

SQUAMISH-LILLOOET REGIONAL DISTRICT

BY-LAW NO. 946-2005

A by-law of the Squamish-Lillooet Regional District to amend Electoral Area D Official Community Plan Bylaw No.495

WHEREAS it is deemed necessary and desirable to amend the “Electoral Area D Official Community Plan Bylaw No.495”;

NOW THEREFORE, the Regional Board of the Squamish-Lillooet Regional District, in open meeting assembled, enacts as follows:

1. This by-law may be cited for all purposes as "Electoral Area D Official Community Plan Bylaw No. 495, Amendment Bylaw No.946-2005.
2. Electoral Area D Official Community Plan Bylaw No. 495 is amended as follows:
 - (a) Schedule B – Howe Sound East Sub-Area 3 Plan, Section 5.0 – Porteau Cove – is amended by inclusion of the following policies following existing section 5.0.9:

5.1 Land Use

The Regional District supports development of a comprehensively planned community of up to 1400 residences at Porteau Cove accommodating an estimated population of 3,000 – 3,500. The Porteau Cove Planned Community will include mixed residential, commercial use in a Village centre, community uses, parks and recreation, trails and open space generally as shown on the Conceptual Site Plan which is attached as Appendix 1 to this bylaw.

Development will be phased generally in accordance with the Concept Plan, with approximately half of the total development units within each of Phase 1 and Phase 2. Sub phases of development may be approved, provided all amenities are provided as required by the Squamish-Lillooet Regional District.

5.2 Planning and Sustainability Principles

The Planned Community at Porteau Cove will be developed in accordance with the design and development principles and Smart Growth approaches in the Sustainability Strategy incorporated in this plan. The overall site design will be planned to minimize impacts on natural site conditions; avoid sensitive environmental areas; provide a range of housing choices; allow for alternative standards for infrastructure; promote transportation choices and a compact, pedestrian Village core to achieve a high standard of livability and environmental responsibility.

Development of the new community at Porteau Cove will be guided by the following planning and sustainability principles:

1. Livable Community: Provide a variety of housing forms, a viable neighbourhood Village Centre and community facilities and amenities to ensure a livable and vital community that reflects the unique landscape character and lifestyle opportunities of the Sea to Sky corridor.
2. Ecological Integrity and Biodiversity: Protect sensitive areas and key natural features within a comprehensive open space system. Focus development in less sensitive areas in a way that minimizes negative impacts on:
 - fish habitat and water quality by avoiding (where possible) development near watercourses, sensitive wetland and their riparian zones;
 - wildlife habitat by retaining areas of undisturbed forest and avoiding impacts and endangered wildlife species habitats;
 - environmentally sensitive old growth forest areas and other areas containing endangered plant species;
 - streams by limiting the number of stream crossings to preserve the natural streambed habitat; and
 - controls or avoids environmental and cultural impacts during construction
3. Greener and Smarter Infrastructure: Use resources more efficiently, shift toward renewable resources, reduce pollution, and use natural processes where possible when providing the following infrastructure: energy, stormwater management, water, wastewater, and solid waste.
4. Greener and Smarter Buildings: Develop to “green” building standards.
5. Transportation Options: Provide a compact, walkable village centre and encourage transportation options. Develop a road network that integrates with the existing topography, while providing necessary access for daily use and emergency purposes.
6. Economic Sustainability: Recognize the importance of the Porteau Cove project as part of the economic development strategy and social goals of the Squamish Nation. Support job creation within Porteau Cove within the Village centre, and by support of home businesses within residential areas.
7. Development Context: Consider visual impacts the Porteau Cove development may create from the Sea To Sky Highway, Howe Sound and Porteau Cove Provincial Parks. Consider noise impacts on development from the Highway and rail line.

5.3 Sustainability Strategy for a Livable Community

The following actions will be taken within the Porteau Cove development to achieve the sustainability principles:

Compact, Mixed Use Centre

Provide a compact and walkable mixed-use village centre adjacent to the highway that includes housing, commercial, social and employment opportunities in close proximity.

Diverse Housing Opportunities

Offer a range of housing types and sizes, including single family homes, apartments, townhomes and live/work spaces, to accommodate and encourage a diversity of residents.

Commercial Opportunities

Provide a range of retail and other commercial spaces within a vibrant local commercial area to meet the basic needs of residents and to create a focal point in the community.

Community Spaces and Services

Provide a system of parks, community spaces, green corridors and trails, educational and public safety services that provide a focus of community and meets the community's public gathering, activity and security needs.

Pedestrian Friendly Village Centre

Design the village centre to be pedestrian friendly, with wide sidewalks and spaces for interaction, trail connections, and a pedestrian scale.

Minimize Light Pollution

Minimize the impact of outdoor lighting through:

- Specifying fixtures that only shine down to limit light pollution;
- Providing minimal street lighting except at intersections; and
- Designing to strategically limit need for excess lighting.

Residential Policies

5.3.1 Residential areas will generally be located within the areas shown on Appendix 1. The exact location of these areas may be modified based on site specific environmental information and housing design submitted in the rezoning or development permit process. The housing mix may be modified somewhat at the time of rezoning, provided the overall development strategy is followed and the total unit count for the site is not exceeded.

- 5.3.2 Site specific mitigation measures shall be required prior to development approval in areas that are environmentally sensitive or subject to natural hazards, as outlined in section 5.4 and the Development Permit Area guidelines of this plan.
- 5.3.3 A base residential density of approximately 140 units is supported for the Porteau Cove community, with provision for a density bonus to allow a maximum of 1400 total residential units as shown conceptually on Appendix 1, subject to provision of community amenities including parks, open space, and community amenity buildings. The developer will also have the option of providing affordable housing as outlined in this plan to achieve the density bonus. The details of the density bonus will be specified in the zoning bylaw, and legal agreements between the owner and the Squamish-Lillooet Regional District will be required to implement the community amenity contributions.
- 5.3.4 A variety of housing types are encouraged to create a diverse neighbourhood and may include:
- Single family at densities of 10 to 15 units per hectare;
 - Small lot single family at densities of 15-25 units per hectare, with parcel sizes in the range of 400-500m²;
 - Two family dwellings and townhomes at densities of 20 to 30 units per hectare;
 - Stacked townhomes at densities of 30-40 units per hectare
 - Apartments at densities of 15-40 units per hectare;
 - Terraced apartments with densities ranging from 45-100 units per hectare;
 - Mixed residential and commercial with up to 20 residential units per hectare;
 - Live/work units
- 5.3.5 Affordable housing is encouraged in Porteau Cove and may be provided in the form of smaller lots, duplex housing, apartments above commercial uses, rental housing and/or dedication of land or housing units to a housing authority or local service club as per the *Local Government Act* provisions. Zoning bylaws for Porteau Cove will include density bonus options to encourage the development of some affordable housing as part of the housing mix.
- 5.3.6 Protection of existing trees, vegetation and wetlands is a priority for new development and planting of new trees to retain the visual and environmental values of the site will be required. Minimizing visual impacts of development from Porteau Cove Provincial Park, including lighting, will also be a priority during the subdivision or development permit process.
- 5.3.7 All residential development, except for single family lots larger than 600m² in area, is designated as a Development Permit Area in accordance with Section 919.1 of the *Local Government Act* for regulation of form and character of intensive and multi-family residential development. A Development Permit issued in accordance with the guidelines of this plan is required prior to subdivision approval or issuance of a building permit.

Commercial Policies

- 5.3.8 A range of commercial uses is supported within the area shown as the Village Centre on Appendix 1. Uses in this area will include those serving local residents as well as travelers on the Sea to Sky Highway. Live/work units and home occupations will be supported to encourage employment within the community.
- 5.3.9 To ensure land is retained for long-term commercial needs, the provision of commercial land will be considered a community amenity for the purposes of obtaining the residential density bonus.
- 5.3.10 Upper storey residential use, particularly rental housing, is supported in the commercial area.
- 5.3.11 A “retreat centre” or similar type of specialized lodge facility may be supported in the upper residential area, subject to rezoning on a site-specific basis and detailed information on the use and location.
- 5.3.12 To ensure a high standard of design for the commercial area, all commercial or mixed use buildings must obtain a Development Permit to regulate the form and character of commercial development in accordance with the Development Permit Area guidelines of this plan.

Parks and Open Space Policies

- 5.3.13 In accordance with the provisions of the *Local Government Act*, park dedication will be required as a condition of subdivision approval, with park locations generally in accordance with the areas shown on Appendix 2. Park dedication will include, but not be limited to, an approximately 1.5 hectares waterview park upland of Howe Sound, an approximately 0.5 hectare community park in the Village centre, viewpoint parks, and a future combined school/park site of approximately 2.0 ha in the later phase of the upper development.
- 5.3.14 Provision of a comprehensive trail system that enhances the existing trail network throughout the site is a key element of the site design, and public trails will be required as a condition of subdivision approval. The proposed trail network, consisting of the trails and trail head parking areas is shown conceptually on Appendix 2. Trail priorities include links to the existing Deeks Lake and Howe Sound Crest trails, trails that provide access to the community amenity and park areas, as well as trail connections between the residential areas. Trails shall be looped and interconnected to the greatest extent possible.
- 5.3.15 Trail linkage from the proposed waterview park to Porteau Cove Provincial Park is supported subject to BC Parks concurrence that the linkage can be appropriately located in a manner that enhances relationships with and minimize impacts on the Provincial Park, and can be integrated with other facilities and uses of the park.
- 5.3.16 Public access to the waterfront at Porteau Cove is desirable as it provides additional opportunity for both park visitors and community residents to access the shoreline. However, the foreshore area is owned by CN Rail, and approval from the rail authority to

cross the double rail tracks abutting the Porteau Cove property is required. Development of a pedestrian crossing is supported in principle, but it is recognized that a formal rail crossing is a longer term goal, and will require approvals from CN Rail and Fisheries and Oceans Canada related to environmental impacts.

- 5.3.17 A small public parking area is needed to support access to the community waterview (upland) park, although parking must not become a dominant feature of the site and must not be developed as a parking access area for the Provincial Park. The northerly existing entrance to the Porteau Cove Provincial Park will continue to be the primary access point to the provincial park for the public and for future residents of the Porteau Cove community.
- 5.3.18 Private open space areas and recreation amenities will be required as appropriate within multi-family strata developments.

Community Amenities and Services Policies

- 5.3.19 A community use building for recreation and social activities is required to meet the long-term needs of the estimated 3,000 to 3,500 residents of the Porteau Cove community. The facility should be centrally located in the Village centre as indicated conceptually on Appendix 1. Provision of this facility will be considered as a key community amenity to implement the residential density bonus described in section 5.3.3.
- 5.3.20 The need for other community service facilities, particularly a fire hall, ambulance and/or school site will be considered in consultation with the School District, provincial authorities and volunteer fire departments to assess the overall community needs for the Britannia Beach, Furry Creek, and Porteau Cove communities. A future school site will be provided in the Porteau Cove community as shown on Appendix 1. If the School District confirms at a later date that the school is not needed, the site will be dedicated as community park. Discussions regarding shared facilities or services, including participation in Search and Rescue services, may also include the Village of Lions Bay subject to their interest in shared facilities.
- 5.3.21 Confirmation of the facility requirements, phasing of facility development and securing of sites through development agreements shall be completed prior to adoption of zoning bylaws for the Porteau Cove community.

5.4 Sustainability Strategy to Maintain Ecological Integrity and Biodiversity

The following actions will be followed within the Porteau Cove community to achieve the environmental sustainability principles:

Protect Environmentally Sensitive Areas

Protect environmentally sensitive areas and focus development in the less vulnerable areas of the site by:

- completing a detailed environmental impact assessment, and build according to the recommendations of the report;
- providing buffer zones around old growth forests, rock outcrops, riparian areas, wetlands, steep slopes, and debris flow areas.

Design landscape and open space to protect environmentally sensitive areas and key natural features to achieve both recreational and ecological objectives.

Minimize Site Disruption

Minimize the extent of site disruption caused by site regrading and cuts and fills for all structures and roads located on slopes by:

- sensitive building siting;
- designing to match contours;
- modulation in building form;
- tree preservation where feasible and
- maintaining as much of the existing vegetation as possible.

Rehabilitation

Rehabilitate disturbed areas after development using native or native compatible plants. Reuse existing plants on site where possible through a plant salvage and replanting program.

Use Native Plants in New Landscaping

New landscaping should specify native or native compatible plants for use in the landscape to provide habitat value and limit need for irrigation once established.

Environmental Management Plan

Prepare an Environmental Management Plan (EMP) that includes mitigation measures to manage impacts to the physical and biological environments of the site. Environmental management measures will include avoidance of key areas, design changes, construction mitigation, habitat enhancement measures and monitoring.

Protect Slopes

Areas of the site over 40% slope will not be built upon as a general rule. Where slopes over 40% are disturbed, measures such as retaining walls and revegetation will be used to minimize risk and erosion. Appropriate setbacks from all slopes will be determined through geotechnical assessment.

Creek Setbacks

Minimize impacts to fish habitat, wildlife habitat and water quality by establishing setbacks along all creeks that protect the integrity and habitat values of the watercourses. Incorporate wetlands, open water areas, and creek systems into the open space system in an ecologically responsible manner.

Creek Crossings

Minimize the number of creek crossings and limit/mitigate negative effects of such crossings by maximizing the use of free span bridges or arched culverts to preserve the natural creekbed habitat, where appropriate.

Green Network & Trails

Provide a network of green corridors and trails throughout the site to connect residential areas with amenities and services, as well as provide connections with regional recreational facilities for the larger community. Trailhead parking for regional trails will be included in the development.

Environmental Education

Work with residents and trail user groups to reinforce awareness of natural areas, watercourses, wetlands and the old growth forest through interpretive signage.

Fire Smart

Incorporate Fire Smart strategies in detail site design as appropriate. These include: setting buildings back from the edge of slopes; selective thinning and limbing up of coniferous trees in development areas; and planting only deciduous trees and lawn within 10 meters of buildings. Such strategies must be balanced with other sustainability strategies and design principles.

Minimize Maintenance

Design landscape with the goal of minimizing the need for ongoing energy, water and chemical use by minimizing formal lawn areas and maximizing use of native and adaptive drought tolerant plants.

Environmentally Sensitive Area Policies

- 5.4.1 Natural open space areas such as steep slopes and environmentally sensitive areas will be protected from impacts of development to the greatest extent possible. A detailed environmental assessment of the site area will be required prior to rezoning, and all sensitive natural areas shall be identified. Site planning will follow the report recommendations for setbacks or other mitigative measures to protect or enhance environmental resources.
- 5.4.2 Existing vegetation should be maintained as much as possible during development, and arborist reports shall assess and indicate protective measures for retaining valuable trees.
- 5.4.3 The Porteau Cove site is designated as a Development Permit Area for the protection of the natural environment, and a Development Permit is required prior to subdivision or development or alteration of land on the Porteau Cove site, subject to the Development Permit Area guidelines of this plan. Environmental features include wetlands, watercourses, riparian areas, old growth forest, important plant communities, wildlife habitat, fish habitat and vegetation (including any unique, rare or endangered species). Some of the key areas are indicated on Appendix 1. More specific mapping will be completed as part of the detailed environmental assessment, and will be used to guide Development Permits for the site.

Natural Hazards Policies

- 5.4.4 The Porteau Cove community is designated as a Development Permit Area to protect development from hazardous conditions. Areas of potential risk due to debris flow or debris flood hazards are shown conceptually on Appendix 3, based on preliminary geotechnical assessment. Appendix 4 indicates portions of the site with steep slopes.
- 5.4.5 Prior to subdivision or development or alteration of the Porteau Cove lands, detailed geotechnical assessment is required to identify areas of risk on a site-specific basis, to provide detailed recommendations to reduce or mitigate risks and to confirm that the site can be safely used for the intended purpose, in accordance with the Development Permit Area guidelines of this plan.. The geotechnical study should identify any areas that are unsuitable for development, and contain recommendations to protect development and the public.
- 5.4.6 Section 219 covenants will be required as appropriate at the time of subdivision to ensure geotechnical study recommendations are followed over time, and that future property owners are aware of potential site hazards.

5.5 Sustainability Strategy for Greener and Smarter Infrastructure

To ensure infrastructure is developed to meet the long-term population requirements of the community, is financially feasible, and minimizes impacts to the natural environment the following actions will be taken:

Alternative Energy

Use alternative energy sources, such as solar, geothermal, and hydro, where feasible, within the project.

Solar Lighting

Incorporate solar panels to light trail signage at trailheads where feasible.

Natural Drainage

Employ a surface runoff management system where possible throughout the site that includes biofiltration swales, on-site detention and percolation areas. Ensure the stormwater management plan protects the water quality and quantity entering watercourses.

Increase permeability

Minimize paved road widths, provide parallel parking and sidewalks on only one side of the road, and use permeable paving for parking areas, trails and other areas to reduce site disturbance and increase stormwater permeability.

Rain-water Catchment

Where feasible, use public open spaces such as parks as rain-water catchment areas.

Reduce Water Demand

Reduce water demand through a variety of measures, including:

- Specification of low flow fixtures;
- Individual water meters;
- Minimizing need for landscape irrigation, using high efficiency irrigation systems; and
- Encourage the capture and reuse of rainwater, particularly for landscape uses.

Solid Waste Management

Support the waste reduction, reuse and recycling initiatives of the SLRD solid waste management plan.

Recycling and Composting

Make provisions for recycling and composting facilities in the design and operations of the site. Ensure all solid waste facilities, including dumpsters and any composting facilities, follow Bear Smart principles.

Infrastructure Policies

- 5.5.1 All community services and infrastructure will meet the standards of Squamish-Lillooet Regional District Subdivision and Development Servicing Bylaw No.741, except where specifically varied by Development Variance Permit. Variance of current standards will be considered by the Regional Board where the variances result in reduced environmental or visual impacts, while still providing a suitable level of service.
- 5.5.2 Prior to adoption of a rezoning bylaw to permit subdivision or development at Porteau Cove, owners must verify that adequate water supply is available, and submit water, sanitary sewer and stormwater sewer master plans for SLRD approval.
- 5.5.3 A public works yard will be required for the community. The size and location of this site will be determined as part of the master plan or subdivision application process as deemed appropriate by the SLRD in consultation with the applicant. The site must be secured prior to adoption of zoning bylaws. All land areas required for the water, sanitary and storm sewer facilities shall be secured by development agreements prior to rezoning, and shall be transferred to the Squamish-Lillooet Regional District at the time of subdivision.
- 5.5.4 Water, sewer and storm sewer systems shall meet all applicable provincial standards, including development and implementation of a water quality monitoring plan for water and sanitary systems..
- 5.5.5 The groundwater aquifer in the Deeks Creek fan shall be protected from contamination through establishment of well head protection areas that incorporate appropriate development setbacks and diversion of surface runoff away from ground water sources/wellheads. A long-term plan for protection of this area and the water supply shall be accepted by the SLRD prior to rezoning.
- 5.5.6 Site development shall follow best management practices for stormwater, with emphasis on flood protection, debris flow protection, and minimizing impacts on watercourses or riparian areas through increased on-site retention and infiltration wherever possible, in accordance with Bylaw 741, provincial stormwater management guidelines and the Development Permit guidelines of this plan.
- 5.5.7 A Fire Protection Plan must be prepared and accepted by the Squamish-Lillooet Regional District prior to completion of the site rezoning. The Fire Protection Plan is to include commitments for sprinklering of buildings, wildfire interface, water supply and fire-fighting services and equipment.

5.6 Transportation Sustainability Strategy

The Porteau Cove development will incorporate the following approaches to transportation:

Transportation Alternatives

Encourage transportation alternatives by incorporating transit stops at the highway interchange and a park & ride facility into the design.

Trip Reduction

Support programs such as car sharing, carpooling and vanpooling, and community shuttles and provide suitable site areas to accommodate these programs.

Integrated System

Integrate the roadway, sidewalks and trails so they operate as a comprehensive system, providing transportation options for residents.

Traffic Calming

Reduce speeds and provide traffic calming through minimized paving widths, steeper road grades and design.

Transportation Policies

- 5.6.1 Pedestrian movement in the form of trails and sidewalks will be a priority for all subdivision and development approvals.
- 5.6.2 Alternatives to private vehicle use are supported, and suitable sites shall be provided throughout the community for transit stops and for park and ride facilities near the Village.
- 5.6.3 Road design should minimize the impact on the environment by following the natural contour of the land to the greatest extent possible, providing bridge crossings at creeks, and shall provide adequate areas for future public transit service, emergency vehicles and school bus service.
- 5.6.4 A second access route to the Porteau Cove community is highly desirable, and all efforts shall be made to secure a secondary means of access to accommodate emergency requirements as a minimum.
- 5.6.5 Site design shall accommodate the long-term requirements on the Ministry of Transportation for a future widening of the Sea-To-Sky Highway, and site access will be by means of a grade separated interchange to MOT standards.

5.7 Development Permit Areas

General Guidelines Applicable to All Development Permit Areas

1. Where a property is subject to multiple Development Permit Areas, separate Development Permits under this section are not required, provided the guidelines for each Development Permit Area are addressed in the Development Permit.
2. Development Permits may be issued for phases of development involving several individual buildings or lots where appropriate.
3. Building permits will not be issued unless a development permit is approved by the Squamish-Lillooet Regional District unless otherwise exempted in this Plan;
4. A development permit issued or received under the above does not exempt any person from securing a building permit or any requirement of a bylaw, statute or regulation.

5.7.1 Development Permit Area #3 – Intensive Residential, Multi-family Residential and Commercial Development

Area

The Porteau Cove Development Permit Area #3 is identified on Appendix A attached to this bylaw, and includes sites to be developed as Small Lot Single Family, Duplex, Townhomes, Apartment, Live/Work, Retail or Commercial use.

Category

Pursuant to Sections 919.1(e) and 919.1(f) of the Local Government Act, the Porteau Cove area is designated as a development permit area for the establishment of objectives for the form and character of intensive single-family residential, commercial and multi-family development. For the purpose of this section, intensive single-family residential includes all single-family areas with minimum lot sizes of 600m² or less.

Justification

The Electoral Area D Official Community Plan contains policies and objectives regarding the visual quality along Highway 99 and Howe Sound, providing public access to the shoreline, and encouraging building forms that blend in with the natural surroundings. Creating a new community at Porteau Cove provides the opportunity to implement a high standard of building design and landscaping to ensure these objectives are met. The guidelines are intended to permit development of the land while controlling the character and appearance of the building siting, exterior materials, landscaping, lighting and parking areas.

Guidelines

The following guidelines provide initial guidance for future building form and character. More detailed Development Permit Area guidelines will be prepared and included as part of the zoning bylaw for the Porteau Cove community, particularly to define the building forms that will be developed within Porteau Cove.

Green Building Strategy

1. Buildings in the Porteau Cove community shall incorporate green building standards to the greatest extent possible, including the following design approaches:
 - Providing for rainwater harvesting, green roofs, rooftop gardens;
 - Orienting buildings and structures to maximize solar access;
 - Incorporating larger overhangs;
 - Locating living spaces next to naturally lit areas;
 - Using materials with recycled content;
 - Using rapidly renewable materials where appropriate;
 - Using healthy materials (non-toxic and low-emitting);
 - Specifying low flow plumbing fixtures and appliances , energy efficient lighting and other measures to reduce resource use; and
 - Using roofing materials that are durable, fire retardant and supportive of rainwater harvesting systems.
 - Select materials for durability and ease of maintenance to reduce costs, future waste, cleaning problems and pollution from cleaning materials.
 - Cladding will fit with the site's character, and be sourced regionally where feasible

Sustainable Site Design

2. Overall site design shall be based on sustainability principles, and will:
 - Cluster housing in order to protect green space and environmentally sensitive areas.
 - Incorporate stepped and terraced forms for residential buildings to integrate with the natural terrain.
 - Use materials that are on-site or in the immediate area wherever possible, including stone, topsoil, gravel, backfill and wood.
 - Minimize the extent of site disruption caused by site regrading and cuts and fills for all structures and roads located on slopes by a combination of modulation in building form, tree preservation and extensive revegetation.
 - Preserve existing vegetation to the greatest extent possible, and provide landscaping and screening elements to ensure visual privacy and separation to neighbouring properties and enhance the development.

- Use exterior lighting of buildings and parking areas that is low intensity and not cause excessive night-time illumination to be cast on adjoining properties or the shoreline, and should be at a pedestrian scale.

General Design Principles

3. The design of buildings and structures should be consistent with the area's coastal temperate rainforest character with the use of pitched roofs, exposed timber and natural materials. Appropriate building materials include wood, stone, treated/textured concrete. Building colours should be muted and consist of natural colours and must also be complementary to neighbouring buildings.
4. The design of buildings should minimize the obstruction of views.
5. The siting and design of all structures must minimize the visual impact of development from Highway 99, Howe Sound and Porteau Cove Provincial Park by appropriate siting of lot and building locations, maximizing tree retention, replanting and careful placement and selection of street and building lighting.
6. The siting of buildings and landscaping shall be used to minimize the noise and visual impacts of Highway 99 and CN Rail lines within residential areas.
7. Long modules of joined units and excessive repetition of unit design shall be avoided.
8. Large surface areas shall be broken down into smaller parking areas (e.g. to a maximum of 20 cars) and landscaped throughout.
9. Commercial area signage shall be compatible with the overall building design elements, and corporate design elements may not be permitted where they conflict with the building design elements or materials. Signs should not be illuminated from within.

5.7.2 Development Permit Area #4– Environmentally Sensitive Areas

Area

Porteau Cove Development Permit Area #4 refers to the site area shown on Appendix 1, which identifies the watercourses, wetlands, riparian areas and old growth forest within the Porteau site. Other environmentally sensitive areas, including important plant communities and areas of fish and wildlife habitat will be identified through the detailed environmental assessment, and will be subject to these guidelines.

Category

Pursuant to Section 919.1(a) of the Local Government Act, the Porteau Cove development site is designated as a development permit area for protection of the natural environment, its ecosystems and biological diversity.

Justification

The Porteau Cove development site includes a range of valuable and sensitive environmental features. Preliminary environmental assessment of the Porteau Cove site (Pottinger Gaherty Environmental Consultants Ltd., March 2005 and PWL Preliminary

Rezoning Application, Creeks and Vegetation maps, December 2004) indicates the presence of environmentally valuable or sensitive areas, including an area of old growth forest, possible red-listed plant communities, and a network of permanent and ephemeral streams and wetlands. Ensuring protection of these sensitive areas during development is a fundamental planning principle for the Porteau Cove development and a goal of the Official Community Plan. The use of housing forms and siting to concentrate development in less sensitive portions of the site, leaving a significant portion of the land in a relatively undisturbed state is the primary means of protecting these areas, and to maintaining the visual and environmental qualities of the site.

Guidelines

1. Land must not be altered and building permits will not be issued unless a development permit is approved by the Squamish-Lillooet Regional District unless otherwise exempted in this Plan;
2. A detailed Environmental Impact Assessment and Environmental Management Plan is required to be submitted prior to completion of rezoning for the site. The recommendations of that plan will be used to guide Development Permits for the site, to provide site-specific impact assessment and detailed management recommendations, which may modify the guidelines of this bylaw where appropriate. The detailed environmental assessment will also provide the basis for mitigation and onsite habitat augmentation.
3. Specific environmental protection and enhancement measures applicable to this site include:
 - (a) Establish setbacks along all creeks that protect the integrity and habitat values of the watercourses in perpetuity. Impacts to fish habitat and water quality will be minimized by avoiding wherever possible, watercourses, sensitive wetland and their riparian zones. The number of stream crossings will be kept to an absolute minimum and free-span bridges or arched culverts will be used in stream crossings to preserve the natural streambed habitat.
 - (b) Ensure connectivity for wildlife traversing the site, primarily through the riparian setback corridor. Impacts to wildlife and wildlife habitats will be minimized by avoiding development on or near rare and endangered wildlife species and their habitats, providing buffer zones around sensitive wildlife features and corridors for wildlife movement. Controlled time frames for construction will be established to avoid critical bird nesting periods.
 - (c) Environmentally sensitive old growth forest areas and other areas containing rare or endangered plant species will be protected from development to the greatest extent possible, and where necessary, adequate buffers provided.
 - (d) The stormwater management plan will protect the water quality and quantity entering watercourses, in part through separation of clean runoff from road runoff;

- (e) Removal of trees and vegetation from the site shall only occur as recommended by the Environmental Assessment, supported by detailed review by a professional arborist. Longer term protection of vegetation on steeply sloped areas may be managed through covenants registered on property titles if appropriate.
 - (f) Plan a plant salvage and replanting program to reuse existing plants on site.
 - (g) Reinforce awareness of natural areas, watercourses, wetlands and the old growth forest through education programs, signage and information kiosks;
 - (h) Use the principles and plant lists contained in the Naturescape Guidelines for site planting where possible;
 - (i) Ensure careful placement of barrier planting using appropriate native species along watercourses and wetlands to discourage public access to sensitive riparian areas;
 - (j) Create or improve wildlife habitats with the use of native plant material and plant massing;
 - (k) Promote the use of indigenous plants in private landscaping, while respecting Firesmart and Bear Smart objectives.
4. Riparian areas shall be protected in accordance with the guidelines and requirements of senior provincial and federal agencies, and in accordance with the Riparian Areas Regulations. The development permit area includes all lands within 30 metres of the top of bank of the watercourse, except where otherwise agreed in consultation with the Ministry of Environment and Fisheries and Oceans Canada, and as provided for under the Riparian Areas Regulations.
5. Environmental and cultural impacts will be minimized or avoided during construction by:
- (a) preparing an Environmental Construction Management Plan (ECMP) and sediment control plan (SCP) incorporating Best Management Practices;
 - (b) establishing and temporary silt fencing of selected riparian areas to prevent sediment release for the duration of construction;
 - (c) establishing and permanently fencing off selected environmentally sensitive areas;
 - (d) drafting construction tender documents that will require contractor and trade adherence to environmental objectives as part of their contractual obligations;
 - (e) establishing controlled timeframes for construction to avoid construction during wet fall months;
 - (f) providing a professional environmental monitor (EM) with authority to modify construction practices or, if needed, halt construction to protect the environment; and
 - (g) ceasing work and contacting the provincial Archaeology Branch if archaeological materials are discovered during development.

5.7.3 Development Permit Area #5– Natural Hazards

Area

Porteau Cove Development Permit Area #5 refers to the site area shown on Appendix 3 (Potential Natural Hazards) and Appendix 4 (Steep Slopes).

Category

Pursuant to Section 919.1(b) of the Local Government Act, the Porteau Cove development site is designated as a development permit area for the protection of development from hazardous conditions.

Justification

The steeply sloping terrain conditions and presence of numerous watercourses on the Porteau Cove site present special challenges in terms of potential erosion problems, debris flow hazard, stormwater drainage, groundwater management, and protection of the environmental and visual values of steep slopes.

Preliminary geotechnical analysis of the Porteau Cove site (Thurber Engineering Ltd., Porteau Cove Development Geotechnical Hazard Assessment, February 11, 2004) indicates the site is characterized by complex bedrock terrain with generally thin or negligible soil cover, and that the property is potentially affected by debris flows and debris floods which originate in the headwaters of creeks which traverse the property. Kallahne Creek has a moderate risk of debris flow hazard, and a detention basin or creek channelization are under consideration as mitigation measures. Deeks Creek is considered to have a relatively low risk of debris flow hazard, but a deflection berm is indicated on Appendix 3 to minimize the potential for creek avulsion. A similar berm may be required to mitigate potential creek avulsion risk where the Creek 3 channel is in close proximity to Bertram Creek. The report also notes potential localized rockfall hazards due to steep slopes, and the need for precautionary creek channel setbacks. These areas are shown conceptually on Appendix 3, and will require site specific assessment.

Appendix 4 indicates areas of steep slopes on the Porteau Cove site (PWL, Slope Analysis map, August 2005). The Development Permit Area #5 guidelines apply to sloped areas over 20% grade.

Guidelines

1. As a general guide, development should not be sited in areas with natural hazards. Development should be designed to respect natural terrain conditions with minimum disruption to areas of steep slope or natural hazards. Where development occurs within or near hazardous areas, suitable development practices shall be followed and

alternative development standards will be considered where the modified standards result in less alteration of natural site conditions.

2. A detailed geotechnical assessment prepared by a qualified geotechnical professional must be submitted as part of the Development Permit application to provide site-specific assessment and building siting and construction recommendations as appropriate. The report shall address all issues related to site drainage, soil slippage, seismic constraints, debris flow and debris flood hazards, creek avulsion and flood hazard, rock fall hazards, site clearing and retention of vegetation on steeply sloped lands. The report shall include recommendations for a Drainage Management Plan and stormwater controls and methods for reducing flows to watercourses and maintenance of groundwater regimes as appropriate. The report shall also identify measures to minimize potential erosion or sedimentation before, during and after site development. The report must certify that the land can be safely used for the purpose intended. The geotechnical report may reference phases of the site development or individual properties as appropriate.
3. Detailed engineering studies may be needed to design either protective or flood control works along stream channels where avulsion hazards are present.
4. As a general guide, no development should occur within 15 metres of the top of bank adjacent to watercourses. More detailed geotechnical investigations on a site-specific basis may modify this setback requirement.
5. Areas of the site with grades of 20-40% as indicated generally on Appendix 4 are intended to be used for development, and site development in these areas must be carefully assessed by a geotechnical engineer and all recommendations for ensuring safety of structures and site stability must be followed. Areas over 40% slope are generally not suitable for development. If portions of these steeper slopes are used for development, they must be fully assessed in a geotechnical report and mitigation measures followed.
6. Prior to approval of subdivision, a geotechnical report must indicate a suitable building envelope and driveway access on each lot. Specific geotechnical reports for individual sites may be also required as appropriate prior to issuance of Building Permit.

5.7.4 Exemptions – Development Permit Areas #4 ((Environmentally Sensitive Areas) and #5 (Hazardous Conditions)

Development Permits are not required:

1. Where an environmental assessment report prepared by registered professionals indicates that development can proceed according to the conditions specified in the report, and where senior provincial and federal agencies have supported the recommendations and conditions of the environmental assessment report in writing;
2. Where there are hazardous conditions requiring development precautions which a professional geotechnical report submitted to the Squamish-Lillooet Regional District indicates can otherwise be regulated by the SLRD zoning or building bylaws, or where the mitigation recommendations of the geotechnical report have been completed prior to subdivision approval and written confirmation has been provided by the

- geotechnical professional, or where the geotechnical report states that the land can be safely used for the purpose intended;
3. For any development or alteration of a site where the proposed construction, including site development activities such as clearing, grading, trenching or pipe installation is located on a portion of the site outside the designated hazard or environmentally sensitive area, to be confirmed by site survey and written confirmation from the appropriate geotechnical engineer or certified environmental professional;
 4. Works approved by the SLRD, Fisheries and Oceans Canada and/or Ministry of Environment with respect to trail construction, stream enhancement, and fish and wildlife restoration.
 5. For development that is an addition or alteration to an existing building which does not exceed 40 square metres in size and is located outside any designated hazardous conditions or environmentally sensitive area;
 6. Where the development is minor and cosmetic in nature such as the replacement of a door or window, replacement of roofing, repairs to exterior finishes and does not involve altering the structure of the building;
 7. For emergency repairs to buildings and structures where there is a demonstrable and immediate risk to public safety or property;
 8. For a temporary use for which a Temporary Use Permit will be issued by the Squamish-Lillooet Regional District;
 9. To resolve emergency situations that present an immediate danger to the including procedures related to flooding, erosion or other immediate threats to life or property, including removal of hazardous trees.
 10. For the construction, repair or maintenance of public works by the SLRD or its authorized agents and contractors.

Map Amendments

- (c) Official Community Plan Land Use Plan Map No.4 is amended to redesignate the properties in Porteau Cove as outlined on Schedule A to this bylaw from "Special Planning Area" to "Planned Community";
- (d) Schedule B to Howe Sound East Sub-Area 3 Plan Map B3 – Development Permit Area- is amended to designate:
 - i. the areas shown on Appendix 1 to this bylaw as Development Permit Area #3 (Form and Character of intensive residential, commercial and multi-family development);
 - ii. the areas shown on Appendix 1 to this bylaw as Development Permit Area #4 (Protection of Environment);
 - iii. the areas shown on Appendix 3 to this bylaw as Development Permit Area #5 (Hazardous Conditions);
 - iv. the areas shown on Appendix 4 to this bylaw as Development Permit Area #5 (Steep Slopes).

READ A FIRST TIME this 19th day of May , 2005
READ A SECOND TIME this 19th day of September , 2005.
PUBLIC HEARING held on the day of , 2005.
READ A THIRD TIME this day of , 2005.

Approved by the Minister of Community Services
on the _____ day of , 2005

ADOPTED this day of , 2005

John Turner
Chair

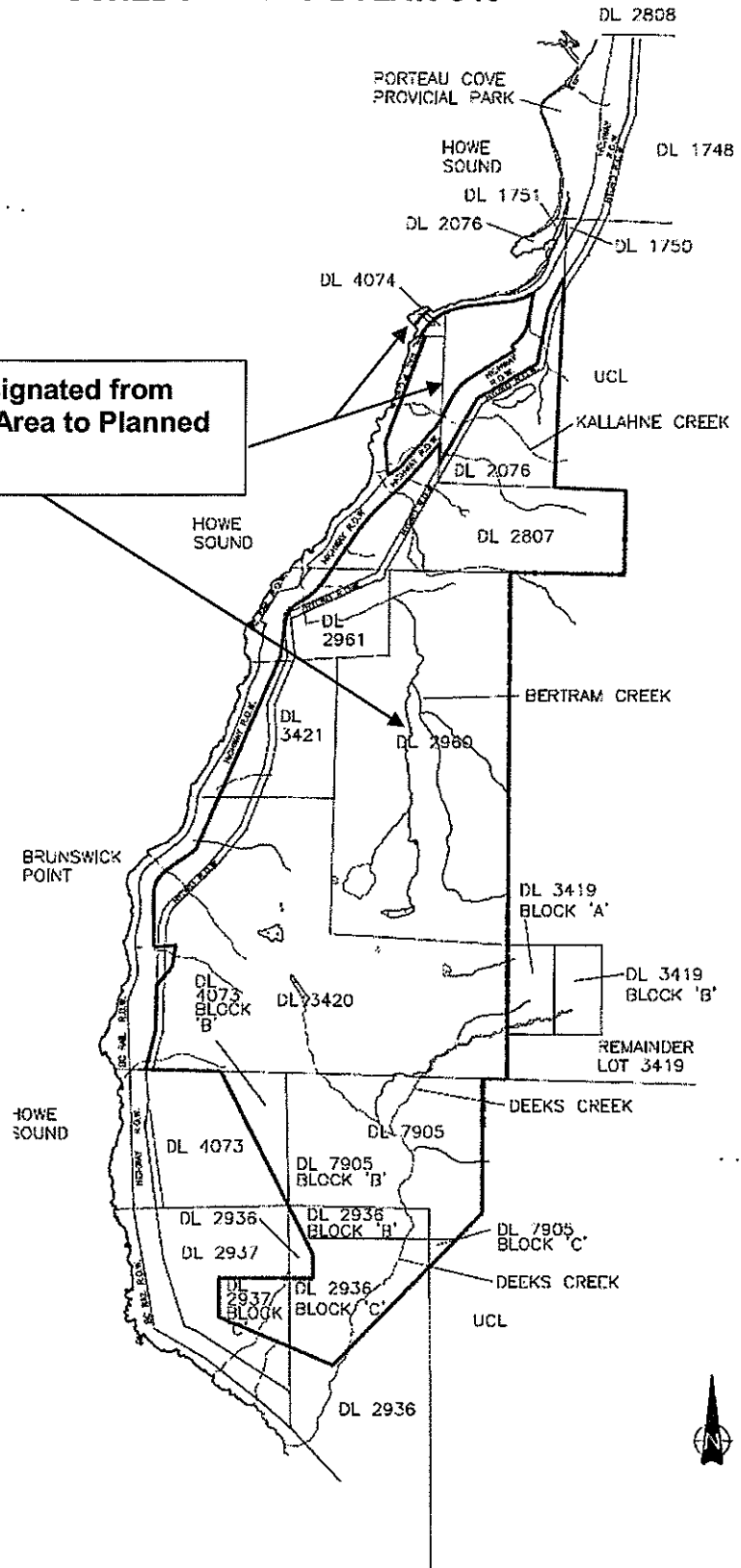
Paul R. Edgington
Administrator-Secretary

I hereby certify the foregoing to be a true and correct copy of By-law No.946 cited as ""Electoral Area D Official Community Plan Bylaw No.495, Amendment Bylaw No.946-2005" as read a second time September 19, 2005

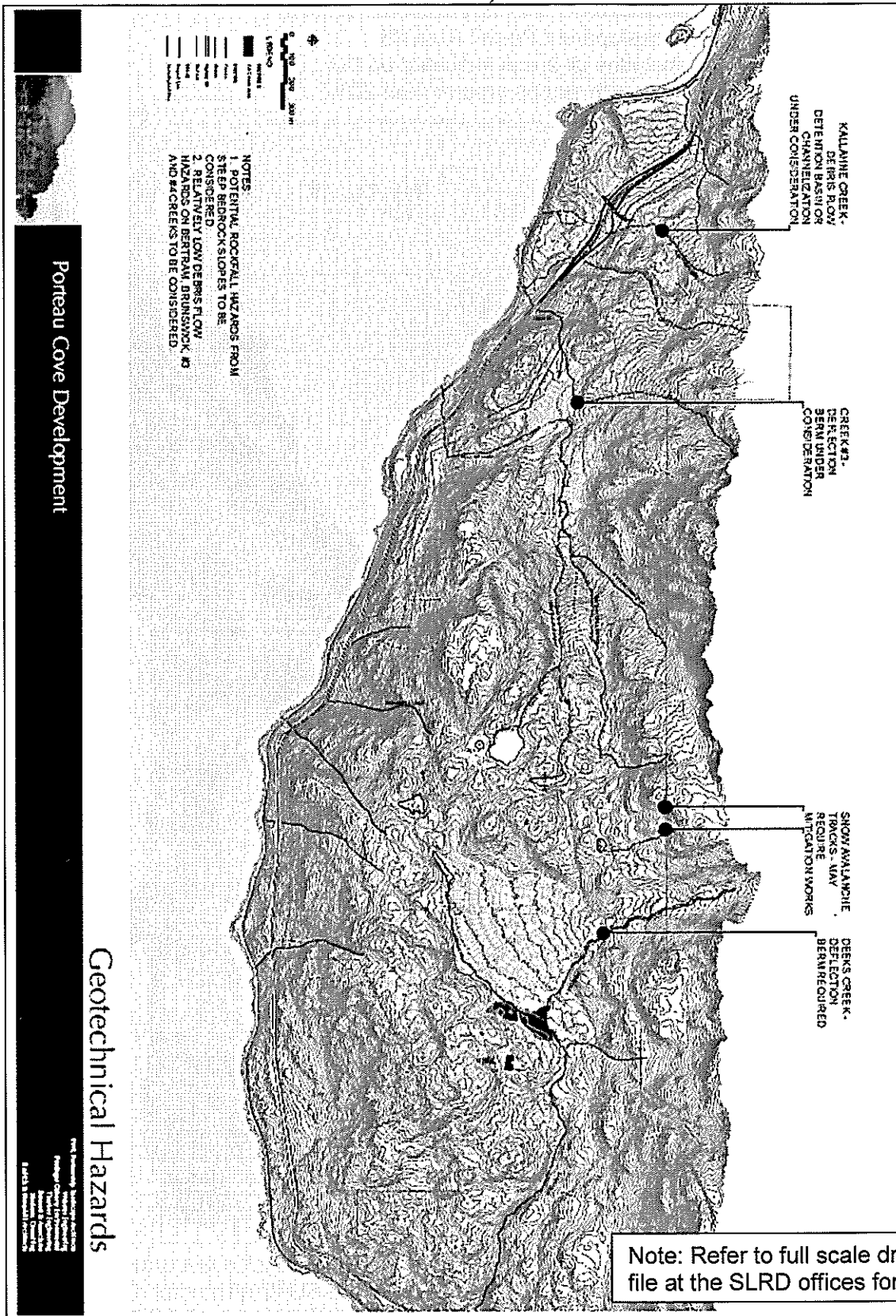
Secretary

SCHEDULE A TO BYLAW 946

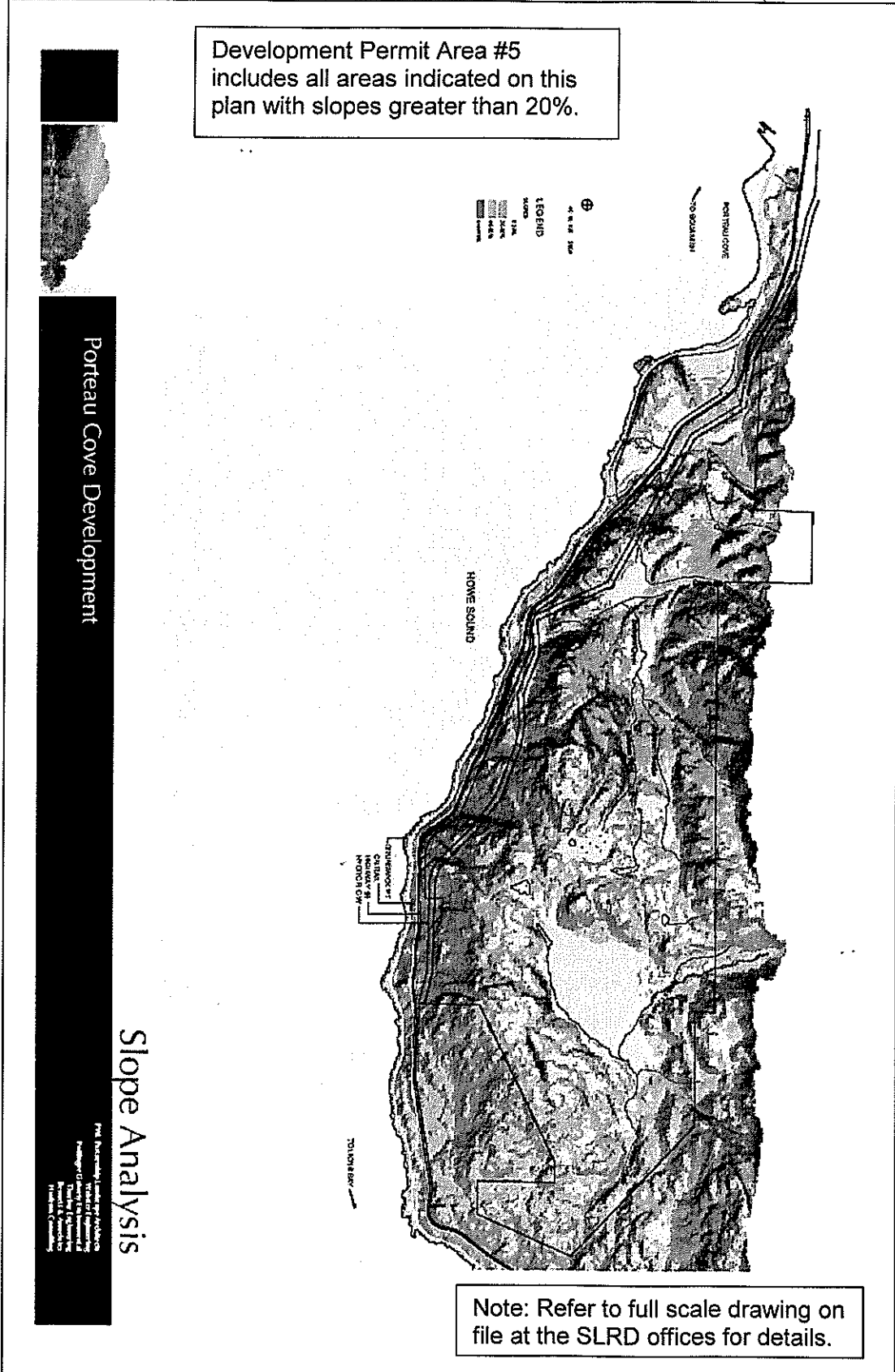
- Lands to be redesignated from Special Planning Area to Planned Community



APPENDIX 3 TO BYLAW 946- DEVELOPMENT PERMIT AREA #5 (HAZARD LANDS)



APPENDIX 4 TO BYLAW 946 – DEVELOPMENT PERMIT AREA #5 (STEEP SLOPES)



Development Permit Area #5 includes all areas indicated on this plan with slopes greater than 20%.

LEGEND
Development Permit Area #5 (Steep Slopes)
1:50,000 Scale
NAD 83
1988
1988

HOWE SOUND

PORTEAU COVE

SEALING
MATERIAL
MOUNTING

TOWN OF

Note: Refer to full scale drawing on file at the SLRD offices for details.

Porteau Cove Development

Slope Analysis

Porteau Cove
Development
Slope Analysis
1988
1988