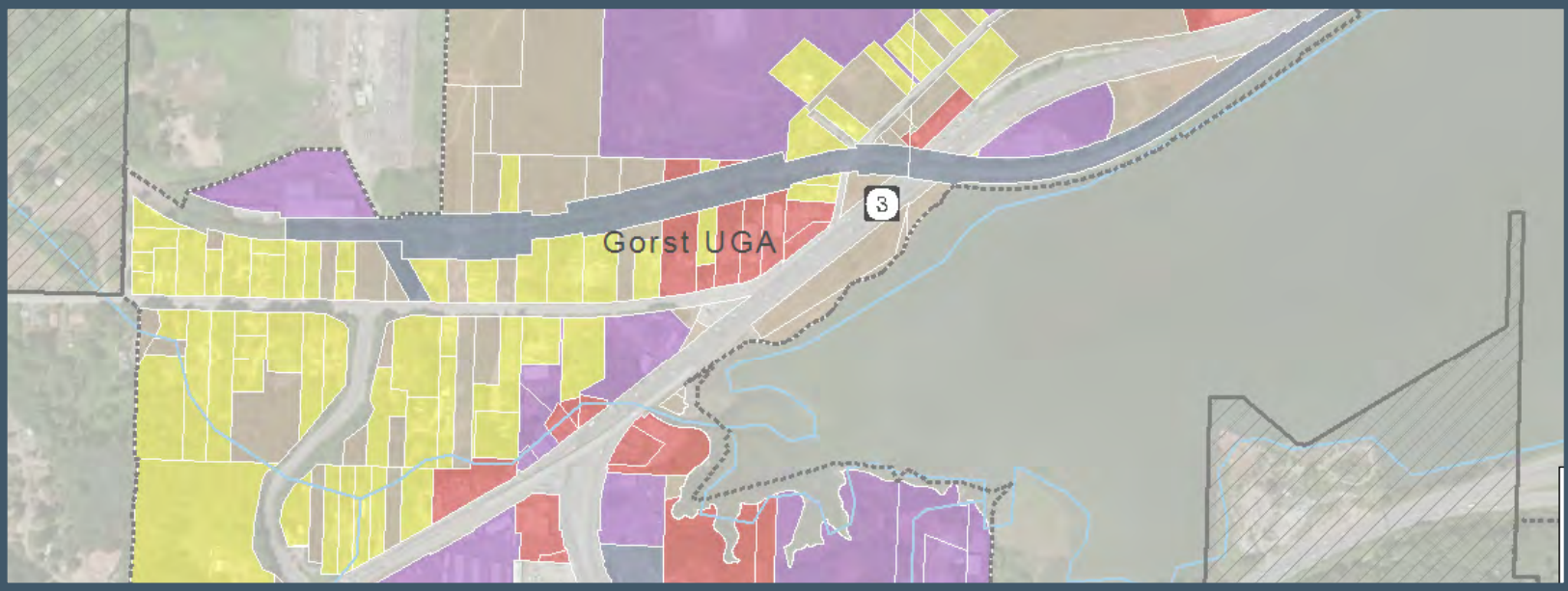
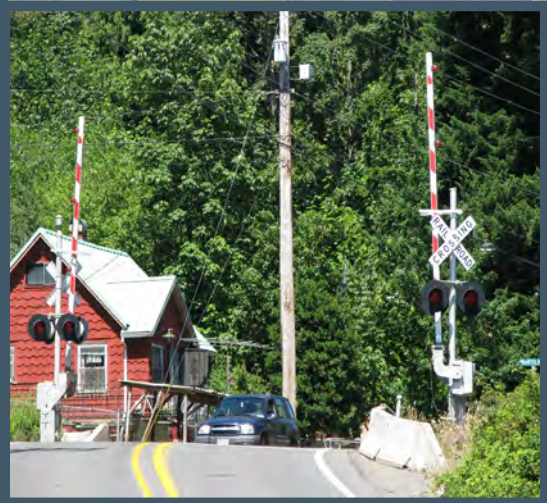
KITSAP COUNTY

CITY OF BREMERTON

Volume 3:
Gorst Subarea Plan

City Council Hearing - December 2013





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VOLUME 3. GORST SUBAREA PLAN

City Council Hearing Draft – Preferred Alternative

Part of a three-volume plan for Gorst

Volume 1. Gorst Creek Watershed Characterization & Framework Plan (under separate cover)

Volume 2. Gorst Planned Action Environmental Impact Statement (under separate cover)

Volume 3. Gorst Subarea Plan (this plan)

PREPARED FOR:

City of Bremerton, lead agency
Kitsap County

December 2013

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1. INTRODUCTION AND PURPOSE

Overview

The City of Bremerton and Kitsap County, in partnership with other state, federal, and tribal agencies, has developed a 20-year plan for the future of Gorst. The purpose of this cooperative planning effort has been to develop a land use plan that is based on the ecological values and functions of the Gorst Creek Watershed in southeast Kitsap County (see Figure 1-1). The preparation of a plan of this nature required significant up-front environmental analysis and careful consideration of the effects that land use decisions would have on the environment.

There are three documents that have been prepared for Gorst, and though they can be read separately, each document relies on the information contained in the others:

Volume 1. Gorst Creek Watershed Characterization & Framework Plan (under separate cover)

Based on the results of a Watershed Characterization Study prepared in 2012 and amended in 2013 studying water flow and habitat, the Gorst Creek Watershed Characterization & Framework Plan guides water quality, habitat, and land use plans and activities across the approximately 6,570-acre watershed. The Gorst Creek Watershed Characterization & Framework Plan provides a common set of goals, policies, and best management practices intended for adoption and implementation by the City of Bremerton, which governs nearly two-thirds of the watershed in its city limits, and by Kitsap County, which governs unincorporated lands comprising over one-third of the watershed.

Volume 2. Gorst Planned Action Environmental Impact Statement (under separate cover)

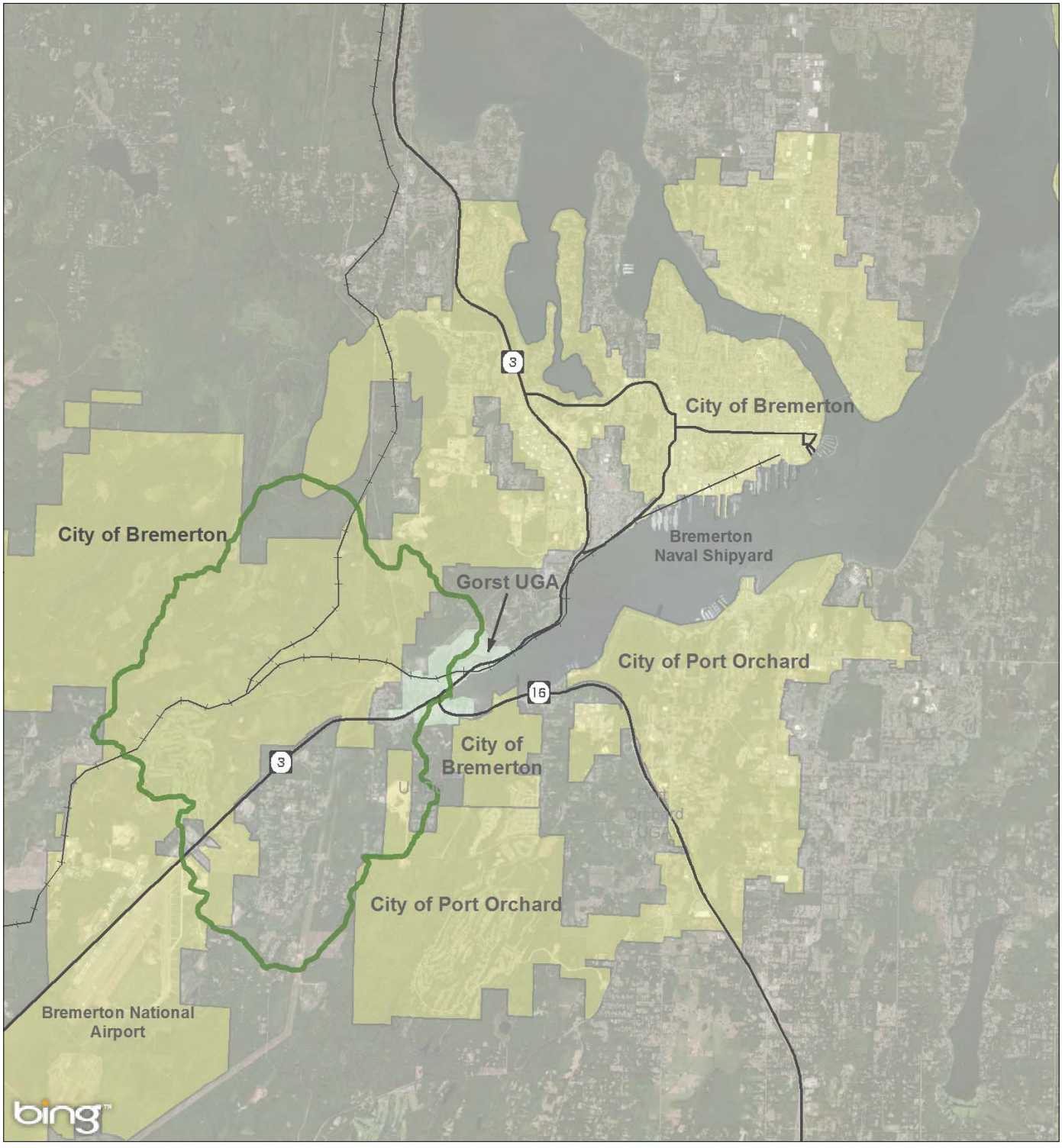
The Gorst Planned Action Environmental Impact Statement (EIS) is an informational document that provides the City of Bremerton, Kitsap County, members of the public, and other agencies with environmental information, an evaluation of alternatives, and potential mitigation measures to minimize environmental impacts. The Gorst EIS analyzes the *No Action Alternative (Alternative 1)*, e.g. continuation of the City's and County's current Comprehensive Plans and development regulations applicable to the Gorst Creek Watershed and Gorst Urban Growth Area (UGA). The EIS also addresses two *Action Alternatives (Alternatives 2 and 3)* and a *Preferred Alternative* that vary land use patterns, particularly in the Gorst UGA; these alternatives consider increasing residential development and enhancing commercial development while promoting environmental restoration and protection. The Gorst EIS allows the City of Bremerton and Kitsap County to consider designating a planned action for some or all of the Gorst UGA. Designating a planned action streamlines environmental review for development proposals consistent with EIS mitigation measures that are adopted in a planned action ordinance.

Volume 3. Gorst Subarea Plan (this document)

This Gorst Subarea Plan is a comprehensive 20-year plan that establishes the general patterns for future land use, transportation and other infrastructure needs in Gorst. The purpose of this plan is to provide greater detail, guidance and predictability to future development within the Gorst UGA, while also protecting the environment.

While the Gorst Creek Watershed Characterization & Framework Plan referred to above analyzed the entire 6,570-acre Gorst Creek Watershed, this Subarea Plan is intended only to address the future vision and development regulations for the Gorst UGA, which is approximately 335 acres in size. The UGA is currently under the jurisdiction of Kitsap County and assigned to the City of Bremerton as an annexation area, and this Subarea Plan will be adopted jointly by both jurisdictions.

FIGURE 1-1. GORST WATERSHED AND GORST UGA VICINITY MAP



Watershed Boundary
City Limits
Gorst UGA
Railroad
Major Highway

Date: September 2013
Source: Parametrix, Department of Natural Resources, BERK

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The Importance of Gorst

The Gorst community is located on Sinclair Inlet between Bremerton and Port Orchard (see Figure 1-1). Two highways converge in Gorst, SR 3 and SR 16. A railroad also traverses the area and connects the Puget Sound Naval Shipyard with the Bangor submarine facility and the Port of Shelton. Through Gorst, county residents, commuters, and military personnel travel to major job centers in the County including Downtown Bremerton and the Puget Sound Naval Shipyard, Bremerton National Airport and associated South Kitsap Industrial Area, and others. From the north at Navy Yard City, State Route 3 carries 44,000 Annual Average Daily Traffic (AADT), increasing to 73,000 AADT north of Gorst, and continuing on SR 16 to Port Orchard with 43,000 AADT. (WSDOT 2012)

In addition to being strategically located between major population and job centers in Kitsap County, the Gorst area contains regionally significant environmental resources. The approximately 6,570-acre Gorst Creek Watershed (see Figure 1-2) is diverse with thousands of acres of intact forest land, miles of streams and acres of wetlands. Much of the forested area that comprises the north and central portion of the Gorst Creek Watershed is publicly owned, and lies within a contiguous area that also contains Green Mountain and Tahuya State Forest. Taken together, this area comprises the largest open-space block in the Puget Trough Ecoregion of the Puget Sound Basin. The estuary (Sinclair Inlet) supports shellfish, waterfowl, shorebirds, great blue herons, and bald eagles. The Gorst Creek estuary is a major passageway and nursery for Puget Sound Chinook, Coho, and Chum salmon, along with Steelhead, and Sea-Run Cutthroat trout. Gorst Creek supports a fish rearing facility managed by the Suquamish Tribe and Washington State Department of Fish and Wildlife.

Prior to modern land use and environmental standards, development in Gorst has occurred haphazardly. There is commercial development along shorelines and state routes and residences along secondary roads. Past development has had environmental impacts to both the saltwater shoreline as well as the creek drainages within the watershed. There has been little revitalization in Gorst over the decades, which is likely due to a lack of sewer infrastructure and traffic congestion (see Figure 1-3 for UGA development patterns).

FIGURE 1-2. GORST WATERSHED AERIAL

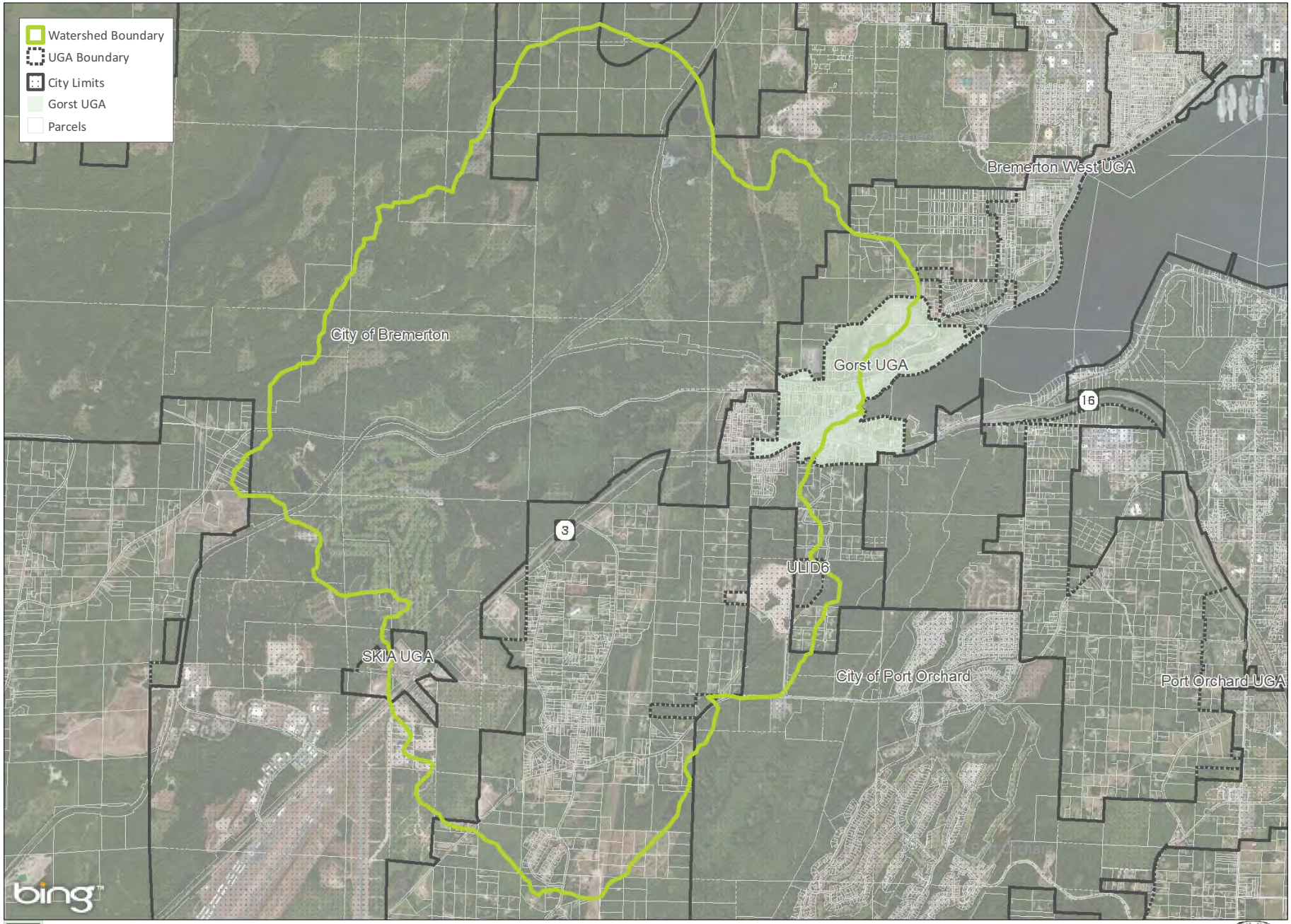
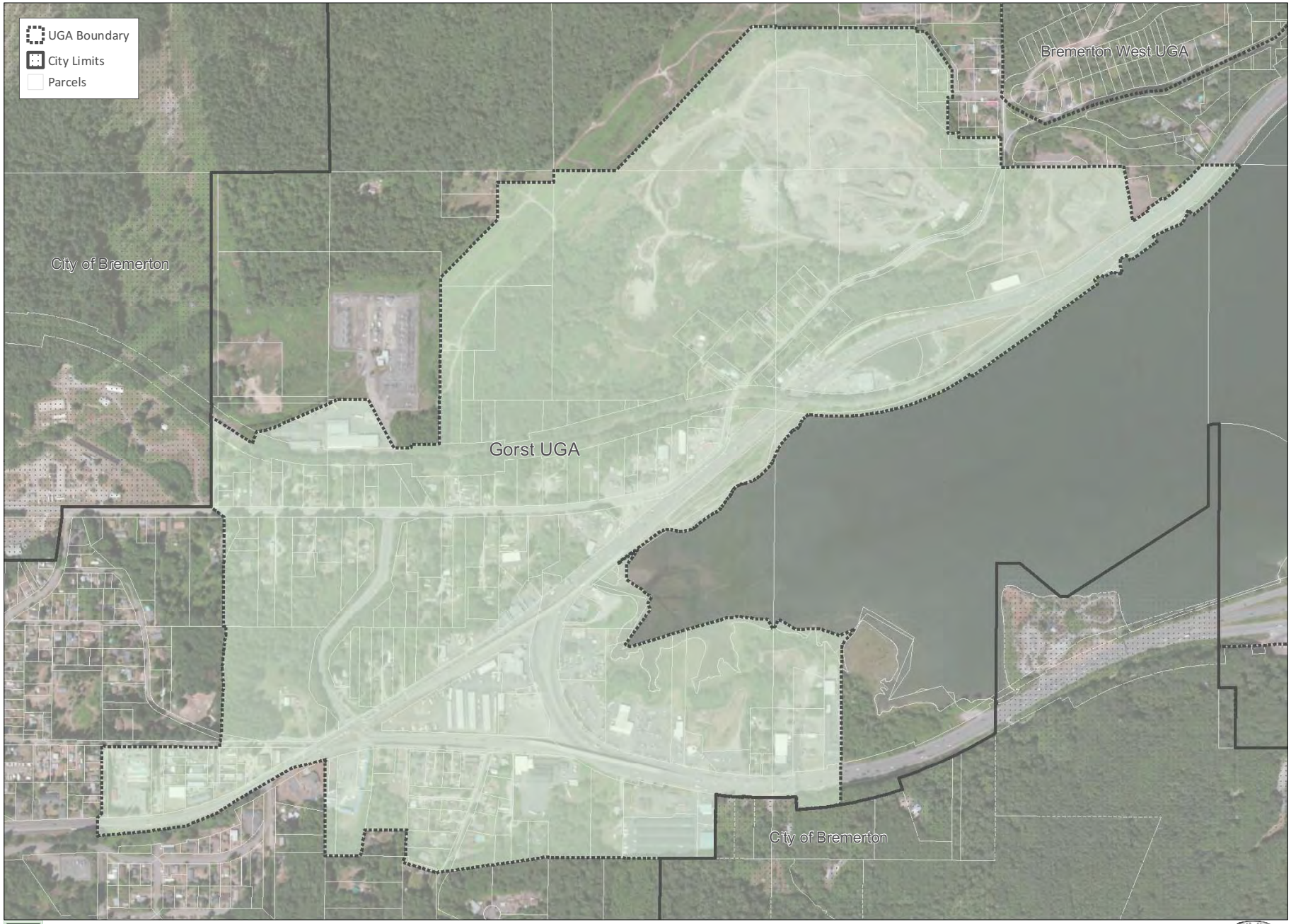


FIGURE 1-3. GORST UGA AERIAL



Date: April 2013
Source: DigitalGlobe, Kitsap County Assessor 2012, BERK

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Recently agencies have been addressing issues within Gorst: In 2010 the City of Bremerton, in coordination with Kitsap County, installed sewers in the Gorst UGA to reduce water quality contamination of Sinclair Inlet partially caused by failing septic systems. The United States Environmental Protection Agency (USEPA) and Kitsap County have invested resources to reclaim brownfields, which restored nearly 3,000 lineal feet of important saltwater shoreline and increased the recreation opportunities within Sinclair Inlet.

Though there has been some progress in improving Gorst, there is more to be accomplished. Gorst Creek does not meet all federal and state water quality standards. Fish passage barriers impede salmonids throughout the watershed. There is lowland flooding in the watershed, particularly in the UGA, as a result of upland deforestation. Traffic congestion hampers businesses, residents, and travelers.

Due to the importance of the Gorst area both environmentally and economically this interagency planning effort was undertaken. In particular, this Gorst Subarea Plan will help:

- Establish the 20 year vision for the Gorst UGA,
- Protect water quality, habitat, and fish while fostering economic development,
- Establish areas for development, restoration and protection based on science, and
- Provide a long-range capital facilities plan for future utility services, public services, and transportation needs.

Gorst UGA Governance

Gorst is dominated by a highway corridor, and from this corridor the uses in the area appear to be only commercial activities. However, off the corridor there is a small long-standing residential community, named for the Gorst family that settled there in 1888. Over one hundred years later, Kitsap County designated the most densely developed area of Gorst as an “urban growth area” (UGA).

Through Kitsap County’s Growth Management Act (GMA) planning efforts, in consultation with the City of Bremerton and the Kitsap Regional Coordinating Council, the Gorst UGA was associated with the City of Bremerton in 2008, which means that the unincorporated UGA is someday expected to annex to the City of Bremerton.

The City is the logical municipal service provider to Gorst. Due to significant public health concerns regarding failing septic systems in the area, the City of Bremerton has invested resources to extend sewer service to the area. The City also provides water service to the Gorst UGA. The transportation system is also an important link where SR 3 and SR 16 provide entry into southern Bremerton.

The City of Bremerton’s Comprehensive Plan introduction notes the following about Gorst:

> *“At Gorst, where two State highways meet, Port Orchard is behind the traveler and the focus is ahead to Bremerton. Gorst is the real entry to Bremerton.”*

The City anticipates that in the near term the area could become part of Bremerton city limits in accordance with State laws and procedures regarding annexation.

The Kitsap Countywide Planning Policies call for joint planning for UGA’s and the need to recognize unique community needs in subarea plans. The Gorst subarea plan is the first joint planning effort for a subarea plan between the City of Bremerton and Kitsap County, and it will be considered for adoption by both jurisdictions.

What does the future hold for Gorst?

With the presence of memorable views of Puget Sound, the recent availability of sewers, the promise of recreation opportunities on public lands along Sinclair Inlet, presence of fish and wildlife at the estuary, the potential for commercial economic growth, and opportunities to add housing and new residents, **Gorst is poised to become a more desirable place where people want to live, shop, and recreate**.

Given Gorst's assets, its assorted commercial and residential pattern, and the potential to accommodate new growth, the question is asked: "What can Gorst become?" This Subarea Plan and its associated EIS examined alternatives for the future of the Gorst UGA. The Draft Plan and Draft EIS reviewed the following alternative visions:

- Vision 1: A small highway-oriented commercial and industrial center.
- Vision 2: A well-designed Regional Commercial Center.
- Vision 3: A Complete Community.

These three visions tested *a range* of land use and growth options in the UGA.

A Preferred Alternative was identified after public outreach and comment opportunities on the Draft Subarea Plan and Draft EIS concluded in summer 2013 (see Chapter 3). The Preferred Alternative is largely based on Vision 3 but includes selected elements of Visions 1 and 2. The Preferred Alternative vision is:

- Preferred Vision: Gorst becomes a complete and sustainable community.

The Draft and Preferred alternatives are compared in a Final EIS available under separate cover (Volume 2) in fall 2013. See Chapters 3 and 5 of this Subarea Plan for additional information on the planning process and the alternatives.

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2. COORDINATED WATERSHED PLANNING

This Gorst Subarea Plan relies on scientific analysis of the watershed through a Watershed Characterization Study. See Volume 1, Gorst Creek Watershed Characterization & Framework Plan, for the full study.

Local agencies, such as the City of Bremerton and Kitsap County, are responsible for land use planning and protection within the Gorst Watershed. The intent of watershed characterization is to inform future land use development with the combined analysis of water flow and habitat. Watershed characterization, an analytical framework developed by the Washington State Department of Ecology (Ecology), provides the basis for understanding the relative value of assessment units for water flow processes, water quality, and habitat within the Gorst Creek Watershed (Puget Sound Characterization, Stanley et al, in preparation, Ecology Publication #11-06-016 April 16, 2012).

What is a Watershed?

A watershed, or basin, is all the land that drains to the same body of water, such as a lake or river. Smaller watersheds become part of larger watersheds, as streams feed into rivers, and rivers flow into oceans.

~Washington Department of Ecology, Working for Washington's future: Healthy Watersheds, Healthy People, May 2008

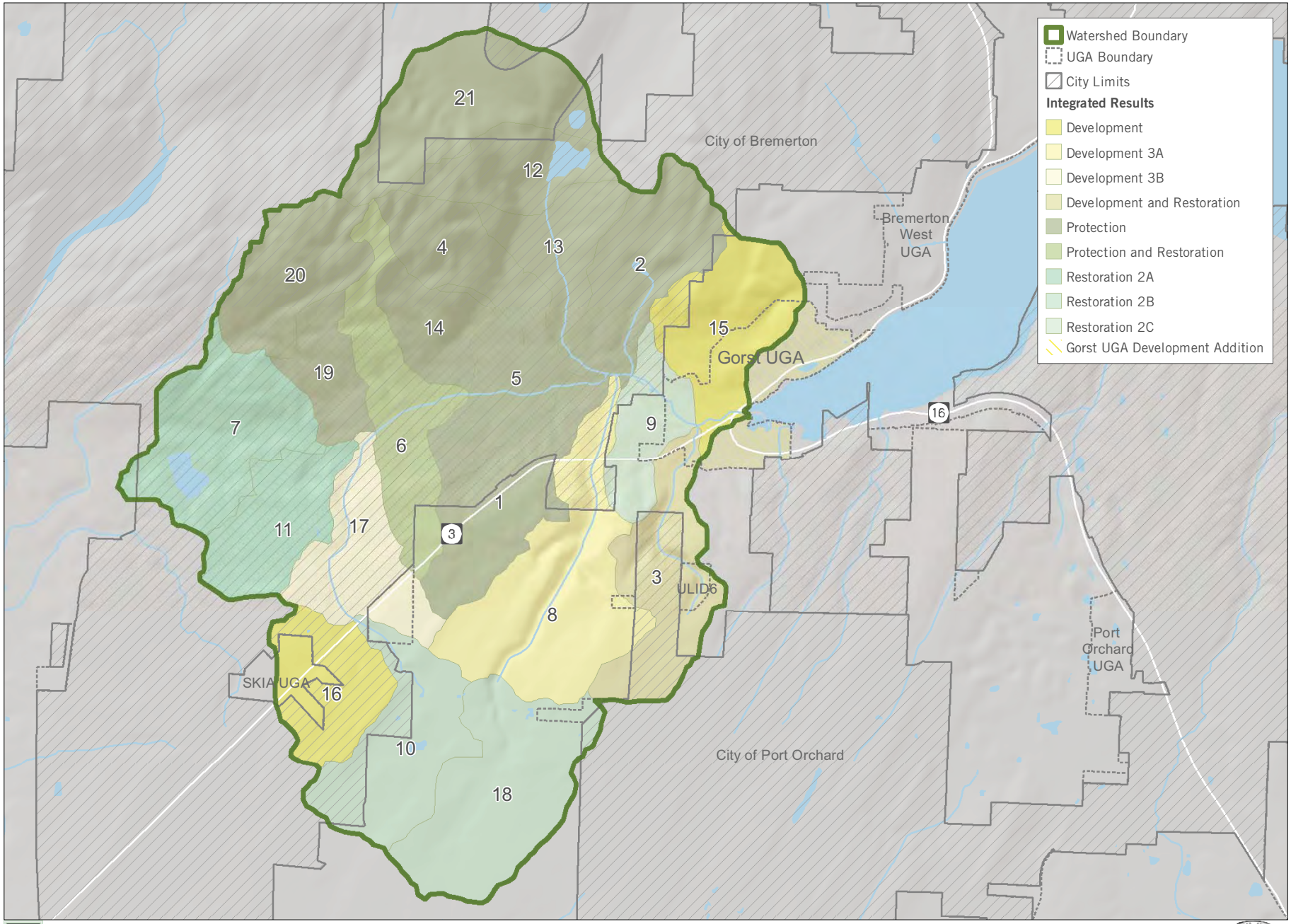
Based on assessment results for individual water flow components (delivery, storage, recharge, and discharge) and sediment process, as well as habit functions, assessment units (AUs) were grouped into patterns that identify zones for restoration, protection, and development. See Figure 2-1.

The **Protection Zone** supports recharge, discharge and storage processes which are critical to sustaining a natural range of flows in Gorst Creek, including adequate low flows during summer and fall. The unique properties of the Gorst Creek recessional outwash deposits are a principal factor in this high rating for hydrologic importance. Because recharge and discharge processes are sensitive to development and would be significantly degraded by impervious surfaces, buildings, roads, and drainage infrastructure, such development should be restricted in this zone. The Protection Zone largely applies to forested lands principally in City ownership, which are highly important as a connected large open space providing habitat for many species.

The **Restoration Zone** primarily supports water storage processes and some recharge/discharge processes. This zone may be appropriate for development, but different actions should be taken to protect water process functions. Restoration actions in the estuary could restore some wildlife habitat. Priority actions of greatest benefit to fish and wildlife should be assessed at a finer scale, looking at existing ecological processes that affect the estuary, and attempting to restore ecological structure and function at site-specific locations, given the degraded condition of the estuarine shoreline and nearshore processes overall.

The **Development Zone** is suited for the highest intensity development (such as high density residential or commercial) provided appropriate measures for protecting streams, wetlands, and water quality are followed.

FIGURE 2-1. GORST CREEK WATERSHED CHARACTERIZATION - INTEGRATED RESULTS



Date: September 2013
Source: Parametrix, Department of Ecology, Department of Fish & Wildlife, BERK

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Generally, the Watershed Characterization Study recommends protection of the north central portion of the watershed, the tributaries, and the estuary, while allowing for additional growth and development in the south, and southeastern portions of the watershed, subject to existing protection measures and best management practices. A map of integrated water processes and habitat assessments is included in Figure 2-1.

Figure 2-2 provides a close up view of the watershed AUs in the Gorst UGA. The Gorst UGA is generally recommended for "Development" in Assessment Unit (AU) 15, though to the west is an area of "Restoration" in AU 9. Also, a small area to the southwest is recommended for "Development and Restoration" in AU 3.

There are two areas in the Gorst UGA to the north and south of Sinclair Inlet unaddressed in the Watershed Characterization Study as they are associated with the marine shoreline. These territories are highly disturbed with high amounts of clearing and impervious surfaces, are generally developed with commercial, residential, or mining operations, and are served with sewers, roads, and stormwater facilities.

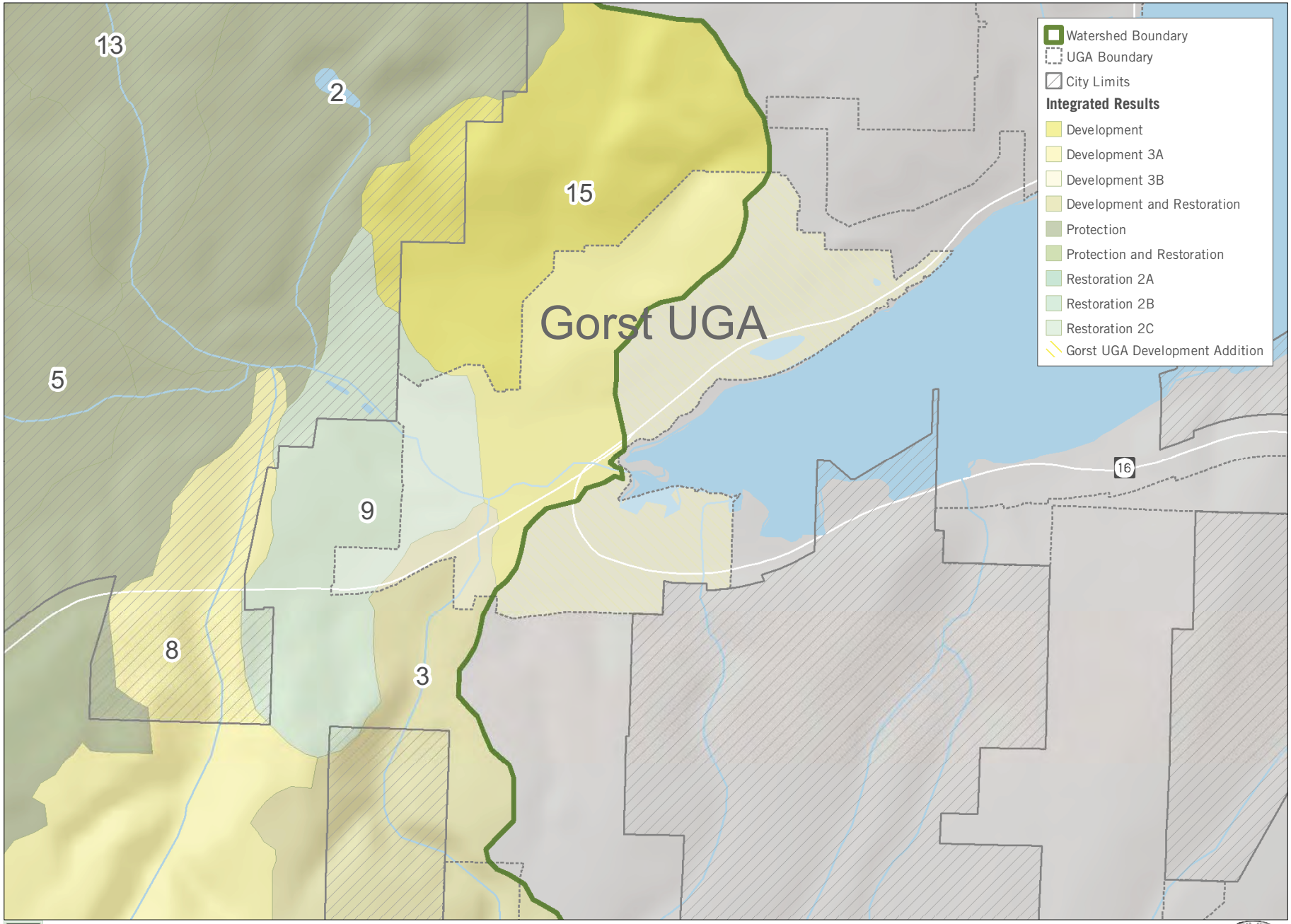
Figure 2-2 extends the "Development" designation of AU 15 since to the two highly disturbed areas are likely to see more development

The recommendations of the Watershed Characterization Study relevant to the Gorst UGA include:

- Area of Development (AU 15): Relatively high level of degradation and low habitat score; more appropriate area for higher density development provided measures are applied to reduce potential sediment export. Recharge processes require restoration.
- Area of Restoration (AU 9): Though this area has a low score for habitat and salmon refugia, it is a higher priority for restoration due to generally intact upstream processes (northern half of watershed). Channelization, culverts, and reduced riparian cover have degraded stream corridor and discharge processes. A comprehensive program to restore creek corridor should be developed. Effective Impervious surface should be reduced through a stormwater retrofit program.
- Area of Development & Restoration (AU 3): Relatively high level of degradation. Not rated by salmon refugia study. More appropriate area for moderate density development provided measures are implemented to reduce erosion and sediment export (adequate stream buffers, setbacks, reduced overland flow through infiltration and vegetation cover).

This Gorst Subarea Plan applies recommendations from the Watershed Characterization Study focusing primarily on the Gorst UGA supported by a more sustainable land use vision and standards as well as capital facility and stormwater improvements. For example, the Gorst Subarea Plan identifies areas along Gorst Creek for residential uses designed with low impact development techniques.

FIGURE 2-2. WATERSHED CHARACTERIZATION RESULTS - GORST UGA VICINITY



Date: April 2013
Source: Parametrix, Department of Ecology, Department of Fish & Wildlife, BERK

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3. GORST PLANNING & OUTREACH PROCESS

The opportunity to leverage assets and overcome challenges is not a chance that many communities are provided. Fortunately, the United States Environmental Protection Agency (US EPA) awarded a Watershed Management Assistance Program Grant to the City of Bremerton for the purposes of improving the future of Gorst through an inter-agency planning effort. Bremerton is working in partnership with Kitsap County, the Suquamish Tribe, and many other agency partners and stakeholders to achieve the following:

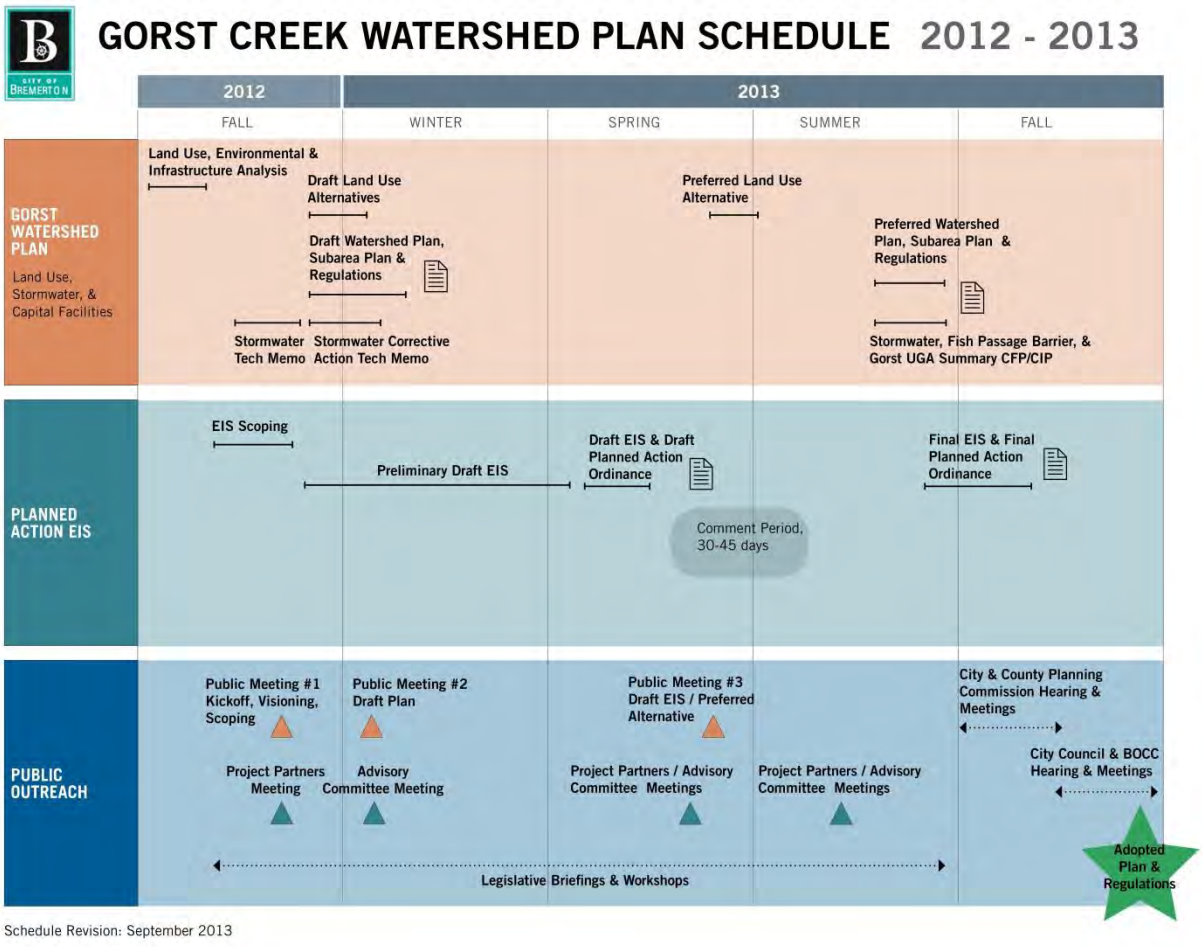
- Make Gorst a place where people want to live, shop and recreate,
- Protect water quality, habitat and fish while fostering economic development,
- Identify areas for development, restoration and protection based on science,
- Adopt a land use plan for Gorst, and
- Implement a long-range capital improvement plan to provide for future utility services, public services and transportation needs.

Gorst watershed and subarea planning began in 2011 and continues through 2013 using the following steps:

1. Characterizing the Watershed (see Volume 1)
2. Developing Guiding Principles and Policies for Planning (see Volume 1 for the Watershed and this subarea plan Volume 3 for Gorst UGA)
3. Preparing Draft Plans for Land Use, Stormwater and Capital Facilities, focusing on the Gorst UGA (this Volume 3)
4. Evaluating Draft Plans and Alternatives in a Draft Environmental Impact Statement (EIS) (see Volume 2)
5. Developing a Preferred Plan and Final EIS (following a robust public comment opportunity)
6. Deliberating with legislative bodies at the City of Bremerton, Kitsap County, and Suquamish Tribe
7. Adopting the Plan

Public and agency engagement opportunities are provided at each step. This Gorst Subarea Plan (Step 3) was developed through coordinated efforts to engage the general public, public agencies and stakeholders, and elected and appointed officials. The Draft Plan was studied in a Draft EIS in Step 4, and refined into a Preferred Plan in Step 5 and has been the subject public meetings and hearings in fall 2013 consistent with Step 6. Action on the plan is anticipated by December 2013 as part of Step 7. See Figure 3-1 displaying the planning and outreach process. Major outreach efforts are described below.

Figure 3-1. Planning Process and Outreach Events



Source: BERK

Project Partners

Gorst Creek Watershed Characterization and planning has benefited from the knowledge and expertise of agencies, organizations and individuals partnering to steer the technical analysis associated with the project, including:

- United States Environmental Protection Agency
- Washington State Department of Ecology
- City of Bremerton
- Kitsap County
- Port of Bremerton
- Sustainable Bremerton
- Suquamish Tribe
- Washington State Department of Fish and Wildlife
- City of Port Orchard
- Kitsap County Health District
- West Sound Watershed Council
- Gorst property owners, Pat and Cheryl Lockhart

Project partners have met several times to discuss analysis methods and review technical documents such as the Watershed Characterization Study (see Volume 1).

Advisory Committee

An Advisory Committee, composed of representatives from Bremerton Planning Commission, Bremerton City Council, Bremerton Mayor, Kitsap County Planning Commission, Kitsap County Board of County Commissioners, and Suquamish Tribal Council, represents the interests of their respective bodies

and convenes at key project milestones to address issues and concerns for Gorst Creek Watershed Plan. In January 2013, the Advisory Committee reviewed and provided direction on the range of Gorst UGA land use alternatives as well as overall watershed guiding principles. In June 2013, the Advisory Committee reviewed the Draft Plans and Draft EIS that evaluated the range of alternatives. In August 2013, the Advisory Committee provided direction on a preferred plan for the Gorst UGA and was briefed on public comments regarding this plan and related Gorst documents.

General Public Outreach

The City of Bremerton and partner Kitsap County have provided education and solicited citizen and agency input on the Gorst Creek Watershed Planning efforts. Each effort is described below.

Website. The City of Bremerton has established a project website http://**www.gorstwatershed.com**/. It includes information about the project, links to draft products, and a comment form.

Scoping comment period and workshop. Public, tribal, and agency comments were solicited by the City as lead agency in a 21-day written scoping period from October 15 to November 5, 2012. The City also held a public meeting on October 29, 2012 to ask about the vision for Gorst and about the EIS scope. Scoping notices and a meeting announcement were sent by mail to each property owner in the Gorst UGA, and to a list of federal, state, and local agencies and tribes. The City and County also sent these documents by email to lists of persons interested in planning issues in the city and county. The scoping notice was published in the Kitsap Sun on October 15, 2012 to notify any other persons having an interest in the project. About 37 persons participated in the scoping meeting and 14 persons or agencies submitted comments. A meeting exercise identified strengths, weaknesses, opportunities and threats. Below are some particular strengths and opportunities identified by citizens in Gorst:

Strengths	Opportunities
Central access, accessibility to highway, connected to rest of the County, Bremerton, Port Orchard	**Businesses and Places:** More inviting businesses, local-serving, places people stop
Views of the mountains and Sound	**Transportation:** Sidewalks, local trails and intra-county trails, bus to Bremerton ferry dock, frontage road (increase flow, spread of through traffic)
New sewer	**Parks, Open Space, and Recreation:** Waterfront access/trail/park, beach/water access and signage, kayak launching point, more public land/park space
Extensive shoreline	**Beautification:** Tree preservation, litter cleanup
Nature, Habitat, and Wildlife: Wooded and forested, “green”; “blue” water, creek, inlet; wildlife, Eagles, deer, seals, etc.	

Preliminary alternatives workshop. At a February 12, 2013 workshop, the City of Bremerton and Kitsap County asked public input about preliminary land use alternatives that should be evaluated in a draft subarea plan and EIS. A postcard meeting announcement was sent by mail to each property owner in the Gorst UGA. A flier was emailed to persons who had participated in prior Gorst scoping events in fall 2012, and also to persons indicating a general interest in county and city planning efforts. An article was published in the Kitsap Sun on February 7, 2013. The workshop focused on land use alternatives and

growth in the Gorst UGA.[1] Around 35-40 persons attended and provided input on the range of alternatives under consideration for the Gorst UGA. As a result of input, the alternatives were refined for study in the EIS.

Legislative meetings. On February 19, 2013, the Bremerton Planning Commission and Kitsap County Planning Commission met separately at their regular meetings to review the preliminary alternatives. Additional Planning Commission, City Council, and Board of County Commissioner meetings are planned later in the process to help identify a preferred alternative, refine and deliberate on the framework and subarea plans, and consider a planned action ordinance.

Draft Plan and Draft EIS Comment Period. The City of Bremerton as lead agency established a public comment period during which time public comments were encouraged regarding the Draft Watershed Characterization & Framework Plan, Gorst EIS, and Gorst Subarea Plan. A 45-day comment period extended from June 10 to July 24, 2013. Five public meetings were held during the comment period including a meeting in Gorst and two City and County Planning Commission meetings.

- Plan & EIS Overview: Kitsap County Planning Commission, June 18, 9:00 am
- Plan & EIS Overview: City of Bremerton Planning Commission, June 18, 5:30 pm
- Preferred Alternative Community Workshop, Gorst, June 20, 5:00 pm, Family Worship Center at 3649 W. Frontage Road
- Preferred Alternative Input: Kitsap County Planning Commission July 16, 9:00 am
- Preferred Alternative Input: City of Bremerton Planning Commission July 16, 5:30 pm

Results of the public meetings and input into the Preferred Alternative are described in Chapter 5.

The City in consultation with Kitsap County is issuing a Final EIS in fall 2013, providing responses to comments and addressing a Preferred Alternative. The Preferred Alternative includes elements from one or more alternatives studied in the Draft Subarea Plan and Draft EIS.

[1] Apart from the UGA, land use and zoning are not anticipated to change in the overall watershed, through some low impact development and stormwater standards may be applied in both urban and rural areas.

4. GUIDING PRINCIPLES, GOALS & POLICIES

Guiding Principles

Guiding Principles give direction on to how to protect water quality, habitat and fish while fostering sustainable and economically viable development. They serve as the foundation on which to build the Gorst Subarea Plan. The Guiding Principles below were developed based on watershed characterization results and reviewed at public workshops, Project Partner meetings, and Advisory Committee meetings.

Community Vision & Economic Development

Make Gorst a place where people want to live, shop and recreate.

Facilitate development of economically valued[2] land.

Recognize environmental restoration as a tool that can support the local economy.[2]

Development Pattern

Identify and prioritize land that can be more intensely developed with less environmental consequences.

Promote green infrastructure for both new and existing facilities, such as by identifying areas to target for stormwater retrofits.

Support development incentives and evaluate options such as off-site mitigation, mitigation banking, and other tools where appropriate.

Environmental Protection

Identify and protect critical areas.

Prioritize areas to be protected and restored.

Protect and enhance water quality/quantity for fish and wildlife habitat as well as for human use.

Promote shoreline reclamation.

Urban Design, Land Use & Transportation

Create a cohesive and attractive urban character in the Gorst urban growth area (UGA) such as by improving building design, and creating and enhancing public spaces such as parks, trails, pedestrian corridors and streetscapes.

Allow an environmentally sustainable pattern of forestry, low density residential, small scale employment, and recreation uses in the rural areas of watershed.

Improve transportation mode choices including transit, bicycle, pedestrian, and autos, recognizing local as well as regional travel needs.

Promote interpretive art, signage, and public spaces that recognize cultural history and environmental features.

Reduce collisions and improve safety.

[2] Such as by establishing land use plans that offer business and housing opportunities, and capital plans that incentivize shoreline reclamation and amenities such as open space and recreation, community design, and streetscapes.

Goals and Policies

This section includes goals and policies that would direct specific actions by the City of Bremerton and Kitsap County in the Gorst UGA. The goals and policies are based on the Guiding Principles, Watershed Characterization & Framework Plan (Volume 1), and EIS (Volume 2). The goals and policies are designed to guide the land use plan as well as zoning, environmental regulations, and capital plans for Gorst.

Policies that are similar to those in the Watershed Characterization & Framework Plan are noted with an asterisk (*). Background information or potential implementation strategies are discussed below selected policies.

Habitat

Goal UGA-1. Protect and restore fish and wildlife habitat along Gorst Creek and Sinclair Inlet.

Policy UGA-1. Develop a comprehensive program to restore the Gorst Creek Corridor in the UGA.

Discussion: Preparing a conceptual restoration plan is recommended in best management practices for Assessment Unit 9 (see Figure 2-2). Such a plan would help guide public and private investments in restoration. Private restoration could occur through an incentive program, such as allowing different densities, height, impervious area, or buffer standards in exchange for creek restoration. See Chapters 8 and 9 for incentives.

Policy UGA-2. Promote shoreline and habitat restoration along Sinclair Inlet.

Discussion: Public investment in shoreline restoration has occurred through a prior Sinclair Inlet Restoration project conducted by Kitsap County with an USEPA grant. That effort resulted in brownfield clean up and public acquisition of open space. Private investment in restoration could occur with incentives for height increases, parking area reductions, or other incentives tied to commercial development. See Chapters 8 and 9 for incentives.

Policy UGA-3. Coordinate County and City shoreline regulations and restoration plans along Gorst Creek and Sinclair Inlet to provide adequate protection and incorporate best management practices based on the Watershed Characterization Study. (*)

- Upon annexation, the City shall apply its Shoreline Master Program to Sinclair Inlet and Gorst Creek. In addition, the City shall apply a Gorst Creek Management Zone Overlay recognizing the habitat requirements of listed fish species, the current degraded buffer conditions, and tailored approaches to implement best management practices and incentives for restoration.
- Prior to annexation, Kitsap County may consider City marine shoreline buffers and the Gorst Creek Management Zone Overlay as a means to mitigate negative impacts when reviewing site specific land use applications, such as variances.

Discussion: As of 2013, the City's shoreline buffer standards for the Sinclair inlet are greater than the County's, and the County's buffer standards for Gorst Creek are greater than the City's. Apart from these more prominent shorelines, the City and County regulate smaller streams and wetlands similarly. Volume 2, Gorst EIS, provided an analysis of options to coordinate County and City shoreline and critical areas regulations. Based on the options considered and comments received, Chapter 8 provides a Gorst Creek Management Overlay applicable upon City annexation and for County consideration prior to annexation.

Water Quality and Flooding

Goal UGA-2. Improve water quality and reduce flooding in the Gorst UGA.

Policy UGA-4. Require enhanced water quality consistent with the Sinclair Inlet Total Maximum Daily Loads (TMDL) (USEPA 2012) throughout the watershed and UGA. Reduction of impervious surfaces and onsite treatment of stormwater should be required in accordance with best management practices specified in the 2012 Stormwater Management Manual for Western Washington (Ecology 2012), or its equivalent or successor, with a preference for infiltration to reduce fecal coliform. (*)

Discussion: The policy promotes implementation of water quality standards that address the documented water quality problems in the study area.

Policy UGA-5. Reduce erosion and sediment export through measures such as adequate stream buffers, setbacks, reduced overland flow through infiltration and vegetation cover.

Discussion: See the discussion under Policy UGA-3 regarding coordinated regulations.

Policy UGA-6. Provide incentives and regulations that reduce impervious surfaces, promote natural and distributed stormwater techniques, and incorporate native and naturalized vegetation. (*)

Discussion: Incentives such as density or height increases, or parking reductions, or others, could encourage a reduction in existing impervious areas and an increase in low impact development proposals. See Chapters 8 and 9 for incentives.

Policy UGA-7. Wherever practicable, require low impact development measures such as infiltration for new development and redevelopment. Where impractical, stormwater detention may be allowed. (*)

Policy UGA-8. Incorporate low impact development best management practices into new development and redevelopment to mitigate and reduce flood impacts. (*)

Policy UGA-9. Reduce flood hazards through infrastructure improvements and stormwater management. (*)

Policy UGA-10. Allow no additional direct and untreated discharge to streams and marine water bodies in association with development and redevelopment. Apply vegetation management, clearing and grading, and stormwater rules that minimize erosion and protect water quality and habitat. (*)

Policy UGA-11. Implement adaptations to address potential effects of sea level rise on Sinclair Inlet properties. These may include, but are not limited to, accounting for sea level rise in the design of buildings and impervious areas, as well as roadway, flood management, and utility facilities.

Discussion: Based on research conducted by the University of Washington Climate Impacts Group and the Washington Department of Ecology sea level is expected to rise within the Puget Sound between 3 and 22 inches by 2050 and between 6 and 50 inches by 2100. The Gorst EIS, Volume 2, discusses a mitigation measure to be implemented through a Planned Action Ordinance that would require public and private applicants along the Sinclair Inlet to conduct a sea-level rise adaptation analysis.

Policy UGA-12. In 2014, the City of Bremerton and Kitsap County shall consider SUSTAIN model analysis to develop means and methods to implement the most effective low impact development standards in the Gorst Urban Growth Area and Gorst Creek Watershed. The results shall be considered for adoption through resolutions or ordinances consistent with agency procedures. (*)

Land Use, Economic Development & Community Design

Goal UGA-3. Create opportunities for well-designed, sustainable commercial and residential growth and development.

Discussion: See Chapters 8 , 9, and 10 regarding permitted uses, densities, heights, setbacks, development coverage, landscaping, building placement, street frontage, and other topics.

Policy UGA-13. Encourage regional and local serving commercial uses that meet community shopping needs, provide jobs, and enhance the image of Gorst through improved landscaping and site design.

Policy UGA-14. Through the land use plan and zoning, allow opportunities for single family units, townhouses, and flats to provide a range of housing choices in Gorst.

Policy UGA-15. Allow horizontal and vertical mixed use development to offer greater business and housing choices and live-work arrangements.

Policy UGA-16. Ensure zoning and design standards promote development patterns that increase open space and recreation opportunities, reduce impervious areas, and cluster in the least sensitive areas of a property.

Discussion: This policy is implemented through standards, guidelines, and incentives in Chapters 8, 9, and 10.

Policy UGA-17. Apply streetscape, landscape, building, and site design standards for new development in order to promote shoreline views, allow for development compatibility, enhance property values, and reinforce Gorst as the southern gateway to Bremerton.

Policy UGA-18. Allocate population to the Gorst UGA based on the Gorst Subarea Plan. Ensure allocations are also consistent with Countywide Planning Policies. Until such time as population is available for allocation to Gorst to support mine site redevelopment following reclamation, the mineral resource overlay will continue.

Discussion: See Chapter 5, Land Use Plan. In 2013, several parcels currently zoned by Kitsap County for industrial use are identified for mixed uses in the preferred alternative plan. The current population growth allocation to Gorst is small, and would need to be amended in Countywide Planning Policies to allow for new zoning that would accommodate more residences and population growth. The primary capacity for residential growth is anticipated to be the current quarry on Sherman Heights Road designated as a mineral resource and with industrial zoning. Reclamation permit information indicates that active mining could be complete during the 20-year period of the Gorst Subarea Plan. Over the 20-year planning period, when mineral extraction ceases and reclamation occurs, residential uses could be desirable. First, the property is a relatively large site located near job centers (e.g. Naval Shipyard and SKIA). Second, sewer service is available in the immediate vicinity. Third, with the gravel mine's location along Sherman Heights Road and with views of Sinclair Bay, residential uses may be attractive (demonstrated in nearby Sinclair Heights development).

Transportation, Public Services & Utilities

Goal UGA-4. Provide effective, efficient, and quality capital facilities and public services at the level necessary to meet the Gorst community needs and support allowed growth.

Policy UGA-19. Work with federal, state, and local agencies to implement transportation improvements to manage congestion. (*)

Discussion: The Gorst Subarea Plan Preferred Alternative results in a mix of residential and commercial uses that is shown in the Volume 2 Gorst Planned Action EIS as avoiding an increase in congestion on state routes in Gorst. Traffic and congestion will continue to be monitored, and future development will be subject to City and County transportation impact analysis and concurrency requirements.

Policy UGA-20. Improve safety and circulation, and improve transportation mode choices including transit, bicycle, pedestrian, and automobiles. (*)

Policy UGA-21. Encourage improved Kitsap Transit service such as added park and ride facilities.

Policy UGA-22. Design roads to incorporate gateway treatments, boulevard style streetscape improvements, and access improvements to invite the community to Gorst and allow convenient travel to regional businesses.

Policy UGA-23. Encourage public access to the shoreline along Sinclair Inlet and portions of Gorst Creek.

Discussion: The City and County Shoreline Master Programs promote added public access. Additionally, Chapter 10 provides a conceptual map noting the need for pedestrian improvements across (over) state highways to achieve better connectivity.

Policy UGA-24. Require new development to meet Bremerton standards for water and wastewater.

Policy UGA-25. Require application of stormwater standards in the Final Gorst Subarea Plan.

Discussion: Based on the Gorst Creek Watershed Characterization Study recommendations, stormwater standards are a focus of regulations in Chapters 8 and 9.

Policy UGA-26. Ensure new developments that create a demand for parks and recreation provide such facilities onsite or contribute their fair share to provision of offsite facilities.

Policy UGA-27. Facilitate adequate fire and emergency response in the UGA through application of uniform fire and building codes, emergency access standards, roadway congestion management measures, and mutual aid agreements.

Policy UGA-28. Ensure adequate police services are provided within the UGA to meet Kitsap County Sherriff and Bremerton police department response time and case load objectives.

Policy UGA-29. Promote crime prevention through environmental design techniques to new development.

Policy UGA-30. Provide long-range growth assumptions and new development applications to South Kitsap School District to ensure educational services can meet needs of new residents.

Annexation

Goal UGA-5. Facilitate a seamless transition of services from Kitsap County governance to City of Bremerton governance when properties become annexed to the City.

Policy UGA-31. Explore the various methods for annexation with the Gorst residents within the planning horizon. Consider annexation of the Gorst UGA to the City in the near term.

Discussion: There are petition methods, election methods, and an interlocal agreement method allowed in State law.

Policy UGA-32. Conduct a fiscal analysis of annexation to ensure appropriate tiering or phasing of services.

Policy UGA-33. Prior to and following annexation, implement the Gorst Subarea Plan to provide coordinated land use and environmental standards.

Discussion: Encouraging annexations is a GMA goal reflected in Kitsap County's assignment of the Gorst UGA to the City of Bremerton.

Policy UGA-34. Prior to and following annexation, implement the Gorst Subarea Capital Facility Plan. Levels of service should be implemented concurrent with new development.

Policy UGA-35. Implement capital facility maintenance standards consistent with approved functional plans for transportation, stormwater, parks, and other systems prior to and following annexation.

5. LAND USE PLAN

Overview

Under GMA, Comprehensive Plans and associated subarea plans govern broad land use patterns, which are implemented by more detailed zoning. A land use plan allows counties and cities to:

- Meet goals for economic development and housing,
- Ensure consistent and compatible development,
- Anticipate needed services and infrastructure, and
- Give predictability to property owners and developers to make investments in their homes, businesses and properties.

This Chapter presents the existing land use pattern and alternative land us patterns for the future. In a Draft Subarea Plan, Bremerton and Kitsap County studied three visions:

- Vision 1: Gorst is a small highway-oriented commercial and industrial center. This is the No Action Kitsap County plan.
- Vision 2: Gorst is a well-designed Regional Commercial Center.
- Vision 3: Gorst is a Complete Community.

The visions considered a range of land use patterns, some allowing well designed auto-oriented commercial, industrial, and residential patterns, and some creating a mixed use center and clustered, low impact style residential development.

A Preferred Alternative was identified after public outreach and comment opportunities on the Draft Subarea Plan and Draft EIS concluded (see Chapter 3). The Preferred Alternative is largely based on Alternative 3 but includes selected elements of Alternatives 1 and 2. The Preferred Alternative vision is:

- Preferred Vision: Gorst becomes a complete and sustainable community.

Alternatives are compared in this chapter and in a Final EIS under separate cover (see Volume 2).

Existing Land Use Pattern

As of 2013, Gorst's development pattern consists of commercial and industrial uses along State Routes 3 and 16, an active mine site (considered industrial) along Sherman Heights Road, and single family residential uses along West Belfair, Sam Christopherson, and West Frone Roads, as well as undeveloped land. See Figure 5-1 and Figure 5-2.

The future vision and land use plan is described on the following pages.

Figure 5-1. Current Use by Assessor Tax Record

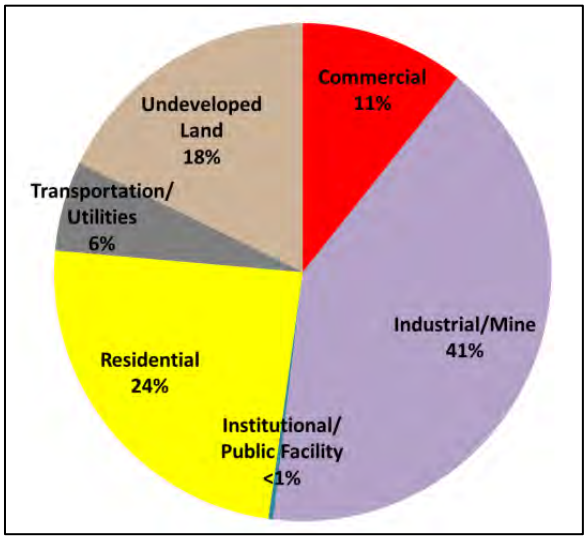
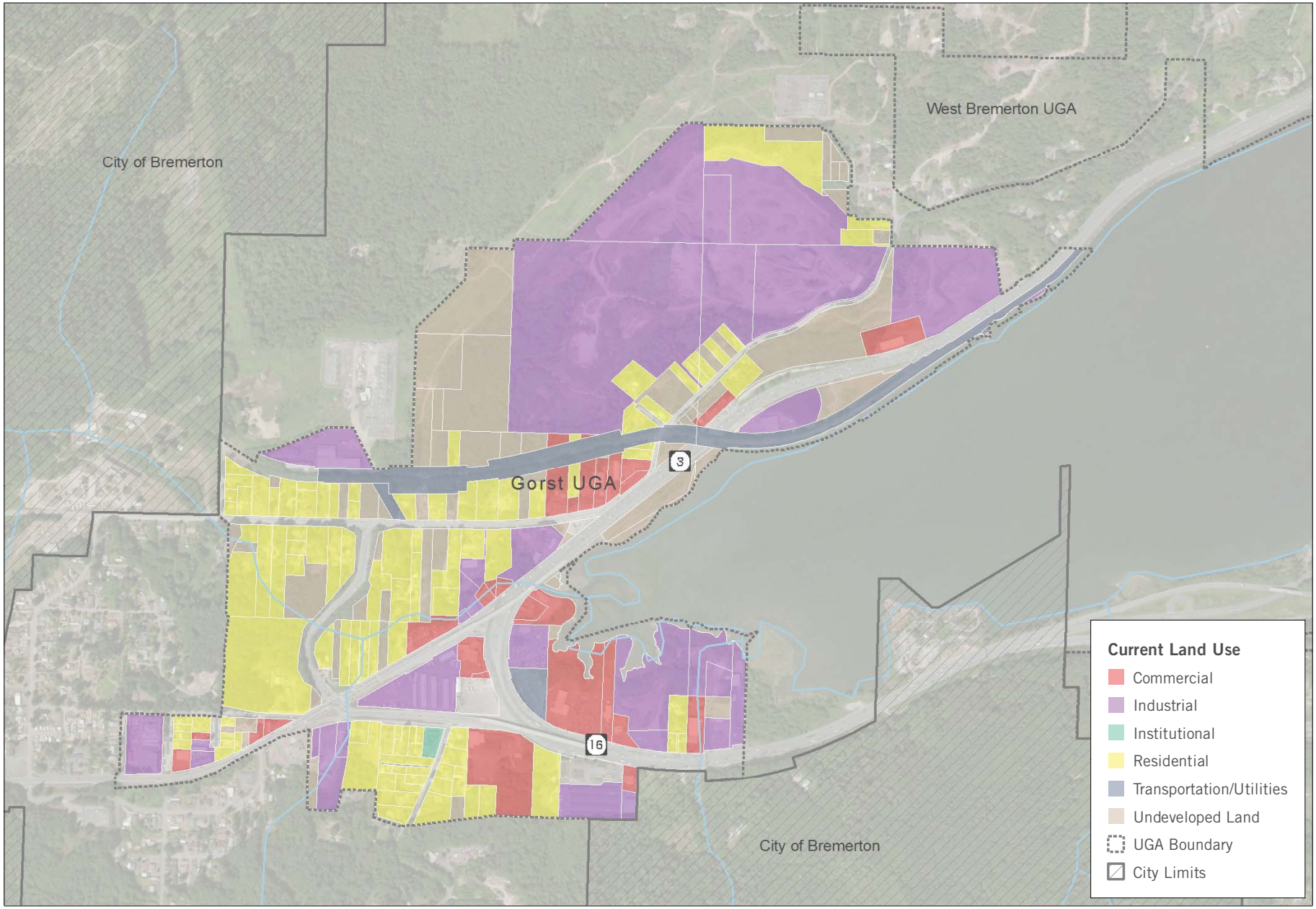


FIGURE 5-2. GORST UGA CURRENT LAND USE



Date: May 2013
Source: Kitsap County, BERK

Draft Alternatives and Public Comment

As described previously, three visions were reviewed in the Draft Gorst Subarea Plan and Draft EIS:

- **Vision 1:** Gorst is a small highway-oriented commercial and industrial center. This is the No Action Kitsap County plan.
- **Vision 2:** Gorst is a well-designed Regional Commercial Center.
- **Vision 3:** Gorst is a Complete Community.

Each alternative vision is shown in Figure 5-3, Figure 5-4, and Figure 5-5 together with key features.

At a June 2013 community workshop, Gorst community members participated in a dot-voting exercise regarding features liked/disliked about the alternative visions, and then broke up into three small groups and discussed several questions:

- What features in Alternatives 1, 2, or 3 do you think are most important to include in a Preferred Alternative?
- What features in Alternatives 1, 2, or 3 were you: Happy to see included? Concerned to see included? Think are missing?
- What strategies do you think would 1) do the most to improve Gorst and 2) can be accomplished by the City or County?

Figure 5-6, Figure 5-7, and Figure 5-8 show results of the workshop, also summarized below:

- **Vision 1 Likes/Dislikes:** Like idea of north-south trail, single family near mine; dislike intensive commercial and industrial.
- **Alternative 2 Likes/Dislikes:** Like parks and open space, low density residential, and one commercial area to the northeast; dislike most intensive commercial areas and single purpose medium density residential on the mine site.
- **Alternative 3 Likes/Dislikes:** Like parks and open space, low intensity waterfront, Gorst creek residential, Gorst mixed use, and neighborhood mixed use on the mine site; suggest adding more residential along creek.

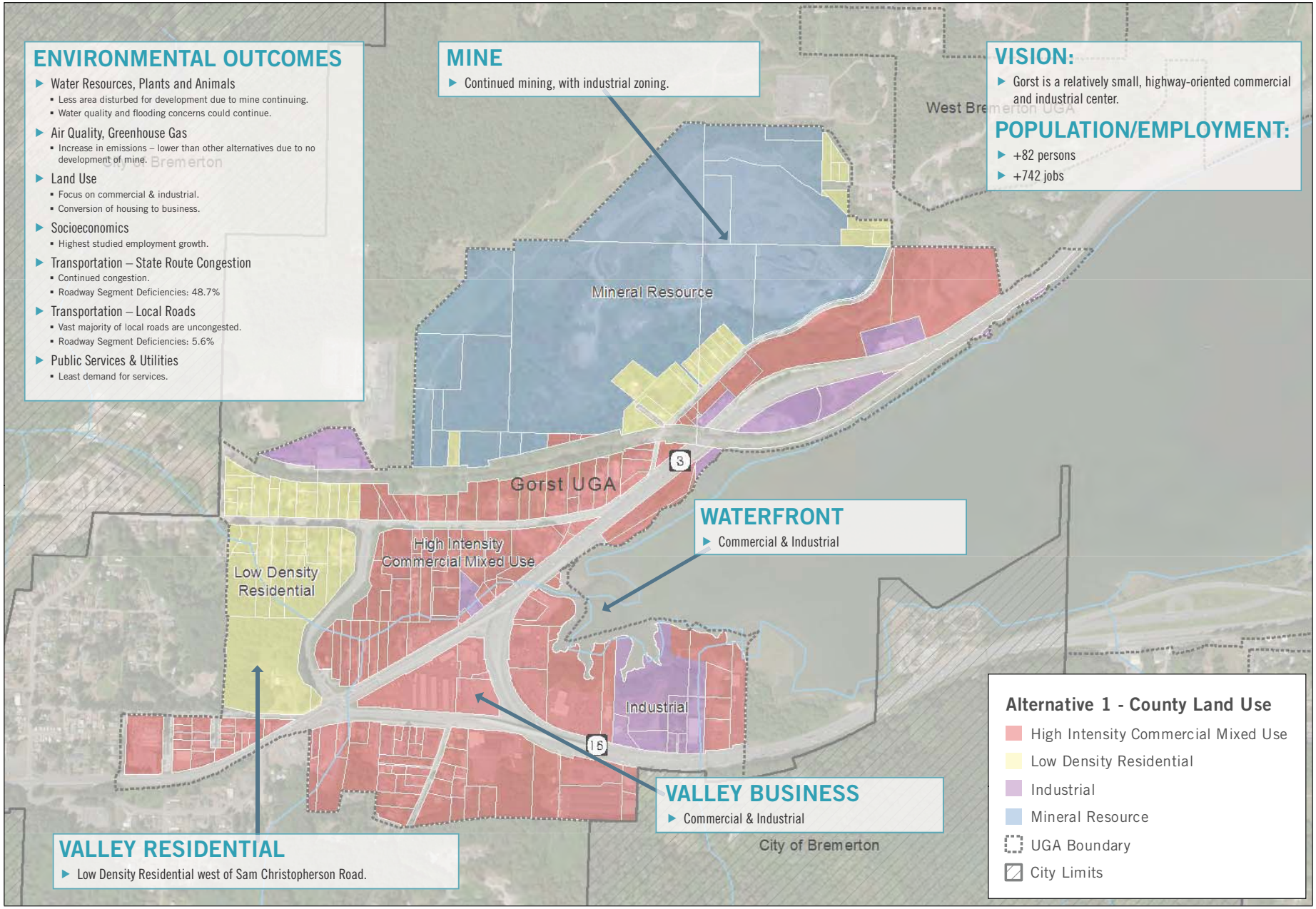
In sum, workshop participants favored Alternative 3 and suggested lower intensity development along Gorst Creek. Similarly, the Bremerton and Kitsap County Planning Commissions favored Alternative 3 with some adjustments as shown in Table 5-1.

Table 5-1. Planning Commission Preferred Alternative Input

Kitsap County Planning Commission Input	Bremerton Planning Commission Input
▪ Generally like Alternative 3. ▪ Postpone rezone of mine until 2016 (to allow Countywide Planning Policy population allocations to be amended and to consider long-term land use needs across County in Comprehensive Plan Update). ▪ Extend concept of Low Intensity Waterfront to Gorst Creek Floodplain. ▪ Vet the Planned Action Ordinance – consider boundaries, traffic, stormwater.	▪ Generally like Alternative 3. ▪ Address highway access. ▪ Like mixed use designations for flexibility, for example, Valley Business & Mine areas. ▪ Like Low Intensity Waterfront – provide incentives and encourage acquisition. ▪ Support higher environmental protection for Gorst Creek floodplain; keep mixed use but have overlay of environmental standards and incentives. ▪ Like Gorst Creek Residential cluster concept.

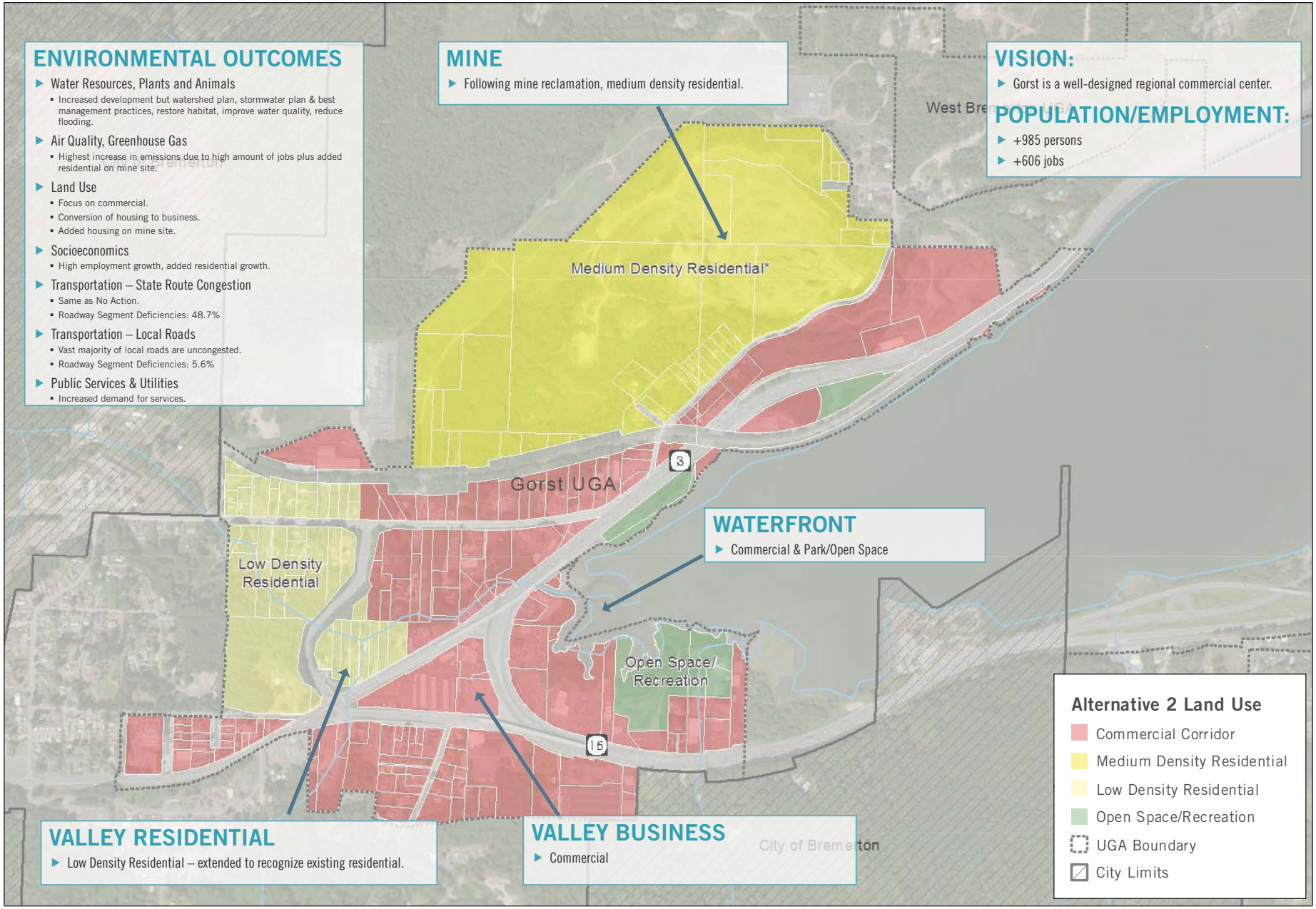
Source: Planning Commission minutes, July 16, 2013

FIGURE 5-3. ALTERNATIVE 1 - NO ACTION CURRENT KITSAP COUNTY PLAN



Date: May 2013
Source: Kitsap County, BERK

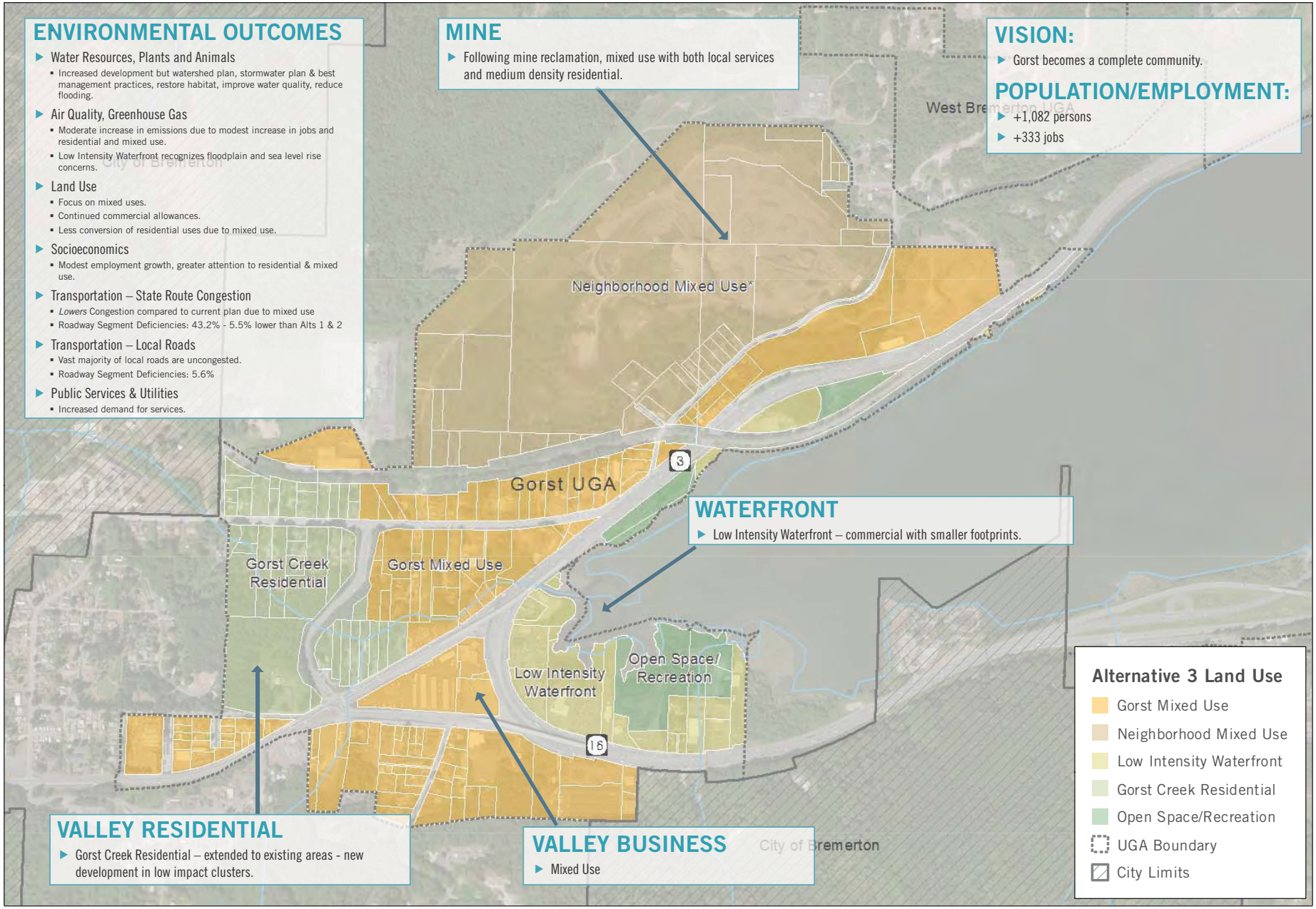
FIGURE 5-4. ALTERNATIVE 2 - GORST IS A WELL-DESIGNED REGIONAL COMMERICAL CENTER



Date: May 2013
Source: Kitsap County, BERK

* Note: Mineral resource extraction may continue in near term.

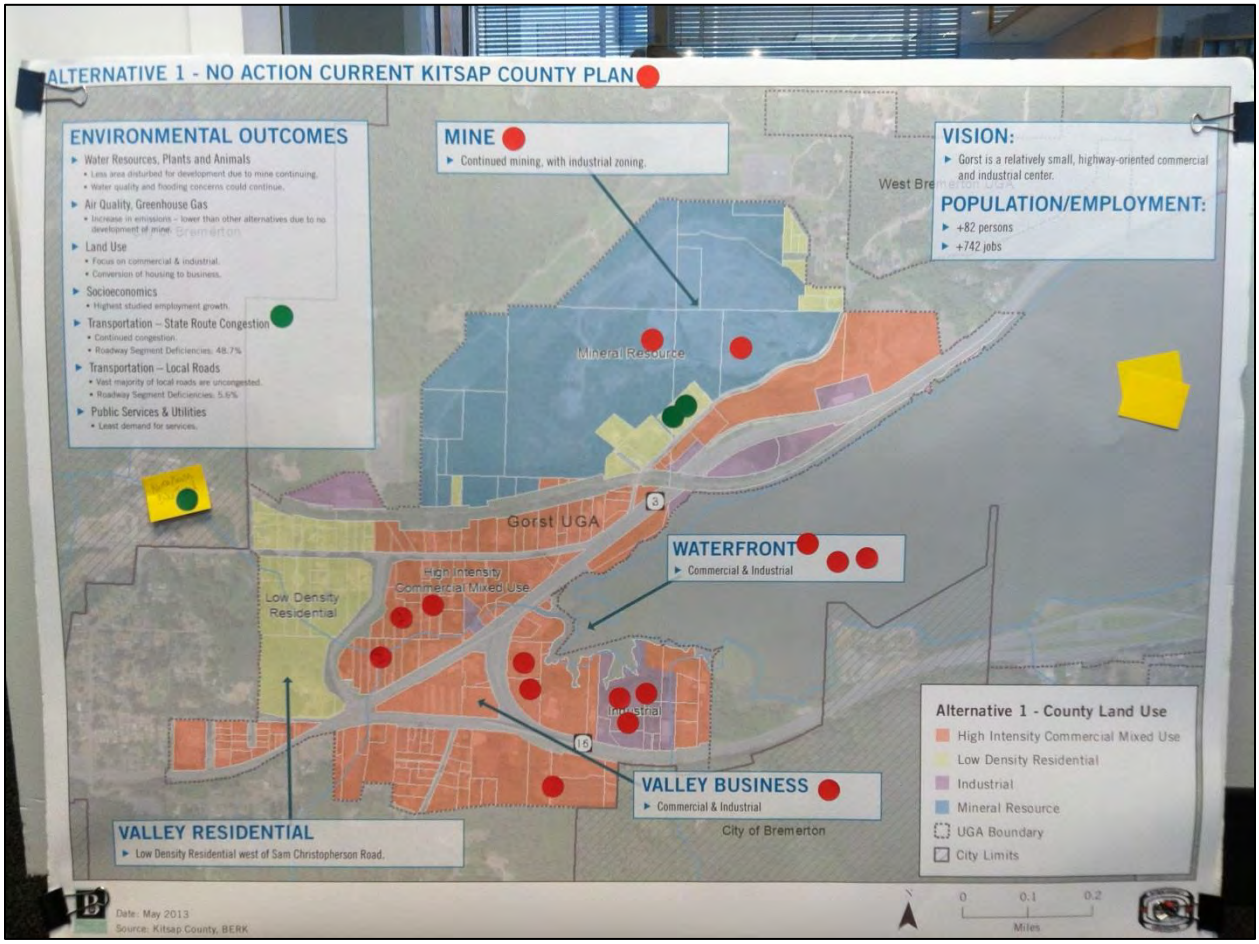
FIGURE 5-5. ALTERNATIVE 3 - GORST BECOMES A COMPLETE COMMUNITY



Date: May 2013
Source: Kitsap County, BERK

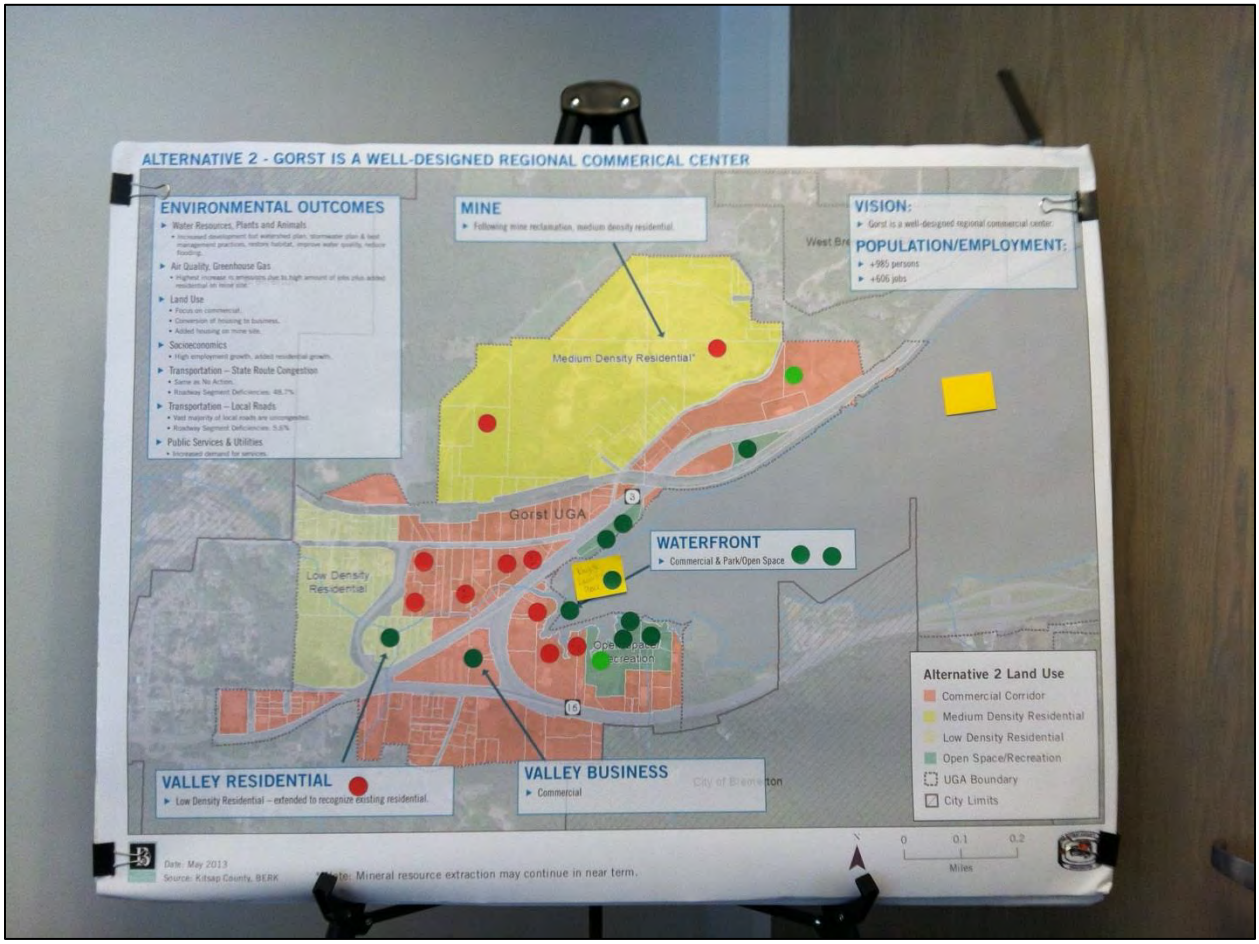
* Note: Mineral resource extraction may continue in near term.

Figure 5-6. Alternative 1 No Action – Community Dot Voting Results



Alternative 1 – Notes

Figure 5-7. Alternative 2 Well Designed Regional Commercial Center – Community Dot Voting Results



Alternative 2 – Notes

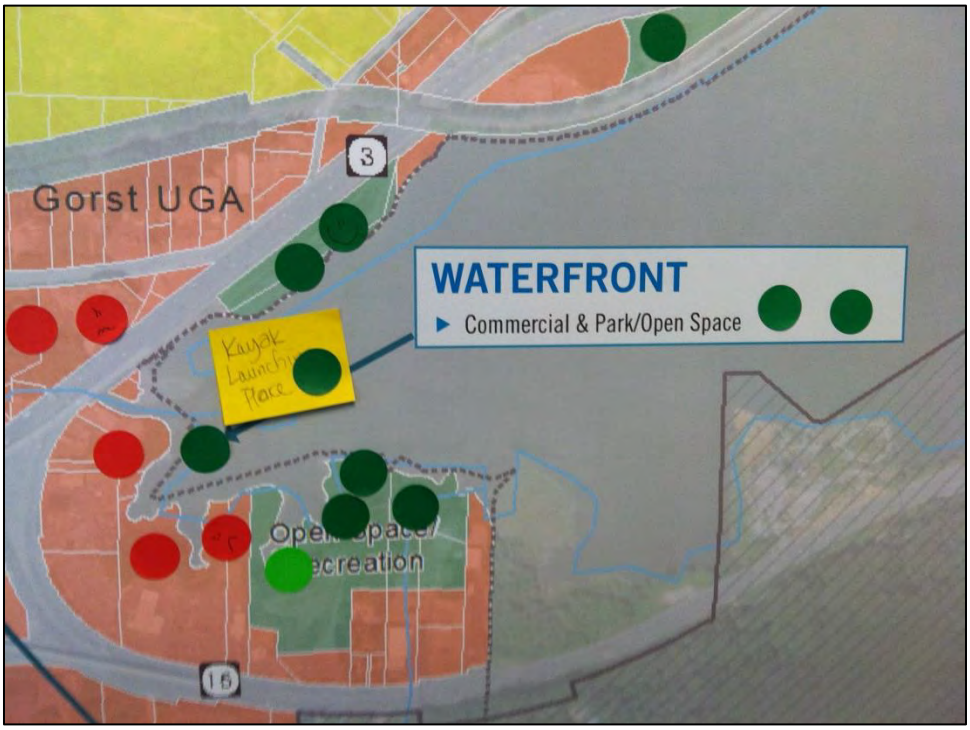
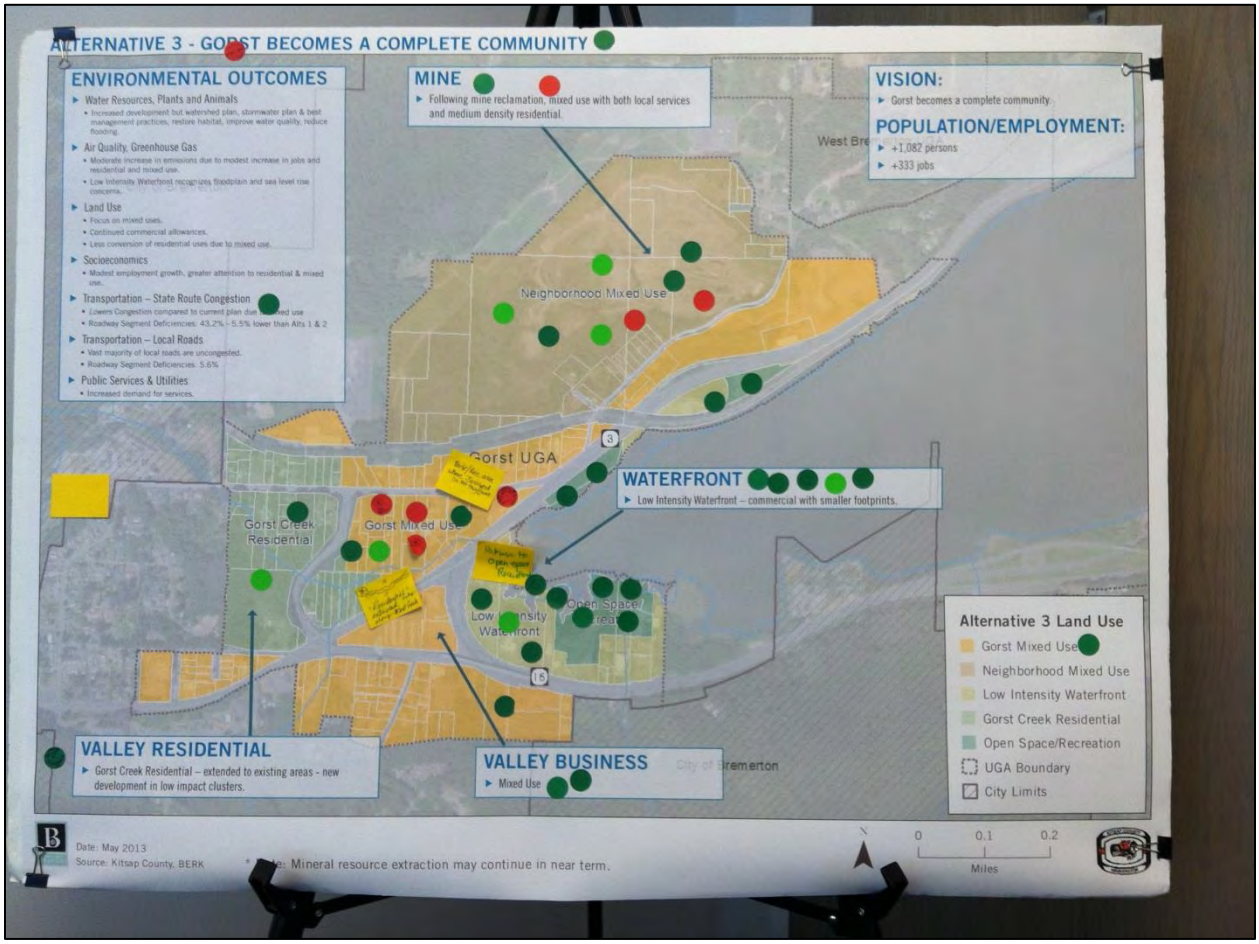
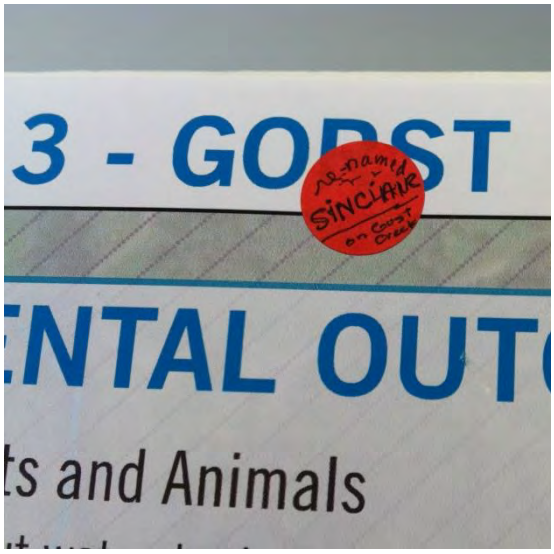


Figure 5-8. Alternative 3 Gorst Becomes a Complete Community – Community Dot Voting Results



Alternative 3 – Notes



Preferred Vision: Gorst becomes a complete and sustainable community

The Preferred Alternative proposes a vision of Gorst as a community offering homes, jobs, and recreation in an environmentally sustainable setting. The Preferred Alternative would be implemented by the zoning designations illustrated in Figure 5-9, Figure 5-10, and described on Table 5-2. The Preferred vision promotes a mix of uses and a wider range of residential dwelling options as follows:

As the South Kitsap Industrial Area grows as an employment center, and demand increases for housing such as along Sherman Heights Road, Gorst evolves into a complete community with places to live, play, shop, and work, in a waterfront setting. Gorst also serves as a community-wide demonstration of low-impact development techniques to create a sustainable, compact and enduring place. Views, cultural resources, and critical areas are protected and enhanced through a coordinated watershed development, restoration, and protection plan and best management practices.

Along the waterfront, a lower intensity land use pattern emerges with commercial uses occurring on smaller impervious footprints interspersed by trails, parks, and reclaimed shoreline habitat. A secondary circulation network improves business access, creates a pedestrian scale, and provides non-motorized access to waterfront properties. Central Gorst allows more intensive regional commercial, office, hotel, and mixed use residential developments.

Small-scale mixed use neighborhoods along West Belfair Road and West Frone Road provide gathering places and daily conveniences for Gorst residents as well as medium density housing as part of horizontal and vertical mixed use development patterns. Along Gorst Creek, a native riparian corridor is created and the stream bed is restored, made possible in part by development incentives such as cottages, small lot single family, medium density residential and mixed use development. Compact building development minimizes impervious areas in the Gorst Creek floodplain extending a low intensity development pattern from the Sinclair Inlet waterfront.

Following mine reclamation, which is anticipated prior to 2035, a residential neighborhood along Sherman Heights Road provides a range of detached and attached residential choices in clustered patterns and small-scale, neighborhood-serving commercial uses. The property attracts new residents to Gorst due to its variety of housing options, commercial and recreation amenities, location near job centers in Bremerton, and views of Sinclair Inlet.

Figure 5-9. Preferred Alternative: Future Land Use/Zoning Designations (%)

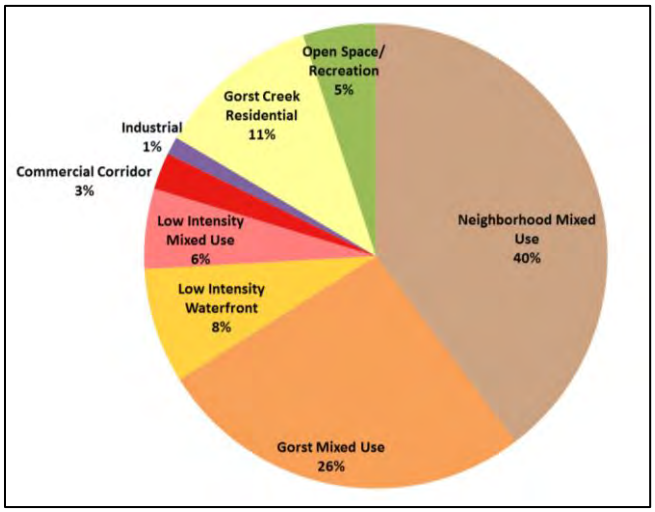
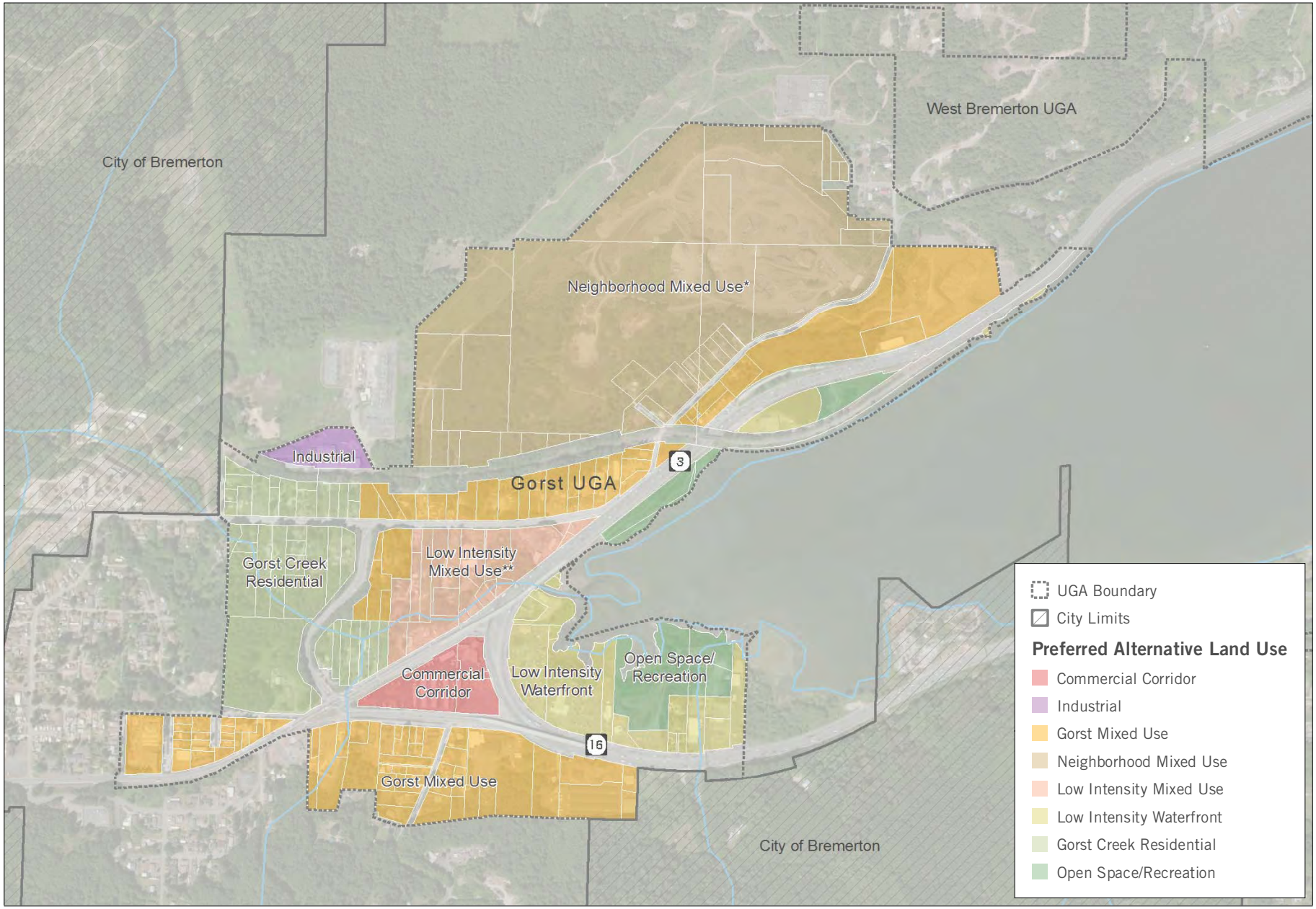


FIGURE 5-10. PREFERRED ALTERNATIVE: FUTURE LAND USE MAP



Date: November 2013
Source: Kitsap County, BERK

* Note: Mineral resource extraction may continue in near term.
** Note: This zone is similar to Low Intensity Waterfront, except that residential development is allowed.

N

0 0.1 0.2
Miles

Table 5-2. Preferred Alternative: Land Use & Zoning Designations

Preferred Alternative Future Land Use Designation Descriptions	
	Low Intensity Waterfront The Low Intensity Waterfront (LIW) district allows commercial uses to serve the traveling public in a development pattern that reduces impervious surfaces, promotes shoreline reclamation and open space, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access. Commercial uses would occur on smaller impervious footprints interspersed by trails, parks, and reclaimed shoreline habitat. New residential uses are restricted.
	Low Intensity Mixed Use The Low Intensity Mixed Use (LIMU) district promotes mixed uses – retail, hotel, office, services, residential – in horizontal or small scale vertical patterns-- and regional commercial uses designed to maximize shoreline views and allow streamside public access where appropriate. A less intensive pattern is found on Gorst Creek and West Belfair Road. A new development pattern reduces impervious surfaces, promotes creek restoration, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access.
	Gorst Mixed Use The Gorst Mixed Use (GMU) district promotes mixed uses – retail, hotel, office, services, residential – in horizontal or small scale vertical patterns-- and regional commercial uses designed to maximize shoreline views and allow streamside public access where appropriate. A more intensive development pattern is found in Central Gorst and a less intensive pattern is found on West Belfair Road, Sam Christopherson Road West, and West Frontage Road/ West Frone Drive.
	Neighborhood Mixed Use The Neighborhood Mixed Use (NMU) district promotes low and medium density housing including detached single family, attached single family, cottages, townhomes, small scale flats, and accessory dwelling units. Developments are accomplished in an environmentally sustainable pattern, such as clustering, low impact development techniques, energy conservation, and similar methods. Small scale commercial uses that serve local residences are allowed. Public and private open spaces are also promoted.
	Commercial Corridor The Commercial Corridor (CC) designation provides locations for high intensity commercial uses serving the entire community while preserving maritime views, forested areas, and buffering impacts to adjacent residential areas. The corridor accommodates access to businesses by automobile while also creating a pedestrian-friendly, transit-supporting corridor.
	Industrial The (I) designation accommodates light and heavy industrial uses in locations where there is limited interaction with residential uses. Uses include large-scale and/or heavy industries in a manner that reduces impact to the community while meeting industry's needs for easy access, large sites, and locations that do not cause conflicts with residential and other less intense use areas.
	Gorst Creek Residential The Gorst Creek Residential (GCR) district applies to low density residential and large lot residential areas along Gorst Creek, where low impact development and riparian and wetland zone protection are priorities. Clustered development patterns and incentives for stream restoration are promoted.
	Open Space/Recreation The Open Space/Recreation (OSR) designation allows for active and passive parks, recreation, and open space facilities. Secondary uses include accessory commercial such as concessions, recreation equipment rental, and other small-scale facilities that support and enhance public access and recreation.

Source: City of Bremerton and Kitsap County, Staff Draft - Preferred Gorst Subarea Plan, September 2013

Images and Examples

Based on the Preferred Alternative, the following Image Chart in Figure 5-11 illustrates the scale and types of land uses by land use and zoning designation. It is not meant to identify preferred architectural styles.

These tables are intended to provide the reader with an indication of the scope and scale of the type of development that is proposed in each of the proposed zoning districts. Chapters 8 and 9 provide zoning and design standards and guidelines to implement the intent of each land use and zoning designation.

Figure 5-11. Land Use and Scale Image Examples

Preferred	IMAGES: LAND USE AND SCALE				
Scale	Base Height 2 stories Maximum Height 4 stories - allowed by reducing impervious area				
Low Intensity Waterfront	 1 Story Commercial Retail with Landscaping		 Areas of Reduced Pavement/ Added Plants (Yellow)		
	Retail with Landscaping	Improved Streetscape	Commercial Site Plan with Reduced Parking and added Plantings	Narrow Footprint Commercial Buildings with Habitat Buffer and Shoreline Protection	Commercial Recreation
Scale	Base Height 2 stories Maximum Height 6 stories in GMU. In LIMU 4 stories allowed by reducing impervious area.				
Gorst Mixed Use / **Low Intensity Mixed Use**		 Acres: 4.8, Units: 180, Density 38, Commercial: 10,000 SF, 2-5 Stories	 Retail shop with office/ caretaker unit above	 3 story townhomes and first floor storefronts	 Acres: 3.44, Units: 40, Density: 12, 2 Stories
	Regional Commercial: Retail Center, Hotel	Horizontal Mixed Use – Retail & Apartments	Neighborhood Convenience Retail	Live Work Townhomes	Townhomes

Figure 5-11. Land Use and Scale Image Examples - Continued

Preferred	IMAGES: LAND USE AND SCALE				
Scale	Base Height 2 stories Maximum Height 4 stories				
Commercial Corridor					
	Retail Center	Stand-Alone Retail	Auto Service	Services and Office	Secondary Use – Light Industrial
Scale	Maximum Height 4 stories Minimum Density 5-8 du/ac Maximum Density 20-24 du/ac				
Neighborhood Mixed Use					
	2-Story, Attached Units on Slope	14 units, Medium Density, 2 stories			0.53 acres
	Small Scale Flats with Open Space/Paths	Townhomes	Single Family Homes on Alleys	Detached Accessory Dwelling Unit	Playground
Scale	Maximum Height 4 stories Minimum Density 5-8 du/ac Maximum Density 20-24 du/ac				
Neighborhood Mixed Use					
	Neighborhood Convenience Retail	Live Work Townhomes			

Figure 5-11. Land Use and Scale Image Examples - Continued

Preferred	IMAGES: LAND USE AND SCALE			
Scale	Maximum Height 3 stories Minimum Density 1-5 du/ac Maximum Density 10 du/ac (Clusters)			
Gorst Creek Residential		 Acres: 1.1, Density: 7, with Open Space		
	Single Family Home with Rain Garden	Cottage Cluster Development	Open Space for Detached Cottages	Accessory Dwelling Unit
Scale	Maximum Height 3 stories			
Open Space/Recreation				
	Natural Open Space	Boardwalk Wetlands	Soft Shore Boat Launch	Boat House and Concession Stand
Scale	Maximum Height 35-50 feet			
Industrial				
	Light Industrial Building with Landscaping		Light Industrial Building with Landscaping	

Land Use and Growth Comparisons

The Gorst UGA contains about 335 gross acres including streets and public rights of way, or about 267 acres in parcels. Each alternative vision and land use plan proposes an urban land use pattern with variable amounts of commercial and residential uses (see Table 5-3).

- Vision 1 focuses on commercial, mineral, and industrial uses (combined 87%) and less on residential uses (13%).
- Vision 2 provides a nearly balanced amount of residential (49%) and commercial (46%) acres with recognition of County-purchased property for open space (6%).
- Vision 3 provides a more mixed use pattern of different commercial and residential intensities (about 75% combined) and some single-purpose designations (residential 11%, low-intensity waterfront commercial 9%) and open space (6%).
- The Preferred Vision is similar to Alternative 3 with the greatest focus on mixed uses (70%), some single purpose residential and commercial designations (23% total) as well as open space (5%).

The total parcel acres for the Preferred Vision is fewer than the Draft EIS alternatives because the railroad right of way was inadvertently treated as a parcel in the original alternatives analysis. For a more even comparison, reviewing the maps and percentages of each category is appropriate.

Table 5-3. Land Use Acres Comparison (Total Parcel Acres by Zone)

Zone	Acres	Percent
Alternative 1		
High Intensity Commercial Mixed Use	121.9	43
Mineral Resource	96.3	34
Low Density Residential	35.3	13
Industrial	27.2	10
TOTAL	280.7	100
Alternative 2		
Commercial Corridor	127.8	46
Medium Density Residential	105.4	38
Low Density Residential	31.6	11
Open Space/Recreation	16.0	6
TOTAL	280.7	100
Alternative 3		
Neighborhood Mixed Use	105.4	38
Gorst Mixed Use	103.3	37
Gorst Creek Residential	31.6	11
Low Intensity Waterfront	24.5	9
Open Space/Recreation	16.0	6
TOTAL	280.7	100
Preferred Alternative		
Neighborhood Mixed Use	105.8	39
Gorst Mixed Use	70.3	26
Low Intensity Waterfront	21.0	8
Low Intensity Mixed Use	14.9	5
Commercial Corridor	6.8	3
Industrial	3.3	1
Gorst Creek Residential	30.4	11
Open Space/Recreation	13.9	5
TOTAL	266.6	100

Source: Kitsap County 2012; BERK

With different land use patterns, each vision would result in a different level of population and employment growth in the Gorst UGA. See Table 5-4.

Vision 1 assumes more employment acres and a smaller residential area, resulting in the greatest employment growth and least residential growth. Vision 2 has a focus on commercial growth in central Gorst and greater land designated for residential growth along Sherman Heights and Gorst Creek, thus resulting in a moderate amount of employment growth and a greater amount of population growth. Vision 3, with a greater emphasis on mixed use in central Gorst and greater potential for small scale mixed use providing medium density housing, has the greatest amount of population and the least amount of job growth.

The Preferred Alternative is most similar to Alternative 3 in terms of planned land use; the Preferred Alternative has slightly fewer dwellings since there is a reduction in Gorst Mixed Use and an increase in Commercial Corridor compared to Alternative 3. The Preferred Alternative has fewer jobs than Alternative 3 and is only 35 jobs less. This reason for slightly lower jobs in the Preferred Alternative is due to a correction in buildable acres; at the time the Draft EIS alternatives were studied, the railroad right of way was inadvertently treated as a standard private parcel and considered partially developable leading to slightly overstated jobs.

Vision 2 and 3 and Preferred Alterative populations would exceed the small population currently allocated to the UGA in the Countywide Planning Policies (CPPs) In 2004 the allocation was 73, but based on a 2012 County land capacity study the allocation is approximately 76 new persons. As part of the 2016 GMA Comprehensive Plan update cycles, population would need to be reallocated to the Gorst UGA to accommodate the expected growth under Visions 2 and 3 and the Preferred Alternative.

Table 5-4. Growth Comparison by Gorst UGA Alternative

Alternative	Residential Net Developable Acres	Dwellings	Population	Employment Developable Acres	Jobs
Alternative 1	5.9	33	82	34.7	742
Alternative 2	46.9	538	985	22.8	606
Alternative 3	56.7	597	1082	12.6	333
Preferred Alternative	55.1	585	1060	11.2	298

Source: Kitsap County 2012; BERK

6. URBAN DESIGN CONCEPTS

Community Design Overview

The Gorst UGA currently lacks a cohesive design character and is often perceived to be haphazard and unattractive, with heavy traffic congestion and poorly maintained uses. Buildings tend to be low rise and spread out with large setbacks and large impervious areas.

The Guiding Principles for this Subarea Plan intend, in part, to improve the aesthetic character of the UGA and to make the built environment function in a more pedestrian and transit oriented fashion. By implementing modest design standards, significant improvement can be made in these areas.

Example of a complete street, which includes space for pedestrians, bicycles, and automobiles.

Based on the Preferred Alternative, Design Guidelines address the design of the public realm, which generally consists of the space within the public right-of-way or other public ownership, as well as the relationship of private development to the public realm. In addition, best practices for Site Design are addressed. Public realm and site design concepts are described in this chapter.

The implementation of Design Guidelines in association with the Preferred Alternative will help achieve several design goals:

- *Walkability* – Ensure a safe, comfortable, and interesting pedestrian environment and prioritize pedestrian accessibility.
- *Complete Streets* – Ensure that streets are supportive of multiple modes of transportation, including walking, bicycling, transit, and automobiles.
- *Identifiable Character* – Create an attractive and functional public realm that identifies Gorst as a unique place. This contrasts with the uncoordinated, and confusing development pattern that often characterizes auto-oriented strip development.
- *Efficient and Coordinated Use of Land and Infrastructure* – Use compact development, shared driveways and parking areas, and consistent street frontage standards to efficiently use land and infrastructure and avoid leftover or "dead" spaces.

Public Realm Design

The space within public rights-of-ways typically accounts for 25% or more of land area within an urban area. This is also the area over which local governments are able to have the greatest design influence, either by way of direct capital expenditures, or through proportionate street frontage improvement requirements that accompany private development proposals. Public rights-of-way are the areas most commonly seen by the general public and therefore contribute significantly to the perceived character of an area.

The design of the public realm is therefore critical to achieving the desired change in public perception of the Gorst UGA. A common perception of Gorst is that of haphazard development. Streetscape design can create a more cohesive and consistent character. This is not to say that the streetscape or the uses fronting it need to be uniform or lacking individuality, but rather that the presence of a few unifying elements can make a noticeable improvement. For example, ensuring that street trees are planted at regular intervals along all streets, ensuring the presence of paved and connected sidewalks that are separated from the roadway, and ensuring that utilities are placed underground can drastically change a street from seeming haphazard into one that seems cohesive and livable.

Streetscape design can improve safety, comfort, and function as well, particularly for the goal of creating pedestrian friendly and transit oriented development. There are certain conditions that are prevalent throughout Washington State and the country that discourage pedestrian activity. Such conditions include:

- Lack of or disconnected sidewalks;
- Lack of a buffer between high speed traffic and pedestrians;
- Lack of street trees;
- Lack of shade during the summer or weather protection during the rainy season;
- Large expanses of paved surfaces that often become dusty, littered, and hot;
- Frequent driveways and curb cuts and long crossing distances that endanger pedestrians in high traffic areas; and
- Uninteresting pathways that increase the perception of distance, either through long blank walls, or large setbacks occupied by parking.

Encouraging pedestrian activity is simply a matter of mitigating the conditions noted above, such as by:

- Providing paved, connected sidewalks;
- Buffering pedestrians from traffic through the use of planter strips, street trees, and even on-street parking;
- Weather protection along building frontages;
- Limiting vehicle and pedestrian conflicts;
- Shorter crosswalks; and
- Smaller setbacks with building entrances, windows, and varying façades oriented to the street.

Example of paved sidewalk, planter strip and street trees.

Site Design Best Practices

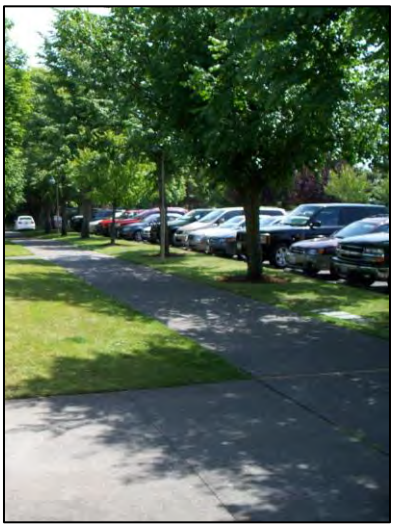
Site design can have a significant effect on the aesthetic character and pedestrian orientation of an area as well. Typical automobile oriented strip development, such as what characterizes much of the Gorst UGA, consists of several common design elements that, while sometimes convenient for automobile access, are less desirable when looked at more comprehensively.

Common design elements of undesirable strip development include:

- Parking located between the building and the street;
- Large parking areas that are rarely fully utilized;
- Unbroken expanses of pavement;
- Lack of clear and safe routes for pedestrians through parking lots, either from cars to the building, or from the street to the building;
- Building entrances oriented to the parking lot and not the street;
- Building entrances not easily identifiable from the street; and
- Large, cluttered signage oriented to passing vehicles and not pedestrians.

A few simple design changes can create a development that appears more orderly, pleasant, and accessible to both pedestrians and vehicles. Such design elements include:

- Placing parking areas to the side or rear of a building where possible;
- Limiting the amount of street frontage that is occupied by parking;
- Pulling the building closer to the street;
- Providing easily identifiable building entrances oriented to the street and connected to the sidewalk;
- Providing pedestrian routes through parking areas, using striping, different paving materials, signage, curbs, and islands;
- Providing landscaping and trees in parking areas to provide visual interest, shade, traffic calming, and for stormwater management;
- Sharing driveways and parking areas with adjacent uses; and
- Reducing impervious area through the use of shared vehicle infrastructure and by properly sizing parking areas.



Example of pedestrian routes, landscaping, and trees in parking area.

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7. BEST MANAGEMENT PRACTICES & INCENTIVES

Establishing a new land use plan for Gorst provides opportunities to implement best management practices and incentives to achieve economically viable development, restoration, and protection.

Best management practices are superior methods or techniques to achieve proper land management and mitigate potential environmental impacts. Typically, these techniques are applied to minimize soil erosion or to achieve water quality standards. The Gorst Creek Watershed Characterization Study (Volume 1) identifies best management practices to reduce soil erosion, protect habitat, and allow for sustainable land use patterns; as a result of the science-based Gorst Creek Watershed Characterization & Framework Plan, several best management practices are recommended as "base" standards, i.e. required for all development, such as low impact development stormwater techniques.

Incentives include a relaxation in development standards or allowances for greater development capacity that are offered to new development in exchange for providing public benefits or amenities. Incentives are not required but are encouraged. Types of incentives could include:

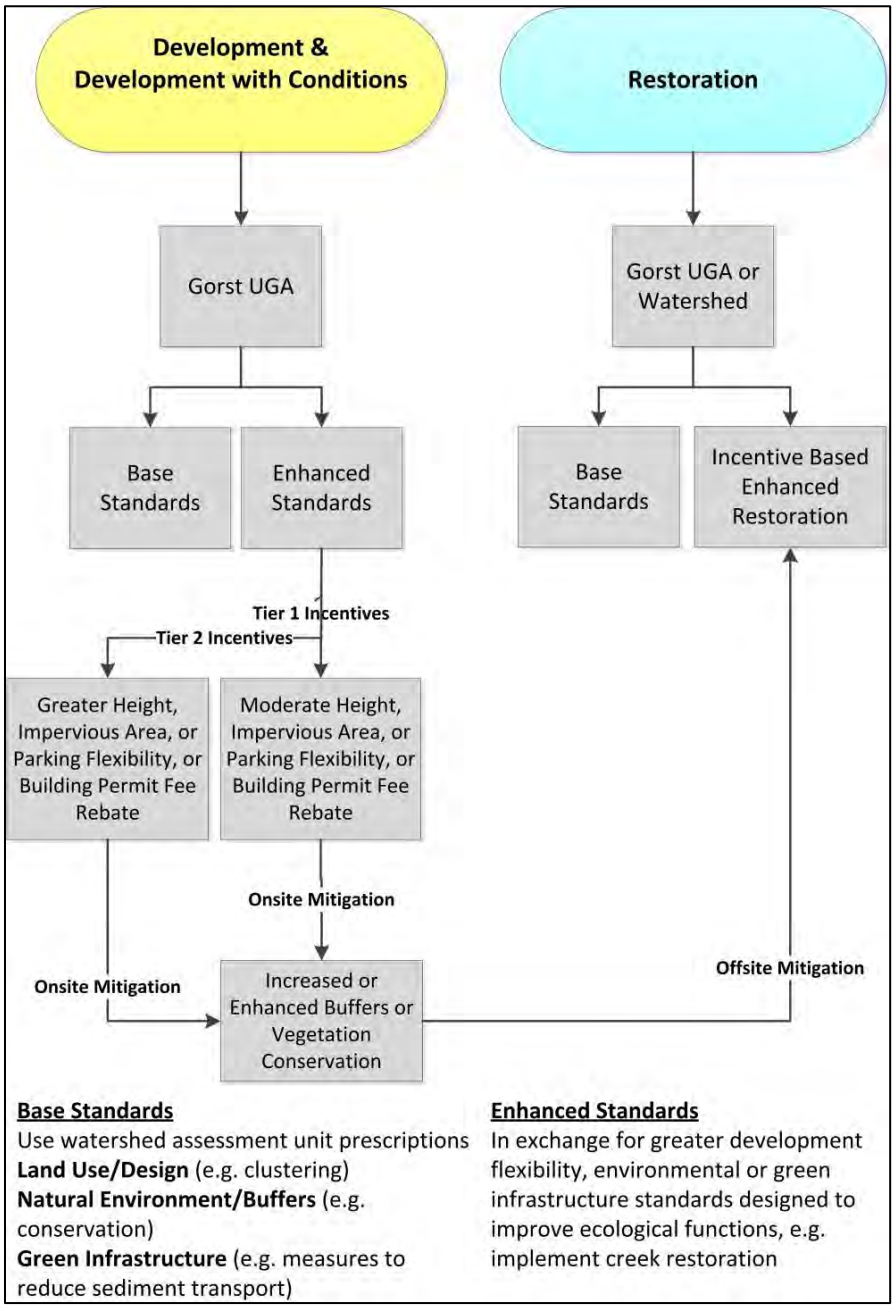
- Amount of Development: for example, increased building heights, increased densities.
- Development Standards: for example, reduced parking, increased impervious surfaces.
- Permit Processing: for example, building permit fee rebates (implemented in SKIA by City of Bremerton), reduced fee for lot line adjustments to consolidate properties.

The desired public benefits or amenities could include enticing higher quality development that provides net benefits for the built and natural environment. In Gorst this could include stormwater, habitat, or access improvements above and beyond base standards.

Figure 7-1 on the following page shows how an incentive system could work in Gorst using the Watershed Characterization results. In areas of "Development" classified on Figure 2-2 earlier, an applicant for a development project could just comply with base "best management practice" standards. Alternatively a development could not only comply with base standards but also voluntarily provide enhanced standards or amenities and in exchange earn greater development capacity. For example, base standards could allow two story commercial development, provided that a basic set of zoning, urban design, critical area protection, and infrastructure levels of service are met. However, if an applicant wanted to build a four-story development, an enhanced set of land use, habitat and green infrastructure standards could be applied, such as a wider/enhanced buffer from shorelines or critical areas or an allowance for offsite mitigation and additional restoration in other portions of the watershed.

Based on the preferred alternative, Chapters 8 and 9 provides a system of base "best management practice" standards and a suite of incentives offering reduced development standards or greater development capacity in exchange for public benefits or amenities that will help achieve a more sustainable and economically viable development pattern.

Figure 7-1. Flow Chart – Permit Process and Incentives



8. GORST ZONING & DEVELOPMENT REGULATIONS – BREMERTON

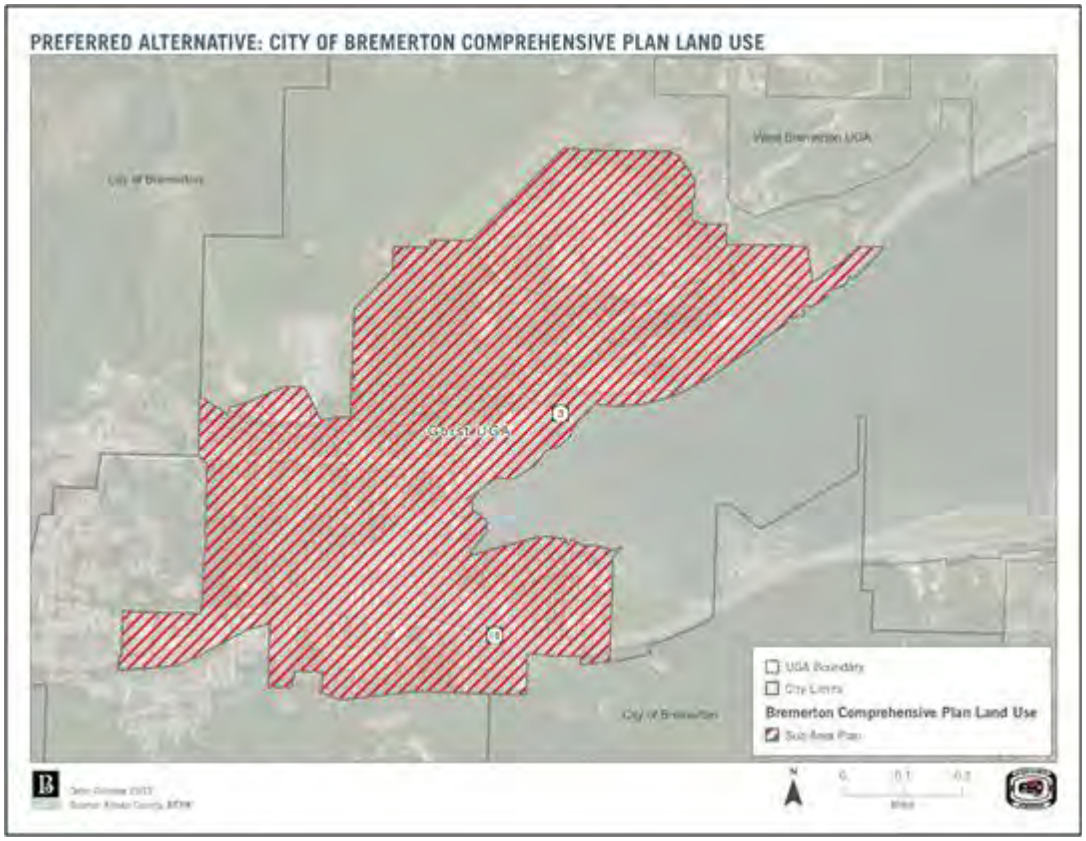
Introduction

This chapter describes the City's Comprehensive Plan Land Use Map designation supporting the subarea plan goals and policies, and the application of implementing zoning and development regulations.

Comprehensive Plan

The City's Comprehensive Plan Land Use Map identifies locations where the City has adopted a Subarea Plan with a designation called "Sub Area Plan" as showing in Figure 8-1. Comprehensive Plan Land Use Map Designation.

Figure 8-1. Comprehensive Plan Land Use Map Designation



Other Amendments

The Gorst Subarea Plan will become an element of the Bremerton Comprehensive Plan. The Gorst Creek Watershed Characterization & Framework Plan is anticipated to be referenced in the Comprehensive Plan as a supporting functional plan.

Zoning and Development Regulations

This Section presents zoning and development regulations for the Gorst UGA effective upon annexation to the City of Bremerton.

A. Purpose and Applicability

1. Purpose:

This chapter implements the Gorst Subarea Plan goals identified in Chapter 2, and summarized below:

i. Create opportunities for well-designed, sustainable commercial and residential growth and development.

ii. Protect and restore fish and wildlife habitat along Gorst Creek and Sinclair Inlet.

iii. Continue to improve water quality and reduce flooding in the Gorst UGA.

2. Applicability, Procedures, and Administration

i. APPLICABILITY: This chapter applies to all lands in the Gorst Subarea as mapped in Chapter 5. In the City of Bremerton, this Chapter 8, Development Regulations, and the associated Design Guidelines in Chapter 10, become effective upon annexation.

ii. AUTHORITY: Bremerton's Director of Community Development (Director) and his/her designee shall have the authority to implement this chapter.

iii. ADMINISTRATION: See BMC Chapter 20.40, Administration.

iv. PROCEDURES: The procedures and criteria of BMC 20.02 Project Permits, 20.04 State Environmental Policy Act, 20.12 Land Division and 20.58 Land Use Permits shall apply.

v. INTERPRETATIONS: See BMC 20.40.080, Interpretations.

vi. MAP: The zones applicable to Gorst are identified in Figure 8-2, and shall guide the application of zoning district regulations.

vii. DEFINITIONS: Except for Definitions listed in this subsection, definitions shall include those in BMC Chapter 20.42, Definitions. If definitions are not located in BMC Chapter 20.42, the Director shall consult the Bremerton Municipal Code (BMC), a dictionary of common usage, or professional literature appropriate to the topic.

a. Definition and Measurement of Density: In all zones where a maximum or base density is identified, maximum or base density is calculated on gross acreage of the site. In all zones where a minimum density is required, minimum density is calculated on net developable acreage. If a calculation results in a partial dwelling unit, the partial dwelling unit shall be rounded to the nearest whole number. Less than 0.5 shall be rounded down. Greater than or equal to 0.5 shall be rounded up.

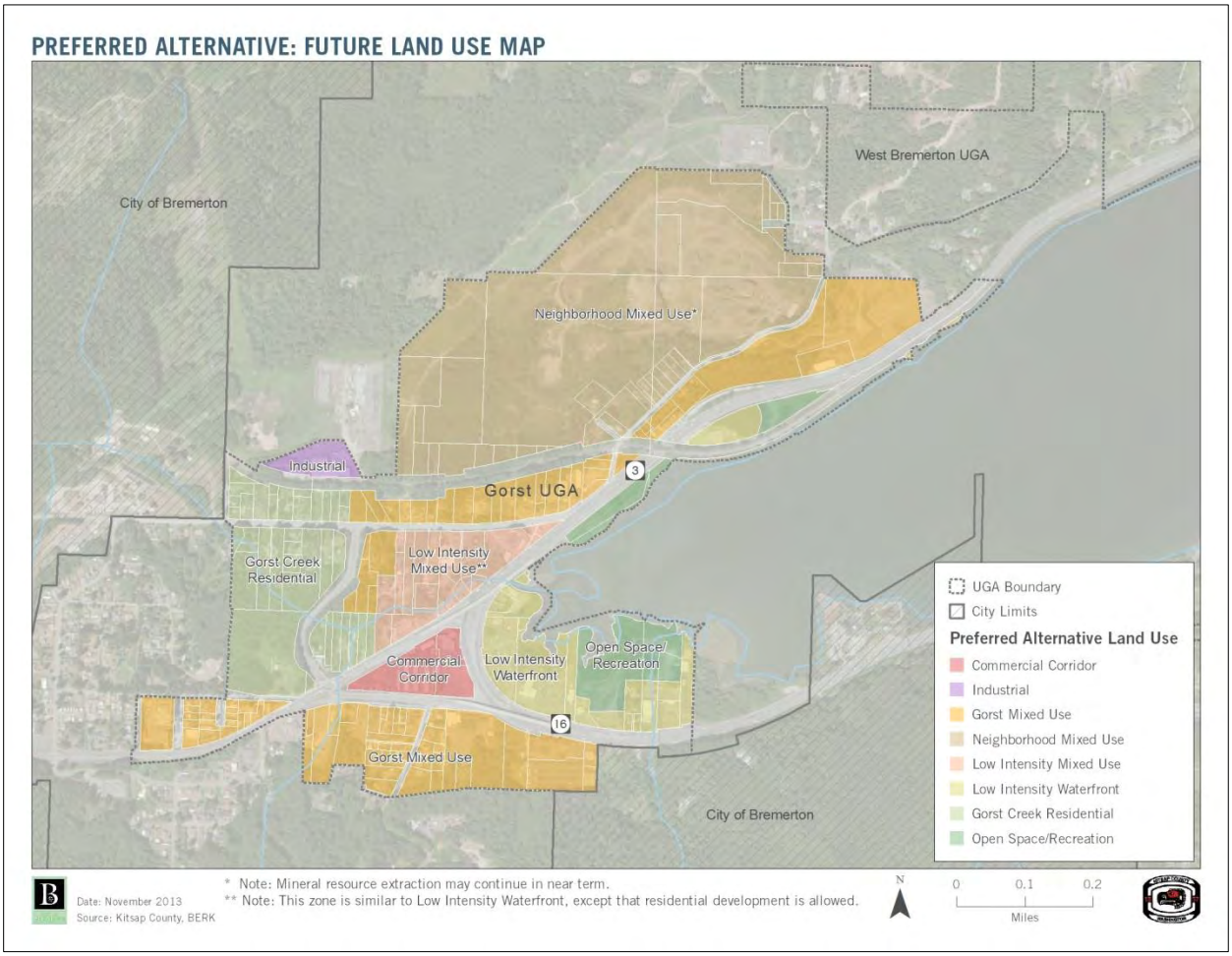
b. Caretaker's Dwelling: A caretaker's dwelling means a single-family residence accessory to a commercial or industrial use intended for the purposes of providing supervision, maintenance or security of the property.

c. Water-Oriented: The definition of water oriented is any combination of water dependent, water related, and/or water enjoyment uses consistent with the City's adopted Shoreline Master Program.

viii. NONCONFORMING STRUCTURES, USES, AND LOTS: Structures and uses legally established as of the effective date of this document are grandfathered and are allowed to continue subject to BMC Chapter 20.54. Nonconforming Provisions. The rules of BMC Chapter 20.54 shall apply to nonconforming lots.

ix. AMENDMENT: The Gorst Subarea Plan land use map (Figure 8-1) and policies (Chapter 4) may be amended consistent with BMC 20.10 Comprehensive Plan Amendments. Zoning map (Figure 8-2) amendments shall be subject to either BMC 20.58.040 Site-Specific Rezone or BMC 20.58.050 Area-Wide Rezones. Code amendments shall be subject to Chapter 20.18 BMC, Text Amendments.

Figure 8-2. Gorst Zoning Map



B. Land Use Zones

1. Low Intensity Waterfront

Intent: The Low Intensity Waterfront (LIW) district allows commercial uses to serve the traveling public in a development pattern that reduces impervious surfaces, promotes shoreline reclamation and open space, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access. Commercial uses would occur on smaller impervious footprints interspersed by trails, parks, and reclaimed shoreline habitat. New residential uses are restricted.

i. PERMITTED USES

a. Permitted Uses: Permitted uses in the Low Intensity Waterfront district shall be consistent with BMC 20.62.020, with the following additions:

(i) Automobile sales, having access to a state route;

(ii) Caretaker's residence;

(iii) Parks, playgrounds, and open spaces;

(iv) Public utility facilities;

(v) Schools and associated uses and outdoor athletic fields less than twenty thousand (20,000) square feet gross floor area;

(vi) Transportation facilities; and

(vii) Worship, religious and community facilities of twenty thousand (20,000) square feet gross floor area or less.

b. Prohibited Uses: The following uses are prohibited in the Low Intensity Waterfront Zone.
(i) Gas Stations; and
(ii) Residential uses not listed in i.a above.

c. Accessory Uses: Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.

d. Conditional Uses: The following uses may be permitted, provided a Type II conditional use permit is approved pursuant to BMC 20.58.020:
(i) Hardware and materials supply stores including garden supply subject to conditions of BMC 20.62.040(a).
(ii) Schools and associated uses and outdoor athletic fields greater than twenty thousand (20,000) square feet gross floor area, subject to the following conditions:
(a) Front, side and rear yard setbacks of structures and outdoor storage areas shall be at least thirty (30) feet;
(b) Setbacks may be reduced for those portions of a structure fronting interior streets;
(c) The maximum height for any new construction may be increased to match the architecture of existing buildings; provided, that it is set back an additional foot from any property line for each additional foot of allowed height, and in no case shall the new construction exceed forty-five (45) feet;
(d) Landscaping is provided meeting the minimum requirements for nonresidential uses prescribed in Chapter 20.50 BMC. Additional landscaping for screening purposes may be required if it is found necessary to mitigate any impacts to adjoining residential properties;
(e) Additional measures may be required if deemed necessary to mitigate any noise impacts to adjacent residential uses; and
(f) The maximum height of a fence or wall within a front yard setback may be increased to six (6) feet, provided it enhances safety and security around an outdoor play area.
(iii) Worship, religious and community facilities greater than twenty thousand (20,000) square feet, provided:
(a) The site is located on a collector or higher street; and
(b) The site area shall be one (1) acre or more.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

2. Low Intensity Mixed Use

Intent: The Low Intensity Mixed Use (LIMU) district promotes mixed uses – retail, hotel, office, services, residential – in horizontal or small scale vertical patterns-- and regional commercial uses designed to maximize shoreline views and allow streamside public access where appropriate. A less intensive pattern is found on Gorst Creek and West Belfair Road. A new development pattern reduces impervious surfaces, promotes creek restoration, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access.

i. PERMITTED USES
   a. Permitted Uses: Permitted uses in the Low Intensity Mixed Use district shall be consistent with BMC 20.92.020, with the following additions:
      (i) Automobile sales, having access to a state route;
      (ii) Automobile service, repair excluding outdoor display areas;
      (iii) Entertainment use;
      (iv) Museum and gallery;
      (v) Education and schools and outdoor athletic fields less than twenty thousand (20,000) square feet gross floor area;
      (vi) Park and ride facility;
      (vii) Public utility facilities; and
      (viii) Transportation facilities.
   b. Prohibited Uses: The following uses are prohibited in the Low Intensity Mixed Use Zone.
      (i) Gas Stations.
   c. Accessory Uses: Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.
   d. Conditional Uses: The following uses may be permitted, provided a conditional use permit is approved pursuant to BMC 20.58.020:
      (i) Education and schools and associated uses, and outdoor athletic fields greater than twenty thousand (20,000) square feet gross floor area subject to the following:
         (a) Front, side and rear yard setbacks of structures and outdoor storage areas shall be at least thirty (30) feet;
         (b) Setbacks may be reduced for those portions of a structure fronting interior streets;
         (c) The maximum height for any new construction may be increased to match the architecture of existing buildings; provided, that it is set back an additional foot from any property line for each additional foot of allowed height, and in no case shall the new construction exceed forty-five (45) feet;
         (d) Landscaping is provided meeting the minimum requirements for nonresidential uses prescribed in Chapter 20.50 BMC. Additional landscaping for screening purposes may be required if it is found necessary to mitigate any impacts to adjoining residential properties;
         (e) Additional measures may be required if deemed necessary to mitigate any noise impacts to adjacent residential uses; and
         (f) The maximum height of a fence or wall within a front yard setback may be increased to six (6) feet, provided it enhances safety and security around an outdoor play area.
      (ii) Worship, religious and community facilities greater than twenty thousand (20,000) square feet, provided:

(a) The site is located on a collector or higher street;
(b) The site area shall be one (1) acre or more; and
(c) Landscaping is provided meeting the minimum requirements for nonresidential uses prescribed in Chapter 20.50 BMC. Additional landscaping for screening purposes may be required if it is found necessary to mitigate any impacts to adjoining residential properties.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

3. Gorst Mixed Use

Intent: The Gorst Mixed Use (GMU) district promotes mixed uses – retail, hotel, office, services, residential – in horizontal or small scale vertical patterns-- and regional commercial uses designed to maximize shoreline views and allow streamside public access where appropriate. A more intensive development pattern is found in Central Gorst and a less intensive pattern is found on West Belfair Road, Sam Christopherson Road West, and West Frontage Road/ West Frone Drive.

i. PERMITTED USES
   a. Permitted Uses: Permitted uses in the Gorst Mixed Use district shall be consistent with BMC 20.92.020, with the following additions:
      (i) Automobile sales, having access to a state route;
      (ii) Automobile service, repair excluding outdoor display areas;
      (iii) Education and schools and associated uses and outdoor athletic fields less than twenty thousand (20,000) square feet gross floor area;
      (iv) Entertainment use;
      (v) Gas stations, permitted when property takes frontage from SR 3 or SR 16;
      (vi) Museum and gallery;
      (vii) Park and ride facility;
      (viii) Public utility facilities; and
      (ix) Transportation facilities.
   b. Accessory Uses: Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.
   c. Conditional Uses: The following uses may be permitted, provided a conditional use permit is approved pursuant to BMC 20.58.020:
      (i) Schools and associated uses, and Outdoor athletic fields greater than twenty thousand (20,000) square feet gross floor area subject to the following:
         (a) Front, side and rear yard setbacks of structures and outdoor storage areas shall be at least thirty (30) feet;
         (b) Setbacks may be reduced for those portions of a structure fronting interior streets;
         (c) The maximum height for any new construction may be increased to match the architecture of existing buildings; provided, that it is set back an additional foot from any property line for each additional foot of allowed height, and in no case shall the new construction exceed forty-five (45) feet;
         (d) Landscaping is provided meeting the minimum requirements for nonresidential uses prescribed in Chapter 20.50 BMC. Additional landscaping for screening purposes may be required if it is found necessary to mitigate any impacts to adjoining residential properties;
         (e) Additional measures may be required if deemed necessary to mitigate any noise impacts to adjacent residential uses; and

(f) The maximum height of a fence or wall within a front yard setback may be increased to six (6) feet, provided it enhances safety and security around an outdoor play area.

(ii) Worship, religious and community facilities greater than twenty thousand (20,000) square feet, provided:

(a) The site is located on a collector or higher street;

(b) The site area shall be one (1) acre or more; and

(c) Landscaping is provided meeting the minimum requirements for nonresidential uses prescribed in Chapter 20.50 BMC. Additional landscaping for screening purposes may be required if it is found necessary to mitigate any impacts to adjoining residential properties.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

4. Neighborhood Mixed Use

Intent: The Neighborhood Mixed Use (NMU) district promotes low and medium density housing including detached single family, attached single family, cottages, townhomes, small scale flats, and accessory dwelling units. Developments are accomplished in an environmentally sustainable pattern, such as clustering, low impact development techniques, energy conservation, and similar methods. Small scale commercial uses that serve local residences are allowed. Public and private open spaces are also promoted.

i. PERMITTED USES

a. Permitted Uses: Permitted uses in the Neighborhood Mixed Use district shall be consistent with BMC 20.66.020 with the following additions, provided that non-residential uses shall not exceed five thousand (5,000) gross square feet in size:

(i) Residential uses of the following types:

(a) Group residential facility – Class I;

(b) Foster home;

(c) Multi-unit dwelling unit;

(d) Senior housing complex;

(e) Single-unit dwelling unit, (zero (0)) lot lines;

(f) Single-unit dwelling unit, detached;

(g) Townhouses;

(ii) Day care facility of twelve (12) or fewer persons receiving care

(iii) Day care facilities (thirteen (13) or more persons receiving care) subject to criteria in BMC 20.60.040, Conditional Uses

(iv) Education and schools of twelve (12) or fewer students;

(v) Live-Work commercial and residential;

(vi) Parks, playgrounds, and open space; and

(vii) Physical fitness and health club.

b. Prohibited Uses: The following uses are prohibited:

(i) Entertainment uses;

(ii) Transportation facilities.

c. Accessory Uses: Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.

d. Conditional Uses: Non-residential uses allowed in i.a may be greater than 5,000 square feet in gross floor area, provided a conditional use permit is approved pursuant to BMC

20.58.020, and subject to the following standards, demonstrated to the satisfaction of the Director:

(i) Apparent building height and bulk is reduced from public views at rights of way and public spaces, consistent with articulation standards required in Chapter 10;

(ii) Increased front, side, or rear setbacks are incorporated beyond that required in Section C to reduce apparent building height and bulk and improve compatibility with adjacent public spaces and residential properties;

(iii) Landscaping treatments are incorporated consistent with the standards of Section C and Chapter 10 to reduce the visibility of blank walls and any additional parking required as a result of the larger non-residential building space; and

(iv) The primary use of the property continues to be residential, or the non-residential use is otherwise consistent with an approved conceptual master plan for the site as a whole that meets the intent of the zone.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

5. Commercial Corridor

Intent: The intent of the commercial corridor (CC) district is to provide locations for high intensity commercial uses serving the entire community while preserving maritime views, forested areas, and buffering impacts to adjacent residential areas. The corridor accommodates access to businesses by automobile while also creating a pedestrian-friendly, transit-supporting corridor.

i. USE STANDARDS: Uses shall be consistent with the provisions of BMC 20.62.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Standards for height, setbacks, yards, density, and development site coverage shall be consistent with Section C and with the provisions of BMC 20.62.

6. Industrial

Intent: The intent of the industrial (I) zone is to accommodate light and heavy industrial uses in locations where there is limited interaction with residential uses. Uses include large-scale and/or heavy industries in a manner that reduces impact to the community while meeting industry's needs for easy access, large sites, and locations that do not cause conflicts with residential and other less intense use areas.

i. USE STANDARDS: Uses shall be consistent with the provisions of BMC 20.94.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Standards for height, setbacks, yards, density, and development site coverage shall be consistent with Section C and with the provisions of BMC 20.94.

7. Gorst Creek Residential

Intent: Gorst Creek Residential (GCR) district applies to low density residential and large lot residential areas along Gorst Creek, where low impact development and riparian and wetland zone protection are priorities. Clustered development patterns and incentives for stream restoration are promoted.

i. PERMITTED USES

a. Permitted Uses: Permitted uses in the Gorst Creek Residential district shall be consistent with BMC 20.60.020.

b. Prohibited Uses: The following uses are prohibited:

(i) Cemetery.

c. Accessory Uses: Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.
d. Conditional Uses: Conditional uses listed in BMC 20.60.040 may be permitted, provided a conditional use permit is approved pursuant to BMC 20.58.020 and any conditions in BMC 20.60.040 are met.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

8. Open Space/Recreation

Intent: The Open Space/Recreation (OSR) designation allows for active and passive parks, recreation, and open space facilities. Secondary uses include accessory commercial such as concessions, recreation equipment rental, and other small-scale facilities that support and enhance public access and recreation.

i. PERMITTED USES
   a. Permitted Uses: Permitted uses in the Open Space/Recreation district shall consist of the following:
      (i) Community, cultural, educational facilities;
      (ii) Docks, piers and other in-water structures;
      (iii) Parks, playgrounds, and open spaces;
      (iv) Recreational facilities, general, outside shoreline jurisdiction;
      (v) Recreational facilities, general, water-oriented; and
      (vi) Trails, public pedestrian and bicycle.
   b. Accessory uses may be permitted when found in connection with a principal use or other necessary and customary uses determined by the Director to be appropriate, incidental, and subordinate.
   c. Conditional Uses: The following uses may be permitted, provided a conditional use permit is approved pursuant to BMC 20.58.020:
      (i) Boat launches, soft shore only; and
      (ii) Recreational facilities, general, in shoreline jurisdiction.

ii. DIMENSIONAL AND DEVELOPMENT STANDARDS: Dimensional and development standards shall be consistent with Section C.

C. Dimensional and Development Standards

1. Dimensional and Development Standards:

i. Standards for height, setbacks, yards, density, and development site coverage shall be consistent with Table 8-1 for the following zones:
   a. Low Intensity Waterfront
   b. Low Intensity Mixed Use
   c. Gorst Mixed Use
   d. Neighborhood Mixed Use
   e. Gorst Creek Residential
   f. Open Space/ Recreation

ii. Commercial Corridor and Industrial zones shall meet the standards of Chapter 20.62 BMC and Chapter 20.94 BMC, respectively.

Table 8-1. Density and Dimensional Standards

	Low Intensity Waterfront	Low Intensity Mixed Use	Gorst Mixed Use	Neighborhood Mixed Use	Gorst Creek Residential	Open Space/ Recreation
Minimum Density (units per net acre)	-	10	10	8	1	-
Base Density (units per gross acre)	-	20	20	15	5	-
Max Density (units per gross acre)(1)	-	30	30	24	10	-
Lot Area (Single Family Only)	-	-	-	Min: 2,400 Max: 8,712	Min: 5,800 Max: None	-
Max Height (ft)	Base: 25 Max: 45 (2)	Base: 25 Max: 45 (2)	Base: 25 Max: 45/65(5)	Base: 35 Max: 45 (2)	35	35
Max Development Coverage (pct. of lot area)	Standard: 35% Max: 50% (2)	Standard: 35% Max: 50% (2)	Standard: 60% Max: 85% (2)	Standard: 55% Max: 65% (2)	Standard: 45% Max: 55% (2)	25%
Max Building Coverage (pct. of lot area)	35%	35%	60%	50%	40%	25%
Street Setback (ft)	Minimum: Zero Max: 10 (3)	Minimum: Zero Max: 10 (3)	Minimum: Zero Max: 10 (3)	Minimum: 0/15(6) Max: 10 (3)(7)	Minimum: 15(6)	Minimum: Zero
Minimum Side Yard Setback (ft)	5	Zero (4)	Zero (4)	Zero (8)	5	10
Minimum Rear Yard Setback (ft)	15	15	15	15	15	Zero

1. Maximum density is subject to the incentives in Section 8.E.
2. Maximum standard is subject to the incentives in Section 8.E.
3. The setback may be increased if the Director finds that such increase is the minimum necessary to facilitate a superior site design. In order to obtain approval for an increased setback, the applicant shall submit a written analysis establishing how the project facilitates superior site design, is the minimum necessary, is consistent with specific goals and policies within the Comprehensive Plan and is compliant with all applicable sections of the BMC. The following list identifies examples of circumstances where increased setbacks may be found to be appropriate:

   a. When the site includes more than one street frontage;

   b. To accommodate existing topography, utilities, or other physical site constraints that make compliance with the setback infeasible;

   c. To accommodate phasing of infill development;

   d. On sites that are significantly developed with existing legally established nonconforming uses or structures whereby strict code compliance will not facilitate effective circulation; and;

e. For projects that in the opinion of the Director provide enhanced public amenities within the setback area which includes, but is not limited to the following: public plazas, increased landscaping, architectural features, improved pedestrian connections.

f. When fronting on an arterial or state route.

4. Except when commercial or mixed use development abuts Gorst Creek Residential Zone, when it shall be a minimum of 10 feet.
5. Maximum height may be increased to 45 feet through the use of incentives in Section 8.E, except when fronting SR 3 or SR 16, when it may be increased to 65 feet.
6. For mixed-use or commercial development, the minimum setback shall be zero (0) feet. Otherwise, the setback shall be 15 feet.
7. Applies only to commercial portion of a mixed-use development.
8. Except for zero lot line or townhouse development on fee simple lots, when the minimum setback shall be five (5) feet.

2. Parking Requirements

i. Subsection a shall apply to all uses, and subsections b and c shall apply to mixed use, commercial, institutional, and industrial uses:
   a. Development applications shall meet the circulation and parking standards of Chapter 10 and BMC Chapter 20.48, Off-Street Parking Requirements.
   b. On-site parking shall be to the rear or to the side of buildings on the site and shall not occupy more than fifty (50) percent of the site frontage facing the arterial street frontage(s). The site frontage includes all of the area between the right-of-way and front building wall; this applies to the entire length of the property, regardless of building width. Corner lots have two site frontages as they are positioned on two street frontages.
   c. All efforts shall be taken to avoid placing parking on street corners. Parking located between the building frontage and street corners shall be fully screened. Screening shall consist of the following:
      (i) A four (4) foot tall decorative wall within the front yard landscaping area that fully screens the parking areas. The wall shall be located such that it blocks views of the parking from the right-of-way. For long spans of frontage (100’ or more), the wall shall include modular articulation to add architectural variety.
      (ii) Shrubs or other alternative materials may be substituted for the wall, provided it is demonstrated that the shrubs/alternative will provide equal to or better visual screening than the wall. Shrubs shall be a minimum of three feet (3’) tall at time of installation and shall be additional to the landscaping required in BMC 20.52.
      (iii) Openings may be required within a wall section in order to provide a sidewalk from the right-of-way to the building entry. The entry shall be the minimum necessary to accommodate a sidewalk that is a minimum of 5’ in width, clearly marked, and distinguished from driving surfaces by using decorative paving, stamped/stained concrete, or raised walkways with alternative materials (such as brick, cobblestone, decorative pavers). Paint striping does not meet this requirement.
      (iv) Access to parking may be from adjacent non-principal arterial streets, or from driveways off of the principal arterial.
      (v) Driveways providing access to parking area shall be well-defined, highly visible entryways.

3. Environmental Standards

Development applications shall comply with Section 8.D.

4. Design Guidelines

Development applications shall be subject to design guidelines in Chapter 10 of this Subarea Plan.

5. Landscaping Standards

Development applications shall comply with Chapter 10 of this Subarea Plan and BMC Chapter 20.50, Landscaping.

6. Sign Standards

Development applications shall comply with BMC Chapter 20.52, Sign Standards.

7. Incentives

See Section 8.E.

8. General Standards

i. Development applications shall comply with general development standards in BMC Chapter 20.44, and Special Development Standards in BMC Chapter 20.46, Special Development Standards.
ii. All development proposals shall comply with applicable requirements for connection to sanitary sewer consistent with Chapter 15.03 BMC, Wastewater.

D. Environmental Standards

1. General Standards

i. CRITICAL AREAS: Upon annexation, the critical areas regulations in BMC 20.14, Critical Areas, shall apply.
ii. SHORELINE MANAGEMENT: Upon annexation, the Bremerton Shoreline Master Program policies and regulations shall apply.
iii. CLEARING AND GRADING:
    a. The standards of Bremerton Shoreline Master Program Section 20.16.920 (or as codified following Ecology approval), Clearing and Grading, shall apply in the entire Gorst UGA.
    b. Non-hazardous vegetation clearing outside of critical area buffers, shoreline buffers, or management zone standards of Section 8.D shall be limited to the minimum necessary to accommodate a development that is consistent with all other provisions of Gorst Subarea Plan Chapters 8 and 10. Design and location of the structure or development shall minimize native vegetation removal. Development or uses that require vegetation clearing shall be designed to avoid the following in the order indicated below, with 1 being the most desirable vegetation to retain: 1) native coniferous trees; 2) native deciduous trees; 3) other native vegetation; 4) non-native trees; and 5) other non-native vegetation.
    c. The Director may allow danger tree removal consistent with the Critical Areas regulations in BMC 20.14; such removal shall be subject to compensation through equivalent tree replacement.

2. Gorst Creek Overlay

i. APPLICABILITY: This section applies to lands within 100 feet of the Gorst Creek ordinary high water mark (OHWM) in the Gorst Subarea as mapped in Chapter 2. These standards shall be met in addition to applicable Bremerton Shoreline Master Program regulations. In cases of conflict, the standards that are most protective of ecological functions shall control as determined by the Director.

ii. MANAGEMENT ZONES: The following habitat, impervious surface, and structure allowances shall be met for new development or redevelopment per Table 8-2.

Table 8-2. Gorst Creek Management Zones

Management Zone	Habitat Standards	Impervious Allowances	Structure Allowances
A: 0-50 feet upland of OHWM or bulkhead	A-1: Retain significant native trees, shrubs, and ground cover consistent with Bremerton Shoreline Master Program, BMC 20.14 Critical Areas and BMC Chapter 20.50 Landscaping. A-2: Enhance degraded areas of Management Zone A, as follows: Enhance at a 2:1 ratio the equivalent of the cleared area with native vegetation.[1]	Perpendicular trails constructed of permeable materials and no greater in travel way width than five feet subject to Type A-1 and A-2 Standards. Spaced no more frequently than every 660 feet.	No new structures with permanent foundations are allowed.
B: 50-85 feet upland of OHWM or bulkhead	B-1: Retain significant native trees, shrubs, and ground cover consistent with Bremerton Shoreline Master Program, BMC 20.14 Critical Areas and BMC Chapter 20.50 Landscaping. B-2: In exchange for impervious surface allowances, enhance degraded areas of Management Zone A, as follows: Enhance at a 2:1 ratio the equivalent of the cleared area with native vegetation or remove man-made structures in stream.[1] B-3: If existing impervious area of an equivalent or greater area is removed from Management Zone A, enhance degraded areas of Management Zone A, as follows: Enhance at a 1:1 ratio the equivalent of the cleared area with native vegetation, or remove man-made structures in stream at a minimum of 25% of property's lineal feet of shoreline frontage based on an approved habitat management plan.[1]	Installation of pervious or semi-pervious surfaces such as non-solid surface decks or green infrastructure in place of existing lawn or other non-native vegetation. The area of such surfaces shall not be greater than 25% of Management Zone and subject to Type B-2 or B-3 habitat standards. Trails, parallel or perpendicular, constructed of permeable materials and no greater in travel way width than five feet subject to Habitat Standard B-2. Parallel trails shall be placed in the outer 25% of Management Zone B.	No new structures with permanent foundations are allowed, except for items in "impervious allowances" column.

Management Zone	Habitat Standards	Impervious Allowances	Structure Allowances
C: 85-100 feet upland of OHWM or bulkhead	C-1: Same as B-1. C-2: Same as B-2. [1] C-3: Same as B-3. [1] If existing impervious area of an equivalent or greater area is removed from Management Zone A, enhance degraded areas of Management Zone A, as follows: Enhance at a 1:1 ratio the equivalent of the cleared area with native vegetation, or remove man-made structures in stream at a minimum of 50% of property's lineal feet of shoreline frontage based on an approved habitat management plan.[1]	Installation of pervious or semi-pervious surfaces such as non-solid surface decks or green infrastructure in place of existing lawn or other non-native vegetation, and when meeting C-2 habitat standards. Or placement of impervious surfaces that comply with all storm water standards and Habitat Standards C-3. The maximum impervious surface allowance by itself shall not exceed 25% of Management Zone C area. In combination, impervious and structural allowances shall not exceed 35% of Management Zone C area. Trails, parallel or perpendicular, constructed of permeable materials and no greater in travel way width than five feet subject to Habitat Standard C-2.	None with Type C-1 vegetation standards. Structures allowed in up to 25% of Management Zone C if meeting Type C-3 habitat standards. Except that the maximum impervious surface allowance and structural allowance shall not exceed 35% in combination.

[1] Vegetation shall be planted in this order of preference: 1) native coniferous trees; 2) native deciduous trees; 3) other native vegetation. Trees and shrubs may be placed in natural groups to allow for view preservation and trails.

3. Sinclair Inlet Overlay Standards

i. New development or redevelopment in the Low Intensity Waterfront Zone shall remove existing impervious area at a rate of 1.25:1 within 200 feet of the Sinclair Inlet shoreline. If incentives are provided consistent with Section 8.E, this requirement to remove existing impervious area shall not apply.

ii. If additional impervious area is required for development in the Low Intensity Waterfront designation, removal or infiltration capacity of stormwater shall be required at 125% of projected runoff based on the 100-year storm event.

4. Environmental Standards – Stormwater

i. Inclusion of Low Impact Development (LID) and Feasibility Determination. All development in Gorst shall incorporate LID to the maximum extent feasible. Please refer to BMC 15.04.020 for further guidance.

   a. Site Evaluation – Dispersion: A site evaluation shall assess the feasibility for dispersion, including topography, sensitive slopes and required setbacks. Where dispersion is feasible for all or part of the site, this method shall be used. In areas where dispersion is not feasible, infiltration shall be used if feasible.

   b. Site Evaluation – Infiltration: The evaluation shall assess the feasibility of infiltration, including a soils reconnaissance and Pilot Infiltration Test (PIT) for any outwash soils identified where infiltration may be possible. Where infiltration is feasible for all or part of the site, it shall be implemented.

   c. Where Full Infiltration is Not Feasible: In areas where full infiltration is not feasible, LID BMPs per Subsection (b) below shall be used for all water quality treatment and partial flow

control. Projects shall meet water quality treatment needs with LID best management practices (BMP's) if feasible.

d. Site Soils: Site soils in landscaped areas shall be amended pursuant to manuals described in Subsection (b)(1) below.

e. Limit Impervious Surfaces: Impervious surfaces shall be limited to the greatest extent feasible and shall comply with the provisions of Section 8.C.

ii. LID Design

a. Design of LID facilities such as bioretention, pervious pavements, and others shall be in accordance with the design criteria in the BMC 15.04.020. Further guidance can be found in the Puget Sound Partnership's Low Impact Development Technical Manual for Puget Sound ("the LID Manual") and the Stormwater Management Manual for Western Washington ("the Stormwater Manual"), except as provided in this Subsection.

b. Conceptual Bioretention Facility Design. Preference shall be given to facility designs that fully infiltrate all stormwater on-site. Refer to BMC 15.04.020for the most current diagrammatic drawings.

iii. LID Implementation Standards

a. Projects shall implement a comprehensive stormwater management plan for the project that manages all rainfall onsite, incorporates soil amendments in landscaped areas, utilizes permeable pavement for all pedestrian areas and uses feasible LID techniques, consistent with Subsection (b) above.

b. Projects shall implement a stormwater management plan that uses LID BMPs for all required water quality treatment from Pollution Generating Surfaces (PGS), e.g. bioretention and pervious pavement.

c. All existing storm drains or inlets shall be clearly labeled to indicate the drain or inlet leads to a stream or groundwater and that dumping in the drain or inlet is prohibited. No additional storm drains shall be installed that lead to streams or to Sinclair Inlet, nor shall new drain systems that connect directly to existing drains that flow to a stream or Sinclair inlet will be allowed.

E. Incentives

1. Applicability

The incentive measures in this chapter apply to all zones and land uses within the Gorst UGA with the exception of Open Space/Recreation, Commercial Corridor, and Industrial zones. Incentives are intended to encourage sustainable development and provide flexibility through voluntary incentives, consistent with the policy direction contained in Chapter 4. These incentives are to acknowledge the existing built environment and through redevelopment minimize activities that contribute to stormwater issues and/or provide greater protection of the Sinclair Inlet shoreline and Gorst Creek.

2. Relationship with Other Standards

Nothing in this section relieves the applicant from compliance with any other standard set forth in Chapters 8 or 10, or from compliance with any other provision of the Bremerton Municipal Code, unless specifically exempted in this document.

3. Public Benefit and Incentives

Table 8-3 describes the public benefit and the resulting development incentive earned. Using the incentives an applicant can earn density, height, or development coverage above the base standard allowed in the zone. In no case shall the maximum density, height, or development coverage exceed

the maximum allowed by the zone. More than one public benefit and corresponding incentive may be earned up to 100% of the bonus. Table 8-4 summarizes the minimum, base, and maximum densities, heights, and development coverages for reference. The full text of the applicable zone should be consulted in addition to the table; in cases of conflict the zone-specific language shall control.

Table 8-3. Public Benefit and Incentives

Public Benefit Description	Development Incentive Select one or more bonus item
Stormwater	
Project provides a clustered residential project with LID street per Chapter 10.	100% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Project uses permeable surfacing or detention/infiltration methods to reduce overland flow in excess of the 100-year storm requirement, in 75% of circulation, parking and loading areas, except where potential contamination, a specific industrial activity or other site specific constraints precludes its use. Contamination sources include vehicle fuel stations, storage of industrial chemicals, oils and grease, and other hazardous substances, dust and dirt storage, etc.	25% excess of 100 year storm infiltrated onsite: 50% Density Bonus 50% Height Bonus 50% Development Coverage Bonus 50% excess of 100 year storm infiltrated onsite: 100% Density Bonus 100% Height Bonus 100% Development Coverage Bonus
Project locates bioretention cells in publicly visible areas, includes a planting plan by a licensed landscape architect, provides a plant maintenance warranty for 1 year. Bioretention cells treat a minimum of 10,000 sq. ft. of Pollution Generating Impervious Surfaces (PGIS).	50% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Net reduction of existing impervious area by 25% and revegetation with native vegetation.	100% Density Bonus 100% Height Bonus
Habitat	
Provide a landscape plan that demonstrates that at least 20% of the significant trees on the buildable area of the site are retained outside of buffers.	50% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Provide multilayered landscaping including native trees, native shrubs and native groundcover on at least 30% of the site.	50% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Site plan includes a minimum 35-foot habitat corridor (not otherwise required by critical area or shoreline or management overlay regulations) vegetated with native trees, shrubs and groundcover that connect critical areas or permanently preserved natural areas within or adjacent to and across the project site. Site design shall ensure that lighting from adjacent development does not intrude on corridor. The corridor shall be protected with a native growth protection easement or maintained to exclude non-native invasive species, such as blackberry and Japanese knotweed (See Noxious Weed list for Kitsap County).	100% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Access Improvements	
Site design for new development is configured in such a way as to allow future businesses and site occupants shared access to roads within or contiguous to the development site.	100% Density Bonus 100% Height Bonus 100% Development Coverage Bonus

Public Benefit Description	Development Incentive Select one or more bonus item
Shared access driveway is provided and designed to serve two or more development sites (one may be a future site), a joint tenant building is provided on a site, or the project is located within a multi-tenant commercial center.	50% Density Bonus 50% Height Bonus 50% Development Coverage Bonus
Shared parking is provided that serves two or more tenants. No additional parking outside of the shared lot(s) may be provided. Shared parking lots shall be located within a 1,200 foot radius of the front door of the building. Number of parking stalls is no more than 50% greater than minimum requirement in Section BMC Chapter 20.48.	50% Density Bonus 100% Height Bonus 100% Development Coverage Bonus
Shared or consolidated loading areas are provided in a central service court or other location that is screened from public view.	25% Density Bonus 25% Height Bonus 25% Development Coverage Bonus

Table 8-4. Summary of Development Standards Eligible for Bonus by Zone

Height, Bulk, and Impervious Surface Standards	Low Intensity Waterfront	Low Intensity Mixed Use	Gorst Mixed Use	Neighborhood Mixed Use	Gorst Creek Residential
Density, Minimum, in units per net acre	-	10	10	8	1
Density, Base, in units per gross acre	-	20	20	15	5
25% of bonus	-	*22.5*	*22.5*	*17.25*	*6.25*
50% of bonus	-	*25*	*25*	*19.5*	*7.5*
100% of bonus	-	*30*	*30*	*24*	*10*
Density, Maximum, in units per gross acre, subject to incentives	-	30	30	24	10
Height, Base, in feet	25	25	25	35	35
25% of bonus	*30*	*30*	*35*	*37.5*	*NA*
50% of bonus	*35*	*35*	*45*	*40*	*NA*
100% of bonus	*45*	*45*	*65*	*45*	*NA*
Height, Maximum, in feet, subject to incentives	45	45	65	45	NA
Development Coverage, Standard Maximum, in percent of lot area	35	35	60	55	45
25% of bonus	*38.75*	*38.75*	*66.25*	*57.5*	*47.5*
50% of bonus	*42.5*	*42.5*	*72.5*	*60*	*50*
100% of bonus	*50*	*50*	*85*	*65*	*55*
Development Coverage, Maximum, in percent of lot area, subject to incentives	50	50	85	65	55

9. GORST ZONING & DEVELOPMENT REGULATIONS – KITSAP COUNTY

Comprehensive Plan and Zoning Regulations

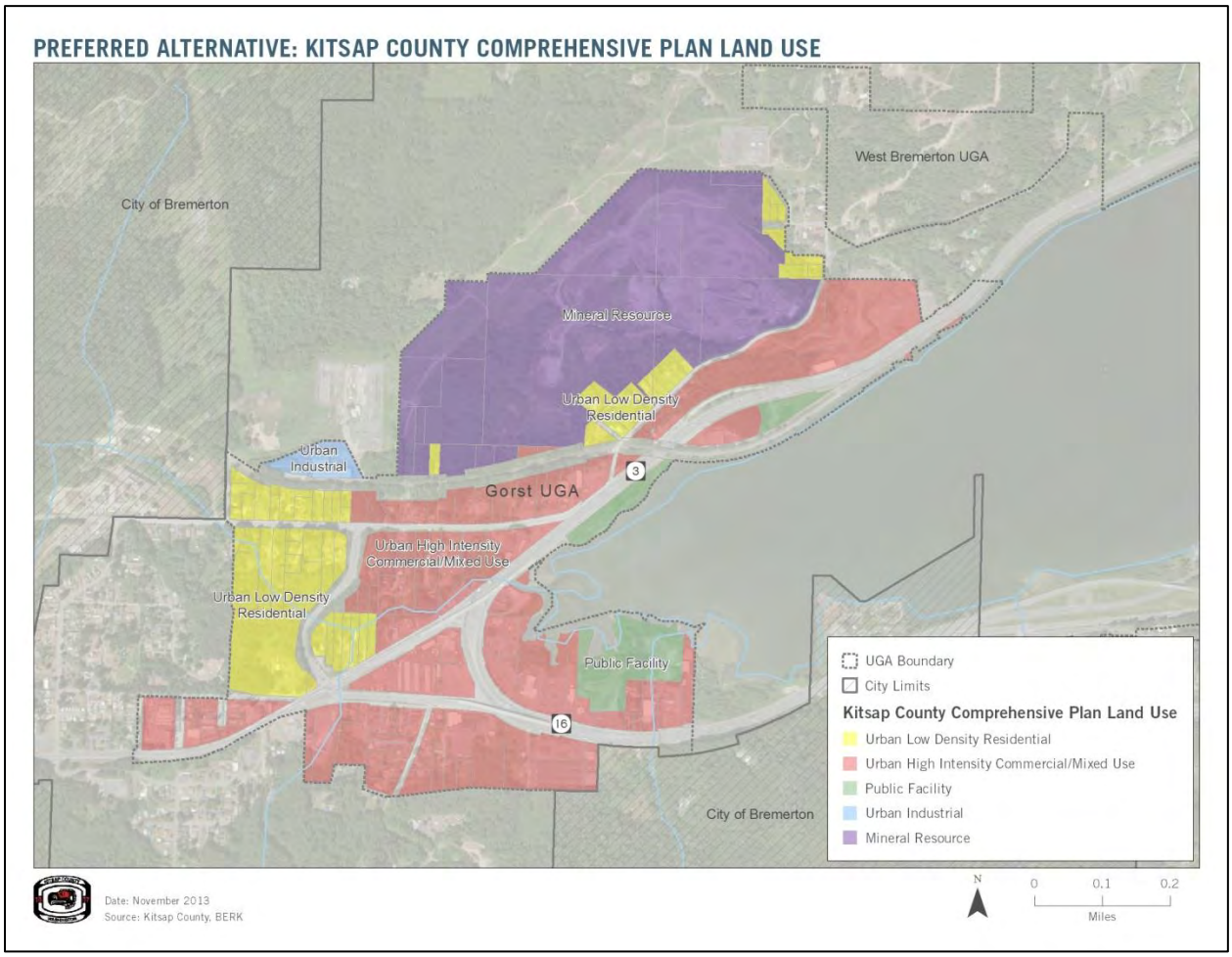
Kitsap County intends to amend its Comprehensive Plan designations and Zoning districts to implement the Preferred Land Use Vision in Chapter 5. Where possible the County intends to apply its equivalent Comprehensive Plan and Zoning categories. See Table 9-1. Also as noted in Chapter 4 and 5, the redesignation and reclassification of the mine property vicinity is dependent on amendment of Countywide Planning Policy population allocations. Amendments associated with the mine and vicinity are anticipated to be considered with the County's Comprehensive Plan Update in 2016.

Table 9-1. County Comprehensive Plan and Zoning Regulations

Conceptual Preferred Alternative Land Use Concept Category	Equivalent Kitsap County Comprehensive Plan Category	Equivalent Kitsap County Zoning Category	Interim Comprehensive Plan Category	Interim Zoning Category
Low Intensity Waterfront	Urban High-Intensity Commercial/Mixed Use	Low Intensity Commercial	Not applicable. See long-term designation.	Not applicable. See long-term designation.
Low Intensity Mixed Use	Urban High-Intensity Commercial/Mixed Use		Not applicable. See long-term designation.	Not applicable. See long-term designation.
Gorst Mixed Use	Urban High-Intensity Commercial/Mixed Use	Mixed Use	Not applicable. See long-term designation.	Not applicable. See long-term designation.
Neighborhood Mixed Use	Urban Low-Density Residential	Urban Cluster Residential	Mine: Mineral Resource Lots adjacent to Mine: Urban Low-Density Residential	Mine: Industrial with Mineral Resource Overlay Lots adjacent to Mine: Urban Low
Commercial Corridor	Urban High-Intensity Commercial/Mixed Use	Highway/Tourist Commercial	Not applicable. See long-term designation.	Not applicable. See long-term designation.
Industrial	Urban Industrial	Industrial	Not applicable. See long-term designation.	Not applicable. See long-term designation.
Gorst Creek Residential	Urban Low-Density Residential	Urban Restricted	Not applicable. See long-term designation.	Not applicable. See long-term designation.
Open Space/ Recreation	Public Facility per map Parks and Public Facility per text	Park (Kitsap County)	Not applicable. See long-term designation.	Not applicable. See long-term designation.

The Comprehensive Plan Land Use Map amendments are depicted in Figure 9-1.

Figure 9-1. Kitsap County Comprehensive Plan Land Use Map – Proposed for Amendment



In addition to amending the Comprehensive Plan Land Use Map, some text amendments would need to be made to integrate the land use and zoning designations for Gorst, and to adopt the Gorst Plans. The proposed Comprehensive Plan text amendments are shown below.

Land Use Element

Amend the text of the land use element as follows:

2.2.4. Urban Growth Areas

The description of the Gorst UGA is amended as follows:

Gorst UGA

The Gorst UGA is located at the western end of Sinclair Inlet at the junction of State Route (SR) 16 with SR 3. The UGA includes approximately 281 gross parcel acres including the railroad. The Gorst UGA is a relatively small highway-oriented commercial and industrial center. It was associated with the City of Bremerton in 2008. Due to significant public health

concerns regarding failing septic systems in the area, the City of Bremerton has invested resources to address this issue.

Jointly the City and County have adopted a Gorst Subarea Plan addressing long term land use and growth in the Gorst UGA. Concurrently, the City and County should pursue a UGAMA for this area, which should include the aspects included in policies LU-26 through LU-30.

2.2.6. Urban Residential Development

The description of the Urban Restricted zone as applied in Gorst is amended as follows:

- **Urban Low-Density Residential.** This designation primarily focuses on single-family dwellings but also may include innovative types such as clustered housing. It also includes regulated environmentally critical areas within the UGAs and other areas identified for low-density urban development. Zones that implement the Urban Low-Density Residential designation include: Urban Restricted Residential, Illahee Greenbelt Zone, Urban Low Residential, Urban Cluster Residential and Senior Living Homestead.
  - Urban Restricted Residential. This zone is applied to areas within UGAs that have been identified with a significant amount of critical areas and regulated pursuant to the CAO, or are planned as greenbelts or urban separators, and are therefore appropriate for lower-density development. These areas may include significant salmon spawning streams, wetlands and steep slopes. Non-residential development is limited. (1–5 du/ac generally, but determine allowed densities at the time of application following a review of the site and potential impacts to critical areas; 1 du/ac minimum density, 5 du/acre base density, and 10 du/acre maximum in Gorst determined based on critical areas and Gorst Subarea Plan public benefit and incentives intended to improve habitat and stormwater)
  - Urban Low Residential. This zone focuses on single-family residences. Duplexes are allowed on double lots. (5–9 du/ac)
  - Urban Cluster Residential. This zone is applied primarily to areas that are characterized by critical area constraints and large contiguous ownership parcels capable of development as a single, unified project. Clustering of appropriate residential densities in areas most suitable for such development, while simultaneously providing a high level of protection for wetlands, streams, critical aquifer recharge areas and wildlife habitat areas, is encouraged. Flexibility related to site planning is also encouraged, as the exact locations of uses should be based on the location of critical areas, transportation corridors, community needs and market conditions. (5–9 du/ac)
  - Illahee Greenbelt Zone. This zone is located within the Illahee Community Boundary and contain significantly environmentally constrained lands which include, but not limited to, wetlands, aquifer recharge areas, bald eagle habitat and steep slopes. (1-4 du/ac)

- Senior Living Homestead. This zone is intended to apply to large contiguous parcels capable of development as single, unified projects. This zone shall provide housing for seniors (55 years of age and older) with a focus on the continuum of care. (5-9 du/ac)

2.2.7. Urban Commercial Lands

The description of the Low Intensity Commercial zone as applied in Gorst is amended as follows:

- **Urban High-Intensity Commercial/Mixed Use.** This designation primarily focuses on larger commercial centers, including commercial uses that require large sites and draw customers at the community and regional scale. Examples of commercial uses appropriate to this designation include but are not limited to superstores, department stores, automotive parts and sales, home improvement stores, hotels and motels, and restaurants. Mixed use developments incorporating residential units are also appropriate in this designation. Zones that implement the Urban High-Intensity Commercial/Mixed Use designation include: Highway Tourist Commercial, Regional Commercial, ~~and~~ Mixed Use, and Low Intensity Commercial.

  - Highway Tourist Commercial zone. This zone is applied to areas needed for commercial uses to serve the traveling public, including along major traffic corridors in urban areas and at highway interchanges, and for commercial establishments requiring large sites. Residential units are allowed. (10–30 du/ac)

  - Regional Commercial zone. This zone is used for commercial centers that provide for the shopping and service needs of the entire region. Generally these centers will contain two or more major department stores along with several shops of the same kind for comparative shopping, and will also attract free-standing commercial services that take advantage of the center's customer traffic. Residential units are allowed. (10–30 du/ac)

  - Mixed Use zone. This zone encourages a mix of uses, including commercial and residential. It is used to promote development that would generally be more pedestrian-friendly than other commercial and residential zones. (10–30 du/ac)

  - Low Intensity Commercial. This zone promotes mixed uses – retail, hotel, office, services, or attached residential in horizontal or small-scale vertical patterns – and regional commercial uses designed to maximize shoreline views and allow streamside and shoreline public access where appropriate. A new development pattern reduces impervious surfaces, promotes marine waterfront and creek restoration, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access. Mixed use development patterns will be focused west of SR 3, while regional commercial development will be focused in areas east of SR 3 along Sinclair Inlet, both areas having smaller impervious footprints interspersed by trails, parks, and habitat. (0-30 du/ac)

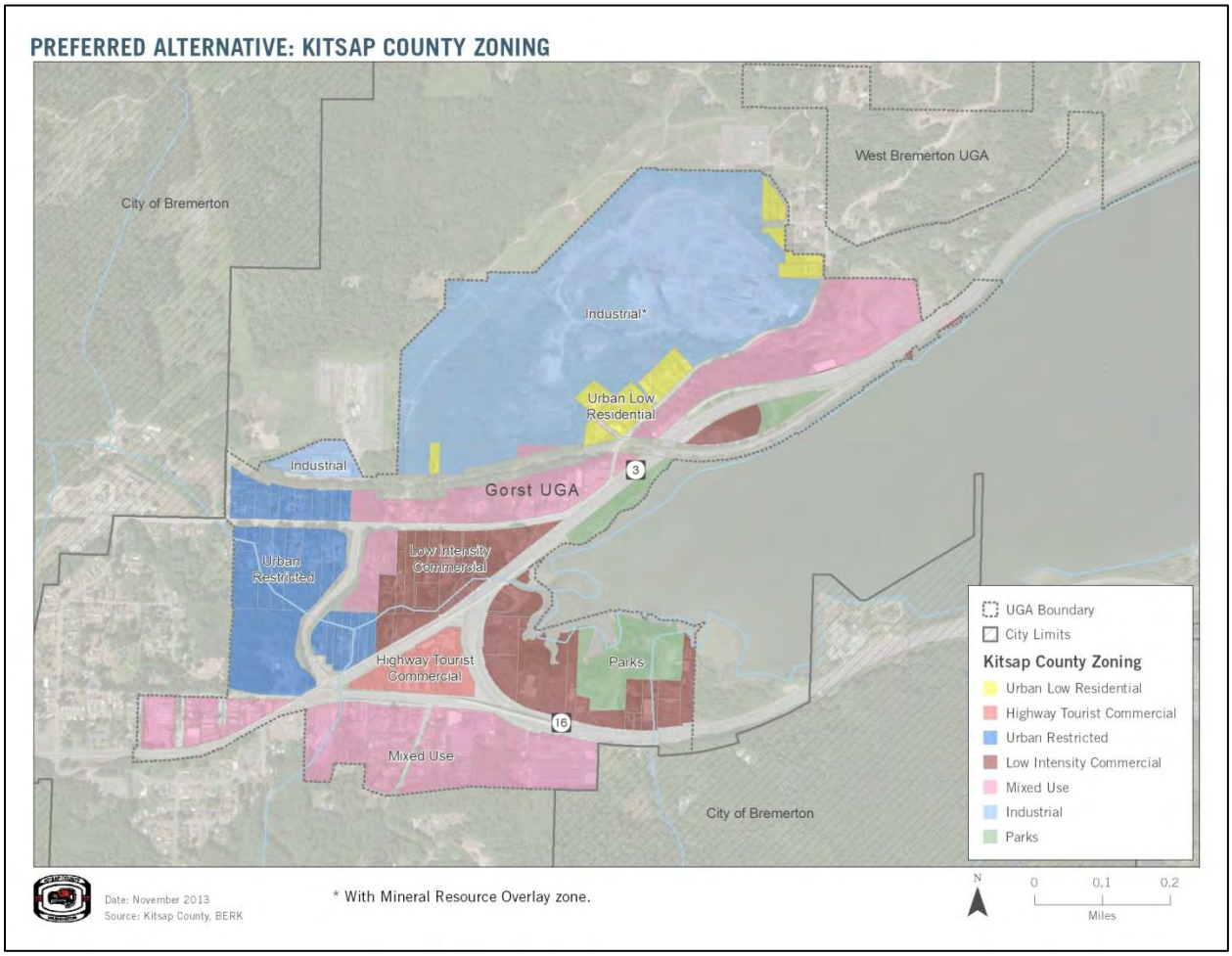
Other Amendments

The Gorst Subarea Plan and Gorst Creek Watershed Framework Plan will become elements of the County Comprehensive Plan, particularly the Goals and Policies in those documents. The remainder of the plans would be incorporated by reference.

Zoning and Development Regulations

This Chapter presents zoning and development regulations for the Gorst UGA effective while it remains part of unincorporated Kitsap County, prior to annexation by the City of Bremerton. Proposed changes to the County's code are shown in redline, and only those chapters of the code proposed for revision are included here. For the complete text of Kitsap County's development code, visit http://www.codepublishing.com/wa/kitsapcounty/. Additionally, this chapter generally applies the closest match of County zones to the Preferred Alternative in Chapter 5. The figure below illustrates the County proposed amended zoning in Gorst.

Figure 9-2. Kitsap County Equivalent Zones



Chapter 17.355
COMMERCIAL ZONES

17.355.010 Purpose.

A. Neighborhood Commercial (NC). These centers are intended to provide for the quick stop shopping needs of the immediate neighborhood in which they are located. These centers should be based upon demonstrated need and shall be sized in a manner compatible with a residential setting.

B. Highway/Tourist Commercial (HTC). These centers are intended to provide for those commercial establishments which require large sites. This zone serves the shopping and service needs for large sections of the county and provides visitor services and accommodations for both destination and en route travelers.

C. Regional Commercial (RC). These centers are intended to provide for the shopping and service needs of the region. Generally these centers contain two or more major department stores along with several shops of the same kind for comparative shopping.

D. Rural Commercial (RCO). The intent and function of the rural commercial zone is to permit the location of small-scale commercial retail businesses and personal services which serve a limited service area and rural population outside established UGAs. The rural commercial zone permits small-scale retail; sales and services located along county roads on small parcels that serve the immediate rural residential population. Rural businesses, which serve the immediate rural population, may be located at crossroads of county roads, state routes, and major arterials.

E. Low-Intensity Commercial (LIC). The intent of the Low-Intensity Commercial zoning is to promote mixed uses – retail, hotel, office, services, or attached residential in horizontal or small-scale vertical patterns – and regional commercial uses designed to maximize shoreline views and allow streamside and shoreline public access where appropriate. A new development pattern reduces impervious surfaces, promotes marine waterfront and creek restoration, promotes landscape and streetscape improvements, promotes pedestrian safety and comfort, and improves vehicular access. Mixed use development patterns will be focused west of SR 3, while regional commercial development will be focused in areas east of SR 3 along Sinclair Inlet, both areas having smaller impervious footprints interspersed by trails, parks, and habitat.

17.355.020 Uses.

Uses shall be allowed in accordance with Chapter 17.381 and Table 17.381.040(B), Commercial and Mixed Use Zones use table.

17.355.030 Height regulation.

For commercial and mixed use zones, height requirements shall be in accordance with Chapter 17.382 and Table 17.382.070, Commercial and Mixed Use Density and Dimensions Table.

17.355.040 Lot requirements.

For commercial and mixed use zones, lot requirements shall be in accordance with Chapter 17.382 and Table 17.382.070, Commercial and Mixed Use Density and Dimensions Table.

17.355.050 Signs.

Signs shall be permitted according to the provisions of Chapter 17.445.

17.355.060 Off-street parking and loading.

Off-street parking shall be provided according to the provisions of Chapter 17.435.

17.355.070 Landscaping.

For landscaping provisions, see Chapter 17.385.

17.355.080 Other provisions.

Additional requirements for development within the LIC zone may be included in Chapter 17.378. For other provisions, see Chapter 17.430.

Chapter 17.378
GORST SUB-AREA

17.378.010 Purpose.

This Chapter implements the Gorst Subarea Plan, and is intended to support Gorst as a community offering homes, jobs, and recreation in an environmentally sustainable setting. Standards are intended to apply to all zones that are included in the Gorst Urban Growth Area.

17.378.020 Uses.

Uses shall be allowed in accordance with Chapter 17.381.

17.378.030 Height regulation.

For commercial and mixed use zones, height requirements shall be in accordance with Chapter 17.382.

17.378.040 Standards and requirements.

A. For commercial and mixed use zones, lot requirements shall be in accordance with Chapter 17.382.

B. New development or redevelopment in the LIC Zone shall remove existing impervious area at a rate of 1.25:1 within 200 feet of the Sinclair Inlet shoreline. If stormwater incentives are provided consistent with Section 17.378.080 this shall not apply. For the purposes of this section, "new development or redevelopment" refers proposals that result in 2,000 square feet, or greater, of new, replaced, or new plus replaced hard surface area, or land disturbing activity of 7,000 square feet or greater.

C. All development within the Gorst UGA must be consistent with the Gorst Subarea Plan Design Guidelines as adopted in the Gorst Subarea Plan.

D. Stormwater

1. Inclusion of Low Impact Development (LID) and Feasibility Determination. All development in Gorst shall be consistent with Kitsap County Title 12 (Stormwater) and incorporate LID to the maximum extent feasible.
    a. Site Evaluation – Dispersion: A site evaluation shall assess the feasibility for dispersion, including topography, sensitive slopes and required setbacks. Where dispersion is feasible for all or part of the site, this method shall be used. In areas where dispersion is not feasible, infiltration shall be used if feasible.
    b. Site Evaluation – Infiltration: The evaluation shall assess the feasibility of infiltration, including a soils reconnaissance and Pilot Infiltration Test (PIT) for any outwash soils identified where infiltration may be possible. Where infiltration is feasible for all or part of the site, it shall be implemented.
    c. Where Full Infiltration is Not Feasible: In areas where full infiltration is not feasible, LID BMPs per Subsection (b) below shall be used for all water quality treatment and partial flow control. Projects shall meet water quality treatment needs with LID best management practices (BMP's) if feasible.
    d. Site Soils: Site soils in landscaped areas shall be amended pursuant to manuals described in Subsection (2)(a) below.

e. Limit Impervious Surfaces: Impervious surfaces shall be limited to the greatest extent feasible and shall comply with the provisions of the Gorst Subarea Plan.

2. LID Design

a. Design of LID facilities such as bioretention, pervious pavements, and others shall be in accordance with the design criteria in Kitsap County Title 12 (Stormwater). Further guidance can be found in the Puget Sound Partnership's Low Impact Development Technical Manual for Puget Sound ("the LID Manual") and the Stormwater Management Manual for Western Washington ("the Stormwater Manual"), except as provided in this Subsection.

b. Conceptual Bioretention Facility Design. Preference shall be given to facility designs that fully infiltrate all stormwater on-site. Refer to Kitsap County Title 12 (Stormwater) for the most current diagrammatic drawings.

3. LID Implementation Standards

a. Projects shall implement a comprehensive stormwater management plan for the project that manages all rainfall onsite, incorporates soil amendments in landscaped areas, utilizes permeable pavement for all pedestrian areas and uses feasible LID techniques, consistent with Subsection 2 above.

b. Projects shall implement a stormwater management plan that uses LID BMPs for all required water quality treatment from Pollution Generating Surfaces (PGS), e.g. bioretention and pervious pavement.

c. All existing storm drains or inlets shall be clearly labeled to indicate the drain or inlet leads to a stream or groundwater and that dumping in the drain or inlet is prohibited. No additional storm drains shall be installed that lead to streams or to Sinclair Inlet, nor shall new drain systems that connect directly to existing drains that flow to a stream or Sinclair inlet will be allowed.

d. If additional impervious area is required for development in the Low Intensity Waterfront designation, removal or infiltration capacity of stormwater shall be required at 125% of projected runoff based on the 100-year storm event.

17.378.050 Signs.

Signs shall be permitted according to the provisions of Chapter 17.445.

17.378.060 Off-street parking and loading.

A. Off-street parking shall be provided according to the provisions of Chapter 17.435.

B. Multifamily, Commercial, and Mixed Use Development – Parking Location: On-site parking shall be to the rear or to the side of buildings on the site and shall not occupy more than fifty (50) percent of the site frontage facing the arterial street frontage(s). The site frontage includes all of the area between the right-of-way and front building wall; this applies to the entire length of the property, regardless of building width. Corner lots have two site frontages as they are positioned on two street frontages.

C. Multifamily, Commercial, and Mixed Use Development – Parking Location: All efforts shall be taken to avoid placing parking on street corners. Parking located between the building frontage and street corners shall be fully screened. Screening shall consist of the following:

1. A four (4) foot tall decorative wall within the front yard landscaping area that fully screens the parking areas. The wall shall be located such that it blocks views of the parking from the right-of-way. For long spans of frontage (100' or more), the wall shall include modular articulation to add architectural variety.
2. Shrubs or other alternative materials may be substituted for the wall, provided it is demonstrated that the shrubs/alternative will provide equal to or better visual screening than the wall. Shrubs shall be a minimum of three feet (3') tall at time of installation and shall be additional to the landscaping required in KCC Chapter 17.385.
3. Openings may be required within a wall section in order to provide a sidewalk from the right-of-way to the building entry. The entry shall be the minimum necessary to accommodate a sidewalk that is a minimum of 5' in width, clearly marked, and distinguished from driving surfaces by using decorative paving, stamped/stained concrete, or raised walkways with alternative materials (such as brick, cobblestone, decorative pavers). Paint striping does not meet this requirement.
4. Access to parking may be from adjacent non-principal arterial streets, or from driveways off of the principal arterial.
5. Driveways providing access to parking area shall be well-defined, highly visible entryways.

17.378.070 Landscaping.

A. For landscaping provisions, see Chapter 17.385.

B. Non-hazardous vegetation clearing outside of critical area buffers or shoreline buffers shall be limited to the minimum necessary to accommodate a development that is consistent with the applicable zone. Design and location of the structure or development shall minimize native vegetation removal. Development or uses that require vegetation clearing shall be designed to avoid the following in the order indicated below, with 1 being the most desirable vegetation to retain: 1) native coniferous trees; 2) native deciduous trees; 3) other native vegetation; 4) non-native trees; and 5) other non-native vegetation.

17.378.080 Other provisions.

A. For other provisions, see Chapter 17.430.

B. Incentives

1. The incentive measures in this chapter apply to all zones and land uses within the Gorst Urban Growth Area with the exception of Highway Tourist Commercial and Industrial zones. Incentives are intended to encourage sustainable development and provide flexibility through voluntary incentives, consistent with the policy direction contained in Chapter 4 of the Gorst Subarea Plan. These incentives are to acknowledge the existing built environment and through redevelopment minimize activities that contribute to stormwater issues and/or provide greater protection of the Sinclair Inlet shoreline and Gorst Creek.
2. Relationship with Other Standards. Nothing in this section relieves the applicant from compliance with any other standard set forth in Title 17, or from compliance with any other provision of the Kitsap County Code, unless specifically exempted in this document.

3. Table 17.378.080(B) describes the public benefit and the resulting development incentive earned. Using the incentives an applicant can earn density, height, or impervious surface coverage above the base standard allowed in the zone. In no case shall the maximum density, height, or impervious surface coverage exceed the maximum allowed by the zone. More than one public benefit and corresponding incentive may be earned up to 100% of the bonus. 17.378.080(C) summarizes the minimum, base, and maximum densities, heights, and impervious surface coverages for reference. The full text of the applicable zone should be consulted in addition to the table; in cases of conflict the zone-specific language shall control.

Table 17.378.080(B) - Public Benefit and Incentives

Public Benefit Description	Development Incentive Select one or more bonus item
Stormwater	
Project provides a clustered residential project with LID street per Chapter 10.	100% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus
Project uses permeable surfacing or detention/infiltration methods to reduce overland flow in excess of the 100-year storm requirement, in 75% of circulation, parking and loading areas, except where potential contamination, a specific industrial activity, or other site-specific constraints preclude its use. Contamination sources include vehicle fuel stations, storage of industrial chemicals, oils and grease, and other hazardous substances, dust and dirt storage, etc.	25% excess of 100 year storm infiltrated onsite: 50% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus 50% excess of 100 year storm infiltrated onsite: 100% Density Bonus 100% Height Bonus 100% Impervious Surface Coverage Bonus
Project locates bioretention cells in publicly visible areas, includes a planting plan by a licensed landscape architect, provides a plant maintenance warranty for 1 year. Bioretention cells treat a minimum of 10,000 sq. ft. of Pollution Generating Impervious Surfaces (PGIS).	50% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus
Net reduction of existing impervious area by 25% and revegetation with native vegetation.	100% Density Bonus 100% Height Bonus
Habitat	
Provide a landscape plan that demonstrates that at least 20% of the significant trees on the buildable area of the site are retained outside of buffers.	50% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus
Provide multilayered landscaping including native trees, native shrubs and native groundcover on at least 30% of the site.	50% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus
Site plan includes a minimum 35-foot habitat corridor (not otherwise required by critical area or shoreline or management overlay regulations) vegetated with native trees, shrubs and groundcover that connect critical areas or permanently preserved natural areas within or adjacent to and across the project site. Site design shall ensure that lighting from adjacent development does not intrude on corridor. The corridor shall be protected with a native growth protection easement or maintained to exclude non-native invasive species, such as blackberry and Japanese knotweed (See Noxious Weed list for Kitsap County).	100% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus

Public Benefit Description	Development Incentive Select one or more bonus item
Access Improvements	
Site design for new development is configured in such a way as to allow future businesses and site occupants shared access to roads within or contiguous to the development site.	100% Density Bonus 100% Height Bonus 100% Impervious Surface Coverage Bonus
Shared access driveway is provided and designed to serve two or more development sites (one may be a future site), a joint tenant building is provided on a site, or the project is located within a multi-tenant commercial center.	50% Density Bonus 50% Height Bonus 50% Impervious Surface Coverage Bonus
Shared parking is provided that serves two or more tenants. No additional parking outside of the shared lot(s) may be provided. Shared parking lots shall be located within a 1,200 foot radius of the front door of the building. Number of parking stalls is no more than 50% greater than minimum requirement in Section BMC Chapter 20.48.	50% Density Bonus 100% Height Bonus 100% Impervious Surface Coverage Bonus
Shared or consolidated loading areas are provided in a central service court or other location that is screened from public view.	25% Density Bonus 25% Height Bonus 25% Impervious Surface Coverage Bonus

Table 17.378.080(C). Summary of Development Standards Eligible for Bonus by Zone

Height, Bulk, and Impervious Surface Standards	Low Intensity Commercial	Mixed Use	Urban Restricted
Density, Minimum, in units per net acre	0	10	1
Density, Base, in units per gross acre	20	20	5
25% of bonus	*22.5*	*22.5*	*6.25*
50% of bonus	*25*	*25*	*7.5*
100% of bonus	*30*	*30*	*10*
Density, Maximum, in units per gross acre, subject to incentives	30	30	10
Height, Base, in feet	25	25	35
25% of bonus	*30*	*35*	*NA*
50% of bonus	*35*	*45*	*NA*
100% of bonus	*45*	*65*	*NA*
Height, Maximum, in feet, subject to incentives	45	65	NA

Height, Bulk, and Impervious Surface Standards	Low Intensity Commercial	Mixed Use	Urban Restricted
Impervious Surface Coverage, Standard Maximum, in percent of lot area	35	60	45
25% of bonus	*38.75*	*66.25*	*47.5*
50% of bonus	*42.5*	*72.5*	*50*
100% of bonus	*50*	*85*	*55*
Impervious Surface Coverage, Maximum, in percent of lot area, subject to incentives	50	85	55

C. Design Guidelines: Design Guidelines for the Gorst Subarea shall be in accordance with Chapter 10 of the Gorst Subarea Plan, as adopted by Kitsap County Ordinance #XXX.

Chapter 17.381
ALLOWED USES

17.381.010 Categories of uses established.

This chapter establishes permitted, conditional, and prohibited uses, by zone, for all properties within Kitsap County. All uses in a given zone are one of four types:

A. Permitted Use. Land uses allowed outright within a zone and subject to provisions within Kitsap County Code.

B. Administrative Conditional Use. Land uses which may be permitted within a zoning designation following review by the director to establish conditions mitigating impacts of the use and to ensure compatibility with other uses in the designation.

C. Hearing Examiner Conditional Use. Land uses with special characteristics that may not generally be appropriate within a zoning designation, but may be permitted subject to review by the hearing examiner to establish conditions to protect public health, safety and welfare.

D. Prohibited Use. Land uses specifically enumerated as prohibited within a zone.

17.381.020 Establishment of zoning use tables.

The tables in Section 17.381.040 establish allowed uses in the various zoning designations and whether the use is allowed as “Permitted,” “Administrative Conditional Use,” or “Hearing Examiner Conditional Use.” Uses with approval processes that will be determined at a future date are identified as “Reserved.” The zone is located at the top of the table and the specific use is located on the far-left of the vertical column of these tables.

17.381.030 Interpretation of tables.

A. Legend. The following letters have the following meanings when they appear in the box at the intersection of the column and the row:

P Permitted Use

ACUP Administrative Conditional Use Permit

C Hearing Examiner Conditional Use Permit

PBD Performance Based Development

X Prohibited Use

R Reserved

B. Additional Use-Related Conditions. The small numbers (subscript) in a cell indicate additional requirements or detailed information for uses in specific zones. Those additional requirements can be found in the table footnotes in Section 17.381.050. All applicable requirements shall govern a use whether specifically identified in this chapter or not.

C. Unclassified Uses. Except as provided in Section 17.100.040, Allowed uses, if a use is not listed in the use column, the use is prohibited in that designation.

17.381.040 Zoning use tables.

There are five separate tables addressing the following general land use categories and zones:

A. Urban Residential Zones.

1. Urban Restricted (UR).
2. Urban Low Residential (UL).
3. Senior Living Homestead (SLH).
4. Urban Cluster Residential (UCR).
5. Urban Medium Residential (UM).
6. Urban High Residential (UH).
7. Illahee Greenbelt Zone (IGZ).

B. Commercial and Mixed Use Zones.

1. Neighborhood Commercial (NC).
2. Urban Village Center (UVC).
3. Urban Town Center (UTC).
4. Highway Tourist Commercial (HTC).
5. Regional Commercial (RC).

6. Mixed Use (MU).

7. Low Intensity Commercial (LIC)

C. Airport and Industrial Zones.

1. Airport (A).

2. Business Park (BP).

3. Business Center (BC).

4. Industrial (IND).

D. Limited Areas of More Intensive Rural Development (LAMIRD).

1. Manchester Village Commercial (MVC).

2. Manchester Village Low Residential (MVLR).

3. Manchester Village Residential (MVR).

4. Port Gamble Rural Historic Town Commercial (RHTC).

5. Port Gamble Rural Historic Town Residential (RHTR).

6. Port Gamble Rural Historic Town Waterfront (RHTW).

7. Suquamish Village Commercial (SVC).

8. Suquamish Village Low Residential (SVLR).

9. Suquamish Village Residential (SVR).

E. Parks, Rural and Resource Zones.

1. Parks (P).

2. Forest Resource Lands (FRL).

3. Mineral Resource (MR).

4. Rural Protection (RP).

5. Rural Residential (RR).

6. Rural Wooded (RW).

7. Urban Reserve (URS).

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					**Urban Medium/High-Density Residential**	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
RESIDENTIAL USES							
Accessory dwelling units (1)	P	P	P	P	P	P	X
Accessory living quarters (1)	P	P	P	P	P	P	X

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
Accessory use or structure (1) (17) (18) (51)	P	P	P	P	P	P	P
Adult family home	P (41)	X	ACUP P (41)	ACUP P (41)	P (41)	ACUP P (41)	ACUP P (41)
Bed and breakfast house	P	ACUP C (34)	ACUP C (34)	ACUP C (34)	ACUP (77)	ACUP C (34)	X
Caretaker's dwelling	X	X	X	X	X	ACUP	X
Convalescent home or congregate care facility	ACUP	X	X	C	ACUP (77)	C	ACUP
Cottage housing developments	P	ACUP	ACUP	ACUP	P (77)	ACUP	X
Dwelling, duplex	P	P	P (3)	P (3)	P (77)	P	X
Dwelling, existing	P	P	P	P	P (77)	P	P
Dwelling, multi-family	ACUP	C	C X (80)	C	P (77)	P	P
Dwelling, single-family attached	P	P	P	P	P (77)	P	ACUP
Dwelling, single-family detached	P	P	P	P	P (77)	P	ACUP
Guest house (1)	P	P	P	P	ACUP	P	X
Home business (1) (52)	P	P	P	P	X	ACUP	ACUP
Hotel/Motel	X	X	X	X	X	X	ACUP
Manufactured homes	P (43)	P (43)	P (43)	P (43)	P (43) (77)	P (43)	X (43)
Mixed use development (44)	X	X	X	X	ACUP (77) (78)	X	ACUP
Mobile homes	C (43)	C (24) (43)	C (24) (43)	C (24) (43)	X	C (24) (43)	X (43)
Residential care facility	P	ACUP	ACUP	ACUP	ACUP (77)	P	P
Senior living development	X	X	X	X	PBD	X	X

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
COMMERCIAL/BUSINESS USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Adult entertainment (1)	X	X	X	X	X	X	X
Ambulance service	X	X	X	X	ACUP (78)	X	X
Auction house	X	X	X	X	X	X	X
Auto parts and accessory stores	X	X	X	X	X	X	X
Automobile rentals	X	X	X	X	X	X	X
Automobile repair and car washes	X	X	X	X	X	X	X
Automobile service station (6)	X	X	X	X	X	X	X
Automobile, recreational vehicle or boat sales	X	X	X	X	X	X	X
Boat/marine supply stores	X	X	X	X	X	X	X
Brew pubs	X	X	X	X	X	X	X
Clinic, medical	X	X	X	X	ACUP (78)	X	ACUP (37)
Conference center	X	X	X	P	X	X	X
Custom art and craft stores	X	X	X	X	ACUP (78)	X	X
Day-care center (14)	C	C	C	C	X	ACUP	ACUP (37)
Day-care center, family (14)	P	C	P	P	X	ACUP	ACUP (37)
Drinking establishments	X	X	X	X	X	X	X
Engineering and construction offices	X	X	X	X	X	X	X
Espresso stands (58)	X	X	X	X	X	X	P (37)
Equipment rentals	X	X	X	X	X	X	X
Farm and garden equipment and sales	X	X	X	X	X	X	X
Financial, banking, mortgage and title institutions	X	X	X	X	ACUP (78)	X	X
General office and management services – less than 4,000 s.f.	C (28)	X	X	X	ACUP (78)	X	ACUP (37)
General office and management services – 4,000 to 9,999 s.f.	X	X	X	X	X	X	ACUP (37)
General office and management services – 10,000 s.f. or	X	X	X	X	X	X	ACUP

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
greater							(37)
General retail merchandise stores – less than 4,000 s.f.	C (28)	X	X	X	ACUP (78)	X	ACUP (37)
General retail merchandise stores – 4,000 to 9,999 s.f.	X	X	X	X	ACUP (78)	X	X
General retail merchandise stores – 10,000 to 24,999 s.f.	X	X	X		X	X	X
General retail merchandise stores – 25,000 s.f. or greater	X	X	X	X	X	X	X
Kennels or pet day-cares	X	X	X	X	X	X	X
Kennels, hobby	P	P	P X (80)	P	P	P	X
Laundromats and laundry services	C (28)	X	X	X	ACUP (78)	X	ACUP (37)
Lumber and bulky building material sales	X	X	X	X	X	X	X
Mobile home sales	X	X	X	X	X	X	X
Nursery, retail	X	X	X	X	X	X	X
Nursery, wholesale	X	X	X	X	X	X	X
Off-street private parking facilities	X	X	X	X	X	X	X
Personal services – skin care, massage, manicures, hairdresser/barber	C	X	X	X	ACUP (78)	X	ACUP (37)
Pet shop – retail and grooming	X	X	X	X	X	X	ACUP (37)
Research laboratory	X	X	X	X	X	X	X
Restaurants	C (28)	X	X	X	C (78)	X	ACUP (37)
Restaurants, high-turnover	X	X	X	X	X	X	X
Recreational vehicle rentals	X	X	X	X	X	X	X
Temporary offices and model homes (27)	P	P	P	P	P (78)	ACUP	ACUP (37)
Tourism facilities, including outfitter and guide facilities	X	X	X	X	X	X	X
Tourism terminals, including seaplane and tour-boat terminals	X	X	X	X	X	X	X
Transportation terminals	X	X	X	X	X	X	X
Veterinary clinics/Animal hospitals	X	X	X	X	X	X	C (9) (37)

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
RECREATIONAL/CULTURAL USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Amusement centers	X	X	X	X	X	X	X
Carnival or circus	X	X	X	X	X	X	X
Club, civic or social (12)	ACUP	C (12)	C (12)	C	ACUP (78)	ACUP	ACUP
Golf courses	ACUP	C	C X (80)	C	X	C	ACUP
Marinas	ACUP	C	C X (80)	C	X	C	C
Movie/Performance theaters, indoor	X	X	X	X	X	X	X
Movie/Performance theaters, outdoor	X	X	X	X	X	X	ACUP
Museum, galleries, aquarium, historic or cultural exhibits	X	X	X	X	X	X	ACUP
Parks and open space	P	P	P	P	P	P	P
Race track, major	X	X	X	X	X	X	X
Race track, minor	X	X	X	X	X	X	X
Recreational facilities, private	ACUP	C	C	C	ACUP (78)	C	ACUP
Recreational facilities, public	P	P	P	P	ACUP (78)	P	ACUP
Recreational vehicle camping parks	X	C	C	C	ACUP (78)	X	X
Zoo	X	X	X	X	X	X	X
INSTITUTIONAL USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Government/Public structures	ACUP	ACUP	ACUP	ACUP	ACUP (78)	ACUP	ACUP
Hospital	X	X	X	X	X	X	C
Places of worship (12)	C	C	C	C	X	C	ACUP
Private or public schools (20)	C	C	C	C	X	C	C
Public facilities, transportation and parking facilities, and electric power and natural gas utility facilities, substations, ferry terminals, and commuter park-and-ride lots (16)	ACUP	C	C	C	ACUP	C	ACUP

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
INDUSTRIAL USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Air pilot training schools	X	X	X	X	X	X	X
Assembly and packaging operations	X	X	X	X	X	X	X
Boat yard	X	X	X	X	X	X	X
Cemeteries, mortuaries, and crematoriums (10)	C	C	C	C	X	C	C
Cold storage facilities	X	X	X	X	X	X	X
Contractor's storage yard	X	X	X	X	X	X	X
Food production, brewery or distillery	X	X	X	X	X	X	X
Fuel distributors	X	X	X	X	X	X	X
Helicopter pads	X	X	X	X	X	X	X
Manufacturing and fabrication, light	X	X	X	X	X	X	X
Manufacturing and fabrication, medium	X	X	X	X	X	X	X
Manufacturing and fabrication, heavy	X	X	X	X	X	X	X
Manufacturing and fabrication, hazardous	X	X	X	X	X	X	X
Recycling centers	X	X	X	X	X	X	X
Rock crushing	X	X	X	X	X	X	X
Slaughterhouse or animal processing	X	X	X	X	X	X	X
Storage, hazardous materials	X	X	X	X	X	X	X
Storage, indoor	X	X	X	X	X	X	X
Storage, outdoor	X	X	X	X	X	X	X
Storage, self-service	C (40)	C (40)	C (40)	C (40)	C (40) (78)	C (40)	C
Storage, vehicle and equipment (1)	X	X	X	X	C (78)	X	X
Top soil production and/or stump grinding	X	X	X	X	X	X	X
Transshipment facilities, including docks, wharves, marine rails, cranes, and barge facilities	X	X	X	X	X	X	X
Uses necessary for airport operation such as runways, hangars, fuel storage facilities, control towers, etc. (13)	X	X	X	X	X	X	X
Warehousing and distribution	X	X	X	X	X	X	X
Wrecking yards and junk yards (1)	X	X	X	X	X	X	X

Table 17.381.040(A)
Urban Residential Zones.

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Use	**UCR (48)**	**IGZ (60)**	**UR (19)**	**UL (19)(48)**	**SLH (48)**	**UM (30)(47)(48)**	**UH (19)(47)(48)**
RESOURCE LAND USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Aggregate extractions sites	X	X	X	X	X	X	X
Agricultural uses (15)	X	P	P X (80)	P	P	P	P
Aquaculture practices	C	C	C	C	C	C	C
Forestry	X	P	P X (80)	P	P	P	P
Shellfish/fish hatcheries and processing facilities	X	X	X	X	X	X	X
Temporary stands not exceeding 200 square feet in area and exclusively for the sale of agricultural products grown on site (27)	X	P (2)	P (2)	P (2)	P (2)	P (2)	P (2)

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
RESIDENTIAL USES								
Accessory dwelling units (1)	X	X	X	R	X	X	X	X
Accessory living quarters (1)	X	X	X	R	X	X	X	X
Accessory use or structure (1) (17) (18) (51)	P	P	P	R	P	P	P	P
Adult family home	X	ACUP P (41)	ACUP P (41) (79)	R	ACUP P (41)	ACUP P (41)	ACUP P (41)	ACUP P (41)
Bed and breakfast house	ACUP C (34)	ACUP C (34)	ACUP (79)	R	X	X	X	ACUP C (34)
Caretaker's dwelling	ACUP	ACUP	ACUP	R	ACUP	ACUP	ACUP	P
Convalescent home or congregate care facility	C	ACUP	ACUP X (79)	R	ACUP	ACUP	ACUP	X
Cottage housing developments	X	ACUP	X	R	X	X	ACUP	X

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Dwelling, duplex	X	ACUP	X	R	X	X	X	X
Dwelling, existing	P	P	P	R	P	P	P	P
Dwelling, multi-family	X	ACUP	P X (79)	R	ACUP	ACUP	ACUP P (81)	X
Dwelling, single-family attached	X	P	P X (79)	R	ACUP	ACUP	ACUP P (81)	X
Dwelling, single-family detached	X	P	X	R	X	X	X	X
Guest house (1)	X	X	X	R	X	X	X	X
Home business (1) (53)	ACUP	P	X	R	X	X	ACUP	ACUP
Hotel/Motel	C	ACUP	ACUP X (79)	R	P	P	ACUP	X
Manufactured homes	X	X (43)	ACUP X (79)	R	X	X	X	X
Mixed use development (44)	ACUP	ACUP	P X (79)	R	ACUP	ACUP	ACUP P (81)	X
Mobile homes	X	X (43)	X	R	X	X	X	X
Residential care facility	X	ACUP	ACUP X (79)	R	ACUP	ACUP	ACUP	X
COMMERCIAL/BUSINESS USES								
Accessory use or structure (1) (17) (51)	P	P	P	R	P	P	P	P
Adult entertainment (1)	X	X	X	R	C	C	X	X
Ambulance service	C	C	P	R	P	P	ACUP	X
Auction house (55)	X	ACUP	P	R	P	P	X	C
Auto parts and accessory stores (65)	P	X	P (83)	R	P	P	ACUP	C
Automobile rentals	P (56)	P (56)	P (83)	R	P	P (61)	ACUP	X
Automobile repair and car washes (65)	ACUP (54)	X	P (83)	R	P	P	ACUP	C
Automobile service station (6)	ACUP	X	P (79)(83)	R	P	P (61)	X C (82)	C
Automobile, recreational vehicle or boat sales	X	X	P (83)	R	ACUP	ACUP	X	X
Boat/marine supply stores	X	X	P(83)	R	P	P	ACUP	C

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Brew pubs	ACUP	ACUP	P	R	P	P	ACUP	X
Clinic, medical	ACUP	ACUP	P	R	P	P	ACUP	X
Conference center	X	P	P	R	P	P	ACUP	X
Custom art and craft stores	P (54)	P (54)	P	R	P	P	ACUP	C
Day-care center (14)	P (54)	P (54)	P X (79)	R	P	P	ACUP	ACUP
Day-care center, family (14)	ACUP (54)	ACUP (54)	P X (79)	R	P	P (61)	P	X
Drinking establishments	C	ACUP	P	R	C	C	C	C
Engineering and construction offices	P (54)	P (54)	P	R	P	P	ACUP	ACUP
Espresso stands (58) (72)	P	X	P	R	P	P (61)	P	ACUP
Equipment rentals	X	ACUP	X	R	P	P (61)	ACUP	ACUP
Farm and garden equipment and sales	X	X	P	R	P	P (61)	ACUP	ACUP
Financial, banking, mortgage and title institutions	P (54)	P (54)	P	R	P	P	ACUP	X
General office and management services – less than 4,000 s.f.	P	P	P	R	P	P	ACUP	ACUP
General office and management services – 4,000 to 9,999 s.f.	ACUP	ACUP	P	R	P	P	ACUP	C
General office and management services – 10,000 s.f. or greater	X	ACUP	P	R	P	P	ACUP	X
General retail merchandise stores – less than 4,000 s.f.	P	P	P	R	P	P	ACUP	ACUP
General retail merchandise stores – 4,000 to 9,999 s.f.	ACUP	ACUP	P	R	P	P	ACUP	C
General retail merchandise stores – 10,000 to 24,999 s.f.	C	C	P	R	P	P	ACUP	X
General retail merchandise stores – 25,000 s.f. or greater	X	X	ACUP	R	ACUP (62)	ACUP (62)	X	X

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Kennels or pet day-cares	C	X	C	R	C	C (61)	C	C
Kennels, hobby	P	P	X	R	X	X	P	X
Laundromats and laundry services	P (54)	P (54)	P	R	P	P	ACUP	X
Lumber and bulky building material sales	X	X	ACUP (42)	R	ACUP (42)	ACUP (42) (61)	X	C
Mobile home sales	X	X	X	R	ACUP	ACUP (61)	X	X
Nursery, retail	ACUP	ACUP	P	R	P	P	ACUP	ACUP
Nursery, wholesale	ACUP	ACUP	P	R	P	P (61)	ACUP	P
Off-street private parking facilities	ACUP	ACUP	X	R	P	P	ACUP	X
Personal services – skin care, massage, manicures, hairdresser/barber (66)	P (54)	P (54)	P	R	P	P	ACUP	ACUP (54)
Pet shop – retail and grooming	ACUP	ACUP	P	R	P	P	ACUP	ACUP (54)
Research laboratory	X	X	X	R	X	X	X	X
Restaurants	P (54)	P (54)	P	R	P	P	ACUP P (81)	C
Restaurants, high-turnover	C	ACUP	P	R	P	P (63)	ACUP P (81)	X
Recreation vehicle rentals	X	X	X	R	ACUP	ACUP (61)	X	X
Temporary offices and model homes (27)	X	X	X	R	X	X	X	X
Tourism facilities, including outfitter and guide facilities	X	P	P	R	P	P	X	ACUP
Tourism facilities, including seaplane and tour-boat terminals	X	X	X	R	ACUP	ACUP	X	C
Transportation terminals	C	C	C	R	ACUP	ACUP	ACUP	X
Veterinary clinics/Animal hospitals	ACUP	ACUP	P	R	P	P	C	ACUP
RECREATIONAL/CULTURAL USES								
Accessory use or structure (1) (17) (51)	P	P	P	R	P	P	P	P

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Amusement centers	C	C (11)	ACUP (11) X (79)	R	ACUP (11)	ACUP (11)	ACUP (11)	X
Carnival or circus	C	ACUP (11)	ACUP (11) X (79)	R	ACUP (11)	ACUP (11) (61)	ACUP (11)	X
Club, civic or social	ACUP	ACUP	P	R	P	P	ACUP	C
Golf courses	ACUP	ACUP	X	X	ACUP	ACUP (61)	ACUP X (80)	X
Marinas	ACUP	C	X	X	ACUP	ACUP (61)	C	C
Movie/Performance theaters, indoor	ACUP	P	P	R	P	P	ACUP	X
Movie/Performance theaters, outdoor	X	ACUP	C	R	C	ACUP	C	C
Museum, galleries, aquarium, historic or cultural exhibits (67)	ACUP	P	P	R	P	P	ACUP	C
Parks and open space	P	P	P	P	P	P	P	P
Race track, major	X	X	X	X	C	C (61)	X	X
Race track, minor	X	X	X	X	X	X	X	X
Recreational facilities, private	ACUP	ACUP	ACUP	R	ACUP	ACUP	ACUP	C
Recreational facilities, public	ACUP	ACUP	P	R	ACUP	ACUP	ACUP	ACUP
Recreational vehicle camping parks	C	X	X	R	C	X	X	X
Zoo	X	X	C	R	C	C (61)	X	X
INSTITUTIONAL USES								
Accessory use or structure (1) (17) (51)	P	P	P	R	P	P	P	P
Government/Public structures	ACUP	ACUP	ACUP	R	ACUP	ACUP	ACUP	ACUP
Hospital	X	C	ACUP	R	ACUP	ACUP	C	X
Places of worship (12)	C	C	ACUP	R	ACUP	ACUP	C	C
Private or public schools (20)	C	C	ACUP	R	ACUP	ACUP	C	C

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Public facilities, transportation and parking facilities, electric power and natural gas utility facilities, substations, ferry terminals, and commuter park-and-ride lots (16)	ACUP	ACUP	ACUP	R	ACUP	ACUP	ACUP	C
INDUSTRIAL USES								
Accessory use or structure (1) (17) (51)	P	P	P	R	P	P	P	P
Air pilot training schools	X	P	X	R	P	P	X	X
Assembly and packaging operations	X	C	X	R	C	C (61)	C X (80)	X
Boat yard	X	X	X	R	ACUP	ACUP (61)	X	X
Cemeteries, mortuaries, and crematoriums (10)	C	C	X	R	ACUP	ACUP (61)	X	C
Cold storage facilities (69)	X	X	X	R	X	X	X	C
Contractor's storage yard (21)	X	X	X	R	X	X	X	X
Food production, brewery or distillery	X	X	X	R	C	C (61)	C X (80)	C
Fuel distributors	X	X	X	R	C	C (61)	X	X
Helicopter pads (13)	X	C	C	R	C	C	C	X
Manufacturing and fabrication, light	X	C	X	R	C	C (61)	X	X
Manufacturing and fabrication, medium	X	X	X	R	X	X	X	X
Manufacturing and fabrication, heavy	X	X	X	R	X	X	X	X
Manufacturing and fabrication, hazardous	X	X	X	R	X	X	X	X
Recycling centers	X	X	X	R	X	X	X	C
Rock crushing	X	X	X	R	X	X	X	X
Slaughterhouse or animal processing	X	X	X	R	X	X	X	C (70)
Storage, hazardous materials	X	X	X	R	X	X	X	C (75)

17.381.040(B)
Commercial and Mixed Use Zones.

	Low Intensity Commercial/Mixed Use			High-Intensity Commercial/Mixed Use				Rural
Use	**(NC) (19) (30) (48) (57)**	**UVC (30) (48) (57)**	**LIC (48) (57)**	**UTC (48) (57)**	**HTC (19) (29) (30) (48) (57)**	**RC (19) (48) (57)**	**MU (19) (44) (45) (48) (57)**	**RCO (12) (64)**
Storage, indoor	X	X	X	R	C	C (61)	X	C (75)
Storage, outdoor	X	X	X	R	X	X	X	C (75)
Storage, self-service	C	C	ACUP X (79)	R	ACUP	ACUP (61)	ACUP (40)	C (75)
Storage, vehicle and equipment (1)	X	X	X	R	ACUP	X	X	C
Top soil production, stump grinding	X	X	X	R	X	X	X	C
Transshipment facilities, including docks, wharves, marine rails, cranes, and barge facilities	X	X	X	R	X	X	X	X
Uses necessary for airport operation such as runways, hangars, fuel storage facilities, control towers, etc. (13)	X	X	X	R	X	X	X	X
Warehousing and distribution (68)	X	X	X	R	X	X	X	X
Wrecking yards and junk yards (1)	X	X	X	R	X	X	X	X
RESOURCE LAND USES								
Accessory use or structure (1) (17) (51)	P	P	P	R	P	P	P	P
Aggregate extraction sites	X	X	X	R	X	X	X	C
Agricultural uses (15)	P	X	P X (79)	R	P	P	P	P
Aquaculture practices	C	C	C	R	C	C	C	C
Forestry	P	X	P X (79)	R	P	P	P	P
Shellfish/fish hatcheries and processing facilities	X	X	X	R	X	X	X	X
Temporary stands not exceeding 200 square feet in area and exclusively for the sale of agricultural products grown on site (27)	P (2)	X	P (2)	R	P (2)	P (2)	P (2)	P (2)

Table 17.381.040(E)
Parks, Rural and Resource Zones.

	Parks	Resource		Rural			
Use	**Parks**	**FRL**	**MR**	**URS**	**RP**	**RR**	**RW**
RESIDENTIAL USES							
Accessory dwelling units (1)	X	X	X	C	C	C	C
Accessory living quarters (1)	X	X	X	P	P	P	P
Accessory use or structure (1) (17) (18) (51)	X	P	P	P	P	P	P
Adult family home	X	X	X	ACUP (41)	ACUP (41)	ACUP (41)	ACUP (41)
Bed and breakfast house	X	X	X	ACUP C (34)	ACUP C (34)	ACUP C (34)	ACUP C (34)
Caretaker's dwelling	P	X	X	X	X	X	X
Convalescent home or congregate care facility	X	X	X	X	X	X	X
Cottage housing developments	X	X	X	X	X	X	X
Dwelling, duplex	X	P (3)	X	P (3)	P (3)	P (3)	P (3)
Dwelling, existing	X	P	P	P	P	P	P
Dwelling, multi-family	X	X	X	X	X	X	X
Dwelling, single-family attached	X	C	X	C	C	C	X
Dwelling, single-family detached	X	C	X	P	P	P	P
Guest house (1)	X	X	X	P	P	P	P
Home business (1) (52)	X	C (23)	X	ACUP	ACUP	ACUP	ACUP
Hotel/Motel	X	X	X	X	X	X	X
Manufactured homes	X	C (43)	X	P (43)	P (43)	P (43)	X
Mixed use development (44)	X	X	X	X	X	X	X
Mobile homes	X	P (43)	P	P (43)	P (43)	P (43)	P
Residential care facility	X	X	X	X	X	X	X
COMMERCIAL/BUSINESS USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Adult entertainment (1)	X	X	X	X	X	X	X
Ambulance service	X	X	X	X	X	X	X
Auction house	X	X	X	X	X	X	X
Auto parts and accessory stores	X	X	X	X	X	X	X
Automobile rentals	X	X	X	X	X	X	X
Automobile repair and car washes	X	X	X	X	X	X	X

Table 17.381.040(E)
Parks, Rural and Resource Zones.

	Parks	Resource		Rural			
Use	**Parks**	**FRL**	**MR**	**URS**	**RP**	**RR**	**RW**
COMMERCIAL/BUSINESS USES (continued)							
Automobile service station (6)	X	X	X	X	X	X	X
Automobile, recreational vehicle or boat sales	X	X	X	X	X	X	X
Boat/marine supply stores	X	X	X	X	X	X	X
Brew pubs	X	X	X	X	X	X	X
Clinic, medical	X	X	X	X	X	X	X
Conference center	ACUP	X	X	X	X	X	X
Custom art and craft stores	X	X	X	X	X	X	X
Day-care center (14)	ACUP X(79)	X	X	C	C	C	X
Day-care center, family (14)	X	X	X	ACUP	P	P	X
Drinking establishments	X	X	X	X	X	X	X
Engineering and construction offices	X	X	X	X	X	X	X
Espresso stands (58)	X	X	X	X	X	X	X
Equipment rentals	X	X	X	X	X	X	X
Farm and garden equipment and sales	X	X	X	X	X	X	X
Financial, banking, mortgage and title institutions	X	X	X	X	X	X	X
General office and management services – less than 4,000 s.f.	X	X	X	X	X	X	X
General office and management services – 4,000 to 9,999 s.f.	X	X	X	X	X	X	X
General office and management services – 10,000 s.f. or greater	X	X	X	X	X	X	X
General retail merchandise stores – less than 4,000 s.f.	X	X	X	X	X	X	X
General retail merchandise stores – 4,000 to 9,999 s.f.	X	X	X	X	X	X	X
General retail merchandise stores – 10,000 to 24,999 s.f.	X	X	X	X	X	X	X
General retail merchandise stores – 25,000 s.f. or greater	X	X	X	X	X	X	X
Kennels or Pet day-cares	X	X	X	C (12)	C (12)	C (12)	X
Kennels, hobby	X	X	X	P	P	P	P
Laundromats and laundry services	X	X	X	X	X	X	X
Lumber and bulky building material sales	X	X	X	X	X	X	X
Mobile home sales	X	X	X	X	X	X	X
Nursery, retail	X	X	X	C	C	C	X
Nursery, wholesale	X	X	X	P	P	P	P
Off-street private parking facilities	X	X	X	X	X	X	X
Personal services – skin care, massage, manicures, hairdresser/barber	X	X	X	X	X	X	X
Pet shop – retail and grooming	X	X	X	X	X	X	X

Table 17.381.040(E)
Parks, Rural and Resource Zones.

	Parks	Resource		Rural			
Use	**Parks**	**FRL**	**MR**	**URS**	**RP**	**RR**	**RW**
Research laboratory	X	X	X	X	X	X	X
Restaurants	X	X	X	X	X	X	X
Restaurants, high-turnover	X	X	X	X	X	X	X
Recreational vehicle rentals	X	X	X	X	X	X	X
Temporary offices and model homes (27)	X	X	X	X	ACUP	ACUP	X
Tourism facilities, including outfitter and guide facilities	X	X	X	X	X	X	X
Tourism facilities, including seaplane and tour-boat terminals	X	X	X	X	X	X	X
Transportation terminals	X	X	X	X	X	X	X
Veterinary clinics/Animal hospitals	X	X	X	C	C (8)	C (8)	X
RECREATIONAL/CULTURAL USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Amusement centers	ACUP	X	X	X	X	X	X
Carnival or Circus	ACUP	X	X	X	X	X	X
Club, civic or social	ACUP	X	C (12)	X	C (12)	C (12)	X
Golf courses	ACUP	X	X	C (12)	C (12)	C (12)	X
Marinas	ACUP	X	X	X	X	X	X
Movie/Performance theaters, indoor	X	X	X	X	X	X	X
Movie/Performance theaters, outdoor	C	X	X	X	X	X	X
Museum, galleries, aquarium, historic or cultural exhibits	ACUP	X	X	X	X	X	X
Parks and open space	P	P	P	P	P	P	P
Race track, major	C (12)	X	X	X	X	X	X
Race track, minor	C (12)	C (12)	C (12)	X	X	X	C (12)
RECREATIONAL/CULTURAL USES (continued)							
Recreational facilities, private	ACUP	X	X	C (12)	C (12)	C (12)	C
Recreational facilities, public	ACUP	X	X	ACUP	ACUP	ACUP	C
Recreational vehicle camping parks	ACUP	X	X	X	C (46)	C (46)	C (46)
Zoo	X	X	X	X	X	X	X
INSTITUTIONAL USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P

Table 17.381.040(E)
Parks, Rural and Resource Zones.

	Parks	Resource		Rural			
Use	**Parks**	**FRL**	**MR**	**URS**	**RP**	**RR**	**RW**
Government/Public structures	P	X	X	P	ACUP	ACUP	X
Hospital	X	X	X	X	X	X	X
Places of worship	X	X	X	C (12)	C (12)	C (12)	X
Private or public schools (20)	X	X	X	C	C	C	X
Public facilities, transportation and parking facilities, electric power and natural gas utility facilities, substations, ferry terminals, and commuter park-and-ride lots (16)	P	C (5)	C	C	C	C	C
INDUSTRIAL USES							
Accessory use or structure (1) (17) (51)	X	P	P	P	P	P	P
Air pilot training schools	X	X	X	X	X	X	X
Assembly and packaging operations	X	X	X	X	X	X	X
Boat yard	X	X	X	X	X	X	X
Cemeteries, mortuaries, and crematoriums (10)	X	X	X	C	C	C	C
Cold storage facilities	X	X	X	X	X	X	X
Contractor's storage yard (21)	X	X	ACUP	X	C (12)	C (12)	X
Food production, brewery or distillery	X	X	X	X	X	X	X
Fuel distributors	X	X	X	X	X	X	X
Helicopter pads (13)	X	X	X	X	X	X	X
Manufacturing and fabrication, light	X	X	X	X	X	X	X
Manufacturing and fabrication, medium	X	X	X	X	X	X	X
Manufacturing and fabrication, heavy	X	X	X	X	X	X	X
Manufacturing and fabrication, hazardous	X	X	X	X	X	X	X
Recycling centers	X	X	X	X	X	X	X
Rock crushing	X	C (39)	C (39)	X	X	X	C (39)
Slaughterhouse or animal processing	X	X	X	X	X	X	X
Storage, hazardous materials	X	X	X	X	X	X	X
Storage, indoor	X	X	X	X	X	X	X
Storage, outdoor	X	X	X	X	X	X	X
Storage, self-service	X	X	X	X	X	X	X
Storage, vehicle and equipment (1)	X	X	X	X (18)	X (18)	X (18)	X
Top soil production, stump grinding	X	X	C	X	C (22)	C (22)	X

Table 17.381.040(E)
Parks, Rural and Resource Zones.

	Parks	Resource		Rural			
Use	**Parks**	**FRL**	**MR**	**URS**	**RP**	**RR**	**RW**
Transshipment facilities, including docks, wharves, marine rails, cranes, and barge facilities	X	X	X	X	X	X	X
Uses necessary for airport operation such as runways, hangars, fuel storage facilities, control towers, etc. (13)	X	X	X	X	X	X	X
Warehousing and distribution	X	X	X	X	X	X	X
Wrecking yards and junk yards (1)	X	X	X	X	X	X	X
RESOURCE LAND USES							
Accessory use or structure (1) (17) (51)	P	P	P	P	P	P	P
Aggregate extractions sites	X	P (4)	P	X	C	C	C
Agricultural uses (15)	P X(79)	X	P	P	P (7)	P (7)	P (7)
Aquaculture practices	P	X	X	C	C	C	C
Forestry	P X(79)	P	P	P	P	P	P
Shellfish/fish hatcheries and processing facilities	X	X	X	X	X	X	X

17.381.050 Footnotes for zoning use table.

A. Where noted on the preceding use tables, the following additional restrictions apply:

1. Where applicable subject to Section 17.381.060, Provisions applying to special uses.

2. Minimum setbacks shall be twenty feet from any abutting right-of-way or property line; provided, however, advertising for sale of products shall be limited to two on-premises signs each not exceeding six square feet.

3. When located within urban growth areas (except UR), duplexes shall require five thousand square feet of minimum lot area. Duplexes located in the UR zone or outside of urban growth areas shall require double the minimum lot area required for the zone.

4. No greater than two acres for the purpose of construction and maintenance of a timber management road system, provided the total parcel is at least twenty acres.

5. Provided public facilities do not inhibit forest practices.

6. Where permitted, automobile service stations shall comply with the following provisions:

a. Sale of merchandise shall be conducted within a building, except for items used for the maintenance and servicing of automotive vehicles;

b. No automotive repairs other than incidental minor repairs or battery or tire changing shall be allowed;

c. The station shall not directly abut a residential zone; and

d. All lighting shall be of such illumination, direction, and color as not to create a nuisance on adjoining property or a traffic hazard.

7. In rural wooded (RW), rural protection (RP), or rural residential (RR) zones:

a. Animal feed yards and animal sales yards shall be located not less than two hundred feet from any property line; shall provide automobile and truck ingress and egress; and shall also provide parking and loading spaces so designed as to minimize traffic hazards and congestion. Applicants shall show that odor, dust, noise, and drainage shall not constitute a nuisance, hazard, or health problem to adjoining property or uses.

b. All stables and paddocks shall be located not closer than fifty feet to any property line. Odor, dust, noise, flies, or drainage shall not be permitted to create or become a nuisance to surrounding property.

8. A veterinary clinic or animal hospital shall not be located within fifty feet of a lot line in the rural protection (RP) or rural residential (RR) zones. In addition, the applicant may be required to provide additional measures to prevent or mitigate offensive noise, odor, light and other impacts.

9. Veterinary clinics and animal hospitals are allowed, provided a major part of the site fronts on a street and the director finds that the proposed use will not interfere with reasonable use of residences by reason of too close proximity to such residential uses, or by reason of a proposed exterior too different from other structures and character of the neighborhood. All activities shall be conducted inside an enclosed building.

10. A cemetery, crematorium, mausoleum, or columbarium shall have its principal access on a county roadway with ingress and egress so designed as to minimize traffic congestion, and shall provide required off-street parking spaces. No mortuary or crematorium in conjunction with a cemetery is permitted within two hundred feet of a lot in a residential zone.

11. A circus, carnival, animal display, or amusement ride may be allowed through administrative review in all industrial zones and any commercial zones, except neighborhood commercial (NC), for a term not to exceed ninety days, with a written approval of the director. The director may condition such approval as appropriate to the site. The director's decision may be appealed to the hearing examiner.

12. All buildings and activities shall be set back a minimum of fifty feet in FRL, MR, RW, RP, RR, RCO, RI or Parks zones and thirty-five feet in all other zones from a side or rear lot line. All such uses shall access directly to a county right-of-way determined to be adequate by the county engineer, and be able to provide access without causing traffic congestion on local residential streets. Any such use shall not be materially detrimental to any adjacent (existing or future) residential development due to excessive traffic generation, noise, light or other circumstances. The director may increase setback, buffer and landscaping standards or impose other conditions to address potential impacts.

13. Public use airports and heliports are allowed only within the airport (A) zone established by this title. Heliports for the purpose of medical emergency facilities may be permitted in certain zones subject to a conditional use permit. All private landing strips, runways, and heliports shall be so designed and oriented that the incidences of aircraft passing directly over dwellings during their landing or taking off patterns is minimized. They shall be located so that traffic shall not constitute a nuisance to neighboring uses. The proponents shall show that adequate controls or measures will be taken to prevent offensive noise, vibrations, dust, or bright lights.

14. In those zones that prohibit residential uses, family day-care centers are only allowed in existing residential structures. Day-care centers shall have a minimum site size of ten thousand square feet and shall provide and thereafter maintain outdoor play areas with a minimum area of seventy-five square feet per child of total capacity. A sight-obscuring fence of at least four feet in height shall be provided, separating the play area from abutting lots. Adequate off-street parking and loading space shall be provided.

15. The number of animals on a particular property shall not exceed one large livestock, three small livestock, five ratites, six small animals, or twelve poultry:

a. Per forty thousand square feet of lot area for parcels one acre or smaller or for parcels five acres or smaller located within two hundred feet of a lake or year-round stream; provided, that when no dwelling unit or occupied structure exists within three hundred feet of the lot on which the animals are maintained, the above specifications may be exceeded by a factor of two;

b. Per twenty thousand square feet of area for parcels greater than one acre, but less than or equal to five acres, not located within two hundred feet of a lake or year-round stream; provided, that when no dwelling unit or occupied structure exists within three hundred feet of the lot on which the animals are maintained, the above specifications may be exceeded by a factor of two;

c. No feeding area or structure or building used to house, confine or feed livestock, small animals, ratites, or poultry shall be located closer than one hundred feet to any residence on adjacent property located within a rural wooded (RW), rural protection (RP), or rural residential (RR) zone, or within two hundred feet of any residence on adjacent property within any other zone; provided, a pasture (greater than twenty thousand square feet) shall not be considered a feed area.

16. The erection, construction, alteration, or maintenance of overhead or underground utilities by a public utility, municipality, governmental agency, or other approved party shall be permitted in any zone; provided, that any permanent above-ground structures not located within a right-of-way or easement shall be subject to the review of the director. Utility transmission and distribution lines and poles may exceed the height limits otherwise provided for in this title. Water towers which exceed thirty-five feet in height, solid waste collection, transfer and/or handling sites in any zone shall be subject to a conditional use permit. These provisions do not apply to wireless communication facilities, which are specifically addressed in Chapter 17.470.

17. For waterfront properties, accessory structures such as docks, piers, and boathouses may be permitted in the rear yards, shorelands or tidelands subject to the following limitations:

a. All requirements of the Kitsap County Shoreline Management Master Program must be met;

b. The building height of any boathouse shall not be greater than fourteen feet above the ordinary high water line;

c. Covered structures must abut or be upland of the ordinary high water line; and

d. No covered structure shall have a width greater than twenty-five feet or twenty-five percent of the lot width, whichever is most restrictive.

18. One piece of heavy equipment may be stored in any single-family zone; provided, that it is either enclosed within a permitted structure, or screened to the satisfaction of the director.

19. All development within the Silverdale Design District boundaries must be consistent with the Silverdale Design Standards.

20. Site plans for public schools shall include an area identified and set aside for the future placement of a minimum of four portable classroom units. The area set aside may not be counted towards meeting required landscaping or parking requirements.

21. Outdoor contractor's storage yards accessory to a primary residence shall be limited to not more than ten heavy equipment vehicles or heavy construction equipment. The use shall be contained outside of required setbacks within a contained yard or storage building. The storage yard and/or building shall be screened from adjacent properties with a screening buffer a minimum of twenty-five feet in width and capable of providing functional screening of the use. Minimum lot size shall be one hundred thousand square feet.

22. Stump grinding, soil-combining and composting in rural protection and rural residential zones must meet the following requirements:

a. The subject property(ies) must be one hundred thousand square feet or greater in size;

b. The use must take direct access from a county-maintained right-of-way;

c. A fifty-foot natural vegetation buffer must be maintained around the perimeter of the property(ies) to provide adequate screening of the use from neighboring properties;

d. The subject property(ies) must be adjacent to an industrial zone or a complementary public facility such as a sewage treatment plant or solid waste facility;

e. The proposed use must mitigate noise, odor, dust and light impacts from the project; and

f. The use must meet all other requirements of this title.

23. Home businesses located in the forest resource lands (FRL) must be associated with timber production and/or harvest.

24. Mobile homes are prohibited, except in approved mobile home parks.

25. All uses must comply with the town development objectives of Section 17.321B.025.

26. Within the MVC zone, a new single-family dwelling may be constructed only when replacing an existing single-family dwelling. All replacement single-family dwellings and accessory structures within the MVC zone must meet the height regulations, lot requirements, and impervious surface limits of the MVR zone.

27. Subject to the temporary permit provisions of Chapter 17.455.

28. Allowed only within a commercial center limited in size and scale (e.g., an intersection or corner development).

29. The Bethel Road Corridor Development Plan sets forth policies and regulations for development within the Highway Tourist Commercial Zone located along the Bethel Corridor in South Kitsap from SE Ives Mill Road to the Port Orchard city limits. Development within the Bethel Road Corridor Highway Tourist Commercial Zone shall be conducted in a manner consistent with the policies and regulations of the Land Use Element of the Bethel Road Corridor Development Plan.

30. The Design Standards for the Community of Kingston set forth policies and regulations for properties within the downtown area of Kingston. All development within this area must be

consistent with these standards. A copy of the Design Standards for the Community of Kingston may be referred to on the Kitsap County web page or at the department of community development front counter.

31. Uses permitted only if consistent with an approved master plan pursuant to Chapter 17.415. Where a master plan is optional and the applicant chooses not to develop one, all uses shown as permitted require an administrative conditional use permit.

32. For properties with an approved master plan, except as described in Section 17.370.025, all uses requiring a conditional use permit will be considered permitted uses.

33. Must be located and designed to serve adjacent area.

34. Bed and breakfast houses with one to four rooms require an administrative conditional use permit; bed and breakfast houses with five or more rooms require a hearing examiner conditional use permit. Bed and breakfast houses serving meals to patrons other than overnight guests require a hearing examiner conditional use permit.

35. The use shall be accessory and shall not occupy more than twenty-five percent of the project area.

36. Requires a conditional use permit when abutting SVR or SVLR zone.

37. Permitted only within a mixed use development or office complex.

38. Customer service-oriented uses over five thousand square feet are prohibited.

39. For the purpose of construction and maintenance of a timber management road system.

40. Self storage facilities must be accessory to the predominant residential use of the property, sized consistently for the number of lots/units being served and may serve only the residents of the single-family plat or multi-family project.

41. Adult family homes serving one to six residents (excluding proprietors) are permitted uses. Adult family homes serving more than six applicable residents (excluding proprietors) require an administrative conditional use permit (ACUP).

42. All business, service repair, processing, storage, or merchandise display on property abutting or across the street from a lot in any residential zone shall be conducted wholly within an enclosed building unless screened from the residential zone by a sight-obscuring fence or wall.

43. Where a family member is in need of special, frequent and routine care and assistance by reason of advanced age or ill health, a manufactured home or mobile home may be placed upon the same lot as a single-family dwelling for occupancy by the individual requiring or providing such special care subject to the following limitations:

a. Not more than two individuals shall be the recipients of special care;

b. No rent, fee, payment or charge in lieu thereof may be made for use of the single-family dwelling or manufactured/mobile home as between the recipients or providers of special care;

c. The manufactured/mobile home must meet the setback requirements of the zone in which it is situated;

d. A permit must be obtained from the director authorizing such special care manufactured/mobile home. Such permit shall remain in effect for one year and may, upon

application, be extended for one-year periods, provided there has been compliance with the requirements of this section;

e. The manufactured/mobile home must be removed when the need for special care ceases; and

f. Placement of the manufactured/mobile home is subject to applicable health district standards for water service and sewage disposal.

44. Certain development standards may be modified for mixed use developments, as set forth in Section 17.382.035 and Chapter 17.400.

45. New or expanded commercial developments that will result in less than five thousand gross square feet of total commercial use within a development site or residential developments of fewer than four dwelling units are permitted outright outside of the Silverdale UGA.

46. Allowed only as an accessory use to a park or recreational facility greater than twenty acres in size.

47. As a hearing examiner conditional use, UM and UH zones adjacent to a commercial zone may allow coordinated projects that include commercial uses within their boundaries. Such projects must meet the following conditions:

a. The project must include a combination of UM and/or UH and commercially zoned land;

b. The overall project must meet the density required for the net acreage of the UM or UH zoned land included in the project;

c. All setbacks from other residentially zoned land must be the maximum required by the zones included in the project;

d. Loading areas, dumpsters and other facilities must be located away from adjacent residential zones; and

e. The residential and commercial components of the project must be coordinated to maximize pedestrian connectivity and access to public transit.

48. Within urban growth areas, all new residential subdivisions, single-family or multi-family developments are required to provide an urban level of sanitary sewer service for all proposed dwelling units.

49. Mixed use development is prohibited outside of urban growth areas.

50. The 2007 Manchester Community Plan, Appendix A – Manchester Design Standards, sets forth policies and regulations for properties within the Manchester Village Commercial (MVC) district. All development within the MVC district must be consistent with these standards.

51. Storage of shipping containers is prohibited unless allowed as part of a land use permit and/or approval. Placement of storage containers allowed only with an approved temporary permit subject to the provisions of Section 17.455.090(I).

52. Aggregate production and processing only. Allowed only if directly connected to an approved surface mining permit approved by the Washington State Department of Natural Resources (DNR).

53. Commercial or industrial uses otherwise prohibited in the zone may be allowed as a component of a home business subject to the requirements of Section 17.381.060(B).

54. The gross floor area shall not exceed four thousand square feet.

55. Auction house and all items to be auctioned shall be fully enclosed within a structure.

56. There shall be no more than six rental vehicles kept on site.

57. When a component of development located within a commercial zone involves the conversion of previously undeveloped land which abuts a residential zone, it shall be treated as a Type II Administrative Decision.

58. In addition to the other standards set forth in the Kitsap County Code, espresso stands are subject to the following conditions:

a. Drive aisles/stacking lanes shall be designed to accommodate a minimum of three vehicles per service window/door. Each stacking lane shall be sized measuring eight and one-half feet in width and twenty feet in length, with direct access to the service window. The drive aisles/stacking lanes shall be designed to prevent any vehicles from interfering with public or private roadways, pedestrian circulation, traffic circulation, parking areas or other required development amenities.

b. Subject to provisions set forth in Chapter 17.435, drive aisles and parking areas must also be paved in urban growth areas and include, at minimum, hard compacted surfaces in rural areas. Such surfaces must be addressed with required drainage facilities. A joint parking agreement shall be required if parking cannot be accommodated on site.

c. All structures must be permanently secured to the ground.

d. Restroom facilities must be available for employees. Portable or temporary restroom facilities shall not be used to meet this requirement.

59. Use is permitted in the South Kitsap Industrial Area only.

60. All development in Illahee shall be consistent with the Illahee Community Plan.

61. Use prohibited in the Waaga Way Town Center area (see the Silverdale Design Standards).

62. General retail merchandise stores greater than one hundred twenty-five thousand square feet in size are prohibited in the Waaga Way Town Center area (see the Silverdale Design Standards). Additional square footage may be allowed for projects greater than twenty-five acres in size.

63. Restaurants, high-turnover that provide drive-through service must be compatible with the pedestrian focus of the Waaga Way Town Center (see the Silverdale Design Standards). Such businesses shall minimize potential conflicts with pedestrian and bicycle traffic and gathering areas by subordinating the drive-through service to the overall development design.

64. When a component of development is located within the Rural Commercial or Rural Industrial Zone and involves the conversion of previously undeveloped land which abuts a residential zone, it shall be treated as a Type III Administrative Decision.

65. No car washes allowed in RCO or RI.

66. Personal service businesses in the RCO are limited to four chairs and are intended for local use only.

67. No aquariums are allowed in the RCO zone. Galleries, museums, historic and cultural exhibits should be geared toward the character of the rural area, rural history, or a rural lifestyle.

68. In the RI zone, warehousing and distribution should be focused on agricultural, food, or forestry uses only.

69. In the RI zone, cold storage facilities are only allowed for agricultural and food uses.

70. In the RCO and RI zones, slaughterhouses and animal processing may have a retail component not to exceed four thousand square feet.

71. In the RCO zone, custom art and craft stores are limited to studio type and size only.

72. Must be accessory to an immediate primary use.

73. Heavy construction, farming and forestry equipment only.

74. Allowed for existing airports only.

75. All storage must be screened from public view by a twenty-five-foot buffer in order to meet rural compatibility. Applicant must also demonstrate how the storage would serve the immediate population.

76.

0 – 4,000 square feet = P

4,001 – 10,000 square feet = ACUP

10,001 – 15,000 square feet = C

15,001 square feet and above = X

77. All dwelling units must be included within a senior living development and consistent with the residency requirements of Section 17.335.080(A).

78. Allowed only in concentrated commercial/mixed use areas designated at the time of performance-based development approval for a senior living development. The use shall be sized and located consistent with the needs of the proposed senior living development.

79. Use prohibited within the portion of the Gorst urban growth area between the Sinclair Inlet shoreline and State Highways 3 and 16.

80. Use prohibited within the Gorst urban growth area.

81. Use permitted outright in the Gorst urban growth area.

82. Use requires a conditional use permit in the Gorst urban growth area.

83. In the Gorst urban growth area, must take access from state route. Auto uses with underground storage tanks (such as gas stations) shall not be located in the Gorst Creek floodplain.

CHAPTER 17.382
DENSITY, DIMENSIONS, AND DESIGN

17.382.010 Standards established.

The following sections and tables contain density, dimension standards, and other limitations for the various zones. Additional development requirements not found in these sections and tables may also apply.

17.382.020 Measurement methods.

A. Density. Except as provided in Section 17.382.110(A)(18), density shall be calculated as follows:

In all zones where a maximum or base density is identified, maximum or base density is calculated on gross acreage of the site. In all zones where a minimum density is required, minimum density is calculated on net developable acreage. If a calculation results in a partial dwelling unit, the partial dwelling unit shall be rounded to the nearest whole number. Less than .5 shall be rounded down. Greater than or equal to .5 shall be rounded up.

B. Setbacks. Setbacks shall be measured perpendicularly from a property line to the nearest vertical wall or other element of a building or structure, not including driveways, patios, pools, sidewalks, landscaping elements or other similar improvements built at or below grade.

C. Height. Except as provided for in Section 17.382.110(A)(14), height shall be measured from a reference datum to the highest point of the coping of a flat roof, to the deck line of a mansard roof, or to the average height of the highest gable of a pitched or hipped roof. The reference datum shall be selected by either of the following, whichever yields a greater height of building:

1. The elevation of the highest adjoining sidewalk or ground surface within a five-foot horizontal distance of the exterior wall of the building when such sidewalk or ground surface is not more than ten feet above lowest grade.

2. An elevation ten feet higher than the lowest grade when the sidewalk or ground surface described in subsection (C)(1) of this section is more than ten feet above lowest grade.

3. The height of a stepped or terraced building is the maximum height of any segment of the building.

D. Lot Area. Lot area for lots in urban areas shall be calculated by adding the area contained within the lot lines, exclusive of public or private streets or rights-of-way, tidelands, storm water detention-retention facilities, and the panhandle of a flag lot if the panhandle is less than thirty feet in width. Lots in rural areas may compute to the centerline of public or private streets or rights-of-way. Further, rural lots shall be considered five acres if the lot is 1/128 of a section, ten acres if the lot is 1/64 of a section, and twenty acres if the lot is 1/32 of a section.

E. Lot Width and Depth. Lot width shall be measured as the average horizontal distance between the side lot lines. Lot depth shall be measured as the horizontal distance between the midpoint of the front and opposite (usually the rear) lot line. In the case of a corner lot, lot depth shall be the length of its longest front lot line.

F. Lot Coverage and Impervious Surface. Lot coverage shall be calculated by dividing the area of land covered by buildings into the total lot area. Impervious surface coverage shall be calculated by dividing

the area of land covered by buildings, structures, and all other impervious surfaces (such as sidewalks, driveways, and patios) into the total lot area.

17.382.030 Design standards.

A. In addition to other standards and requirements imposed by this title, all uses except single-family detached dwellings, duplexes and uses located in the RW, FRL, or MR zones shall comply with the provisions stated herein. Should a conflict arise between the requirements of this section and other requirements of this title, the most restrictive shall apply.

B. Landscaping, Building Height, Buffering and Screening.

1. The development must comply with Chapter 17.385 of this title regarding landscaping standards.

2. The director may require increased landscaping, screening and setbacks to minimize conflicts and improve compatibility with adjacent uses.

3. The director may reduce landscaping, screening, and setback requirements:

a. Where the nature of established development on adjacent parcels partially or fully provides the screening and buffering which otherwise would be required;

b. Where the density of the proposed development is less than that permitted by the zone; or

c. Where topographical or other site conditions provide natural screening and buffering.

4. A reduction in landscaping/screening requirements may be approved by the director in conjunction with a joint landscape screening proposal submitted by adjacent landowners for their combined boundaries or for an integrated project located within two or more zones.

C. Exterior Lighting. In all zones, artificial outdoor lighting shall be arranged so that light is directed away from adjoining properties and so that no more than one foot candle of illumination leaves the property boundaries.

D. Screening of Equipment, Storage, and Refuse Areas.

1. All roof-mounted air conditioning or heating equipment, vents, ducts, or other equipment shall not be visible from any abutting lot, or any public street or right-of-way as feasible. This shall be accomplished through the use of parapet roof extensions, or screened in a manner which is architecturally integrated with the main structures;

2. Locate service areas, outdoor storage areas and other intrusive site features away from neighboring properties to reduce conflicts with adjacent uses. Building materials for use on the same premises may be stored on the parcel during the time that a valid building permit is in effect for construction;

3. Every parcel with a structure shall have a trash receptacle on the premises. The trash receptacle shall comply with adopted public works standards and be of sufficient size to accommodate the trash generated. All receptacles shall be screened on three sides with fencing and/or landscaping as determined appropriate by the director;

E. Access and Circulation.

1. Pedestrian access shall be accommodated on-site from the public right-of-way, and throughout the site to minimize potential conflicts between pedestrian and vehicular circulation. Pedestrian paths

must correspond with state and local codes for barrier-free access. Projects should also integrate walkways into the site plan leading to transit stops within one thousand two hundred feet of the site and incorporate transit stops within the site plan design as appropriate;

2. Developments shall be limited to one ingress/egress per three hundred lineal feet along a public arterial. Small parcels that provide less than two hundred fifty feet of road frontage shall be limited to one parking lot entrance lane and one exit lane. Access points may be required at greater intervals as directed by the director of public works as demonstrated through a traffic analysis. Developments shall attempt to share access with adjoining parcels to minimize access points and potential conflicts from vehicles entering and exiting onto traveled roadways, unless deemed not feasible due to natural constraints such as critical areas or topographical relief, or existing development that precludes the ability to share access. Developments shall attempt to minimize vehicular movement conflicts with public roadways by use of connected frontage lanes.

F. Off-Street Parking. The development must comply with the off-street parking requirements prescribed by Chapter 17.435 of this title.

G. Solid Waste. The development must comply with the guidelines set forth in the Kitsap County Comprehensive Solid Waste Plan.

17.382.035 Additional mixed use development standards.

A. Total gross floor area devoted to residential uses in any mixed use development project shall not exceed eighty percent of the proposed gross floor area.

B. Total gross floor area dedicated to commercial uses in any mixed use development shall not exceed fifty percent of the proposed gross floor area.

C. If the mixed use development is phased, the development's commercial uses shall be constructed concurrent with or subsequent to the residential uses.

D. Development standards for mixed use development may be modified or waived, as set forth in Chapter 17.400 and Title 21 of this code, provided the applicant can demonstrate that the modification or waiver request will result in a project that:

1. Fosters a development pattern focused on the public street;

2. Provides for community spaces such as plazas, atriums or pocket parks;

3. Provides for a compatible mix of multi-family housing and commercial businesses and services;

4. Better meets the intent of the Comprehensive Plan;

5. Provides for compatibility with surrounding uses and zones; and

6. The commercial and residential components are constructed concurrently.

E. The following development standards may be modified or waived consistent with the criteria outlined in subsection (D) of this section:

1. Screening requirements in Title 17, provided the modification or waiver complies with the provisions of Section 17.382.030(B);

2. Landscaping requirements in Title 17, provided the modification or waiver complies with the provisions of Section 17.382.030(B);

3. Parking layout, access and dimensional standards in Chapter 17.435, provided the modification or waiver results in a design that provides safe and efficient pedestrian and vehicular circulation;

4. Minimum parking requirements in Chapter 17.435, provided the applicant demonstrates with a traffic and parking impact analysis that any adverse parking impacts resulting from the granting of the modification or waiver request are adequately mitigated;

5. Lot coverage limitations in Chapter 17.382; provided that this shall not apply in the Gorst UGA, which instead is subject to KCC 17.378.080.

6. Setback requirements in Chapter 17.382;

7. Residential open space requirements in Title 17; and

8. Height restrictions in Chapter 17.382, provided the modification or waiver is consistent with the recommendations of the fire marshal/fire district and results is a decrease in building coverage, an increase in public amenities, and/or a more creative or efficient use of land. The maximum height approved shall not exceed the heights listed in Section 17.382.110(A)(17). In the Gorst UGA, maximum height may only be earned through the incentives in KCC 17.378.080.

F. The criteria and provisions of this section supersede other variance, modification or waiver criteria and provisions contained in this title.

17.382.037 Single-family subdivision/development standards.

In addition to the provisions set forth elsewhere in this code, all single-family subdivisions, condominiums or residential developments of ten or more lots/units within urban growth areas must meet the following development standards:

A. Sidewalk Requirements.

1. Sidewalks shall be required on both sides of all public or private streets meeting the criteria for classification as a principal or minor arterial, collector, local sub-collector or local minor roads as described by the Kitsap County Road Standards. Sidewalk design shall be developed consistent with the requirements of the Kitsap County Road Standards.

2. Sidewalks shall be required on a minimum of one side of all public or private streets meeting the criteria for classification as local road, cul-de-sac or very low volume local road as designated by the Kitsap County Road Standards or of similar traffic volume. Sidewalk design shall be developed consistent with the requirements of the Kitsap County Road Standards. The director may require sidewalks on both sides based upon site-specific conditions.

3. Rolled-curb sidewalks are prohibited, except where the sidewalk is separated from the street by a bioswale, other water quality treatment facility or landscaping berm.

B. Public Street and Street Connectivity Requirements. Dedicating or deeding property for right-of-way or a portion thereof to the county for public streets within, or along the boundaries of all single-family subdivisions or developments, shall be required as a condition of application approval where the county demonstrates all of the following:

1. Facts support that such dedication is reasonably necessary as a result of the impact created by the proposed development;

2. Such dedication will result in mitigation of the impact in the reasonably foreseeable future;

3. Connectivity to existing public right-of-way is feasible; and

4. One or more of the following circumstances are met:

a. A county transportation plan indicates the necessity of a new or additional right-of-way or portion thereof for street purposes;

b. The dedication is necessary to provide additions of right-of-way to existing county right-of-way to meet county road standards;

c. The dedication is necessary to extend or to complete the existing or future neighborhood street pattern;

d. The dedication is necessary to comply with county road standards and Kitsap County transportation plans;

e. The dedication is necessary to provide a public transportation system that supports future development of abutting property consistent with the Kitsap County Comprehensive Plan or Kitsap County Zoning Code.

C. Utility Connectivity Requirements. Dedication of easements for future public utility extensions to abutting or contiguous properties shall be required as a condition of application approval in cases where the county demonstrates the following:

1. Vacant or underutilized land abuts the proposed subdivision or development;

2. The location is reasonable based upon the design needs for future utility infrastructure;

3. The dedication may further the extension of utility infrastructure with the urban growth area; and

4. The dedication furthers the goals and policies of the Comprehensive Plan.

D. Landscaping Requirements.

1. A landscaped area will be provided at all entrances to the subdivision or development consistent with the landscaping standards of Chapter 17.385.

2. Street trees consistent with Chapter 17.385 shall be provided along all streets with the road classification of principal or minor arterial, collector, or local sub-collector as determined by the Kitsap County Road Standards or of similar traffic volume. Street trees shall be located in the road right-of-way or the front yards of individual lots or units. Street trees located on individual lots may be installed before final plat approval or before the certificate of occupancy for individual building permits.

E. Off-Street Parking.

1. Projects shall provide off-street parking consistent with the requirements of Chapter 17.435.

2. All fractional parking spaces shall be rounded up to the nearest whole number.

3. If the development includes set-aside parking areas, each area shall not include more than ten spaces each and shall be in locations throughout the development.

17.382.040 Tables.

There are five separate tables addressing the uses allowed within the following general land use categories and zones:

A. Urban Residential Zones.

1. Urban Restricted (UR).
2. Urban Low Residential (UL).
3. Senior Living Homestead (SLH).
4. Urban Cluster Residential (UCR).
5. Urban Medium Residential (UM).
6. Urban High Residential (UH).
7. Illahee Greenbelt Zone (IGZ).

B. Commercial and Mixed Use Zones.

1. Neighborhood Commercial (NC).
2. Urban Village Center (UVC).
3. Urban Town Center (UTC).
4. Highway Tourist Commercial (HTC).
5. Regional Commercial (RC).
6. Mixed Use (MU).
7. Low Intensity Commercial (LIC)

C. Airport and Industrial Zones.

1. Airport (A).
2. Business Park (BP).
3. Business Center (BC).
4. Industrial (IND).

D. Limited Areas of More Intensive Rural Development (LAMIRD).

1. Manchester Village Commercial (MVC).
2. Manchester Village Low Residential (MVLR).
3. Manchester Village Residential (MVR).
4. Port Gamble Rural Historic Town Commercial (RHTC).
5. Port Gamble Rural Historic Town Residential (RHTR).
6. Port Gamble Rural Historic Town Waterfront (RHTW).
7. Suquamish Village Commercial (SVC).
8. Suquamish Village Low Residential (SVLR).
9. Suquamish Village Residential (SVR).

E. Parks, Rural and Resource Zones.

1. Parks (P).
2. Forest Resource Lands (FRL).
3. Mineral Resource (MR).
4. Rural Protection (RP).
5. Rural Residential (RR).
6. Rural Wooded (RW).
7. Urban Reserve (URS).

17.382.050 Interpretation of tables.

Development standards are listed down the left side of the tables and the zones are listed at the top. The table cells contain the minimum and, in some cases, maximum dimensional requirements of the zone. The small numbers (subscript) in a cell indicate additional requirements or detailed information. Those additional requirements can be found in the table footnotes in Section 17.382.110. A cell, marked with NA, indicates there are no specific requirements.

17.382.060 Urban Residential Density and Dimensions Table.

	Urban Low-Density Residential					**Urban Medium/High-Density Residential**	
Standard	**UCR (5)**	**SLH**	**IGZ (33) (50)**	**UR (33)**	**UL (5) (33)**	**UM (5)**	**UH (33)**
Minimum density (du/acre)	5 (19)	5	1 (3) (18)	1 (3) (18)	5 (19)	10 (19)	19
Base/Maximum density (du/acre)	9 (19)	9	4 (18)	5 (18) 10 (53)	9 (19)	18 (19)	30
Minimum lot size (39)	2,400 s.f.	2,400 s.f.	5,800 s.f.	5,800 s.f.	2,400 s.f.	None for multi-family; 2,400 s.f. for single-family	None
Lot width (feet)	40	40	60	60	40 (20)	0 for multi-family; 40 for single-family	60
Lot depth (feet)	60	60	60	60	60	0 for multi-family; 60 for single-family	60
Maximum height (feet) (40)	35	Single-family 35 Multi-family 45	35 (50)	35	35	35 (17)	35 (17)
Maximum impervious surface coverage	NA	NA	40%	50% 55%(53)	NA	85%	85%

	Urban Low-Density Residential					Urban Medium/High-Density Residential	
Standard	**UCR (5)**	**SLH**	**IGZ (33) (50)**	**UR (33)**	**UL (5) (33)**	**UM (5)**	**UH (33)**
Setbacks, Generally (34) (38)							
Front (feet) (41)(42)(43)(45)	10 for single-family, duplex & townhouse; 10 for multi-family adjacent or abutting residential, otherwise 0 (29)	5 for single-family, duplex & townhouse; 10 for multi-family adjacent or abutting residential, otherwise 0 (29)	20 (29)	20 (29) 15 (54)	20 for garage or carport; 10 for habitable area (29)	Multi-family = 10 Single-family = 20 for garage or carport; 10 for habitable area (29)	20 (29)
Side (feet) (42)(43)(45)(48)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (28) (29)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (28) (29)	5 (29)	5 (29)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (29)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (29)	5 (29)
Rear (feet) (42)(43)(48)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (28) (29)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (28) (29)	5 (29)	5 (29) 15 (54)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (29)	5 If on an alley, 10 feet for a garage or carport opening directly onto the alley or 5 feet in all other instances (29)	10 (29)

17.382.070 Commercial and Mixed Use Density and Dimensions Table.

	Urban Low Commercial Intensity/Mixed-Use			Urban High Commercial Intensity/Mixed Use				Rural Commercial
Standard	**NC (5) (33)**	**UVC (5)**	**LIC (51)**	**UTC**	**HTC (5) (25) (33)**	**RC (33)**	**MU (33)**	**RCO**
Minimum density (du/acre)	10 (44)	10 (19)	10	Reserved	10 (44)	10 (44)	10 (32)	None
Base/Maximum density (du/acre)	30	18 (19)	20 base 30 max (53)	Reserved	30	30	30	None
Maximum height (feet) (40)	35 (17)	45	25 base 45 max (53)	Reserved	35 (17)	35 (17)	35 (17)	35
Maximum impervious surface coverage	85%	85%	35% base 50% max (53)	85%	85%	85%	Base: 60% (54) 85% (53)	85%
Maximum lot coverage	NA	Total gross floor area devoted to nonresidential use in any one structure shall not exceed 25,000 square feet. Total gross floor area devoted to residential use in any project shall not exceed 2/3 of the total proposed gross floor area. (24)	35%	Total gross floor area devoted to residential use in any project shall not exceed 2/3 of the total proposed gross floor area. (24)	NA	NA	NA	None

	Urban Low Commercial Intensity/Mixed-Use			Urban High Commercial Intensity/Mixed Use				Rural Commercial
Standard	**NC (5) (33)**	**UVC (5)**	**LIC (51)**	**UTC**	**HTC (5) (25) (33)**	**RC (33)**	**MU (33)**	**RCO**
Setbacks, Generally (34) (38)								
Minimum front (feet) (29) (41) (42) (43) (48)	20	None	None	Reserved	20	20	10	20 (26)
Maximum front (feet) (42) (43) (48)	NA	NA	10 (52)	NA	NA	NA	20	NA
Side (feet) (29) (42) (43) (48)	10 (21)	None	0 (10 feet when abutting UR zone)	Reserved	10 (21)	10 (21)	10 (21)	20 (50 feet when abutting residential) (26)
Rear (feet) (29) (48)	10 (21)	None	15	Reserved	10 (21)	10 (21)	10 (21)	20 (50 feet when abutting residential) (26)

17.382.100 Parks, Rural and Resource Density and Dimensions Table.

	Parks	Resource		Rural			
Standard	**P**	**FRL**	**MR**	**RP**	**RR**	**RW**	**URS**
Base/Maximum density (du/acre)	NA	NA	NA	NA	NA	Base: 1 du/20 acres Max: 1 du/5 acres (35)	NA
Minimum lot size (acre) (39)	NA	40	20 (30)	10	5	20 (35)	10
Lot width (feet)	NA	140	60 (31)	140	140	140	140
Lot depth (feet)	NA	140	NA	140	140	140	140
Maximum height (feet) (40)	35 (17)	35 (1)	NA	35 (2)	35 (2)	35 (2)	35

	Parks	Resource		Rural			
Standard	**P**	**FRL**	**MR**	**RP**	**RR**	**RW**	**URS**
Setbacks, Generally (34) (38)							
Front (feet) (41) (42) (43)	20 0 (54)	50 (29)	NA	50 (29)	50 (29)	50 (29)	20 (29)
Side (feet) (42) (43)	10	20 (29)	NA	20 feet; 5 feet for accessory structures (29)	20 feet; 5 feet for accessory structures (29)	20 (29)	5 (29)
Rear (feet) (42) (43)	10 0 (54)	20 (29)	NA	20 feet; 5 feet for accessory structures (29)	20 feet; 5 feet for accessory structures (29)	20 (29)	5 (29)
Setbacks for Agricultural Structures (34)							
Front yard (feet) (48)	50	NA	NA	50	50	NA	20
Side yard (feet) (48)	50	NA	NA	50	50	NA	50
Rear yard (feet) (48)	50	NA	NA	50	50	NA	50

17.382.110 Footnotes for tables.

A. Where noted on the preceding tables, the following additional provisions apply:

1. Except for those buildings directly associated with timber production and harvest.

2. Except for silos and other uninhabited agricultural buildings.

3. Properties within the urban restricted (UR) zone and Illahee Greenbelt Zone (IGZ) may subdivide at densities below the minimum required for the zone under the following circumstances:

a. The reduced density provides a greater protection for critical areas or environmentally sensitive areas; and

b. The intent of the short subdivision or subdivision is to keep the property in the ownership of the immediate family members.

4. If a single lot of record, legally created as of April 19, 1999, is smaller in total square footage than that required under this chapter, or if the dimensions of the lot are less than required, said lot may be occupied by any reasonable use allowed within the zone subject to all other requirements of this chapter. If there are contiguous lots of record held in common ownership, each of the lots legally created as of April 19, 1999, and one or more of the lots is smaller in total square footage than required by this chapter, or the dimensions of one or more of them are less than required, said lots shall be combined to meet the minimum lot requirements for size and dimensions.

5. The Design Standards for the Community of Kingston sets forth policies and regulations for properties within the downtown area of Kingston. All development within this area must be consistent with these standards. A copy of the Design Standards for the Community of Kingston may be referred to on the Kitsap County web page or at the department of community development front counter.

6. Building replacements and remodels shall not create in excess of a total of forty percent impervious surface for lot area or more than the total existing impervious surface area, whichever is greater.

7. Excess area from acreage used to support proposed densities but not devoted to residential lots and public improvements such as streets and alleys shall be permanently dedicated and reserved for community open space, park land, and similar uses. For developments proposing densities no greater than one dwelling unit per five acres, the minimum and maximum lot sizes shall not apply, except that existing dwelling units shall be allocated lot area between three thousand five hundred and seven thousand five hundred square feet. New proposals may then proceed using the five-acre lot requirements of Section 17.310.030 for the rural residential (RR) zone.

8. Hotels may be developed with four above-ground floors and up to a height not exceeding fifty feet with approval of the fire marshal and relevant fire district.

9. May be reduced to ten feet for residential uses through the administrative conditional use or PBD process.

10. Uses allowed through the conditional use process shall provide minimum side setbacks of ten feet and minimum rear setbacks of twenty feet.

11. Any newly created lot within the Suquamish Rural Village shall be subject to Chapter 16.48 of this code, Short Subdivisions, and must meet the lot requirements below:

a. Lot Requirements.

(1) Minimum lot size: twenty-one thousand seven hundred eighty square feet.

(2) Minimum lot width: one hundred feet.

(3) Minimum lot depth: one hundred feet.

b. Setbacks.

(1) Front: twenty feet.

(2) Side: five feet.

(3) Rear: five feet.

12. Nonconforming Lots.

a. Nonconforming Lots in Single Ownership. If a single lot of record, legally created before the adoption of the Manchester Community Plan, is less than eight thousand seven hundred twelve square feet in size or does not meet the dimensional requirements of its zone, the lot may be occupied by any use allowed within the zone subject to all other requirements of this chapter.

b. Nonconforming Lots in Common Ownership. Contiguous lots of record held in common ownership, each lot legally created before adoption of the Manchester Community Plan, must be combined to meet the minimum lot requirements of its zone if one or more of the lots are less than eight thousand seven hundred twelve square feet in size or does not meet the dimensional requirements of its zone and, at the time of adoption of the Manchester Community Plan (March 18, 2002), either (i) a residential structure encumbered more than one of the contiguous lots or (ii) two or more of the contiguous lots were vacant. If one or more of the lots is sold or otherwise removed from common ownership after the adoption of the Manchester Community Plan, it will not be considered to meet the minimum lot requirements for non-conforming lots in single ownership. Property with two contiguous lots legally created before adoption of the Manchester Community Plan with a residential structure entirely on one lot may develop the second lot consistent with applicable zoning.

13. Residential structures within the MVC zone may not exceed twenty-eight feet.

14. Within the view protection overlay, the maximum height shall be twenty-eight feet. Height shall be measured from the average elevation of the property's buildable area to the structure's highest point. Buildable area is considered all portions of the property except wetlands and/or geologically hazardous areas. Properties within the view protection overlay zone may build as high as thirty-five feet under the following circumstances:

a. There is no existing view of downtown Seattle, the Cascade Mountains, Mt. Rainier or the Puget Sound from the subject property or any adjacent property; or

b. The owners of all adjacent properties approve the building height prior to building permit issuance; or

c. It can be explicitly shown that the structure will not cause the blockage of existing views from any of the adjacent properties.

15. Clustering residential development is encouraged in all development. When clustering development, if a property owner designates forty percent of the gross acreage as naturally

vegetated open space, he or she may create one additional lot for every five lots clustered. The additional lot may not reduce the naturally vegetated open space to an amount less than forty percent of the gross acreage of the development.

16. All properties within the Manchester Village must also meet the requirements of the Storm Water Management Ordinance, Chapters 12.04 through 12.32 of this code. The use of pervious materials and other new technologies may be used in the construction of these areas and structures to reduce the impervious surface calculation.

17. A greater height may be allowed as set forth below and in accordance with the procedures in Title 21 of this code. Such approval must be consistent with the recommendations of the fire marshal/fire district and compatible with surrounding uses and zones. Such approval shall result in a decrease in building coverage, an increase in public amenities, and/or a more creative or efficient use of land. The maximum building height approved by the director shall not exceed:

a. In the UM, NC, and P zones: forty-five feet.

b. In the UH, HTC, and RC zones: sixty-five feet.

c. In the BP, BC, and IND zones: fifty feet.

d. In the mixed use zone:

i. Within Silverdale, the maximum height shall be forty-five feet;

ii. Along the Highway 303 corridor, the maximum height shall be sixty-five feet;

iii. Along Perry and National Avenues, the maximum height shall be forty-five feet.

iv. Within Gorst, the maximum height shall be sixty-five feet when public benefits are provided and incentives earned per 17.378.070.

18. The minimum and maximum densities within the range are based upon the net acreage of the property(s) after the removal of critical areas. In determining a development proposal's actual density within the range, the features of the subject parcel including on-site or adjacent wetlands, streams or steep slopes shall be considered first.

19. The maximum number of residential units permitted in the South Kitsap UGA/ULID #6 Sub-Area Plan is four thousand one hundred seventy-two until such time as a further population allocation is made to the sub-area. All residential development within the sub-area is subject to this density limitation. To ensure that the density limit for the sub-area is not exceeded, the director shall use the county's land information system (LIS) to monitor the number of dwelling units remaining and available for development within the sub-area.

20. The minimum lot width within the ULID #6 Sub-Area shall be forty feet.

21. Twenty feet when abutting a residential zone.

22. Maximum height shall be thirty feet when located within the two-hundred-foot shoreline area.

23. The minimum site setback shall be seventy-five feet for any yard abutting a residential zone, unless, based upon a site-specific determination, berming and landscaping approved by the director is provided that will effectively screen and buffer the business park activities from the residential zone that it abuts; in which case, the minimum site setback may be reduced to less than seventy-five feet but no less than twenty-five feet. In all other cases, minimum site setbacks shall be twenty feet.

24. An individual structure intended for future mixed commercial and residential uses may initially be used exclusively for residential use if designed and constructed for eventual conversion to mixed commercial and residential use once the Urban Village Center or Urban Town Center matures.

25. The Bethel Road Corridor Development Plan sets forth policies and regulations for development within the Highway Tourist Commercial Zone located along the Bethel Corridor in South Kitsap from SE Ives Mill Road to the Port Orchard City limits. Development within the Bethel Road Corridor Highway Tourist Commercial Zone shall be conducted in a manner consistent with the policies and regulations of the Land Use Element of the Bethel Road Corridor Development Plan.

26. No service road, spur track, or hard stand shall be permitted within required yard areas that abut a residential zone.

27. As approved by the director, wherever an industrial zone abuts a residential zone, a fifty-foot screening buffer area shall be provided. This screening buffer is intended to reduce impacts to abutting residential uses such as noise, light, odors, dust and structure bulk. No structures, open storage, or parking shall be allowed within this area. The director shall only approve screening buffers that improve the compatibility between the proposed use and the residential zone. The director may reduce this buffer to a minimum of twenty-five-foot width only when based upon a site-specific determination that topography, berming or other screening features will effectively screen industrial activities from the residential zone. Conversely, based upon a similar site-specific determination, the director may increase the buffer width from fifty feet to ensure adequate buffering and compatibility between uses.

28. Unless part of an approved zero-lot line development.

29. One-hundred-foot setback required for single-family buildings abutting FRL or RW zones.

30. No minimum lot size if property is used only for extraction.

31. Three hundred thirty feet if activity includes any uses in Section 17.380.020.

32. Existing lots developed with existing single-family residences are permitted to be maintained, renovated and structurally altered. Additions to existing residential structures in order to provide commercial uses are also permitted regardless of density.

33. All development within the Silverdale Design District boundaries must be consistent with the Silverdale Design Standards.

34. Development abutting a street for which a standard has been established by the Kitsap County Arterial Plan shall provide a special setback from the centerline of said street or a distance adequate to accommodate one-half of the right-of-way standard established by the arterial plans for the street. The building setback required by the underlying zone shall be in addition to the special setback and shall be measured from the edge of the special setback line. The special setback area shall be treated as additional required yard area and reserved for future street widening purposes.

35. Maximum density, smaller lot sizes and reduced setbacks may be allowed based upon the designation of a portion of the development acreage as “permanent open space” through the Rural Wooded Incentive Program per Section 17.301.080.

36. For standards applicable to master planned industrial developments and approved industrial parks, see Section 17.370.090.

37. When an airport zone abuts a residential zone, there shall be a minimum of five hundred feet from the end of any runway and the residential zone. Adjacent to airports, the director may impose height restrictions and/or other land use controls, as deemed essential to prevent the establishment of air space obstructions in air approaches to protect the public health, safety and welfare consistent with Federal Aviation Regulations (FAR) Part 77.

38. Cornices, canopies, eaves, belt courses, sills or other similar architectural features, or fireplaces may extend up to twenty-four inches into any required yard area. For setbacks along shorelines, see Chapter 17.450.

39. Unless otherwise stated in this title, if a lot of record which was legally created as of May 10, 1999, is smaller in total square footage than that required within the zone, or if the dimensions of the lot are less than that required within the zone, said lot may be occupied by any use allowed within that zone subject to all other requirements of the zone. Unless specifically stated within this title, where two or more contiguous lots which are nonconforming to the lot size or dimensions of the zone and are held in common ownership, said lots shall be considered separate legal nonconforming lots and each may be occupied by any use permitted within the zone subject to all other requirements of the zone. If a lot of record was lawfully occupied by two or more single-family residences (excluding accessory dwellings) as of May 10, 1999, the owner of such a lot may apply for a short plat approval in order to permit the segregated sale of such residences, even though some or all of the resulting new lots will have lot areas or dimensions less than required for the zone in which they are located. All other provisions of the Short Subdivision Ordinance (Chapter 16.48 of this code) shall apply to the application.

40. Height limitations set forth elsewhere in this title shall not apply to the following: barns, silos, or other farm buildings and structures, provided they are not less than fifty feet from every lot line; chimneys, spires on places of worship, belfries, cupolas, domes, smokestacks, flagpoles, grain elevators, cooling towers, solar energy systems, monuments, fire house towers, masts, aerials, elevator shafts, and other similar projections, and outdoor theater screens, provided said screens contain no advertising matter other than the name of the theater. The proponent seeking exception to the height limitation shall certify that the object being considered under this provision will not shade an existing solar energy system which, by the determination of the director, contributes substantially to the space or water-heating requirements of a building.

41. The following exceptions apply to front yard requirements:

a. If there are dwellings on both abutting lots with front yards less than the required depth for the zone, the front yard for the lot need not exceed the average front yard of the abutting dwellings.

b. If there is a dwelling on one abutting lot with a front yard less than the required depth for the zone, the front yard need not exceed a depth of half-way between the depth of the front yard on the abutting lot and the required front yard depth.

c. If a modification to the front-yard requirement is necessary in order to site dwellings in a manner that maximizes solar access, the director may modify the requirement.

d. On lots with multiple front yards, the front yard setback(s) in which the lot does not receive access may be modified by the director. Based upon topography, critical areas or other site constraints, the director may reduce these front yard setbacks to a minimum of twenty feet for properties requiring fifty feet and five feet for properties requiring twenty feet. The director may

not modify front yard setbacks from county arterials or collectors. Such reductions shall not have an adverse impact to surrounding properties.

42. The following exceptions apply to historic lots:

a. Building setback lines that do not meet the requirements of this title but were legally established prior to the adoption of this title shall be considered the building line for alterations, remodels, and accessory structures on the lot or parcel; providing, that no structure or portion of such addition may further project beyond the established building line.

b. Any single-family residential lot of record as defined in Chapter 17.110 that has a smaller width or lot depth than that required by this title, or is less than one acre, may use that residential zoning classification that most closely corresponds to the dimension or dimensions of the lot of record, for the purpose of establishing setbacks from the property lines.

43. Any structure otherwise permitted under this section may be placed on a lot or parcel within a required yard area if the director finds that such a location is necessary because existing sewer systems or roadways make compliance with the yard-area requirements of this title impossible without substantial changes to the site.

44. Outside of the Silverdale Sub-Area, densities required only with mixed use development.

45. Density in the KVLR zone may be increased to three units per acre through a performance-based development (PBD) process pursuant to the regulations cited in Section 17.321D.090(B).

46. Front porch must meet following requirements to qualify for five-foot front setback:

a. Porch shall be forty percent open on each of two sides; no enclosed porches.

b. Minimum porch dimensions shall be four feet by six feet, or twenty-four square feet.

c. Porches shall not be less than four feet in width.

47. The 2007 Manchester Community Plan, Appendix A – Manchester Design Standards sets forth policies and regulations for properties within the Manchester Village commercial district (MVC). All developments within the MVC district must be consistent with these standards.

48. Cornices, canopies, eaves, belt courses, sills, bay windows, fireplaces or other similar cantilevered features may extend up to twenty-four inches into any required yard area. In no case shall a habitable area be considered for encroachment into a required yard through any land use process. Additionally, fire escapes, open-uncovered porches, balconies, landing places or outside stairways may extend up to twenty-four inches into any required side or rear yards, and shall not extend more than six feet into any required front yard. This is not to be construed as prohibiting open porches or stoops not exceeding eighteen inches in height, and not closer than twenty-four inches to any lot line.

49. Minimum project size applies to the initial land use application for the property such as master plan, PBD or other mechanism. Subsequent subdivision through platting or binding site plan consistent with scope and conditions of the land use approval is not required to meet this minimum size.

50. New or remodeled structures within the Illahee View Protection Overlay Zone may not exceed twenty-eight feet.

51. No residential uses are allowed within the portion of the Gorst urban growth area between the Sinclair Inlet shoreline and State Highways 3 and 16.

52. No motor vehicle parking allowed within the front yard setback. See also KCC 17.378.060 regarding conditions under which maximum setbacks may increase, as well as parking location standards.

53. Within the Gorst urban growth area, density, impervious surface coverage, and height may be increased to the maximum listed in the Density and Dimensions Table through compliance with the incentive program described in 17.378.030(B).

54. Standard listed applicable to Gorst UGA only.

10. DESIGN GUIDELINES

Introduction

Purpose

The Gorst Subarea Design Guidelines are intended to support the implementation of the land use and zoning designations and development regulations contained within the Gorst Subarea Plan. These Guidelines will help ensure that future physical development within the Subarea is supportive of the overall Subarea Plan goals. The Guidelines apply primarily to the public realm, which generally consists of the space within the public right-of-way or other public ownership, and the relationship of private development to the public realm.

Specifically these Design Guidelines will:

- Implement the Gorst Subarea Plan Guiding Principles;
- Supplement the Gorst Subarea Plan Zoning and Development Regulations;
- Ensure design that is functional, sustainable, desirable, and appropriate for the Gorst Subarea;
- Provide design guidance to property owners, developers, architects, and other designers; and
- Provide City and County staff with guidance and metrics for evaluating development proposals.

Design Goals

The Gorst Subarea Plan contains several Guiding Principles that provide overarching goals toward which the future physical development of the Subarea aspires.

Three Guiding Principles in particular provide the overall design intent for these Design Guidelines:

- Make Gorst a place to stop.
- Create a cohesive and attractive urban character in the Gorst urban growth area (UGA) such as by improving building design, and creating and enhancing public spaces such as parks, pedestrian corridors and streetscapes.
- Improve transportation mode choices including transit, bicycle, pedestrian, and autos, recognizing local as well as regional travel needs.

Design can play an important role in realizing these Guiding Principles. Following are several specific Design Goals these Guidelines intend to achieve:

- *Walkability* – Ensure a safe, comfortable, and interesting pedestrian environment and prioritize pedestrian accessibility.
- *Complete Streets* – Ensure that streets are supportive of multiple modes of transportation, including walking, bicycling, transit, and automobiles.
- *Identifiable Character* – Create an attractive and functional public realm that identifies Gorst as a unique place. This contrasts with the uncoordinated, messy, and confusing development pattern that often characterizes auto-oriented strip development.

- *Efficient and Coordinated Use of Land and Infrastructure* – Use compact development, shared driveways and parking areas, and consistent street frontage standards to efficiently use land and infrastructure and avoid leftover or "dead" spaces.
- *Low Impact Development* – Minimize impervious surfaces, maximize vegetation retention, and manage stormwater close to the source to minimize water quality impacts.

How to Use These Guidelines

Applicability

These Design Guidelines apply to all new proposed development or significant redevelopment within the Gorst Subarea. The City of Bremerton Director of Community Development (Director) or his/her designee shall have discretion to apply the Guidelines to the remodel or expansion of existing development to an extent that is proportional to the scope and scale of the proposal.

The Guidelines are intended to address primarily the public realm and how development relates to the public realm. The Guidelines are not intended to be prescriptive of architectural style nor are they intended to preclude design flexibility or innovation. The Guidelines are statements of design intent that provide guidance for project proponents and project reviewers during the design review process.

Relationship to City and County Code

These Guidelines are supplementary to the requirements of applicable City Codes and Policy as well as the zoning and development regulations of the Gorst Subarea Plan. Any topics not explicitly addressed herein are to be governed by applicable City standards. Where there is a conflict between these Guidelines and the BMC, it is intended that these Guidelines will apply. The final decision regarding the applicability of these Guidelines is within the discretion of the Director.

User Guide

These Guidelines are organized into two parts:

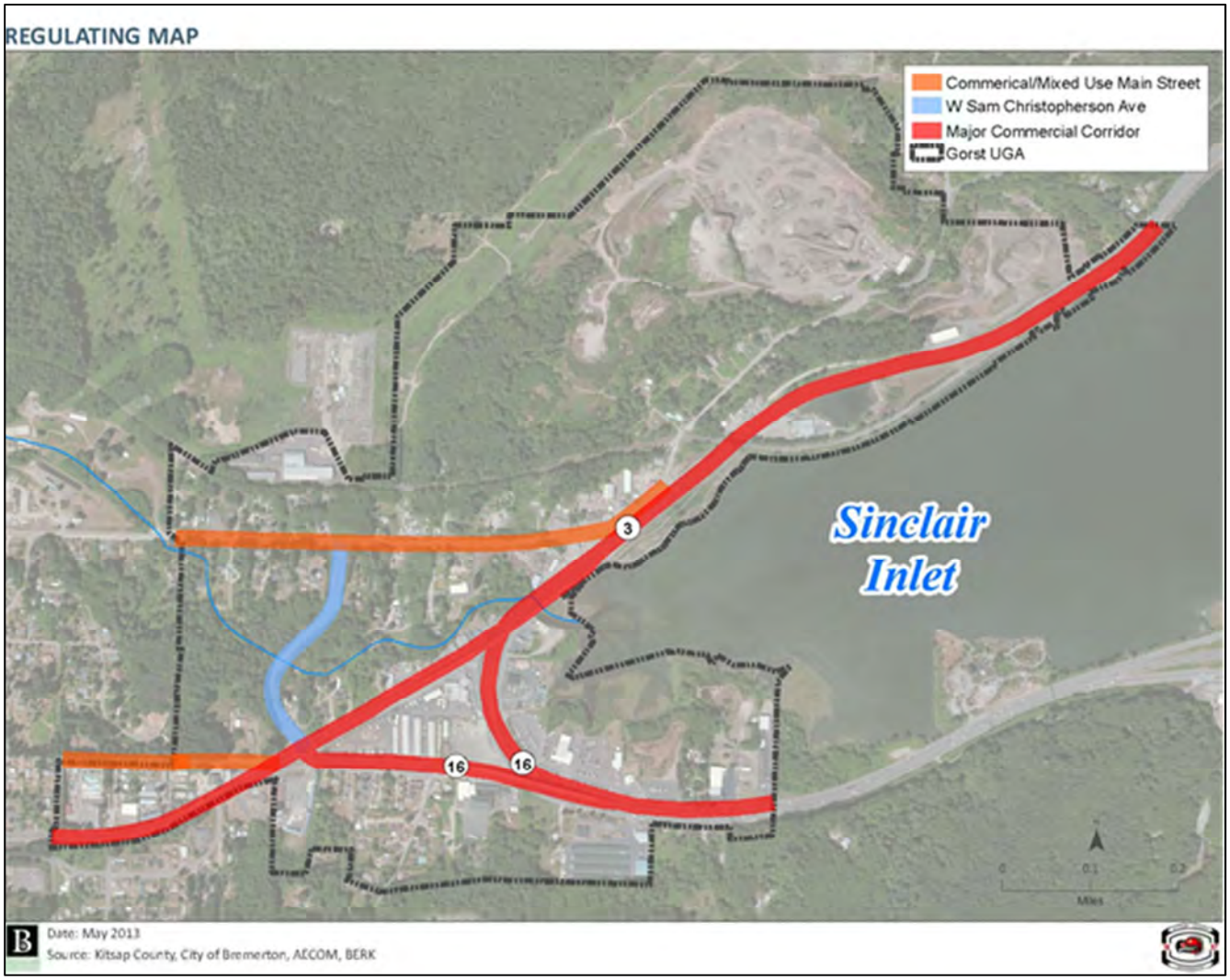
- Sections 10.100 to 10.150: Streetscape Guidelines
- Sections 10.200 to 10.20: Site Planning Guidelines

Some of the Streetscape Guidelines apply to specific street segments (e.g., West Frone Drive between State Route 3 and North Birch Avenue West). In all other cases, the guidelines apply to a general streetscape type (e.g., Neighborhood Access) or development types (e.g., Medium Density Residential). The Guidelines do not apply zoning designations to specific areas. Zoning regulations, including allowed uses and other development standards, are found in Chapters 8 and 9 of the Gorst Subarea Plan Zoning and Development Regulations.

To use these Guidelines, the following steps must be taken:

1. Locate the project site on the Gorst Subarea Plan Zoning Map (Chapter 5).
2. Identify the applicable use regulations and development standards within the Gorst Subarea Plan Zoning and Development Regulations, Chapters 8 and 9.
3. Locate the project site on the Design Guidelines Regulating Map (Figure 10-1) to determine the applicable streetscape standards.
4. Apply the Site Planning Guidelines applicable to the proposed development type.

Figure 10-1. Regulating Map



10.100 Streetscape Guidelines

Overall Intent

This section contains guidelines pertaining to the design of spaces within public street rights-of-way. These spaces include:

- The *Roadway*, which is the space inside the face of curb or edge of pavement and consists of vehicle travel and turning lanes, bicycle lanes, and parking lanes
- The *Street Frontage*, which is the space between the curb and the edge of the right-of-way and includes a curb zone, sidewalk, and transitional zone.
- The *Building Frontage*, which may include portions of a building façade where buildings abut or are adjacent to the right-of-way.
- *Intersections*, which may include crosswalks or curb bulb-outs.

Streetscape guidelines generally are intended to meet several objectives, including:

- Ensure sufficient capacity and safety for the movement of vehicles, transit, bicycles, and pedestrians
- Create an attractive and functional public realm
- Provide clear access to adjacent properties
- Reduce conflicts between pedestrians, bicycles, and vehicles
- Encourage walking and alternate modes of transportation

Guidelines for Commercial or Mixed Use Main Streets, West Sam Christopherson Road, Major Commercial Corridors, Neighborhood Access, and LID Streets are found in this section. Refer to Table 10-1 on the following page for a summary of applicable numerical standards.

Table 10-1. Streetscape Guidelines Summary

	Commercial/Mixed Use Main Street	West Sam Christopherson Road	Major Commercial Corridor	Neighborhood Access	LID Street
City Standard Detail	3006 (W Belfair: 3007)	3006 (except as noted)	3007 (varies)	3004	3004 (except as noted)
Travel Lanes	2 x 12' (W Belfair: 2 x 12' Outside 2 x 11' Inside)	2 x 12'	2 x 12' Outside 2 x 11' Inside	2 x 10'	2 x 10' or 1 x 13'
Bike Lanes	2 x 5'	2 x 5'	2 x 5' (optional)	2 x 5'	2 x 5' or 1 x 5'
Center Lane	N/A	11' Median or Turn Lane	Median or Turn Lane	N/A	N/A
On-Street Parking	2 x 8' (W Belfair: Optional)	Optional	No	1 x 8' or 2 x 8'	1 x 8' or 2 x 8'
Curb and Gutter	Yes	Yes	Varies	Yes	No
Street Frontage	11' Min.	11' Min.	11' Min.	9' Min.	9' Min.
Curb Zone	3'-6' Paved or Landscaped	6' Landscaped	6' Landscaped	4'-6' Landscaped	4'-6' with Bioretention
Sidewalk	5'-8'	5'	5'-8'	5'	5'
Transitional Zone2	2' Min.	2' Min. Optional	2' Min. Optional	2' Min. Optional	N/A
Weather Protection[1]	60% of Building Frontage	40% of Building Frontage	40% of Building Frontage	40% of Building Frontage	N/A
Fences or Walls	42" Max.	3.5'-4' Max.	42" Max.	3.5'-4' Max.	4' Max.
Curb Radius	25'	25'	Per WSDOT/City	15' Min.	15' Min.

Notes:

1. To be located between 8 and 20 feet above grade. Minimum depth of weather protection is 3 feet and may project up to 5 feet into ROW.
2. Generally, that space between the back of the sidewalk and the building façade

10.110 Commercial or Mixed Use Main Street

Intent

The Commercial or Mixed Use Main Street guidelines are to be applied to the following street segments:

- West Belfair Valley Road between SR 3 and West Sam Christopherson Avenue
- West Frone Drive between SR 3 and North Birch Avenue West
- Other street segments in areas zoned for commercial or mixed use development

The roadway should be designed to primarily serve low-speed, local traffic and to provide access to abutting parcels, but will also accommodate pass-through traffic to adjacent neighborhoods. The exception to this is West Belfair Valley Road, which will accommodate greater regional pass-through traffic in addition to supporting local mixed uses. The roadway should accommodate bicycles and transit, in addition to automobile traffic. The street frontage should include design elements that prioritize pedestrian safety and comfort, create visual interest, and support fine-grained, mixed-use development.

Roadway

The roadway of a Commercial or Mixed Use Main Street should be designed to meet one of two subtypes. For West Belfair Valley Road, the roadway should be designed to meet City of Bremerton Minor Arterial standards, as defined in City Standard Details 3001 and 3007.

The following design elements should be included, provided sufficient right-of-way width is available:

- Two 12-foot outside travel lanes
- Two 11-foot inside travel lanes
- Two 5-foot bicycle lanes
- Two 8-foot on-street parallel parking lanes (optional)
- Curb and gutter

For all other street segments noted above, the roadway should be designed to meet City of Bremerton Collector Arterial standards, as defined in City Standard Details 3001 and 3006.

The following design elements should be included, provided sufficient right-of-way width is available:

- Two 12-foot travel lanes
- Two 5-foot bicycle lanes
- Two 8-foot on-street parallel parking lanes
- Curb and gutter

Street Frontage

Intent

Design of the Street Frontage is of particular importance for Commercial or Mixed Use Main Streets as it greatly affects both the pedestrian environment and the relation of the street to adjacent building

frontages. The following Street Frontage guidelines apply to all Commercial or Mixed Use Main Street segments. The Street Frontage should have a minimum width of 11 feet, where the right-of-way allows.

The design of the Street Frontage should encourage pedestrian activity while providing for pedestrian safety and comfort, and should facilitate pedestrian access to adjacent parcels. The width of the street frontage may be constrained by a lack of available right-of-way; however, Street Frontage design should seek to maximize the available width to facilitate pedestrian activity.

Curb Zone

The curb zone should be between 3 and 6 feet wide. The curb zone should be paved where adjacent to commercial or mixed use development, except where it is occupied by street trees or planter boxes. Where the street is adjacent to a residential use, a landscaped planter strip may be provided.

The curb zone may include the following elements:

- Street trees – Trees of an appropriate species should be planted every 30 feet on-center.
- Street lights
- Planter boxes or landscaped planting strip
- Bioinfiltration planters or other LID features
- Public or other authorized signage
- Authorized temporary sandwich board signs
- Bus stops
- Bike racks
- Fire hydrants
- Trash receptacles
- Newspaper boxes

Sidewalk

Sidewalks should be a minimum of 5 feet wide, but 8 feet is preferable where adjacent land uses are commercial or mixed use. An 8-foot sidewalk allows space for two people to walk side-by-side, while allowing a third person to pass. The entire sidewalk width should be paved and unobstructed.

Transitional Zone

Where building façades abut, or are within 2 feet of the right-of-way, a Transitional Zone should be provided. This zone should have a minimum paved width of 2 feet. This 2-foot zone allows people to pause in front of building windows or doorways without obstructing pedestrian movement within the sidewalk.

The Transitional Zone may include other elements as well, including benches, planters, temporary sandwich board signs or other temporary displays, and other street furniture. A wider Transitional Zone may accommodate outdoor seating (a 6-foot minimum width is required for one row of tables). Similarly, a smaller Transitional Zone may be combined with a building forecourt or other building setback to accommodate outdoor seating, entryway plazas, or other semi-public spaces.

Building Frontage

Intent

Where buildings abut or are within 10 feet of the right-of-way, design of the Building Frontage should receive special attention. Design elements should be provided to encourage pedestrian activity and contribute to a varied and interesting streetscape.

Weather Protection

For commercial or mixed use buildings, weather protection should be provided along at least 60% of the building frontage through the use of awnings, canopies, or other architectural elements. The minimum depth for weather protection is 3 feet and should be placed between 8 and 20 vertical feet above the sidewalk. Weather protection may project into the right-of-way for a maximum of 5 feet.

Fences, Walls, and Planters

Fences, walls, or planters not exceeding 42 inches in height above the sidewalk grade are permitted.

Intersections

Intent

Intersections should be designed to ensure the safety and comfort of pedestrians while accommodating expected vehicular traffic.

Curb Radius

The minimum required curb radius is 25 feet.

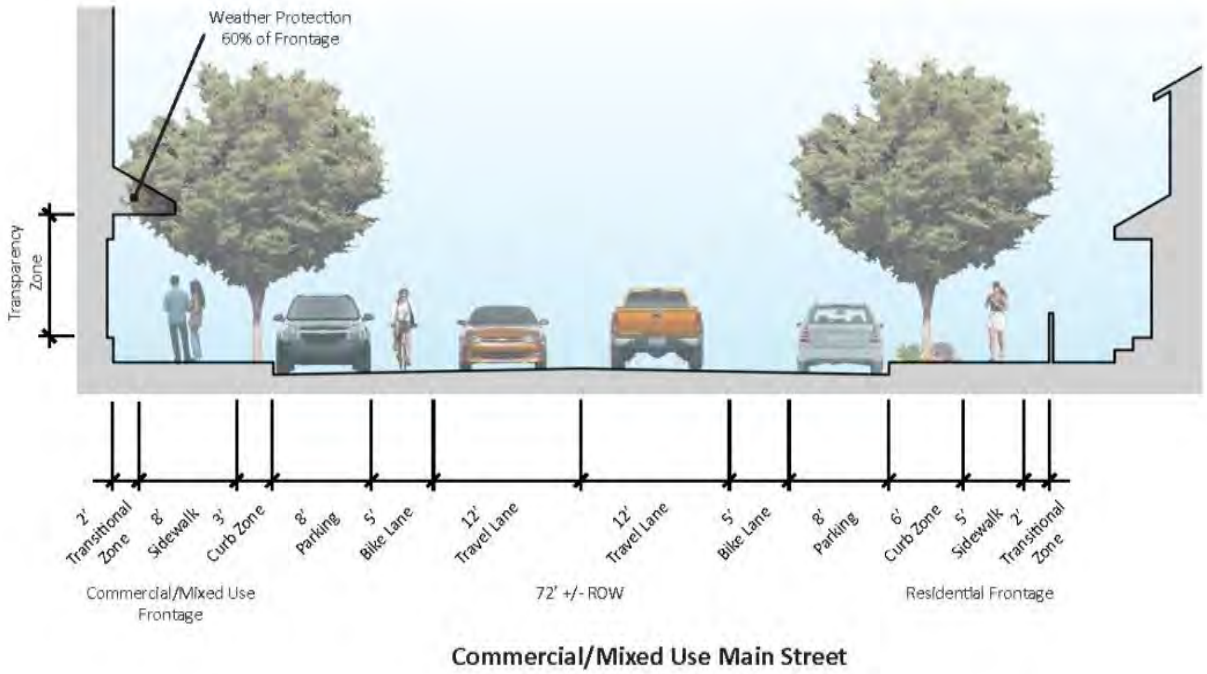
Curb Bulb-outs

Curb bulb-outs are encouraged at intersections to reduce the crossing distance for pedestrians.

Crosswalks

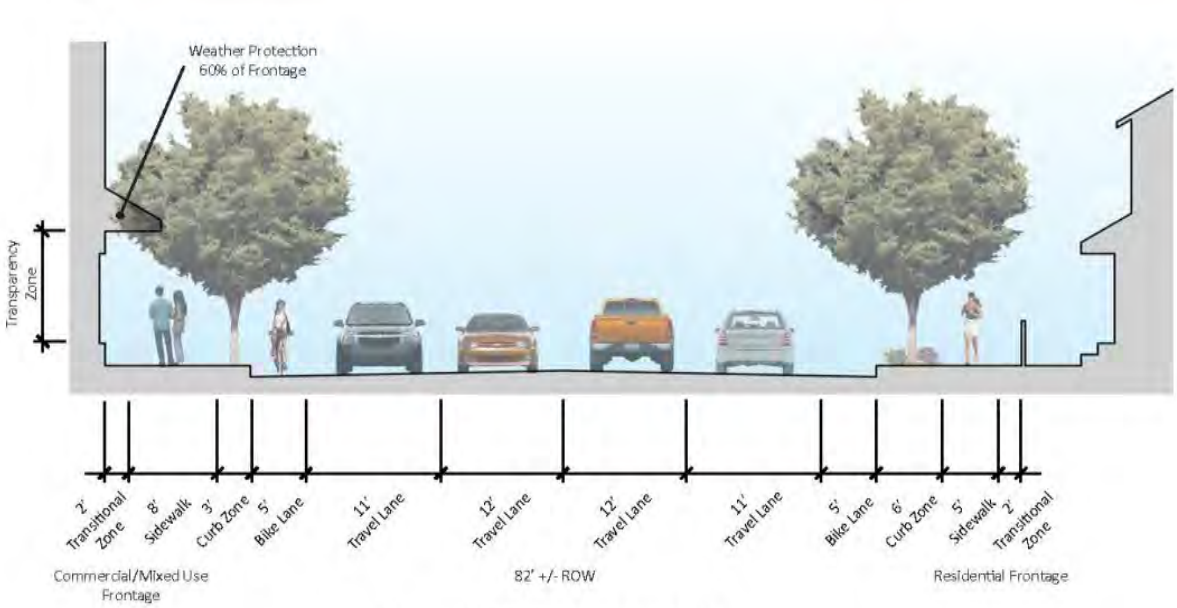
A variety of treatments should be considered to define crosswalks, including striping, signage, stamped or colored concrete, or raised crosswalks where traffic calming is warranted.

Figure 10-2. Commercial Mixed Use Street Section



Commercial/Mixed Use Main Street

Figure 10-3. Commercial Mixed Use Belfair Street Section



Commerical/Mixed Use Main Street
- West Belfair Valley Road

10.120 West Sam Christopherson Avenue

Intent

West Sam Christopherson Avenue provides a connection between SR 3 and West Belfair Valley Road in addition to providing access to adjacent parcels. As such the roadway should be designed to provide a balance between pass-through and local traffic, while also accommodating bicycles and transit. The road will serve primarily low density residential development, with some limited mixed use and commercial development. The street frontage should include design elements that prioritize pedestrian safety and comfort.

Roadway

The roadway of West Christopherson Avenue should be designed to meet City of Bremerton Collector Arterial standards, as defined in City Standard Details 3001 and 3006, except that a center median or turn lanes should be provided. The following design elements should be included, provided sufficient right-of-way width is available:

- Two 12-foot travel lanes
- Two 5-foot bicycle lanes
- Two 8-foot on-street parallel parking lanes (optional)
- 11-foot planted median or left turn lane
- Curb and gutter

Street Frontage

Intent

The Street Frontage should have a minimum width of 11 feet, where the right-of-way allows.

The design of the Street Frontage should encourage pedestrian activity while providing for pedestrian safety and comfort.

Curb Zone

The curb zone should be a minimum of 6 feet wide and should provide a landscaped planter strip or bioinfiltration swales or cells. A paved curb zone may be provided where adjacent to commercial or mixed use development.

Sidewalks should be a minimum of 5 feet wide. The entire sidewalk width should be paved and unobstructed.

Transitional Zone

A Transitional Zone is not required where adjacent to residential uses. Where adjacent to commercial or mixed use development, a transitional zone may be provided, such as that described for a Commercial or Mixed Use Main Street.

Building Frontage

Intent

Where buildings abut or are within 10 feet of the right-of-way, design of the Building Frontage should receive special attention. Design elements should be provided to encourage pedestrian activity and contribute to a varied and interesting streetscape.

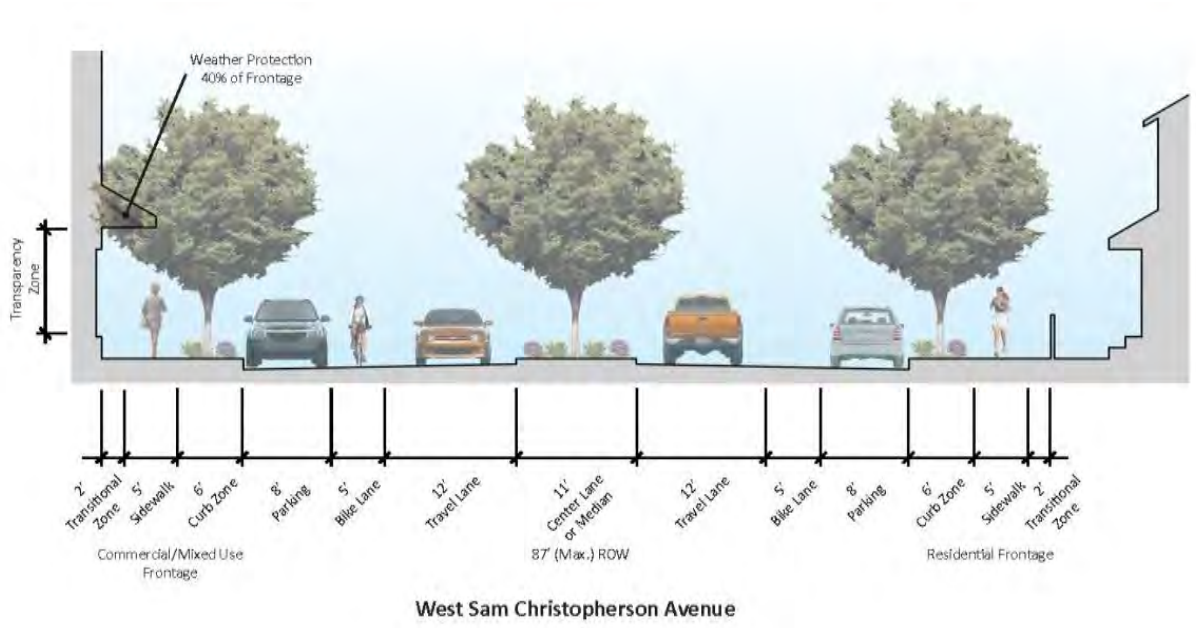
Weather Protection

For commercial or mixed use buildings, weather protection should be provided along at least 40% of the building frontage through the use of awnings, canopies, or other architectural elements. The minimum depth for weather protection is 3 feet and should be placed between 8 and 20 vertical feet above the sidewalk. Weather protection may project into the right-of-way for a maximum of 5 feet.

Fences, Walls, and Planters

Fences, walls, or planters not exceeding 42 inches in height above the sidewalk grade are permitted for commercial or mixed use development. Fences not exceeding 4 feet are permitted for residential uses.

Figure 10-4. Sam Christopherson Street Section



10.130 Major Commercial Corridor

Intent

The Major Commercial Corridor guidelines apply to the at-grade portions of SR 3 and SR 16 within the Gorst UGA.

SR 3 and SR 16 are major State Highways carrying heavy vehicular traffic. The intent of these guidelines is to mitigate the negative impacts of such traffic on the pedestrian environment and to promote a more coordinated and attractive character of development along these corridors.

Roadway

Design of the vehicle roadway will vary based on applicable WSDOT and City of Bremerton standards, typically being 4 to 6 lanes wide with a median or center turn lane. The City of Bremerton standard for a Principal Arterial, as defined in City Standard Details 3001 and 3007, provides an example of a typical section.

Typical roadway elements may include:

- Two 12-foot outside travel lanes
- Two 11-foot inside travel lanes
- Two High Occupancy Vehicle (HOV) lanes
- Center median or left turn lane
- Two 5-foot bicycle lanes (optional)
- Curb and gutter or shoulder

Street Frontage

Intent

The Street Frontage should prioritize pedestrian safety and comfort while maintaining vehicular access to adjacent properties. The Street Frontage should have a minimum width of 11 feet, where the right-of-way allows.

Curb Zone

The curb zone should be a minimum of 6 feet wide. The curb zone may be occupied by a landscaped planter strip, or planter boxes.

Elements included in the curb zone may include those elements noted for a Commercial or Mixed Use Main Street.

Sidewalk

Sidewalks should be a minimum of 5 to 8 feet wide. The entire sidewalk width should be paved and unobstructed.

Transitional Zone

A Transitional Zone is not required but may be provided, such as that described for a Commercial or Mixed Use Main Street, where buildings are placed within 5 feet of the right-of-way edge.

Building Frontage

Intent

Where buildings abut or are within 10 feet of the right-of-way, design of the Building Frontage should receive special attention. Design elements should be provided to encourage pedestrian activity and contribute to a varied and interesting streetscape.

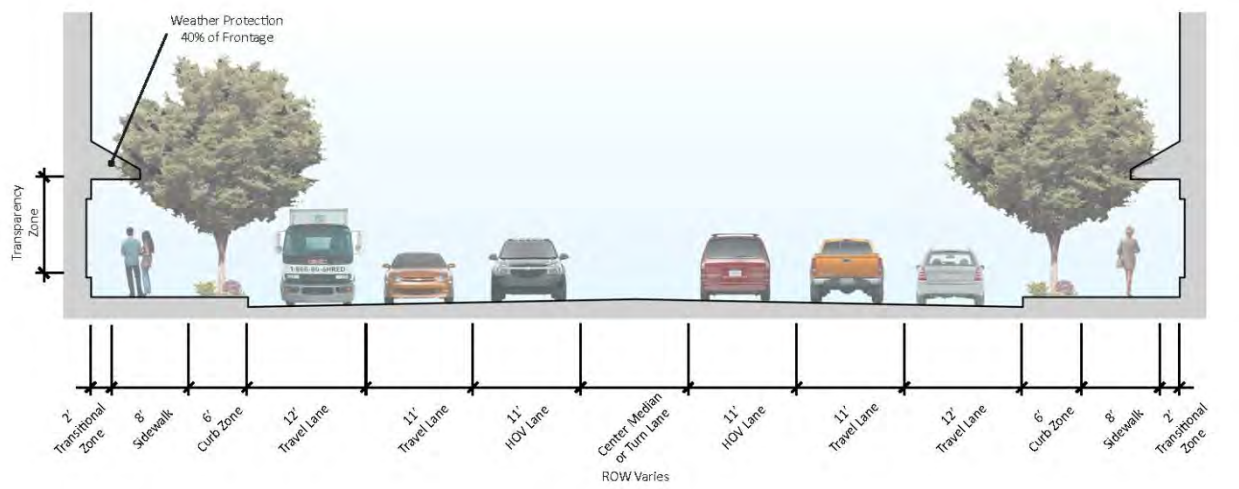
Weather Protection

For commercial or mixed use buildings, weather protection should be provided along at least 40% of the building frontage through the use of awnings, canopies, or other architectural elements. The minimum depth for weather protection is 3 feet and should be placed between 8 and 20 vertical feet above the sidewalk. Weather protection may project into the right-of-way for a maximum of 5 feet.

Fences, Walls, and Planters

Fences, walls, or planters not exceeding 42 inches in height above the sidewalk grade are permitted.

Figure 10-5. Commercial Corridor Street Section



Major Commercial Corridor
Typical Section

10.140 Neighborhood Access

Intent

Neighborhood Access streets are intended to provide local access to low and medium density residential neighborhoods or limited neighborhood commercial or mixed use development where such development is located on a primarily residential block or street.

The roadway should be designed to primarily serve low-speed, local traffic and to provide access to abutting parcels. Pass-through traffic should be discouraged. The roadway should accommodate bicycles and transit, in addition to automobile traffic. The street frontage should include design elements that prioritize pedestrian safety and comfort, create visual interest, and promote a residential neighborhood feel.

Roadway

Neighborhood Access streets should be designed to meet City of Bremerton Local Access Two Way standards, as defined in City Standard Details 3001 and 3004.

The following design elements should be included, provided sufficient right-of-way width is available:

- Two 10-foot travel lanes
- Two 5-foot bicycle lanes
- One or two 8-foot parking lanes
- Curb and gutter

Street Frontage

Intent

The Street Frontage should prioritize pedestrian safety and comfort while promoting a residential neighborhood feel. The Street Frontage should have a minimum width of 9 feet, where the right-of-way allows.

Curb Zone

The curb zone should be between 4 and 6 feet wide. The curb zone should be landscaped with either a landscaped planter strip or with planter boxes. Where adjacent to commercial or mixed use development, a paved curb zone may be used.

Elements included in the curb zone should largely be limited to street trees, street lights, fire hydrants, LID features, and other elements required or compatible with a residential neighborhood. However, the additional elements noted for a Commercial or Mixed Use Main Street may be included where adjacent to a commercial or mixed use development.

Sidewalk

Sidewalks should be a minimum of 5 feet wide. The entire sidewalk width should be paved and unobstructed.

Transitional Zone

A Transitional Zone is not required where adjacent to residential uses. Where adjacent to commercial or mixed use development, a transitional zone may be provided, such as that described for a Commercial or Mixed Use Main Street.

Building Frontage

Intent

Where buildings abut or are within 10 feet of the right-of-way, design of the Building Frontage should receive special attention. Design elements should be provided to encourage pedestrian activity and contribute to a varied and interesting streetscape.

Weather Protection

For commercial or mixed use buildings, weather protection should be provided along at least 40% of the building frontage through the use of awnings, canopies, or other architectural elements. The minimum depth for weather protection is 3 feet and should be placed between 8 and 20 vertical feet above the sidewalk. Weather protection may project into the right-of-way for a maximum of 5 feet.

Fences, Walls, and Planters

Fences, walls, or planters not exceeding 42 inches in height above the sidewalk grade are permitted for commercial or mixed use development. Fences not exceeding 4 feet are permitted for residential uses.

Intersections

Intent

Higher traffic volume intersections should be designed to ensure the safety and comfort of pedestrians while accommodating expected vehicular traffic. Such intersections include where adjacent block faces serve commercial, mixed use, or medium density residential development. Where adjacent block faces serve primarily low density residential, curb bulb-outs and crosswalk treatments are of lesser priority.

Curb Radius

The minimum required curb radius is 15 feet.

Curb Bulb-outs

Curb bulb-outs are encouraged at intersections to reduce the crossing distance for pedestrians.

Crosswalks

A variety of treatments should be considered to define crosswalks, including striping, signage, stamped or colored concrete, or raised crosswalks where traffic calming is warranted.

Figure 10-6. Neighborhood Access Street Section

Neighborhood Access

10.150 LID Street

Intent

The LID Street guidelines are intended to for local access streets in low density, large lot, or clustered residential areas.

The roadway should be designed to primarily serve low-speed, local traffic and to provide access to abutting parcels. The street will have a more rural feel and is intended to minimize impervious area and associated stormwater impacts.

Roadway

LID Streets should be based on City of Bremerton Local Access Two Way or One Way standards, as defined in City Standard Details 3001 and 3004.

The following design elements should be included, provided sufficient right-of-way width is available:

- Two 10-foot travel lanes or one 13 foot travel lanes
- One or two 5-foot bicycle lanes
- One or two 8-foot parking lanes
- Curbless

Street Frontage

Intent

The Street Frontage should prioritize LID stormwater management while maintaining pedestrian safety and comfort. The Street Frontage should have a minimum width of 9 feet, where the right-of-way allows.

Planter Strip

The street edge should be curbless to direct runoff to a roadside planter strip. The planter strip should be between 4 and 6 feet wide and should contain bioretention facilities including swales or bioretention cells (rain gardens).

Sidewalk

Sidewalks should be a minimum unobstructed width of 5 feet wide. The sidewalk may be paved using conventional concrete or pervious concrete or asphalt. If conventional asphalt is used, the sidewalk should direct runoff to the roadside bioretention facility.

Building Frontage

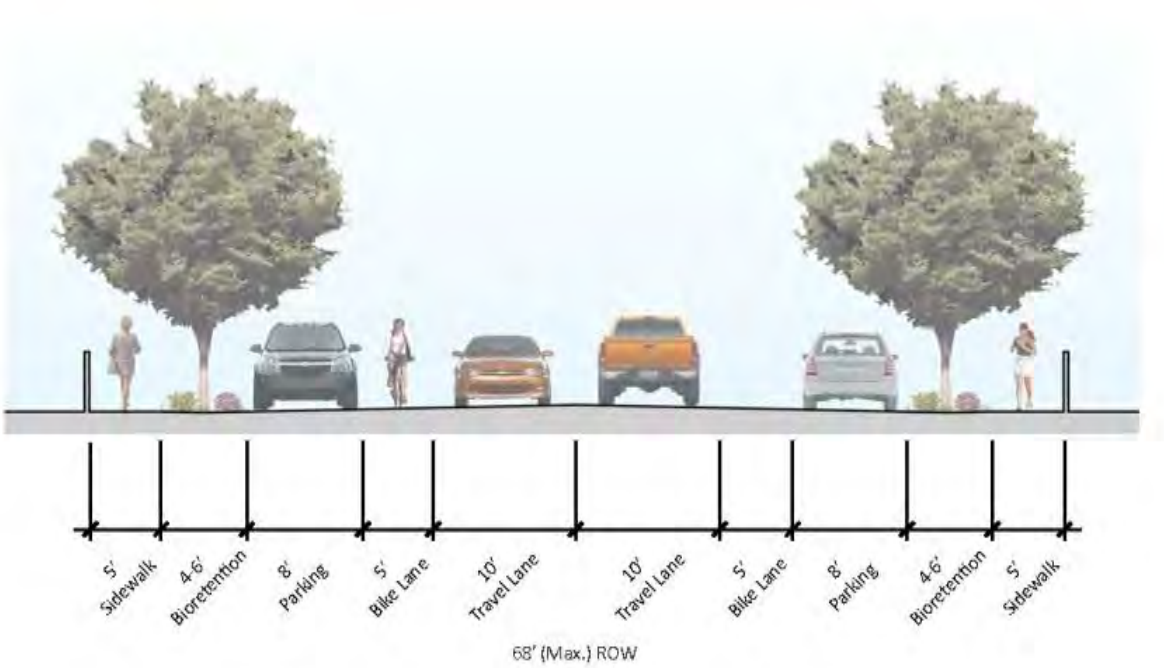
Intent

The LID street section is intended for low density or large lot residential neighborhoods and building frontages should be compatible with these areas.

Fences, Walls, and Planters

Street facing fences, walls, or planters not exceeding 4 feet are permitted for residential uses.

Figure 10-7. LID Street Section



LID Street

10.200 Site Planning Guidelines

Overall Intent

The site planning guidelines are intended to ensure that new development or significant redevelopment within the Gorst Subarea supports the Guiding Principles.

To do this, development should:

- Contribute to an identifiable sense of place
- Define and enhance the public realm for residents, businesses, and visitors
- Create a safe, functional, and interesting pedestrian environment
- Facilitate the use of alternate modes of transportation, including walking, bicycling, and transit
- Incorporate Low Impact Development (LID) and other sustainable design principles

The guidelines apply to site design at a high level with special attention paid to those portions of the site adjacent to the street frontage. The guidelines are not intended to specify architectural style; however, certain building elements warrant guidance to ensure that buildings meet the above goals.

Guidelines are provided for Mixed Use, Commercial, Medium Density Residential, and Low Density Residential development. Refer to Table 10-2 for a summary of applicable numerical standards.

Table 10-2. Site Planning Guidelines Summary

	Mixed Use	Commercial	Medium Density Residential	Low Density Residential
Building Frontage	80% within Min/Max Setback	65% within Min/Max Setback	60% within Min/Max Setback	N/A
Transparency[1]				
Commercial	60%	50%	N/A	N/A
Multifamily	50%	N/A	50%	N/A
Single Family	15%	N/A	N/A	N/A
Garages	50% of Façade or 12' Max.	N/A	50% of Façade or 12' Max.	N/A
Articulation	20' Max.	30' Max.	30' Max.	N/A
Blank Walls	20' Max.	30' Max.	30' Max.	N/A
Parking	50% of Frontage Max.	50% of Frontage Max.	50% of Frontage or 14' Max.	N/A

Notes:

1. Transparency zone is between 2 and 10 feet above grade.

10.210 Mixed Use

Intent

Mixed Use development is intended to create a moderately dense pattern of development with a variety of land uses within a walkable area. Mixed Use may be either vertical or horizontal. Vertical Mixed Use is where two or more uses are located within one building. One example is medium density residential units above ground floor retail. Horizontal Mixed Use is where two or more land uses are located adjacent to one another in separate buildings but within a compact, walkable district.

Mixed Use development in Gorst should achieve several key design principles, which include:

- Creating a compact pattern of development with multiple land uses that is generally more dense than neighboring, single use areas
- Locating multiple land uses within a walkable radius
- Supporting alternate modes of transportation

Mixed use development in Gorst is most likely to occur in the Low Intensity Mixed Use, Gorst Mixed Use, and Neighborhood Mixed Use zones.

Building Orientation

Intent

Buildings within a Mixed Use area should be oriented toward the public right-of-way to define and strengthen the public realm. Building setbacks should be used to define the street wall. Building entrances should be oriented toward the street to facilitate pedestrian accessibility.

Building Frontage

No less than 80% of the building frontage should be located within the minimum/maximum setback allowable in the zone. It is preferable to place the building frontage as close to the public right-of-way as is allowable to create an identifiable street wall. The use of greater setbacks to create pedestrian-oriented plazas is a desirable exception.

Building Entrances

Primary building entrances should be oriented toward the public right-of-way, not toward off-street parking. Secondary entrances may be provided that are oriented toward off-street parking. Architectural elements should be used to clearly identify the primary entrance. Such elements include building articulation or projections, roof modulation, material or color changes, overhangs, or signage. The primary entrance should be connected to the public sidewalk by a clearly identifiable, unobstructed, all-weather pathway.

Residential Entrances

Where residential uses occupy the ground floor, entrances should be elevated a minimum of 24 inches above grade at the right-of-way to ensure privacy.

Building Façade

Intent

Building façades within a Mixed Use area should use design elements that help create a safe, functional, and interesting pedestrian environment.

Garages

For single family and attached residential units, garages or carports should not occupy more than 50% of a street facing façade or 12 feet, whichever is greater. Garages or carports should be even with or set back from the primary entrance. The garage should not be the defining architectural feature of the façade but should instead give prominence to the primary entrance.

Ground Floor Transparency

The ground floors of buildings within a Mixed Use area should incorporate windows oriented to the public right-of-way. Windows create a welcoming and interesting feel for pedestrians. Windows also provide "eyes on the street" that help to discourage crime. For retail uses, storefront glazing can be used to display merchandise or give views to uses within the building and draw customers in.

For ground floor retail, glazing should occupy 60% of the street facing building façade between 2 and 10 feet above the grade of the right-of-way. Curtain windows should be avoided. Use muntins, transom windows, and other architectural elements to add interest.

For multifamily residential uses on the ground floor, windows should occupy 50% of the street facing building façade. For single-family residential, windows should occupy 15% of the street facing building façade.

Example of a pedestrian friendly building frontage.

Building Articulation

Unbroken wall planes of greater than 20 feet along the street facing building frontage should be avoided. Use articulation of the wall plane, changes in color or material, roof modulation, or other architectural elements to add visual interest to larger building frontages.

Blank Walls

Blank walls greater than 20 feet along the street facing building frontage should be avoided. Use building articulation elements noted above, or additional treatments such as windows, planters or other landscaping, trellises, weather protection, or other architectural elements to add visual interest.

Parking and Vehicular Access

Intent

Buildings within a Mixed Use area should be primarily oriented to the public right-of-way and conducive to pedestrian activity. Off-street parking areas, driveways, and curb cuts should be designed to be minimally disruptive of the pedestrian environment while efficiently serving the need for vehicular access.

Location of Parking

Wherever practicable, parking should be located to the side or rear of a building. Parking located between a building and the street should only be allowed in unavoidable circumstances. No more than 50% of the street frontage of any site may be occupied by parking or driveways.

Curb Cuts

Curb cuts should be minimized to ensure continuity of sidewalks and minimize conflicts between pedestrians and vehicles. Limiting curb cuts also improves traffic flow and traffic safety. Alley access or service drive access to a site should be used where such access exists or can reasonably be provided to avoid curb cuts on the primary street. On corner lots it is preferable to locate the curb cut on the secondary street frontage. Curb cuts should be designed to be no wider than is warranted to ensure safe ingress/egress for the expected traffic. Minimizing curb cut width shortens pedestrian crossing distance and reduces pedestrian/vehicle conflicts.

Shared Driveways

Driveways should be shared between two or more building site wherever practicable, as a means of limiting curb cuts. Driveways should be located along side lot lines where future development of the adjacent lot may be reasonably expected to occur and an access easement provided to allow for future shared use.

Shared Parking

Parking should be shared between two or more building site wherever practicable. This may take the form of a single parking area that is shared by multiple users or separate parking areas that are connected and accessed via a shared driveway. Provision should be made to allow for future shared parking with an adjacent lot where future development of the adjacent lot may be reasonably expected to occur. Provisions may include stubbing a drive aisle to the adjacent lot line and providing an access easement.

In the cases above, parking areas and access are shared, but each use requires a minimum number of parking spaces. Parking may also be shared through reciprocal use agreements between uses in such a way as to reduce the total number of spaces required. For example, a use requiring primarily daytime parking, such as office or some retail, may share parking spaces with another use that requires primarily evening and nighttime parking, such as residential or a restaurant. It is the responsibility of the project

proponent to provide parking generation data to justify the parking requirement reduction and to establish a reciprocal use agreement.

Pedestrian Accessibility

Parking areas and driveways should be designed to provide pedestrian accessibility through the parking area to the building. Separated pedestrian ways, striping, signage, traffic calming, and other measures should be used to create clearly identifiable and safe routes for pedestrians from parking areas to building entrances. Where parking is located between the street and a building, there must be a clear and direct route from the public sidewalk, through the parking area, to the primary building entrance.

10.220 Commercial

Intent

The commercial design guidelines apply to highway oriented and stand-alone commercial uses, which include auto sales and service and office uses, as well as small scale light industrial uses. These uses currently characterize much of the non-residential development in the Gorst Subarea. The intent of the guidelines is to ensure that commercial development contributes to an attractive and inviting streetscape and minimizes conflicts between pedestrians and vehicles. The guidelines recognize the importance of maintaining vehicle accessibility but seek to mitigate some of the negative impacts of automobile-oriented development on the pedestrian environment.

Building Orientation

Intent

Commercial buildings should be oriented toward the public right-of-way to define and strengthen the public realm and avoid the uncoordinated and confusing pattern of development that often occurs with auto-oriented uses. Building entrances should be oriented toward the street to facilitate pedestrian accessibility.

Building Frontage

No less than 65% of the building frontage should be located within the minimum/maximum setback allowable in the zone.

Building Entrances

Primary building entrances should be oriented toward the public right-of-way, not toward off-street parking. Secondary entrances may be provided that are oriented toward off-street parking. Architectural elements should be used to clearly identify the primary entrance. Such elements include building articulation or projections, roof modulation, material or color changes, overhangs, or signage. The primary entrance should be connected to the public sidewalk by a clearly identifiable, unobstructed, all-weather pathway.

Building Façade

Intent

Commercial building façades should use design elements that help create a safe, functional, and interesting pedestrian environment.

Ground Floor Transparency

For ground floor retail, glazing should occupy 50% of the street facing building frontage between 2 and 10 feet above the grade of the right-of-way. Curtain windows should be avoided. Use muntins, transom windows, and other architectural elements to add interest.

Building Articulation

Unbroken wall planes of greater than 30 feet along the street facing building frontage should be avoided. Use articulation of the wall plane, changes in color or material, roof modulation, or other architectural elements to add visual interest to larger building frontages.

Blank Walls

Blank walls greater than 30 feet along the street facing building frontage should be avoided. Use building articulation elements noted above, or additional treatments such as windows, planters or other landscaping, trellises, weather protection, or other architectural elements to add visual interest.

Example of a commercial building.

Parking and Vehicular Access

Intent

Commercial buildings should be primarily oriented to the public right-of-way and conducive to pedestrian activity. Off-street parking areas, driveways, and curb cuts should be designed to be minimally disruptive of the pedestrian environment while efficiently serving the need for vehicular access.

Location of Parking

Wherever practicable, parking should be located to the side or rear of a building. Parking located between a building and the street should only be allowed in unavoidable circumstances. No more than 50% of the street frontage of any site may be occupied by parking or driveways.

Curb Cuts

Curb cuts should be minimized to ensure continuity of sidewalks and minimize conflicts between pedestrians and vehicles. Alley access or service drive access to a site should be used where such access exists or can reasonably be provided to avoid curb cuts on the primary street. On corner lots it is preferable to locate the curb cut on the secondary street frontage. Curb cuts should be designed to be no wider than is warranted to ensure safe ingress/egress for the expected traffic.

Shared Driveways

Driveways should be shared between two or more building site wherever practicable, as a means of limiting curb cuts. Driveways should be located along side lot lines where future development of the adjacent lot may be reasonably expected to occur and an access easement provided to allow for future shared use.

Shared Parking

Parking should be shared between two or more building site wherever practicable. This may take the form of a single parking area that is shared by multiple users or separate parking areas that are connected and accessed via a shared driveway. Provision should be made to allow for future shared parking with an adjacent lot where future development of the adjacent lot may be reasonably expected to occur. Provisions may include stubbing a drive aisle to the adjacent lot line and providing an access easement.

Parking may also be shared through reciprocal use agreements between uses in such a way as to reduce the total number of spaces required. It is the responsibility of the project proponent to provide parking generation data to justify the parking requirement reduction and to establish a reciprocal use agreement.

Pedestrian Accessibility

Parking areas and driveways should be designed to provide pedestrian accessibility through the parking area to the building. Separated pedestrian ways, striping, signage, traffic calming, and other measures should be used to create clearly identifiable and safe routes for pedestrians from parking areas to building entrances. Where parking is located between the street and a building, there must be a clear and direct route from the public sidewalk, through the parking area, to the primary building entrance.

10.230 Medium Density Residential

Intent

The medium density residential guidelines are intended to promote a variety of housing types at moderate densities that will achieve several design objectives, including:

- Creating a pedestrian friendly streetscape
- Ensuring privacy for residents
- Ensuring "eyes on the street" for safety

Building Orientation

Intent

Medium density residential buildings should be oriented toward the public right-of-way in most cases to define and strengthen the public realm. Building entrances should be oriented toward the street to facilitate pedestrian accessibility. Exceptions would include cottage housing, where homes are oriented around a common central open space, or garden apartments, where individual unit entrances are oriented to a central courtyard. In these cases, the overall development should still bear a clear relationship to the public realm such as by making the central area visible from the public right-of-way and providing a clear and direct pedestrian connection from the central area to the public sidewalk.

Building Frontage

The use of smaller front yard setbacks is encouraged to help define the public realm. This is particularly important for townhouse developments, since the connected façades contribute to the feeling of a defined street wall. No less than 60% of the building frontage should be located within the minimum/maximum setback allowable in the zone.

Building Entrances

Primary building entrances should be oriented toward the public right-of-way, not toward off-street parking. Some housing types, such as cottage housing or garden apartments, may not lend themselves to this type of design. In these cases, the design should still relate to the public right-of-way by providing clear pedestrian connections from the public sidewalk to common areas and internal pathways. Provide architectural elements such as fenestration and building articulation on the street facing façade.

In all cases, architectural elements should be used to clearly identify the primary entrance. Such elements include building articulation or projections, roof modulation, material or color changes, or overhangs. The primary entrance should be connected to the public sidewalk by a clearly identifiable, unobstructed, all-weather pathway.

Residential Entrances

Where primary unit entrances face the public right-of-way, entrances should be elevated a minimum of 24 inches above grade at the right-of-way to ensure privacy.

Example of Townhomes.

Building Façade

Intent

Medium density residential building façades should use design elements that help create a safe, functional, and interesting pedestrian environment. Garages or carports should not dominate street-facing façades.

Garages

Garages or carports should not occupy more than 50% of a street facing façade or 12 feet, whichever is greater. Garages or carports should be even with or set back from the primary entrance. The garage should not be the defining architectural feature of the façade but should instead give prominence to the primary entrance.

Ground Floor Transparency

The ground floors of medium density residential buildings should incorporate windows oriented to the public right-of-way. Windows should occupy 50% of the street facing ground floor building façade. Considerations should be given to privacy in the placement of windows.

Building Articulation

Unbroken wall planes of greater than 30 feet along the street facing building frontage should be avoided. Use articulation of the wall plane, changes in color or material, roof modulation, or other architectural elements to add visual interest to larger building frontages.

Blank Walls

Blank walls greater than 30 feet along the street facing building frontage should be avoided. Use building articulation elements noted above, or additional treatments such as windows, planters or other landscaping, trellises, weather protection, or other architectural elements to add visual interest.

Parking and Vehicular Access

Intent

Medium density residential buildings should be primarily oriented to the public right-of-way and conducive to pedestrian activity. Off-street parking areas, driveways, and curb cuts should be designed

to be minimally disruptive of the pedestrian environment while efficiently serving the need for vehicular access.

Location of Parking

Wherever practicable, parking should be located to the side or rear of a building. Parking located between a building and the street should only be allowed in unavoidable circumstances. No more than 50% of the street frontage or 14 feet, whichever is greater, may be occupied by parking or driveways.

Curb Cuts

Curb cuts should be minimized to ensure continuity of sidewalks and minimize conflicts between pedestrians and vehicles. Alley access is encouraged where such access can reasonably be provided.

Shared Driveways

Driveways should be shared between two or more building sites or between two or more units in the case of townhouse, duplex, or triplex housing types as a means of limiting curb cuts. Driveways should be located along side lot lines where future development of the adjacent lot may be reasonably expected to occur and an access easement provided to allow for future shared use.

Shared Parking

Parking should be shared between two or more building site wherever practicable and accessed via a shared driveway. Provision should be made to allow for future shared parking with an adjacent lot where future development of the adjacent lot may be reasonably expected to occur. Provisions may include stubbing a drive aisle to the adjacent lot line and providing an access easement.

Parking may also be shared through reciprocal use agreements between uses in such a way as to reduce the total number of spaces required. It is the responsibility of the project proponent to provide parking generation data to justify the parking requirement reduction and to create a reciprocal use agreement.

Pedestrian Accessibility

Parking areas and driveways should be designed to provide pedestrian accessibility through the parking area to the building. Separated pedestrian ways, striping, signage, traffic calming, and other measures should be used to create clearly identifiable and safe routes for pedestrians from parking areas to building entrances. Where parking is located between the street and a building, there must be a clear and direct route from the public sidewalk, through the parking area, to the primary building entrance.

10.240 Low Density Residential

Intent

Low density residential development in the Gorst subarea will primarily consist of single family detached homes, although some attached homes (e.g., townhomes[3] or duplexes) or accessory dwelling units may be appropriate within low density areas.

The low density residential guidelines are intended to:

- Ensure that new development contributes to an attractive streetscape
- Promotes the creation of walkable neighborhoods
- Ensure "eyes on the street" for safety

Building Orientation

Intent

Homes should be oriented toward the public right-of-way to define and strengthen the public realm. Front doors should be oriented toward the street to facilitate pedestrian accessibility.

Building Frontage

The use of smaller front yard setbacks is encouraged to help define the public realm.

Building Entrances

Front doors should be oriented toward the public right-of-way. Architectural elements should be used to clearly identify the primary entrance. Such elements include building articulation or projections, roof modulation, material or color changes, or overhangs. The primary entrance should be connected to the public sidewalk by a clearly identifiable, unobstructed, all-weather pathway.

[3] In Kitsap County Code considered under definition of single family attached.

Example of a single family home.

Building Façade

Intent

The façades of single family homes should use design elements that help create a safe, functional, and interesting pedestrian environment. Garages or carports should not dominate street-facing façades but should instead give prominence to the front door. The ground floors of single family homes should incorporate windows oriented to the public right-of-way.

Low Impact Development

Intent

Low density residential development is encouraged to incorporate LID design features that go above and beyond the LID requirements of the Gorst Subarea Development Regulations.

Such features may include:

- Rain barrels
- Downspout disconnection and dispersion
- Rain gardens
- Green roofs
- Native landscaping or xeriscaping instead of grass lawn
- Native tree and vegetation retention on 65% of lot area
- Pervious materials for walkways and driveways
- Pin foundations

Example of a rain garden in a single family yard.

11. CAPITAL FACILITIES PLAN

Purpose

Capital facilities such as roads, stormwater, water, sewer and others will be needed to support the land use plan for the Gorst UGA to mitigate the impacts of development and to achieve and maintain adopted standards for levels of service.

Both the City and County have adopted capital facilities plans (CFPs) in association with their current Comprehensive Land Use Plan, and this chapter supplements those plans.

Transportation

Roadways

The following improvements to State and County Roadways are assumed to occur by 2035 in the County transportation model and would affect the Gorst UGA:

- SR 3 and SR 304 interchange assume an additional lane is in place on SR 3. WSDOT is currently studying this interchange to finalize the improvements needed.
- SKIA Connector from Lake Flora Road to SR 3 – New 2 lane roadway

The assumed transportation improvements needed to meet the adopted Kitsap County roadway segment level of service (LOS) as shown in Kitsap County's Capital Facility Plan in the Gorst vicinity include:

- Belfair Valley Rd (W), Mason County Line - Bremerton City Limits Widen to undivided 4 lanes: 2019-2025
- Belfair Valley Rd (W), Bremerton City Limits - Sam Christopherson Ave W, Widen to undivided 4 lanes

These improvements are expected to occur outside of the six year 2013-2018 capital improvement program, but were developed as mitigation measures for the Kitsap County Comprehensive Plan amendments in 2012.

In addition to these projects, the County's CFP also notes the following non-capacity project on Sam Christopherson Road: Sam Christopherson Ave. Arch Bridge #17: Implement bridge scour counter measures to protect bridge footings.

The Washington Department of Transportation Bremerton Economic Development Study has developed a number of transportation improvement projects along SR 3 and SR 16 within the Gorst area. While these projects were not included in the County Transportation model many of them are or will be included in the PSRC Transportation 2040 plan and amendments. Following is a summary of these projects:

- SR 3 from Belfair to Gorst: Widen to four lanes with inside and outside shoulders. Widening will also include improved intersections and access management.

- SR 16/SR 3 from Sedgwick Road Interchange to Loxie Eagans Boulevard Interchange: Widen to provide a six lane, divided, limited access highway with HOV lanes. Improved access management will be included throughout this segment.
- Sam Christopherson Avenue/SR 3: Construct a four lane bridge with shoulders over Sam Christopherson Avenue .
- As part of the improvements for the SR 16/SR 3 intersection area, the Bremerton Economic Development Study recommends improvements, including potentially a roundabout to eliminate the existing merging, weaving, and access issues.

While WSDOT has long range plans to address capacity on SR 3, the amount of widening of this roadway will be limited by the presence of Sinclair Inlet on the east side of the roadway, a steep hillside on the west side of the roadway and a railway crossing with abutments that limit widening.

Nonmotorized Travel

Within the Gorst UGA, there are few areas with formal sidewalks or protected paths since the area was originally developed with rural road standards. As noted in Chapters 4 and 6, some urban design goals for Gorst include enhancing non-motorized travel, improving shoreline access, and promoting walkability and complete streets.

The Mosquito Fleet Trail Master Plan defines in greater detail a project that is both part of the Kitsap County Open Space Plan and the Kitsap County Bicycle Facilities Plan. The basic concept is that of a trail corridor for use by bicyclists and pedestrians that skirts the eastern shoreline of Kitsap County and Bainbridge Island, connecting historic Mosquito Fleet docks along the way. Within Gorst, the opportunity for a shoreline trail along Sinclair Inlet is limited by the location of the railroad used for sensitive military purposes. Thus it is likely that an alternative alignment will be needed. Other options are to provide regional trail connections through Jarstad Park and the Gorst Creek Watershed area. See Figure 11-1.

While sidewalks can be required for new streets, retrofitting existing streets with pedestrian and bicycle facilities will require coordination by the City of Bremerton, Kitsap County, and WSDOT. A particular challenge is connecting central Gorst with the Sinclair Inlet given heavy vehicular travel on SR 3 and SR 16. A grade separated pedestrian crossing could achieve greater connectivity and shoreline access. See Figure 11-1.

Stormwater and Fish Passage

The watershed characterization analysis has prompted a capital facility plan intended to address stormwater and flooding deficiencies and fish passage barriers. A map of stormwater improvement locations is shown in Figure 11-2. Where possible regional stormwater solutions can be considered in County and City capital facility plans. Potential improvements on private property would be the responsibility of the private property owner and would be considered at the time of a development application or other property owner initiative.

Water System

The Kitsap County CFP (August 2012) coordinates water improvements planned by the County, cities, and special districts. Within the Gorst UGA, the City of Bremerton identified the following improvement:

- Project #2 – 36” Transmission Main McKenna Falls to Gorst

Future development at the mine site would require an evaluation of drinking water improvements. It is likely that service providers have adequate water supply for added growth. New development at the mine site would require developer installed improvements for adequate distribution of drinking water.

Wastewater System

In 2010, a wastewater (sanitary sewers) collection system was built in the Gorst UGA. Wastewater is conveyed through several 8-inch gravity mains located along W Belfair Valley Road, W Frone Drive, Feigley Road W, SR 3, and SR 16. These mains tie into two sewer pump stations and an 18-inch force main that connects to a wastewater treatment plant on Oyster Bay Avenue in Bremerton. Kitsap County Public Health found 7 water quality hotspot areas in the Gorst UGA. After the wastewater collection system was constructed in 2010, 6 of the 7 areas were downgraded to a level of no significance. A total of 125 residences and commercial properties have connected to the Gorst wastewater system as of August 2011. Remaining parcels in the UGA manage wastewater through on-site septic systems. The high ground water and poor draining soils in the area tend to cause septic systems to fail prematurely, resulting in the discharge of untreated sanitary sewage into Gorst Creek and its tributaries (City of Bremerton 2009).

The Kitsap County CFP (August 2012) coordinates wastewater improvements planned by the County, cities, and special districts. Within the Gorst UGA, the City of Bremerton identified the following improvement:

- Project #1 – Pump Station SB 3 (Gorst) Upgrade: 2019-2025 period

In addition, an extension of sewer mains and improvement to existing pump stations may be required for the proposed development in the mine area. A preliminary analysis of sewer capacity at the mine where approximately 96 acres currently used for mineral resources would be converted to for residential or mixed use purposes results in a projected sanitary flow consistent with the recommended 8-inch diameter system documented in the Kitsap County CFP and could accommodate the additional residential population at the mine site. In addition, the proposed new residential area would require developer installed improvements to the wastewater system to accommodate new growth.

Other Services

The Gorst EIS, Volume 2, identifies and compares special district, Kitsap County and City of Bremerton levels of service for parks and recreation, law enforcement, and fire suppression/emergency medical services. As a result of added growth in the UGA there would be an increased demand for these services. The EIS identifies mitigation measures to minimize impacts. Additionally, City and County coordination regarding any transition of services due to annexation would entail ensuring appropriate phasing of services.

Upon population reallocation to Gorst, the Gorst Planned Action EIS results regarding Preferred Alternative levels of service should be integrated into the next update of the County or City CFP.

Proposed Capital Facility Cost Estimates

The table below presents transportation, stormwater, water and wastewater capital facilities needed in particular to support growth and development in Gorst. There are other improvements that support cumulative growth such as system wide improvements to transportation, parks, fire protection, and

other services. Thus, the Bremerton and Kitsap County capital facility plans are hereby incorporated by reference.

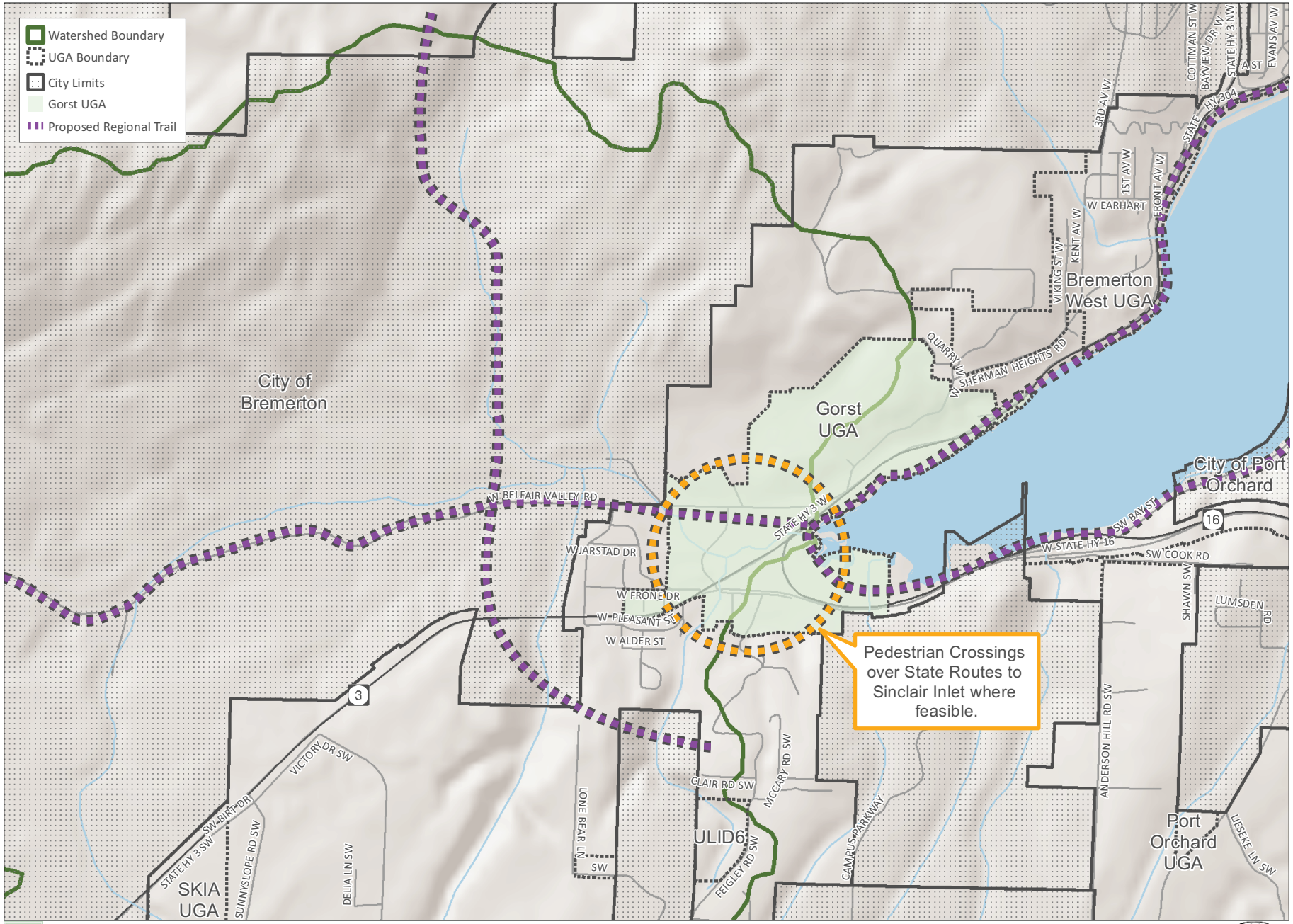
Table 11-1. Capital Facilities Projects and Financing
2013-2035 Preferred Land Use Plan (All Amounts in $1,000)

Project and Cost/Revenue (thousands $)	Source (Responsibility)	Capacity Project (Yes/No)	2013-2018 Total	2019-2035 Total	2013-2035 Total
Transportation					
Belfair Valley Rd (W) Mason County Line - Bremerton City Limits Widen to undivided 4 lanes	County CFP 2012	Yes			
Cost[1]				9,982	9,982
Belfair Valley Rd (W) Bremerton City Limits - Sam Cristopherson Ave W Widen to undivided 4 lanes	County CFP 2012	Yes			
Cost[1]				2,822	2,822
Stormwater and Fish Passage					
Project/Cost: Flood Cause Study Evaluate source areas and flooding	Gorst Watershed Planning (City Lead)		600		
Revenue: Stormwater Utility Funding, Grants			600		
Project/Cost: Stormwater and Fish Passage Projects 1-35, Appendix A	Gorst Watershed Planning (Agency with Jurisdiction)			11,930	11,930
Revenue: Stormwater, Utility Funding Grants, Developer, Property Owner				11,930	11,930
Water					
Project #2 – 36" Transmission Main McKenna Falls to Gorst	County CFP 2012 (City)	Yes			
Cost			2,000	4,000	6,000
Revenue: Fees/Charges/Other			2,000	4,000	6,000
Sanitary Sewer					
Project #1 – Pump Station SB 3 (Gorst) Upgrade	County CFP 2012 (City)	Yes			
Cost				100	100
Revenue: Utility Local Improvement District				100	100

Notes:

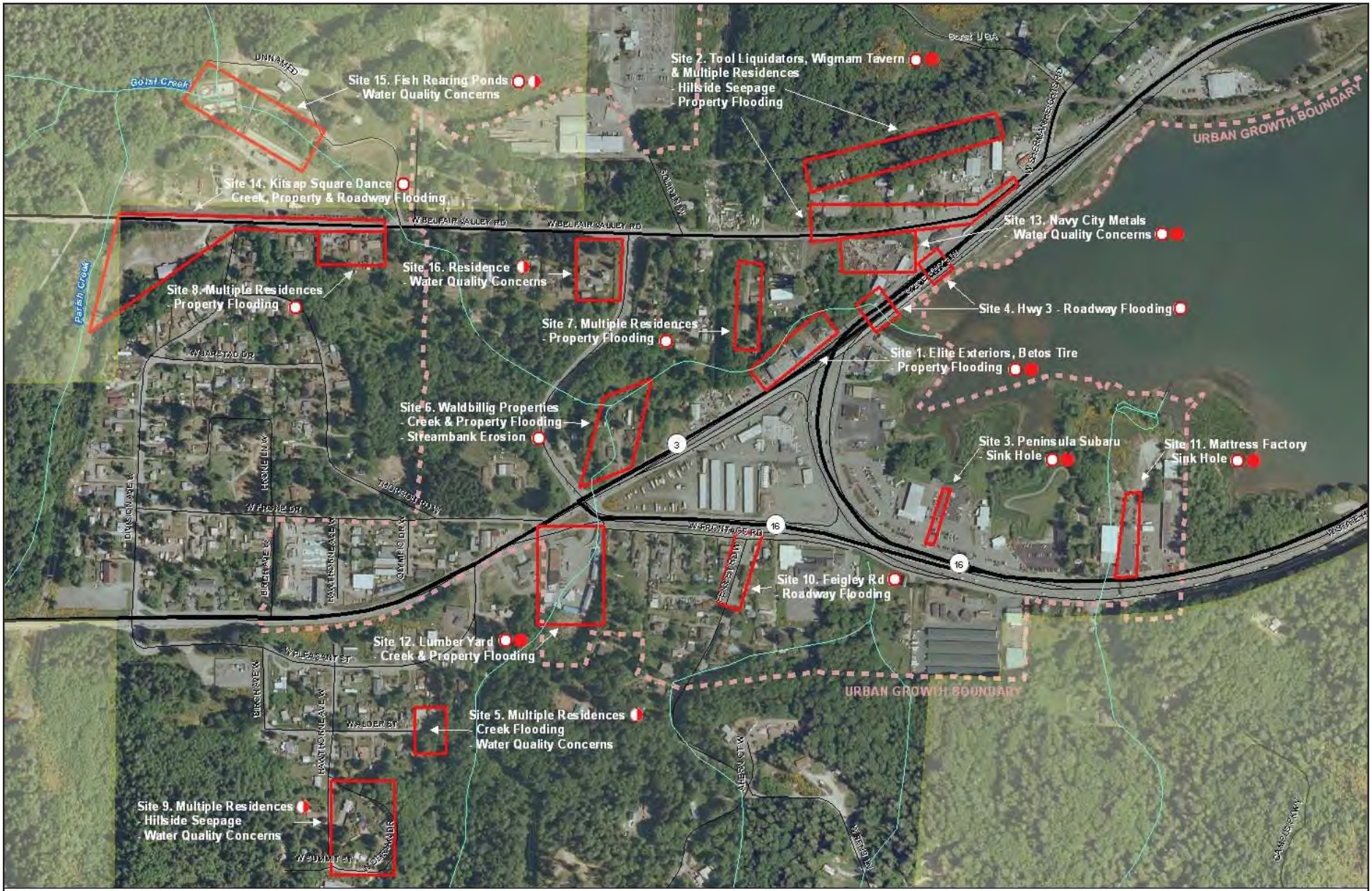
1. For projects in the 2019-2035 period, revenue sources will be identified as they advance through the Kitsap County six-year TIP process.

FIGURE 11-1. ROADWAY SYSTEM AND PLANNED NONMOTORIZED CONNECTIONS



Date: June 2013
Source: Kitsap County, WA State Department of Ecology, BERK

FIGURE 11-2. STORMWATER DEFICIENCY AND CAPITAL IMPROVEMENT LOCATIONS



Date: September 2013

Source: AECOM, Department of Ecology, Department of Fish & Wildlife, BERK

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APPENDIX A: STORMWATER CAPITAL IMPROVEMENT PROGRAM

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GORST CREEK WATERSHED
STORMWATER CAPITAL IMPROVEMENT PLAN

Technical Memorandum

For: City of Bremerton, WA

September 2013

Table of Contents

List of Figures and Photos

Appendices

INTRODUCTION

This memorandum is prepared as part of the Stormwater Management Plan used to comply with National Pollutant Discharge Elimination System Phase II (NPDES II) permit requirements. It follows up on the findings described in the Stormwater Facility Deficiencies Technical Memorandum for the Stormwater Plan of the Gorst Creek Watershed. The watershed encompasses the Bremerton city limits, portions of unincorporated Kitsap County, and a small portion of the Port Orchard city limits. No improvements were identified within Port Orchard. The City of Bremerton is planning for the Gorst Creek Watershed, and particularly for the unincorporated Gorst Urban Growth Area (UGA) in partnership with Kitsap County. Possible approaches for correcting drainage deficiency problems are discussed for locations in the watershed, focusing on lands in and adjacent to the Gorst UGA where drainage deficiencies were concentrated.

OBJECTIVE

The objective of this technical memorandum is to prioritize stormwater corrective actions based on stormwater infrastructure deficiencies identified in the *Existing Conditions and Deficiencies Technical Memorandum* (AECOM, January 2013).

METHODOLOGY

A strategy for the City and County will be suggested from a priority ranking of identified drainage infrastructure deficiencies. This will be accomplished by developing a schematic level solution to estimate programmatic costs and then provide a ranking based on Kitsap County Surface and Stormwater Management ranking criteria. Potential funding sources will be identified.

SITE-SPECIFIC IDENTIFIED DRAINAGE INFRASTRUCTURE DEFICIENCIES

Drainage infrastructure deficiencies are identified by site and are located on Figure 1. General potential or observed deficiency concerns are provided in notes for each of the 16 sites shown on the figure. The legend identifies flooding, chemical, and biological deficiency concerns for each site. Unresolved or potential problems from drainage complaints and records are also noted for the site locations shown on Figure 1. The storm sewer systems and creeks within the Gorst UGA boundary are shown on the map in Appendix A.

Identified Fish Passage Barriers

In addition to the site-specific infrastructure deficiencies, fish passage barriers have been identified in the Gorst Creek Watershed. A final summary basin-wide barrier inventory and assessment is addressed in the *Fish Passage Barrier Capital Improvement Plan Technical Memorandum*, included as Appendix D.

Creek UGA Flooding

The floodplain for the 100-year event in the Gorst Creek Watershed extends well beyond the creek banks and encompasses significant developed areas within the UGA. Two creeks, Gorst Creek and Parish Creek, are responsible for flooding in the UGA. Flooding also occurs off of an unnamed creek at the very northeast corner of the drainage basin, flowing from north to south. Runoff from approximately eight acres of the Gorst Creek Watershed extends flooding within the UGA. The flooding closes state highways and local roads and homes and businesses are inundated by flood waters. Several drainage deficiency flood sites are related to the inability of these creeks to discharge peak flows to Sinclair Inlet, especially during high tides.

Discussion and Recommendations:

Recent increases in flooding on Parish Creek may indicate that flooding on Gorst Creek may be increasing due to development. Upstream unincorporated Kitsap County area development that discharges into Gorst Creek is regulated by Kitsap County Stormwater Management Standards. To comply with the NPDES Phase II stormwater permit, in 2008, Kitsap County adopted the current Washington State Department of Ecology

(Ecology) stormwater standards in the *Kitsap County Stormwater Management Ordinance and Design Manual*. These standards generally provide for flow and water quality controls for new development. However, these standards do not necessarily reduce current existing discharge volumes or provide days long lag time strategies to control peak discharge flows into these creeks. Applying low impact development strategies is an approach being considered to reduce peak flow runoff and was discussed in a separate *Programmatic Stormwater Management Alternatives Technical Memorandum* (AECOM, March 2013).

Recent hydrology studies were completed for Gorst Creek when the City of Bremerton added fish habitat features to the creek. In the 1930s, Gorst Creek was diverted into a straight, 700-foot-long channel to control Bremerton's drinking water supply at Gorst and salmon passage was deliberately restricted. Improvements have since removed the concrete channel features and altered the stream section. The creek must provide fish habitat as well as function for flow conveyance purposes. These dual needs will require careful stream analysis prior to any future alterations. Flows for Parish Creek and the unnamed creek northeast of the Gorst Creek outlet should also be accurately modeled with broad based watershed solutions in mind.

Chemical and Biological Deficiencies

In 2010, two pump stations and a sanitary sewer collection system were built in the Gorst UGA as part of the Sinclair Inlet Restoration Project. The project tied in residential properties with failing or non-conforming septic systems into the sewer system in the UGA. All residential properties and most of the businesses on septic systems in the UGA in the Gorst area were connected to the collection system. The Kitsap County Public Health District is currently administrating and monitoring the connection of five remaining businesses to this sanitary collection system.

The Kitsap County Public Health District has noted chemical issues in runoff coming off parking lots that water quality treatment facilities would help mitigate. No specific parking lots are currently noted as a specific drainage infrastructure deficiency but this general issue should be considered.

In the case of two residential sites noted as stormwater facility deficiencies outside of the UGA, the septic systems were designed before the established standards were developed and before the 1960s when reporting requirements associated with permitting began. While no observed problem is evident, hillside seepage and flooding can potentially pose a condition where septic systems could conceivably be compromised. It is recommended that homes using septic systems in the older neighborhoods either be required to perpetually maintain a well-functioning septic system or be eventually tied into the county sanitary sewer collection system.

Additional sites with potential biologic issues include cases of observed cloudy creek water at fish rearing ponds where Parish Creek joins into Gorst Creek and an older report observing several waterfowl residing within a backyard residential pond. These deficiencies are addressed in the comments that follow.

Description of Deficiencies by Site

Site 0 Basin UGA Flood Assessment

Due to uncertainty associated with the root causes of flooding within the UGA, it is recommended that a comprehensive flood and flow study be performed to assess the volume and source of stormwater inputs into the area by mapping the streams, flow patterns and storm systems (including illicit connections) upgradient of the UGA area. This would involve field survey and mapping of source areas, channel scour and in-ground piping, as well as stream flow gauging, storm observation, and other tasks. The goal of this study is to evaluate where excess flow is coming from and to determine possible mitigation for this increased flow in the uplands. The estimated cost for this study is $600,000.

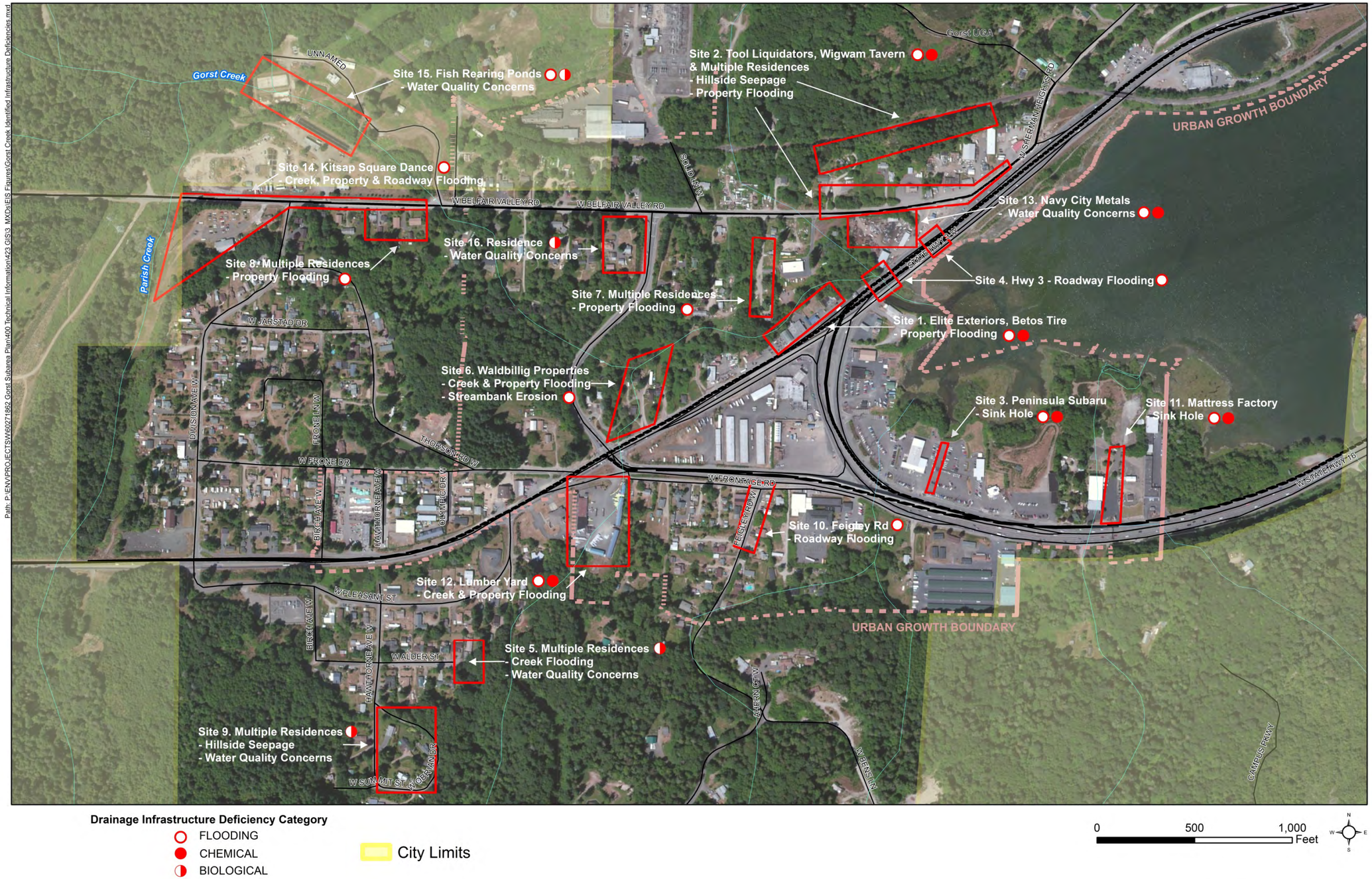

Figure 1 - Gorst Creek Identified Infrastructure Deficiencies
(Fish passage deficiencies for sites 17 through 25 are not shown)

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Site 1 – Elite Exteriors and Betos Tire, 3987 State Highway 3 W, Bremerton, WA 98312-4940

Identified Deficiency – State Highway (Hwy) 3 runoff is channeled along the road shoulder to a sag point in the road profile near the properties of Elite Exteriors and Betos Tires. The two properties are flooded as the runoff drains northwest to Gorst Creek. The frequency of the flooding problem is not known. The roadway lacks any ditch or tight-line drainage system at this low point.

Discussion and Recommendations: Road runoff at this low spot should be picked up, treated, and conveyed to the north approximately 75 feet to Gorst Creek. A backflow preventer may be needed to restrict reverse drainage from high tailwater levels in Gorst Creek. The hydraulic grade lines for the creek and the sewer would need to be checked. Gorst Creek is overwhelmed during high tides and heavy rainfall, and under these conditions, the creek is known to cause highway flooding (See Appendix B for the storm sewer system layout). The flood runoff is adjacent to Hwy 3 and any drainage modifications needed within the Washington State Department of Transportation (WSDOT) right-of-way is the responsibility of WSDOT. Public flooding of properties may require a City and WSDOT solution to resolve.

Estimate: Study scope includes researching the boundaries of WSDOT right-of-way, commercial property boundaries, and drainage easements; developing the hydrologic and hydraulic analysis; designing the catch basin and water quality treatment for roadway runoff, storm sewer, and possible backflow preventer. Construction costs include installing a catch basin in pavement with 75 linear feet (LF) of storm sewer with a backflow preventer. See Appendix C for site cost estimate summaries.

Site 2 – **Multiple business and residential sites,** along W. Belfair Valley Road, north of Navy City Metals property

Site 2, Problem 1, Hillside Seepage Deficiency - Seepage from the upland hillside flows behind the building of Tool Liquidators (3476 W. Belfair Valley Road) and Winners Circle Bar and Grill (3548 W. Belfair Valley Road, or old Wigwam Tavern) after day long rains.

Hillside Seepage Discussion and Recommendations: The owner of Tool Liquidators installed sump pumps at the rear of the property to counter seepage flow as high as 2 inches through the building. The Winner's Circle Bar and Grill property also corrected rear property hillside drainage problems while under previous ownership. The source of the seepage was reported to appear from along an extended width of the hillside somewhere at the base. This drainage seepage upstream, with high volumes and broad width area within the UGA properties, is worth reviewing.

To investigate the problem, additional discussions are suggested with the rest of the property owners in the general area known to flood. A limited geotechnical investigation would be required to review the seepage flow source (see Appendix A). Existing geotechnical mapped and soil drilling data for the area should be reviewed.

Photo 1 Belfair Valley Road 36 IN Culvert crosses the roadway at the Winner's Circle Bar and Grill

Site 2, Problem 2, Unnamed Tributary Flooding Deficiency - The unnamed tributary begins at the northeast corner of the basin and flows south and then east along the north side of W. Belfair Valley Road in 7-foot-wide by 8-foot-deep ditches. The tributary crosses the road in a 36-inch-diameter concrete culvert into one of the ditches and then outlets through a 36-inch culvert to the southeast into Sinclair Inlet across Hwy 3. The ditch gets overwhelmed with the combination of rising tides and heavy rain at this Hwy 3 sag location. Flooding in this area is frequent and severe in impact. Business for Winners Circle Bar and Grill shuts down when the lot floods and the road is closed by the high water. Tool Liquidators, the Winner's Circle Bar and Grill, and adjacent residential properties to the west reported ditch overflow flooding up to the foundation footing of their buildings during high tides and high

intensity storms. Tool Liquidators has had up to 18 inches of flood waters within their building. The Navy City Metals yard has occasionally flooded next to these ditches. Finally, a discharging street drainage line/inlet to the northeast silts up from reverse pipe flow sediment in the front of Tool Liquidators.

Unnamed Tributary Discussion and Recommendations: Flooding of the multiple businesses and residences is closely related to the Hwy 3 flooding road closures discussed for Site 4. Flooding of business and residences is common and severe enough that drainage subreach creek source controls and outlet culvert design of the ditch flow should be carefully reviewed.

If adequate studies have not been completed by the county, the size and elevation of the ditches and culverts should be reviewed and compared to tidal information and flood elevations. Any solution requiring modifications to the state culvert or highway will involve cooperation with WSDOT to resolve.

Estimate: Preliminary *s*tudy scope includes providing time for discussions with property owners, the county, and WSDOT; limited geotechnical investigation and reporting; hydrologic investigation of the tributary; and preparation of an alternatives memorandum.

Site 3 - Peninsula Subaru, 3888 State Highway 16 W, Bremerton, WA, 98312

A 270 LF by 18-inch CMP culvert runs from south to north under the Subaru car lot and into Sinclair Inlet (see Appendix B for the County's storm sewer system). A sink hole developed on the northeast side of the Peninsula Subaru property in their paved parking area over the top of this culvert. It appears that the CMP culvert has corroded and has created the sink hole as a result of culvert piping or exterior flows undermining and eroding out the bedding around the pipe. The outlet for this pipe is set roughly 10 feet below the parking area and includes a tee diffuser at or below the water level depending on the tides. A culvert and a storm sewer trunk line drains into this culvert on the south end. The storm sewer is adjacent to Hwy 16. The culvert crosses Hwy 16 and picks up the flow from an unnamed tributary. Proper drainage for these connecting pipes is dependent on the repair of the Subaru culvert.

Photo 2 At south culvert end, looking south across SR 16 toward unnamed tributary

In addition, this culvert is the downstream component of Culvert 18, Map ID - NL 6, which is considered a fish barrier culvert with 500 LF of habitat gain and a high obstacle rating.

Discussion and Recommendations: Repair of the culvert is complicated by a claim by the owner that the culvert is set within an easement and they are not responsible for its repair. The City of Bremerton does not claim ownership nor honor the maintenance responsibility for a storm drainage line within the easement. The issue of maintenance will need to be resolved before the repair can be completed.

Capacity of this undermined culvert may be reduced and might be affecting the ability to drain runoff away from Hwy 16. However, flow upstream in the unnamed tributary appeared to be unencumbered at the culvert entrance in observations during recent near record rains. Public comments report that stormwater is undermining many of the roads in the vicinity of Feigley Road and the frontage road on the south side of Hwy 16 as discussed with flood deficiencies for Site 10. Common sediment accumulations are noted to clog road drainage catch basins in this area. WSDOT, Subaru, and the City of Bremerton need to coordinate to address the underground erosion and capacity issues associated with this culvert.

Estimate: Preliminary design and coordination scope includes multi-jurisdictional and private owner coordination; survey services to include resolving land dispute; and design of culvert replacement. Construction scope assumes replacing the existing culvert with 270 LF of 48-inch-wide arch culvert.

Site 4 – **Hwy 3 /Hwy 16** (at two culvert road crossing locations near the Navy City Metals property at 3805 Hwy 3 W. Bremerton).

On several occasions within the last seven years, Hwy 3 W and Hwy 16 have closed down to traffic at these two culvert crossing locations due to a simultaneous high tide and high rainfall intensity. These road crossing locations cross Hwy 3 and Hwy 16 to Sinclair Inlet and are the outlets of Gorst Creek and the unnamed creek tributary northeast of the Gorst Creek outlet. The runoff from the unnamed tributary outlets into Sinclair Inlet through a 36-inch concrete culvert as discussed in Site 2. Gorst Creek outlets through twin 7-foot-wide concrete bottomless box culverts into Sinclair Inlet. Vehicle access between Bremerton and large outlying areas within the Kitsap Peninsula is dependent on Hwy 16 and Hwy 3 at this critical location.

Roadway runoff and property flooding as discussed in Sites 2, 7, and 13 are impacted by the flooding in floodplain areas. Gorst Creek is unable to discharge to Sinclair Inlet through the culvert during high tides and heavy rainfall events without backwater flooding in the floodplain areas. According to FEMA insurance studies, Gorst Creek has a peak 100-year NGVD elevation of 14.3 feet and record tide levels have been recorded as high as 12.9 feet. The 100-year and 500-year flood levels for the Gorst Creek Watershed are illustrated in the FEMA Flood Insurance Map shown in Figure 2.

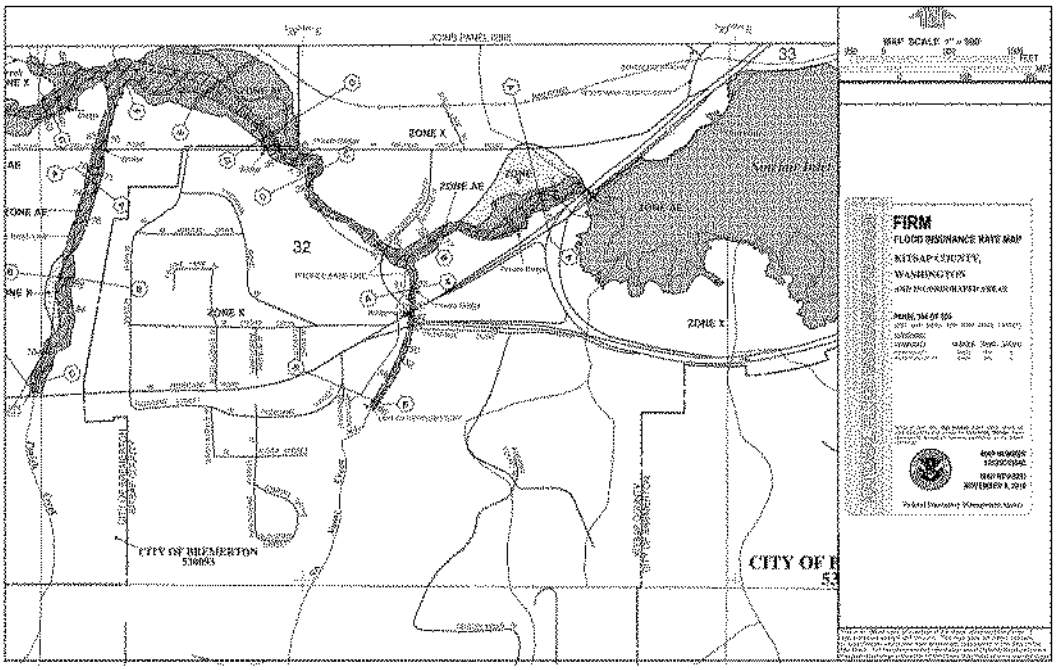

Figure 2 - FEMA Flood Map

Discussion and Recommendations: It is evident from Figure 2 that Gorst Creek has a huge floodplain area. Generally, as development adds impervious surface within the subbasins, creek volumes increase. Times of concentration are reduced for the peak creek flows. When Sinclair Inlet tides are high at the same time as peak stream flows are occurring, the creeks cannot drain the backwater through the outlet culverts. The inability of the backwater to drain through the culverts causes overflows onto the roadway. Three intuitive options to reduce roadway flooding include:

1. Review if creek flow concentrations to the outlet culverts can be reduced, minimized, or mitigated.
2. Look at improving the hydraulic capacity of the outlet culverts and creek channel.
3. Look at raising the roadway grade above the floodway elevation.

Any solution requiring modifications to the culverts or roadway will require a multi-jurisdictional solution with WSDOT to resolve. Culvert flow line and soffit elevations and highway profile elevations should be reviewed against record or prevailing high tide information. From site observations, it appears to be possible to raise the roadway profile several feet in the vicinity of the culvert at the unnamed creek to keep traffic from being blocked during flooding. Bridge clearance could be a problem for raising Hwy 3 at Gorst Creek because the Hwy 16 bridge crosses at this point and it already has a substandard 15.1-foot vertical clearance.

Estimate: Preliminary study scope includes a hydrology study for Gorst Creek, including defining floodplain impacts addressed in Site 7; reviewing alternatives for culvert modifications; analyzing and reviewing alternative channel modifications, including environmental and fish passage implications; and reviewing the feasibility of raising the highway profile at both culvert locations. Fish habitat and environmental permitting will be needed and impacts will need to be assessed. Construction scope assumes contingencies for raising Hwy 3 at the unnamed creek; modifying the Gorst Creek culvert; and providing possible undefined channel widening improvements/riparian enhancement features to Gorst Creek.

Site 5 – **Multiple residences,** east end of W. Alder Street (Outside of the Gorst UGA)

Residences may flood from creek overflows. Septic systems in this old part of town could be under stress during peak flow periods creating a concern for water quality by the Kitsap County Public Health District. Many of the septic systems were designed before established standards were developed and before the 1960s when reporting requirements associated with permitting began.

Discussion and Recommendations: Grandfathered septic systems may eventually fail. For replacement or restoration of services, regulations should require upgrading to current standards of care to ensure water quality concerns are addressed for the community.

Estimate: No costs are anticipated for resolving this deficiency.

Site 6 – Waldbillig Properties.

These properties include the residences of (b) (6) and a commercial property at 4163 Hwy 3 that are all located on the north side of the highway and east of Sam Christopherson Avenue W.

Unnamed Creek (1227026475270) Flooding - A ditch carries flow along the west side of the property to the north into Gorst Creek. This perched elevated ditch overtops its banks and floods the yards of two homes. At the north end of the property, the ditch flow cascades down into Gorst Creek.

Sam Christopherson Road Culvert - A drainage complaint was received by Kitsap County Public Works that the two residences flood due to installation of a 24-inch private driveway culvert upstream along Sam Christopherson Road. The County inspected the site and noted that the culvert and driveway were on private property.

Gorst Creek Erosion - The Kitsap County Public Health District thought that the owner claimed that the residence at 4159 Hwy 3 was almost lost to stream bank erosion in Gorst Creek three to four years ago.

Photo 3 Looking south

Discussion and Recommendations: The ditch flow is mostly restricted by the upstream 36-inch-diameter culvert(s) that constrain the maximum flow volumes coming from Hwy 3 and the unnamed creek. Since the ditch flow overtops the banks, the capacity of the ditch will need to be increased and sized based on the outlet flows picked up by the ditch to prevent flooding of the properties. Fish habitat and environmental impacts will need to be assessed.

The Sam Christopherson Road culvert is located west of the Waldbillig properties. No action was taken by the County after determining that the culvert was on private property. It is not apparent how a driveway culvert would cause flooding on any property other than the adjacent property on Sam Christopherson Road. More investigation is needed to determine if culvert clogging was the issue or not.

The slopes along the sides of the Gorst Creek channel are erodible and show recent sloughing on the southern slopes. Gorst Creek has flows up to 1,145 cfs at a peak velocity of 8 fps based on FEMA insurance studies for a 100-year storm event during the last ¼ mile where profile slopes are near flat. The shear stresses are likely high enough to continue to cause erosion. The basis of erosion potential in Gorst Creek should be quantified. The threat to property structures can be evaluated in this location compared to erosion potential within the creek. Stream bank protection measures will be reviewed and considered if needed.

Estimate: Preliminary study scope includes modeling receiving waters into the ditch; designing and analyzing the ditch channel; holding discussions with the culvert property owners along Sam Christopherson Road; computing shear stresses in Gorst Creek near the Waldbillig properties; determining fish habitat and environmental requirements; and developing design of stream bank protective measures. The construction estimate scope assumes 380 LF of ditch modifications and 250 LF of Gorst Creek stream bank protective measures adjacent to the properties.

Site 7 – Old Belfair Valley Road properties

These properties are southeast of Old Belfair Valley Road and Sam Christopherson Avenue W. and west of Navy City Metals. Flooding was reported to have occurred in this area in the past. Neighbors reported that homes in the area are now abandoned. This is area is within the Gorst Creek 100-year floodplain according to the FEMA floodplain Flood Insurance Rate Mapping shown in Figure 2. Access into the site was restricted, probably because of abandonment of homes due to previous flooding.

Discussion and Recommendations: The area closer to Gorst Creek would likely be more susceptible to flooding damages. The *Water Resource Inventory Area #15 2000 Salmon Habitat Limiting Functions Report* from the Washington State Conservation Commission made recommendations in this area to:

- Restore natural channel configuration and floodplain function in the lower 0.8 mile of Gorst Creek.
- Seek removal or relocation of approximately six businesses and 10 to 12 residences that encroach into the natural floodplain.
- Restore functional riparian zones from the mouth of Gorst Creek to the old diversion site at river mile 0.8.

Modeling of the creek flow and floodplain as discussed for Site 4 would be helpful to determine a more accurate floodplain boundary and property impacts.

Estimate: Study scope includes effort to determine floodplain impacts and the reach of general flooding in this residential and commercial zoned area documented in a technical memorandum. This effort assumes use of the hydrologic modeling completed for Site 4.

Site 8 – Multiple residential homes, W. Belfair Valley Road at Gorst Creek (Outside of the UGA)

It was reported by Kitsap County Public Health District that Gorst Creek has flooded near the fish hatchery where the creek crosses Belfair Valley Road. Several homes at 4277, 4259 and 4273 W Belfair Valley Road on the south side of the road and west of the Gorst Creek crossing have experienced minor flood runoff impacts caused by overflow from the Kitsap Square Dance property where Parish Creek overtops its banks. The overflow travels downstream along the shoulder edges of W. Belfair Valley Road and into the low lying driveways and grades of these homes.

Discussion and Recommendations: Although these homes are located adjacent to Gorst Creek, the flooding threat is the upstream creek bank overtopping at Parish Creek, located a quarter of a mile away. Parish Creek

flooding is discussed under Site 14. Currently, the problem has been mitigated by the County sandbagging the driveways to 1 foot high or so to prevent flooding of the property and downstream neighboring properties.

Estimate: The scope is directly tied to solving flooding discussed under Site 14. No costs have been estimated for this site.

Site 9 – Multiple residences between W. Summit Street and O'Brian Drive, Gorst, WA (Outside of Gorst UGA)

Stress on septic systems is a water quality concern for the Kitsap County Public Health District in this neighborhood due to hillside seepage and raised water tables during peak rain events. The septic systems were designed earlier than the current established standards were developed and before the 1960s when reporting requirements associated with permitting began. Monitoring of septic systems is not normally completed during peak flow events so the performance of these systems is uncertain under these circumstances.

Discussion and Recommendations: As these unincorporated county septic systems fail, new permits will bring the older systems up to current code compliance required in the implementation of the NPDES II stormwater permits as specified through the *Kitsap County Stormwater Management Ordinance and Design Manual* and county and state water quality laws.

Estimate: No task work is required other than coordination of these water quality concerns with Kitsap County.

Site 10 – Multiple residences along Feigley Road switchback (Outside of Gorst UGA)

Drainage records reported that flooding occurred when a frontage road crossing culvert was plugged on Feigley Road, a moderately sloped and switchbacked street. The location was not specified and the problem was reportedly resolved by removing the debris blockage and may not be an ongoing problem. Additionally, public comments reported that stormwater is undermining the roads in the vicinity of Feigley Road and the frontage road on the south side of Hwy 16.

Discussion and Recommendations: Hwy 16 is curbed and ditched along the stretch adjacent to W. Frontage Road. Inlets located within the shoulder area are sparsely spaced. Feigley Road is mildly sloped with no curbing or ditching near the intersection with W. Frontage Road. From initial observations, it is not apparent what could create an erosive condition that could undermine any of the local or state roadways in the area.

More investigation and discussions with neighboring businesses are needed to identify the threats, damages, and jurisdiction of responsibility of the deficiencies identified by drainage records and public comments, if any. Coordination may eventually be needed between the City of Bremerton, Kitsap County, and WSDOT. A site visit is needed to review culverts along Feigley Road that might be more susceptible to clogging and therefore cause flooding of property downstream.

Estimate: Study scope includes coordination with Kitsap County and WSDOT, a site visit, and development of a memorandum detailing problems and proposed actions.

Site 11 - The Mattress Ranch, 3650 Hwy 16 W., Port Orchard

The owner currently has a sink hole developing approximately 25 feet from the back of the parking lot in line with drainage structures at the Mattress Factory. Kitsap County Public Works storm sewer mapping shows a storm sewer under the Mattress Ranch parking lot that is connected to a WSDOT storm sewer and two upstream Hwy 3 catch basins. A Kitsap County Public Works drainage complaint shows that the storm sewer under the Mattress Ranch is a 30-inch CMP private line that is the responsibility of the owner. The complaint notes a sink hole problem in 2003. The storm sewer section that is maintained by the Mattress Ranch likely has a problem with piping or the undermining of culvert bedding that causes the sink holes. Kitsap County maintains the outfall swale at the end of the Mattress Ranch drain pipe and is averse to taking responsibility for cleaning this private drainage line.

WSDOT maintains 120 LF of 30-inch culvert upstream of this culvert and is identified as a fish passage barrier (Site 34, Culvert 20, Map ID 108494).

Discussion and Recommendations: Kitsap County Public Works reports that sediment filled up the WSDOT catch basins and connecting storm sewer quickly after a recent maintenance cleaning in this area. The upstream runoff from the south side hills can carry sand and gravel unto the highway. The County suspects that the private storm sewer line may have significant silt deposits as a result. Overflow from inlets on Hwy 16 may be contributing to the downstream issues reported with Site 10 near Feigley Road.

Estimate: The design scope includes City coordination with WSDOT, Kitsap County, and the property owner to fix the culvert and discuss state highway maintenance to find solutions for maintaining the roadway drainage system. Construction scope assumes replacement of the existing culvert with 310 LF of 58-inch-wide by 36-inch arch culvert to connect up to the WSDOT culvert.

Site 12 – Washington Cedar Lumber Yard, 4041 Hwy 3 W, Bremerton (junction of Hwy 16 and Hwy 3)

Kitsap County Public Works and the Kitsap County Public Health District noted previous flooding from an upstream unnamed tributary that caused property damage in the lumber yard from an overwhelmed 36-inch diameter steel CMP culvert entrance upstream of the paved lot. Flows enter the site from an upstream unnamed stream 12270264775270 from the south (see photo 4). The headwater of the unnamed stream is just downstream of the Port Orchard UGA near the McCormick Woods development.

To avoid flooding, the manager has to maintain a screen at the culvert entrance that prevents debris from entering the 350 LF by 36-inch-diameter culvert pipe. Silt has not been an issue with the culvert. In the *Existing Fish Passage Barriers Technical Memorandum*, the culvert is classified as a fish barrier due to 1-foot-high peak flows and a length longer than 100 feet. The obstacle rating was evaluated as low to medium. The culvert is downstream of 5,000 LF of potential habitat.

Photo 4 Looking south at 36-inch culvert (in shadow)

Discussion and Recommendations: Past and potential flooding from this private culvert predominantly is a threat mostly to damage of material stored on this private site. However, flows draining across the paved lot could end up quickly flowing north across Hwy 16. The business has taken preventative measures by removing the culvert screen guard during heavy rains that collect debris and dams up the stream but also prevents debris from entering the culvert. Flooding caused by debris clogging can be mitigated by using a pool near the culvert entrance to slow velocities and snag debris before lodging in the inlet.

Fish passage improvements are discussed for Site 26 (Culvert 12 - Map ID 111010) in the *Fish Passage Barrier Capital Improvement Plan Technical Memorandum* (Appendix D).

Site 12 emphasizes reducing clogging, while Site 26 emphasizes abandoning the culvert with a rerouted culvert to reduce culvert lengths to improve fish passage.

Estimate: The design scope includes a site visit, review of property ownership, and development of an inlet pond with debris catchment features. Construction scope assumes an inlet pond.

Site 13 – Navy City Metals, 3805 Hwy 3 W. Bremerton

This site is monitored by Ecology through an industrial permit. The ditch on the north side of W. Belfair Valley Road (see photo 5) is connected to a second continuing downstream ditch by a 36-inch culvert crossing under the road. This ditch is drained by a 36-inch culvert crossing Hwy 3 to Sinclair Inlet. The second ditch (see photo 4) is adjacent to this active metal recycling facility. Backwater from high tides and heavy rainfall floods the properties noted in Site 2 and the yard at Navy City Metals. Employees report that flooding as deep as 3 feet has been seen in the yard. All yard drainage leaves through an oil/water separator and is released into the ditch by a 6-inch pipe. Metal laden runoff released into Sinclair Inlet is a concern because copper and zinc levels are already high.

Photo 5 Looking southeast at ditch and 36-inch culvert crossing west of Hwy 3

Discussion and Recommendations: The water quality for this site is the responsibility of Ecology. The flooding of this site is related to solving the flooding problems described for Gorst Creek at the outlet with Sinclair Inlet as discussed for Site 4. Investigation should include discussions with the property owner. A backflow preventer with the 4-inch outlet pipe with their oil/water separator may help relieve flooding. The grades surrounding the site should be reviewed to see if the site is lower than the creek channel flood levels and straight-forward flood mitigation solutions should be reviewed.

Estimate: This is the responsibility of Ecology. No costs are estimated.

Site 14 –Kitsap Square Dance Association, 6800 W. Belfair Valley Road, Gorst, WA (Outside UGA)

Fish passage problems are encountered in Parish Creek downstream of the W. Belfair Valley Road crossing and bank overtopping problems occur from Parish Creek upstream of the road crossing within the Kitsap Square Dance Association property. During high flows, Parish Creek jumps the narrow and shallow creek bed channel into surrounding floodplain areas to the east, approximately 400 feet upstream of the W. Belfair Valley Road culvert. Over the years, high flow events have brought sediment into this area causing loss of the main channel due to infilling, and creating braiding and broad floodplain overflows into the adjacent areas (see photos 17 and 18). From this location, floodplain drainage tends to flow through the Kitsap Square Dance Association gravel parking lot to the northeast corner where it crosses W. Belfair Valley Road. The sheet flow flows down both road shoulders toward the road's sag point at the Gorst Creek crossing, 800 feet to the east.

For flows that remain in Parish Creek west of the dance hall facility, the main channel flows through a 5-foot-diameter steel CMP culvert under the W. Belfair Valley Road. This culvert outlet is directed into a concrete channel constructed with 12-inch weir drops.

Photo 6 Creek bank overflow from behind first row of trees upstream of the Association's property

Photo 7 Kitsap Square Dance Association parking that overtops W. Belfair Valley Road

Discussion and Recommendations: The culvert fish passage problem and creek flooding problems and solution alternatives are discussed in a technical memorandum called *Parish Creek Fish Habitat Improvement* (AECOM 2012). The obstacle rating for this culvert was evaluated as medium. Barrier elements include 1-foot weir drops without notches, slope culvert, and high velocities at peak flows. This culvert is downstream of 7,400 LF of potential habitat.

The reason sediment is infilling Parish Creek needs to be identified. Soils are known to be susceptible to erosion and the site should be observed for evidence of slides or other tell tale signs of where the sediment is originating. Property development at the headwaters should be reviewed and analyzed for the possibility it is increasing Parish Creek flow rates. The Sunny Slope development, adjacent to Parish Creek, was constructed without any stormwater controls.

Estimate: Study scope includes hydrologic modeling of Parish Creek and design plans and specifications for a bridge providing fish passage and rechanneling of overtopping flows from Parish Creek. A conservative construction estimate is provided in the *Parish Creek Fish Habitat Improvement Technical Memorandum* for constructing a 34 LF by 40-foot flat slab fish passage bridge over W. Belfair Valley Road and a 256 LF 6-foot by 4-foot box culvert to redirect overtopped flows back to Parish Creek.

Site 15 – Fish Rearing Ponds (Outside UGA)

A Sun Times article reported that 1.6 million baby Chinook salmon died from oxygen deprivation in May 2006 as sediment debris washed into the creek from rains and clogged an intake pipe. Coincidentally, a County drainage complaint cited a concern for silt clouding up the creek water twice in one week about that time. The County noted that the engineer suspected that a large slide occurred up Parish Creek Canyon due to heavy rain.

Discussion and Recommendations: Additional investigation will be needed to fully understand siltation of Parish Creek upstream as discussed for Site 14. Silt accumulation of Parish Creek is seen as the cause of flooding for Sites 8 and 14. A site visit should be included to discuss the drainage incident with the owner of the parcel belonging to the property owners called Bremerton Watershed.

Estimate: Study scope includes a site visit to walk the Parish Creek valley and watershed ridge,discussions and meeting notes with the engineer at the town of Sunny Slope about recent property development, and drainage code requirements; and provision for limited geotechnical research and preparation of a memorandum.

Site 16 – Residence, (b) (6), Gorst, WA

A formal drainage complaint received from the Kitsap County Public Works addressed possible water quality pollution by animals and vehicles on this private property. The concern was that pollution could end up in Gorst Creek (KCPW Ref#100876). The property has a pond with resident waterfowl. The property was inspected but no corrective action was requested by Kitsap County Public Works at that time.

Discussion and Recommendations: This drainage complaint may no longer be valid if the conditions have changed or if pollution is not likely to escape from the property. The property should be visited by the City to note current condition. Following the site visit, the property should be removed as a concern if there is not a noticeable problem. No costs are estimated for this private site.

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Appendix A: Gorst Creek Watershed Plan

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FIGURE 3.1-1 GORST CREEK WATERSHED: SOILS

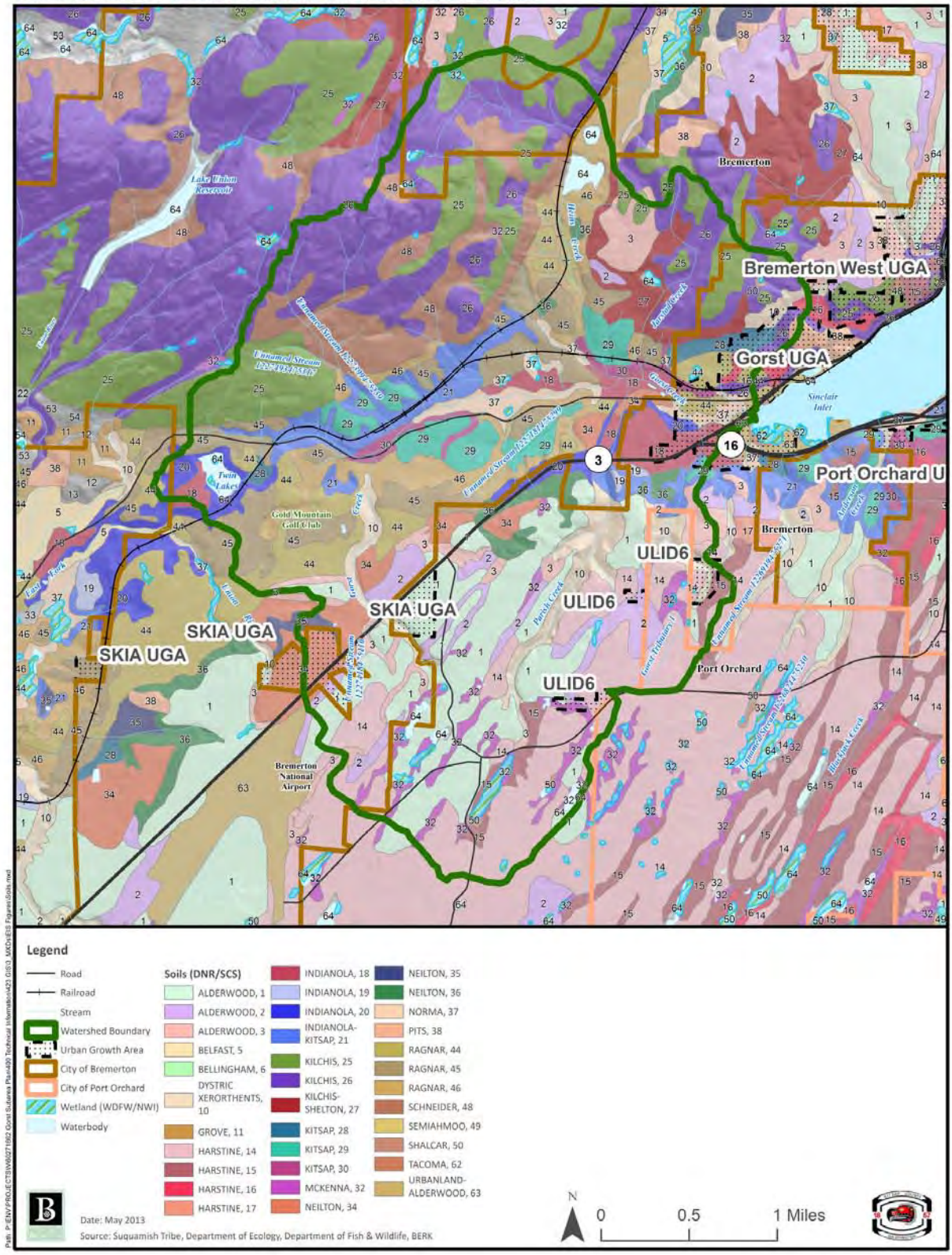
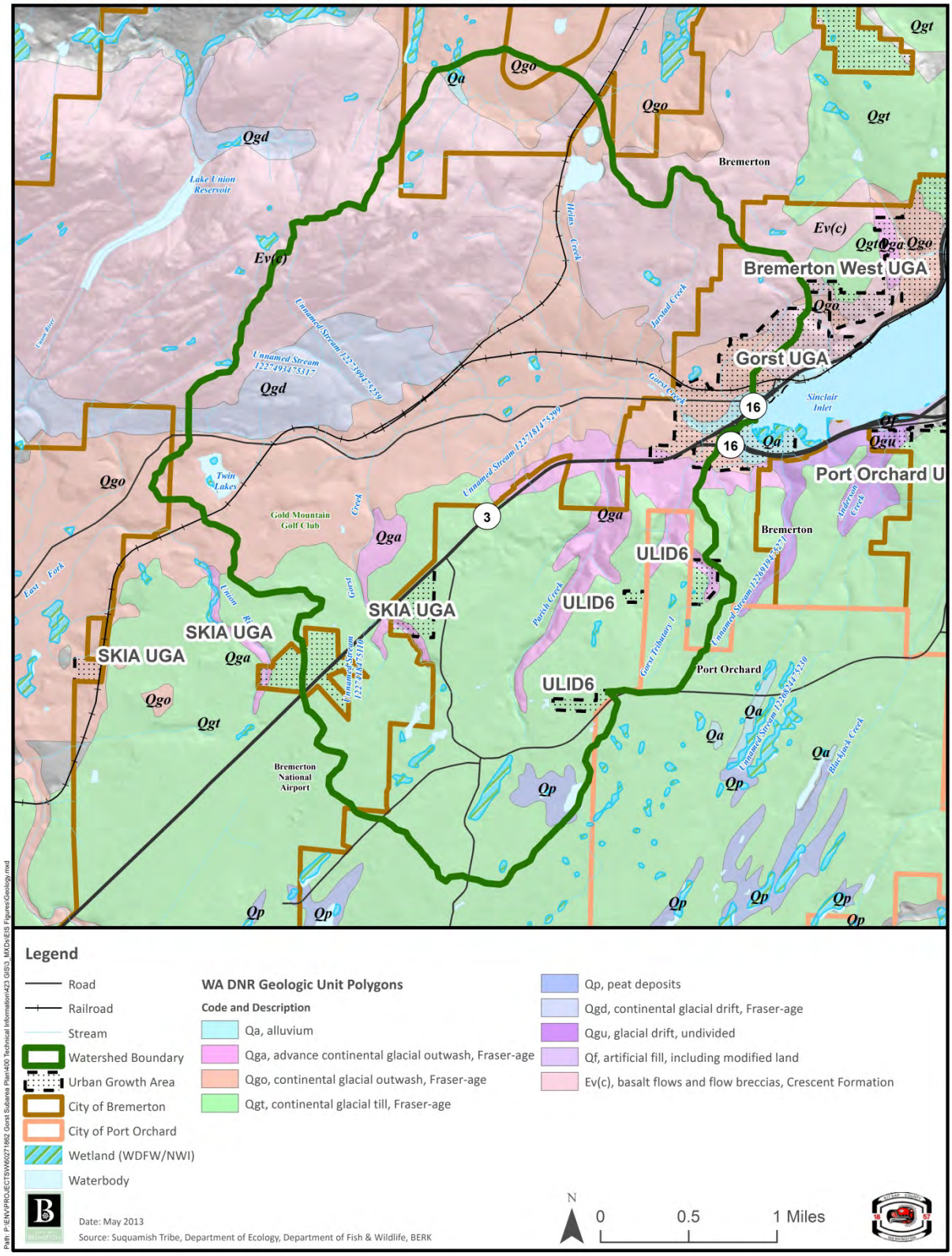


FIGURE 3.1-1 GORST CREEK WATERSHED: GEOLOGY



Appendix B: Kitsap County Public Works Surface and Stormwater Management

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CB1
CB1-SL
CB1-BL
CB2
CMH
OWS1
OWS2
Other
TideGate
Collector/Kitsap County
Collector/Private
Collector/Commercial
Ditch
Trench
Culvert
Swale
DischargeStructure
DiversionPoint
JunctionChamber
StorageBasin
Other
Vault
Storm Grid
Tax Parcels
KITSAP COUNTY PUBLIC WORKS
Surface and Stormwater Management
Note: The information presented in the map comes from several sources and varies in data quality. This map provides information on the type and relative location of components which comprise the surface water drainage system of Kitsap County; it should not be used as a basis for developing engineering designs. For more information, contact Kitsap County Surface and Storm Water Management Program at 360-337-5777

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Appendix C: Site Costs

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Gorst Watershed
Summary of Programmatic Costs

Site	Location	Description	Engineering Costs	Construction Costs	Rounded Total	Revenue Source
0	Flood Cause Study	Evaluate source areas and flooding within UGA	$600,000	$0	$600,000	S, G
1	Elite Exteriors/Betos Tire	WSDOT Hwy 3 flooding	$ 24,491.39	$ 149,735.67	$ 174,000.00	S, G
2	Business and homes north of Navy City Metals	Hillside seepage & stream overbank flooding	$ 99,180.00	$ -	$ 99,000.00	S, G
3	Peninsula Subaru	Storm drain piping & sink hole	$ 36,753.26	$ 179,682.58	$ 216,000.00	S, G
4	State Hwy 3/16	Highway flooding from two creeks	$ 172,560.00	$ 3,051,000.00	$ 3,224,000.00	S, G
5	Residences east end of W. Alder Street	Water quality from septic systems	$0.00	$0.00	$0.00	
6	Waldbillig Property	Stream overtopping	$ 175,485.19	$ 873,526.27	$ 1,049,000.00	S, G
7	Old Belfair Residences at Sam Christopherson	Gorst Creek floodplain flooding	$ 14,640.00	$ -	$ 15,000.00	S, G
8	W. Belfair Valley Rd. Residences w. of Gorst Cr.	Parish Creek street flooding	$0.00	$0.00	$0.00	
9	Multiple residences between W. Summit Street and O'Brian Drive	Water quality concern to septic systems from high water tables	$0.00	$0.00	$0.00	
10	Feigley Road switchback	Roadway undermining and culvert clogging	$ 13,260.00	$ -	$ 13,000.00	S, G
11	The Mattress Ranch	Private storm sewer piping creating sink hole & fish passage barrier	$ 77,394.23	$ 378,371.80	$ 456,000.00	S, G*
12	Washington Cedar lumber yard	Upstream Culvert 12 inlet flooding and fish passage, Map ID #111010	$ 20,480.00	$ 271,288.65	$ 292,000.00	S, G
13	Navy City Metals	Water quality concerns with yard flooding	$0.00	$0.00	$0.00	
14	Kitsap Square Dance Association	Parish Creek bank overtopping w/ Culvert 8, Map ID #105106	$ 32,580.00	$1,013,000	$ 1,046,000.00	S, G*
15	Fish Rearing Ponds	Gorst Creek bank overtopping	$ 17,560.00	$ -	$ 18,000.00	S, G
16	Residence, (b) (6)	Water quality with private pond	$0.00	$0.00	$0.00	
17	Culvert 1, Map ID 105103	W. Belfair Valley Rd near Gold Mountain Golf Course Road vicinity	$ 45,919.35	$ 114,494.62	$ 160,000.00	S, G
18	Culvert 2, NL #1	Gold Mountain Golf Course Road	$ 51,905.76	$ 143,761.49	$ 196,000.00	S, G
19	Culvert 3, Map ID NL #2	W. Belfair Hwy @ Gold Mountain Golf Course Rd	$ 16,185.28	$ 79,128.02	$ 95,000.00	S, G
20	Culvert 4, Map ID NL #3	Heins Creek Culvert Crossing	$ 55,232.78	$ 80,013.47	$ 135,000.00	S, G
21	Culvert 6, Map ID 105105	Jarstad Creek Railroad Crossing			$0.00	
22	Culvert 7, Map ID 105107	Heins Creek COB access road crossing	$ 45,786.38	$ 113,844.53	$ 160,000.00	S, G
23	Culvert 8, Map ID 105106	Parish Creek Culvert W. Belfair Highway	$0.00	$0.00	$0.00	
24	Culvert 10, Map ID 111009	North side Hwy 3 @ junction of Hwy 16	$ 52,589.48	$ 147,104.13	$ 200,000.00	S, G
25	Culvert 11, Map ID 108414	Unnamed Creek 1227026475270 at South Side of Hwy 16	$ 67,612.05	$ 220,547.80	$ 288,000.00	S, G
26	Culvert 12, Map ID 111010	Unnamed Creek 1227026475270 at South Side of Hwy 16	$ 61,899.42	$ 192,619.40	$ 255,000.00	S, G
27	Culvert 13, Map ID 107158	Gorst Greek at Hwy 3 MP 28	$ 154,201.80	$ 742,933.24	$ 897,000.00	S, G, WSDOT

28	Culvert 14, Map ID 105104	Gorst Creek South of Hwy 3 MP 28	$0.00	$0.00	$0.00	
29	Culvert 15, Map ID NL #5	Unnamed Stream 1227418475110 South of Hwy 3 MP 28	$ 27,357.08	$ 133,745.72	$ 161,000.00	S, G, WSDOT
30	Culvert 16, Map ID 115006	Gorst Creek at West Belfair Highway	$ 233,522.57	$ 1,141,665.89	$ 1,375,000.00	S, G
31	Culvert 17, Map ID 110964	Gorst Creek at Hwy 3 at Outfall			$0.00	
32	Culvert 18, Map ID NL #6	Unnamed Creek at Hwy 16 and connects to Subaru culvert	$ 72,665.13	$ 306,564.66	$ 379,000.00	S, G, WSDOT*
33	Culvert 19, Map ID NL #7	Unnamed Creek at Hwy 16	$ 36,660.00	$ -	$ 37,000.00	S, G, WSDOT
34	Culvert 20, Map ID 108494	Unnamed Stream 1226919475271 at Hwy 16 and connects to Mattress Ranch Culvert	$ 54,964.17	$ 198,392.12	$ 253,000.00	S, G, WSDOT
35	Stream Barrier 1, Map ID 110970	Unnamed Stream 1226919475271 at Hwy 16	$ 41,950.94	$ 95,093.50	$ 137,000.00	S, G, WSDOT

Notes: Sites with $0.00 are: the responsibility of an entity other than the City of Bremerton, are included under another site, or were not costed. See notes below.

Site 5: No costs are anticipated.

Site 8: Costs are tied to Site 14, no direct costs for Site 8.

Site 9: No costs were estimated.

Site 13: Responsibility of Washington State Department of Ecology.

Site 16: No costs, private site.

Site 21: No costs, owned by the U.S. Navy

Site 23: Costs are included in Site 14 work.

Site 28: No costs or scope estimated.

Site 31: Responsibility of the Washington State Department of Transportation.

S = Stormwater fund (rates)

G = Grants

WSDOT = WSDOT may be required to assist with funds

* = cause may be private individuals, potential for private contribution or costs incurred by owner

Site 1

Description	PM	SR Eng	Eng	
Elite Exteriors/Betos Tire Flooding	**$170**	**$150**	**$100**	
Hydraulics & Hydrology, Calcs 5%				5,442.53
Plans, Specs & Est. for culvert 10%				10,885.06
Subtotal Hours*				16,327.59
OH & Contingencies 50%				8,163.80
Design Totals				24,491.39

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit Cost**	**Unit**	**Total**
Excavation	75	4	4	1200	35.00	CY	42,000.00
Pav't Repair	20	10	0.5	100	129.00	SY	12,900.00
18" Stormsewer				75	50.00	LF	3,750.00
Shoring	75	4	1	300	5.00	SF	1,500.00
Culvert Testing				75	2.56	LF	192.00
Type 1L CB				1	1,300.00	EA	1,300.00
CB filter insert				1	200.00	EA	200.00
18" Flap gate				1	2,000.00	EA	2,000.00
Subtotal							63,842.00
Misc Construction 25%							15,960.50
Construction Subtotal							79,802.50
Traffic Control 10%							7,980.25
Survey Services 2%							1,596.05
Erosion Control & Env Permits 12%							9,576.30
Construction Subtotal							98,955.10
Mobilization 10%							9,895.51
Construction Subtotal							108,850.61
Construction Engineering 10%							10,885.06
Construction Total							**$ 119,735.67**
Property Acquisition	75	20		1500	20	SF	**$ 30,000.00**
Site Total							**$ 174,227.06**

* = calculated as a percentage of construction costs

Site 2

Description	PM	SR Eng	Eng		
Business and homes north of Navy City Metals	**$170**	**$150**	**$100**		
Discussions & minutes property owners	8	8			
Discussions & minutes w/ Kitsap County	8	8			
Discussions & minutes w/ WSDOT	8	8			
Hydrologic & hydraulic study	16	60	120		
Alternatives memo	16	80	80		
Subtotal Hours	56	164	120		46,120.00
OH & Contingencies 50%					23,060.00
Geotechnical investigation & rpt					30,000.00
Engineering Total				**$**	**99,180.00**

Site 3

Description	PM	SR Eng	Eng		
Peninsula Subaru	**$170**	**$150**	**$100**		
Stream and culvert analysis 5% of construction					8,167.39
Design (10% of construction)					16,334.78
Subtotal hours*	0	0	0		24,502.17
OH & Contigencies 50%					12,251.09
Engineering total					**$ 36,753.26**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit Cost**	**Unit**	**Total**
Excavation	270	6	8	480	35.00	CY	16,800.00
Embankment	270	6	8	480	35.00	CY	16,800.00
Pav't Repair	270	6	1	180	129.00	SY	23,220.00
48" wide arch CMP culvert	270			270	85.00	LF	22,950.00
Shoring	270	1	8	2,160	5.00	SF	10,800.00
Type II 60" dia. CB	1			1	5,000.00	EA	5,000.00
Stream diversion	1			1	10,000.00	LS	10,000.00
Diffusion tail piece	1			1	500.00	EA	500.00
Subtotal							106,070.00
Misc Construction 25%							26,517.50
Construction Subtotal							132,587.50
Erosion Control & Env. Permits @12%							15,910.50
Survey @1.5%							1,988.81
Construction Subtotal							148,498.00
Mobilization 10%							14,849.80
Construction Subtotal							163,347.80
Construction Engineering 10%							16,334.78
Construction Total							**$ 179,682.58**

Site Total	**$ 216,435.84**

* calculated as percentage of construction costs

Site 4

Description	PM	SR Eng	Eng		
State Hwy 3/16	**$170**	**$150**	**$100**		
Gorst Creek hydrology stream study	40	80	120		
Culvert/bridge modification alternatives	24	80	120		
Creek modification alternatives memorandum	24	80	120		
Feasibility study to raise Hwy 3	24	80	120		
Total Hours	112	320	480		
	19,040.00	48,000.00	48,000.00		
Subtotal				115,040.00	
OH & Contingencies 50%				$ 57,520.00	
Total Study					**$ 172,560.00**

I. RIGHT OF WAY					Cost			
29000	SF				$20			$580,000
II. CONSTRUCTION		Unit		Quantity	Cost	Total	$355,180	
1	Grading / Drainage							
1.1	Earthwork (100' x39'x10' Cut culvert)	CY		1,445	$35.00	$50,575.00		
1.2	Earthwork Fill 500LFx90'x2' (raise road)	CY		3,333	$35.00	$116,655.00		
1.3	Drainage Cut (2,900LFx5'x10' channel)	CY	$	5,370	$35.00	$187,950.00		
2	Structures						$39,500	
2.1	Bridge Structure 34' x 40'	SF			$180.00	$0.00		
2.2	Culvert Structure	LF		100	$395.00	$39,500.00		
2.3	Retaining Walls (Cut)	SF			$100.00	$0.00		
2.4	Retaining Walls (Fill)	SF			$60.00	$0.00		
2.5	Bridge Removal	SF			$20.00	$0.00		
3	Surfacing / Paving						$ 708,050	
3.1	HMA Paving (culv & raise road) (600LFx90'Wx8")/27*2.05T/CY	TN		2,747	$150.00	$412,050.00		
3.2	CSBC (culv & raise road) (600LFx90'Wx12")/27*1.85T/CY	TN		3,700	$80.00	$296,000.00		
4	Roadside Development						$132,300	
		12%	Of sections 1, 2 & 3			$132,300.00		
	(Item includes Fencing, Temporary Water Pollution Control, Environmental Mitigation)							
5	Traffic Services & Safety						$ 132,300	
		12%	Of sections 1, 2 & 3			$132,300.00		
	(Price includes Guard Rail, Striping, Utilities, Traffic Control)							
	Construction Subtotal Items 1,2,3,4 and 5			(Round to nearest 1000)				$1,367,000
6	Contingencies				25% of Subtotal		$ 342,000	
7	Construction Subtotal (Lines 1 through 6)							$ 1,709,000
8	Mobilization -				8% of Line 7		$ 137,000	
9	Subtotal (Lines 7 & 8)							$ 1,846,000
10	Sales Tax -				8.60% of Line 9		$ 159,000	
11	Subtotal							$ 2,005,000
12	Construction Engineering				10% of Line 11		$ 201,000	
13	Construction Total (Lines 11 and 12)							$ 2,206,000
III. DESIGN ENGINEERING & ADMINISTRATION					12% of Line 13		$ 265,000	
IV. TOTAL ESTIMATED COST		Lines I, 13 and III						**$3,051,000**
Site Total								**$ 3,223,560.00**

Site 5

Description	PM $170	SR Eng $150	Eng $100	
Residences east end of W. Alder Street				
Total				**0**

No costs are anticipated for this site.

Site 6

Description	PM	SR Eng	Eng		
Waldbillig Property	**$170**	**$150**	**$100**		
Study					
Hydrologic and hydraulic analysis & ditch flow report 5%*					38,996.71
Design of stream bank protection & report @5% construction*					38,996.71
Ditch design & concept design @ 10%				$	77,993.42
Subtotal Hours	0	0	0		-
Subtotal				$	155,986.83
OH & Contingencies 25%					19,498.35
Total Study				**$**	**175,485.19**

Ditch & stream bank Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	380	5	3	211	CY	35.00	7,388.89
Embankment	380	5	3	211	CY	35.00	7,388.89
Seeding	380	5	1	1900	SF	10.00	19,000.00
Cut Retaining wall	100	1	8	800	SF	60.00	48,000.00
Temporary stream diversion (Gorst Cr. & Unnamed Cr)	680			1	LS	30,000.00	30,000.00
stream bank Protection	250	1	10	2500	SF	60.00	150,000.00
Subtotal							261,777.78
Misc Construction 25%							65,444.44
Construction Subtotal							327,222.22
Survey 1.5%							4,908.33
Temp Erosion Control, Env permits 12%							39,266.67
Construction Subtotal							371,397.22
Mobilization 10%							37,139.72
Construction Subtotal							779,934.17
Const Engineering 10%							93,592.10
Construction Total							**$ 873,526.27**
Site Total							**$ 1,049,011.45**

* calculated as percentage of construction costs

Site 7

Description	PM	SR Eng	Eng	
Old Belfair Residences at Sam Christopherson	$170	$150	$100	
Technical memorandum on floodplain impacts	12	48	36	
Subtotal	8	40	24	9,760.00
OH & Contigencies 50%				4,880.00
Study Total				**$ 14,640.00**

Site 8

	PM	SR Eng	Eng	
Description	$170	$150	$100	
W. Belfair Valley Rd. Residences w. of Gorst Cr.				
Total				**0**

Costs are tied to Site 14 , no direct costs for Site 8.

Site 9

	PM	SR Eng	Eng	
Description	$170	$150	$100	
Multiple residences between W. Summit Street and O'Brian Drive				
Total				**0**

No costs were estimated.

Site 10

Description	PM	SR Eng	Eng	
Feigley Road switchback	**$170**	**$150**	**$100**	
Site visit		8		
Meeting, minutes coordinating w/ WSDOT	8	8		
Technical Memorandum	4	24	8	
Total Hours	12	40	8	8,840.00
OH & Contingencies 50%				4,420.00
Study Total				**$ 13,260.00**

Site 11

Description	PM $170	SR Eng $150	Eng $100				
The Mattress Ranch							
Study							
Hydrologic and hydraulic analysis (5% of construction)							17,198.72
Design (10% of construction)							34,397.44
Subtotal*	0	0	0				51,596.15
OH & Contingencies 50%							25,798.08
Total Study							**$ 77,394.23**
Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	310	7	7	563	CY	35.00	19,690.74
Embankment	310	5	3	172	CY	35.00	6,027.78
58" width x 36" arch culvert	310	1	1	310	LF	95.00	29,450.00
Shoring	310	1	7	2,170	SF	5.00	10,850.00
Pavement Repair	310	10	1	344.4	SY	129.00	44,433.33
Temporary stream diversion (tie into nearby storm sewer)	1	1	1	1	EA	5,000.00	5,000.00
Subtotal							115,451.85
Misc Construction 25%							28,862.96
Construction Subtotal							144,314.81
Survey 1.5%							2,164.72
Temp Erosion Control, Env permits 12%							17,317.78
Construction Subtotal							163,797.31
Mobilization 10%							16,379.73
Construction Subtotal							343,974.36
Const Engineering 10%							34,397.44
Construction Total							**$ 378,371.80**
Site Total							**$ 455,766.03**

* calculated as percentage of construction costs

Site 12

Description	PM	SR Eng	Eng		
Washington Cedar lumber yard	**$170**	**$150**	**$100**		
Site visit		8	8		
Hydrologic and hydraulic analysis	8	24	24		
Research and report	16	40	24		
Totals	24	72	56		**$ 20,480.00**

Basin Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	100	75	8	2,222	CY	35.00	77,777.78
(Culvert 12 Construction covered under Site 26)				0	LF		-
Temporary stream diversion (tie into nearby storm sewer)	1	1	1	1	EA	5,000.00	5,000.00
Subtotal							82,777.78
Misc Construction 25%							20,694.44
Construction Subtotal							103,472.22
Survey 1.5%							1,552.08
Temp Erosion Control, Env permits 12%							12,416.67
Construction Subtotal							117,440.97
Mobilization 10%							11,744.10
Construction Subtotal							246,626.04
Const Engineering 10%							24,662.60
Construction Total							**$ 271,288.65**
Site Total							**$ 291,768.65**

Site 13

	PM	SR Eng	Eng	
Description	$170	$150	$100	
Navy City Metals				
Total				**0**

Site is responsibility of the Washington State Department of Ecology

Site 14

Description	PM	SR Eng	Eng		
Kitsap Square Dance Association	**$170**	**$150**	**$100**		
Hydrologic analysis Parish Creek	16	100	40	21,720.00	
OH & Contingencies 50%				10,860.00	
Total Design (Engineering design included on line III below)					**$ 32,580.00**

I.	RIGHT OF WAY			Cost			
	1100 SF			$5		$5,500	
II.	CONSTRUCTION	Unit	Quantity	Cost	Total	$97,200	
	1 Grading / Drainage						
	1.1 Earthwork (256' Culvert Cut/Fill)	CY	1,897	$35.00	$66,395.00		
	1.2 Earthwork (425' Ditch Cut/Fill)	CY	880	$35.00	$30,800.00		
	1.3 Drainage	10%	Of Sections 2.3-4, & 3		N/A		
	2 Structures					$345,920	
	2.1 Bridge Structure 34' x 40'	SF	1,360	$180.00	$244,800.00		
	2.2 Culvert Structure	LF	256	$395.00	$101,120.00		
	2.3 Retaining Walls (Cut)	SF		$100.00	$0.00		
	2.4 Retaining Walls (Fill)	SF		$40.00	$0.00		
	2.5 Bridge Removal	SF		$20.00	$0.00		
	3 Surfacing / Paving					$24,370	
	3.1 HMA Paving	TN	99	$150.00	$14,850.00		
	(Assumes 100LF, 8" CSBC and 6" HMA)						
	3.2 CSBC	TN	119	$80.00	$9,520.00		
	4 Roadside Development					$56,100	
		12%	Of sections 1, 2 & 3		$56,100.00		
	(Item includes Fencing, Temporary Water Pollution Control, Environmental Mitigation)						
	5 Traffic Services & Safety					$56,100	
		12%	Of sections 1, 2 & 3		$56,100.00		
	(Price includes Guard Rail, Striping, Utilities, Traffic Control)						
	Construction Subtotal Items 1,2,3,4 and 5		(Round to nearest 1000)				$580,000
	6 Contingencies			20%	of Subtotal	$116,000	
	7 Construction Subtotal (Lines 1 through 6)						$696,000
	8 Mobilization -			8%	of Line 7	$56,000	
	9 Subtotal (Lines 7 & 8)						$752,000
	10 Sales Tax -			8.60%	of Line 9	$65,000	
	11 Subtotal						$817,000
	12 Construction Engineering			10%	of Line 11	$82,000	
	13 Construction Total (Lines 11 and 12)						$899,000
III.	DESIGN ENGINEERING & ADMINISTRATION			12%	of Line 13	$108,000	
IV.	**TOTAL ESTIMATED COST**	Lines I, 13 and III					**$1,013,000**

Site Total **$ 1,045,580.00**

Site 15

Description	PM	SR Eng	Eng	
Fish Rearing Ponds	**$170**	**$150**	**$100**	
Site visit & notes		12		
Sunnyside Engineers Meeting w/ Notes	12	8		
Total Hours	12	20	0	5,040.00
OH & Contingencies 50%				2,520.00
Geotechnical provision				10,000.00
Study Total				**$ 17,560.00**

Site 16

Description	PM $170	SR Eng $150	Eng $100	
Residence, (b) (6) (b) (6)				
Total				**0**

No costs were estimated, private site.

Site 17

Description	PM	SR Eng	Eng		
Culvert 1, Map ID 105103	**$170**	**$150**	**$100**		
Study					
Hydrologic and hydraulic analysis & ditch flow report 5%*					5,204.30
Ditch design & concept design 10%*					10,408.60
Biological Assessment					15,000.00
Subtotal	0	0	0		30,612.90
OH & Contingencies 50%					15,306.45
Total Study					**$ 45,919.35**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	40	27	12	480	CY	35.00	16,800.00
Embankment	40	27	12	480	CY	35.00	16,800.00
Shoring	40	1	12	480	SF	5.00	2,400.00
58" wide arch culvert	40			40	LF	95.00	3,800.00
Base Course (1.85 TN/CY)	60	24	1	99	TN	80.00	7,893.33
HMA Pavement (2.05 TN/CY)	60	24	0.67	73	TN	150.00	10,988.00
Temporary stream diversion	1	1	1	1	LS	10,000.00	10,000.00
Subtotal							58,681.33
Misc Construction 25%							14,670.33
Construction Subtotal							73,351.67
Erosion Control & Env Permits 12%							8,802.20
Traffic Control 15%							11,002.75
Survey 2%							1,467.03
Construction Subtotal							94,623.65
Mobilization 10%							9,462.37
Construction Subtotal							104,086.02
Construction Engineering 10%							10,408.60
Construction Total							**$ 114,494.62**
Site Total							**$ 160,413.97**

* calculated as percentage of construction costs

Site 18

Description	PM	SR Eng	Eng		
Culvert 2, NL #1	**$170**	**$150**	**$100**		
Study					
Hydrologic and hydraulic analysis & ditch flow report 5%					6,534.61
Ditch design & concept design 10%					13,069.23
Biological Assessment					15,000.00
Eng Labor Subtotal*	0	0	0		-
Subtotal					34,603.84
OH & Contingencies 50%					17,301.92
Total Study					**$ 51,905.76**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	40	27	12	480	CY	35.00	16,800.00
Embankment	40	27	12	480	CY	35.00	16,800.00
58" wide arch culvert	40			40	LF	95.00	3,800.00
Shoring	40	1	12	480	SF	5.00	2,400.00
Base Course (1.85 TN/CY)	60	24	1	99	TN	80.00	7,893.33
HMA Pavement (2.05 TN/CY)	60	24	0.67	73	TN	150.00	10,988.00
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							73,681.33
Misc Construction 25%							18,420.33
Construction Subtotal							92,101.67
Erosion Control & Env Permits 12%							11,052.20
Traffic Control 15%							13,815.25
Survey 2%							1,842.03
Construction Subtotal							118,811.15
Mobilization 10%							11,881.12
Construction Subtotal							130,692.27
Construction Engineering 10%							13,069.23
Total Construction							**$ 143,761.49**
Site Total							**$ 195,667.25**

* calculated as percentage of construction costs

Site 19

Description	PM	SR Eng	Eng	
Culvert 3, Map ID NL #2	**$170**	**$150**	**$100**	
Study				
Hydrologic and hydraulic analysis & ditch flow report 5%				3,596.73
Ditch design & concept design 10%				7,193.46
Eng Labor Subtotal*	0	0	0	-
Subtotal				10,790.18
OH & Contingencies 50%				5,395.09
Total Study				**$ 16,185.28**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	20	24	8	142	CY	35.00	4,977.78
Embankment	20	24	8	142	CY	35.00	4,977.78
58" wide x 31" arch culvert	20			20	LF	95.00	1,900.00
Shoring	20	1	8	160	SF	5.00	800.00
Base Course (1.85 TN/CY)	40	24	1	66	TN	80.00	5,262.22
HMA Pavement (2.05 TN/CY)	40	24	0.67	49	TN	150.00	7,325.33
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							40,243.11
Misc Construction 25%							10,060.78
Construction Subtotal							50,303.89
Erosion Control & Env Permits 12%							6,036.47
Traffic Control 15%							7,545.58
Survey 3%							1,509.12
Construction Subtotal							65,395.06
Mobilization 10%							6,539.51
Construction Subtotal							71,934.56
Construction Engineering 10%							7,193.46
Total Construction							**$ 79,128.02**
Site Total							**$ 95,313.29**

* calculated as percentage of construction costs

Site 20

Description	PM	SR Eng	Eng	
Culvert 4, Map ID NL #3	**$170**	**$150**	**$100**	
Study				
Hydrologic and hydraulic analysis & ditch flow report 5%				3,636.98
Ditch design & concept design 10%				7,273.95
Design of stream bank protection & report 15%				$ 10,910.93
Biological Assessment				$ 15,000.00
Eng Labor Subtotal*	0	0	0	-
Subtotal				36,821.86
OH & Contingencies 50%				18,410.93
Total Study				**$ 55,232.78**

Bridge Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	12	24	8	85	CY	35.00	2,986.67
Embankment	12	24	8	85	CY	35.00	2,986.67
12' flat slab bridge or 3 sided culvert	12	12	1	144	SF	130.00	18,720.00
Base Course (1.85 TN/CY)	40	12	0.5	16	TN	80.00	1,315.56
HMA Pavement (2.05 TN/CY)					TN	150.00	-
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							41,008.89
Misc Construction 25%							10,252.22
Construction Subtotal							51,261.11
Erosion Control & Env Permits 12%							6,151.33
Traffic Control 15%							7,689.17
Survey 2%							1,025.22
Construction Subtotal							66,126.83
Mobilization 10%							6,612.68
Subtotal							72,739.52
Construction Engineering 10%							7,273.95
Construction Total							**$ 80,013.47**
Site Total							**$ 135,246.25**

* calculated as percentage of construction costs

Site 21

Description	PM $170	SR Eng $150	Eng $100	
Culvert 6, Map ID 105105				
Owned by Navy				
Total				**0**

No costs, site is owned by the U.S. Navy

Site 22

Description	PM	SR Eng	Eng	
Culvert 7, Map ID 105107	**$170**	**$150**	**$100**	
Study				
Hydrologic and hydraulic analysis & ditch flow report 5%				5,174.75
Ditch design & concept design 10%				10,349.50
Biological Assessment				15,000.00
Eng Labor Subtotal*	0	0	0	-
Subtotal				30,524.25
OH & Contingencies 50%				15,262.13
Total Study				**$ 45,786.38**

Bridge Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	20	24	8	142	CY	35.00	4,977.78
Embankment	20	24	8	142	CY	35.00	4,977.78
12' flat slab bridge or 3 sided culvert	12	20	1	240	SF	130.00	31,200.00
Base Course (1.85 TN/CY)	40	20	0.5	27	TN	80.00	2,192.59
HMA Pavement (2.05 TN/CY)					TN	150.00	-
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							58,348.15
Misc Construction 25%							14,587.04
Construction Subtotal							72,935.19
Erosion Control & Env Permits 12%							8,752.22
Traffic Control 15%							10,940.28
Survey 2%							1,458.70
Construction Subtotal							94,086.39
Mobilization 10%							9,408.64
Subtotal							103,495.03
Construction Engineering 10%							10,349.50
Construction Total							**$ 113,844.53**
Site Total							**$ 159,630.91**

* calculated as percentage of construction costs

Site 23

	PM	SR Eng	Eng	
Description	$170	$150	$100	
Culvert 8, Map ID 105106				
Total				**0**

Costs for this site are included under Site 14.

Site 24

Description	PM	SR Eng	Eng				
Culvert 10, Map ID 111009	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 5%							6,686.55
Ditch design & concept design 10%							13,373.10
Biological Assessment							15,000.00
Eng Labor Subtotal*	0	0	0				-
Subtotal							35,059.65
OH & Contingencies 50%							17,529.83
Total Study							**$ 52,589.48**
Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	100	20	6	444	CY	35.00	15,555.56
Embankment	100	20	6	444	CY	35.00	15,555.56
Shoring	100	1	6	600	SF	5.00	3,000.00
58" wide x 36" arch culvert	100			100	LF	95.00	9,500.00
Base Course (1.85 TN/CY)	80	16	1	88	TN	80.00	7,016.30
HMA Pavement (2.05 TN/CY)	80	16	0.67	65	TN	150.00	9,767.11
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							75,394.52
Misc Construction 25%							18,848.63
Construction Subtotal							94,243.15
Erosion Control & Env Permits 12%							11,309.18
Traffic Control 15%							14,136.47
Survey 2%							1,884.86
Construction Subtotal							121,573.66
Mobilization 10%							12,157.37
Subtotal							133,731.03
Construction Engineering 10%							13,373.10
Construction Total							**$ 147,104.13**
Site Total							**$ 199,693.61**

* calculated as percentage of construction costs

Site 25

Description	PM	SR Eng	Eng		
Culvert 11, Map ID 108414	**$170**	**$150**	**$100**		
Study					
Hydrologic and hydraulic analysis & ditch flow report 5%					10,024.90
Ditch design & concept design 10%					20,049.80
Biological Assessment					15,000.00
Eng Labor Subtotal*	0	0	0		-
Subtotal					45,074.70
OH & Contingencies 50%					22,537.35
Total Study					**$ 67,612.05**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	190	20	6	844	CY	35.00	29,555.56
Embankment	190	20	6	844	CY	35.00	29,555.56
58" wide x 36" arch culvert	190			190	LF	95.00	18,050.00
Shoring	190	1	6	1140	SF	5.00	5,700.00
Base Course (1.85 TN/CY)	120	16	1	132	TN	80.00	10,524.44
HMA Pavement (2.05 TN/CY)	120	16	0.67	98	TN	150.00	14,650.67
Temporary stream diversion	1	1	1	1	LS	5000.00	5,000.00
Subtotal							113,036.22
Misc Construction 25%							28,259.06
Construction Subtotal							141,295.28
Erosion Control & Env Permits 12%							16,955.43
Traffic Control 15%							21,194.29
Survey 2%							2,825.91
Construction Subtotal							182,270.91
Mobilization 10%							18,227.09
Subtotal							200,498.00
Construction Engineering 10%							20,049.80
Construction Total							**$ 220,547.80**
Site Total							**$ 288,159.85**

* calculated as percentage of construction costs

Site 26

Description	PM	SR Eng	Eng				
Culvert 12, Map ID 111010	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 5%							8,755.43
Ditch design & concept design 10%							17,510.85
Biological Assessment							15,000.00
Eng Labor Subtotal*	0	0	0				-
Subtotal							41,266.28
OH & Contingencies 50%							20,633.14
Total Study							**$ 61,899.42**
Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	440	20	6	1,956	CY	35.00	68,444.44
Embankment	50	20	6	222	CY	35.00	7,777.78
58" wide x 36" arch culvert (@fire station corner)	140			140	LF	95.00	13,300.00
Shoring	140	1	6	840	SF	5.00	4,200.00
Base Course (1.85 TN/CY)				0	TN	80.00	-
HMA Pavement (2.05 TN/CY)				0	TN	150.00	-
Temporary stream diversion	1	1	1	1	LS	5,000.00	5,000.00
Subtotal							98,722.22
Misc Construction 25%							24,680.56
Construction Subtotal							123,402.78
Erosion Control & Env Permits 12%							14,808.33
Traffic Control 15%							18,510.42
Survey 2%							2,468.06
Construction Subtotal							159,189.58
Mobilization 10%							15,918.96
Subtotal							175,108.54
Construction Engineering 10%							17,510.85
Construction Total							**$ 192,619.40**
Site Total							**$ 254,518.82**

* calculated as percentage of construction costs

Site 27

Description	PM	SR Eng	Eng				
Culvert 13, Map ID 107158	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 3%							20,261.82
Ditch design & concept design 10%							67,539.39
Biological Assessment							15,000.00
Eng Labor Subtotal*	0	0	0				-
Subtotal							102,801.20
OH & Contingencies 50%							51,400.60
Total Study							**$ 154,201.80**
Bridge Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	174	16	6	619	CY	35.00	21,653.33
Embankment				0	CY	35.00	-
Bridge or 3 legged culvert	40	48		1,920	SF	180.00	345,600.00
Base Course (1.85 TN/CY)			1	0	TN	80.00	-
HMA Pavement (2.05 TN/CY)			0.67	0	TN	150.00	-
Temporary stream diversion	1	1	1	1	LS	15,000.00	15,000.00
Subtotal							382,253.33
Misc Construction 25%							95,563.33
Construction Subtotal							477,816.67
Erosion Control & Env Permits 12%							57,338.00
Traffic Control 15%							71,672.50
Survey 1.5%							7,167.25
Construction Subtotal							613,994.42
Mobilization 10%							61,399.44
Subtotal							675,393.86
Construction Engineering 10%							67,539.39
Construction Total							**$ 742,933.24**
Site Total							**$ 897,135.05**

* calculated as percentage of construction costs

Site 28

	PM	SR Eng	Eng	
Description	$170	$150	$100	
Culvert 14, Map ID 105104				
Total				**0**

No costs or scope were estimated for this site.

Site 29

Description	PM	SR Eng	Eng				
Culvert 15, Map ID NL #5	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 5%							6,079.35
Ditch design & concept design 10%							12,158.70
Eng Labor Subtotal*	0	0	0				-
Subtotal							18,238.05
OH & Contingencies 50%							9,119.03
Total Study							**$ 27,357.08**
Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Ditch Excavation 5' wide	300	17	6	1,133	CY	35.00	39,666.67
Embankment				0	CY	35.00	-
Shoring	80	1	6	480	SF	5.00	2,400.00
58" wide x 36" arch culvert	80			80	LF	95.00	7,600.00
Base Course (1.85 TN/CY)	30	48	1	99	TN	80.00	7,893.33
HMA Pavement (2.05 TN/CY)	30	48	0.67	73	TN	150.00	10,988.00
Temporary stream diversion				0	LS	15,000.00	-
Subtotal							68,548.00
Misc Construction 25%							17,137.00
Construction Subtotal							85,685.00
Erosion Control & Env Permits 12%							10,282.20
Traffic Control 15%							12,852.75
Survey 2%							1,713.70
Construction Subtotal							110,533.65
Mobilization 10%							11,053.37
Subtotal							121,587.02
Construction Engineering 10%							12,158.70
Construction Total							**$ 133,745.72**
Site Total							**$ 161,102.79**

* calculated as percentage of construction costs

Site 30

Description	PM	SR Eng	Eng
Culvert 16, Map ID 115006	**$170**	**$150**	**$100**

Study							
Hydrologic and hydraulic analysis & ditch flow report 5%							51,893.90
Ditch design & concept design 10%							103,787.81
Eng Labor Subtotal	0	0	0				-
Subtotal*							155,681.71
OH & Contingencies 50%							77,840.86
Total Study							**$ 233,522.57**
Bridge Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	72	48	12	1,536	CY	35.00	53,760.00
Downstream channel edge enhancement	700	4	12	1,244	CY	35.00	43,555.56
Bridge (24' channel)	72	36		2,592	SF	180.00	466,560.00
Base Course (1.85 TN/CY)		36	1	0	TN	80.00	-
HMA Pavement (2.05 TN/CY)		36	0.67	0	TN	150.00	-
Temporary stream diversion	1			1	LS	15,000.00	15,000.00
Streambed Control Weirs	288	1	4	43	CY	200.00	8,533.33
Subtotal							587,408.89
Misc Construction 25%							146,852.22
Construction Subtotal							734,261.11
Erosion Control & Env Permits 12%							88,111.33
Traffic Control 15%							110,139.17
Survey 1.5%							11,013.92
Construction Subtotal							943,525.53
Mobilization 10%							94,352.55
Subtotal							1,037,878.08
Construction Engineering 10%							103,787.81
Construction Total							**$ 1,141,665.89**
Site Total							**$ 1,375,188.46**

* calculated as percentage of construction costs

Site 31

	PM	SR Eng	Eng	
Description	$170	$150	$100	
Culvert 17, Map ID 110964				
Total				**0**

No cost, site is the responsibility of the Washington State Department of Transportation

Site 32

Description	PM	SR Eng	Eng				
Culvert 18, Map ID NL #6	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 2%							5,573.90
Ditch design & concept design 10%							27,869.51
Biological Assessment							15,000.00
Eng Labor Subtotal	0	0	0				-
Subtotal*							48,443.42
OH & Contingencies 50%							24,221.71
Total Study							**$ 72,665.13**

Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	210	8	10	622	CY	35.00	21,777.78
50" wide x 31" arch culvert	210		10	210	LF	85.00	17,850.00
Shoring	210	1	10	2,100	SF	5.00	10,500.00
Base Course (1.85 TN/CY)	170	48	1	559	TN	80.00	44,728.89
HMA Pavement (2.05 TN/CY)	170	48	0.67	415	TN	150.00	62,265.33
Temporary stream diversion				0	LS	15,000.00	-
Subtotal							157,122.00
Misc Construction 25%							39,280.50
Construction Subtotal							196,402.50
Erosion Control & Env Permits 12%							23,568.30
Traffic Control 15%							29,460.38
Survey 2%							3,928.05
Construction Subtotal							253,359.23
Mobilization 10%							25,335.92
Subtotal							278,695.15
Construction Engineering 10%							27,869.51
Construction Total							**$ 306,564.66**
Site Total							**$ 379,229.79**

* calculated as percentage of construction costs

Site 33

Description	PM	SR Eng	Eng	
Culvert 19, Map ID NL #7	**$170**	**$150**	**$100**	
Hydrologic & hydraulic study	16	40	40	
Memorandum	16	60	40	
Subtotal Hours	32	100	40	24,440.00
OH & Contingencies 50%				12,220.00
Engineering Total				**$ 36,660.00**

Site 34

Description	PM	SR Eng	Eng				
Culvert 20, Map ID 108494	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report @ 2% (Mostly completed w/Site 11)							3,607.13
Ditch design & concept design 10%							18,035.65
Biological Assessment							15,000.00
Eng Labor Subtotal*	0	0	0				-
Subtotal							36,642.78
OH & Contingencies 50%							18,321.39
Total Study							**$ 54,964.17**
Culvert Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	120	8	8	284	CY	35.00	9,955.56
58" wide x 36" arch culvert	120		1	120	LF	95.00	11,400.00
Shoring	120	1	8	960	SF	5.00	4,800.00
Base Course (1.85 TN/CY)	120	48	1	395	TN	80.00	31,573.33
HMA Pavement (2.05 TN/CY)	120	48	0.67	293	TN	150.00	43,952.00
Temporary stream diversion				0	LS	15,000.00	-
Subtotal							101,680.89
Misc Construction 25%							25,420.22
Construction Subtotal							127,101.11
Erosion Control & Env Permits 12%							15,252.13
Traffic Control 15%							19,065.17
Survey 2%							2,542.02
Construction Subtotal							163,960.43
Mobilization 10%							16,396.04
Subtotal							180,356.48
Construction Engineering 10%							18,035.65
Construction Total							**$ 198,392.12**
Site Total							**$ 253,356.29**

* calculated as percentage of construction costs

Site 35

Description	PM	SR Eng	Eng				
Stream Barrier 1, Map ID 110970	**$170**	**$150**	**$100**				
Study							
Hydrologic and hydraulic analysis & ditch flow report 5%							4,322.43
Ditch design & concept design 10%							8,644.86
Biological Assessment							15,000.00
Eng Labor Subtotal*	0	0	0				-
Subtotal							27,967.30
OH & Contingencies 50%							13,983.65
Total Study							**$ 41,950.94**

Bridge Construction	**L**	**W**	**D**	**Qty**	**Unit**	**Unit Cost**	**Total**
Excavation	20	12	4	36	CY	35.00	1,244.44
Embankment	40	12	8	142	CY	35.00	4,977.78
Wooden Bridge	20	12		240	SF	130.00	31,200.00
Base Course (1.85 TN/CY)	40	12	0.5	16	TN	80.00	1,315.56
Temporary stream diversion	1	1	1	1	LS	10,000.00	10,000.00
Subtotal							48,737.78
Misc Construction 25%							12,184.44
Construction Subtotal							60,922.22
Erosion Control & Env Permits 12%							7,310.67
Traffic Control 15%							9,138.33
Survey 2%							1,218.44
Construction Subtotal							78,589.67
Mobilization 10%							7,858.97
Subtotal							86,448.63
Construction Engineering 10%							8,644.86
Construction Total							**$ 95,093.50**
Site Total							**$ 137,044.44**

* calculated as percentage of construction costs

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Appendix D: Gorst Creek Watershed Fish Passage Barrier Capital Improvement Plan Technical Memorandum

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GORST CREEK WATERSHED FISH PASSAGE BARRIER CAPITAL IMPROVEMENT PLAN Technical Memorandum

For: City of Bremerton, WA

September 2013

Table of Contents

List of Figures and Photos

Attachments

INTRODUCTION

This memorandum has been prepared as part of the Stormwater Capital Improvement Plan. It follows up on the findings of the existing fish passage barriers identified in the *Fish Passage Barrier Preliminary Engineering Technical Memorandum* prepared by Parametrix, December 30, 2011. The City of Bremerton is planning for the Gorst Creek Watershed, and particularly for the unincorporated Gorst Urban Growth Area (UGA) in partnership with Kitsap County. The City and County are considering best management practices for development, restoration, and protection, including how to manage stormwater and restore fish habitat. In this memorandum, programmatic solutions with cost estimates for fish passage drainage barrier problems are discussed.

OBJECTIVES

The objectives of this technical memorandum are:

1. Review the basin-wide barrier inventory in the *Fish Passage Barrier Preliminary Engineering Technical Memorandum*.
2. Provide a corrective action programmatic assessment for each barrier.
3. Prepare a programmatic cost for each fish barrier.

METHODOLOGY

The *Fish Passage Barrier Preliminary Engineering Technical Memorandum* (Parametrix 2011) includes the evaluation of fish passage barrier areas from inventoried Washington State Department of Fish and Wildlife (WDFW) and Washington State Department of Transportation (WSDOT) fish barriers, Water Resource Inventory Area (WRIA) 15, and seven additional sites. In this memorandum, programmatic strategies are developed for the City for the fish passage barriers previously identified. The fish passage deficiency locations were then ranked in order of priority based on effectiveness, implementation factors, and cost. The ranking is found in Appendix E of the *Stormwater Capital Improvement Plan Technical Memorandum*. Programmatic solutions were derived from WDFW guidelines for the sites listed in the *Fish Passage Barrier Preliminary Engineering Technical Memorandum*. Site visits to provide more accurate conditions were not included in this scope and more detailed costs and scope development should be expected to occur during design.

RELATED CITY OF BREMERTON AND GORST CREEK WATERSHED APPLICABLE FISH PASSAGE REGULATORY POLICIES

Fish Passage and Listed, Threatened or Endangered Species

The *Existing Drainage Infrastructure Deficiencies Technical Memorandum* (AECOM, January 2013) identified several culverts with limited or blocked fish passage. WAC 220-110-070 defines the WDFW fish-passage criteria for new design and retrofit of culverts.

Recent significant judicial rulings (U.S. v. Washington, No. CV 70-9213, ruling issued March 29, 2013) require fish passage barrier removal on fish bearing streams to be completed by the fall of 2016 on state recreational lands, and by 2030 on highways administered by WSDOT.

Bremerton Municipal Code 15.40 Stormwater

Bremerton's Stormwater Management Plan Update was adopted January 2009. The plan identifies actions needed to coordinate the existing Stormwater Program with the National Pollutant Discharge Elimination System Phase II (NPDES II) Stormwater Permit and Puget Sound Partnership's Action Agenda.

Corrective Actions for Site-specific Fish Passage Deficiencies

Existing fish passage barriers in the Gorst Creek Watershed were identified in the *Fish Passage Barrier Preliminary Engineering Technical Memorandum* (Parametrix 2011). The memorandum discussed remaining existing fish barriers inventoried by WSDOT (Attachment A) and WDFW (Attachment B). The fish passage barriers are based on Level A passability criteria of water surface drops, culvert length, and culvert velocity. Currently, WDFW has no listed fish species upstream of five of these identified barriers. However, these are included as fish barriers due to the potential habitat upstream of these impassable barriers. Of the existing inventoried fish barriers, two were improved and should no longer be considered barriers and should be reclassified. The two improvements were culvert 9 (Parish Creek at State Highway [Hwy] 3) where fish ladder type baffles were added to the existing culvert, and Heins Creek at the Navy Railroad Crossing, Fishway 1, Map ID 105108, which received a new baffled chute fish ladder.

Sites 17 through 35 General

Culverts typically are fish passage obstacles to both juvenile and adult species of fish under varying conditions. These culverts can pose a complete barrier, partial barrier, or a temporal barrier to both adult and juvenile fish depending on flow conditions. The culverts have been identified as barriers based on Level A passability criteria: water surface drops, culvert length, slope and flow velocity, and culvert width compared to stream channel width.

Stream flow capacity can often be achieved along with fish passage capacity. To achieve long-term effectiveness, Baker and Volcher, 1990 came up with a priority of stream crossing measures based on experience and research. In addition, WDFW provides design criteria for culvert and fishway design. Depending on stream width, profile, and other design requirements, the suggested preference for stream crossing design is:

1. Bridge over the floodway or main body of creek flow and 100-year floodplain
2. Bridge over the floodway
3. Culvert with natural streambed bottom wide enough to include the floodway
4. Culvert with slope less than 0.5%
5. Baffled culvert or fish ladder included with the culvert to allow fish to rest especially throughout a longer culvert.

Figure 1 shows the watershed with the UGA boundaries. The inventoried fish passage barriers are shown on map FP-1 in the *Fish Passage Barrier Preliminary Engineering Technical Memorandum* (Parametrix 2011).

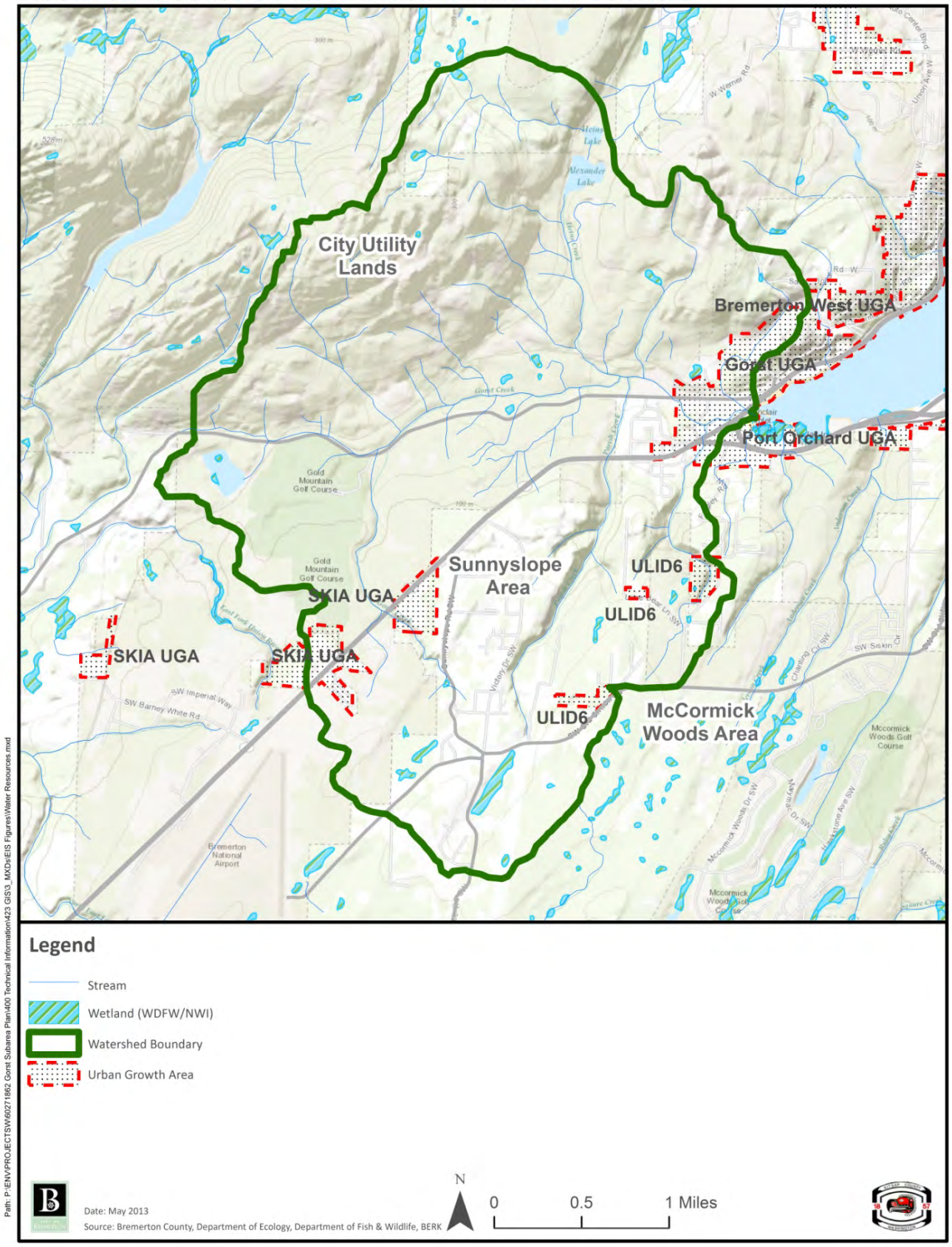

Figure 1: Watershed Plan Showing UGA Boundaries

The following narrative addresses relevant priority ranking and comes from the WDFW Fish Passage Barrier Assessment Manual:

> Percent passability is estimated for all fish passage features, and uses a combination of professional judgment and species ability to negotiate water surface drop, velocity, and depth. A feature may be evaluated as a total barrier (0% passable), a partial barrier (33% passable; some passage), a less severe partial barrier (67% passable), or a non-barrier (100% passable; passable during all times when flow is present, up to the high fish passage flow). The guidance provided in subsequent chapters is based upon the abilities of a 15.24 centimeter (6 inch) trout, so it should not be construed as an absolute value for all salmonid species and life stages.

Each of the following identified fish passage barrier sites are discussed in this memorandum and recommendations are noted. The following sites continue in number following from the 16 stormwater deficiencies identified in the existing stormwater deficiencies memorandum (AECOM 2013). Most of the photos in the following descriptions are borrowed from the Parametrix 2011 memorandum.

Sites 17 through 35 Specific Discussion

Site 17 – Culvert 1 (City of Bremerton, Outside UGA) – Map ID 105103 **–** Gorst Creek at Gold Mountain Golf Course Road

The obstacle rating was evaluated as medium for this culvert. This 40 linear foot (LF), 36-inch-diameter concrete culvert has vertical drop and velocity barrier elements downstream of 5,500 LF of potential habitat.

Discussion and Recommendations: Improving this culvert will open up over a mile of fish habitat upstream of this culvert. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. Upstream flows will need to be modeled to determine flow and high velocity rates. Channel depths are estimated to be 10 to 12 feet below road height based on limited site visits in the area. In general, high velocity can be addressed with the use of a broader culvert with a flatter slope and can be accompanied with less desirable engineered streambed control measures or culvert baffles for the steeper slopes.

Photo 1 Culvert 1 outlet at south end

Photo 2 Culvert 1 inlet

Estimate: For estimating purposes, the study scope includes designing the drainage culvert and performing an upstream modeling study. Per WAC 220-710-070 for all fish bearing streams, a biological assessment will be required as part of a required Hydraulic Project Approval (HPA) permit. The construction scope is based on replacing the existing culvert with a 58-inch-wide arch culvert suitable for fish passage.

Site 18 – Culvert 2 (Kitsap County, Outside UGA) – Map ID NL 1 – Gorst Creek West Belfair Highway at Gold Mountain Golf Course

The obstacle rating was evaluated as very low. Barrier elements for this 100 LF 36-inch aluminum arch bottomless culvert include sediment and high velocity at peak flow. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. The culvert is downstream of 5,400 LF of potential habitat. The culvert crosses under the 24-foot-wide paved asphalt road for Gold Mountain Golf Course.

Discussion and Recommendations: This culvert is the responsibility of Kitsap County and currently has a 100% rating for fish passage. Channel depths are assumed to be 10 to 12 feet deep compared to the road height based on limited site visits in the area.

Estimate: For estimating purposes, the study scope includes designing the drainage culvert and performing an upstream modeling study to determine if sedimentation has affected the capacity of the culvert to handle

100-year storm event flows. A biological assessment will be required as part of a required HPA permit. While it may be possible to remove sediment within the culvert, the construction scope is based on replacing the existing culvert with a 58-inch-wide arch culvert suitable for fish passage.

Site 19 – Culvert 3 (City of Bremerton, Outside UGA) – Map ID NL 2 – Unnamed Tributary to Gorst Creek; West Belfair Highway at Gold Mountain Golf Course Road, North End

The obstacle rating was evaluated as impassable. Barrier elements for the 20 LF dual 16-inch-diameter aluminum CMP culvert pair include a large vertical drop and high velocity at peak flows. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. The channel to road depth is approximately 8 feet with a 4.5-foot-wide creek floodway. The culverts are downstream of 300 LF of potential habitat.

Photo 10 Culvert 3 outlets

Discussion and Recommendations: Due to the short potential habitat gain, replacing these culverts to remove the vertical drop and reduce the velocity is a low priority because of the limited benefit. An arch culvert replacement large enough to span the floodway would be the recommended improvement.

Estimate: For estimating purposes, the study scope includes drainage culvert and upstream modeling study. The construction scope includes a 20 LF by 58-inch-wide arch culvert across an estimated nominal 12-foot-wide gravel road.

Site 20 – Culvert 4 (City of Bremerton, Outside UGA) – Map ID NL 3 – Heins Creek Culvert Crossing

The obstacle rating was evaluated as low to medium. Barrier elements for this 20 LF 60-inch-diameter aluminum CMP culvert include a vertical drop of less than a foot and high velocities at peak flows. The culvert is downstream of 1,000 LF of potential habitat.

Photo 11 Culvert 4 outlet

Discussion and Recommendations: The floodway channel for this culvert is approximately 10 feet wide and approximately 8 feet below the grade of the 12-foot-wide gravel roadway. Ideally, the culvert would be designed to span the floodway to avoid the larger velocities.

Estimate: For estimating purposes, the study scope includes an upstream modeling study. A biological assessment will be required as part of the HPA permit. The construction scope includes a 12 LF by 12-foot-wide slab bridge or three-sided concrete culvert.

Culvert 5 is a box culvert that has been modified for fish passage. The fish passage barrier status should be updated to indicate it is fish passable.

Site 21 – Culvert 6 (US Navy, Outside UGA) – Map ID 105105 Jarstad Creek Railroad Crossing

The obstacle rating was evaluated as high to impassable. This is a 267 LF 30-inch-diameter steel and concrete joined culvert approximately 29 feet below the railroad grade. Barrier elements include a 12-inch outlet drop, high velocities during peak flows, and leaks from a piping condition where soil support has eroded.

Discussion and Recommendations: The Navy owns and is responsible for the culvert. The Navy has evaluated and prioritized this culvert for replacement as a fish passage barrier as recorded *An Analysis of Stream Culvert Fish Passage on the Navy Rail Line Between Bremerton and Shelton, Washington*, (Battelle Marine Sciences Laboratory, Sequim, WA, December 2004).

Estimate: An estimate is not prepared because this is a federal site.

Site 22 – Culvert 7 (City of Bremerton, Outside UGA) – Map ID 105107 Heins Creek City of Bremerton Access Road Crossing

The obstacle rating was evaluated as low to medium. Barrier elements for this 30 LF dual 48-inch-diameter steel galvanized CMP culvert pair include a 1-foot outlet drop and has high velocities at peak flow rates. From WRIA data, the stream is expected to have less than a 2% gradient in this creek. The stream width is approximately 10 feet wide. The stream is 6 feet lower than the 20-foot-wide gravel road grade. The culvert is downstream of 5,000 potential habitat.

Photo 12 Culvert 7 outlets

Discussion and Recommendations: Increasing the slope would adversely affect fish passage by increasing velocities. The culverts could either be replaced or perhaps enhanced with less desirable step wall(s) to raise the water level at the outlet end to match the invert elevation of the culvert. The flows upstream of the crossing should be modeled.

Photos 13 & 14 Culvert 7 outlets

Estimate: The study scope includes design of a drainage culvert and upstream modeling study. A biological assessment will be required as part of a required HPA permit. The construction scope includes a 12 LF by 20-foot-wide flat slab bridge or comparable three-sided culvert.

Site 23 - Culvert 8 (City of Bremerton, Outside UGA) **–** Map ID 105106 Parish Creek Culvert West Belfair Highway

This culvert has a high priority for replacement. Please refer to the culvert discussion described for Site 14 in the *Stormwater Capital Improvement Plan Technical Memorandum* and the Parish Creek addendum to the *Existing Drainage Infrastructure Deficiencies Technical Memorandum* (AECOM, January 2013).

Estimate: The scope for this culvert is included with the *Stormwater Capital Improvement Plan Technical Memorandum* for Site 14.

Culvert 9 is a WSDOT culvert that has since been modified for fish passage modifications to include baffles. The fish passage barrier status should be updated to indicate it is fish passable.

Site 24 – Culvert 10 (Privately owned culvert) – Map ID 111009 – Unnamed Creek at North Side of Hwy 3 at Hwy 3 and Hwy 16 junction

The obstacle rating was evaluated as low to medium. Barrier elements for this 100 LF plus 36-inch-diameter steel CMP culvert include 1-foot high velocities at peak flows and a length greater than 100 feet. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. The culvert is downstream of 5,700 LF of potential habitat.

Photo 15 Culvert 10 outlet

Discussion and Recommendations: Sedimentation of this culvert has reduced the minimum 1-foot clearance for a culvert having a bank flow width less than 8 feet. In the Water Crossings WAC 220-110-070 *"Culverts shall be installed according to an approved design to maintain structural integrity to the 100-year peak flow with consideration of the debris loading likely to be encountered."* The bank flow width is not directly applicable in this case since there is a 36-inch-diameter storm sewer and culvert directly upstream.

Length of the culvert reach cannot be addressed without redirecting the flow from this unnamed stream (1227026475270). The upstream flow traverses a total of 640 LF into three culverts that outlet into the small channel outlet shown. The 100 LF plus length of culvert crosses Sam Christopherson Road where it picks up the culvert crossing Hwy 3 from the lumber yard (addressed under Site 25) and then crosses Washington Cedar Lumber yard culvert (addressed under Sites 12 and 26). This culvert may be completed incrementally (see Figure 2).

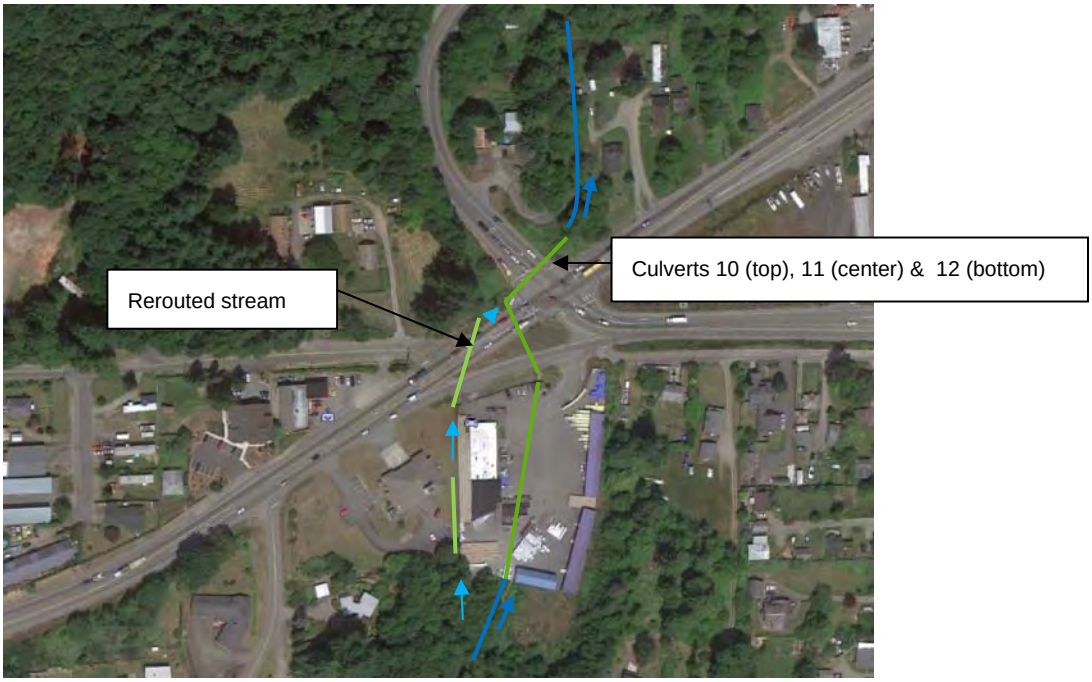

Figure 2 - Existing Culverts of Unnamed Stream

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling. A biological assessment will be required as part of the HPA permit. While may be possible to clean out the sediment from the culvert, the construction scope assumes the culvert will be replaced with a rerouted 58-inch-wide arch culvert to the south side of Hwy 16 and Hwy 3. Unnamed Creek 1227026475270 will be rerouted around the west side of the Washington Cedar Lumber Yard within the fire station property.

Site 25 - Culvert 11 (WSDOT) – Map ID 108414 – Unnamed Creek 1227026475270 at South Side of Hwy 16

The obstacle rating was evaluated as low to medium. Barrier elements for this 120 LF 36-inch-diameter concrete culvert include 1-foot-high velocities at peak flows and length greater than 100 feet. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. The culvert is downstream of 5,600 LF of potential habitat.

Discussion and Recommendations: This culvert crosses Hwy 3 and is directly upstream and connects with Culvert 10 at Site 24. Similar to Site 24, length of the culvert reach cannot be addressed without redirecting the flow from unnamed stream (1227026475270). The upstream flow traverses a total of 640 LF into three culverts that outlet into the small channel outlet shown. The 100 LF plus length of culvert crosses Sam Christopherson Road where it picks up the culvert that crosses Hwy 3 from the lumber yard (Site 25) and which crosses the culvert length under the Washington Cedar Lumber yard addressed in the discussion of Sites 12 and 26 (See Figure 2). Addressing this culvert may be done incrementally. Replacement of this culvert is the responsibility of WSDOT.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling. A biological assessment will be required as part of the HPA permit. The construction scope includes replacing the culvert with a rerouted 190 LF by 58-inch-wide arch culvert between the north and south sides of Hwy 16 and Hwy 3. Unnamed Creek 1227026475270 will be rerouted around the Washington Cedar Lumber Yard.

Site 26 - Culvert 12 (Privately owned) – Map ID 111010 – Unnamed Creek 1227026475270 at South Side of Hwy 16

The obstacle rating was evaluated as low to medium. Barrier elements for this 120 LF 36-inch-diameter concrete culvert include 1-foot high velocities at peak flows and length greater than 100 feet. From WRIA data, the stream is expected to have a 2% to 4% gradient in this tributary. The culvert is downstream of 5,600 LF of potential habitat.

Photo 16 Culvert 12 inlet

Discussion and Recommendations: This 36-inch-diameter CMP culvert is the same culvert discussed under Site 12 and is associated with the Washington Cedar Lumber Yard. As discussed with Sites 24 and 25, the inlet shown in photo 16 is the beginning of roughly 640 LF of culvert and storm sewer pipe that outlets near the Waldbillig properties. The outlet drainage flow of this culvert enters directly into the inlet of the culvert mentioned in Site 25. The only option for improving fish passage is to reroute the stream around the current property and avoid the culvert running through the business property. The private owner will be responsible for adhering to WDFW fish passage compliance.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling. A biological assessment will be required as part of the HPA permit. The construction scope includes replacing the culvert with a rerouted 300 LF of 5-foot-wide creek bed and 140 LF by 58-inch-wide arch culvert adjacent to the fire station and parking lot. Unnamed Creek 1227026475270 will be rerouted around the Washington Cedar Lumber Yard.

Site 27 - Culvert 13 (WSDOT, Outside UGA) – Map ID 107158 – Gorst Greek at Hwy 3 MP 28

The obstacle rating was evaluated as low to medium. Barrier elements for this 2% sloped 174 LF 48-inch-wide by 42-inch-high three-sided box culvert include 1-foot high peak flows and a length greater than 100 feet.

Discussion and Recommendations: Replacement of this culvert crossing Hwy 3 is the responsibility of WSDOT.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling. A biological assessment will be required as part of the HPA permit. Due to the length, the construction scope includes replacing the culvert with a bridge. The bridge length is estimated at 40 LF to extend out wide enough to include the unknown floodplain width of the stream.

Site 28 – Culvert 14 (Privately Owned, Landfill) – Map ID 105104 – Gorst Creek South of Hwy 3 MP 28

The obstacle rating was evaluated as impassible due to sediment infill. This is a 500 LF 24-inch metal CMP culvert.

Discussion and Recommendations: The drainage in the landfill is currently being redesigned with the State.

Estimate: No scope or estimate is provided.

Photo 17 Culvert 14 inlet

Site 29 - Culvert 15 (WSDOT, Outside UGA) – Map ID NL 5 – Unnamed Stream 1227418475110 South of Hwy 3 MP 28

The obstacle rating was evaluated as impassible due to an inlet structure on the entrance of the culvert. This is an 80 LF 18-inch-diameter concrete culvert crosses the 48-foot-wide Hwy 3 paved roadway downstream of 1,000 LF of potential habitat. The flow path follows a ditch along Hwy 3 for several hundred feet.

Discussion and Recommendations: The culvert is not identified in WRIA data as a culvert of concern. Replacement of this culvert is the responsibility of WSDOT.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling and a conceptual design study. Construction scope includes 300 LF of 5-foot-wide ditch channel with fish estuarine features and an 80 LF by 58-inch-wide by 36-inch arch culvert.

Site 30 – Culvert 16 (Kitsap County, Outside UGA) – Map ID 115006 – Gorst Creek at West Belfair Highway

The obstacle rating was evaluated as low to medium. Barrier elements for these 60 LF 72-inch Steel CMP and 96-inch steel arch bottomless culverts include a 6-inch plus drop, sloped passage, and high velocities. The creek slope is roughly 1.6%. These culverts are downstream of 13,200 LF of potential habitat.

Discussion and Recommendations: WRIA 15 recommendations include replacing the culverts with a bridge and restoring estuarine features in the creek below the culverts. Based on the flood profile below, the twin culverts appear to dissipate the hydraulic head upstream for the 10-year to 500-year stream flows. The typical velocity of flow through the culverts would logically be expected to remain high since they are under inlet control with approximately 12 feet of backwater. Removing or modifying these culverts would possibly produce adverse upstream and downstream impacts to the creek. Replacement of this culvert is the responsibility of Kitsap County.

Photo 18 Culvert 16 outlet

Estimate: For estimating purposes, the design scope includes stream hydrologic modeling and a conceptual design study. Construction scope includes a 72 LF span bridge, upstream streambed control weirs, downstream control for 700 LF upstream and 700 LF downstream, and stream bank enhancements for 700 LF downstream.

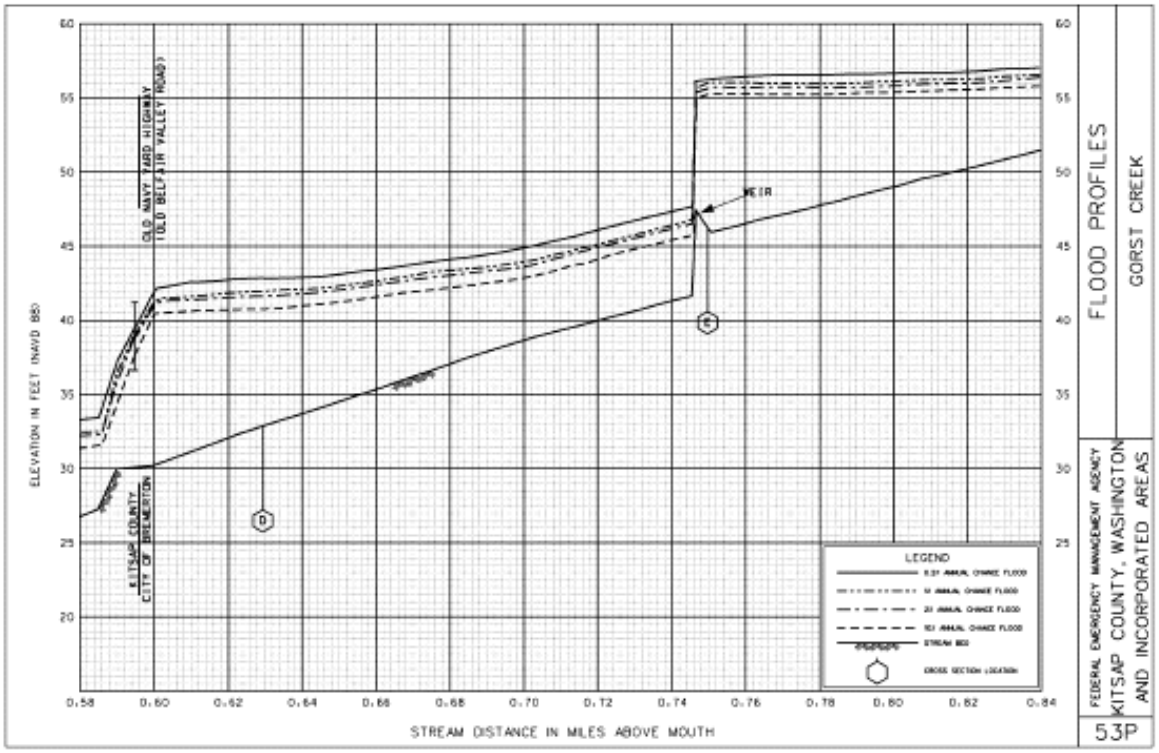

Figure 3 - Gorst Creek Profile Upstream from W. Belfair Valley Road

Site 31 – Culvert 17 (WSDOT) – Map ID 110964 – Gorst Creek at Hwy 3 at Outfall

The obstacle rating was evaluated as low. There are no fish barrier elements to the 120 LF 84-inch by 84-inch twin box culverts.

Discussion and Recommendations: This culvert is discussed with Site 4 and is the responsibility of WSDOT.

Photo 19 Culvert 17

Site 32 – Culvert 18 (WSDOT) – Map ID NL 6 – Unnamed Creek at Hwy 16

This 210 LF by 24-inch-diameter culvert crosses Hwy 16 north to a manhole at the south end of the Subaru dealership parking lot. The receiving culvert then runs north through the Subaru dealership parking lot for a total of approximately 480 LF. The obstacle rating is evaluated as high. Barrier elements for this 24-inch-diameter concrete culvert include a high velocity and length greater than 100 LF. The culvert provides approximately 500 LF of potential habitat.

Discussion and Recommendations: As discussed for Site 3, the repair of the Subaru portion of the receiving culvert is complicated by the owner's claim that the culvert is set within an easement and it is not responsible for the culvert's repair. WSDOT is responsible for this culvert.

Photo 20 Culvert 18 inlet

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling and a conceptual design study. A biological assessment will be required as part of the HPA permit. Construction estimate scope includes 210 LF of 50-inch-wide by 31-inch arch culvert.

Site 33 – Culvert 19 (WSDOT) – Map ID NL 7 – Unnamed Creek at Hwy 16

The obstacle rating for this 24-inch-diameter concrete culvert was evaluated as impassable. Barrier elements include a 2-foot drop and high velocities.

Discussion and Recommendations: Culvert length and the length of reach is not known. Replacement of this culvert is the responsibility of WSDOT.

Estimate: For estimating purposes, the design scope includes investigating this stream for fish habitat quality and the feasibility of improving the site to remove this fish barrier.

Photo 21 Culvert #19 outlets

Site 34 – Culvert 20 (WSDOT) – Map ID 108494 – Unnamed Stream 1226919475271 at Hwy 16

The obstacle rating for this 532 LF 30-inch-diameter concrete culvert was evaluated as high. Barrier elements include an 18-inch drop at the inlet and high velocity. The continuation of this culvert appears to be the 30-inch-diameter CMP culvert crossing the Mattress Ranch noted in Site 11 of the *Stormwater Capital Improvement Plan Technical Memorandum*.

Discussion and Recommendations: The slope of this culvert is 1%. WSDOT is responsible for the portion of the culvert that crosses Hwy 16.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling and a conceptual design study. A biological assessment will be required as part of the HPA permit. Construction scope includes 120 LF of 58-inch-wide by 36-inch arch culvert.

Photo 22 Culvert #20

Site 35 – Stream Barrier 1 (Privately owned) – Map ID 110970 – Unnamed Stream 1226919475271 at Hwy 16

The wood bridge structure is clogged on the inlet side with debris. The obstacle rating was evaluated as very high. Barrier elements include a 2-foot drop and high velocities.

Discussion and Recommendations: The private owner will be responsible for adhering to WDFW fish passage compliance.

Estimate: For estimating purposes, the design scope includes upstream hydrologic modeling and a conceptual design study. A biological assessment will be required as part of the HPA permit. Construction scope includes a 20 LF raised wood bridge, 12 feet wide.

Photo 23 Private Wooden Bridge

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Attachment A: Fish Passage Barrier Inventory

GORST WATERSHED FISH PASSAGE BARRIER INVENTORY

Culvert Photo ID #	Notes	Barrier Map ID	WDFW FPID #	WRIA Number	WSDOT ID #	% Fish Passage	Potential Habitat Lineal Gain (ft)	Rear Area (square miles)	Spawn Area (square miles)	Culvert Shape	Diameter (in)	Material	% slope	Length (ft)
culvert 1	Gold Mtn G.C.	105103	5899 SiteRecID 6589	15.0216		66	5,500			RND	36	CONC		40 est.
culvert 2	Wst Bel HW @ G.C.	NL #1				100	5,400			ARCH	36	CAL		100 est.
culvert 3	Minor Contrib	NL #2				0	300			RND	16	CAL Twin		20 est.
culvert 4	Upper Heins Creek	NL #3				66	1,000			RND	60	CAL		20 est.
culvert 5	Jarstad Box @ park	NL #4				100	2,200			BOX		CONC		
culvert 6	Jarstad RR crossing	105105	5901 SiteRecID 6591	15.0218		0	1,500			RND	30	CONC & SPS		300 est.
culvert 7	Heins Creek	105107	5903 SiteRecID 6593	15.0221		66	5,000			RND				30 est.
culvert 8	Parish Creek WBHW	105106	5902 SiteRecID 6592	15.0220		33	7,400			RND	60	CST		<100 est
culvert 9	Parish Creek @ SR 3	118126	9818 SiteRecID 11598	15.0220	990323	66	5,200			RND[1]	108	SPS		
culvert 10	SR 3 SR 16 junction	111009	15383 SiteRecID 17490		996828	66	5,700			ARCH	36	CMP		100 est.
culvert 11	SR 3 SR 16 junction	108414	10985 SiteRecID 12803	15.0217	991585	66	5,600			RND	36	CONC		120 est.
culvert 12	Cedar Lumberyard	111010	17492 SiteNum 996830		996830	33	5,000			RND	36	CMP		370 est.
culvert 13	WSDOT SR 3 BOX	107158	9681 SiteRecID 11454	15.0216	990168	33	4,186	0.00035	0.00058	BOX		PCC	1.96	174
culvert 14	Landfill Culvert	105104	5900 SiteRecID 6590	15.0216		0	2,400			RND	24	CAL		500 est
culvert 15	SR 3 Culvert	NL #5				0	1,000			RND	18	CONC		80 est
culvert 16	Gorst Cr. WstBelHW	115006	20961 SiteRecID 6587	15.0216		66	13,200			RND, ARCH	72 & 120	CMP Twin		60
culvert 17	Gorst outfall	110964	15308 SiteRecID 17403	15.0216	996740	67	16,900			BOX	84	CONC Box Twin	0.20	120
culvert 18	Unnamed at SR 16	NL #6				0	500 est.			RND	24	CONC		470 est
culvert 19	Unnamed at SR 16	NL #7				0				RND				
culvert 20	Unnamed at SR 16	108494	11063 SiteRecID 12860	15.0216	991670	33				RND	30	OTH	0.99	532
Barrier 21	Wooden Structure	110970?	15325 SiteRecID 17424		996761	0								
Fishway 1	Heins Creek	105108	5904 SiteRecID 6594	15.0221		100				Fishway[2]		CONC WP		150 est
	TESC nonexistant	118570	36020 SiteRecID 13213		991993	100								

[1] Culvert with baffles or otherwise designed for improved fish passage, Culvert with roughened channel inside, etc.

[2] Combination of weir and pool, vertical slot or roughened channel fishways, etc.

Fishway Definitions: **BC** = baffled culvert, **BF** = baffled flume, **PC** = pool chute, **WP** = weir pool, **SP** = Steep Pass, **VS** = vertical slot, **SBC** = streambed control, **RCC** = roughened channel culvert, **BL** = blasted falls, **TH** = trap and haul, **Unk** = unknown

Codes Used for Culvert Shape

ARCH - bottomless arch
BOX - rectangular
SQSH - squash
ELL - ellipse
RND - round
OTH - other

Codes Used for Culvert Materials

PCC - precast concrete
SPA - structural plate aluminium
CST - corrugated steel
TMB - timber
SST - smooth steel
MRY - masonry
CAL - Corrugated aluminium
OTH - other
SPS - structural plate steel
PVC - plastic

Washington State Department of Fish and Wildlife *Progress Performance Report For WSDOT Fish Passage Inventory,* June 2011 Appendix IIIA. WSDOT Fish Barriers Inventoried as of Feb 2011

Based on Field Inspection by Engineer 12-2011, barrier rating by velocity estimated and not calculated, barrier drops estimated and not measured

Table 3.3. Criteria for assigning passability to culverts that are assessed as barriers. When more than one parameter applies, use the more restrictive passability value.

Parameter	Value	Range	Passability
Water Surface Drop	≥0.24 meters	≥0.24 m & <0.5 m	0.67
		≥0.5 m & <1.0 m	0.33
		≥1.0 m	0
Slope (Culverts ≤18.3 meters length)	≥1.0%	≥1.0% & <2.0%	0.67
		≥2.0% & <4.0%	0.33
		≥4.0%	0
Slope (Culvert >18.3 meters length)	≥1.0%	≥1.0% & <2.0%	0.33
		≥2.0%	0

GORST WATERSHED FISH PASSAGE BARRIER INVENTORY

LocationID	Name	Tributary to	Latitude	Longitude	LIsource	BarrierOwn	AgencyType	AgencyTy_1	FishWayTyp	FishWay Notes	FishWaySta	FishWayS_1	RefID	Year_Comp	Year_Remov	GenPassSta	Height	Updated	InternalAg
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.52431700000	-122.74288300000	DIG		22	City of Bremerton	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	1	0		6589
								Kitsap County?											
								City of Bremerton											
								City of Bremerton											
1227104475308	Unnamed Stream [1227104475308]	Unnamed Stream [1227104475308], trib to Gorst Creek	47.53114000000	-122.71202600000	DIG		4	US Navy	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	0		6591
1227133475309	Heins Creek	Heins Creek, trib to Gorst Creek	47.53098400000	-122.71624600000	GPS		22	City of Bremerton	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	1		6593
1227123475308	Parish Creek	Parish Creek, trib to Gorst Creek	47.52924100000	-122.71385700000	GPS		22	City of Bremerton	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	0		6592
1227123475308	Parish Creek	Parish Creek, trib to Gorst Creek	47.52373700000	-122.71592700000	GPS		2	WSDOT	213	Hybrid or multiple types[2]	2	Fishway present and functioning	17000	1992	0	3	0		11598
BW17490	PointID for WDFW FPDSI.mdb SiteRec_ID 17490	PointID for WDFW FPDSI.mdb SiteRec_ID 17490	47.52633500000	-122.70427600000	GPS		21	Private	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	3	0		17490
1227026475270	Unnamed Stream [1227026475270]	Unnamed Stream [1227026475270], trib to Gorst Creek	47.52554100000	-122.70425700000	GPS		2	WSDOT	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	0		12803
BW17492	PointID for WDFW FPDSI.mdb SiteRec_ID 17492	PointID for WDFW FPDSI.mdb SiteRec_ID 17492	47.52519700000	-122.70467800000	GPS		21	Private	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	1	0		17492
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.51060000000	-122.74199800000	GPS		2	WSDOT	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	0		11454
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.51032100000	-122.74137300000	GPS		21	Private	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	1	1		6590
							21	WSDOT											
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.52925800000	-122.70850200000	GPS		23	Kitsap County	BC	Culvert is designed for fish passage[3]	2	Fishway present and functioning	17000	1987	0	3	0		6587
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.52800800000	-122.69885700000	GPS		2	WSDOT	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	3	0		17403
								WSDOT											
								WSDOT											
1226919475271	Unnamed Stream [1226919475271]	Unnamed Stream [1226919475271], flows into Puget Sound	47.52457500000	-122.69457500000	GPS		2	WSDOT	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	1	0		12860
BW17424	PointID for WDFW FPDSI.mdb SiteRec_ID 17424	PointID for WDFW FPDSI.mdb SiteRec_ID 17424	47.52325100000	-122.69406100000	GPS		21	Private	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	2	0		17424
1227133475309	Heins Creek	Heins Creek, trib to Gorst Creek	47.53234900000	-122.71983300000	GPS		4	US Navy	101	WP Fish Ladder constructed 2011	1	Barrier has no known fishway	17000	0	0	1	4		6594
1226963475279	Gorst Creek	Gorst Creek, flows into Puget Sound	47.51048800000	-122.74173300000	GPS		2	WSDOT	101	None (Fishway known to be absent)	1	Barrier has no known fishway	17000	0	0	1	0	10/23/2008	13213

Appendix E: Ranking of Improvements

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Sites	Priority Table	Solution Complexity Table	Costs	Responsibility	Action	Standing
0	1	3	5	1	1	1
1	3	4	4	1	12	2
2	3	3	3	1	10	2
3	6	4	4	1	15	3
4	1	3	6	3	13	2
5	N/A	N/A	N/A	N/A	0	N/A
6	3	5	6	1	15	3
7	3	6	2	1	12	2
8	N/A	N/A	N/A	N/A	0	N/A
9	N/A	N/A	N/A	N/A	0	N/A
10	6	1	2	1	10	2
11	6	4	5	20	35	4
12	3	3	4	1	11	2
13	N/A	N/A	N/A	N/A	0	N/A
14	1	5	6	1	13	2
15	2	3	2	3	10	2
16	N/A	N/A	N/A	N/A	0	N/A
17		4	4	1	8	1
18		4	4	2	10	2
19		4	3	1	8	1
20		4	3	1	8	1
21	N/A	N/A	N/A	N/A	0	N/A
22		4	4	1	8	1
23	N/A	N/A	N/A	N/A	0	N/A
24		5	4	20	29	4
25		5	4	3	12	2
26		5	4	20	29	4
27		4	5	3	12	2
28	N/A	N/A	N/A	N/A	0	N/A
29		4	4	3	11	2
30		4	6	2	12	2
31	N/A	N/A	N/A	N/A	0	N/A
32		5	5	3	13	2
33		3	2	3	8	1
34		5	4	3	12	2
35		4	3	20	27	4

Legend

1= Public Safety Risk
2= Fish ESA > 70%
3= Property Risk (Major)
4= Fish ESA > 50%
5= Fish ESA > 20%
6= Property Risk (Minor)

1= Trivial < $10,000
2= Low $10,000 to $50,000
3= medium $50,000 to $150,000
4= Moderately high $150,000 to $300,000
5= High $300,000 to $1,000,000
6= Extremely high > $1,000,000

Priority 1 <10
Priority 2 10 to 15
Priority 3 16 to 25
Priority 4 > 25

1= Minor construction / watch
2= Maintenance (Annual)
3= Feasibility study
4= Construction requiring permit
5= Construction requires calculation (complex, multiple jurisdictions)
6= Major (NEPA, Extensive)

1= City of Bremerton
2= Kitsap County
3= WSDOT
20= Non city, county, state