

BRITANNIA BEACH COMMUNITY VISIONING CHARRETTE

Goals & Objectives

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GOALS & OBJECTIVES

CHARRETTE GOAL: to collectively design a sustainable Britannia Beach community – a community built around the historically significant but highly constrained Britannia Beach mine site

Community Design Principles

The following general principles are emerging as an acceptable basis for sustainable community design in our region. It is our intention to promote the sustainable design of all BC Communities based on these 8 principles:

1. Each Community is Complete
2. Options to the Car are Emphasized
3. Natural Systems are Integrated and Enhanced
4. Buildings & Infrastructure are Greener, Smarter, and Cheaper
5. Housing Meets the Needs of the Whole Community
6. Good Jobs are Close to Home
7. The Spirit of Each Community is Honoured
8. Everyone has a Voice

Community Design Objectives

The following design goals and objectives derive from existing local, regional, provincial and federal planning and policy initiatives specific to Britannia Beach. Deriving design objectives from this previously adjudicated policy base ensures that the products emerging from the process follow public will. The objectives are organized into interlinked categories:

- A) Mining Education & Heritage Conservation
- B) Environmental Remediation and Stewardship
- C) Economic Development
- D) Community
- E) Synergy

A) Mining Education and Heritage Conservation

Goal: *To use the site as a whole as a means for research and education, and to communicate with the broadest possible audience*

1. Improve the image and understanding of mining practices internationally as we move from past and present practices to future sustainable models.^{1 2 3}
2. Use the mine site to showcase British Columbian and Canadian leadership in sustainable practices and mining innovations.⁴

3. Design public spaces to demonstrate research, environmental remediation and cultural heritage.⁵
4. Preserve the cultural integrity and heritage values of the mine and townsite for future generations.⁶

B) Environmental Remediation and Stewardship

Goal: *To restore and enhance the site's overall environmental health based on best management practices for infrastructure and building design*

5. Use 'green building design' in the construction of new buildings, that optimizes energy use, materials and water consumption, and occupant health and where possible, retro-fit existing buildings with resource efficient technologies⁷
6. Use 'green infrastructure technologies' that are compatible with contaminated and remediated sites and explore alternate green energy sources available on site.^{8 9}
7. Identify and protect significant natural features such as important views, landforms, and key cultural heritage resources^{10 11}
8. Strongly encourage and secure public access for recreational opportunities¹²
9. Identify and protect all environmentally sensitive areas and enhance fish and wildlife habitats^{13 14}
10. Promote non-polluting development and commercial services compatible with a remediation strategy¹⁵
11. Take measures to reduce the risk of flooding to increase development area^{16 17 18 19}
12. Remediate existing contamination to acceptable standards and regenerate ecological integrity
13. Protect existing drinking water resources and explore alternate sources of community water, and efficient sewage treatment systems

C) Economic Development

Goal: *To create a thriving, diversified economy at Britannia Beach; one based on sustainable industrial, commercial, cultural heritage and recreational activities – an economy that serves the long term needs of residents and visitors*

14. Build capacity for economic cultural heritage tourism²⁰
15. Enhance Britannia Beach village centre and waterfront as a tourist destination point^{21 22 23 24 25}
16. Design the community to build economic capacity by restricting economic activities to those appropriate to a National Heritage Site^{26 27 28}

17. Explore ways of reducing the immediate and life cycle costs of roads and other infrastructure improvements by implementing alternate design standards that work with the natural capacity of the site.^{29 30}
18. Provide good jobs for the community.^{31 32}
19. Ensure that the transportation strategy is compatible with and strengthens local and regional economic development.^{33 34 35 36 37 38}
20. Design facilities with a positive national vision that will attract responsible mining investment in BC & Canada

D) Community

Goal: *To honour the spirit of the Britannia Beach Community by creating an inclusive place where people of all ages and incomes can feel they belong. To create a town with a strong local identity that is vibrant, diverse, safe, healthy and sustainable*

21. Strive to provide opportunities for current residents to remain in their existing homes wherever possible and work to find solutions that are respectful of the desire of residents to stay in the community.³⁹
22. With public subsidies as required, introduce a balance of new housing types that are affordable to people with different income levels and/or at different life stages.^{40 41 42}
23. Integrate residential with a variety of institutional uses such as schools, policing and medical services, as well as commercial and other uses, to serve local residents, tourists or recreationalists.^{43 44}
24. Provide a mix of new buildings that reflect the local history and regional character of Britannia Mine and enhance the visual quality of the community.^{45 46 47 48 49 50}
25. Create a pedestrian oriented network of streets and greenways to reduce car dependency.^{51 52 53 54 55}
26. Maximize the potential for outdoor recreation by making open spaces and waterfront areas publicly and safely accessible.^{56 57 58 59}
27. Ensure that communities are safe and that public amenities are distributed appropriately based on demand between Britannia North and South.^{60 61 62 63 64 65}

E.) Synergy

Goal: *To take a holistic approach to design that integrates resource systems for mutual benefit in a way that creates the conditions to achieve the 'educational' 'environmental', 'economic', and 'community' goals for Britannia Beach*

28. Identify and establish economic & institutional partnerships within the



- community, and with the adjoining Furry Creek, Squamish, Whistler and Squamish First Nations communities.^{66 67 68 69}
29. Use 'green building and green infrastructure' systems to link community spaces, the BC Museum of Mining, the Centre for Mining Innovation, the UBC Research Lab, and the Provincial Water Treatment Plant while respecting historic conservation principles.
 30. Continue to encourage community involvement in the planning and development of new and existing areas, and incorporate the outcomes of the Britannia Design Workshop into the SLRD's new Regional Growth Strategy.⁷⁰
 31. Establish partnerships between all levels of government, academia, community organizations and the private sector to encourage development that meets the educational, environmental, economic, and social goals for Britannia Beach.
 32. Use educational opportunities to research past economic survival strategies following natural disasters in Britannia, link students with new business opportunities, and promote Britannia as an economic development model for other communities.

Notes

¹ See CERM3 Mission statement, “to improve the image of mining in society”

<http://www.cerm3.mining.ubc.ca/intro/>

² Commemorative Integrity Statement (Draft 25 Feb. 02), Britannia Mines and Concentrator National Historic Site, 1.2 National Historic Site Objectives: “The objectives of the Government of Canada for the national historic sites program are:

-to foster knowledge and appreciation of Canada's past through a national program of historical commemoration.

-to ensure the commemorative integrity of national historic sites by protecting and presenting them for the benefit, education and enjoyment of this and future generations, in a manner that respects the significant and irreplaceable legacy represented by these places and their associated resources.

-to encourage and support owners of national historic sites in their efforts to ensure commemorative integrity.”

³ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.12.4: “Support integration of remediation facilities into the community in a way that is compatible with tourism and heritage objectives.”

⁴ See Strategy 5 under Research, the third of UBC's five pillars in Trek 2000: UBC's Vision. UBC will strive to expand its “industrial liaison efforts and work with government, industry, and organized labour to further the process of economic diversification and enhance the region's effectiveness in a knowledge-based economy.”

<http://www.trek2000.ubc.ca/principles/research.html>

⁵ See Section 2.12.3 of Schedule B Howe Sound East Sub Area 3 Plan: “Where possible, encourage the incorporation of public access and education displays into remediation facilities.”

⁶ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.10.1: “Encourage protection and preservation of the historic Britannia townsite and Museum.”

⁷ See Section 2.2.5 of Schedule B Howe Sound East Sub Area 3 Plan: “Promote energy conservation in building design, eg. passive solar, recycled materials, conservation materials within buildings.”

⁸ See Electoral Area D – OCP Amendment By-Law No. 714, 2000, 2.8.5: “Require preparation of a detailed stormwater management plan prior to development, encouraging infiltration of the water to the ground as quickly as possible, and the use of best management practices in stormwater design.” These BMP's may require adaptive measures to meet the needs of a contaminated site.

⁹ See “Stormwater Management Guidelines” in section 8 of Schedule B Howe Sound East Sub Area 3 Plan, especially “direct water to grass slopes, swales and areas with thick vegetation”; and “use wetlands which can improve the quality of stormwater through biofiltration”.

¹⁰ See Electoral Area D-OCP Amendment By-Law No. 714, 2000, 2.5.4: “In siting commercial buildings, ensure that views of Howe Sound from the highway and from residential areas are protected, although the views may be partially interrupted.”

¹¹ “Preserve heritage resources: logging, mining, fishing, farming, rail, Squamish Nation, recreation and natural,” is identified as the top ranked common community goal by the Citizen's Advisory Committee in the Tourism Development Plan for the District of Squamish.

¹² See 2.3.6 Howe Sound East Sub-Area 3 – Electoral Area D – By-law No. 714, 2000, “Encourage provision of a trail system throughout the community and to adjacent communities...Encourage provision of trail-head facilities where possible and appropriate...”

¹³ See Section 2.2.6 of Schedule B, Howe Sound East Sub Area 3 Plan: “Encourage the protection of existing trees...”

¹⁴ See 2.9 Howe Sound East Sub-Area 3 – Electoral Area D – By-law No. 714, 2000, *Guidelines for Environmentally Sensitive Areas* - “Effort should be made to retain as much existing vegetation as possible, especially significant vegetation and habitat...”

¹⁵ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.5: "Support provision of non-polluting recreational marine commercial services, such as mooring facilities, canoe and kayak rentals, windsurfing shop."

¹⁶ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.9.3: "Residential development will not be permitted in the area's watersheds."

¹⁷ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.11.2: "Avoid dwelling units in the area designated Flood Management on Map B2, which is within the floodplain and alluvial fan of Britannia Creek. Temporary tourist commercial uses, park space, parking, and historic structures not used for accommodation may be permissible in that area. The potential relocation of the historic structures will be determined through a Heritage Study."

¹⁸ See 2.3.5 Howe Sound East Sub-Area 3 – Electoral Area D – By-law No. 714, 2000, Encourage provision of natural open space in all environmentally sensitive areas, hazard areas and the upland remainder of Britannia North and South which are not intended for future development..."

¹⁹ See Britannia Creek Flood Risk Assessment Water Management Consultants Report, 2002, 9 Recommendations: "It is recommended that Option 1 involving construction of a sediment basin near the apex of the fan of Britannia Creek be given further consideration. This option has the second lowest cost of the four options considered but provides protection for most of the fan area with low impact on the community."

²⁰ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.7.1: "The regional district recognizes and encourages the BC Museum of Mining, particularly their strategy to develop their property in partnership with the private sector through the adaptive re-use of their heritage buildings."

²¹ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.7.1: "The regional district recognizes and encourages the BC Museum of Mining, particularly their strategy to develop their property in partnership with the private sector through the adaptive re-use of their heritage buildings."

²² See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.2: "Focus tourism-related commercial activities within the existing townsite and adjacent waterfront area at Britannia North."

²³ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.3: "Support the ongoing operation of the B.C. Museum of Mining as a tourist commercial site under the designations National Historic Site and Provincial Historic Landmark."

²⁴ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.8: "Support tourist accommodation with a maximum size of 100 bedrooms."

²⁵ See Sea to Sky Land and Resource Management Plan (LRMP) Base Case Report, p2: "In the Plan Area as a whole, tourism is the single largest sector providing basic income (25%) and employment (40%)..." "The strong historical growth in the tourism sector and the number of tourism-related investments being proposed suggest that this sector will continue to be one of the most significant growth factors in the Plan Area economy for the foreseeable future."

²⁶ See Sea to Sky Land and Resource Management Plan (LRMP) Base Case Report, p2: "The scenic beauty and proximity of the Plan Area to Vancouver will continue to attract film industry activity."

²⁷ New Horizons for Squamish Economic Development Strategy, Phase 3 Strategy Report, January 1999, Strategy 5.12.3: "Build capacity for more S&T business activity."

²⁸ New Horizons for Squamish Economic Development Strategy, Phase 3 Strategy Report, January 1999, Strategy 5.13.3: "Take advantage of the economic development potential of the arts."

²⁹ See IPP Development in the Squamish-Lillooet Regional District, Volume One – Policy Report and Appendices, Policy Position #1: "Proposed IPP developments in the SLRD will be evaluated for consistency with the following criteria:

Renewable – the resource must be replenishable by natural processes within a reasonable length of time – at the longest, within about one average human life span.

...

Environmentally responsible – the project should avoid any significant environmental impacts.... and must meet all criteria established by Ministry of Water, Land and Air Protection, Fisheries and Oceans Canada, and Environment Canada....”

Also see Policy Position #2: “The development of small hydroelectric facilities will be considered to be consistent with the resource use designation within its official community plans (OCP).”

Also see Policy Position #3: All other forms of green energy development will be evaluated on their own merits and may require an OCP amendment depending on the proposed change in land use.

³⁰ See Britannia Creek Flood Risk Assessment Water Management Consultants Report, 2002, 9 Recommendations: “It is recommended that Option 1 involving construction of a sediment basin near the apex of the fan of Britannia Creek be given further consideration. This option has the second lowest cost of the four options considered but provides protection for most of the fan area with low impact on the community.”

³¹ New Horizons for Squamish Economic Development Strategy, Phase 3 Strategy Report, January 1999, Strategy 5.13.4: “Continue to promote Squamish as a centre for film activity.”

³² See Sea to Sky Land and Resource Management Plan (LRMP) Base Case Report, p2: “In the Plan Area as a whole, tourism is the single largest sector providing basic income (25%) and employment (40%)....” “The strong historical growth in the tourism sector and the number of tourism-related investments being proposed suggest that this sector will continue to be one of the most significant growth factors in the Plan Area economy for the foreseeable future.”

³³ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.8, Objectives: “To maintain, and where recommended by the Sea to Sky Local Resource Use Plan, enhance the visual quality of the Highway 99 corridor.” Also, 4.8.2: “It is the policy of the Regional District to require appropriate screening and buffering in areas adjacent to Highway 99 where major developments are proposed.”

³⁴ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.11.4: “The Regional District encourages the Ministry of Transportation and Highways to upgrade Highway 99 as a scenic, tourist highway.”

³⁵ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.11.6: “The Regional District supports the objective of BC Rail to increase passenger and freight service in the Plan Area.”

³⁶ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.7.1: “Encourage the realignment of Highway 99 around Britannia South as generally shown on Map B2 Britannia Beach Land Use Plan with a grade-separated access off the highway.”

³⁷ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.7.2: “Support the retention of 2-lane Highway 99 through Britannia North, with improved pedestrian crossing of the highway and the railway, and allowance for vehicular access to potential upper residential areas from the highway. If the highway is to be 4-laned, retain the 2-lane highway through Britannia.”

³⁸ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.7.3: “Encourage and support internal community roads narrower and steeper than typical Ministry of Transportation standards to reduce visual and environmental impacts. This could require private or strata-title development of roads.”

³⁹ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.2.7: “Support and encourage the retention of the 10ha (25 acre) historic community site for affordable housing to accommodate a maximum of 100 units. Support retention of existing homes, and opportunities for existing residents to remain in the community.”

⁴⁰ Section 2.2.4 of Schedule B Howe Sound East Sub Area 3 Plan recommends the housing types and densities that should be considered for residential development in Britannia Beach, but there is no description of distribution of housing by type. See Neighbourhood Pattern Typology, and the East Clayton NCP for guidance on distribution of housing by type.

⁴¹ See Whistler South OCP By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.6.1: “The Regional District will work with provincial agencies, adjoining local governments and potential developers in an effort to have affordable housing included as an integral part of the developments within the Plan Area.”

⁴² See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.2.7: “Support and encourage the retention of the 10ha (25 acre) historic community site for affordable housing to accommodate a maximum of 100 units. Support retention of existing homes, and opportunities for existing residents to remain in the community.”

⁴³ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.6: “Support provision of community-oriented commercial uses, up to a maximum of approximately 1500 square metre (16,000 square feet) of gross leasable floor area, to serve residents. Community commercial development should be located at or near a major road intersection within Britannia South, away from Highway 99 on a site that has convenient pedestrian access from the majority of the residential development.”

⁴⁴ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.10.2: “Encourage establishment of a Maritime Heritage Society facility within the waterfront location shown as Tourist commercial on Map B2 Britannia Beach Land Use Plan.”

⁴⁵ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.2.6: “Encourage protection of existing trees and plant new trees in residential areas to provide neighbourhood character and to minimize visual impacts, especially in areas that slope steeply towards Highway 99, the railway, or the ocean.”

⁴⁶ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.2.9: “In accordance with section 919.1 of the local Government Act, all Single Family Residential and Mixed Residential designated lands in the Britannia area (North and South) are designated as development permit areas for the purpose of establishment of objectives and development of guidelines for the form and character of intensive residential development.”

⁴⁷ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.9: “All commercially designated lands are designated as development permit areas for the purpose of establishment of objectives and development of guidelines for the form and character of commercial development.”

⁴⁸ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.10.3: “Encourage any new structures within the Historic Residential, Tourist Commercial or Floodplain Management areas to be compatible with the character of the existing historic community in terms of siting, form, and exterior design.”

⁴⁹ New Horizons for Squamish Economic Development Strategy, Phase 3 Strategy Report, January 1999, Strategy 5.6.2, Action 2: “Develop design guidelines that will ensure that additional development is attractive, pedestrian friendly, and has a comfortable human character.”

⁵⁰ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 2.2.3: “Encourage clustering of residential units with public open space around clusters.”

⁵¹ See Whistler South OCP, By-law No. 495, Schedule A Squamish-Lillooet Regional District, 4.11.5: “The Regional District encourages MOTH [Ministry of Transportation and Highways] to incorporate a bicycle lane into any future upgrading of Highway 99.”

⁵² See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.3.4: “Encourage provision of pedestrian access along the shoreline of Howe Sound on the Britannia South frontage and the Britannia North frontage, with a pedestrian link between these two areas.”

⁵³ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.3.6: “Encourage provision of a trail system throughout the community and to adjacent communities (e.g., Furry Creek), linking commercial areas, residential areas, and parks and open space. Encourage provision of trail-head facilities (e.g. road access, small parking lot, signage) where possible and appropriate. The trail system should include major trails for walking and bicycle use, as well as hiking trails. Consideration should be given to designation of specific trails that can accommodate mountain biking.”

⁵⁴ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.7.4: “Encourage provision of transportation demand management facilities, such as park and ride/carpool lot.”

⁵⁵ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.7.5: “Encourage and support provisions for a future commuter rail service, such as space for train stations in key locations, such as Britannia North and South.”

⁵⁶ B.C. Parks System Goals, under the recreation mandate of the *Park Act* – “Goal 4: Local Recreation-to ensure access to local outdoor recreation opportunities for all residents of this province.”

⁵⁷ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.3.1: “In accordance with the park designation provisions in the Local Government Act, require dedication of land for the provision of community and neighbourhood parks in the general locations shown on Map B@ Britannia Beach Land Use Plan....”

⁵⁸ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.3.3: “In conjunction with future rezoning of Britannia South lands, encourage provision of an additional waterfront park at Minaty Bay, in the general location shown on the land use plan, to protect the beach, the picnic area, and the peninsula, retaining the natural character of this public use area....”

⁵⁹ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.5.6: “Support provision of community-oriented commercial uses, up to a maximum of approximately 1500 square metre (16,000 square feet) of gross leasable floor area, to serve residents. Community commercial development should be located at or near a major road intersection within Britannia South, away from Highway 99 on a site that has convenient pedestrian access from the majority of the residential development.”

⁶⁰ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.2.2: “Residential development shall not occur in areas that are contaminated or geologically unsafe.... Appropriate phased remediation, mitigation and risk management must occur prior to residential development.”

⁶¹ CPTED principles, see *Creating safer communities : an introduction to crime prevention through environmental design (CPTED) for architects, planners, and builders*

⁶² See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.4.3: “Work with other government agencies to determine the needs for sites for other community amenities. A fire hall will be retained at Britannia North. There will be a future need for a police office and ambulance station either at Britannia Beach or Furry Creek.”

⁶³ See Sections 2.3 “Parks and Open Space” and 2.4 “Community Amenities” of Schedule B Howe Sound East Sub Area 3 Plan

⁶⁴ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.3.2: “Encourage location of the Britannia South community park adjacent to an elementary school site.”

⁶⁵ See Electoral Area D OCP Amendment By-law No. 714, 2000, 2.4.2: “Encourage provision of a site for public indoor recreation facilities to serve the community within or near the Britannia South school/park site.”

⁶⁶ New Horizons for Squamish, *Economic Development Strategy*, 5.2.4. “Enhance economic development partnerships with the Squamish Nation”.

⁶⁷ See Squamish Tourism Marketing Plan and Development Strategy – First Nation Heritage.

⁶⁸ New Horizons For Squamish – *Economic Development Strategy* – 5.2.5 – “Develop partnerships with other agencies to explore joint capital projects”

⁶⁹ New Horizons for Squamish Economic Development Strategy, Phase 3 Strategy Report, Jan. 1999, Strategy 5.12.3: “Build capacity for more S [science]& T [technology] business activity.”

⁷⁰ See IPP Development in the Squamish-Lillooet Regional District, Volume One-Policy Report and Appendices, Policy Position #11: “The SLRD Board requires IPP [independent power projects] developers to engage the community in dialogue about the project and a community consultation plan and summary are to be submitted as part of the rezoning application....”

Policy and Planning Documents for the Britannia Mine Charrette

Federal Policy

Fisheries Act

Land Development Guidelines for the Protection of Aquatic Habitat

Environmental Protection Act

Cultural Resources Management Policy

Guidelines for Implementation of the Pollution Prevention Planning Provisions for Part 4 of the Canadian Environmental Protection Act, 1999, Environment Canada 2001

Provincial Policy

Local Government Act

Growth Strategies Amendment Act

Local Government Statutes Amendment Act (Bill 26)

Waste Management Act

Environmental Assessment Act

Municipal Sewage Regulation (and code of practice for the use of reclaimed water)

BC Fish Protection Act

Streamside Protection Regulation

Mines Act

Britannia Contaminated Site Investigation: Fan Area Remediation Planning Document

Bill 14 Community Charter

Developing Criteria and Objectives for Managing Contaminated Sites in British Columbia 1989

Final Report of the Minister's Advisory Panel on Contaminated Sites January 2003

Action Plan for a Feasibility Study of the Britannia Mine Remediation Project Ministry of Water Land and Air Protection 2001

British Columbia Heritage Trust Service Plan 2002-2005 2002

Regional and Municipal Policy and Planning

Electoral Area D Official Community Plan Bylaw No.714, 2001, Schedule B Howe Sound East Sub-Area 3 Plan

Sustainability Indicators for the Fraser Basin: Consultation Report



Sustainability Indicators for the Fraser Basin: Indicators Workbook

Fraser Basin 5 Year Action Plan 1999-2004

Fraser Basin Council Charter for Sustainability

IPP Development in the Squamish Lillooet Regional District Volume 1 Policy Report and Appendices

Britannia Mine Stakeholder's Sustainable Reclamation Plan Copper Beach Estates, 2002

Squamish Tourism Marketing Plan and Development Strategy, District of Squamish, 1997
Tourism Development Plan, District of Squamish, 1994

New Horizons for Squamish, Economic Development Strategy. District of Squamish, 1999.

Official Community Plan, District of Squamish.

Britannia Beach Historical Society Documents

Britannia Historical Society: Statement of Intents and Purposes, Constitution and Bylaws. 1971

Commemorative Integrity Statement, Parks Canada. 2001

Recording Report for Britannia Mines. Parks Canada, 1998/99

Structural Review of Concentrator No 3. Britannia Beach. Parks Canada, Heritage Conservation Program. 2001

Structural Inspection, Britannia Mines, Parks Canada, 1990

Report on Study of Existing Concentrator Mill Building. John Idiens, Simons, 1982.

Capital Cost Estimate Update for Concentrator, Mill #3, John Idiens, September 1990

Geological features of the British Columbia Museum of Mining tunnel and vicinity, Marilyn Mullen

Historic Buildings (machine shop, welding shop) restoration plans, Barry McGinn Engineering and preservation. 1994-1995

A proposal for developing the Britannia Beach Area. Nicholas Dykes Communication Services. 1981

Prelude to the Britannia Opportunity, the Britannia Opportunity. 1990. Marilyn Mullen

Site Hazard Assessment, BC Museum of Mining. 1997. Dillon Consulting

Report on the Water Supply System. Prepared for Copper Beach Estates by Soltan Kuun Assoc. 1983.

Not Yet Released

Britannia Centre for Mining Innovation, Natural Resources Canada. Not yet released (2003).



Identification and Analysis of Business Development Strategies for the BC Museum of Mining.
Bindu Chembrakkalathil, 2003. Not yet released.

Planning Documents for Britannia Mines and Reclamation Corporation or Macdonald Corporation (landowners)

These have not yet been identified.

Discussion Papers

Digging Up Trouble: The Legacy of Mining in British Columbia Sierra Legal Defense Fund 1998

Riparian Protection and Compensation West Coast Environmental Law 1999

Sustainable Development and Minerals and Metals: A Discussion Paper Natural Resources Canada 1995

Undermining the Law: Addressing the Crisis in Compliance with Environmental Mining Laws in BC West Coast Environmental Law 2001

Environmental Mining Council of BC. "When a mine makes a mess, who cleans it up?"
"Submission to the Fraser Basin Council on the Britannia Mine Reclamation and Remediation Permit application submitted by Copper Beach Estates Ltd."

Corporate Plan Summary Canadian Tourism Commission

Britannia Beach. Film by David Vaisbord. 2001. 604-687-7591

A Bird's Eye view of Britannia Mine and Mill. Britannia Mining and Smelting, 1927.

Technical Reports

Transportation

Sea-to-Sky Corridor Demand Study

The objective of this study is to estimate the long term demand for rail and other multi-modal services on the Sea-to-Sky corridor up to 2025.

Higher Speed Passenger Rail Vancouver to Whistler

This report set out to examine the potential for establishing Higher Speed passenger rail service between Downtown Vancouver and Whistler, what the order-of-magnitude costs for building and operating such a service and finally what level of ridership would be needed to bring a Return on Investment of 15%, after taxes.

There is no mention of Britannia Beach in this document, though it includes proposals for a station in Porteau Cove/ Furry Creek.

Highway 99 Alternative Routes Analysis and Corridor Improvement Analysis

Identifies negative impacts to Britannia Beach as a result of Highway 99 'improvements' (widening). These include impacts to property, limited access to businesses, disconnection from Howe Sound, and release of metal contaminants resulting from disturbance to soft, unstable sedimentary effluent.

Sea-to-Sky Modal Diversion Study

The objective of this study is to estimate the proportion of Sea-to-Sky auto travellers that would divert to alternate modes with the introduction of highway tolls on an upgraded highway. (No specific mention of Britannia Beach in this study).

Marine Options: Greater Vancouver to Squamish Feasibility Study

One option identifies Darrell Bay as a ferry location. Darrell Bay is approximately 6km along the S-t-S Highway from Britannia. There is no specific mention of Britannia in the report.

Multi-Modal Corridor Transportation Study: Horseshoe Bay to Highway 97

B.C. Supplement to TAC Geometric Design Guide Subdivision Roads Chapter, Ministry of Transportation

Mining and Ecology

Britannia Creek Alluvial Fan: Preliminary Investigation Ministry of Water Land and Air Protection

The Science of Acid Mine Drainage and Passive Treatment Department of Environmental Protection Bureau of Abandoned Mine Reclamation

http://www.dep.state.pa.us/dep/deputate/minres/bamr/amd/science_of_amd.htm

Coastal Mining: Benthic Impact and Recovery Brenda Burd, Ecostat Research Ltd.

Summary of DFO Environmental Effects Studies 1997-1999: Britannia Copper Mine

Marine Toxicological Testing: Britannia Mine Pacific Environmental Science Centre
Britannia Sediment Assessment 1 and 2 Environment Canada 2001

Seabed Reconnaissance for Habitat and Substrate Mapping: Britannia Mine Environment Canada, 2001

Britannia Mines Surveys: 1984-1986 and 2001 Ministry of Land Water and Air Protection

Minefile Report: Ministry of Energy and Mines
Detailed report of the Britannia Mine

Pilot Scale Testing of the High Density Sludge Process Ministry of Water Land and Air Protection 2002

Structural Review of Concentrator #3 Parks Canada 2001

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The Former Britannia Mine, Mount Sheer Britannia Beach, British Columbia Chris Mills