

**ENVIRONMENTAL ASSESSMENT
REGISTRATION DOCUMENT**

**CAPITAL READY MIX LTD.
PROPOSED PENNY'S HILL SAND AND GRAVEL QUARRY**

Prepared for:
Capital Ready Mix Ltd.
St. John's, NL A1B 3N4

Prepared by:
ADI Limited
St. John's, NL A1B 4H7

June 2007

TABLE OF CONTENTS

	Page No.
1.0 NAME OF UNDERTAKING	1
2.0 PROPONENT	1
3.0 CHIEF EXECUTIVE OFFICER	1
4.0 PRINCIPAL CONTACT PERSON	1
5.0 THE UNDERTAKING	1
5.1 Nature of Undertaking	1
5.2 Purpose/Rationale/Need for the Undertaking	2
6.0 DESCRIPTION OF THE UNDERTAKING	2
6.1 Geographic Location	2
6.2 Physical Features	2
6.3 Existing Environment	5
6.4 Construction	6
6.4.1 Site Access	7
6.4.2 Salvageable Timber (Clearing) and Grubbing	7
6.4.3 Quarry Development	7
6.4.4 Potential Sources of Pollution During the Construction Phase	7
6.5 Operation	8
6.6 Occupations	9
6.7 Project Related Documents	9
7.0 APPROVAL OF THE UNDERTAKING	10
8.0 SCHEDULE	10
9.0 FUNDING	10
10.0 SUBMISSION	10

LIST OF FIGURES

Figure 1	Site Location	3
Figure 2	Site Plan	4

1.0 NAME OF UNDERTAKING: PENNY'S HILL SAND AND GRAVEL QUARRY

2.0 PROPONENT: Capital Ready Mix Ltd.

3.0 CHIEF EXECUTIVE OFFICER:

Mr. Hedley Blundon, CET
President
P.O. Box 8274, Stn. A
St. John's, NL
A1B 3N4
709.364.5008
709.364.4833 (fax)

4.0 PRINCIPAL CONTACT PERSON (for purposes of environmental assessment)

Mr. Jason Coish, P. Eng.
Project Manager
P.O. Box 8274, Stn. A
St. John's, NL
A1B 3N4
709.364.5008
709.364.4833 (fax)

5.0 THE UNDERTAKING

5.1 *Nature of Undertaking*

The proposed project comprises the development of an approximately 32 hectare parcel of land in an area located approximately 200 m southeast of the Foxtrap Access Road (Route 61), near the intersection of Incinerator Road. The proposed site access will be via an approximately 100 m long access road from *Incinerator Road*, located off the *Foxtrap Access Road*. The proponent proposes to develop the area as a quarry operation, mining, and transporting sand and gravel materials for use in aggregate sales and in *Capital Ready Mix Ltd.*'s concrete batching plant operations, located at the *Trans-Canada Highway/Manuals Access Road* interchange.

5.2 Purpose/Rationale/Need for the Undertaking

Capital Ready Mix Ltd. has operated a concrete batching plant at its current lease location (Pennecon Inc. - Lease No.7110731) at the TCH/Manuals Access Road Quarry Area for five years. Raw material for the batch plant is currently supplied through its existing quarry operation located on *Incinerator Road*, off the *Foxtrap Access Road* (Lease No.7116719). This existing quarry site is approaching the end of its useful life. The supply of raw sand and gravel materials provided by the proposed Quarry will help fulfill anticipated future demand for raw materials required for concrete production and for sand and gravel aggregate sales.

6.0 DESCRIPTION OF THE UNDERTAKING

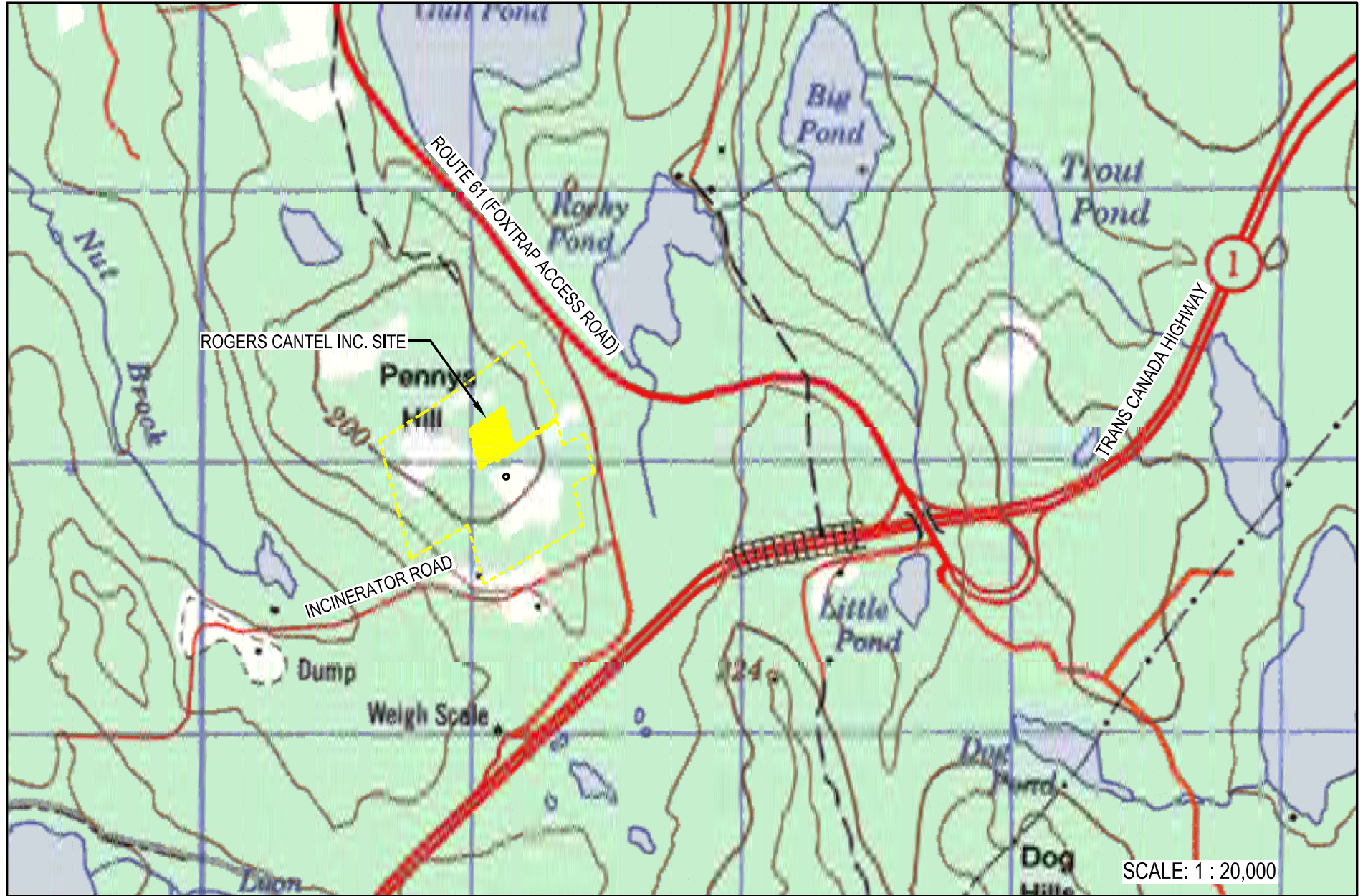
6.1 Geographic Location

The proposed quarry is located at Penny's Hill, an area southwest of the *Foxtrap Access Road* (Route 61) and north of *Incinerator Road*, approximately 1.5 km west of the *Trans-Canada Highway/Foxtrap Access Road* intersection. The site is located within the City of St. John's, NL, and is currently zoned as part Rural (R) and part Industrial General (IG). The site access will be from *Incinerator Road* (which is off *Foxtrap Access Road*), via an approximately 100 m long gravel road. The proponent proposes to develop the area for a quarry operation, mining sand and gravel materials for use in *Capital Ready Mix Ltd.*'s concrete batching plant operations, located at the *Trans-Canada Highway/Manuals Access Road* interchange, and for raw aggregate sales. Refer to *Figure 1: Site Location* and *Figure 2: Site Plan* for site details.

6.2 Physical Features

The primary physical feature will be the quarry site itself. A short access road to the site (approximately 100 m in length) will be constructed from *Incinerator Road* to the proposed quarry site. Additionally, access roads will be constructed within the quarry property during development and quarrying operations. Quarrying will involve simple resource extraction and transportation of the raw product to the consumer or to the *Capital Ready Mix Ltd.* Batch Plant located off-site. At this time there are no plans for secondary processing (i.e. screening, washing, or crushing) of quarry materials on site.

FILE: MODEL: "MODELNAME" PLOTTED BY: USER DATE: DATE TIME:



This drawing is not to be scaled

FILE: MODEL: MODELNAME: PLOTTED BY: USER: DATE: DATE: TIME:



This drawing is not to be scaled



ADI Limited
St. John's, NF, Canada
Engineering, Consulting, Procurement
and Project Management

Charlottetown, Moncton, Saint John, Truro, Halifax, Sydney
Port Hawkesbury, St. John's, Fredericton and Salem, NH

Project Title

ENVIRONMENTAL REGISTRATION
PROPOSED SAND AND GRAVEL QUARRY
PENNY'S HILL
ST. JOHN'S, NL

Dwg. Title

FIGURE 2 : SITE PLAN

Drawn By:

R.J.B.

Project No.

26-3971-015.1

Dwg. Standards
Ckd. By:

Dwg. No.

FIGURE 2

Designed By:

Dwg. Design
Ckd. By:

Rev. No.

The quarry boundary is sited to ensure a minimum 250 m buffer zone/strip between all water bodies and streams adjacent to the proposed site. Allowing for progressive rehabilitation, no more than 3.5 hectares of property will be developed at any given time. As the quarrying operation expands into subsequent phases, mined-out areas will be rehabilitated to an acceptable condition. As shown on *Figure 1: Site Location* and *Figure 2: Site Plan*, the proposed quarry site envelops a 2.25 hectare property and associated Right-Of-Way (ROW) occupied by *Rogers Cantel Inc.* for a radio tower and associated power lines. A minimum buffer of 50 m will be maintained around this property line.

Property to the southwest, northwest, and northeast of the proposed quarry site is undeveloped. Property to the southeast of the proposed quarry site is partly occupied by commercial properties, fronting onto Incinerator Road; including a Newfoundland and Labrador Department of Transportation and Works (NLDTW) storage yard.

6.3 Existing Environment

Climatic conditions in the region are characterized by cool summers with frequent fog and strong winds. Winters are relatively mild with intermittent snow cover, particularly near the coastline. The annual precipitation exceeds 1250 mm.

The site is located within the *Maritime Barrens Eco-region*, which extends from the east coast of Newfoundland to the west coast through the south central portion of the island. A previous habitat and dominant species survey completed in the eastern region, in close proximity to the proposed quarry site, indicated the following habitat/species in the area: Bog/Fen (Mosses [*Sphagnum spp.*], Dwarf Birch [*Betula Pumila*], Ground Juniper [*Juniperus communis*], Creeping Savin [*Juniperus horizontalis*], Swamp Birch [*Betula Pumila*], Deer Grass [*Scirpus cespitosus*]; Heath - Eastern Larch [*Larix laricina*], Low Bush Blueberry [*Vaccinium angustifolium*], Widdy [*Potentilla frusticosa*], Black Spruce [*Picea mariana*], Bog Laurel [*Kalmia polifolia*], Sweet Gale [*Myrica gale*], Mosses [*Sphagnum spp.*], Lichens [*Cladonia spp.*], Mixed Forest - Black Spruce [*Picea mariana*], Eastern Larch [*Larix laricina*], Mosses [*Sphagnum spp.*], Mountain Alder [*Alnus crispa*], Fake Solomon's Seal [*Smilacina trifolia*], Labrador Tea [*Ledum groenlandica*]. No rare or endangered plants were identified in the previous survey. Impacts to the terrestrial environment would not be considered significant in completing the proposed undertaking.

The proposed site is located at Penny's Hill, situated southeast of the Foxtrap Access Road (Route 61), along Incinerator Road. Incinerator Road is an asphalt-surfaced roadway, off Route 61, that provides access to a number of area businesses, some of which include:

- Marine Institute Offshore Survival and Fire Training Facility
- NewAlta Hazardous Waste Transfer Facility
- Pardy's Waste Management Storage Facility
- Newfoundland Labrador Department of Transportation & Works Depot
- Existing Quarries
- Rothsay Rendering Plant
- Rogers Cantel Communications Tower Site.

Site topography slopes generally towards the southeast, with existing ground elevations ranging from approximately 190 m in the southeast to 220 m above sea level at the northwest end of the site. There are no water bodies, brooks, or streams in close proximity to the proposed quarry site. *Nut Brook*, a small stream which feeds into Kelligrews River, is located approximately 600 m southwest of the site property boundary and the western portion of the site is located within the *Nut Brook* drainage area. *Rocky Pond* is located approximately 300 m northeast of the property, on the northeast side of the Foxtrap Access Road (Route 61). The eastern portion of the property falls within the *Rocky Pond* drainage area.

Surficial geology in the area is characterized by an undifferentiated till veneer (Liverman and Taylor, 1990). Bedrock, which outcrops at numerous areas over the site, is reported to consist of medium-grained, massive, pink to grey granite, minor aplite of the *Holyrood Intrusive Suite* (King., A.F., 1988).

6.4 Construction

The construction phase of site development will consist of the following main components:

- site access
 - clearing and grubbing
 - quarry development including sediment control.
-

6.4.1 *Site Access*

Access to the site will be from a proposed 100 m long gravel access road, off Incinerator Road. Incinerator Road itself is a two-lane asphalt-surfaced roadway used to access a number of commercial/industrial businesses in the area. The site access will be a two-lane, gravel-surfaced road with appropriate drainage, capable of supporting the proposed operations heavy equipment.

6.4.2 *Salvageable Timber (Clearing) and Grubbing*

Merchantable timber removed in the process of access road construction and quarry development will be salvaged.

6.4.3 *Quarry Development*

The proposed quarry site covers an area of approximately 32 hectares. Initial site construction activities will involve the removal of the vegetative cover from the access road and Phase 1 of the development. Surficial organics and topsoil (where present) will be set aside for use in future rehabilitation. (Note that several large sections on the southeast side of the site have been cleared and grubbed by others - this is evidenced by 2005 aerial photography.) Once access to Phase 1 is established, up-grade ditching will be completed to direct surface drainage away from the active quarrying area. Similarly, ditching will be provided down-grade of Phase 1 in such a way that it provides control of any potentially silty run-off. *Capital Ready Mix Ltd.* proposes to develop the quarry in maximum 3.5 hectare sections, followed by rehabilitation as quarrying continues.

6.4.4 *Potential Sources of Pollution During the Construction Phase*

The construction phase of the development will consist of earth-moving activities. The potential source of pollution during these activities include site drainage, waste and litter, noise, air emissions, and potential release of petroleum hydrocarbons.

Site run-off water will be contained/directed, as necessary, to vegetated areas which will filter suspended solids. In addition, and where required, silt screens will be installed at appropriate locations to prevent siltation of water bodies.

The handling of petroleum products on site will comply with the *Storage and Handling of Gasoline and Associated Products Regulations*. Note that petroleum products will not be stored on the site during the construction stage, or the operating stage, of the quarry.

Sewage will be handled by approved portable facilities during construction. Holding tanks will be pumped on an as-required basis.

Domestic waste generated during construction will be collected and disposed of at *Robin Hood Bay Landfill*, per the *Waste Material Disposal Act*.

Equipment on site will have appropriate emission-control equipment. Dust control measures, such as application of water, will be provided on an as-required basis. Noise levels associated with the work is not expected to increase over typical operations in the area.

6.5 Operation

Typical quarrying methods will be engaged to collect the overburden sand and gravel deposit at the site. The operation will include the excavation and loading of the native sand and gravel materials at the working face of the quarry, and transportation of these materials to processing equipment located off-site or directly to the consumer. Waste and oversized rock will also be stockpiled for future use. Appropriate ditching will be located on site to ensure silt and general site run-off is controlled and does not adversely affect the surrounding environment. In addition, perimeter ditching and settling basins, as required, will be located to prevent migration of surface water drainage from non-operating and off-site areas into operating areas.

As required, the extracted materials will be loaded and transported to *Capital Ready Mix Ltd.*'s concrete operations located at its *Trans-Canada Highway/Manuals Access Road* property.

Equipment on site will include the following:

- tracked excavator (access road construction and loading at the working face)
 - tandem dump trucks (material transportation)
 - front end loader (material handling)
-

Quarrying native till material will take place over an extended period. *Capital Ready Mix Ltd.* have estimated the life of the proposed quarry to be five years.

Decommissioning/rehabilitation of the quarry site will be completed on an on-going basis. The process will generally follow the following procedure:

- terrain disturbances will be limited to that which is necessary to complete the required work
- grubbed materials and waste rock will be stockpiled on site for future use in site rehabilitation
- surface disturbances will be stabilized on an on-going basis to limit erosion.

6.6 *Occupations*

Site construction and operations for the proposed quarry will include the following occupations, classified per *National Occupational Classification 2001*:

Construction Phase

- 1 - Site Foreman/Supervisor (7217)
- 2 - Heavy Equipment Operators (7421)
- 2 - Truck Drivers (7411)

Quarry Operations

- 1 - Quarry Manager (0811)
- 1 - Quarry Foreman/Supervisor (8221)
- 2 - Heavy Equipment Operator - Loader/Excavator (7421)
- 2 - Truck Drivers (7411)
- 2 - Quarry Laborer(7611).

6.7 *Project-Related Documents*

There are no project-related reports.

7.0 APPROVAL OF THE UNDERTAKING

Approvals, permits, and licences that may be required for the undertaking, as follows:

Environmental Protection Act - Assessment Regulations: Permit to proceed
Quarry Materials Act and Quarry Minerals Regulations: Quarry Permit
Forestry Act and Regulations: Commercial Cutting Permit

8.0 SCHEDULE

Registration Document Submission	June 15, 2007
Government Review and Decision	July 31, 2007
Access Road Development	August 2007
Quarry Development	June 2008
Quarry Operations	2008 - 2013

9.0 FUNDING

Capital Ready Mix Ltd. will be providing funding for the undertaking.

10.0 SUBMISSION

Date June 12 / 07

Name: Jason Coish
Position: Mr. Jason Coish, P.Eng.
Project Manager