneer Square, the Chinatown/ International District (including the Little Saigon area east of I-5), and the northernmost edges of the Greater Duwamish Manufacturing and Industrial Center.	Stimulate housing and related development consistent with the Mayor's Center City Seattle strategy	City of Seattle, Department of Planning and Development	Environmental impact statement and legislative proposals in 2008
Closure of South Holgate Street at BNSF Railway Crossing	South Holgate Street at the BNSF Railway crossing	Eliminate conflicts between rail and vehicle traffic.	City of Seattle, Department of Transportation	Construction not scheduled

EXHIBIT 6-2. REASONABLY FORESEEABLE FUTURE ACTIONS IN OR NEAR THE STUDY AREA

Project[a]	Location	Purpose	Proponent	Expected Construction Time Frame[b]
South Lander Street Grade Separation	South Lander Street between First Avenue South and Fourth Avenue South	Improve safety and traffic flow by constructing a roadway bridge for vehicles, bicycles, and pedestrians over the BNSF Railway tracks.	City of Seattle, Department of Transportation	2009-2011
South Spokane Street Viaduct Widening	South Spokane Street from Sixth Avenue South to West Seattle Bridge	Improve traffic safety and upgrade the structural and seismic performance of the viaduct that connects I-5 to the West Seattle High Level Bridge. Construct a new eastbound loop ramp to Fourth Avenue South, to the south of South Spokane Street.	City of Seattle, Department of Transportation	Seismic retrofit, median barrier installation, and street-level utility relocations have been completed. Viaduct widening and ramp construction is scheduled to start in 2008 and would be constructed in phases as funds become available, so exact construction range not known.
Bridging the Gap Paving Projects	Seattle arterial streets	As part of a larger program, the paving projects will resurface, restore, or replace approximately 300 lane-miles of arterial streets; rehabilitate or replace 3-5 bridges and seismically retrofit 5 additional bridges; repair or restore approximately 144 blocks of existing sidewalks; build approximately 117 blocks of new sidewalks; rehabilitate approximately 50 stairways; and restripe about 5,000 crosswalks.	City of Seattle, Department of Transportation	2006-2013
Central Waterfront Plan	South Atlantic Street to West Thomas Street along the shoreline edge of the Center City	Following replacement of the existing Alaskan Way Viaduct, construct new parks and open spaces, shoreline and habitat improvements, improved linkages to the downtown core, *and* transit connections, *and implement* land use and regulatory changes.	City of Seattle	Presently in planning process. Construction will begin with the removal of the *v*iaduct and will be ongoing for several years.

EXHIBIT 6-2. REASONABLY FORESEEABLE FUTURE ACTIONS IN OR NEAR THE STUDY AREA

Project[a]	Location	Purpose	Proponent	Expected Construction Time Frame[b]
Terminal 30 Conversion	East Marginal Way South between approximately South Holgate Street and South Lander Street	Terminal 30 had been used for cruise operations but will be converted back to its original use as a container terminal. This and the adjacent Terminal 25 will provide 70 acres for container use.	Port of Seattle	2007-2009
East Marginal Way Grade Separation Project	East Marginal Way South just south of South Spokane Street	Provide a north- and southbound grade separation on Duwamish Avenue South, relocating East Marginal Way through this corridor to improve access among Port of Seattle terminals, rail yards, and industrial warehouses.	Port of Seattle	2006-2008
Washington State Ferries Terminal Improvements at Colman Dock	Pier 54 at Seattle Waterfront on Alaskan Way South	Upgrade structures and facilities and increase capacity.	Washington State Department of Transportation	Construction not scheduled. For 2008-2009, focus will be on system-wide planning and coordination with nearby projects, including the proposed SR 519 Phase 2.

[a]Only major planned projects are listed. Many other projects that could be implemented in the reasonably foreseeable future are not shown.
[b]Dates are approximate.
Sources: General information from the WSDOT, City of Seattle, Port of Seattle, and Sound Transit websites.

Urban development is increasing in portions of the South Downtown area immediately north of the study area. This area, which includes Seattle's International District/Chinatown/Little Saigon neighborhood, is currently the subject of Livable South Downtown, a major planning effort by the City of Seattle's Department of Planning and Development. In November 2007, the City of Seattle released the *Draft EIS for Livable South Downtown Planning* (City of Seattle, 2007a), a SEPA programmatic EIS which evaluates options for a comprehensive neighborhood plan for the South Downtown area.

The study examines growth and planning issues specific to Pioneer Square, the Chinatown/International District (including the Little Saigon area east of I-5), and the northernmost edges of the Greater Duwamish Manufacturing and Industrial Center. Preliminary recommendations were released by the City's Department of Planning and Development in March 2006. Land use and zoning changes considered as part of this process will require conducting an environmental review prior to legislative decision-making.

The project most likely to interact with the Proposed Action in the near future is the South Holgate Street to South King Street Viaduct Replacement Project, which will replace the south end of the Viaduct (Exhibit 6-1). That project, a Moving Forward project within the Alaskan Way Viaduct and Seawall Replacement Program, is scheduled for construction from 2009 to 2012, the same time frame as the Proposed Action, and it will be located immediately west of the proposed SR 519 improvements.

3 Would the Proposed Action contribute to cumulative effects on land use?

The right-of-way acquisitions noted in Exhibit 5-1 would convert about 5,415 square feet of land from industrial or commercial to a transportation land use, but this conversion could actually help to reduce the cumulative adverse effect on land use of past and future projects in the study area. Past projects have contributed to a proliferation of nonindustrial

uses in the study area, making it less conducive to sustained industrial use. By improving freight movement, the Proposed Action could help to offset this effect, making it more likely that industrial and freight-dependent businesses will choose to remain in the area.

4 Would the No Build Alternative contribute to cumulative effects on land use?

Because the No Build Alternative would not directly or indirectly affect land use in the study area, it would not contribute to a cumulative effect on land use.

5 How would cumulative effects on land use be monitored, mitigated, and managed?

During construction, WSDOT would require contractors to implement best management practices and would closely coordinate the Proposed Action with the South End Alaskan Way Viaduct Replacement Project to minimize temporary effects on local property owners and businesses.

Chapter 7 References

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Appendix A
EDR Aerial Photo Decade Package

The EDR Aerial Photo Decade Package

SR-519
1250 1st Ave South
Seattle, WA 98134

Inquiry Number: 1874982.5

March 12, 2007

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

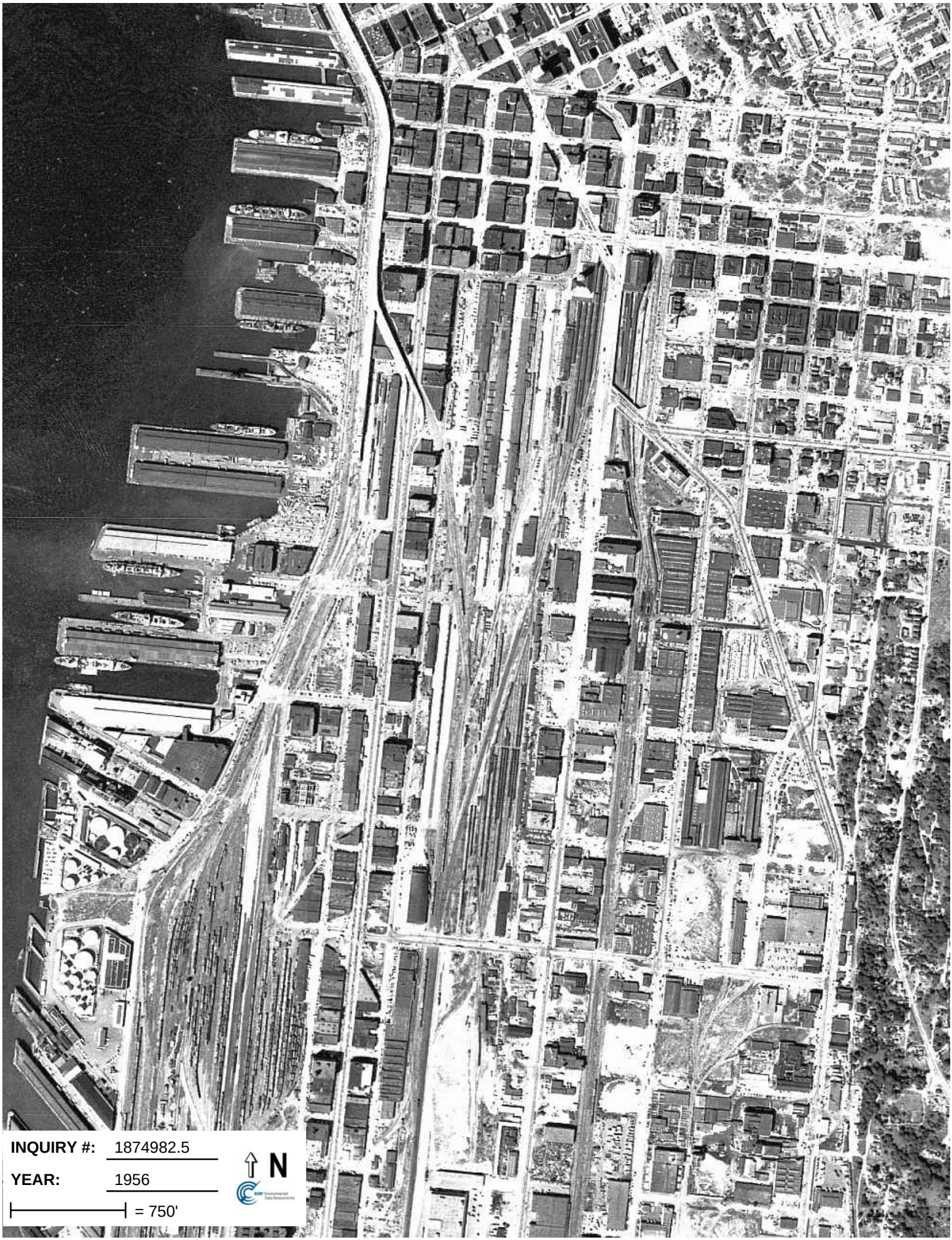
Aerial Photography March 12, 2007

Target Property:

1250 1st Ave South

Seattle, WA 98134

Year	***Scale***	***Details***	***Source***
1956	Aerial Photograph. Scale: 1"=750'	Panel #: 2447122-E3/Flight Date: August 07, 1956	EDR
1965	Aerial Photograph. Scale: 1"=750'	Panel #: 2447122-E3/Flight Date: June 30, 1965	EDR
1977	Aerial Photograph. Scale: 1"=750'	Panel #: 2447122-E3/Flight Date: September 05, 1977	EDR
1985	Aerial Photograph. Scale: 1"=750'	Panel #: 2447122-E3/Flight Date: June 19, 1985	EDR
1990	Aerial Photograph. Scale: 1"=833'	Panel #: 2447122-E3/Flight Date: July 10, 1990	EDR

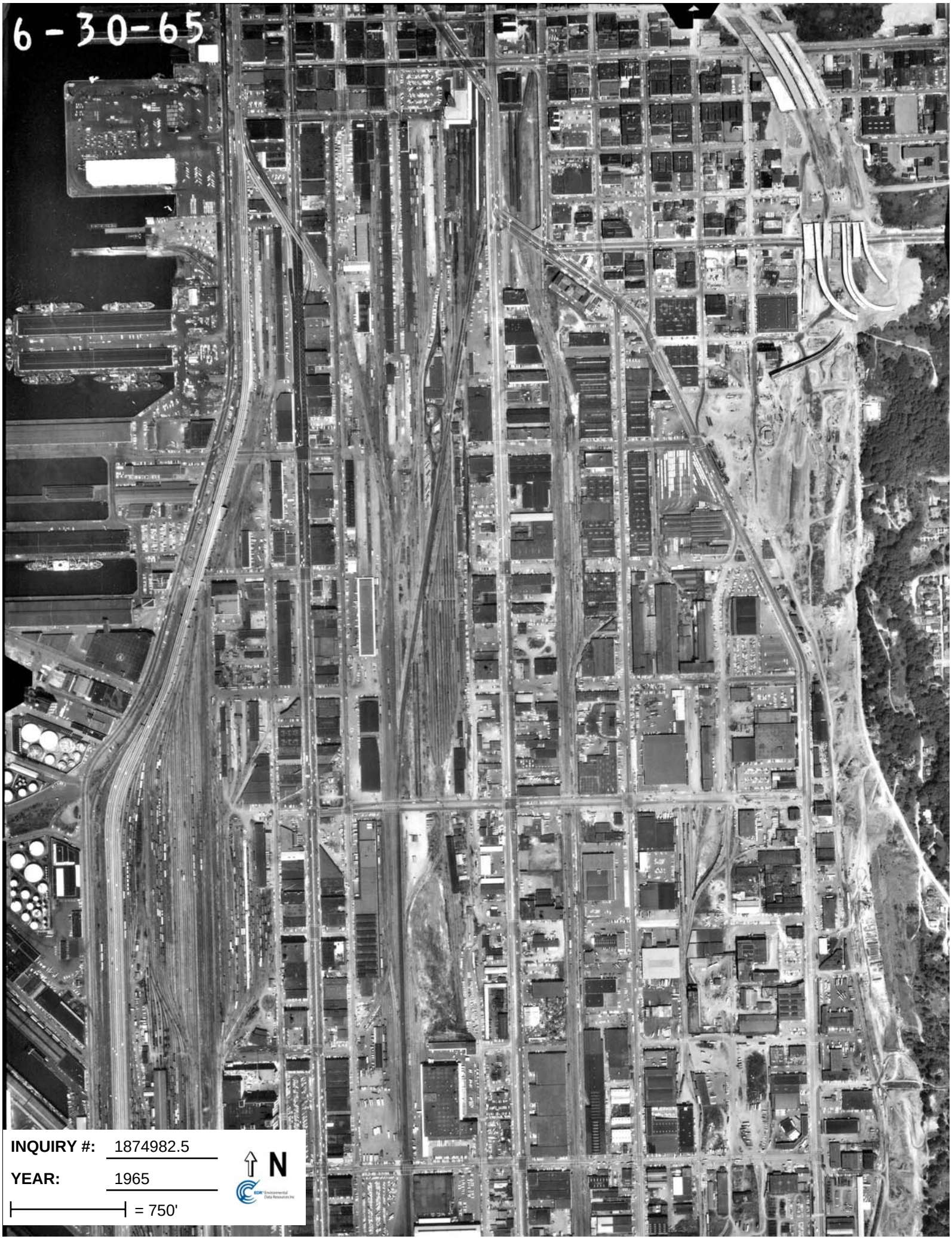


INQUIRY #: 1874982.5

YEAR: 1956

= 750'

N



INQUIRY #: 1874982.5

YEAR: 1965

= 750'

N

INQUIRY #: 1874982.5

YEAR: 1977

= 750'

N


INQUIRY #: 1874982.5
YEAR: 1985
= 750'
N

INQUIRY #: 1874982.5

YEAR: 1990

= 833'

N

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Marcella Ripich
CH2M Hill, Inc.
1100 112 Ave NE
Bellevue, WA 98004

Order Date: 3/9/2007 **Completion Date:** 3/12/2007
Inquiry #: 1874982.3S
P.O. #: 348513.AG.18.10
Site Name: SR-519
Address: 1250 1st Ave South
City/State: Seattle, WA 98134
Cross Streets:

Customer Project: SR-519
1122163BRU 425-453-5000

Based on client-supplied information, fire insurance maps for the following years were identified

1904 - 1 Map
1916 - 1 Map
1950 - 1 Map
1969 - 1 Map

Limited Permission to Photocopy Total Maps: 4

USER'S GUIDE

This User's Guide provides guidelines for accessing Sanborn Map® images and for transferring them to your Word Processor.

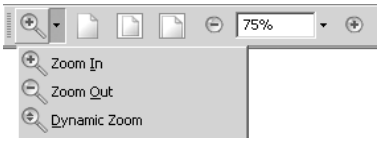
Reading Sanborn Maps

- Sanborn Maps document historical property use by displaying property information through words, abbreviations, and map symbols. The Sanborn Map Key provides information to help interpret the symbols and abbreviations used on Sanborn Maps. The Key is available from EDR's Web Site at: http://www.edrnet.com/reports/samples/key.pdf

Organization of Electronic Sanborn Image File

- Sanborn Map Report, listing years of coverage
- User's Guide
- Oldest Sanborn Map Image
- Most recent Sanborn Map Image

Navigating the Electronic Sanborn Image File

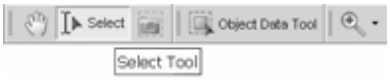


1. Open file on screen.
2. Identify TP (Target Property) on the most recent map.
3. Find TP on older printed images.
4. Using Acrobat® Reader®, zoom to 250% in order to view more clearly. (200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.)
   A. On the menu bar, click "View" and then "Zoom to..."
   B. Or, use the magnifying tool and drag a box around the TP

Printing a Sanborn Map From the Electonic File

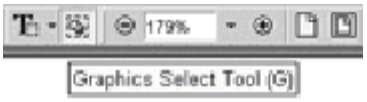
- EDR recommends printing images at 300 dpi (300 dpi prints faster than 600 dpi)
- To print only the TP area, cut and paste from Acrobat to your word processor application.

Acrobat Versions 6 and 7



1. Go to the menu bar
2. Click the "Select Tool"
3. Draw a box around the area selected
4. "Right click" on your mouse
5. Select "Copy Image to Clipboard"
6. Go to Word Processor such as Microsoft Word, paste and print.

Acrobat Version 5



1. Go to the menu bar
2. Click the "Graphics Select Tool"
3. Draw a box around the area selected
4. Go to "Menu"
5. Highlight "Edit"
6. Highlight "Copy"
7. Go to Word Processor such as Microsoft Word, paste and print.

Important Information about Email Delivery of Electronic Sanborn Map Images

- Images are grouped intro one file, up to 2MB.
- In cases where in excess of 6-7 map years are available, the file size typically exceeds 2MB. In these cases, you will receive multiple files, labeled as "1 of 3", "2 of 3", etc. including all available map years.
- Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please contact your ISP to identify their specific file size limitations.