Appendix A: Project Design Features

APPENDIX A: PROJECT DESIGN FEATURES

Purpose

The purpose of this appendix is to provide a more detailed description of project features than the project description in Chapter 4 of the Environmental Assessment. For example, some project elements such as specific roadway improvements and stormwater management are presented in greater detail.

The Renton to Bellevue Project extends approximately eight miles (milepost 3.8 to milepost 11.9) from SR 169 north to the northern on- and off-ramps of the I-90 interchange (see Exhibit A-1). The principal features of the project (see Exhibit A-2, sheets 1-8 for details), also referred to as the Build Alternative, are:

- Addition of two new general-purpose lanes on I-405 in each direction from SR 169 through the I-90 interchange;
- Realignment of I-405 to bring it up to current freeway standards where feasible;
- Construction of a new in-line BRT station in the vicinity of 112th Avenue SE;
- Construction of a transit/high occupancy vehicle (HOV) direct access ramp at N 8th Street in coordination with Sound Transit;
- Realignment and reconfiguration of eight interchanges;
- Changes to local roadways related to interchange improvements and I-405 widening;
- Construction of stormwater management facilities; and
- Application of Context Sensitive Solutions (CSS) to incorporate visually pleasing and community-oriented features into the project design.

Detailed Project Improvements

The following discussion describes specific improvements that will be made in the I-405 Renton to Bellevue Project area, starting from the southern project limits and SR 169 in Renton to the northern project limits at the I-90 interchange in Bellevue. These improvements are shown in Exhibit A-2.

Mainline Improvements

WSDOT will realign and reconstruct I-405 to add two, 12-foot general-purpose lanes in both the northbound and southbound directions. The roadway will be improved with approximately 10-foot inside shoulders (to the driver's left) and 12-foot outside shoulders (to the driver's right) in both directions. The freeway design will include a four-foot painted buffer to separate the general-purpose lanes from the inside HOV lane (see Exhibit A-2). In addition to adding the new lanes, the existing lanes will be reconstructed.

Intelligent transportation system (ITS) features will be incorporated into the project. In addition to the planned ramp meters, these features may include electronic variable message signs, highway advisory radio, and enhanced data and communication equipment for incident response. The specific ITS components will be determined during the final design phase of the project.

Exhibit A-1: Project Vicinity Map