CHAPTER 1

Summary

CHAPTER 1 **EXECUTIVE SUMMARY**

1.1 INTRODUCTION

This chapter provides a summary of the New Whatcom Redevelopment Project Supplemental Draft EIS (SDEIS). It briefly describes the Preferred Alternative and Straight Street Grid Option; and provides an overview of the probable significant environmental impacts, mitigation measures and significant unavoidable adverse impacts of the Preferred Alternative and Straight Street Grid Option. See Chapter 2 of this SDEIS for a more detailed description of the Preferred Alternative and Straight Street Grid Option, and Chapter 3 for a detailed presentation of probable significant impacts, mitigation measures and significant unavoidable adverse impacts.

The New Whatcom Redevelopment Project Draft EIS (DEIS) was issued in January 2008. The DEIS addresses the probable significant adverse impacts that could occur as a result of the approval by the Port of amendments to the Comprehensive Scheme of Harbor Improvements, adoption by the City of the Master Development Plan, zoning changes and implementing regulations, the approval of a Development Agreement between the Port and City, and potential redevelopment activities on the New Whatcom site during the long-term build-out horizon. The Proposed Actions would result in a change in zoning from heavy industrial uses at the site to a mixed-use neighborhood. Over the buildout period, a transition to an urban waterfront community with business, institutional, residential and commercial uses and a range of public amenities would occur.

At the time the DEIS was prepared and issued, a preferred plan for the site had not been determined. Accordingly, a range of alternatives are addressed in the DEIS that represent an overall envelope of potential redevelopment that the site could accommodate (Alternatives 1 - 4 in the DEIS). The DEIS recognizes that features of the alternatives could be mixed and matched to arrive at the final Master Plan Development for the site.

In March 2008, The Port of Bellingham's Board of Commissioners directed the Port staff to defer completion of the New Whatcom Redevelopment Project Final EIS in order to conduct further research of certain key considerations for redevelopment of the site. Based on this work, as well as input from and coordination with the City, agencies, and the public, the Port staff prepared a recommended Proposal that serves as the current redevelopment concept for the site and a "Preferred Alternative". This Preferred Alternative would be consistent with the applicant's objectives, as defined in the DEIS (see Section 2.4 of the DEIS). The Preferred Alternative is the subject of this SDEIS. The mix of uses and level of redevelopment called for in the "Preferred Alternative" are within the range of redevelopment addressed in the DEIS (within the range analyzed under DEIS Alternatives 1 - 4). This SDEIS also analyzes a rectilinear road grid option, known as the "Straight Street Grid Option", as requested and defined by the City of Bellingham.

1.2 PREFERRED ALTERNATIVE

The Preferred Alternative is intended to be a medium density, sustainable development that features: a diversity of uses that are complimentary to the downtown Bellingham Central Business District; an infrastructure network that integrates with and connects the waterfront to

surrounding areas; and, a system of parks, trails and open space that provides substantial waterfront access opportunities to the community. As currently defined by the Port, the level of redevelopment under the Preferred Alternative would be within the range assumed for the EIS Alternatives analyzed in the DEIS. Redevelopment under the Preferred Alternative would mix and match elements of the DEIS Alternatives. For example, the redevelopment density of the Preferred Alternative would be comparable to DEIS Alternatives 2/2A (up to 6 million square feet of office, institutional, marine industrial, residential, and retail uses), while the amount of parks, trails and open space would be similar to DEIS Alternative 1 (approximately 33 acres). The Preferred Alternative also includes development of a marina within the remediated ASB area.

The Preferred Alternative is based on a modified street grid for long-term redevelopment of the New Whatcom Redevelopment site (also referred to herein as the Waterfront District). The new grid would be rotated at the top of the bluff that currently divides the Waterfront District from the existing downtown, in order to provide efficient connections to downtown and surrounding areas, opportunities for formal view corridors, and cost-effective engineering solutions for bridging the bluff and BNSF railroad corridor.

The Preferred Alternative represents a further refinement of the DEIS Alternatives in the following key areas:

- Redevelopment density and mix of uses
- Road system
- Grading/stormwater management concept
- Parks and shoreline habitat plan
- In-water work
- Sustainable "green" design strategies
- Historic Buildings
- View Corridors
- Development regulations.

(See **Chapter 2** for details on the Preferred Alternative.)

1.3 STRAIGHT STREET GRID OPTION

The City of Bellingham has requested that a rectilinear road grid option to support redevelopment of the Waterfront District be analyzed as part of this SDEIS. This road grid option is reference herein as the "Straight Street Grid Option". The City defined certain features of this Option for analysis purposes, including the road system, maximum building heights, etc. The road system under this Option would be similar to the rectilinear road grid included under DEIS Alternatives 1 - 3, except there would be no five-legged intersection at the Laurel St./Commercial St./Log Pond Dr. intersection and the Commercial St. bridge would not be provided.

Many features of this Option (i.e. redevelopment density, mix of uses, amount of parks/open space, stormwater concept, and marina development), as defined by the City, are assumed to be similar to those included in the Preferred Alternative. The key differences between the Straight Street Grid Option and the Preferred Alternative would include: the orientation of the street grid and its connection to adjacent areas; the assumed building heights (75-foot height limits); the assumed retention of certain historic buildings; and, the inclusion of view corridors

along road rights-of-way. For comparative purposes, this SDEIS evaluates the potential impacts of this Option relative to the Preferred Alternative (see **Chapter 2** for details).

1.4 SUMMARY OF ENVIRONMENTAL IMPACTS

Proposed redevelopment under the Preferred Alternative and the Straight Street Grid Option would be within the range of redevelopment assumed for DEIS Alternatives 1 - 3, and would mix and match elements of Alternatives 1 and 2. As a result, the probable significant impacts of the Preferred Alternative and the Straight Street Grid Option would be expected to be within the range of impacts described in the DEIS (see the summary of impacts from the DEIS in **Chapter 6** of this SDEIS). **Table 1-1** presents the key probable significant environmental impacts for each element of the environment evaluated for the Preferred Alternative and the Straight Street Grid Option, and highlights any differences in impacts from those identified for Alternatives 1 - 3. This summary table is not intended to be a substitute for the complete discussion of each element that is contained in **Chapter 3** of this SDEIS.

Table 1 – 1
IMPACT SUMMARY MATRIX

Environmental Element	Preferred Alternative	Straight Street Grid Option
Earth	Redevelopment would require grading for construction of infrastructure components, for remediation purposes (in portions of the site), for potential long-term sea level rise, for parking structures and to achieve suitable finish grades for building construction. There would be a potential for temporary earth-related impacts during construction (i.e. erosion, ground subsistence, ground settlement, vibration due to pile-driving). With implementation of typical geotechnical engineering design and construction measures, significant earth-related impacts would not be expected.	Impacts on soils and geologic conditions would be similar to under the Preferred Alternative.
	The revised grading plan prepared for the Preferred Alternative is intended to be consistent with the revised roadway layout and stormwater management plan. Under the revised plan, the site roadways located to the south of the Waterway would be elevated approximately 6 to 11 feet above the existing site grade on average. The roadway network in the areas to the north of the Waterway would be constructed closer to existing elevations. Maximum overall grading quantities are expected to be similar to or less than the amounts estimated for the preliminary grading concept under DEIS Alternatives 1 - 3.	
	All new stormwater outfalls would be designed at an elevation to preclude any long-term sea level rise impacts or storm surge problems.	
Air Quality	Construction activities would produce a range of air emissions. Operational emissions and related potential air quality impacts could result from the primary emission sources in the site area, including traffic and non-road (railroad and marine vessels)	Impacts on air quality and emissions of greenhouse gases would be similar to under the Preferred Alternative.

Environmental Element	Preferred Alternative	Straight Street Grid Option
Air Quality Cont'd	sources. Significant impacts would not be expected either during construction or operation. Redevelopment would result in greenhouse gas emissions over the lifespan of the project and on an annual basis. Given the commitment to develop the site as a LEED-Neighborhood Design project and relative to historical emissions at the site from industrial sources, emissions would likely be reduced.	
Water Resources	Construction would have the potential to temporarily impact water resources adjacent to the site, primarily from erosion and sedimentation. With implementation of the mitigation measures listed in the DEIS (Best Management Practices), significant impacts to water resources would not be expected. A revised stormwater control plan was developed for the Preferred Alternative. This system would meet the applicable stormwater treatment criteria of the Washington Department of Ecology and the City of Bellingham. Several features of the revised stormwater management system would differ from or expand upon the conceptual stormwater plan assumed under DEIS Alternatives 1 - 3 (i.e. further definition of an interim stormwater system, employment and evaluation of specific water quality treatment facilities). With implementation of the proposed stormwater management plan, significant impacts on stormwater runoff conveyance and discharge during operation of the project would not be expected. The stormwater system is expected to include various low-impact development features; however, infiltration of stormwater into soils would be limited due to contamination conditions at the site. With implementation of the revised stormwater management system, stormwater quality discharge from the site would be	Impacts on water resources would similar to under the Preferred Alternative, although no specific stormwater management plan has been defined for this Option.

Environmental Element	Preferred Alternative	Straight Street Grid Option
Water Resources Cont'd	expected to improve over existing conditions and be within applicable state standards for all pollutants (except for fecal coliforms, which would be unchanged at worst).	
Plants & Animals	Overall, with proposed redevelopment there would be substantial benefits to aquatic habitat as a result of shoreline restoration and enhancement. There would also be an improvement in upland habitat relative to existing conditions. Approximately 33 acres of parks/open space would be provided, similar to DEIS Alternative 1; a portion of the 33 acres would provide upland habitat. New riparian habitat would be provided as well. Grading operations and stormwater runoff associated with construction could potentially affect aquatic habitat. With implementation of mitigation measures listed in the DEIS and the additional proposed measures in this SDEIS, significant impacts to aquatic habitat would not be expected. The Preferred Alternative would differ from or expand upon certain features assumed under DEIS Alternatives 1 - 3 (i.e. the shoreline habitat plan, wave attenuator systems, bulkhead/rip/rap slope removal, boat launch in the marina, and fill placement proposed in nearshore and fringe habitat areas). Two types of shoreline habitat would be created: nearshore habitat and fringe habitat. Shoreline improvements would benefit intertidal/shallow subtidal habitat on a net basis, as redevelopment would include a reduction in over-water coverage associated with removal of a portion of the bulkhead/wharf along the southern edge of the Whatcom Waterway and restoration of a sloped shoreline, removal of creosote-treated piles and extensive riparian and aquatic habitat restoration/enhancement.	Impacts on upland and aquatic habitat would be similar to under the Preferred Alternative.

Environmental Element	Preferred Alternative	Straight Street Grid Option
Environmental Health	Cleanup required for mixed-use redevelopment would be more stringent than the level required for ongoing industrial uses. This would result in reductions in residual environmental risks and overall improvement in environmental protection at the site. Construction impacts could include disturbance of contaminated soils, exposure to soil vapors or other hazardous substances, disturbance of containment structures, and disturbance of capped sediments. Potential operational impacts could include disturbance and/or exposure to capped sediments from operational activities. With the proposed mitigation measures listed in the DEIS, including the use of soil and/or asphalt caps, vapor mitigation systems, and implementation of other measures (institutional controls) in conjunction with final cleanup plans, no significant environmental health-related impacts would be expected.	Environmental health-related impacts would be similar to under the Preferred Alternative.
Noise	Redevelopment would result in noise impacts from construction-related activities (particularly from pile-driving activities), as well as from operations on the site. Operational noise would primarily include vehicular traffic, as well as human activity, mechanical equipment, and light/marine industrial operations. Under the Preferred Alternative there would be a reduction in noise associated with industrial uses. With implementation of the mitigation measures listed in the DEIS, no significant noise-related impacts would be expected.	Noise-related impacts would be similar to under the Preferred Alternative.
Land Use	Approval of the Proposed Actions would allow for the transformation of the site from an underutilized industrial site, that is currently separated from the surrounding community, to a new neighborhood with a mix of uses and open spaces that are connected to and integrated with the surrounding community. Proposed redevelopment levels under the Preferred Alternative would be similar to under DEIS Alternative 2 (6 million square feet	Land use impacts would be generally similar to under the Preferred Alternative. The assumed height limit (75 feet) could result in a more uniform and less diverse character of building development and design than under the Preferred Alternative. Less opportunity for additional open space between buildings would likely result, as well as fewer internal

Environmental Element	Preferred Alternative	Straight Street Grid Option
Land Use Cont'd	of total building space). However, there would be a slight decrease in the amount of proposed residential uses as compared to DEIS Alternative 2 and an increase in office, institutional and light/marine industrial uses. Proposed parks, trails, and habitat area would be similar to under DEIS Alternative 1 (33 acres). A range of amenities and public access opportunities would be afforded. The majority of the site's shoreline would be accessible to the public Proposed land uses would be compatible and complimentary with uses in the downtown and surrounding neighborhoods. The proposed street network and community greens are intended to provide increased opportunities for efficient vehicle, pedestrian and bicycle connections between the site, downtown Bellingham and surrounding areas, and help to create an extension of the downtown area, and promote view opportunities through the site.	view opportunities. The proposed street network would be slightly different than under the Preferred Alternative and would continue to follow the existing City of Bellingham street grid. This layout is also intended to provide efficient connections from the site to downtown and surrounding areas and promote pedestrian activity. However, under this Option, there would be less direct connections to the downtown, due to the elimination of the Commercial St. bridge improvement.
Population/ Employment/ Housing	The population and housing-related impacts under the Preferred Alternative would be similar to under DEIS Alternative 2 (3,614 people and 1,892 housing units at buildout). Employment-related impacts would be similar to under Alternative 1 (8,354 employees).	It is assumed that impacts on population, employment, and housing would be similar to under the Preferred Alternative.
Aesthetics	Redevelopment could alter views of the New Whatcom site and areas beyond the site from surrounding viewpoints. However, several formal view corridors would be included through the site to provide visual connections from established neighborhoods to Bellingham Bay, Whatcom Waterway and the site's waterfront. View corridors would generally be provided as a result of the angled street grid and uninterrupted roadway rights-of-ways through the site to the water, variable limitations on building heights and/or upper level building setbacks, and/or proposed community greens/open space features. This would represent a contrast to existing conditions, particularly given the lack of	Alteration of views of the New Whatcom site and beyond would result, similar to under the Preferred Alternative. Under the Straight Street Grid Option, the street network would be slightly different than under the Preferred Alternative, and would continue the existing City of Bellingham street grid onto the site. Extension of road rights-of-way would be anticipated to provide opportunities for views through the site to the water and beyond; however, no formal view

Environmental Element	Preferred Alternative	Straight Street Grid Option
Aesthetics Cont'd	protected views and building height limits under industrial zoning regulations. The variable height limits would also provide opportunities for buildings to be separated by open spaces and could result in substantial view opportunities to the waterfront and Bay from onsite structures. Variable heights, upper-level building setbacks, building modulation and spacing between taller buildings would likely result in a diverse building and design character.	corridors are assumed. Building height limits of 75 feet throughout the site could result in a more uniform and less diverse character of building redevelopment and design than under the Preferred Alternative that could reduce the opportunity for views of the water from certain onsite building and additional open space between buildings.
Historic & Cultural Resources	Ten historic structures that are over 40 years of age (5 structures listed in the DEIS and 5 additional structures) are identified that could be retained or reused in some capacity under the Preferred Alternative (including potential reuse of building materials or relocation of industrial equipment or features); therefore, the potential for impacts to historic resources could be lower than under DEIS Alternatives 1 - 3. The viability of retention, reuse (of buildings and/or materials) or other potential methods of preservation would be subject to additional analysis of a range of factors, including structural integrity, need for seismic upgrade, economic considerations, sea level rise, and view opportunities.	The potential for significant impacts on historic structures could be similar to, but less than those described under the Preferred Alternative, due to the assumed potential retention/reuse of a total of 13 historic structures. The viability of retention, reuse (of buildings and/or materials) or other potential methods of preservation would be subject to additional analysis of a range of factors, including structural integrity, need for seismic upgrade, economic considerations, sea level rise, and view opportunities.
Transportation	There would be an increase in net new trips to and from the site under the Preferred Alternative. Onsite and offsite roadway and intersection operations would vary by 2026; certain roadways and intersections would exhibit a decline in LOS, while others would improve due to assumed improvements, including new access connections, traffic control, and channelization at various locations. Assumed onsite access improvements would create the necessary vehicle capacity to support the buildout of 6 million	Net new trips to and from the site would be similar to under the Preferred Alternative. At a few adjacent intersections, operations would be worse than under the Preferred Alternative due to the need for additional site access locations to accommodate the full buildout of the site (6 million square feet). Unlike the Preferred Alternative, assumed onsite access improvements would not provide the necessary vehicle capacity to accommodate land

Environmental Element	Preferred Alternative	Straight Street Grid Option
Transportation Cont'd	square feet of mixed uses and the number of PM peak hour vehicle trips that would be generated to/from the site. Additional offsite improvements would be needed to address congestion and operational deficiencies, particularly along Roeder Ave./Chestnut St. and Holly St.; in some cases, such improvements will be required to accommodate future growth in the area, with or without New Whatcom redevelopment. Impacts to non-motorized, transit, rail, and parking would be similar to under DEIS Alternative 2.	use buildout (6 million square feet) and the number of PM peak hour vehicle trips generated to/from the site. Similar to under the Preferred Alternative, additional offsite improvements would be needed to address congestion and operational deficiencies. Impacts to non-motorized, transit, rail and parking would be similar to under the Preferred Alternative; however, specific provisions for onsite parking have not been defined under this Option.
Public Services	Public service impacts (i.e. fire, emergency services, police, schools and street maintenance) under the Preferred Alternative would be similar to under DEIS Alternative 2. Impacts to proposed parks, trails and habitat areas would be similar to under DEIS Alternative 1 (33 acres of parks/open space would be provided).	Impacts on public services would be similar to under the Preferred Alternative.
Utilities	Demand for utilities (water, sanitary sewer, electricity and natural gas) and associated impacts under the Preferred Alternative would be similar to under DEIS Alternative 2	The assumed demand for utilities and associated impacts would be similar to under the Preferred Alternative.

1.5 MITIGATION MEASURES

All mitigation measures identified in the DEIS would also apply to the Preferred Alternative and the Straight Street Grid Option (see the summary of mitigation measures from the DEIS in **Chapter 6** of this SDEIS). Additional mitigation measures proposed as part of the Preferred Alternative and the Straight Street Grid Option are listed below.

Earth

 To further protect against the potential for long-term sea level rise, new stormwater outfalls discharging runoff from areas on the south side of the Whatcom Waterway would be designed at an elevation of 13 to 15 feet, several feet above existing Mean Higher High Water elevation.

Air Quality

Greenhouse Gas Emissions

Although the Preferred Alternative and Straight Street Grid Option would generate greenhouse gas emissions, thresholds have not been established by Ecology to determine the significance of these impacts. Further, reductions in greenhouse gas emissions could result from the transition of the site from industrial to mixed uses. Efforts to reduce the carbon footprint and associated greenhouse gases of the New Whatcom redevelopment could include:

- The Preferred Alternative and the Straight Street Grid Option would provide a road network and connections to link the site to downtown and the waterfront and would provide a range of jobs, goods and services. Transit and non-motorized connections would reduce vehicular trips from onsite residents and employees and associated emissions.
- The greenhouse gas emissions reduction strategy would consider promoting high efficiency buildings and reducing electrical energy used for thermal needs.
- Construction strategies, including green roofs, natural ventilation and solar orientation could be used as part of fundamental building design principles.
- Maximizing energy production from renewable energy sources such as solar, wave, tidal, wind or biomass could be considered, as feasible.
- Potable water demand could be reduced by conservation and substituting reclaimed water for uses that do not require drinking water quality. Reclaimed and/or reused water could result from captured rainwater stored for reuse. The rainwater could be reused for various functions such as flushing toilets and irrigating landscaping during dry periods.
- A Membrane Bioreactor (MBR) process or similar onsite treatment system could be considered for wastewater treatment. This process is a system for purifying and reclaiming water for other uses.

Water Resources

The Port expects to incorporate various low-impact development (LID) techniques for stormwater management at the site; however, due to existing contamination, infiltration of runoff would be limited. LID techniques could include the following:

- Two parallel stormwater systems could be installed (Option 1) that would separate non-pollution-generating runoff from pollution-generating runoff. With proper permitting, this option would present an opportunity for rainwater harvesting and reuse (including for landscape irrigation and other non-potable functions) and could serve as a LEED (low-impact development) feature.
- Stormwater wetlands or biofiltration swales could be installed in certain areas of the site that would meet requirements for water quality treatment while using low-impact, natural processes for filtration. These could also serve as landscape design features.
- Low-impact bioretention units could be employed for water quality treatment for runoff from pollution-generating surfaces to the extent feasible.

Plants and Animals

As part of redevelopment, substantial benefits to aquatic habitat would result due to the reduction in over-water coverage, restoration of a sloped shoreline, removal of creosote-treated piles and extensive riparian and aquatic habitat restoration/enhancement.

- Impacts to eelgrass for fill placement in certain shoreline areas would be avoided and minimized to the extent possible. Additional eelgrass could be planted to offset any significant impacts. Monitoring would likely occur to ensure success of the mitigation planting.
- In-water construction would occur during approved in-water work windows for salmonids and forage fish. Appropriate work windows would be determined during the permitting process.

Environmental Health

No additional mitigation measures beyond those listed in the DEIS would be warranted.

Noise

No additional mitigation measures beyond those listed in the DEIS would be warranted.

Land Use

The Preferred Alternative includes features to achieve the community vision of a new urban, waterfront community. These include a mix of complimentary uses, a range of public amenities and enhanced public access to the site, vehicular and pedestrian connections to the surrounding downtown and neighborhoods, view corridors, etc.

• As mentioned in the DEIS, specific development regulations would be established to guide long-term redevelopment of the site (along with the Development Agreement and other applicable regulations and standards). Since issuance of the DEIS, the Port and the master planning team have formulated a preliminary set of development regulations for each major redevelopment area of the site (see **Appendix D** to this SDEIS). These preliminary regulations would assist the Port and City in ensuring that significant adverse land use impacts would not result over the long-term. These regulations could be refined as part of the ongoing master planning effort and would ultimately be reviewed and considered by the City as part of the decision-making process for the Waterfront District Master Development Plan (Subarea Plan).

Population/Employment/Housing

No additional mitigation measures beyond those listed in the DEIS would be warranted.

Aesthetics/Light and Glare

- The Port has formulated Preliminary Development Regulations that address view corridors, building height limitations, provisions for upper-level setbacks of buildings in certain areas, and provisions for minimum spacing between taller buildings (no building height limitations or protected views exist under the current industrial zoning). These are intended as refinements to the mitigation measures identified in the DEIS to protect views to/from the site and to address the character of building development and design (see Appendix D, Preliminary Development Regulations).
- As part of the Preferred Alternative, the Port has identified formal view corridor locations on the site. Two primary types of view corridors would be established to provide uninterrupted views through the site to the water: 1) view corridors defined by rights-of way and open space; and 2) view corridors defined by a combination of rights-of-way and building height limitations. The Master Development Plan (which could include the designation of corridors on the site), and the Development Regulations to be adopted, would ensure that view opportunities are provided as part of long-term redevelopment.
- To lessen the impacts of uniformity of building heights under the Straight Street Grid Option, development standards and design guidelines requiring variation in building heights could be adopted.

Historic and Cultural Resources

Mitigation measures to address the potential for significant historic and archaeological impacts of Alternatives 1 - 3 were identified in the DEIS. These mitigation measures would also apply to the Preferred Alternative and Straight Street Grid Option and include the following:

- The Port would explore opportunities for adaptive reuse of existing onsite industrial buildings with consideration of structural, economic, market, and land use factors.
- Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) documentation for potentially eligible buildings and structures onsite that are scheduled for demolition could be prepared during the future permit process.

- An interpretation plan for the Whatcom Waterway area and potentially eligible buildings and structures onsite that are scheduled for demolition or major modifications could be formulated during the future permit process.
- Building materials salvage and reuse strategies could be developed for potentially eligible buildings and structures onsite that are scheduled for removal and demolition. Salvaged materials could include heavy timbers, brick, steel, and stone from onsite structures.
- The terra cotta clad high pressure tanks, located on the site and associated with the former mill operation could be retained (either in their present location or at another location). In addition, the high pressure globe and steel log remover could also be retained as a representation of the historically industrial use of the site.
- Any planned onsite construction in the immediate vicinity of National Register of Historic Places (NRHP), Washington Heritage Register (WHR), and Bellingham Local Landmarks Register (BLLR) listed buildings and structures could be monitored so that such listed resources would not be adversely affected by ground settlement, vibration or other geotechnical factors.
- A management plan could be developed by the Port for the construction life of the New Whatcom redevelopment, drafted in consultation with and agreed upon by applicable state, tribal, and local agencies. The management plan could:
 - Establish procedures and appropriate responses for addressing potential effects to archaeological resources, including review by a qualified archaeologist of specific construction components (review could be limited to construction components in or adjacent to high probability areas);
 - Consider levels of contractor awareness training and specific areas where onsite archaeological monitoring during construction could be conducted;
 - List onsite chains of authorities and contacts for decision-making regarding inadvertent archaeological discoveries during construction activities;
 - Describe prescriptive actions that would result in minimal additional disturbances to potentially significant resources if any are discovered, including specific treatment plans for inadvertent discovery of human remains; and,
 - Identify expectations of participating groups involved in addressing the site's potential discovery of archaeological resources.

The following additional mitigation measure is identified to address potential historic and archaeological impacts:

 A Programmatic Agreement between the Port, the Washington State Department of Archaeology and Historic Preservation (DAHP), and the City could be developed to ensure compliance over the project's build-out period with identified mitigation measures to preclude significant impacts on historic and cultural resources.

Transportation

Measures incorporated into the Preferred Alternative include construction of an extensive infrastructure network featuring both at-grade and bridge connections to the existing street system. In addition, the Preferred Alternative would include a new park and trail system, providing enhanced opportunities for pedestrian and bicycle modes. The Preferred Alternative would result in less onsite and offsite impacts in 2016 and 2026 as compared to the DEIS Alternatives and, therefore would require fewer mitigation measures. This is due to the set of infrastructure improvements assumed as part of the Preferred Alternative. In addition, assumed onsite access improvements would create the necessary vehicle capacity to support buildout of 6 million square feet of mixed uses (it should be noted that under the Straight Street Grid Option assumed access improvements would not provide such capacity).

Specific measures to mitigate onsite and offsite impacts of the Preferred Alternative and Straight Street Grid Option would be necessary to effectively accommodate full redevelopment of the site. These mitigation measures are discussed below.

Onsite Mitigation Measures

- Onsite operational analysis indicates that the Roeder Ave./Hilton Ave. and Chestnut St./Bay
 St. intersections would require improvements by 2016 to ensure safe and efficient traffic
 operations. The Roeder Ave./Hilton Ave. improvements could include the installation of a
 traffic signal and turn lanes, provision of a refuge/merge lane for left turns from Hilton Ave.
 onto Roeder Ave., or restriction of left turns from Hilton Ave. by 2016. The Chestnut St./Bay
 St. improvements could include installation of a traffic signal and turn lanes by 2016.
- To accommodate the assumed redevelopment levels beyond 2016, additional Roeder Ave. improvements would be necessary. Roeder Ave./Chestnut St. from Hilton Ave. to Cornwall Ave. would require widening to provide two lanes per direction and turn lanes at major intersections. In addition, a southbound left turn lane would be needed along F St. at its intersection with Roeder Ave. It should be noted that the City is currently evaluating additional options to improve Roeder Ave. beyond street widening in order to accommodate future traffic growth along this corridor.

In addition, the following onsite mitigation measure is identified for the Straight Street Grid Option:

Operational analysis indicates that the Chestnut St./Bay St. and Chestnut St./Cornwall Ave. intersections would have poor operations in 2026. Intersection improvements at this intersection are assumed as part of the Straight Street Grid Option; therefore, additional site access locations (i.e. new Commercial St. bridge connection) would be needed to improve intersection operations and accommodate 2026 land use densities. To improve operations at the Chestnut St./Cornwall Ave. intersection, an additional northbound turn lane would be needed.

Offsite Mitigation Measures

In addition to onsite improvements, certain offsite improvements would be necessary to support the land use densities proposed under the Preferred Alternative and the Straight Street Grid Option. In some cases, improvements will be required to accommodate future growth in the area, with or without the New Whatcom redevelopment. The following improvements would be necessary by 2016:

- Chestnut St./Railroad Ave. A traffic signal at this intersection should be provided. This
 improvement would also be needed under the lower amount of industrial land uses of the
 DEIS No Action Alternative; therefore, it is recommended that this improvement be
 constructed during the early phases of redevelopment.
- Wharf St. It is recommended that this roadway be improved to provide wide shoulders or bicycle lanes and sidewalks to enhance pedestrian and bicycle use.

The following improvements would be necessary by 2026:

- Forest St./Laurel St. A traffic signal and turn lanes should be provided. The City is planning to enhance multi-modal access and increase pedestrian safety along Forest St., which could eliminate the need for this mitigation measure or change the specific improvements that would be needed. This mitigation measure should be re-evaluated as the City plans their specific improvements.
- Holly St. This street should be widened to provide additional capacity in the northbound direction from Broadway St. to Champion St. The City is also exploring improvements along this corridor, as well as Roeder St.
- Holly St./F St. A northbound left turn lane on F St. should be provided.
- Bay St. Pedestrian and bicycle facilities along this roadway from Champion St. to Chestnut St. should be provided to enhance non-motorized access to and from the site.

Financial responsibilities for the above mitigation requirements and specific implementation strategies for the mitigation improvements noted above would be determined as part of the Development Agreement between the Port and the City.

Public Services

No additional mitigation measures beyond those listed in the DEIS would be warranted.

Utilities

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 or similar onsite treatment system 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.

1.6 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No changes to the discussion of significant unavoidable adverse impacts presented in the DEIS is warranted for the Preferred Alternative or the Straight Street Grid Option (see the summary of significant unavoidable adverse impacts from the DEIS in **Chapter 6** of this SDEIS).

Under most environmental elements, significant unavoidable adverse impacts would not result from redevelopment, with implementation of the identified mitigation measures. This pertains to impacts under Earth, Air Quality, Water Resources, Plants and Animals, Environmental Health, Noise, Land Use, Population/Employment/Housing, Light/Glare, Historic and Cultural Resources, Public Services and Utilities.

Under two elements - <u>Aesthetics</u> and <u>Transportation</u>, significant unavoidable adverse impacts could result. Under Aesthetics, the character of the site would be substantially modified over the long-term, as would views to the site; such changes could be viewed as significant, depending upon one's perspectives and perceptions, or could be perceived as a benefit to the community. Given the provision of formal view corridors under the Preferred Alternative, views to/from and through the site would be afforded; under existing conditions formal view protection is not provided. Such view corridors, as well as the adoption and compliance with development standards and design guidelines would likely preclude significant unavoidable adverse impacts.

Under Transportation, traffic congestion will increase in the site area and downtown over the next 20 years, with or without New Whatcom Redevelopment. Assumed onsite access improvements under the Preferred Alternative would create the necessary vehicle capacity to support the buildout of 6 million square feet of mixed uses. However, traffic associated with redevelopment of the site would worsen congestion levels at certain offsite intersections and along certain roadways, even with the provision of assumed improvements. Ultimately, the potential for significant unavoidable adverse impacts would be dependent upon the Port, the City and other parties to successfully pay for, fund and implement a range of transportation-related mitigation improvements to serve future growth. With implementation of mitigation measures identified for the Preferred Alternative, significant unavoidable adverse impacts would be prevented or substantially lessened.