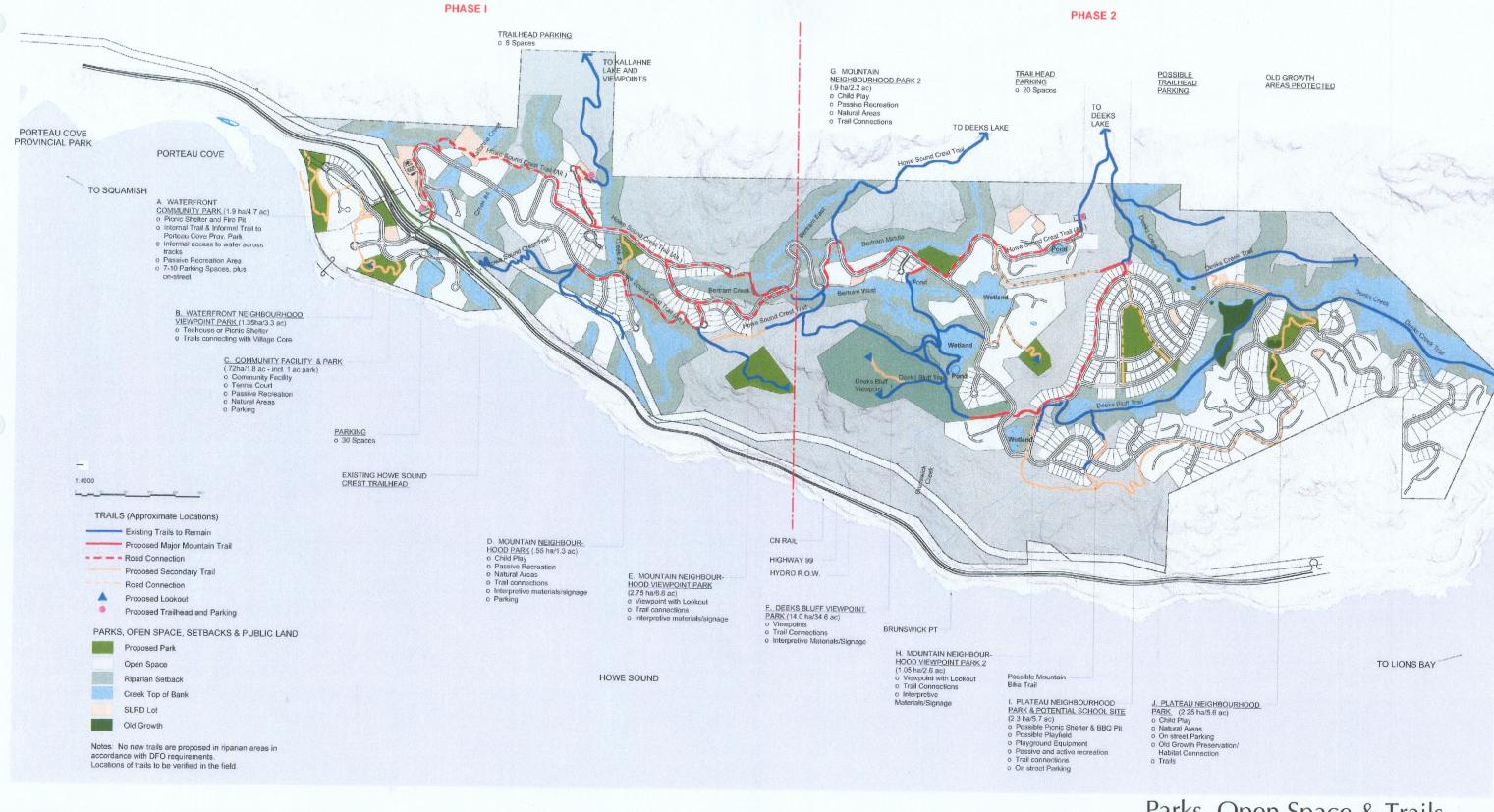


SCHEDULE B3 - ZONING BYLAW NO. 1350-2016



Revised November 21, 2006

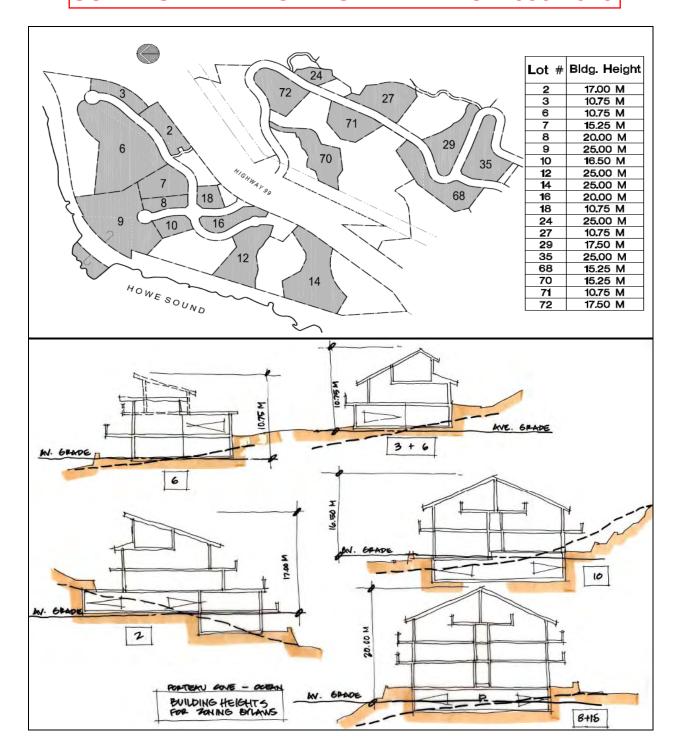


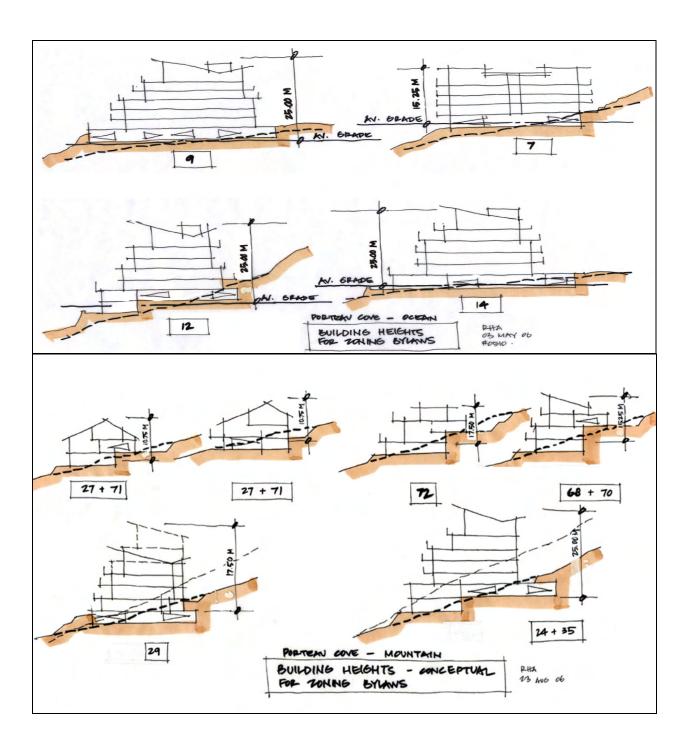
Porteau Cove Development

Parks, Open Space & Trails

VL Partnership Landscape Architects
Webster Lugineering
Pottinger Gaberty Environmental
Thurbor Engineering
Bennett & Associates
Hudema Consulting
Rositch & Homphill Architects

SCHEDULE B4 - ZONING BYLAW NO. 1350-2016





PORTEAU COVE DEVELOPMENT DESIGN GUIDELINES

April 12, 2007



Prepared By:
PWL Partnership Landscape Architects / Rositch Hemphill Architects / Webster Engineering

For: Porteau Cove Developments Limited

CONTENTS

OVE	RVIEW	/	Page iii
1.	ROAI 1.1 1.2 1.3 1.4 1.5	DWAYS Village Roads Collector Roads Local Roads Retaining Walls Vehicular Bridges Fences and Guards	Page 1 Page 1 Page 3 Page 3 Page 4 Page 4
2.	TRAI 2.1 2.2	LS AND WALKWAYS Trail Hierarchy Trailheads	Page 5 Page 5 Page 5
3.	ARCI	HITECTURE - GENERAL	Page 6
4.	ARCI 4.1 4.2 4.3 4.4 4.5	HITECTURE - VILLAGE CENTRE Building Design + Siting Permitted Materials Village Commercial Signage Village Commercial Lighting Service Station	Page 6 Page 6 Page 8 Page 8 Page 9 Page 9
5.	ARCI 5.1 5.2 5.3 5.4	HITECTURE - MULTI-FAMILY RESIDENTIAL Building Design + Siting Permitted Materials Multi-family Residential Signage Multi-family Residential Lighting	Page 11 Page 11 Page 12 Page 12 Page 12
6.	ARCI 6.1 6.2 6.3 6.4	HITECTURE - DUPLEX AND INTENSIVE SINGLE FAMILY Building Design and Siting Permitted Materials Residential Signage Residential Lighting	Page 12 Page 12 Page 13 Page 13 Page 13
7.	LANE 7.1 7.2 7.3 7.4	OSCAPE Overall Public Realm Residential Tree Management	Page 14 Page 14 Page 15 Page 15 Page 17
8.	PUBI 8.1 8.2 8.3	LIC REALM LIGHTING Overall Strategy Streets, Parking and Lighting Landscape Lighting	Page 19 Page 19 Page 19 Page 19

9.	SITE FURNISHINGS		Page 20
	9.1	Village Centre	Page 20
	9.2	Other Areas	Page 20
10.	SIGNAGE		Page 21
	10.1	Overall Strategy	Page 21
	10.2	Sign Types	Page 21
11.	SUSTAINABILITY		Page 22
	11.1	Sustainability Measures	Page 22
	11.2	Stormwater Management	Page 22
APP	ENDIX A	A - RECOMMENDED PLANT LIST	Page 24
ΔΡΡΙ	ENDIX E	R - PROHIRITED PLANT LIST	Page 26

OVERVIEW

Porteau Cove is an oceanfront community sited on \underline{a} dramatic west coast mountainside setting. It offers tremendous opportunities for soaring views of constantly changing fiords, skies, mountain peaks and nature. The setting also creates great challenges: the steepness of the terrain and the superlative setting requires sensitive planning to ensure that manmade development responds to and respects the natural .

These design guidelines are intended to require thoughtful design, high quality materials and innate sensitivity to the site while allowing individual expression. It is imperative that design and construction respect the land.

Reference to Other Regulations

These guidelines are to be read in conjunction with the requirements of Electoral Area D Official Community Plan Bylaw No. 495, Amendment Bylaw No. 946, 2005 and Subdivision and Development Servicing Bylaw No. 741. See in particular Section 5.7 Development Permit Areas and the sections on "Green Building Strategy," "Sustainable Site Design" and "General Design Principles" of Bylaw 495.

These guidelines are subordinate to Ministry of Transportation regulations, the OCP, Zoning Bylaws, Bylaw 741 and BC Building Code, which govern. However, these guidelines are intended to supplement those bylaws and provide direction on the form and character of the built environment. In some cases the standards contained in the zoning or development servicing bylaw may need to be varied to achieve the objectives of the design guidelines. It is intended that the Development Permit process be the tool to implement these guidelines.

Design Theme

There is no overall design theme. It is expected that architects, landscape architects and other designers who understand the value of the land and natural landscape will create developments that are appropriate to the setting.

It should be understood that Porteau Cove is not an attempt to re-create a style or era found elsewhere. It is a community being built in the twenty-first century and the architecture and man-made landscape should reflect this.

1. STREETSCAPE

It is recognized that the provincial Ministry of Transportation (MOT) has jurisdiction over all public roads within Porteau Cove, and that MOT standards and requirements must be met. The following road guidelines are intended to supplement MOT standards and provide the overall intended environmental and design concept for the community.

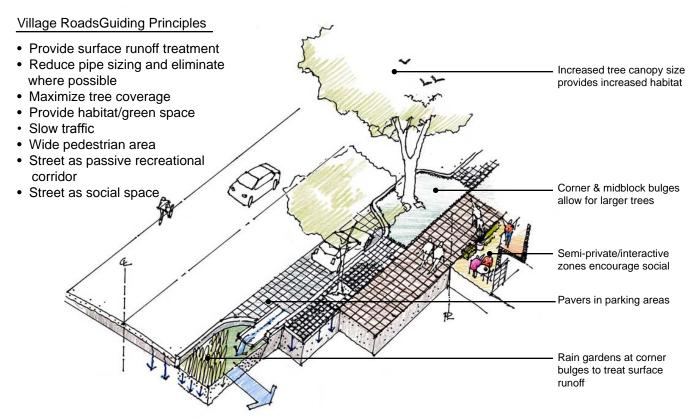
1.1 Village Roads

Village Roads include the main entry road that extends from the overpass into the Village running east-west and the north-south road that connects the Community Facility and the Commercial / Residential parcels in the Village Centre. Turnarounds in the centre and marking the end of the Village provide traffic calming and add a unique character to the streetscape.

The streetscape character in the Porteau Cove Village should be designed to encourage residents and visitors to walk and to experience the village on foot. It is intended that Village Roads provide low impact development (LID) measures to maximize rainwater infiltration (where possible), evaporation, transpiration and pollutant removal. This can be done through use of pavers, raingardens, planting, and other measures, as illustrated below.

1.1.1 Roadway

- 7.0m wide roadway, with onstreet parking provided in pullouts in some areas
- Roadway surface to be asphalt, except where patterned or



- accented
- 550mm wide, 150mm high concrete barrier or rolled curbs with letdowns where required
- Curb bulges to reduce pedestrian crossing width
- Driving surfaces to be accented with concrete unit pavers, local stone, or scored broom finished concrete at intersections and pedestrian crossings

1.1.2 Sidewalks and Pedestrian Areas

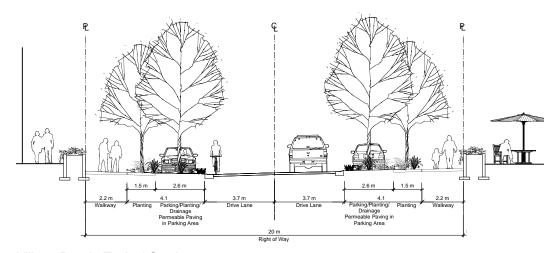
- 1.5m minimum sidewalk, 2m or wider preferred
- Materials Large scale Concrete Unit Pavers
 - Colour natural / granite / sandstone
 - Type: 80mm thick on driving surfaces; 60mm thick on walking surfaces
 - Pattern: driving surfaces shall be in herringbone pattern. Sidewalks shall use a simple field pattern or running bond

1.1.3 **Parking Areas**

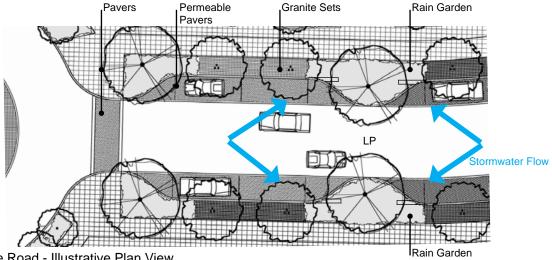
- Materials - Pavers or asphalt



Streetscape Example



Village Road - Typical Section



Village Road - Illustrative Plan View

1.2 Collector Roads

The collector roads constitute the main roadway spine connecting the neighbourhoods within the Porteau Cove Development.

1.2.1 Roadway

- 7-9m roadway with shoulder of varied width
- Roadway surface to be asphalt
- Provide crushed rock shoulders and minimize use of curbs and autters
- Allow parking on pervious gravel strips on the shoulder when fronting single family lots.

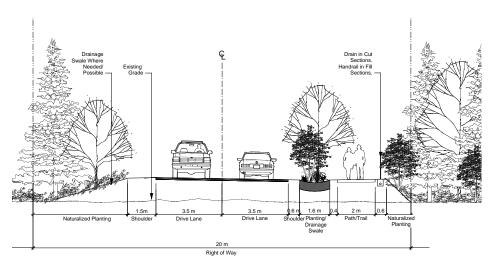
1.2.2 Sidewalks/Trail

Typically the collector roads shall not have the standard sidewalk treatment one expects on neighbourhood collector roads. A pedestrian trail shall follow along one side of the collector road, and, where feasible, will be physically separated from the roadway.

- Sidewalk/Trail width may vary depending on site conditions
- Materials Asphalt, pavers or crushed, compacted granular material



Collector Road Example



Collector Road - Typical Section

1.3 Local Roads

Local roads will extend from the central collector system, serving smaller pockets of residential development, and may be public or strata roads. The intent is that they are narrower streets with no curbs and allow parking along the shoulder on pervious gravel strips that aid in stormwater infiltration, where this is possible.

1.3.1 Roadway - Public Roads:

- 7m roadway with crushed rock shoulders.
- Roadway surface shall be asphalt.

1.3.2 Roadway - Strata/Common Property Roads:

- 6m wide with or without rollover curb and gutter.
- Roadway surface may be asphalt, pavers, or concrete.
- Parking shall be allowed on shoulders where fronting residential lots.



Separated Sidewalk/Trail

1.4 Retaining walls

Retaining walls shall typically be rockstack using local stone, however other types are permissible (e.g., shotcrete, reinforced concrete, Mechanically Stabilized Earth with stone facing) in low visibility areas. Lock block walls are not permitted unless faced with stone.

- 1.4.1 Character Retaining walls to look natural as opposed to engineered.
- 1.4.2 Retaining walls to have landscaping pockets where possible and appropriate.

1.5 Vehicular Bridges

There are a number of locations thoroughout the Porteau Community where the roadway crosses a creek. These will either be bridge or culvert crossings. The intent is that these bridges or culverts are well designed to fit with the natural environment, using natural materials.

- 1.5.1 Bridges should visually fit with surrounding natural features.
- 1.5.2 Materials Stone, stone facing, timber, concrete and steel.

1.6 Fences and Guards

- 1.6.1 The intent is that fences and guards visually fit with the surrounding natural features and use natural materials to the greatest extent possible.
- 1.6.2 Fences and guards shall be structurally sound. Concrete barriers shall not be be allowed unless specifically required by MOT.





Retaining Wall Examples





Guard Examples



Bridge Example

2. TRAILS AND WALKWAYS

A hierarchical system of trails will link the different parts of the development, as well as providing a link to the greater landscape features beyond. The Howe Sound Crest trail currently traverses the site - this linkage will be maintained in the new development. In general, BC Parks facility standards shall be followed when constructing trails.

2.1 Trail Hierarchy.

A hierarchy of trails shall serve different purposes, as follows:

- 2.1.1 Major Mountain Trail (like Whistler Valley Trail.) This main trail through the site shall provide primary linkages both within the development and to the regional trail system. This trail shall be a maximum of 2m wide, and may be surfaced with crushed gravel, asphalt or other acceptable material. Wherever possible, the existing trail surfacing and width will be retained. The portions of the trail that constitute the emergency access routes in the development shall be 3m wide within a 6m right-of-way and surfaced with asphalt.
- 2.1.2 Secondary Trails More minor trails linking with the major mountain trail shall be surfaced with wood chips where grades are moderate, and/or gravel or other natural surface.
- 2.1.3 Boardwalk Trails These will be used in sensitive areas.

2.2 Trail Heads

Locations where trails start, or trailheads, will occur in several locations in the community.

- 2.2.1 Trailheads should be marked with signage and provided with parking.
- 2.2.2 Trailheads in residential areas should blend in with the neighbourhood

to the greatest extent possible.





Trailhead Interface with Residential Areas









Trail Surfacing Examples

3. ARCHITECTURE - GENERAL

The siting of buildings is critical in the sensitive development of the property. Site buildings to reduce disturbance of adjacent land, reduce volumes of cuts and fills, and reduce the need for blasting.

4. VILLAGE CENTRE

Buildings in the core of the Village at Porteau establish the identity of the place and create its heart. The design approach should be warm, interesting and delightful. Materials must be durable and of good quality. Attention should be paid to the experience of the pedestrian and patron.



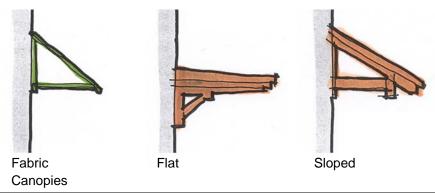
Sensitive Building Siting



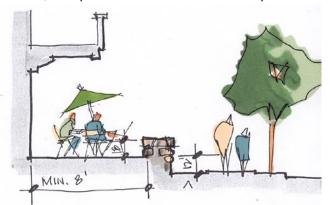
Village Entrance Character

4.1 Building Design + Siting

- 4.1.1 Animate the village streetscape with balconies, canopies, planters and recesses in buildings.
- 4.1.2 Provide solid canopies or covers over a portion of the usable outdoor area facing the village street.



4.1.3 On the village street side, provide terraces that are at least 0.3m above adjacent sidewalk elevation with a usable depth of at least 2.4m. Provide easy and regular access, including access for the disabled. Provide low planters or stone walls 0.45m above terrace level. Terraces must be stone, stamped concrete and/or concrete pavers.



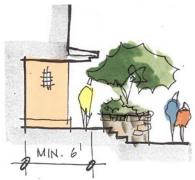
Terrace Surrounded by Stone Walls

- **Raised Terraces**
- 4.1.4 Provide individual recesses for each live/work studio entrance. Provide entrances for individual or shared residential entry doors that are separate from commercial entries.
- 4.1.5 Create a smaller scale rhythm for storefronts along the main street by:
 - designing commercial storefronts with widths of 6m or less, even if the commercial space behind is larger;
 - .2 incorporating strong bases, columns, recesses and bays to provide increased texture:
 - .3 integrating landscape walls, seating, planters, signage and other features to provide a series of points of interest.
- 4.1.6 Provide a separation between the first floor commercial and the residential above through setbacks of the upper floors, canopies and colonnades, awnings and/or other devices.
- 4.1.7 Provide outdoor patios or balconies for all residential units and:
 - .1 for upper level residential units, recess half the balcony behind the outermost adjacent residential wall;
 - .2 for second floor residential units provide a solid balcony wall of at least 0.6m in height to provide privacy.





Individual Live/Work Entries



Recessed Entries

Illustrative sketch of Village terraces - commercial uses with residential above.

4.1.8 Use stone at the base of buildings and/or for significant columns or corners. Provide stone landscape walls at vertical changes of grade. Provide opportunities for planting, planter boxes and planters.







Stone Columns

Stone Corner

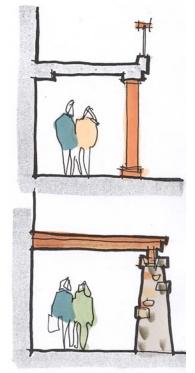
Stone Base

- 4.1.9 Provide sloped roofs on all buildings in the Village Centre.
- 4.1.10 Provide generous roof overhangs. First floor soffits must be wood.
- 4.1.11 Provide colonnades, canopies and other methods of weather protection along commercial frontages where there is expected to be pedestrian traffic.
- 4.1.12 Hide or camouflage mechanical units, both visually and acoustically.
- 4.1.13 Garbage areas must be enclosed and bear-proof.
- 4.1.14 Lights must be non glare, sufficient to light the adjacent space but not be a nuisance to adjacent neighbours.

4.2 Permitted Materials

Use the best materials where they are seen by the public and passersby. Wood or wood composite materials may be stained or painted and must be in natural colours with some brighter accents permitted.

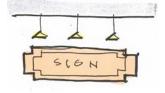
- 4.2.1 The permitted materials for buildings in the Village Centre are:
 - .1 stone, from the local area and region;
 - .2 wood, stained, varnished or painted;
 - .3 wood composite or concrete composite siding and panels;
 - .4 clear, coloured or textured glass;
 - .5 textured, painted or similar-finished concrete. Unpainted concrete is permitted to a maximum 0.6m height from grade;
 - .6 textured asphalt, cedar shingle and metal roofs;
 - .7 other materials that are similar to the above and which offer durable finishes.



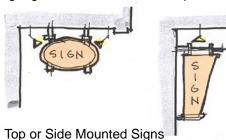
Covered Colonnades

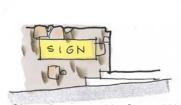
4.3 Village Commercial Signs

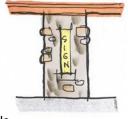
- 4.3.1 Signs are to be front lit. Sign cans and neon lighting are not permitted with the exception of the fuel price signage for the service station.
- 4.3.2 With the exception of the service station, signs must be hung from a soffit or wall bracket or recessed into a wall or column. Signs must be made of wood, stone or metal. With the exception of the fuel price signage for the service station, plastic signs are not permitted.



Face Mounted Signs







Signs Recessed in Stone Walls

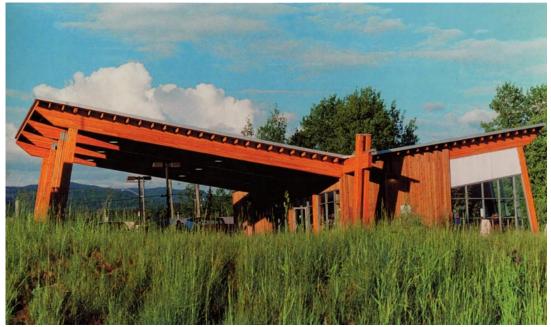
4.4 Village Commercial Lighting

Street lighting will be provided by the master developer. Individual buildings will be responsible for lighting within their own property. Light fixtures should complement and enhance the character of the village centre.

- 4.4.1 Provide sufficient and suitable lighting to provide safe pedestrian access to building entrances in the dark.
- 4.4.2 For terraces that will be used in the dark provide outdoor lighting that allows for use of the space but does not cast light upwards beyond the first floor.
- 4.4.3 Avoid lighting that shines onto a neighbouring property.
- 4.4.4 Provide clearly-seen civic addresses that are lit at night.

4.5 Service Station

The service station is located at the entrance to the Village and will act as a partial gateway. Its design is to convey the intent of the Village design and set a tone for the high quality of building design and use of materials.



Sloped roof canopy over gas pumps

4.5.1 Building Design and Siting

- .1 Create a design that acts as an entrance to the Village at Porteau Cove with the use of strong forms, high quality materials and sensitive integration of hard and soft landscaping.
- .2 For the principal building provide a sloped roof with a minimum slope of 3/12, or a flat roof that incorporates a green roof. Provide generous roof overhangs.
- .3 Provide protective cover for motorists using the gas pumps. That roof may be flat or sloped.
- .4 Incorporate elements of heavy timber, stone and/or other high quality materials that blend into its surroundings.
- .5 Provide enclosures for bulky equipment, supplies and

- garbage. Design the enclosures to integrate with the design of the service station building.
- .6 Provide lighting that is restricted to the area of the service station and avoid lighting that will shine into adjacent residential units.
- .7 Provide general lighting for the service station that can be extinguished if the service station is closed.

4.5.2 Signage

- .1 One primary service station sign is permitted, and the maximum height of that sign is restricted to 2.5 m and must be located at the eastern end of the property.
- .2 Locate the primary service station signage on a stone base, with landscaping around it.
- .3 The primary signage is permitted to be back lit and plastic to a maximum size of 6.0 sm.
- .4 All other signage on or around the service station is required to be front lit or individually lit letters.

4.5.3 Permitted Materials

- .1 The permitted materials for the service station are:
 - .1 stone, from the local area and region;
 - .2 wood and heavy timber, stained, varnished or painted;
 - .3 wood or concrete composite siding and panels;
 - .4 clear, coloured or textured glass
 - .5 metal panels
 - textured, painted or similar-finished concrete.
 Unpainted concrete is permitted to a maximum 2' height from grade;
 - .7 textured asphalt, cedar shingle and metal roofs;
 - .8 other materials that are similar to the above and which offer durable finishes.
 - .9 materials similar to the above.
- .2 Stone is required on a minimum of 20% of the front and side walls of the building.
- .3 Metal panels or similar materials are restricted to a maximum of 50% of the area of the exterior walls.



Low sign set into stone base

5. MULTI-FAMILY RESIDENTIAL

Buildings in the multi-family areas should be designed to closely respond to the surrounding grades and natural terrain. In many locations they will be highly visible and must convey a warmly modern and sensitive approach to development.

5.1 Building Design + Siting

- 5.1.1 Be a good neighbour.
- 5.1.2 Site buildings to minimize the impact on views from and shadowing of adjacent properties and buildings.
- 5.1.3 If the building/development is adjacent to public trails, provide connections from common space to the public trails whenever possible.



Building sited to minimize impacts.



Common Space and Public Trails Connections

- 5.1.4 Make the front door easy to find, either through the architecture of the building or through a thoughtful landscaped access.
- 5.1.5 Provide a transition between public streets and private property using hard and soft landscaping integrated into natural landscaping.
- 5.1.6 Design buildings and the landscaping so that the buildings and their terraces appear to grow out of the natural landscaping. Minimize the extent of modification to the natural landscape surrounding the development, both during construction and after.
- 5.1.7 Avoid long, unbroken expanses of wall.
- 5.1.8 Except for visitor parking, locate all required parking underground or in enclosed parking garages, with additional convenience spaces at grade integrated into the hard and soft landscaping. Ensure that fluourescent lighting in a parking garage is not generally seen from outside the garage.
- 5.1.9 Provide common open space that maximizes sun access. Design the common space to be usable in most kinds of weather.
- 5.1.10 Decks over living space should be finished with pavers or stone





Buildings grow out of the landscape

- for those areas of deck that are not landscaped. Larger expanses of deck must be broken up with changes of materials, levels and/or landscaping.
- 5.1.11 Flat or nearly-flat roofs must be finished with pavers, stone, decorative pebbles or vegetation. Minimize the visibility of roof-top vents when visible from adjacent development or from public open spaces.
- 5.1.12 Camouflage or hide mechanical equipment when visible from adjacent development or from public open spaces.

5.2 Permitted Materials

Use the best materials where they are seen by the public and passersby. Wood or wood composite materials may be stained or painted and must be in natural colours with some brighter accents permitted.

- 5.2.1 The permitted materials for multi-family residential buildings are:
 - .1 stone, including stacked stone walls, from the local area and region, or cultured stone which replicates this;
 - .2 wood, stained, varnished or painted;
 - .3 wood composite or concrete composite siding and panels;
 - .4 clear, coloured or textured glass;
 - .5 textured, painted or similar-finished concrete. Unpainted concrete is permitted to a maximum 4' height from grade;
 - .6 metal panels with a matte finish;
 - .7 other materials that are similar to the above and which offer durable finishes.



Natural Materials

5.3 Multi-family Residential Signage

- 5.3.1 Integrate the signage into the architecture and landscaping.
- 5.3.2 Provide clearly-seen civic addresses that are lit at night.

5.4 Multi-family Residential Lighting

- 5.4.1 Provide sufficient and suitable lighting to provide safe pedestrian access to the principal entrance in the dark.
- 5.4.2 Avoid lighting that shines onto a neighbouring property.

6. DUPLEX AND SINGLE FAMILY INTENSIVE

Duplex and single family houses on lots of less than 600 square metres are subject to these design guidelines and development permits.

6.1 Building Design and Siting

- 6.1.1 Site the building to minimize cut and fill on the site for the building and for access to the building.
- 6.1.2 Required parking spaces (2 per home) are to be in an enclosed or covered space. To soften the impact of garages facing the street, recess garage doors at least 0.3m from the surrounding building face.
- 6.1.3 Front stairs must be constructed of concrete and/or stone. No wood stairs are permitted.
- 6.1.4 For homes on the uphill side of a street, provide a street-facing balcony above the





- first level with a depth of at least 2.4m. Provide roof cover over at least 50% of the balcony area.
- 6.1.5 Decks and balconies above the first level must be partially recessed or covered.
- 6.1.6 Avoid long runs of straight wall. Introduce jogs in the wall, bay windows, recesses or changes to wall planes to avoid straight runs of more than 10m
- 6.1.7 Front driveways should be scored or textured concrete or asphalt, concrete pavers or stone.
- 6.1.8 Chimneys are to be boxed to match the siding or finished with stone.
- 6.1.9 Decks over living space should be finished with pavers or stone for those areas of deck that are not landscaped. Larger expanses of deck should be broken up with changes of materials, levels and/or landscaping.
- 6.1.10 Exterior lights should be placed so that they do not shine directly at a neighbour.





6.2 Permitted Materials

Use the best materials where they are seen by the public and passersby. Wood or wood composite materials may be stained or painted with natural colours.

- 6.2.1 The permitted materials for multi-family residential buildings are:
 - .1 stone, from the local area and region, or cultured stone which replicates this:
 - .2 wood, stained, varnished or painted;
 - .3 wood composite siding and panels;
 - .4 clear, coloured or textured glass;
 - .5 textured, painted or similar-finished concrete. Upainted concrete is permitted to a maximum 2' height from grade;
 - .6 metal panels with a matte finish;
 - .7 textured asphalt, cedar shingle and metal for sloped roofs
 - .8 other materials that are similar to the above and which offer durable finishes.

6.3 Residential Signage

6.3.1 Provide clearly-seen civic addresses that are lit at night.

6.4 Residential Lighting

6.4.1 Avoid lighting that shines onto a neighbouring property.



7. LANDSCAPE

7.1 General

The objective of the landscape guidelines is to ensure a high level of landscape design for all components of the development.

Specific Objectives are to:

- Provide compatibility with and enhancement of the site's intrinsic natural qualities;
- Maintain and enhance the site's native vegetation to the greatest extent possible;
- Encourage the use of natural construction materials (particularly those indigenous to the site and region) for built elements such as terraces, walls, steps, fences, and pathways;
- Recognize the development shares the natural area with wildlife, and consider these impacts in site planning;
- Treat the interface between common areas (such as parks, roadways and paths) and residential or village areas in a manner that protects and enhances the natural site character;
- Rehabilitate areas disturbed during site construction to a natural state;
- Incorporate and enhance the natural landscape features such as significant trees, rock outcrops and topographic variations wherever possible.
- 7.1.1 **Minimize grading**. Modifications to existing contours to be minimized where possible.
- 7.1.2 Use native/native compatible plantings. New landscaping and rehabilitation of disturbed areas will specify native or native compatible plants in the landscape to provide habitat value and limit the need for irrigation once established. A list of Native / Native compatible Plants is included as Appendix A.
- 7.1.3 Prohibited plant material. A number of plant materials are prohibited within the overall Porteau Cove Community development due to their invasiveness, high maintenance, toxicity, or other characteristics that make it inappropriate for a mountain environment. Introduction of invasive plant species that will threaten the character and integrity of the plant communities on site shall be avoided. See Appendix B for the list of specifically prohibited plants.
- 7.1.4 **Use natural on-site construction materials.** Use natural materials that are on site or in the immediate area wherever possible, including stone, topsoil, gravel, backfill and wood, for built elements such as terraces, walls, steps, fences, and pathways.
- 7.1.5 Retain natural features. Natural features such as rock outcroppings, significant changes in grade, gullies, special trees/tree groupings will be considered in detailed site planning and retained wherever possible. Building locations shall be adjusted to suit topography and special natural features when the site for each phase is actually ready for construction.
- 7.1.6 Minimize irrigation. The intent is that irrigation will be minimized on site, and potentially only used for establishment of the landscape and for landscape elements on structure. If irrigation is needed, high efficiency systems utilizing sensors should be used to minimize water use, and should use collected rainwater where possible.
- 7.1.7 Minimize formal lawn. The use of formal lawns shall be minimized,



Incorporate Natural Landscape Features





Use Native Plants



Use Natural Materials

- and limited to small areas in multi-family projects and limited use in parks. Lawn shall only be used where appropriate for gathering, picnicking or informal play.
- 7.1.8 Interface areas. The interface between common areas (such as parks, roadways and paths) and residential or village areas, and the interface between developed and open space areas shall be designed in a manner that protects and enhances the natural site character and reinforces natural edges. Where possible, native plant groupings shall be extended into the developed area to soften the line between developed and open space areas.
- 7.1.9 **Retaining walls**. Where retaining walls are required on development parcels, they are to be constructed of local stone or stone faced concrete.
- 7.1.10 **Fire Smart.** Limit the density of plantings in close proximity to buildings to assist with wildland fire protection.



The public realm includes areas within the road right-of-ways, parks, open space and the Village Core. In addition to the overall guidelines above, the following shall apply in these areas:

- 7.2.1 **Landscape features and elements.** Planters shall be made of natural stone or natural stone faced concrete max. height of 1m. Preferred height of .5m to double as informal seating walls.
- 7.2.2 **Street trees.** Street trees in the Village Core may be formally arranged to reinforce the village character. Outside the Core, trees shall be planted in informal groupings, avoid formal street tree plantings, to reinforce the naturalistic character of the development.
- 7.2.3 **Open space.** Areas designated as open space shall be retained in their natural form and enhanced as necessary after development. Only native plant materials shall be allowed in these areas.

7.3 Residential

The landscape development of the residential parcels is a key design component of the overall Porteau Cove community. This section applies to multi-family residential as well as duplex and intensive single family units.

The overall concept of the landscape for the multi-family unit types is simple and elegant designed courtyards, patios, roof terraces and entry courts juxtaposed with the natural forest and mountain character landscape. The landscape character surrounding the buildings for both multi-family and duplex/intensive single family units should be very naturalistic, while the landscape directly associated with the usable outdoor living

All landscape development for the residential sites should serve a purpose such as but not limited to:

areas should reflect a structured, simple, refined and elegant look.

- Forest restoration and enhancement of natural forest setting
- Visual Screening
- Rain water collection
- · Defining outdoor space
- Re-enforcing the architecture



Stone Landscape Features



Public Realm



Integrate Landscape with Architecture & Natural Setting

- · Linking the indoor with the outdoor
- · Providing drama and Framing views
- 7.3.1 Landscape integration. All landscape development should reinforce and integrate with the architecture and natural setting. Landscape should be usable/visible/have a purpose.
- 7.3.2 Plant material. Plant materials used in the residential parcels should provide a rich experience of texture, fragrance, drama, and colour. The pallette of plant materials for each parcel should reflect a moderate number of plant materials. The majority of plant materials are to be selected from the recommended list (see Appendix A). Refer to Appendix B list of prohibited plants, due to their invasive or noxious character.
- 7.3.3 **Landscape materials.** The landscape materials suggested and anticipated for the residential parcels should be natural as well as refined in character.
- 7.3.4 **Sustainability**. Wherever feasible sustainability should be visibly evident in the landscape development. See Sustainability Section.
- 7.3.5 **Water features.** Where applicable, water features of re-circulating rain water should be considered in public and semi-public courtyard and patio areas to minimize highway noises. These water features should be integral to the landscape architectural design.
- 7.3.6 **Children's play.** Mutli- family residential parcels should incorporate opportunities for children's play within the parcel development unless a neighbourhood park with a play area is within a 10 minute walking distance.
- 7.3.7 **Fencing**. Security fencing and perimeter fencing of multi-family parcels is prohibited, except where recommended adjacent to dense woodlands for bear safety/protection.
- 7.3.8 **Automatic irrigation**. All multi-family residential parcels shall have an automatic irrigation service for all landscape areas over structure. Irrigation in other areas shall be minimized and energy efficient, if used.
- 7.3.9 Rooftop planting. Green roofs may be used on flat roofs on multi-family buildings, particularly when highly visible from the road or surrounding development. Such roofs should follow best practices for green roofs, taking into account the mountainside environment.



Use Natural Materials



Opportunities for Child Play in Natural Environment

7.4 Tree Management

Much of the site is currently in a natural wooded state. The intent is to minimize the intrusion of development into forested areas. A large portion of the site is protected from development through open space designation.

- 7.4.1 For trees located on development parcels, retention should occur where possible through sensitive site planning, and significant trees should be incorporated into the development.
- 7.4.2 When trees are removed to site buildings, an uneven staggered edge rather than a straight line of trees is recommended to maximize edge habitat for wildlife, regenerate understorey growth and reduce windthrow hazards.
- 7.4.3 A clearing zone should be identified on each development parcel that encompasses the area of the building envelope and up to a 6m buffer area.
 - 7.4.3.1 Significant trees within the lot and outside the clearing zone are to be retained and preserved during construction through the creation of tree protection zones. Trees other than significant trees and understory vegetation located outside the clearing zone and not within a protective easement on specific development parcels may be removed or selectively pruned to improve views, air movement and light penetration.

Trees in potential retention areas should be assessed to determine significance, level of effort for retention and potential hazards associated with retention. Additional considerations should be taken to overall stand management and safety including windfirming edges and fire hazard management.

- 7.4.3.2 Prior to any work being carried out in any phase of the development the contractor will meet with the Landscape Architect or Arborist to confirm the tree clearing boundary and tree protection zones. This boundary shall be completely flagged, clearly marked and fully protected. No access will be allowed into the areas beyond the tree clearing boundary for the duration of construction, except for safety reasons.
- 7.4.4 Trees and vegetation to be retained are to be protected during construction. Tree protection zones should be assigned based on individual tree assessments for age, diameter size and species tolerance to disturbance. Bright coloured, reusable construction fencing and/or wood hoarding should surround tree protection zones. The following activities shall not be permitted in the designated tree protection zones:
 - * Clearing, grading, filling or excavation;
 - * Passage of vehicular traffic including trucks, excavators, backhoes and similar vehicles including
 - * the use of grubbing buckets or blades for vegetation removal;
 - Storage or piling of construction materials such as sand, aggregates, soil, lumber, formwork, pipes or similar items;
 - * Disposal of waste materials such as paint, solvents or gyproc mud, the washing of cement or stucco machines, or the piling of other waste construction materials;
 - * The location of portable toilets, generators, ancillary service



- machines, portable sheds and other storage units; or
 * The disposal of excess water accumulating within the construction area.
- 7.4.5 Tree topping is to be avoided as it deforms native trees and may result in the degradation of tree integrity and stability.

8. PUBLIC REALM LIGHTING

8.1 Overall Strategy.

The overall strategy for site wide lighting, including that for roads and public areas, is to provide the minimum levels necessary for pedestrian and vehicular safety, security and visibility while minimizing light pollution and ensuring the 'Night Sky' is preserved. Light pollution from the development has been identified as a potential issue from the campsite and areas of Porteau Cove Provincial Park.

- 8.1.1 Fixtures should have a contemporary feel yet fit within the mountain environment.
- 8.1.2 Utilize energy efficient fixtures that produce a soft natural quality of lighting. A white light character that shows true colours, such as Metal Halide, is preferred.



The intent of the overall lighting approach is to minimize the street lighting and light pollution generated from inefficient and inappropriate light fixtures. The lighting character will vary with each street or path type, and will reflect the quality of the overall development.

- 8.2.1 Minimize the lighting in the village by providing more indirect street and pedestrian level lighting only.
- 8.2.2 Roadway lighting will only be provided within the Village Centre and at intersections/entrances, unless required by MOT for safety reasons (e.g., on tight curves.)
- Parking areas, pathways and other pedestrian areas will use bollard 8.2.3 fixtures and suitable pole mounted fixtures.

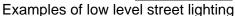
8.3 Landscape Lighting.

- Where provided, low landscape elements should contain the lighting 8.3.1 source. Tree lighting to be indirect. The source of landscape lighting should not be visible from the street or adjacent lots.
- 8.3.2 The use of timed dimmers and motion sensor actuated lighting is recommended for use in exterior locations where illumination at full intensity level is not required during all the non-daylight hours.
- Flashing, blinking or coloured lighting is not permitted (except for 8.3.3 seasonal holidays.)



















Lighting Examples

9. SITE FURNISHINGS

Site furniture in the public realm includes benches, garbage and recycling receptacles, and bicycle racks. Selected products will reinforce the project theme, and shall be durable, easily maintainable and readily available. Site furnishings in the Village core shall include benches, garbage and recycling receptacles, and bike racks. In other areas of the development, including parks and trails, site furnishings will generally be limited to benches and potentially garbage receptacles. Heavier, more rustic looking site furnishings are encouraged in these areas. Site furnishings should be durable and well made.

9.1 Village Centre

- 9.1.1 Site furnishings within the Village Core shall be made of natural materials, preferably wood and metal, with a rustic yet refined look, as illustrated in these images.
- 9.1.2 Trash receptacles shall also provide for recycling, and shall be bearproof.



9.2.1 Trash receptacles shall also provide for recycling, and shall be bearproof.

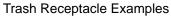


















Bench Examples

10. SIGNAGE

10.1 Overall Strategy:

Signs in the public realm will fulfill two functions: project identity and wayfinding. Project identity signs will be located at site arrival points, and provide the first impression of the village character.

- 10.1.1 Signage should be simple, rustic yet refined, and incorporate natural materials from the area such as wood and stone.
- 10.1.2 There should be a consistent sign system for village entry points, streets, parking entrances, service areas and buildings.
- 10.1.3 Way-finding and information signage throughout the development shall be kept to the minimum size and number required to direct and inform vehicle drivers and pedestrians.

10.2 Sign Types

- 10.2.1 **Gateway Signs.** Gateway signs should be substantial, made of natural materials from the area wood and stone. Simple and natural looking graphics, reflecting aesthetic of project... Minimally lit.
- 10.2.2 **Project Signs.** Signage should be low key and coordinated with the architectural features and finishes of each building.
- 10.2.3 **Information Signs.** Signage associated with recreational elements (trails / trailheads, parks, open spaces, viewpoints, interpretive signage) shall be wood and in a style similar to that of BC Parks. Solar panels shall be used to light trail signage where feasible.















Information Sign Examples







Gateway and Project Sign Examples

11. SUSTAINABILITY

11.1 Sustainability Measures

A variety of green development guidelines identify ways to achieve and maintain a high level of inherent sustainability and healthy living - assure energy efficiency, a wholesome living environment, durability, and effective use of local materials. These have been incorporated in other sections of these guidelines, and include provisions for recycling and composting, potential use of green roofs, measures to reduce irrigation or use rainwater for irrigation, use of native plants, etc.

11.2 Stormwater Management

One critical element in the sustainability measures for the project is the natural stormwater management program. Stormwater is an integral part of the Porteau Cove community experience. It is a resource that needs to be protected and celebrated. Design of stormwater Best Management Practices should integrate with the architecture and natural setting of the mountain community.

Stormwater management best management practices are included in more detail in the Integrated Stormwater Management Plan (ISMP). For completeness, the following summary is included in these design guidelines. Refer to the ISMP for more detail.

11.2.1 For Roadways (not including the Village):

- 11.2.1.1 Maintain existing drainage routing and catchment areas to the extent possible
- 11.2.1.2 Provide Best Management Practices to capture the first 50mm of runoff from impervious surfaces in a 24 hour period.
- 11.2.1.3 Provide water quality Best Management Practices to treat the first 100mm of rainfall from impervious surfaces in a 24 hour period.

11.2.2 For the Village:

- 11.2.2.1 Attempt to provide source control Best Management Practices to capture the first 40mm of rainfall from impervious surfaces in a 24 hour period.
- 11.2.2.2 Provide Best Management Practices to detain the second 40mm (40mm to 80mm) of runoff from impervious surfaces in a 24 hour period and release at predevelopment levels.
- 11.2.2.3 Provide water quality Best Management Practices to treat the first 80mm of rainfall from road surfaces in a 24 hour period.

11.2.3 For Multi-Family Lots (not including the Village):

- 11.2.3.1 Provide on-site Best Management Practices to capture the first 50mm of runoff from impervious surfaces in a 24 hour period and infiltrate, evapotranspirate, reuse or redistribute to vegetated areas.
- 11.2.3.2 Provide on-site Best Management Practices to detain the second 50mm (50mm to 100mm) of runoff from impervious surfaces in a 24 hour period and release at predevelopment levels.







11.2.4 Best Management Practices

- 11.2.4.1 For building sites on impervious soils, BMP's include but are not limited to the following
 - · Impervious area reduction
 - · Porous pavement
 - · Green Roofs
 - Rain barrels
 - Rain gardens/absorbent landscaping
 - Constructed wetlands/wet ponds
- 11.2.4.2For building sites on pervious soils, in addition to those listed in 8.4.2.1 above, BMP's include but are not limited to the following:
 - · Infiltration trench/field
 - · Detention trench/field
- 11.2.4.3For roadways, suitable BMP's include but are not limited to the following:
 - Impervious area reduction
 - · Oil and grit separators
 - · Detention ponds
 - Constructed wetlands
 - · Vegetated filter strips
 - Bioswales
- 11.2.4.4 Ditches and swales on steep slopes to have check dams or coarse lining material to reduce runoff velocities.







APPENDIX A

RECOMMENDED PLANT LIST

Native Plants

Trees

Vine Maple Acer circinatum
Bigleaf Maple Acer macrophyllum
Japanese Maple Acer palmatum
Norway Maple Acer platanoides
Red Alder Alnus rubra
Arbutus Arbutus menzeisii

White Wonder Dogwood Cornus "Eddie's White Wonder"

Pacific Dogwood Cornus nuttallii
Cascara Rhamnus purshiana
Shore Pine Pinus contorta
Quaking Aspen Populus tremuloides
Douglas Fir Pseudotsuga menziesii

Western Red Cedar Thuja plicata
Canadian Hemlock Tsuga canadensis
Western Hemlock Tsuga heterophylla

Shrubs

Strawberry Tree Arbutus unedo
Azalea Azalea sp./varieties
Red Twig Dogwood Cornus sericea

Enkianthus Enkianthus campanulata

Salal Gaultheria shallon Mountain Laurel Kalmia latifolia

Oregon Grape Mahonia aquifolium, Mahonia nervosa

Sweet Gale Myrica gale

Osmarea Osmarea burkwoodii
Oregon Box Pachystima myrsinites
Mock orange Philadelphus lewisii
Red Flowering Currant Ribes sanguineum

Rhododendron sp./varieties

Nutka Rose Rosa nutkana
Arctic Willow Salix arctica
Pussy willow Salix discolor
Hooker's Willow Salix hookeriana
Red Elderberry Sambucus racemosa
Edible blueberry Vaccinium corymbosum
Evergreen Huckleberry Vaccinium ovatum
Huckleberry Vaccinium parvifolium

Note: Kinnickinick, Red twig dogwood and other berry producing shrubs attractive to bears should not be the predominant species in new landscaping.

Vines and Groundcovers

Kinnickinick Arctostaphylos uva-ursi

Clematis Clematis sp.

USE NATIVE PLANTS













APPENDIX A (Continued)

Bunchberry Cornus canadensis Wild Strawberry Fragaria virginiana

Western Bog Laurel Kalmia macrophylla ssp. occidentalis

Trailing Blackberry Rubus ursinus Fringecup Tellima grandiflora

Bulbs, Perennials, Ferns and Grasses

Vanilla leaf Achlys triphylla Yarrow Achillea millefolium Maidenhair Fern Adjantum pedatum Red columbine Aquilegia formosa Goat's Beard Aruncus sylvester Wild Ginger Asarum caudatum Lady Fern Athyrium filix-femina Deer Fern Blechnum spicant **Great Camas** Camassia leichtlinii Common Camas lily Camassia quamash Pacific Bleeding Heart Dicentra formosa Coastal Wood Fern Dryopteris arguta Fawn lily Erythronium sp.

Skunk cabbage Lysichiton americanum
False Lily-of-the-Valley
Licorice Fern Polypodium glycyrrhiza
Sword Fern Polystichum munitum
Broad leafed stonecrop Sedum spathulifolium
False Solomon's Seal
Piggyback Plant Tolmeia menziesii

Non-native Plants that meet the following criteria are allowed in multi-family development areas:

- o Drought tolerant
- o Provide habitat value
- o Are non-invasive
- o Low maintenance
- o Hardy to Zone 7

APPENDIX B

PROHIBITED PLANT LIST

Invasive Species

Butterfly Bush
Cotoneaster
English Hawthorn
Daphne
English Ivy
Holly
Buddleia davidii
Cotoneaster spp.
Crataegus laevigata
Daphne laureola
Hedera helix
Ilex spp.

Laurel Varieties Prunus laurocerasus varieties

Zabel Laurel Prunus zabeliana

Noxious, Toxic or Invasive Species

Sweet Vernal Grass Anthoxanthum odoratum

Giant Reed Arundo donax

Spotted Knapweed Centaurea maculosa
Canada thistle Cirsium arvense

Cattails

Field Bindweed Convolvulus arvensis
Hedgehog Dogtail Cynosurus echinatus
Scotch Broom Cytisus scoparius
Orchard Grass Dactylis glomerata
Spurge-laurel Daphne laureola
Leafy Spurge Euphorbia esula

Giant Hogweed Heracleum mantegazzianum

Velvet Grass Holcus lanatus
Hairycats Ear Hypochoeris radicata
Yellow Flag Iris Iris pseudacorus
Dalmation Toadflax
Purple Loosestrife Lythrum salicaria

Giant Knotweed Polygonum sachalinense Japanese Knotweed Polygonum cuspidatum

Himalayan Blackberry
Tansy Ragwort
Carpet Burweed
Gorse
Rubus discolor
Senecio jacobaea
Soliva sessilis
Ulex europaeus

No Fruit Trees