3.14 UTILITIES

The following section compares the probable significant impacts from the Preferred Alternative and the Straight Street Grid Option on utility systems to those associated with the Redevelopment Alternatives (Alternatives 1 - 3) in the 2008 *New Whatcom Redevelopment Project Draft EIS* (DEIS) and identifies any new or increased significant impacts and/or mitigation.

3.14.1 Affected Environment

The DEIS describes the existing conditions of the utility systems provided to the New Whatcom site (the Waterfront District). Utilities considered in the DEIS include: water, sanitary sewer, electrical and natural gas service. (The stormwater management system is described in **Section 3.3,** Water Resources, of the DEIS and this SDEIS.) The above-listed utilities are currently available to the site. The current status of utilities provided to the site has generally remained the same as presented in the DEIS; therefore, no changes to the discussion of existing conditions is warranted in this SDEIS (see DEIS Section 3.14.1 for a description of the existing status of these utilities).

3.14.2 Impacts

Draft EIS (Alternatives 1 - 4)

As described in the DEIS, Alternatives 1 - 3 would result in increased demands on all utility systems. The overall water, sewer, electrical, and natural gas system improvements needed to serve the New Whatcom redevelopment would be similar among DEIS Alternatives 1 - 3; the estimated level of demand/consumption would vary by alternative (see Section 3.14 of the DEIS for the detailed estimates of utility demands).

Under DEIS Alternatives 1 - 3, most existing onsite utilities, including water, sanitary sewer, electrical, and natural gas lines would be removed, replaced, or abandoned in place. It is assumed that the existing utilities would continue to serve the site until required to be removed for redevelopment activities. Underground utilities could be abandoned as part of site preparation and/or environmental cleanup activities. Based on the specific soil remediation requirements for designated areas of the site, abandoned-in-place pipes may be required to be filled with clean material and capped (refer to **Section 3.5** of this SDEIS, Environmental Health, for more information on site remediation).

Utility systems would need to be upgraded and/or new systems constructed to meet the demands of redevelopment under DEIS Alternatives 1 - 3. For example, it is assumed that a new onsite water and sanitary sewer network would be built to serve the New Whatcom redevelopment; in addition, a new electrical substation would be constructed to meet the demand at full buildout of the project. Under all Alternatives, adequate capacity would be available to serve the redevelopment with extensions and improvements.

As described in the DEIS, construction and operation impacts under the No Action Alternative would be similar in nature to those under the Redevelopment Alternatives.

Preferred Alternative

As described in **Chapter 2** of this SDEIS, levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1 - 3 in the DEIS. Redevelopment under the Preferred Alternative would mix and match elements of Alternatives 1 - 3.

Redevelopment under the Preferred Alternative would result in temporary construction impacts on utilities similar to those anticipated for DEIS Alternatives 1 - 3.

Operations of redevelopment under the Preferred Alternative would result in increased demand for utility services, within the range of demands estimated for DEIS Alternatives 1 - 3. The density levels and nature of redevelopment (i.e. types of land uses) under the Preferred Alternative would be similar to under DEIS Alternative 2. As a result, the onsite population levels (residents and employees) and anticipated increases in demand for utility services would be comparable to those estimated for DEIS Alternative 2 (see DEIS Section 3.14.2 for details on these anticipated impacts). All utilities have adequate capacity to provide service to the redevelopment under the Preferred Alternative; no significant impacts to utility systems would be anticipated.

Straight Street Grid Option

Redevelopment under the Straight Street Grid Option would include a similar mix of land uses and densities to those proposed under the Preferred Alternative. Accordingly, it is assumed that operations of the redevelopment under the Straight Street Grid Option would result in increased demands for utility services similar to those described under the Preferred Alternative; no significant impacts to utility systems would be anticipated.

3.14.3 Conclusions

The potential for significant impacts under the Preferred Alternative on utility services (water, sanitary sewer, electricity and natural gas) would be within the range of impacts identified under DEIS Alternatives 1 - 3. The utility demands and associated impacts of the Preferred Alternative would be similar to DEIS Alternative 2. No additional significant impacts on utility services would be anticipated with the Preferred Alternative.

3.14.4 Mitigation Measures

Mitigation measures to address the potential for significant utility service impacts of Alternatives 1 - 3 are identified in the DEIS (see DEIS Section 3.14.3 for a list of these measures). These mitigation measures would also apply to the Preferred Alternative and the Straight Street Grid Option. Because no additional significant impacts were identified for the Preferred Alternative or the Straight Street Grid Option, no additional mitigation measures would be warranted.

As part of the master planning process, the Port and City have decided that the Waterfront District would be developed as one of the nation's first LEED-Neighborhood Design projects. As such, the redevelopment could incorporate an array of sustainable design principles including utility and infrastructure conservation features, when feasible, including:

- Reduction of potable water demand by conservation and reclaimed or reused water.

- Potential use of a Membrane Bioreactor (MBR) process for wastewater treatment. The MBR process is intended to purify and reclaim water for other uses (flushing toilets, irrigation and other non-potable uses).

- Use of other sustainable principles for water conservation, such as utilizing water conserving fixtures, and use of micro or drip irrigation techniques combined with drought tolerant species for landscaping purposes.

- Reduction of electrical demand by utilizing energy conservation and sustainable building designs.

3.14.5 Significant Unavoidable Adverse Impacts

No significant adverse impacts to utility services would be anticipated to result from redevelopment under the Preferred Alternative or the Straight Street Grid Option.