#### ENVIRONMENTAL REGISTRATION DOCUMENT FOR TOWN OF ST. ANTHONY BOTTOM BROOK SANITARY SEWER IMPROVEMENTS

#### **PREPARED FOR :** TOWN OF ST. ANTHONY

# PREPARED BY:NEWFOUNDLAND AND LABRADOR<br/>CONSULTING ENGINEERS LIMITED

- DATE: OCTOBER 6, 2003
- PROJECT NO: 3129

## **TABLE OF CONTENTS**

| 1.0 | NAME OF UNDERTAKING1        |                             |     |
|-----|-----------------------------|-----------------------------|-----|
| 2.0 | PROPONENT                   |                             |     |
| 3.0 | UNDERTAKING 1               |                             |     |
| 4.0 | DES                         | CRIPTION OF THE UNDERTAKING | 2   |
|     | 4.1                         | Geographical Location       | 2   |
|     | 4.2                         | Physical Features:          |     |
|     | 4.3                         | Construction:               |     |
|     | 4.4                         | Operation:                  |     |
|     | 4.5                         | Occupations:                |     |
|     | 4.6                         | Project Related Documents:  |     |
| 5.0 | APPROVAL OF THE UNDERTAKING |                             | . 4 |
| 6.0 | SCH                         | EDULE                       | . 5 |
| 7.0 | FUN                         | DING                        | . 5 |

### DRAWINGS

| 3129-G1 | Location Plan |
|---------|---------------|
| 3129-G2 | Project Plan  |

#### **1.0 NAME OF UNDERTAKING:**

Environmental Registration Document for Town of St. Anthony Bottom Brook Sanitary Sewer Improvements

#### 2.0 **PROPONENT:**

- (i) Town of St. Anthony
- (ii) P.O. Box 430 St. Anthony, NL A0K 4S0
- (iii) Mr. Curtis Richards Town Manager Phone# (709) 454-3454 Fax# (709) 454-4154
- (iv) Consultant: Mr. Rick Noseworthy, P. Eng. Newfoundland and Labrador Consulting Engineers Limited Phone# (709) 579-2886 Fax# (709) 738-1596

#### **3.0 UNDERTAKING:**

The Town of St. Anthony are presently faced with the discharge of several sanitary sewer pipes onto the shoreline of St. Anthony Harbour. Also, two existing sewerage lift stations have been a continuous maintenance problem causing sewer back-up and overflow into the adjacent river and properties.

The service area involved consists of the commercial and residential properties along North Street, Locke's Cove Subdivision, Goose Cove Road, Ollerhead Drive, Harbourview Road and West Street over to Barn Road. The equivalent service population is approximately 450 people with an estimated sewerage flow of 200 m<sup>3</sup>/d.

The Bottom Brook area has recently been designated for a Tourism/Nature Park and potential commercial development. The continuous discharge of sewerage throughout this area has been a cause of concern regarding potential health hazards and aesthetic impact.

It is vital to have the above noted problems eliminated to properly develop the Bottom Brook Park.

#### 4.0 DESCRIPTION OF THE UNDERTAKING:

**4.1** Geographical Location: The proposed sewer pipeline will start at the existing lift station adjacent to the stadium. The sewer main will be installed along the shoulder of North Street and will cross to an easement between the properties of E. Woodford and S. Rumbolt. The sewer main will traverse through the open field behind the North Street and Harbourview Avenue properties to the shoreline at the end of Marine Drive. The outfall pipe will then be extended into deeper waters outside of the foreshore flats.

Historically, the diverted flows have been discharging through the Cabot Street outfall, when the sewerage lift stations have been fully functional. The Cabot Street outfall was extended beyond the foreshore flats approx. 10 years ago and has functioned quite well with no observed environmental or aesthetic impact. The same is expected of the new outfall location.

In relation to St. Anthony Harbour, there are no fishing activities conducted within the confines of the harbour.

#### 4.2 **Physical Features:**

The sewer main will be 300 mm diameter PVC pipe buried at a depth ranging from 1.8 m to 5.0 m. Access manholes will be provided at all points of vertical and horizontal alignment change to a maximum spacing of 112 m.

The outfall will consist of a 300 mm diameter HDPE pipe that will be butt-fused for a continuous length of approximately 130 m. Concrete weights will be installed on the outfall pipe to aid in sinking and stabilizing the pipe onto the harbour bottom. The pipe and weights will be buried beneath the harbour bottom for approximately 80 m of the outfall length. The discharge pipe will have a minimum of 2.0 m submergence below low tide.

The above installation will permit the decommissioning of the following;

- 2 Sewage lift stations
- 1 Sewer main outfall
- +5 Residential service line discharges.

In doing so, it is estimated that the entire sewerage flow of  $200 \text{ m}^3/\text{d}$  will be diverted into the deeper waters of St. Anthony Harbour.

#### 4.3 Construction:

Construction is scheduled for the period commencing in June 2004 to August 2004. If weather and ground conditions permit, some work may be undertaken in May 2004. The primary construction activities include the following:

- Excavation and backfilling trenches.
- Placement of pipe, fittings, manholes and other associated works.

The potential sources of pollutants during construction will include heavy equipment exhaust, fuels and lubricants, in addition to minor disturbance of the vegetation and trees along the right of way. Measures will be enforced regarding fuel and solid waste storage and handling. Construction equipment will be restricted to the areas of work that will be defined on the final design drawings. Dust control will be enforced throughout the construction period and all blasting procedures will be in strict compliance with Provincial Regulations including filing of an Emergency Response Assistance Plan, with the Explosive Division of Energy Mines and Resources Canada.

Solid waste material during construction will be disposed in accordance with Provincial Regulations. Materials permitted to be disposed at the Municipal Disposal Site will require the approval of the Governing Authorities.

#### 4.4 Operation:

Upon completion of these works, the sewerage collection/disposal system will operate under gravity flow. The Town of St. Anthony will maintain the system to ensure pipes are kept free from blockages. The sewerage effluent will discharge into the deeper harbour waters to provide improved dilution and dispersion.

There are no resource conflicts expected as a result of this project.

#### 4.5 Occupations:

Following is a list of occupations that are expected to be employed during the design and construction period.

- 1- Professional Engineers
- 1- Engineering Technicians
- 1- Surveyors
- 2- Rod and Chainmen
- 1- Construction Inspectors
- 2- CAD Operators
- 1- Secretaries
- 6- Labourers
- 1- Carpenters
- 2- Pipe Fitters
- 4- Heavy Equipment Operators
- 4- Truck Drivers
- 2- Flag People
- 1- Drillers/Blasters
- 1- Office Clerks

2- Construction Foremen/Superintendents

#### 4.6 Project Related Documents:

- Detailed plans and profiles have been submitted to the Department of Municipal and Provincial Affairs, the Department of Environment and Labour, the Department of Tourism Culture and Recreation and the Department of Fisheries and Oceans.
- An historic resources phase I assessment has been undertaken for the Department of Tourism Culture and Recreation.

#### 5.0 APPROVAL OF THE UNDERTAKING:

Following is a list of the main permits, licences and approvals required for this project.

| <u>Approval/Certificate/Licence/Permit</u><br>Environmental Registration | <u>Authority</u><br>Department of Environment<br>Environment Assessment Division                     |
|--|--|
| Blasters Certification   | Department of Environment<br>Workplace Safety Programs Division                                      |
| Flag Persons Certification   | Occupational Health & Safety   |
| Magazine Licence (Temporary)   | Mines & Energy Canada  |
| Quarry Development Permit  | Department of Mines & Energy<br>Mineral Lands Division   |
| Water and Sewer Works<br>Permit  | Department of Environment<br>Water Resources Management<br>Division<br>Community Water & Waste Water |
| Authorization for Works or Undertakings<br>Affecting Fish Habitat        | Fisheries & Oceans Canada  |
| Safety Training and Supervision<br>Certificate of Recognition            | Newfoundland & Labrador<br>Construction Safety Association   |
| Waste Disposal Approval  | Town of St. Anthony  |
| Tender Approval  | Department of Municipal and<br>Provincial Affairs  |

#### 6.0 SCHEDULE:

The earliest start for construction of this project would be May 2004 with the latest being August 2004. It is of the upmost importance that this project start as soon as possible to eliminate the discharge of raw sewerage onto lands and waterways designated for the Nature Park development.

#### 7.0 FUNDING:

Funding assistance has been provided under the Canada/Newfoundland Infrastructure Program, which is being administered through the Atlantic Canada Opportunities Agency (ACOA) and the Department of Municipal and Provincial Affairs. The Town of St. Anthony is also contributing funds towards this project which is estimated to cost \$500,000.00 which includes engineering fees and construction cost.

Date

Mr. Rick Noseworthy Project Manager (on behalf of the Town of St. Anthony).