EXECUTIVE SUMMARY

The Interstate 5 (I-5)/State Route (SR) 502 Interchange project would provide a new interchange connecting I-5 and SR 502 in north Clark County. Following the recommendations of two transportation studies completed over the past five years, this Nickel Project would address the needed transportation improvements in the project area.

The discussion in this chapter is a summary of the environmental assessment (EA) that follows. The EA has been written in a format that may appear different than past EAs. It is presented in a question and answer format, and technical jargon and scientific and engineering terms have been replaced with more common terms. A glossary defining technical terms has been included in Appendix A and the technical reports on each environmental element have been included in Appendix B.

What is a Nickel Project?

The 2003 Washington State Legislature enacted the "Nickel Funding Package" for transportation projects across the state. The funding for these projects comes from the 2003 $0.05 gas tax increase and other new fees and charges. The I-5/SR 502 Interchange project is one of those projects.

Where is the I-5/SR 502 Interchange project located?

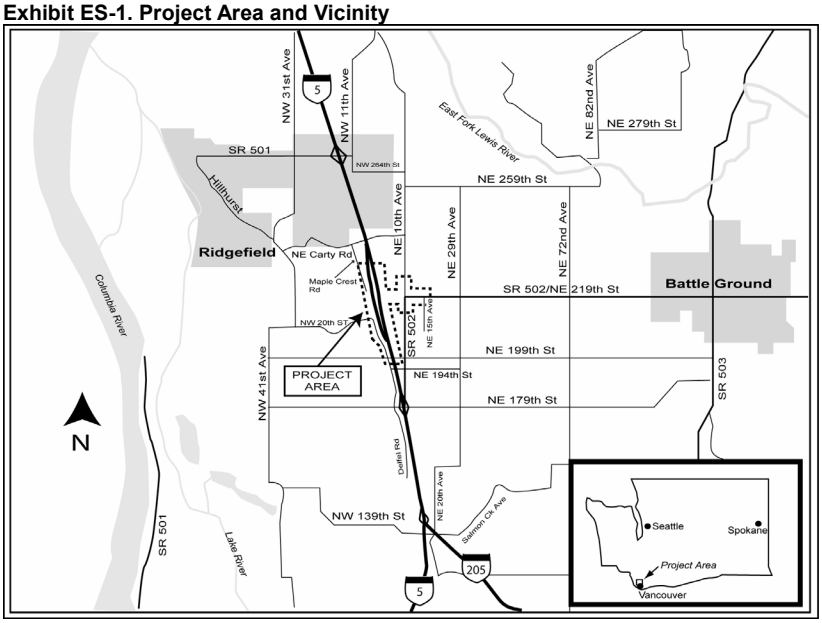
The project is located along the I-5 corridor in Clark County. It is roughly 9 miles north of Vancouver, 5 miles west of Battle Ground, and 2 miles south of Ridgefield (Exhibit ES-1).

What is the I-5/SR 502 Interchange project?

There are four main components to the I-5/SR 502 Interchange project (Exhibit ES-2). They include:

- New northbound on ramps to I-5 and modified off ramps to the rest area and SR 502.
- New southbound on ramp to I-5 and off ramp to SR 502.

Exhibit ES-1. Project Area and Vicinity



- A new extension of SR 502 from NE 10th Avenue to I-5.
- Improvements to the intersection at SR 502 and NE 10th Avenue.

Other improvements include new and improved roadway shoulders constructed for shared pedestrian and bicycle use; new stormwater treatment and detention facilities; and access control on SR 502.

Why are we building the project?

The I-5/SR 502 Interchange project is being built to reduce congestion and improve safety on I-5, NE 10th Avenue, and existing SR 502, and to provide more direct access to Battle Ground and north Clark County.

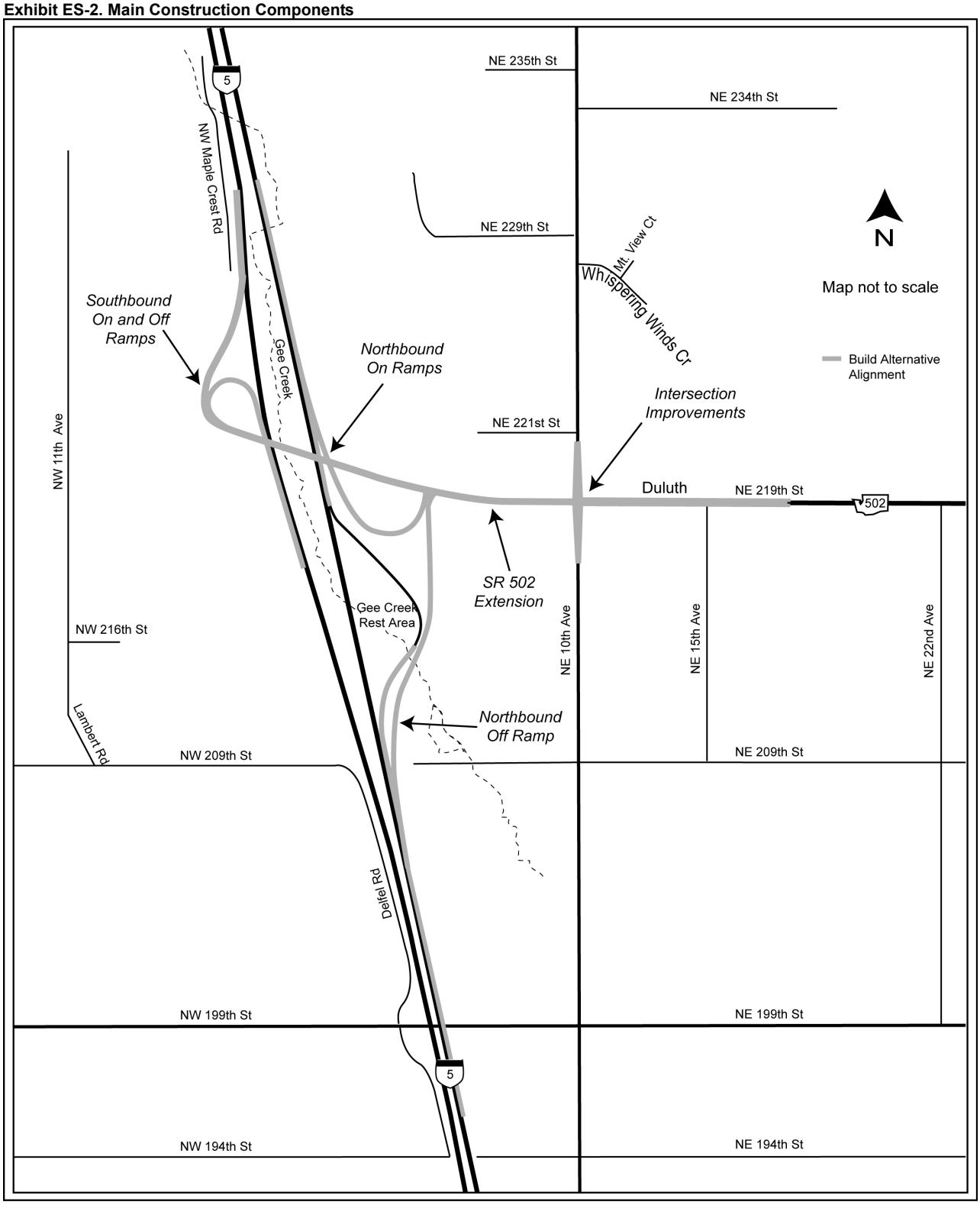
When would construction begin and how long would it take?

Construction would begin in 2007 and be completed in 2008. The constructed project would open to traffic in 2008.

How would the project directly affect the environment?

Based on the analysis conducted for the Build Alternative, potential effects from the project would not be considered

Exhibit ES-2. Main Construction Components



significant. Environmental elements are analyzed in Chapter 3, Sections 3.1 through 3.18. The following discussions highlight the analysis findings.

Traffic and Transportation

Although the number of future vehicles traveling in the project area would increase, overall traffic congestion would decrease. The project would also increase overall traffic speeds, improve operations, safety, freight mobility, and pedestrian and bicycle facilities in the project area.

Right of Way Acquisition and Displacements

Some 49 parcels are being investigated for partial acquisitions (approximately 35 acres) and full acquisitions (approximately 50 acres). A total of 17 displacements would occur, 14 residences and 3 businesses.

Wetlands

Approximately 6 acres of wetlands and 10 acres of wetland buffer would be filled. Approximately 12 acres of wetland would be created at one or more locations to mitigate for this loss. (This amount does not include mitigation for the loss of wetland buffer.)

Vegetation

Approximately 49 acres of existing vegetation would be affected by the project, including 33.0 acres of grassland, 7.7 acres of scrub-shrub, and 8.0 acres of forest. Approximately 3.3 acres of forested riparian area would be cleared and graded and/or filled.

What is a riparian area?

A riparian area is a vegetated land area that is adjacent to, and influenced by streams, lakes, and open water wetlands.

Fish and Wildlife

The permanent removal of riparian vegetation, the increase in impervious surfaces, and the temporary effects of increased erosion, noise, and artificial light during construction are not expected to cause long-term effects to aquatic species that live in Gee Creek and its tributaries. A culvert replacement along Gee Creek would have a positive affect on fish passage.

The project would clear and grade, fill, or otherwise affect wetland and upland habitats that support a variety of common wildlife species. Some wildlife would be displaced or would experience diminished habitat quality or foraging opportunities. Construction may harm or kill some individuals,

but would have no long-term effects on wildlife populations. The project would fragment an area that already exhibits impaired wildlife connectivity due to roadway crossings and the presence of I-5.

Threatened and Endangered Species

Federal-listed or proposed species that may occur in the project area include the bald eagle, steelhead, and coho salmon. Suitable habitat is or may be present for a few additional species (including species of plants), although individuals or populations of these species are not expected to occur in the project area. One or more state-listed priority plant, fish, and wildlife species, may occur in the project area, though only the small-flowered trillium has been documented in the project area. While the project may alter or degrade suitable habitat for these species and construction would temporarily increase levels of disturbance, WSDOT does not expect the project to negatively affect any federal- or state-listed (or priority) plant, fish, or wildlife species.

A biological assessment was prepared for the project in compliance with the Endangered Species Act. The US Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries concurred with the biological assessment (July 12, 2005 and August 2, 2005, Appendix C).

Water Quality, Floodplains, and Hydrology

New water quality treatment facilities would treat stormwater runoff from new roadway surfaces and some existing untreated surfaces. Temporary, minor effects on water quality would be caused by construction; however, Temporary Erosion and Sediment Control and Spill Prevention, Control, and Countermeasures Plans would be implemented during construction to minimize these risks.

Historic, Cultural, and Archaeological

A small portion of one prehistoric archaeological site in the project area was determined eligible for listing on the National Register of Historic Places. Construction within this site would result in adverse effects.

What is the National Register of Historic Places (NRHP)?

The National Register of Historic Places is the nation's official listing of properties significant in national, state, and/or local history. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

What is prime farmland?

The Natural Resources Conservation Service (NRCS) defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land, but not urban built-up land or water).

Land Use

The project complies with all of the applicable land use plans for the area. 48.7 acres of prime farmland (prime agricultural soils) would be converted to non-agricultural uses. This conversion was reported to the US Department of Agriculture Natural Resource Conservation Service (Appendix E). Future development of the project area would be required to comply with all pertinent land use plans and regulations.

Visual Quality

Construction of the project would alter existing views and would result in a slight decrease to the visual quality of the project area. The amount and severity of effects to the visual environment varies depending on the type of impact and location within the project area.

Economic Elements

Business and shopping patterns at Duluth Corners would be altered and three businesses would be displaced resulting in the displacement of six jobs. The roadway design would also alter traffic patterns to businesses, but the improved access to the area may benefit regional economic development in the long-term.

Social Elements

No residences or businesses would be isolated from community facilities or adjoining residential areas, and the affect to community cohesion would be minimal. Regional connectivity and accessibility would improve. Temporary disruptions to utilities and detours to local vehicle trips would occur during construction.

Environmental Justice

The project would not have a disproportionately high and adverse effect on minority and/or low-income populations. One ethnic minority household and possibly one low-income household would be displaced.

Hazardous Materials

Contamination from petroleum products at two hazardous material sites have a high potential of being disturbed, which could affect the project area during construction. However, any required clean up would remove contaminated soils and

groundwater and would result in a net positive effect on the environment.

Soils and Geology

The project area's soils are of the Hillsboro-Gee-Odne association. All Gee series, although stated to be moderately well-drained, have a fairly high seasonal water table. The soils in the area near Gee Creek are stated as having poor drainage. The effects on soils and geology would be managed using standard design and construction techniques.

Noise

Temporary noise level increases would occur during construction. After the project is complete, noise levels would increase 2-6 decibels (dBA). Noise levels at 36 residences within the project area would approach or exceed FHWA noise abatement criteria. Noise mitigation measures, including noise walls, were analyzed but determined not reasonable and/or not feasible for any of the 36 residences according to FHWA and WSDOT reasonable and feasible criteria. As a result, noise mitigation would not be proposed for the project.

What are noise abatement criteria?

If future noise levels with a project are predicted to approach or exceed the FHWA noise criteria at a sensitive receptor, mitigation is evaluated at the receptor. For residences, the criterion is 67 dBA. WSDOT considers a noise impact to occur if the noise level is within 1 dBA of the 67 dBA criterion.

What is feasible and reasonable?

Reasonable refers to the maximum cost per residence benefiting from the noise mitigation. Feasible refers to whether the barrier can provide a substantial (at least seven decibels) reduction in noise and other constructability issues.

Air Quality

The project would conform to the Vancouver area Air Quality Maintenance Plan for carbon monoxide (CO) and ozone; therefore, it would not cause a substantial regional affect to CO or ozone air quality.

What indirect effects could occur as a result of the project?

The project would fill some areas that are now wetland; it would decrease flood storage capacity and could change hydrology. As part of a wetland mitigation plan, created wetlands would replace or restore wetland functions and values lost or degraded as a result of the project. The wetland mitigation plan would increase flood storage capacity in the local vicinity.

The project is not expected to degrade water quality in the project area. The project would treat a larger impervious surface area than it would create. Therefore, a slight long-term benefit to water quality in the watershed may result.

What is an impervious surface?

Any surface, such as a rooftop, sidewalk, road, parking lot, and compacted urban soils, that prevents rain from passing through or penetrating and moving into soils as it would naturally.

Over time, increased traffic in the area would affect views by increasing vehicle light and glare. Roadway signs and streetlights may also lead to increased light levels in what is now a semi-rural environment.

Over time additional vegetation may be lost in the vicinity of the project after construction. Severed tree roots may impair the health of trees. Newly exposed trees may also be affected due to their increased exposure to wind

What cumulative effects could occur as a result of the project?

The project area is semi-rural in character. When this project is combined with other development in the project vicinity, it may contribute to a more urbanized character of the area. However, future freeway oriented development within the area would occur slowly because there is no existing sewer service. In addition access control will limit traffic circulation and preserve the area around the transportation infrastructure. Regulations imposed by the Clark County Comprehensive Plan and the Clark County Interchange Area Policy will also control the area's development. A more urbanized character would mean more rooftops, roads, and parking lots. These in turn would increase impervious conditions and cause increased stormwater runoff.

The incremental removal of vegetation from possible future development would also decrease the overall quality of existing views and increase habitat fragmentation in an area that already exhibits impaired wildlife connectivity for plant and wildlife species. Over time, the loss of wildlife habitat and new barriers to wildlife movement could result in a slight increase of incidental wildlife deaths. However, the wildlife corridor is already fragmented due to numerous roadway crossings and the nearby presence of I-5.

Where can project information be found?

http://www.wsdot.wa.gov/projects/SR502/Interchange/

This project website provides information regarding the project alignment, process, schedule, public involvement opportunities, and WSDOT contact information. Also, project newsletters have been distributed to residents in the vicinity of the project area. A final public open house to discuss the project is scheduled for September 2005.