Section C: Zoning and Development Standards

THIS PAGE INTENTIONALLY BLANK

SECTION C: PSIC ZONING AND DEVELOPMENT STANDARDS

Chapter 1: Introduction

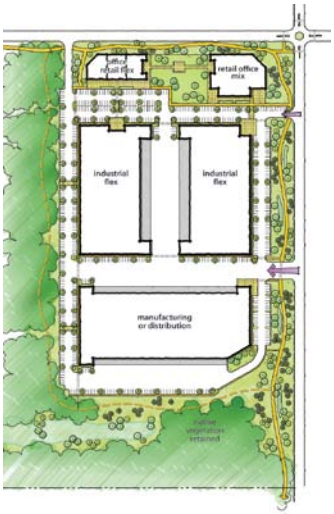
1.010 Purpose

a. The PSIC Zoning and Development Standards establish zoning provisions, minimum development standards, performance standards and design criteria that will guide all development in the Puget Sound Industrial Center (PSIC) Subarea, including both areas within and outside of the designated Manufacturing/Industrial Center (MIC). The purpose of these development standards is to:

   1. Implement the vision and policy direction contained in Section A;
   2. Promote environmental stewardship and reward businesses for being responsible neighbors and contributing to the sustainable character of the community;
   3. Promote compact industrial and commercial development on environmentally suitable sites near existing and planned infrastructure;
   4. Promote regional job creation and long term economic vitality through standards and guidelines that encourage and reward attractive, more sustainable development;
   5. Provide a streamlined review process for development that is consistent with Land Use Goal 3 of Section A and related SEPA Planned Action;
   6. Ensure the continued viability of industrial and aviation uses by providing restrictions and physical separation of uses that are deemed incompatible by the City;
   7. Provide a regulatory balance between predictability and flexibility to recognize the evolving nature of land uses, unique site conditions and development technologies.

b. The standards address the following elements:

   1. Chapter 1: Introduction, including a description of the purpose, content, applicability and administration of the Zoning and Development Standards;
   2. Chapter 2: Definitions;
   3. Chapter 3: Land Use Zones, including purpose statements for each zone, zoning map, and standards for uses, height, setbacks, and other key standards;



Example of intensive, compact industrial development.

Sustainable industrial development.

4. Chapter 4: Development Standards, including standards for site clearing and development; building design; transportation, parking, circulation, and pedestrian access; landscaping; signs; exterior lighting; noise and emissions; and low impact development;
5. Chapter 5: Right-of-Way Standards

1.020 Applicability

a. The Zoning and Development Standards provide minimum requirements applicable to development in the PSIC Subarea. The purposes outlined in this subsection are intended to be achieved through compliance with all mandatory standards and consideration of the design guidelines.

b. Conflict of Provisions and Severability

   1. The standards contained in Section C are specific to PSIC and are intended to supplement or modify standards contained in the Bremerton Municipal Code (BMC Title 20).
   2. In the event of a conflict between the standards contained in Section C and those contained in the Bremerton Municipal Code, the standards in Section C shall prevail.
   3. In the event that a provision of this Chapter is held invalid, the remaining provisions shall remain in full force.

Chapter 2: Definitions

2.010 Introduction

All definitions contained with the Bremerton Municipal Code (BMC) apply in PSIC, unless specifically modified by the definitions below. Specific land uses are defined in BMC Chapter 20.42. If a specific term is not defined or referenced herein or in BMC Chapter 20.42, it shall take its normal and customary meaning within the context of how it is used.

2.020 List of Defined Terms

Critical Root Zone (CRZ) — The minimum area beneath a tree that must be left undisturbed in order to preserve sufficient root mass to give a tree a reasonable chance of survival. The CRZ is typically represented by a concentric circle centering on the tree trunk with a radius equal to the distance from the outside of the trunk to any point twelve times the trunk diameter, which is measured at four and a half feet from the ground.

Dispersion — Release of surface and storm water runoff from a drainage facility system such that the flow spreads over a wide area and is located so as not to allow flow to concentrate anywhere upstream of a drainage channel with erodible underlying granular soils or the potential to flood downstream properties.

Dual Supply Plumbing — A plumbing system that provides separate piping and connections for the use of either potable water or reclaimed, non-potable water at the same fixture.

Effective Landscaping — An area that provides sufficient quantity and quality of plant materials to screen parking, building, or hardscaped areas of a project and provides color and viewing interest.

Feasible — Actions that can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results. Additionally, the action

Example of separate piping systems for potable (blue) and reclaimed non-potable (purple) water. Image courtesy of the Water Environment Federation.

	shall not physically preclude achieving the project's primary intended legal use. In cases where these standards require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the City may weigh the action's relative costs and public benefits, considered in short- and long-term time frames.
Habitat Corridor	A continuous area of retained, multi-layered native vegetation that provides habitat for native wildlife species and connects environmentally critical areas, such as wetlands, or other permanently preserved natural areas allowing passage of wildlife through developed areas with minimal human disturbance.
Hard Surfaces	Any impervious surface, as well as any pervious or partially pervious surface that is not predominantly covered with vegetation or landscape mulch.
Infiltration	The movement of water into the soil layer. The rate of this movement is called the infiltration rate. If rainfall intensity is greater than the infiltration rate, water will accumulate on the surface and runoff will begin.
Infiltration facility	A drainage facility designed to use the hydrologic process of water soaking into the ground (commonly referred to as percolation) to dispose of surface and storm water runoff.
Low Impact Development (LID)	A stormwater management, site design and engineering approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized small-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Specific LID tools and standards are identified in the Low

Impact Development: Technical Guidance Manual for Puget Sound.

Multi-layered Landscaping Landscaping that incorporates plants of varying sizes (trees, shrubs, groundcover) to mimic the natural understory-canopy forest relationship. Such landscaping should generally be planted at densities similar to intact forest communities in the general vicinity.

Retained multilayered vegetation and habitat area.

Neighborhood Electric Vehicles Battery electric vehicles that are legally limited to roads with certain posted speed limits, usually are built to have a top speed of 30 miles per hour (48 km/h), and have a maximum loaded weight of 3,000 lbs. NEVs fall under the United States Department of Transportation classification for low-speed vehicles.

Neighborhood electric vehicles (NEVs) provide quick access between buildings and work sites and can be shared by all employees. NEVs are allowed on all roads and trails in PSIC other than State Route 3.

Off-Site Trail Connection A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles, that provides a connection from one development site to another or that connects to an established public regional trail system.

On-Site Trail A non-motorized pathway, constructed for use primarily by pedestrians, bicyclists, and neighborhood electric vehicles, that provides access between buildings, parking, common areas, and open space within a development site.

Pedestrian-Scaled The relationship between the dimensions of a building, street, outdoor space, or streetscape element and the average dimensions of the human body, as well as the space and built environment as perceived by the senses of a human being.

Pollution Generating Impervious Surface An impervious surface that is a significant source of stormwater run-off pollutants. Pollution Generating Impervious Surface (PGIS) includes surface that receive direct rainfall and are regularly used for vehicular travel, storage of waste, storage of chemicals, or storage of erodible or

	leachable materials (stockpiled soils, fertilizers, manure, ashes, petroleum products, etc). PGIS also includes metal roofs unless they are coated with an inert, non-leachable material.
Setback, External	The minimum required horizontal distance between the finished exterior wall of a structure and the nearest lot line that borders a property not located within the PSIC subarea.
Site Clearing	The clearing or removal of vegetative cover and other obstructions on a project site prior to undertaking construction work.
Support Retail and Services	Locally serving uses such as banks, child care, cafés, cleaners, medical/dental offices, and similar uses that support employees of industrial office or business uses.
Trees, large	A tree with a canopy that will reach at least 30 feet in diameter at maturity.
Trees, small	A tree with a canopy that will not exceed 30 feet in diameter at maturity.
Vehicle Storage Area	An outdoor area where vehicles and equipment are accumulated and stored for an indefinite period of time.

Chapter 3: Zoning Districts and Uses

3.010 Zone Establishment and Purpose

The following zones are hereby established within PSIC to protect the public health, safety and general welfare by implementing the goals and policies adopted in Section A. These goals include promoting the economic viability of manufacturing and industrial uses, encouraging employment growth, protecting Bremerton National Airport from incompatible land uses and preventing the encroachment of unplanned residential and other large non-industrial development within industrial zones. Specific purpose statements listed for each zone shall serve as a guide in determining the appropriate location of uses, conditions for development and in interpreting the standards.

a. General Industrial (GI)

   The purpose of this zone is to promote a wide range of light and heavy industrial uses and compatible support retail and service uses.

b. Port Industrial Mix (PIM)

   The purpose of this zone is to promote a wide range of light industrial, support retail and service uses, government uses and compatible service uses within a business park built form, as well as recreational facilities that are designed and operated in a manner that is compatible with industrial uses. Heavy industrial uses are also allowed in this zone, provided additional measures are taken to reduce the potential negative impacts of these uses on adjacent property through site design, screening, buffers and landscaping.

c. Aviation Business (AB)

   The purpose of this zone is to provide areas for aviation related business, manufacturing and service-related uses, while ensuring compatibility with aircraft operations. A broad range of non-aviation industrial uses that do not include significant outdoor operations are also allowed in this zone, provided measures are taken to reduce the potential negative impacts of these uses on adjacent property through site design, screening, buffers and landscaping.

d. Mixed Employment (ME)

   The purpose of this zone is to promote a range of commercial, office and light industrial uses outside of the MIC boundaries that are compatible with land uses in the MIC, with improved non-motorized connections and amenities. Light industrial activities in this zone should occur within enclosed buildings and heavy industrial uses are discouraged.

Shared Vision, Shared Direction

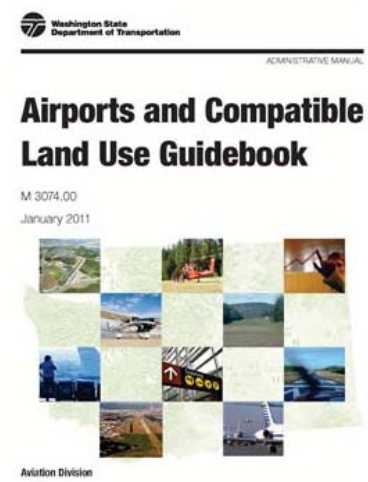
The purpose of the PSIC Zoning and development standards is to implement key policy direction identified in the Section A, such as Strategy LU 3.1, which calls for a streamlined and expedited permitting process for development that meets sustainability criteria.

Examples of development in the PIM Zone.

Example of development appropriate for the Mixed Employment Zone

Shared Vision, Shared Direction

The Airport Compatibility Overlay (ACO) implements Policy LU 2.3 of Section A regarding controls on land uses and development that are incompatible with Bremerton National Airport.



ACO Zones are defined based on guidance in the WSDOT Airports and Compatible Land Use Guidebook, available online at http://www.wsdot.wa.gov/aviation/Planning/ACLUguide.htm

e. Airport Compatibility Overlay (ACO)

1. The purpose of this overlay zone is to protect the viability of Bremerton National Airport by discouraging incompatible land uses and requiring the evaluation and consideration of potential safety impacts when siting certain land uses in proximity to the airport while retaining City zoning authority.

2. Determination of ACO. The Airport Compatibility Overlay for Bremerton National Airport is derived from the most current edition of the Washington State Department of Transportation's Airports and Compatible Land Use Guidebook. The location and mapped extent of the ACO Zones 1 through 6 are based on the WSDOT Guidebook recommended zone overlay for runways exceeding 5,000 feet as applied to Bremerton National Airport. The City retains all rights to prohibit, establish, and/or modify land uses within proximity to Bremerton National Airport. Airport compatibility zones represent areas surrounding an airport that have the potential to be affected by airport operations, including exposure to lights, noise, vibration, or increased aircraft crash hazard. To minimize safety risks, the WSDOT Guidebook contains an advisory list of sensitive land uses that generally should not be located within certain compatibility zones. In general, the most sensitive land uses should not be allowed within Zones 1-4, which are directly affected by take-off and landing procedures. Each compatibility zone corresponds to a phase of the airport traffic sequence and has an associated level of crash risk:

   i. Zone 1 is the area immediately adjacent to either end of the runway, directly in the take-off or landing path. This zone lies on airport property and is generally kept free of structures to avoid interference with aircraft. This zone carries the highest crash risk for arriving aircraft.

   ii. Zone 2 is an extension of Zone 1 and consists of the approach path for landing aircraft or ascent path for departing aircraft. This zone represents the most likely crash area for departing aircraft.

   iii. Zone 3 is the inner aircraft turning zone. While crash risk is relatively low, land use compatibility is a concern due to the relatively low altitude of arriving and departing aircraft.

   iv. Zone 4 is the outer approach/departure zone, located on a direct line from the ends of the runway. Crash risk is relatively low, but structure height should be regulated to prevent interference with aircraft landing/departure.

v. Zone 5 represents the runway itself and land immediately adjacent to the sides of the runway.

vi. Zone 6 is the general traffic area for aircraft in the traffic pattern awaiting permission to land.

3. Compliance with FAA Regulations. In addition to local requirements established in the Section C, the applicant will be responsible for compliance with Federal Aviation Administration (FAA) Regulations, including, but not limited to, FAR Part 77 federal airspace regulations pertaining to the height of structures within defined areas.

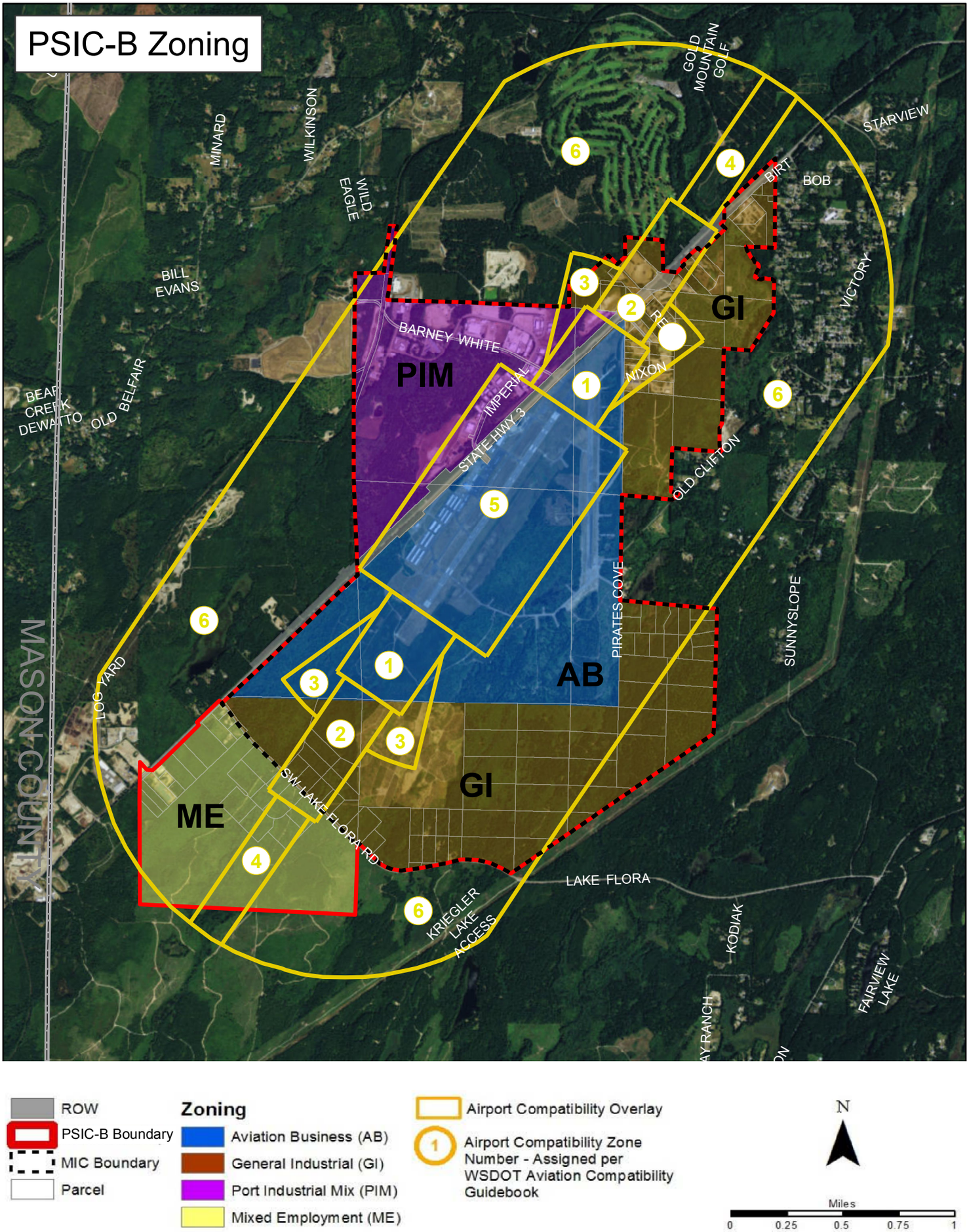
4. Consultation with the Port of Bremerton. All applicants proposing work in ACO zones 1 through 6 shall consult the Port of Bremerton after submitting a land use, site development, or building permit application. Consultation with the Port of Bremerton encourages applicants to seek input on actions that may affect Bremerton National Airport and promotes land use compatibility.

Development in the ACO should not conflict with airport operations.

3.020 ZONING MAP

Figure C-1 depicts the location and extent of land use zones within the PSIC Subarea. The boundaries of the designated Manufacturing Industrial Center (MIC), which includes the General Industrial, Port Industrial Mix, and Aviation Business zones is also shown.

Figure C-1: PSIC-B Zoning Map



3.030 Permitted Uses

a. The purpose of this section is to ensure that land uses within PSIC are compatible with manufacturing, industrial, aviation and employment uses. The following use regulations shall apply to all zones within the PSIC Subarea. All applicable requirements shall govern a use whether or not they are cross-referenced in a section.

b. Permitted Uses. Provided that they are consistent with the intent of the Zone as specified in Section C.3.010, all uses are permitted outright, except for those uses set forth as conditional per Section C.3.040, those uses prohibited per Section C.3.050, and provided that the Development Standards specified in Chapter C.4 and C.5 of the Subarea Plan are satisfied. The applicant shall bear the burden of proving that a proposed use achieves the stated intent of the particular zone.

c. Use Definitions. Definitions of the specific land uses are found in BMC Chapter 20.42.

d. Decision Authority. A use determination made by the Director may be appealed to the Hearing Examiner following a Type II decision process as set forth in BMC Chapters 20.02 and 20.40.

3.040 Conditional Uses

a. Conditional Uses. A conditional use permit, which is approved pursuant to BMC 20.58.020, may permit the following uses, provided that the Development Standards specified in Chapter C.4 and C.5 of the Subarea Plan are satisfied:

    1. Group Residential Facility—Class II
    2. Adult Entertainment Business
    3. Essential public facilities, as defined in RCW 36.70A.200

3.050 Prohibited Uses

a. Prohibited Uses. Prohibited uses in the PSIC Subarea include:

    1. Junk Yard
    2. Residential as a primary use

b. In addition to the prohibited uses listed above, any use with significant adverse impacts on less intense uses in neighboring residential zones shall be prohibited. Determination of significant adverse impact is made by the City and is based upon the following criteria:

    1. Noise encroachment. Generation of sound not meeting the provisions of the noise levels ordinance, BMC Chapter 6.32;

2. Light/glare encroachment. Unshielded glare visible during periods of darkness in an adjacent residential zone;
3. Odor, dust or smoke encroachment. Emission of an odor, dust or smoke byproduct clearly detectable in any residential zone.

3.060: Site Development Standards

a. The purpose of this section is to ensure that site development is accomplished in a manner that is compatible with neighboring uses, while providing flexibility. Minimum site development standards apply as shown in Table C-1.

b. Except those specified in Table C-1 below, there are no traditional setback requirements in PSIC. Instead, emphasis will be put on site conditions and corresponding site design to ensure safe, compatible, and effective building placement. Refer to the General Development Standards of Chapter C.4 for more specific development standards.

Table C-1: Site Development Standards

	General Industrial	**Port Industrial Mix**	**Aviation Business**	**Mixed Employment**
Standards				
Maximum Height [1]	Market Driven	Market Driven	Market Driven	Market Driven
Minimum External Setbacks when abutting an R-10 Zone or a residential use outside of PSIC boundaries. [2, 3]	50 feet	50 feet	50 feet	25 feet

Notes
1. Where building heights might affect airport operations at Bremerton National Airport applicants must demonstrate compliance with the criteria specified in Federal Aviation Regulations Part 77 and other applicable requirements.
2. This setback applies where a property line abuts another property. Refer to Section C.2.020 for additional information on where these setbacks apply.
3. An additional setback of 10 feet is required for outdoor storage use only.

Chapter 4: Development Standards

4.010 Purpose

a. The following standards apply to all zones and land uses within PSIC. They are intended to set minimum basic standards (i.e. requirements) for all development. These standards are also intended to encourage sustainable development, consistent with the policy direction contained in Section A. An applicant must satisfy the minimum requirements specified in each Subsection. Additional recommended guidance on methods to increase overall project sustainability are contained in Section D – Sustainable Development Guidelines and Development Incentives.

4.020 Site Clearing and Site Development

a. The purpose of this section is to prevent the indiscriminate removal or destruction of trees and ground cover on undeveloped and partially developed property during construction activities while also limiting hard and impervious surface coverage.

    1. Site Clearing. The maximum allowed site clearance for construction on a parcel shall not exceed the necessary area needed for construction purposes. Clearing for timber harvesting purposes shall be approved separately.

    2. Grading. On-site grading shall be limited to the greatest extent possible and shall be limited to the period between May 1st and October 1st, except when accompanied by a geotechnical report prepared by a qualified professional licensed in the State of Washington, which specifically and realistically identifies methods of erosion control for wet weather conditions.

    3. Hard Surface Coverage. The maximum allowed hard surface coverage on a parcel shall not exceed the area necessary for site development purposes and in no case shall exceed 75% of the total site area, except as specified in Tables D-1 or D-2 as appropriate.

    4. Impervious Surface Coverage. The maximum allowed impervious surface coverage on a parcel shall not exceed the area necessary for site development purposes and in no case shall exceed 65% of the total site area, except as specified in Tables D-1 or D-2 as appropriate.

4.030 Building Design Standards

a. Basic Site Development Standards. The purpose of this section is to ensure building design that enhances the architectural and aesthetic quality of buildings in PSIC. Further guidance for specific standards

in this section can be found in the Design Guidelines located in Section D.

1. No outdoor storage in required building setbacks or easements shall be allowed.
2. Primary entrances shall be located so that they are visible and prominent from streets or access roads and parking areas.
   i. Primary entrances shall be made visible and prominent by using architectural elements such as canopies, fixed seating, large doors, or protruding or recessed entrances.
   ii. Avoid hidden building entrances, ensure good sight lines and well lit inset doorway and alcoves to increase personal safety.
3. The primary public entrances of all buildings shall be enhanced by one or more of the following at or near the entry:
   i. Provide pedestrian facilities such as benches, kiosks, special paving; or
   ii. Provide a trellis, arbor or other building element that incorporates landscaping; or
   iii. Provide pedestrian-scaled lighting; or
   iv. Provide adjacent window displays; or
   v. Provide building ornamentation such as mosaic tile, relief sculpture, ornamental wood, metal trim, or other approved detailing; or
   vi. Provide artwork or special pedestrian-scaled signs; or
   vii. Other methods as approved by the Director as meeting the intent.

Landscaping framing a building entrance and open space.

b. Basic Building Design Standards. One of the following basic building design standards are required for building façades longer than 100 feet that are visible from the public right-of-way:
   1. A visual treatment applied for a continuous distance of at least 20 feet along the façade with the interval between treated areas not exceeding 100 feet;
   2. An offset with a minimum depth of 5 feet;
   3. A façade material, texture or color that is visually different and distinct from that of the base material, texture or color;
   4. Landscape screening or other vegetated treatment as approved by the Director;
   5. This requirement may be waived or modified for heavy industrial uses where determined not to be feasible by the Director.

Light Industrial-Flex building featuring façade modulation, recessed entrance, and large windows facing the street.

c. Minimum Building Energy Efficiency. For all new construction, development shall meet at least one of the requirements, as described in LEED-ND GIB Prerequisite 2: Minimum Building Energy Efficiency, or functional equivalent standard as determined by the Director.

4.040 Transportation, Parking, Circulation, and Pedestrian Access

a. The purpose of this section is to reduce the visual impact of parking, reduce vehicle trips, encourage alternate modes of transportation, and reduce greenhouse gas emissions within PSIC. Parking is regulated through standards that address the design, location, and size of parking areas. Right-of-way standards and requirements for sidewalks, trails, and driveways are contained in Chapter C.5. Traffic requirements and parking development shall be in accordance with the provisions of the Bremerton Municipal Code, including Title 10 (Traffic), Chapter 11.12 (Transportation Development), Chapter 20.48 (Off-Street Parking), with the following revisions and exceptions.

b. Commute Trip Reduction

   1. The requirements of BMC Chapter 10.40, Commute Trip Reduction (CTR) Plan, shall apply, except as provided in paragraph (2) below.

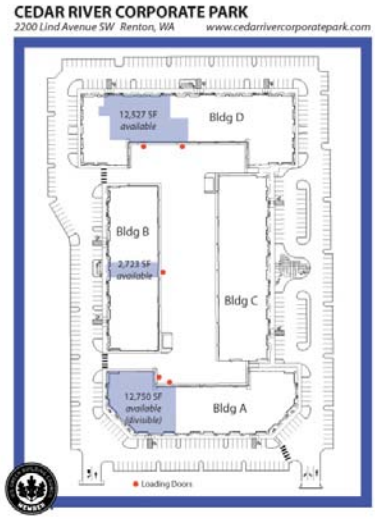
   2. Once total new employment within PSIC has exceeded 2,000 new employees (resulting from actions permitted under the Planned Action Ordinance), all employers with 50 or more employees shall be required to participate in the CTR Program.

c. Minimum Parking Requirements. Minimum parking standards shall be in accordance with BMC Chapter 20.48 Off-Street Parking Requirements, except as specified in Paragraph (1) of this subsection as well as in Subsection (e) below.

   1. Parking reductions may be allowed, at the discretion of the Director, if a parking analysis is completed and indicates that sufficient parking is available to meet demand.

d. Parking Location and Design

   1. Parking areas that accommodate more than 125 vehicles shall be divided into a series of smaller connected lots, located behind structures, and/or fully screened with Type I landscaping.



Site plan using internal service court to avoid vehicular and pedestrian conflicts and to screen service and storage activities. Site plan courtesy of Cedar River Corporate Park, LLC.

Example of intensive, compact industrial development with shared parking and loading areas screened from rights-of-way.

Shared Vision, Shared Direction

See Strategies T 2.2 and LU 1.3 for policies that support shared parking and coordinated access.

e. Shared Parking Area Reductions

1. The amount of off-street parking required in Subsection (c) above may be reduced where multiple buildings/tenants share a common, centrally-located parking area. Reduction shall be based on the type and mix of uses, as follows, except that these reductions shall not be used in conjunction with reductions specified in Subsection (c) above:

   i. Properties with only industrial or support retail and service uses: 30% reduction

   ii. Properties with retail or other uses: 10% reduction

   iii. Mixed retail/office uses with at least a 4:1 ratio of retail to office: 20% reduction

   iv. 50% reduction for retail uses of less than 5,000 sq. ft. when they are developed as part of a business park that contains at least 60% industrial or support retail and service uses.

f. Parking Stall and Aisle Design. Shall be in accordance with BMC 20.48.080.

g. Loading and Vehicle Storage Areas

1. Loading and vehicle storage areas shall not be located within required building setbacks.

2. Vehicle loading docks and long-term vehicle storage areas shall be screened from public rights-of-way with Type I Visual Screening, walls, or other methods, as approved by the Director.

3. The Director may waive or modify these standards where it is deemed infeasible for a particular industrial or manufacturing use.

h. Pedestrian Access

1. Projects shall include an on-site pedestrian system connecting all parking areas and entrances to each other and the public right-of-way.

2. Pedestrian paths shall be integrated with the parking lot landscaping required in BMC 20.48.080 and BMC 20.50.050(c)(3).

3. Bicycle circulation shall be considered in site design and appropriate measures taken to accommodate bicycle circulation on-site.

4. Where feasible, provide steps and ramps across retaining walls and slopes.

5. Pedestrian paths shall be well lit.

Separation of parking from pedestrian pathway with landscaping and weather covering.

6. Adjacent landscaping shall not block visibility to and from a pedestrian path, especially where it approaches a roadway or driveway.

7. Refer to Chapter D.3 for more specific Design Guidelines.

i. Bicycle Facilities. Bicycle parking shall be provided at 10% of the required automobile spaces. Please see BMC 20.48.180(b) for bicycle parking requirements and Section D.3.170 for recommended Design Guidelines.

j. Neighborhood Electric Vehicles. Neighborhood Electric Vehicles (NEV) and Electric Golf Carts shall be allowed on all pedestrian pathways within PSIC that are constructed to the standards contained in Section C.5.050. NEVs shall also be allowed on all public roadways in PSIC where their use is not otherwise prohibited by state or local law (e.g. roadways with a maximum speed limit of 25 miles per hour or less are suitable).

Indoor bicycle parking facility. Image courtesy of FHWA.

4.050 Landscaping

a. The purpose of this section is to ensure that site landscaping within PSIC reflects key goals related to sustainable development and stewardship of critical areas. The retention of existing trees and vegetation is important to help promote the utilization of natural systems for environmental benefits, reduce the impacts of development on the storm drainage system, moderate the urban heat island effect and provide a better transition between various land uses within the City. The requirements of BMC Chapter 20.50 shall apply, except as modified or supplemented in this subsection. Please also see Chapter D.4. for recommended design guidelines.

Multilayered landscaping used to screen industrial loading area from adjacent street.

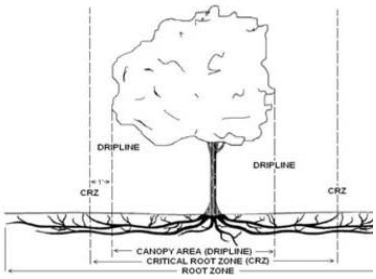
b. Vegetation Preservation

1. To the greatest extent feasible, existing healthy significant trees defined in BMC 20.50.050(d)(4) shall be retained on site.

2. Site design shall attempt to preserve existing trees where feasible. However, should a proposal include the removal of all or portions of a site's significant tree cover a certified arborist or professional forester shall be retained by the applicant to inventory the tree(s) and make recommendations regarding the protection, retention, preservation, removal and replacement of the tree(s). A copy of the report and recommendations shall be submitted to the City as part of the site development process and prior to clearing.

3. If any trees in required landscaped areas are deemed to be hazardous and must be removed, the following replacement standards are required:

Example of retained vegetation in an industrial parking area.



A tree's Critical Root Zone extends beyond the dripline, and disturbance in this area should be avoided to prolong the life of the tree. Photo courtesy of Urban Horticulture Institute, Cornell University. Diagram courtesy of the City of Elk Grove, CA.

Retained and planted landscaping resulting in a combination of large and small trees.

i. Replacement trees shall be similar to the trees removed and all replacement plants in required landscaped areas are subject to native species requirement in Section C.4.050(c)(3).

ii. The evaluation report shall provide recommendations for methods to ensure that hazard removal and replacement planting do not harm adjacent trees and infrastructure and that harm to adjacent shrubs and groundcover is minimized.

4. Where existing trees are preserved, the Critical Root Zone (CRZ) of each tree shall be protected. No more than 30% of the CRZ may be disturbed, and ground disturbance may not occur within the inner 50% of the CRZ radius from the trunk, unless such action is approved by an arborist or professional forester and the Vegetation Management Plan (VMP) contains provisions for replacement of any affected trees that do not survive as a result of disturbance.

5. During construction, chain link fencing, or other type as appropriate, shall be installed at or beyond the limits of the CRZ to ensure protection, except in those portions of the CRZ where ground disturbance is allowed to occur.

c. General Landscape Requirements

1. Landscaping requirements shall be satisfied through the use of multilayered vegetation and/or retained significant vegetation, provided all other standards are also satisfied. Large areas of manicured lawn do not count toward landscaping requirement.

2. The minimum amount of the total site area required to be landscaped by zone is described in Table C-2 below:

Table C-2: Required Landscaping by Zone

Zone	Required Percentage of on-site Landscaping [1, 2, 3, 4]
Aviation Business	10%
General Industrial	10%
Mixed Employment	15%
Port Industrial Mix	15%

Notes:

1. Areas of retained native vegetation may be counted toward landscaping requirements provided that they are not degraded by infrastructure improvements, including, but not limited to, access roads and utility corridors.
2. Landscaping, visual screening, native vegetation and vegetated low-impact development facilities required under other standards in the code shall count toward the landscaping requirements.

3. Projects containing critical areas must comply with all standards of BMC Chapter 20.14. Critical areas may be counted toward required landscaping area.
4. Landscaping required at the base of all signs shall not count toward the required landscaping area specified in this table.

3. Landscaping shall result in tree densities consistent with one of the following criteria:

   i. At least 8 large trees per 10,000 square feet of landscaped area;

   ii. At least 14 small trees per 10,000 square feet of landscaped area; or

   iii. A combination of at least 12 large and small trees per 10,000 sq. ft. of landscaped area, of which at least 4 are large trees.

4. At least 90% of new plant material installed within designated landscaping/retention areas shall be native to the Puget Sound region.

Entrance landscaping using evergreen species.

d. Visual Screening

1. The retention of existing multilayered native forest vegetation is preferred over planted landscaping within required landscape buffers, provided it meets the basic screening intent or is inter-planted to comply with the standard. Please see BMC 20.50.050(D) for applicable credits given for retention of native vegetation.

2. All development in the MIC shall provide a minimum 25-foot Type II visual screen where a site abuts a zone outside of PSIC other than the Industrial Park zone.

3. Development in the ME Zone shall provide a 15-foot Type I visual screen where it abuts the R-10 Zone or a residential use.

4. Industrial development shall provide a minimum 25-foot Type II visual screen along any portion of the property boundary that adjoins the right-of-way of State Route 3 or Lake Flora Road. Existing native vegetation in the area shall be preserved to the greatest extent feasible, and retained plants within the buffer area shall be counted toward fulfillment of this requirement.

5. Heavy industrial development in the MIC that borders other properties within the MIC shall provide a minimum 20-foot Type II visual screen along any portion of the property boundary where the adjacent use is not also heavy industrial.

6. Tree spacing specified in BMC 20.50.050(b) for Type I and Type II visual screens may be modified when an arborist or other qualified professional determines that vegetation densities or

Example of a retained greenbelt to separate industrial and residential development.

spacing provided in BMC 20.50.050 are not recommended for vegetative health.

e. Maintenance

1. A Vegetation Management Plan (VMP) that describes management of planted and retained vegetation shall be prepared by a certified arborist or professional forester and submitted to the City with the landscaping plans. The VMP shall include maintenance procedures to ensure continued survival and/or forest management (i.e. timber harvesting and replanting) guidelines and will be transferred to future tenants and property owners. The VMP shall apply as follows:

   i. For vegetation within critical areas, the VMP shall apply after any required mitigation monitoring period has been satisfied.

   ii. For vegetation within non-critical areas, the VMP shall apply after final landscape as-built drawings are submitted.

4.060 Signs

a. The purpose of this section is to prevent poorly designed or improperly located signs, while enhancing the overall appearance of the community. Signage in all zones of the PSIC Subarea shall conform to the City's adopted sign standards contained in BMC Chapter 20.52, except as modified herein. Please also see recommended design guidelines for signage in Section D.3.120.

Pedestrian directional signage for multi-tenant business park.

b. Signs

1. Pole signs are permitted, consistent with the industrial regulations found in Figure 20.52(a) of BMC 20.52.

2. Landscaping with a variation of shrubs and plants equal to the sign area shall be required at the base of all signs. Landscaping required in this paragraph shall not count toward required landscaping in Section C.4.050(c) or (d)

3. Multi-tenant buildings shall provide coordinated signage. Directional signage for visitors is encouraged as specified in Section D.3.120(b)(2).

4. Signs shall be constructed of durable weatherproof materials, such as metal, glass and wood.

4.070 Exterior Lighting

a. The purpose of this section is to ensure that new or expanded industrial development does not become a source of light pollution that will impair surrounding properties. Recommended design guidelines for exterior lighting are contained in Section D.3.140.

b. Exterior Lighting

1. Exterior lighting fixtures shall be directed in a manner that does not result in the trespass of excess light onto adjacent parcels or public rights-of-way.

2. The brightness of exterior illumination shall be the minimum necessary to ensure operational safety and security, and lighting shall be appropriately scaled for its purpose. For example, lighting for pedestrian walkways shall be smaller in scale than lighting used for security and parking, which shall be smaller in scale than lighting used for industrial operations.

3. All exterior building and site lighting (e.g. street lights and parking area lights) shall use full cut-off fixtures except where waived by the Director due to specific lighting requirements of the proposed use, e.g. industrial process equipment, outdoor recreation facilities, etc.

Bollard lights used to illuminate pedestrian pathway. Image by Philips-Lumec.

4.080 Noise and Emissions

a. The purpose of this section is to ensure that new and expanded industrial development does not result in adverse effects on surrounding properties through the generation of excessive noise or through emission of dust, odors, or toxic substances. Development in all zones of the PSIC Subarea shall conform to BMC Title 6, except as modified herein.

b. Noise and Emissions

1. All zones within PSIC are herby established as Noise Control District III, as defined in BMC Chapter 6.32. All requirements of BMC Chapter 6.32 shall apply to development within PSIC, provided that the FAA shall be the sole regulator of noise levels associated with Bremerton National Airport.

2. New or expanded development within PSIC shall not result in odors, dust, or smoke that is clearly detectable on any property outside the MIC boundaries.

The Kitsap County LID Guidance Manual is a comprehensive resource for localized guidance on pertinent best practices. The manual can be found at: http://www.kitsaphba.com/LID/

4.090 Low Impact Development

a. Inclusion of Low Impact Development and Feasibility Determination. All development in PSIC is encouraged to incorporate LID to the maximum extent feasible. Please refer to the Kitsap County LID Guidance Manual for further guidance.

1. Site Evaluation

i. A site evaluation should assess the feasibility for dispersion, including topography, sensitive slopes and required set-backs. Where dispersion is feasible for all or part of the site,

These illustrate LID features implemented at the Kitsap County Annex building in PSIC.

These illustrate LID features implemented at the Kitsap County Annex building in PSIC.

Rain gardens, a type of bioretention, used in industrial setting to capture and treat stormwater. Image courtesy of TOTE Marine, Tacoma WA.

Additional guidance for bioretention soil is provided in Washington State University, Pierce County Extension's, Technical Memorandum: Bioretention Soil Mix and Recommendations for Western Washington. Please also see additional technical guidance on LID stormwater facilities at the Puget Sound Partnership Resource Center at: http://www.psparchives.com/our_work/stormwater/stormwater_resources.htm

this method should be used. In areas where dispersion is not feasible, infiltration should be used if feasible.

ii. The evaluation should 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 should be implemented.

iii. In areas where full infiltration is not feasible, LID BMPs per Subsection (b) below should be used for all water quality treatment and partial flow control. Projects should meet water quality treatment needs with LID BMP's if feasible.

iv. Site soils in landscaped areas shall be amended pursuant to Subsection (b)(1) below.

v. Impervious surfaces shall be limited to the greatest extent feasible and shall comply with the provisions of Section C.4.020(a)(4).

b. LID Design

1. Design of LID facilities such as bioretention, pervious pavements, and others shall be in accordance with the design criteria in the latest edition of the Kitsap County LID Guidance Manual. 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 Chapter C.5 and this Subsection.

2. All stormwater facilities located in the Airport Compatibility Overlay Zone shown in Figure C-1 shall use BMPs detailed in the WSDOT Airport Stormwater Guidance Manual.

3. Conceptual Bioretention Facility Design. Figures C-2 and C-3 contain conceptual bioretention facility designs for PSIC. Preference shall be given to facility designs that fully infiltrate all stormwater on-site. These are provided for convenience only and specific reference should be made to the Kitsap County LID Guidance Manual for most current diagrammatic drawings.

Figure C-2: Bioretention Cell Design – Full Infiltration

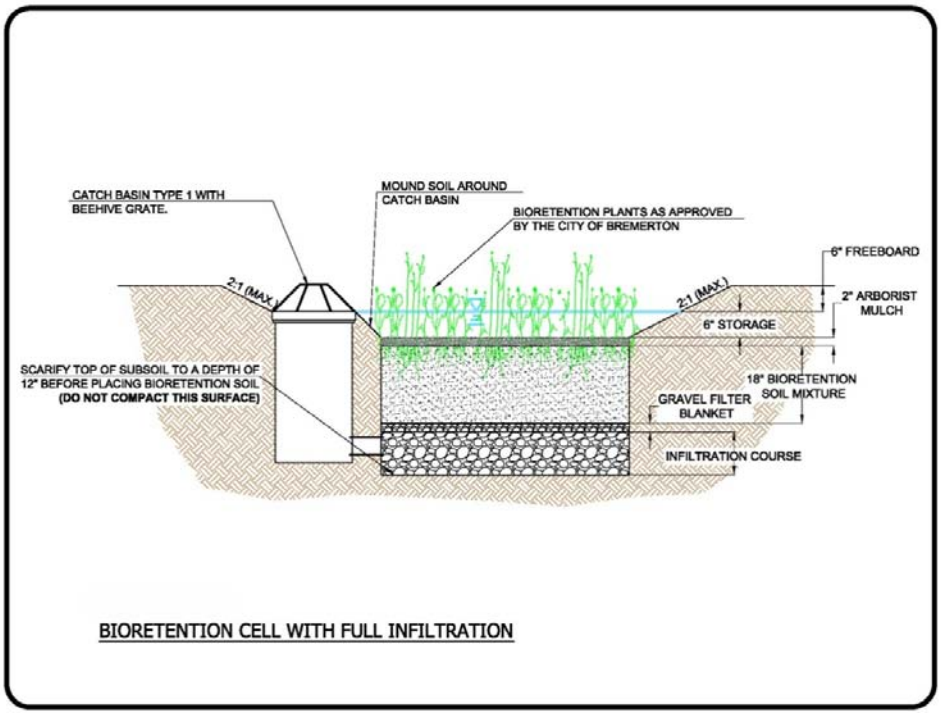
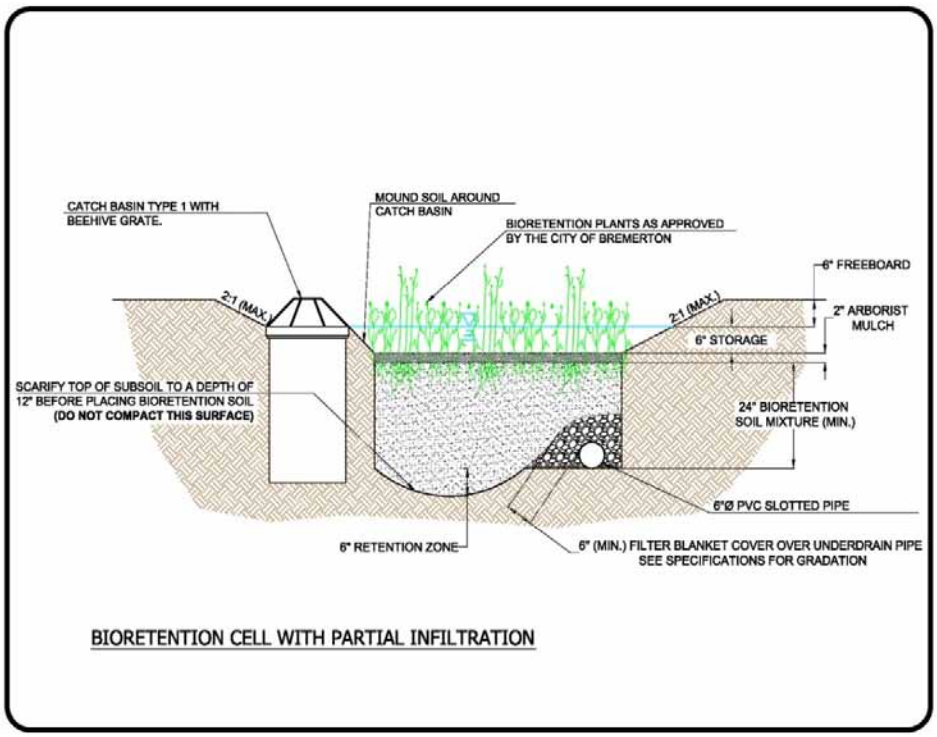


Figure C-3: Bioretention Cell Design – Partial Infiltration



c. LID Implementation Standards

1. Projects should implement a comprehensive stormwater management plan for the project that manages all rainfall on-site, incorporates soil amendments in landscaped areas, utilizes permeable pavement for all pedestrian areas and uses feasible LID techniques, consistent with Subsection (b) above.
2. Projects should implement a stormwater management plan that uses LID BMPs for all required water quality treatment from Pollution Generating Surfaces (PGS), i.e. bioretention and pervious pavement.
3. All 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.

Chapter 5: Right-Of-Way Standards

5.010 Purpose and Applicability

a. SKIA's circulation system includes streets, driveways, sidewalks and multi-use paths. This system is a critical element in site design and provides connectivity on and off-site. All standards shall be in accordance with BMC Title 11 with the following additions and/or revisions as detailed in this Section.

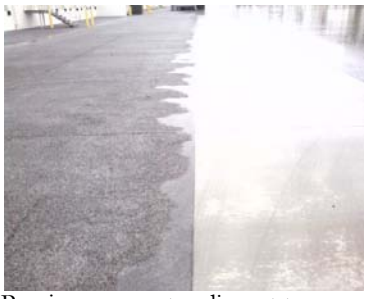
5.020 Conceptual Street Standards

a. Conceptual Street Standards. Figures C-4 through C-6 contain conceptual street designs for PSIC.

b. Selection of Street Design. LID options are provided for design, in addition to the standard designs provided in the City of Bremerton Design and Construction Standards. The applicant shall give preference to LID designs where feasible and final street design will be dependent upon anticipated traffic volume, soils conditions and other pertinent factors.

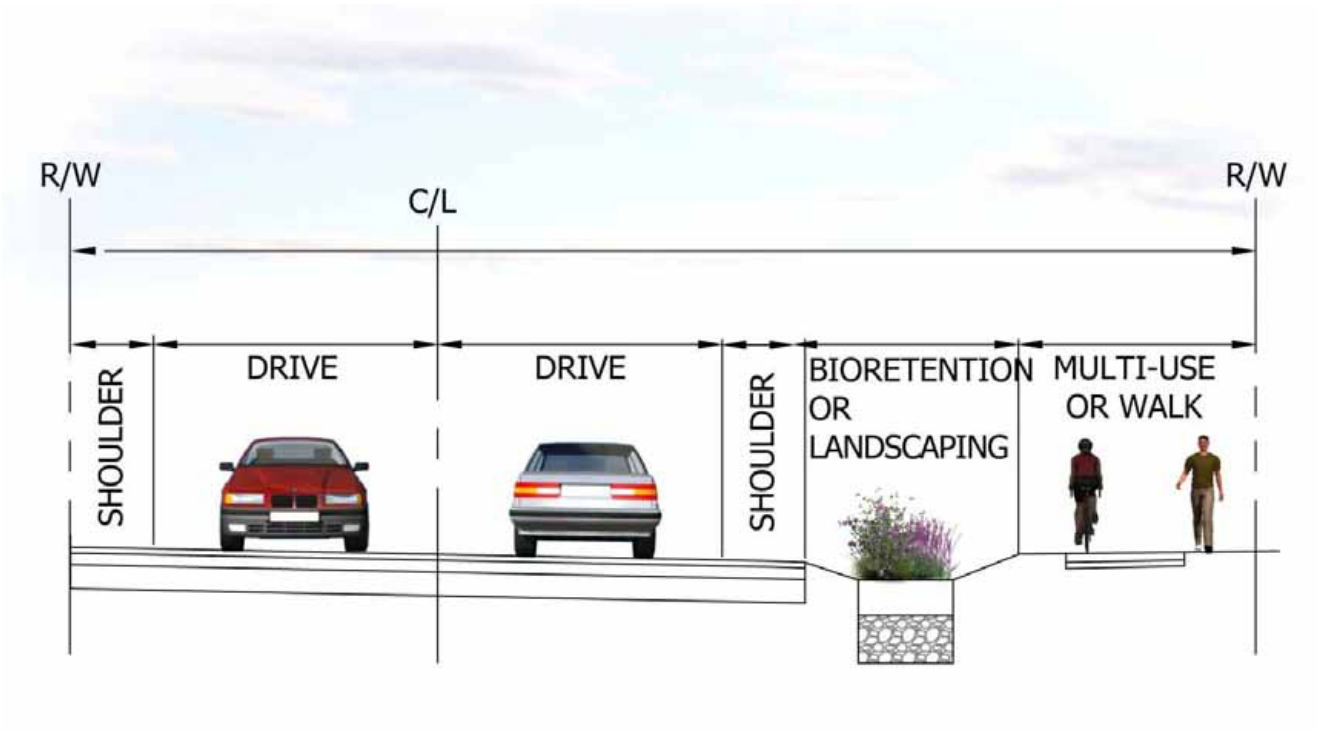
c. Street Typologies Map. Figure C-7 illustrates a conceptual plan for a preferred roadway network and street typologies in PSIC. Street typology details are shown in Figures C-4 through C-6. The preferred street typologies represent a preference only; other streetscapes as specified in Section C.5.020 may be used upon direction from the City Engineer. Similarly, the roadway network is conceptual only; future street alignments may vary depending on actual development proposals and review/approval by the City.

The newly constructed Phase I of the Cross-SKIA Connector incorporates a pervious concrete shoulder



Pervious concrete adjacent to traditional concrete. Note lack of ponding or sheet flow on the pervious concrete on the left.

Figure C-4: Local Access Street Cross-Section Typology



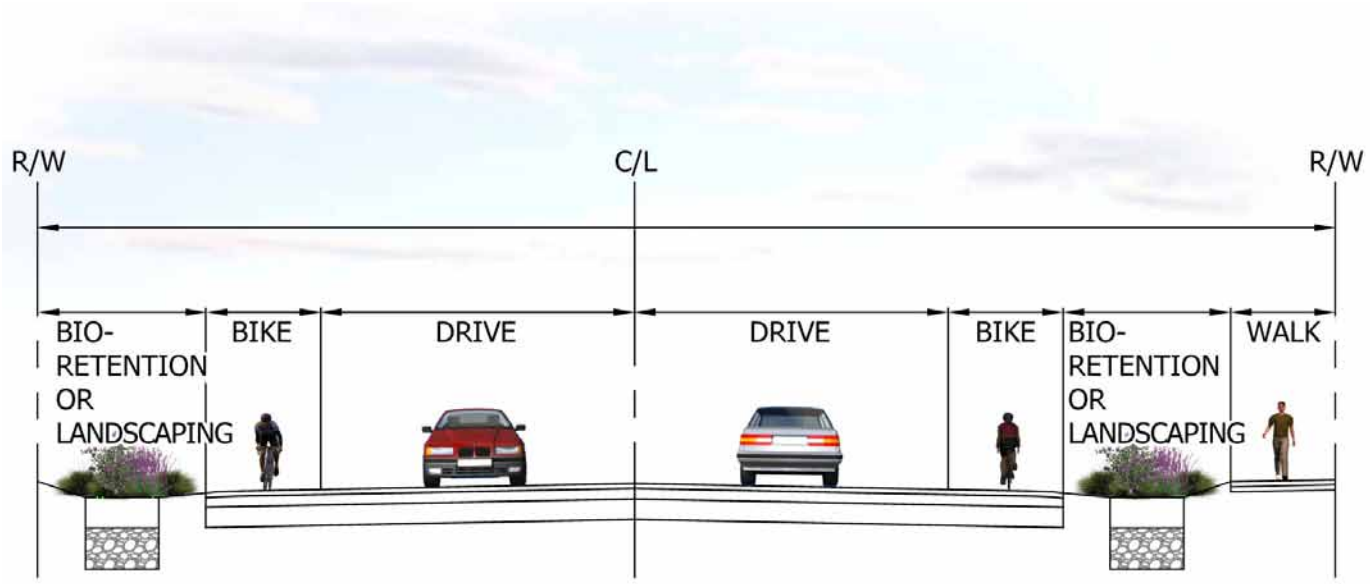
Note: 1) Multiuse-paths, sidewalks, and shoulders should be considered for construction with pervious pavement where soil conditions are appropriate.

2) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.

3) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.

4) Width of the multi-use path shall be governed by usage. Paths anticipated to have heavy NEV usage may be up to 14 feet in width with a minimum trail width of 6 feet with no NEV usage anticipated.

Figure C-5: Commercial/Industrial Street Cross-Section Typology

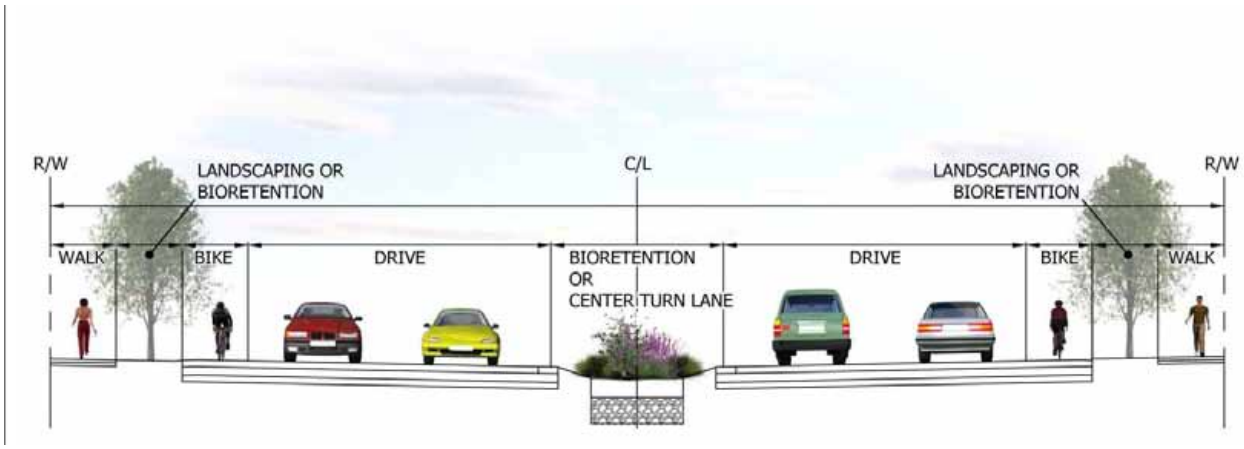


Note: 1) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.

2) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.

3) Sidewalk and bike lane should be considered for construction with pervious pavement where soil conditions are appropriate. Drive lanes are to use standard impervious surfacing.

Figure C-6: Arterial Street Cross-Section Typology



Note: 1) Dimension flexibility for individual elements is allowed provided that minimum requirements per City Standards are met.

2) Curb and gutter may be required where soil conditions are not conducive to infiltration and a storm system is required.

3) Sidewalk may be eliminated from one side of the roadway where it is documented that a sidewalk is not needed. Consideration shall then be for a multi-use trail, either on-site or off-site, instead of the sidewalk.

4) Sidewalk and bike lane should be considered for construction with pervious pavement where soil conditions are appropriate. Drive lanes are to use standard impervious surfacing.

5) Per City of Bremerton Roadway Section 3007, the City may require a two-way left turn lane in lieu of a planted median.

5.030 Deferred Construction of Street Frontage Improvements

a. Development that is required to construct right-of-way and frontage improvements per BMC 11.12 may seek a deferment from Section C.5.020 as follows. The deferment may allow elements of the streetscape to be constructed at a future date, as determined by the City Engineer. In the case of deferment, the applicant is required to dedicate the necessary right-of-way.

b. Conditions for deferment. Applicants may defer construction of the required street frontage improvements under the following conditions:

   1. Development is located on a dead-end street; and

   2. Development must be adjacent to vacant parcels or undeveloped lease lots.

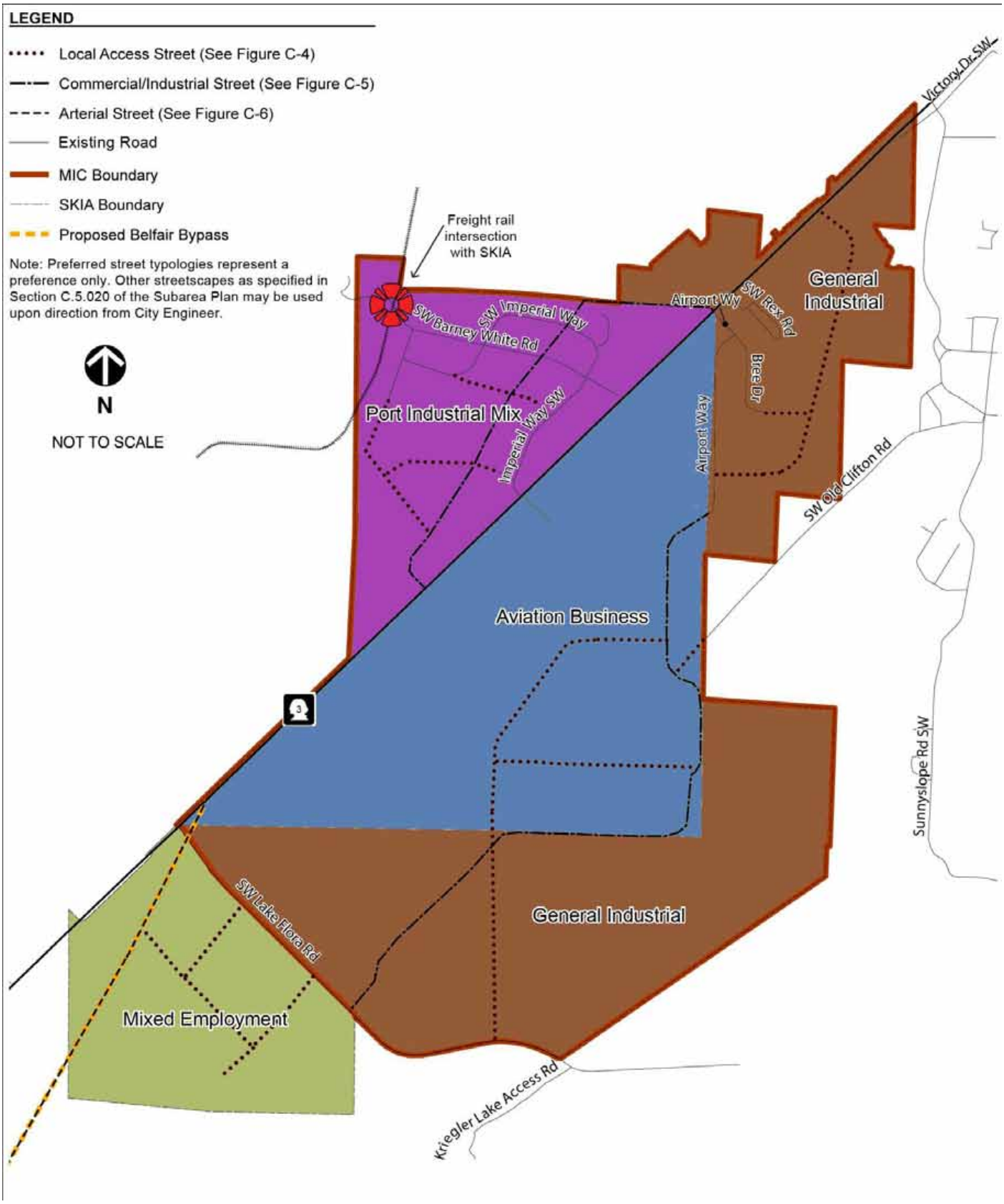
c. Applicant shall:

   1. Construct drive lanes as presented in Section C.5.020 for sites with substandard vehicular access; and

   2. Property owner shall dedicate sufficient right-of-way necessary to construct the required streetscape(s) presented in Section C.5.020; and

   3. Agree to construct the improvements at a future date, as determined by the City.

Figure C-7: Preferred Street Typologies Map

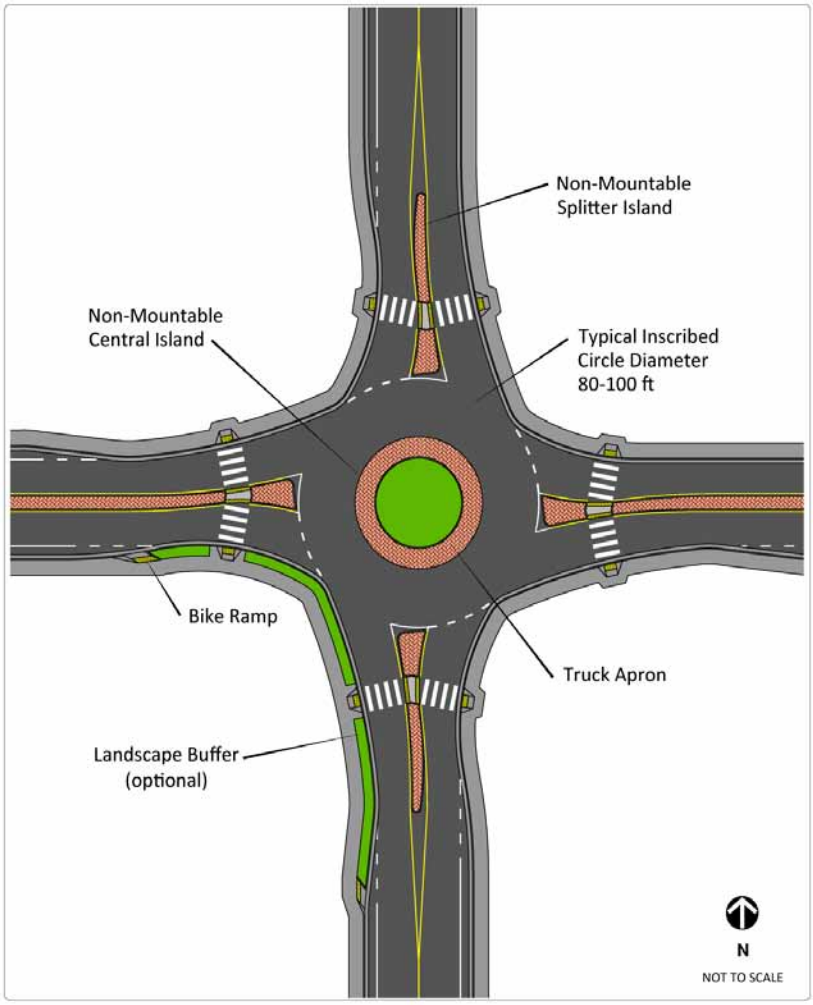


5.040 Intersections – Preference for Roundabouts

a. Preference for Roundabouts. Roundabouts shall be used in lieu of traffic signals and all-way stop signs unless a roundabout is determined to be inappropriate by a traffic study and concurrence of the study by the City Engineer.

b. Conceptual Roundabout Design. Figure C-8 contains a conceptual roundabout design for PSIC. This design shall be refined with additional dimensional and technical details, and then adopted as part of the revised City of Bremerton Design and Construction Standards (also referred to as the engineering standards).

Figure C-8: Conceptual Urban Compact Roundabout



Existing roundabout in PSIC.

5.050 Non-Motorized Facilities

a. Non-motorized facilities in PSIC can range from traditional sidewalk design to a multi-use path.

b. Trails Concept. The trail system in PSIC is intended to form a loop, making non-motorized connections throughout the entire Subarea. As development occurs, the ideal route will be determined to best fulfill the concept. The main loop trail is intended to have individual developments feed into it with connected pathways (pursuant to Figures C-9 and C-10).

c. Preference for Low Impact Development. The applicant shall give preference to LID sidewalk and multi-use path designs utilizing pervious pavement where feasible and shall determine final design depending on soil conditions and other pertinent factors.

Figure C-9: Pervious Sidewalk

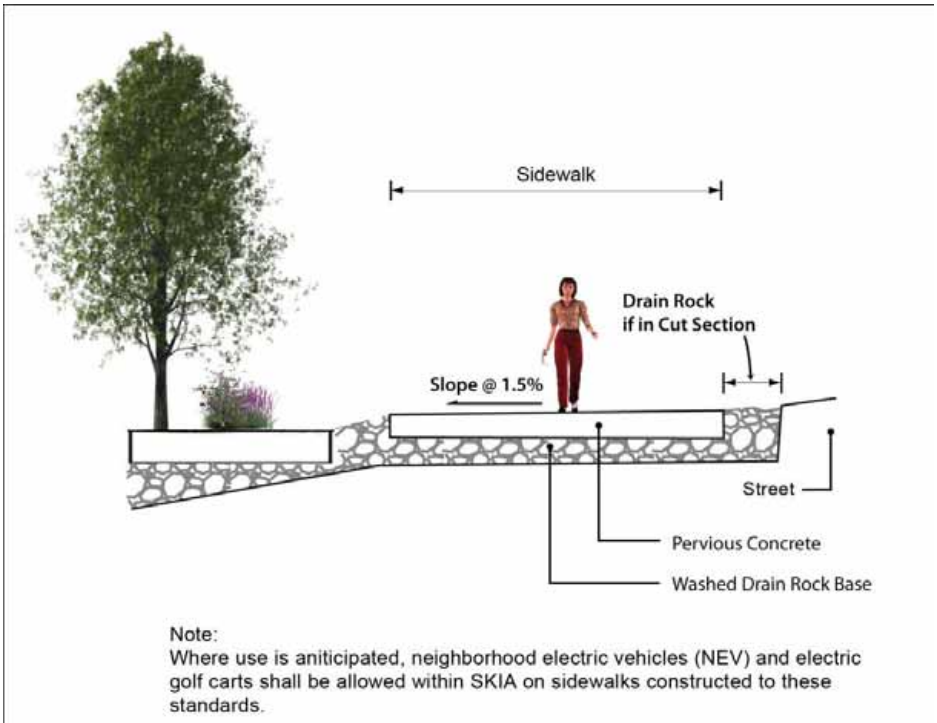
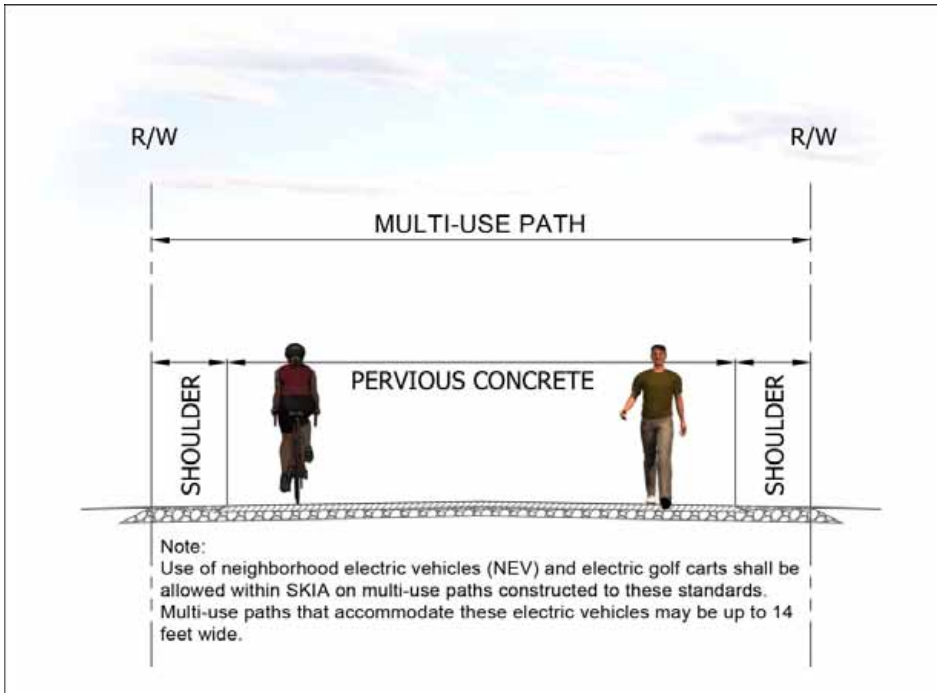


Figure C-10: Multi-Use Path Cross-Section



5.060 Private Driveways

a. Driveways on roads with a parallel multi-use trail shall have a minimum spacing of 200 feet.

b. All other driveways shall be designed to conform to BMC 11.12.150.

THIS PAGE INTENTIONALLY BLANK