

COR/2015/00071

JAN 13 2015

Honourable Dan Crummell,
Minister of Environment and Conservation
Confederation Building (West Block)
St. John's, NL
A1B 4J6

Dear Minister Crummell:

**RE: Environmental Assessment Registration,
Robert E Howlett Memorial Drive, Route 10**

In accordance with Section 49 of the Environmental Protection Act, 2002, I am submitting for your review and consideration, an Environmental Assessment Registration for a proposed bypass road skirting Bay Bulls Big Pond, a protected water supply for the City of St. John's.

Attached is a digital copy plus 10 paper copies of the registration. The site is indicated on the attached topographic map. The road runs from the north end of Bay Bulls Big Pond to the southern end of Middle Pond for 9.5 km long and is approximately 350 meters east of existing Route 10 throughout most of its length. Site clearing and grubbing will be undertaken through highway construction activities.

The route is to provide a more efficient and safer roadway which would reduce travel time and bypass the water supply and local residential and farm properties along the old route. This will substantially reduce traffic adjacent to the water supply and the local farms with an increased buffer thereby avoiding sensitive areas and maximizing the opportunities for mitigation.

An Environmental Protection Plan and a Contractor Environmental Mitigation Plan will be produced to minimize environmental impacts and a Stage 1 Historic Resources Overview Assessment will be determined for the proposed route.

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We would like to complete the requirements of the Environmental Protection Act within 45 days of your receipt of this registration. The Department of Transportation and Works would like to call tenders for this project as soon as possible to allow clearing operations to commence early within the 2015 construction season.

If your officials have any questions, they should be directed to contact Ken Hannaford, Environmental Scientist with our Highway Design and Construction Division at 729-5540 or email: hannafordk@gov.nl.ca.

Sincerely,



Brent Meade
Deputy Minister

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Attachments

cc: Gary Gosse, ADM (Transportation)
Garry Spencer, Regional Director (Avalon)
Bill Skanes, Regional Engineer (Avalon)
Ken Hannaford, Environmental Scientist



REGISTRATION PURSUANT TO SECTION 49

OF THE ENVIRONMENTAL PROTECTION ACT, 2002,

FOR THE

EXTENSION OF ROBERT E. HOWLETT MEMORIAL

DRIVE, ROUTE 10

PROPONENT:

(I) Name of Corporate Body

Department of Transportation and Works
Government of Newfoundland & Labrador

(ii) Address

6th Floor, Confederation Building (West Block)
St. John's, NF
A1B 4J6

(iii) Chief Executive Officer

Brent Meade
Deputy Minister
729-3676

(iv) Principal Contact for the Purpose of Environmental Assessment

Ken Hannaford
Environmental Scientist
Highway Design and Construction Division
729-5540

THE UNDERTAKING:

(I) Name of the Undertaking

Extension of Robert E. Howlett Memorial Drive, St. John's, Newfoundland.

(ii) Nature of the Undertaking

The extension of a road from the north end of Bay Bulls Big Pond to the southern end of Middle Pond, Newfoundland for a distance of 9.5 km. The road would be constructed to a two lane asphalt surface highway consistent with existing Route 3.

(iii) Purpose / Rationale / Need for the Undertaking

The route is to provide a more efficient and safer roadway which would reduce travel time and bypass the water supply and local residential and farm properties along the old route. This will substantially reduce traffic along the water supply and the local farms thereby, avoiding sensitive areas.

The general benefits of the highway are:

- improved travel time;
- improved design and safety standards
- improved goods and services availability;
- new highway construction jobs (seasonal employment for 30 people);
- improved transportation around a protected water supply area;

Description of the Undertaking

(I) Geographic Location

The preferred routing begins at the end of Route 3 near the community of Goulds. It will extend south towards Bay Bulls and will be approximately 9.5 km long. See the attached 1:50,000 topographic map section in Appendix A and the Google Earth image.

(ii) Physical Features.

The highway will be 9.5 km long and constructed to a Rural Collector Undivided 80 km / hr. (RCU 80 Modified Standard for 80 km/hr) design standard and hold a posted speed limit of 80km/hr. This is a similar standard to the section of Route 3 northwest of the project area. Typical cross section drawings are included in Appendix B. An 11 m wide top will be provided and the surface will be asphalt. The right-of- way width of an RCU 80 is 40 m. Normally the clearing width is 40 m; however, this will be reduced wherever possible especially around watercourses. The grubbing width will be the standard 30 m.

The road will cross a number of small watercourses and brooks that run down the slopes towards drainage basins upstream of Bay Bulls Big Pond, a water supply for St. John's and surrounding communities. A fish habitat assessment will need to be conducted on the significant watercourses that will be crossed. A preliminary examination of available mapping and field-truthing indicates most of the crossings could be made using culverts which are approximately 2,400 mm in diameter or smaller. Grubbing activities around watercourses will be prohibited until such time as the crossing structures are installed. The buffer width at each water crossing will be determined when the road grade is established. Water quality will be monitored closely and

mitigation measures will be required prior to grubbing activities.

All water crossing sites will be examined in greater detail as soon as field survey information is obtained; however, for environmental protection purposes all crossings will be deemed to have potential fish habitat. Detailed design work and existing environmental conditions will determine the type of structures which will be required and what modifications have to be incorporated into the structure to allow for the necessary fish passage parameters. Based on an examination of 1:50,000 topographic map sections approximately five (5) culverts are required for small watershed areas and to accommodate storm drainage and snow melt.

All stream crossing structures will be designed to withstand a minimum of 1:50 year flood events. Special attention will be given to sedimentation prevention, hydrocarbon and other product spill prevention, and erosion and scour protection at inlet and outlet control areas.

The Department of Transportation and Works will consult with the Water Resources Division of the Department of Environment and Conservation to ensure that the best available data is utilized to design stream crossing structures and storm drainage structures. The Water Resources Division's Environmental Guidelines for work around watercourses will be used during the design and construction phases. These guidelines include:

Chapter	Title
3	Watercourse Crossings
4	Bridges
5	Culverts
6	Fording
7	Diversions, New Channels, and Major Alterations
9	Pipe Crossings
13	General Construction Practices

Stream crossing structures will be designed and constructed in consultation with Fisheries and Oceans Canada (DFO). An **Assessment of Fish Habitat** along upstream and downstream areas adjacent to significant stream crossings will be carried out. Stream crossing structures will be designed and constructed at locations which have minimal impact on fish and fish habitat and in accordance with:

- DFO's Guidelines for Protection of Freshwater Fish Habitat in Newfoundland and Labrador (1998);
- DFO Fact Sheets for environmental protection measures; and
- fish passage guidelines and other applicable guidelines.

Construction

Road construction will be performed by contract forces. The subgrade construction will be carried out over a one year period with the initial road bed phase in year 1 and paving the following year. The project will involve:

Road

- (a) field surveys;
- (b) right-of-way clearing;
- (c) grubbing;
- (d) subgrade construction;
- (e) stream crossing structures;
- (f) clean-up and rehabilitation and
- (g) paving

The potential sources of pollution during construction would include the possible siltation of various watercourses that drain towards the water supply during grubbing operations, stream crossing work, drainage installation and subgrade construction. In addition, the potential exists for hydrocarbon spillage from the operation of heavy equipment. Contractors will be advised of the environmental requirements for stream crossings and for hydrocarbon storage and spill reporting, clean up procedures, and the necessity of strict compliance.

An **Environmental Protection Plan (EPP)** will be prepared for the project and it will form part of the tender documents. The EPP will be a field usable document which will outline the environmental protection measures to be implemented during construction phase. The EPP will clearly outline the location of any environmentally sensitive areas which are known and specify any restrictions on the timing of construction due to water resources/wildlife/fisheries/historic resources, etc. Rehabilitation measures for areas such as borrow sites and quarries will be clearly outlined.

A **Contractor Environmental Mitigation Plan (CEMP)** will be required from the contractor prior to the commencement of construction outlining site specific protection measures to be implemented during operations.

The need for a **Stage 1 Historic Resources Overview Assessment** will be determined for the proposed route. The Department of Transportation and Works will work closely with the Cultural Heritage Division of the Department of Tourism, Culture and Recreation to ensure that Historic Resources requirements are met.

The potential for adverse environmental impacts during construction will be minimized as all construction activities will be undertaken in accordance with the environmental requirements of the Department of Transportation and Works' Specification Book for road/highway projects. An EPP and CEMP will be prepared for the project and where necessary, additional environmental

protection conditions will be incorporated into the contract documents.

(iv) Operation

The road is a permanent operation. Periodic summer maintenance will be necessary and will include such activities as shouldering, ditch cleaning and repairs to guide rails and road signs. Winter maintenance will consist of snow clearing and the application of sand for ice control.

(v) Occupations

The various types of occupations anticipated for this project include:

- (a) Civil Engineers;
- (b) Structural Engineers;
- (c) Project Management Technicians;
- (d) Environmental Planner
- (e) Environmental Scientist
- (f) Road Surveyors;
- (g) Heavy Equipment Operators;
- (h) Drillers and Blasters;
- (i) Electricians;
- (j) Carpenters;
- (k) Heavy Equipment Mechanics;
- (l) Labourers;
- (m) Truck Drivers;
- (n) Asphalt Plant Operators;
- (o) Asphalt Pavement Technicians;

(vi) Project-related Documents

- Environmental Protection Plan prepared for the Extension of Route 3 between Goulds and Bay Bulls by Department of Transportation and Works, 2015.
- Contractor Environmental Management Plan prepared for the Extension of Route 3 between Goulds and Bay Bulls
- Stage 1 Historic Resources Overview Assessment for the Extension of Route 3 between Goulds and Bay Bulls by Department of Transportation and Works, 2015.

APPROVAL OF THE UNDERTAKING

The following is a list of the permits, licences, approvals which may be necessary for this project:

MAJOR REGULATORY APPROVALS BY TYPE AND AGENCY

Type of Permit	Agency
1. Stream crossing approvals	Dept. of Fisheries & Oceans
2. Wood cutting permits	Dept. of Natural Resources
3. Burning permits	Dept. of Natural Resources
4. Fuel storage & handling	Government Service Centre
5. Solid waste disposal	Government Service Centre
6. Water supply/sewage disposal for construction camps	Government Service Centre
7. Borrow/quarry site approvals	Dept. of Natural Resources
8. Stream Crossing Approvals	Dept. of Environment and Conservation

SCHEDULE

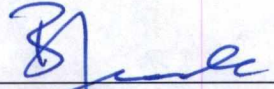
The Department of Transportation and Works would like to complete the requirements of the Environmental Assessment Act and seek approval for the project within 45 days of your receipt of this application. A tender call could take place in the spring of 2015 with brush clearing starting shortly after.

FUNDING

The project will be funded by the Government of Newfoundland and Labrador. The total estimated cost of the project is approximately \$10 million.

Jan 13/15

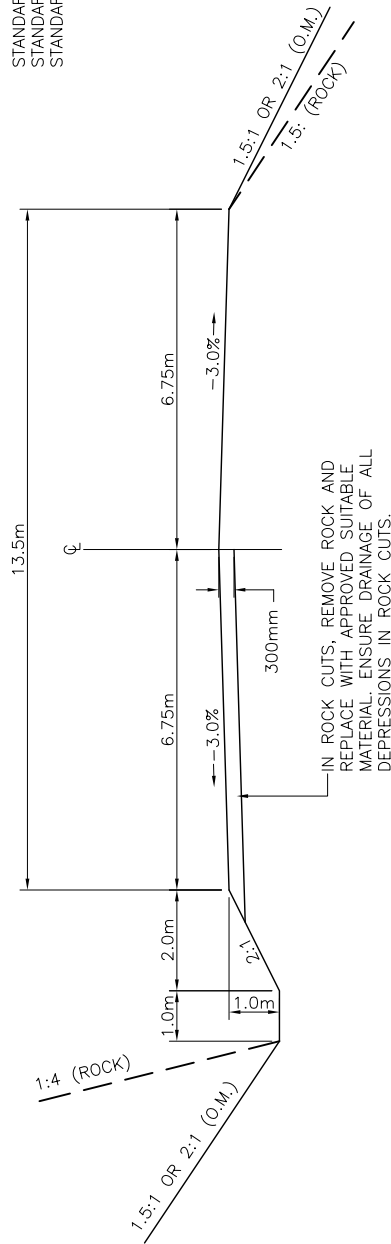
Date



Brent Meade
Deputy Minister

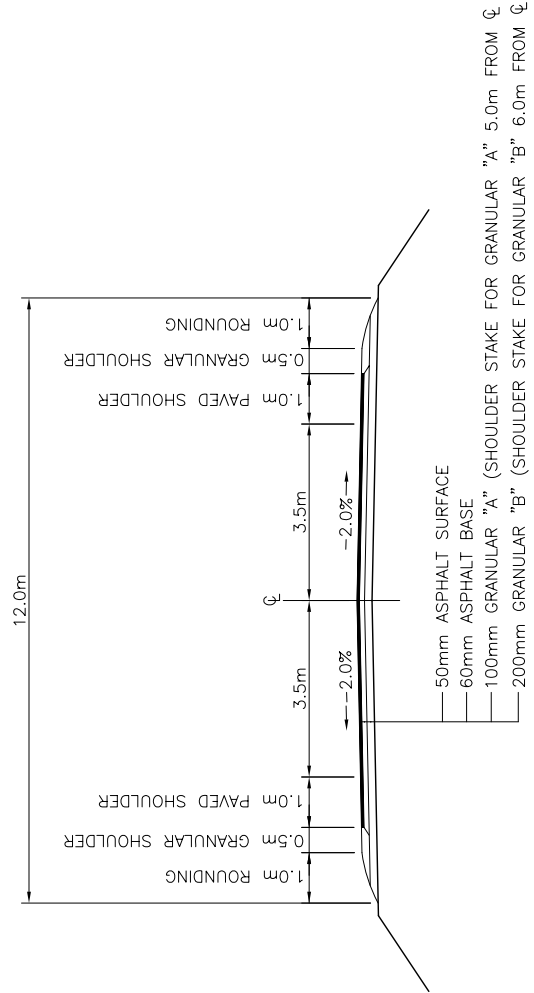


STANDARD WIDTH OF R.O.W. IS 40.0 m
 STANDARD WIDTH OF CUTTING IS 40.0 m
 STANDARD WIDTH OF GRUBBING IS 30.0 m



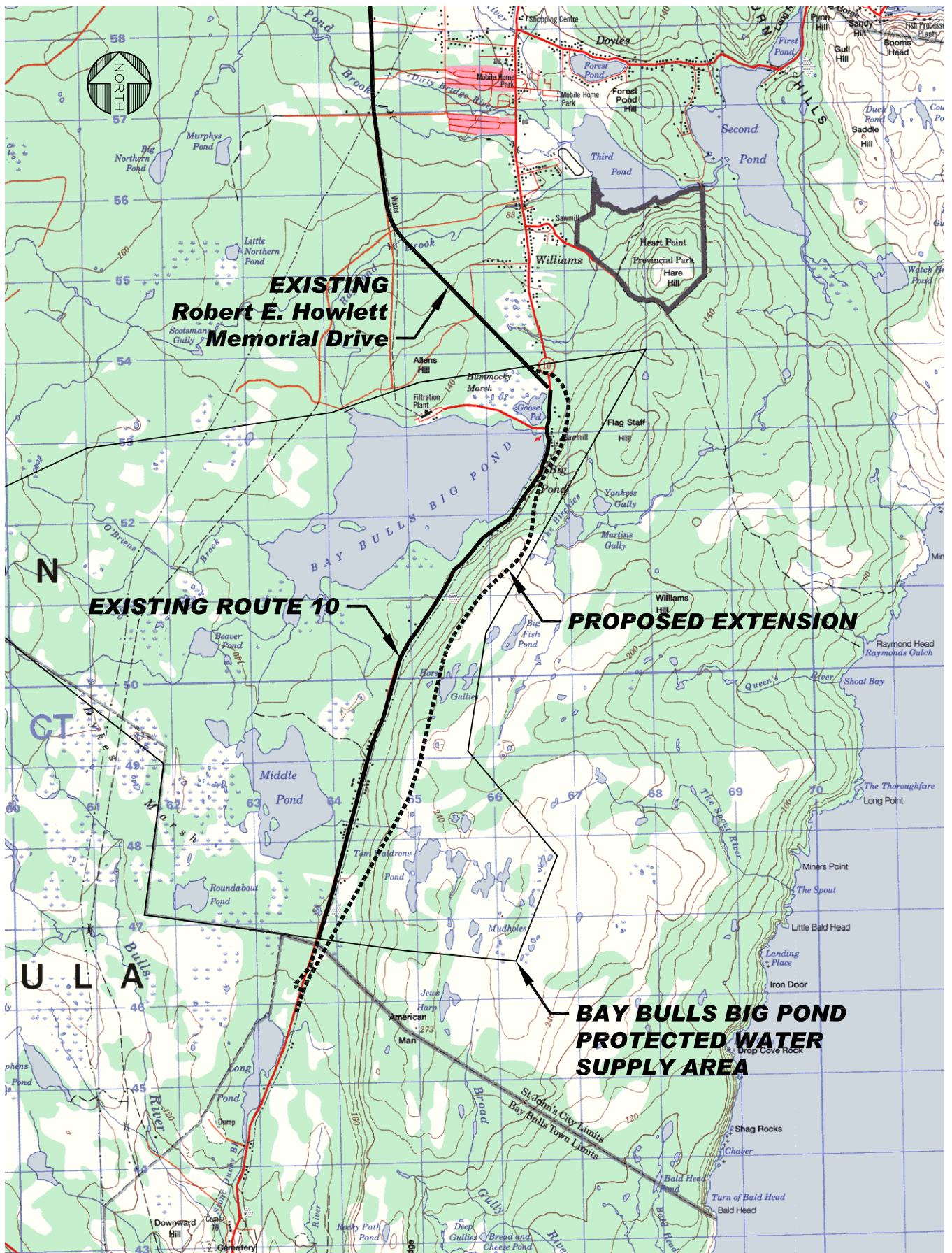
TYPICAL CROSS SECTION FOR BY-PASS SUBGRADE CONSTRUCTION
 IN CUTS AND FILLS

SCALE 1 : 75



TYPICAL CROSS SECTION FOR BY-PASS PAVING

SCALE 1 : 75



TRANSPORTATION AND WORKS
HIGHWAY DESIGN DIVISION

Proposed Robert E. Howlett Memorial Drive Extension

DRAWN BY: R. Langmead

DATE: Rev March 20, 2014

NOT TO SCALE