



Government of Newfoundland and Labrador
Department of Transportation and Works
Office of the Deputy Minister

PR/335

October 13, 2009

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

Dear Minister Johnson:

RE: Environmental Assessment Registration, Realignment of Route 510 Project at the Pinware River.

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 Realignment of Route 510 Project at the Pinware River.

The site is indicated on the attached topographic map. It is approximately 10.5 km north of the community of Pinware. The proposed realignment is approximately 8 kilometers in length.

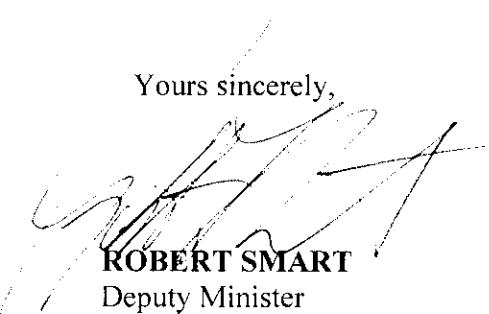
The purpose of this realignment is to eliminate safety and maintenance issues with respect to the existing highway along the Pinware River.

We would like to complete the requirements of the Environmental Protection Act by January 31, 2010. The Department of Transportation and Works needs to call tenders for this project as soon as possible to allow construction to commence early within the 2010 construction season.

If your officials have any questions, they should be directed to contact Roger Pottle, Senior Environmental Planner at 729-5379 or E-mail: pottler@gov.nl.ca or Ken Hannaford, Environmental Scientist at 729-5540 or E-mail hannafordk@gov.nl.ca, with our Highway Design and Construction Division

/rp
Attachments
c: Gary Gosse
Brandon McDonald
Roger Pottle
Dion Tee
Kent Randell
Cyril McCarthy
Don Matthews
Ken Hannaford

Yours sincerely,



ROBERT SMART

Deputy Minister



**REGISTRATION PURSUANT TO SECTION 49
OF THE ENVIRONMENTAL PROTECTION ACT, 2002,
FOR THE
REALIGNMENT OF ROUTE 510 PROJECT AT THE
PINWARE RIVER**

PROPOSER:

(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

Robert Smart
Deputy Minister
729-3676

(iv) Principal Contacts for the Purpose of Environmental Assessment

Brandon McDonald
Director
Highway Design and Construction Division
729-0648

Roger Pottle
Senior Environmental Planner
Highway Design and Construction Division
729-5379

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

THE UNDERTAKING:

(I) Name of the Undertaking

Realignment of Route 510 Project at the Pinware River, Labrador.

(ii) Nature of the Undertaking

The construction of the Realignment of Route 510 at the Pinware River, Labrador. The road would be constructed to a two lane asphalt surface highway for an approximate distance of 8 km.

(iii) Purpose / Rationale / Need for the Undertaking

The purpose of this realignment is to eliminate safety and maintenance issues with respect to the existing Route 510 along the Pinware River between the Pinware River Bridge and Country Cat Pond. Establishment of this link will provide improved road maintenance, snow clearing and safer vertical and horizontal alignments for travellers.

The general benefits of the realignment are:

- improved road safety issues;
- improved snowclearing and maintenance operations;
- new highway construction jobs (seasonal employment for 30 people);

Description of the Undertaking

(I) Geographic Location

The preferred routing begins at Pinware River Bridge and crosses the adjacent hills to the east to bring the road away from the river valley. The road is approximately 8km long with straighter alignment and joins the straight stretch of the existing road at the turn just below Country Cat Pond.

(ii) Physical Features.

The highway will be constructed to a Rural Local Undivided 80 km / hr. (RLU 60 modified for 80 km/hr) design standard and hold a posted speed limit of 70km/hr. This is a similar standard of the rest of the highway outside the project area northeast and southwest. Typical cross section drawings are attached. A 9 m wide top will be provided and the surface will be asphalt. The right-of- way width of an RLU 80 is 40 m. Normally the clearing width is 30 m; however, this will be reduced wherever possible especially around watercourses. The grubbing width will be the standard 20 m.

The road will cross a number of small watercourses and cascading tributaries of the Pinware River that run down the steep slopes and contain numerous small waterfalls and rock glides. Migration by fish up these brooks is not expected however there appear to be landlocked trout in the ponds on top of the hill. A total of six watercourses will be crossed. A preliminary examination of available mapping and field-truthing indicates most of the crossings could be made using steel culvert pipes which are approximately 2,000 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.

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 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. Based on an examination of 1:50,000 topographic map sections, seven 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 1:100 year flood events. Special attention will be given to erosion and scour protection at inlet and outlet control areas.

The Department of Works, Services and Transportation will consult with the Water Resources Division of the Department of Environment and Labour 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 construction will be carried out over a one year period with the initial phase and completion scheduled for 2010. The project will involve:

Road

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

The potential sources of pollution during construction would be limited to the possible siltation of various watercourses during grubbing operations, stream crossing work and subgrade

construction. In addition, the potential exists for hydrocarbon spillage from temporary fuel storage facilities. Contractors will be advised of the environmental requirements for stream crossings and for hydrocarbon spill reporting 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 wildlife/fisheries/water resources/historic resources/native concerns, etc. Rehabilitation measures for areas such as borrow sites and quarries will be clearly outlined.

A **Stage 1 Historic Resources Overview Assessment** will be undertaken for the proposed route. The Department of Works, Services and Transportation will work closely with the Cultural Heritage Division of the Department of Tourism, Culture and Recreation to ensure that known sites containing historic resources are protected and that potential sites along the route are investigated, recorded and where necessary mitigative measures put in place.

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 Works, Services and Transportation Specification Book for transportation projects. An EPP 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 grading, 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) Engineering Technicians;
- (d) Environmental Planners
- (e) Road Surveyors;
- (f) Heavy Equipment Operators;
- (g) Drillers and Blasters;
- (h) Electricians;
- (i) Carpenters;
- (j) Heavy Equipment Mechanics;
- (k) Labourers;
- (l) Truck Drivers;
- (m) Concrete Finishers;
- (n) Concrete Technicians;
- (o) Steel Erectors.

(vi) Project-related Documents

- Environmental Protection Plan prepared for the Realignment of Route 510 Project at the Pinware River by Department of Transportation and Works, 2010.
- Stage 1 Historic Resources Overview Assessment for the Realignment of Route 510 Project at the Pinware River by Department of Transportation and Works, 2010.

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. Navigable Waters Approvals	Transport Canada

SCHEDULE

The Department of Transportation and Works would like to complete the requirements of the Environmental Assessment Act and seek approval for the project by 2010 01 31. A tender call could take place in the spring of 2010 with subgrade construction starting shortly after.

FUNDING

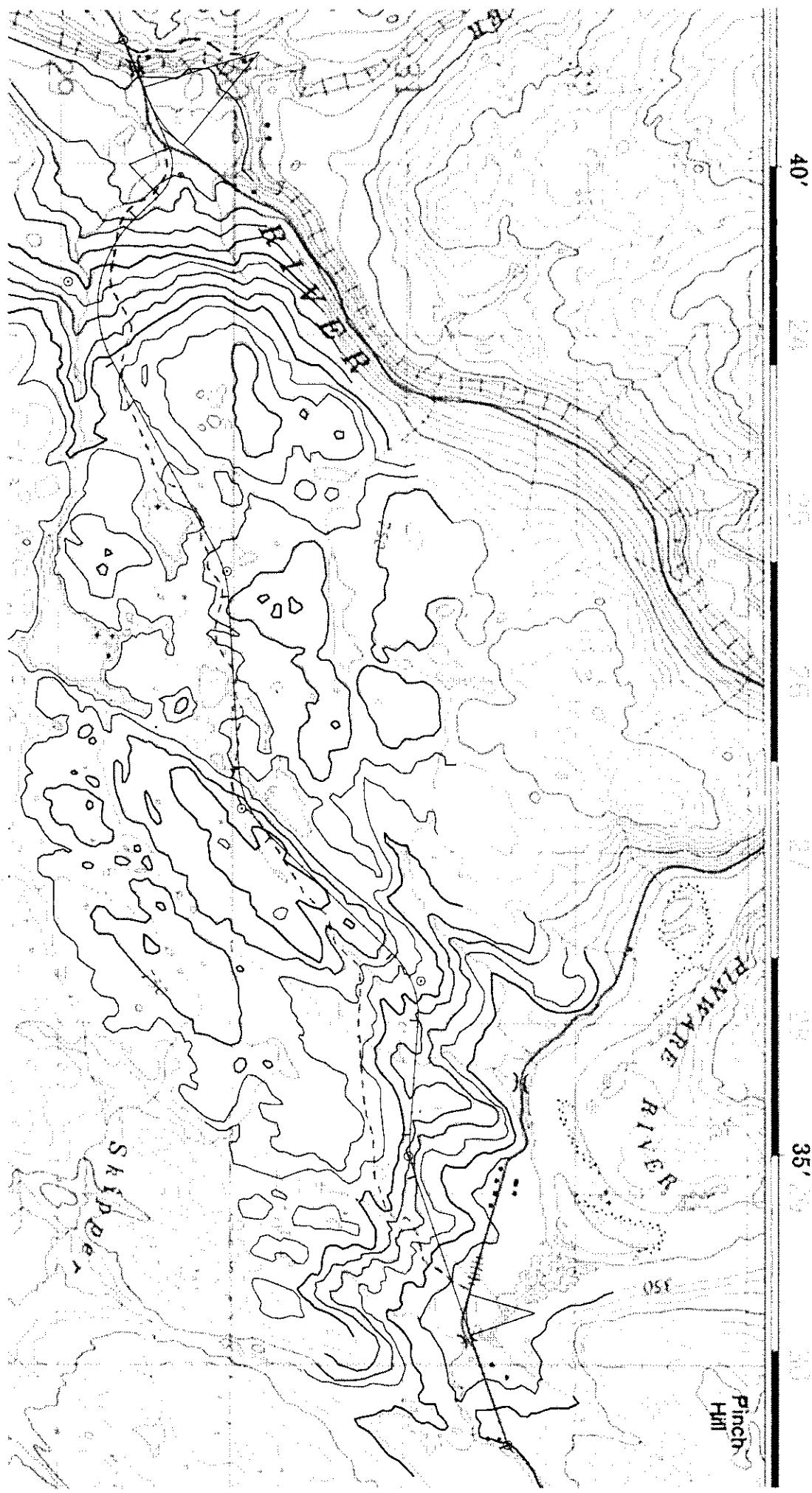
The project will be cost-shared between the Government of Newfoundland and Labrador and the Government of Canada.

OCT 28 2009

Date

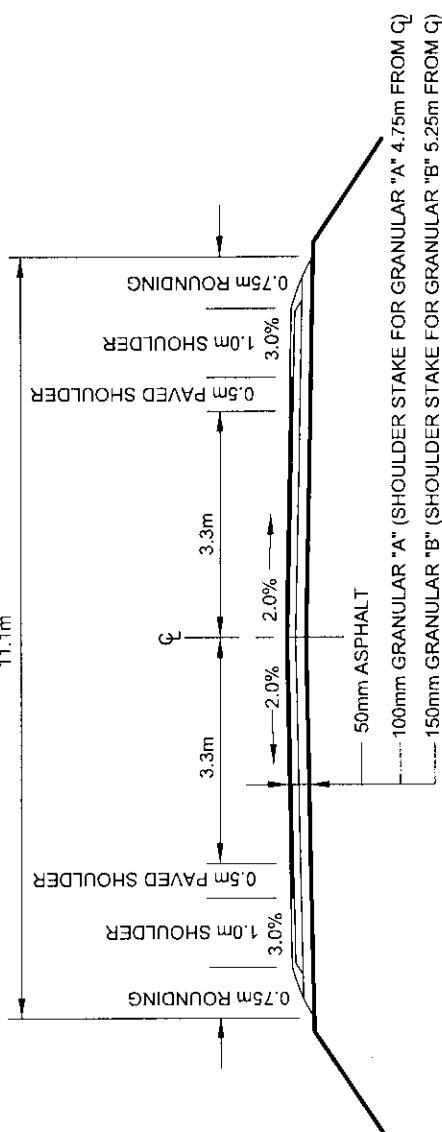


Robert Smart
Deputy Minister

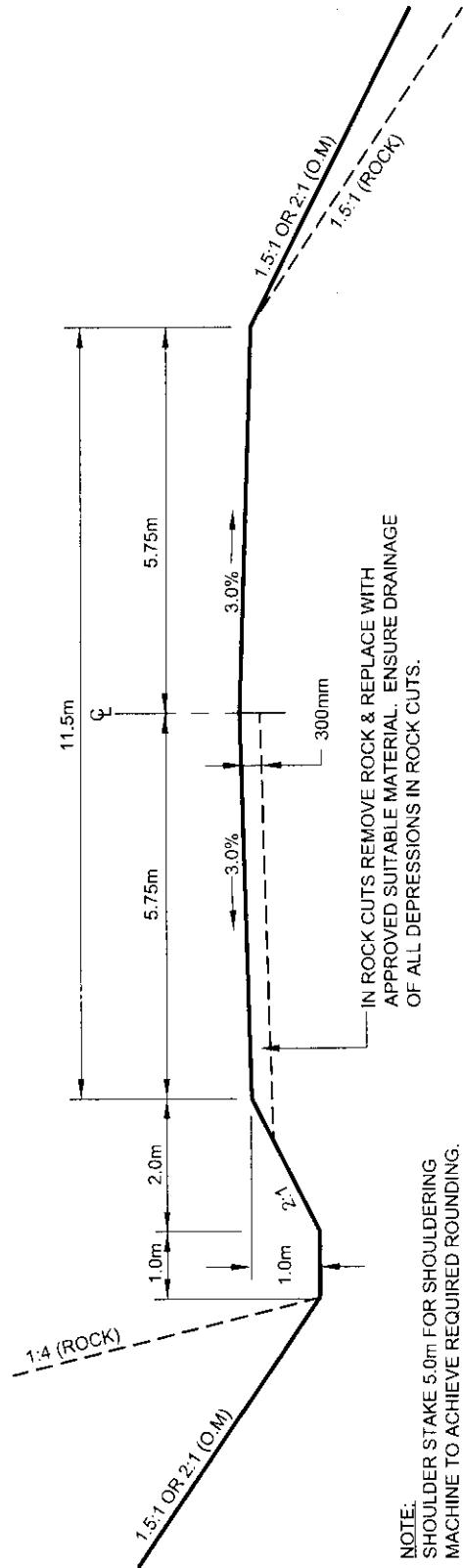


RLU 80 (MODIFIED)

STANDARD WIDTH OF R.O.W. 20.0m
STANDARD WIDTH OF CUTTING 20.0m
STANDARD WIDTH OF GRUBBING 15.0m



**TYPICAL CROSS SECTION FOR
BLU 80 FINAL CONSTRUCTION**



NOTE: SHOULDER STAKE 5.0m FOR SHOULDERING MACHINE TO ACHIEVE REQUIRED ROUNDING.

IF SCARIFYING IS REQUIRED WIDTH OF SCARIFYING SHALL BE WIDTH OF PAVEMENT PLUS 300mm ON BOTH SIDES.

TYPICAL CROSS SECTION FOR RLU 80 SUB-GRADE CONSTRUCTION

TRANSPORTATION AND WORKS
HIGHWAY DESIGN DIVISION

3
Newfoundland
Labrador

TYPICAL CROSS SECTION (MODIFIED) RLU 80

DRAWN BY: BMR

DATE: 02-01-10

SCALE 1:100