Property File

92GNW031

Sechelt Carbonate

T. S/C/R/D

Mining Commission

008164

PROPOSAL FOR DEVELOPMENT OF THE SECHELT INDUSTRIAL MINERAL PROJECT

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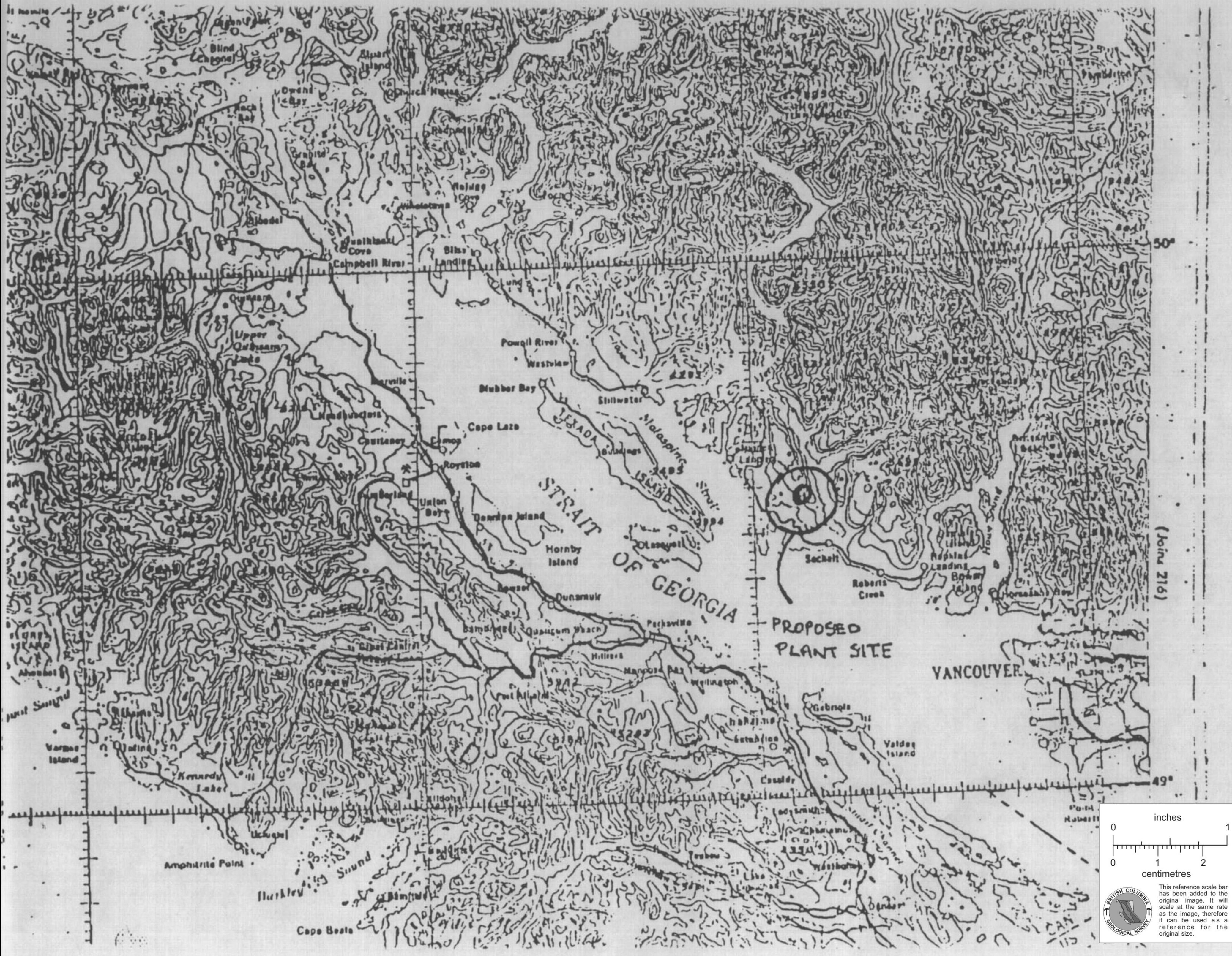
STRAIT OF GEORGIA
PROPOSED PLANT SITE
VANCOUVER
TEXADA ISLAND
Malaspina Strait
Campbell River
Powell River
Westview
Blubber Bay
Stillwater
Lund
Cape Lazo
Comox
Courtenay
Royston
Cumberland
Union Bay
Denman Island
Hornby Island
Sechelt
Roberts Creek
Dunsmuir
Qualicum Beach
Wellington
Gabriola
Valdes Island
Kennedy Lake
Ucluelet
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BRITISH COLUMBIA GEOLOGICAL SURVEY

1.0 INTRODUCTION

The claims were first staked in 1969 by R. Riepe. Anticipated industrial minerals to be removed are: limestone, Dolomite/lime, Zinc Oxide, marble, graphite, silica, magnesite, brucite, industrial clays and peat moss.

Material is to be removed almost entirely by quarry methods. Initially, products will be removed by trucking. Eventually trucking will be replaced by barging via a 4 kilometre long aerial tramway.

2.0 HISTORY

Following establishment of the original claims in 1969, development and verification of minerals present has proceeded until the total area at present is 4,000 acres (1,900 hectares).

3.0 PRODUCTS

3.1 Limestone

Limestone will be quarried as metallurgical stone and fillers.

3.2 Lime

Lime will be produced by burning limestone with waste wood. A horizontal rotary kiln and wet cell burner will be utilized to reduce negative environmental impacts. Supplemental heat will be provided by burning crude oil or bunker "C" fuel.

3.3 Zinc Oxide

Zinc oxide will be produced as a by-product of Dolomite production for sale to industrial distributors.

3.4 Dolomite

Magnesite, brucite will be produced as a base stock for various refractories.

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3.5 Marble

Architectural aggregates will be sold locally.

3.6 Graphite and Industrial Clays

Graphite and industrial clays will be processed to produce filler and refractories bases.

3.7 Peat Moss and Soil

Peat moss will be excavated for agricultural purposes and protein supplements.

3.8 Low quality rock

Lower quality rock will be used in conjunction with till overburden to surface and construct access and haul roads. Some of the material will be offered for local sale.

4.0 OVERBURDEN REMOVAL

Virtually all of the overburden is composed of low quality rock, till, waste wood, peat moss or peat. Low quality rock and till removed will be used in road construction; waste wood will be burned to generate heat for lime production.

5.0 LAND RECLAMATION AND RESOURCE ENHANCEMENT

Reforestation will be carried out using plantation programs as required by Ministry of Forests. Peat removal should improve water quality due to removal of tannins and lignins and by re-establishment of underlying surface contours. Removal programs will be planned to return silt laden run-off via existing bogs. Limestone and Dolomite will be quarried so that small, deep, high total dissolved solids lakes will be formed.

Together with the additional water stored in the Carlson Lake system for hydro-electric generation, these lakes will greatly enhance existing fisheries.

Clearing of bogs and waste woods will provide improved ungulate habitats.

6.0 TOXICITY OF EXPLOSIVES

Rock blasting will be done with ammonium nitrate explosives, basically a fertilizer, and initiated by water gel explosives which are composed of amino acids and aluminum. No measurable amounts of toxic leachants will enter surrounding soils or adjacent water courses.

7.0 CONSERVATION OF HYDRO CARBON FUELS

Some diesel fuel, gasoline and bunker "C" fuel will be required, but the developers are committed to the use of renewable energy sources where economically viable.

7.1 Hydro Electric Power

An ongoing investigation has shown in preliminary stages that approximately 1,000 kilowatts of power can be produced by storage of 3.0 metres of water on Carlson Lake. A 1.5 metre penstock approximately 1,300 metres long will be required. 1,800 metres of electrical transmission line will be required initially, expanding to approximately 4 kilometres for final stage developments. Power will be used to operate mining equipment and production facilities.

7.2 Aerial Tramway

As the tramway transports products downhill, back electromotive force generation will reduce the amount of electricity to a level slightly higher than friction losses. Another option is to transport Hydrocarbon fuels in clip-on tanks uphill to the mine site.

7.3 Waste Wood

A waste wood recovery program is anticipated. Wood will be stockpiled, partially mulched and fed into burners. It is proposed to use wet cell burners to reduce air pollution and remove energy most efficiently. Heat generated will be used in production of lime and other materials and for drying peat.

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8.0 PRODUCTION GOALS, BUDGET AND NET REVENUE

YEAR	GOAL	BUDGET	NET REVENUE
1983	200,000	800,000	- 600,000
1984	500,000	1,200,000	- 700,000
1985	2,500,000	3,000,000	- 500,000
1986	4,500,000	3,500,000	+ 1,000,000
1987	7,000,000	3,500,000	+ 3,500,000
1988	9,000,000	5,000,000	+ 4,000,000
1989	10,000,000	5,500,000	+ 4,500,000
TOTALS	33,700,000	22,500,000	11,200,000

APPENDIX I

Site Inspection
Sechelt, B.C.
May 1st, 1983

Estimate of Energy Available.

From Waste Wood on Claims held by Rudy C. Riepe ;

Area = 4,000 acres (1,620 hectares)
10 Cunits of wood/acre (70 M^3/hectare)
Total = 40,000 Cunits (113,270 M^3)

$$\text{Energy} = 9{,}000 \frac{\text{B.T.U.}}{\text{lb.}} \times 40{,}000 \times 100\ \text{ft}^3 \times 35 \frac{\text{lb.}}{\text{ft}^3}$$

$$= 1{,}260 \times 10^9 \text{ B.T.U. } (1.33 \times 10^{15} \text{ Joules})$$

Assuming 300 working days per year, over five years the daily energy budget would be:

$$\frac{1.26 \times 10^{12}}{300 \times 5} = 840 \times 10^6 \text{ B.T.U. } (8.85 \times 10^9 \text{ Joules})$$

Daily Area Cleaned up = 2.67 acres (1.08 hectares)

As the energy will be converted in a "clean" wet cell burner, an unsightly mess will be cleaned up, fire hazard will be greatly reduced, and areas covered by waste wood will be made available for growing, the following procedures are advised:-

1. Discussion should be initiated with the Ministry of Forests to obtain rights to waste wood on the peninsula to ensure a continued supply of wood.
2. That local contractors be used.
3. That only light machinery or horses be used to recover the waste wood.
4. In view of benefits accrued to the province of British Columbia, the Ministry of Forests be requested to pay a per unit clean-up allowance.

APPENDIX II

Meeting Regarding Lime Production
Sechelt, B.C.
May 1st, 1983.

Based on:

1. Use of a 100 tpd kiln
2. 8×10^6 B.T.U. (8.43×10^9 Joules) of energy are needed to produce one tonne of lime (Lamb Cargile report).

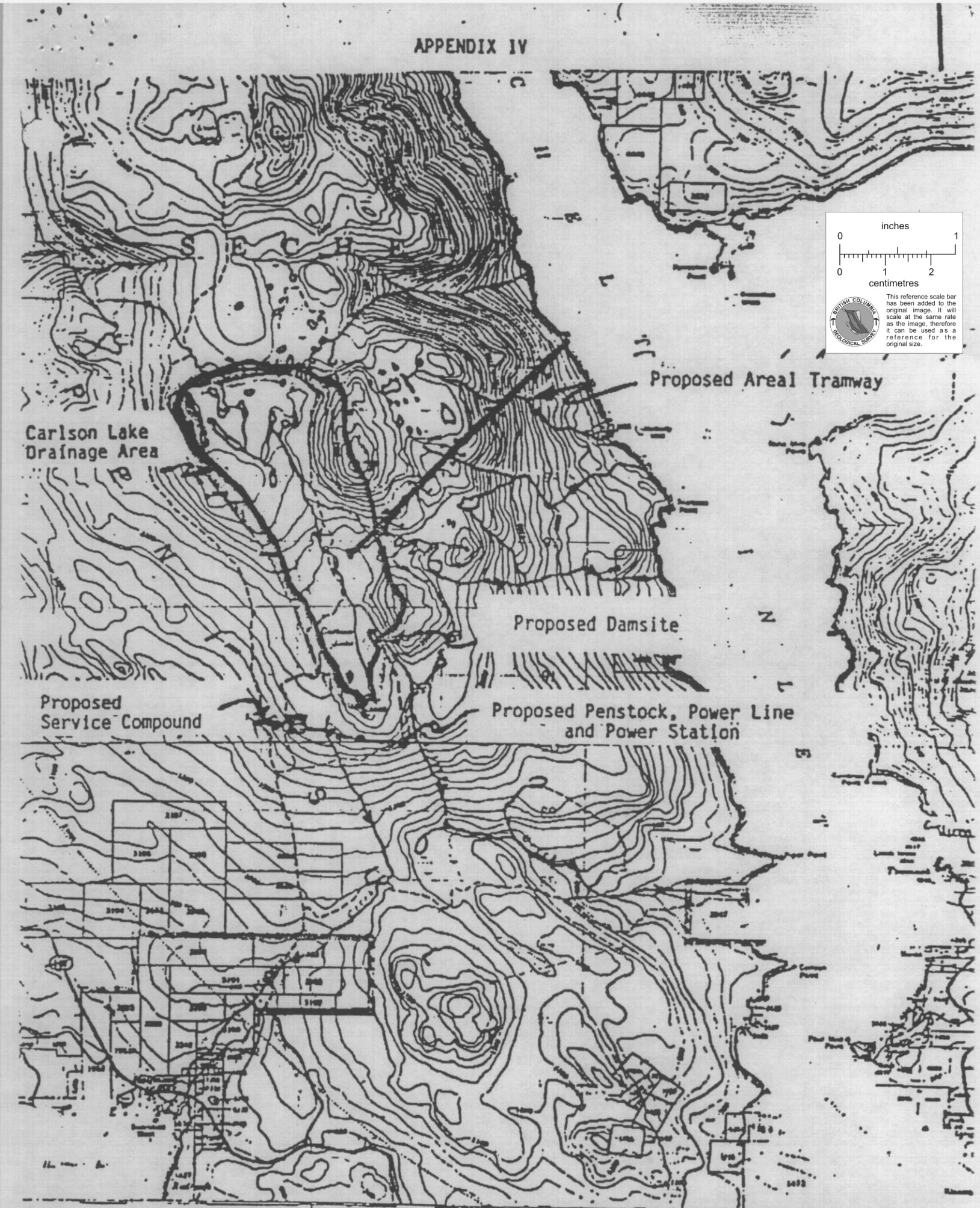
The daily energy requirement will be 800×10^6 B.T.U. (843×10^9 Joules). This is well below a five year daily energy budget of 840×10^6 B.T.U. (885×10^9 Joules). An alternative energy source, such as bunker "C" oil, crude oil, or gas should be provided to ensure continuous production.

APPENDIX III

Fact sheet - Lime production proposal utilizing waste wood.

1. Production - 100 tonnes per day.
2. Energy - waste wood is available in quantities sufficient to produce 105 tonnes per day.
3. Supplemental power such as oil is required to ensure continuity, and improve the 5% Safety factor in #2.
4. Design life - 5 years using only wood on the claims area - 10 years if clean-up rights to the Sechelt Peninsula are obtained.
5. Volume of limestone required for 5 years - approximately 80 metres x 200 metres x 10 metres (less than 10% of exposed limestone at present).

APPENDIX IV



STONEY PLAIN MINING PROPOSAL.