8 May 2012

Ms. Phyllis Beaulieu
Licencing Coordinator,
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B1J0

Re: **2BW-MEL1215 - Water License for Phase 1 All-Weather Access Road (AWAR): Char and Meliadine Bridge Construction Activities: Agnico-Eagle Mines Limited (AEM)**

Dear Ms. Beaulieu;

On March 13, 2012, the NWB granted Agnico-Eagle Mines Limited (AEM) the above noted licence. Subject to having all other necessary authorizations[1], this licence allows for the use of water and disposal of waste at the Phase 1 – Meliadine All-Weather Access Road Project. This licence was welcomed as it allows AEM to proceed with its advanced exploration program as planned.

The application for the AWAR was made on October 6th, 2011 and at the time it was hoped that all authorizations be approved sometime in late January or early February, 2012. The early approvals were considered necessary to allow winter construction of the Meliadine and Char River Bridges and the road. Upon receiving the water licence, AEM and its bridge contractor did an appraisal of the likelihood of being able to complete the bridges within the four to five weeks of winter that remained. The assessment's conclusion was that there was less than a 20 percent chance of success. This proved to be too much of a risk and the construction plans were revised to allow construction of the bridges during the summer period. The contractor assured AEM that this would be possible using scaffolding placed directly on the edge of the river to move the single span girders into place on the abutments. However, there was the drawback in requiring construction machinery fording the rivers a number of times.

Fording of rivers is noted in Fisheries and Oceans Canada's Operational Statement for a Temporary Stream Crossings and the measures therein to protect fish and fish habitat in doing so. The Statement states in part:

> *Machinery fording a flowing watercourse to bring equipment required for construction to the opposite side is limited to a one-time event (over and back) and is to occur only if an existing crossing at another location is not available or practical to use.*

[1] Transport Canada's authorization to build a bridge across the Meliadine River remains outstanding. The Meliadine River is a navigable water while the Char River is not.

AEM and DFO discussed repeated crossings of the rivers at the locations used by heavy machinery immediately downstream to the existing Char River bridge[2] and at the ATV fording location on the Meliadine River 100 metres down steam of the bridge location. DFO's February 24th email below indicated that repeated crossings of the rivers by construction equipment within the period of July 15 to August 15 represents a relatively low risk activity to fish and fish habitat.

> *Just to follow up with AEM's proposal for the summer installation of the Meliadine and Char River clear span bridge crossings. After reviewing the alternate construction plan for the installation of the clear span bridges during non-frozen conditions, it has been determined that the clear span bridge operational statement is appropriate for the project, as described.*
>
> *The use of scaffolding on the edge of the river to facilitate the installation of the Char River bridge is not a significant deviation from the operational statement. It is also recognized that multiple crossings of machinery will be required during the construction process. Because the machinery crossings will take place outside of the restricted timing window of May 1 to July 15 (spring spawning species) and August 15 - June 30 (fall spawning species) and during lower flow conditions, this represents a relatively low risk activity to fish and fish habitat.*
>
> *The works as described in the document should not require an authorization and the mitigation measures described in the operational statement are appropriate for the bridge installation.*[3]

Clause E13 from the Water Licence paraphrases DFO's Operational Statement for Temporary Stream Crossings in saying:

> *E13. Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum and limited to one area and a one-time event. Equipment used should be well cleaned and free of oil and grease and maintained free of fluid leaks.*

DFO sees repeated crossings of the rivers by construction equipment as not being a significant deviation from the Operational Statement. AEM has attached the **Description, Schedule and Method of Construction - Char River Bridge and Meliadine River Bridge** for information as it details the steps in constructing the bridges over the summer period.

Further discussions were held with DFO on April 24 to clarify a few remaining items and the minutes of that conference call are attached[4]. This includes fording the Meliadine River subject to limiting the number of crossings to a minimum. This applies especially during fish runs, which normally occur after August 15 when Arctic Char return to fresh water for the winter.

[2] The present Char River bridge is a light duty bridge suitable for pick-up trucks, empty dump trucks and ATVs but not heavy machinery or loaded dump trucks.
[3] Email from Bobby Bedingfield, Fisheries and Oceans Canada to Larry Connell and John Witteman, February 24, 2012. It is attached.
[4] The minutes were reviewed by and received input from DFO.

Earlier road and bridge building material was placed on both sides of the rivers so that loaded dump trucks need not ford the rivers. The machinery expected to repeatedly ford the river will be a front end loader and a backhoe and their crossings will be kept to a minimum.

Care will be taken to ensure all equipment is clean before it fords the rivers and should any damages result to the shoreline or river bed, the area will be reclaimed following completion of construction. Once the bridges are open to traffic, there will be no need to ford the rivers anymore and the reclamation of the fording locations will become permanent improvements.

AEM is writing to ask if the Water Board's concurs with DFO's guidance that machinery can ford the rivers a numbers of times this coming open water season. In keeping with licence 2BW-MEL1215, the construction of the bridges will be a one-time event, and fordings will be limited to one area on both rivers.

AEM looks forward to the NWB's early reply.

Yours sincerely,

John Witteman

Cc. Luis Manzo, Veronica Tattuinee – KIA
Larry Connell, Stéphane Robert, Jack Dutil - AEM
Bobby Bedingfield, Fisheries and Oceans Canada

From:	Bedingfield, Robert
To:	Larry Connell; John Witteman
Cc:	Moggy, Derrick; Stephane Robert; Eric M Lamontagne; Jack Dutil
Subject:	RE: Alternate Bridge Construction Proposal for Meliadine and Char River Crossings - summer placement of bridge beams
Date:	February-24-12 1:40:36 PM
Attachments:	image001.png Clear span bridge OS.pdf

Hi Larry and John,
Just to follow up with AEM's proposal for the summer installation of the Meliadine and Char River clearspan bridge crossings. After reviewing the alternate construction plan for the installation of the clearspan bridges during non-frozen conditions, it has been determined that the clearspan bridge operational statement is appropriate for the project, as described.

The use of scaffolding on the edge of the river to facilitate the installation of the Char River bridge is not a significant deviation from the operational statement. It is also recognized that multiple crossings of machinery will be required during the construction process. Because the machinery crossings will take place outside of the restricted timing window of May 1 to July 15 (spring spawning species) and August 15 - June 30 (fall spawning species) and during lower flow conditions, this represents a relatively low risk activity to fish and fish habitat.

The works as described in the document should not require an authorization and the mitigation measures described in the operational statement are appropriate for the bridge installation.

As mentioned in the email below, if at some point in the future plans change to include the restoration and removal of the existing bridge crossing on the Char River, please consult with DFO for advice.

Please

Bobby Bedingfield
Fisheries and Oceans Canada
Telephone/ Téléphone 403-292-8675
Email/Courriel Robert.Bedingfield@dfo-mpo.gc.ca

27 April 2012

Minutes of Teleconference
Meliadine River Bridge and Char River Bridge - Construction Method

Wednesday April 25, 2012, 09:00 MT, 10:00 CT, 11:00 ET

Tel: 1-877-669-3239; Attendee access code: 23158186

Participants: Bobby Bedingfield, DFO; email: Robert.Bedingfield@dfo-mpo.gc.ca
Stephane Robert, AEM; email: stephane.robert@agnico-eagle.com
Daniel Seguin, AEM; email:daniel.seguin@agnico-eagle.com
John Witteman, AEM; email:John.Witteman@agnico-eagle.com
Jivko Jivkov, JE, email: jivko@jivko.ca

Topics discussed:

1. Jivko Engineering Proposal for summer construction

DFO: Confirmed receipt and review of the Jivko Engineering Proposal for summer construction of Meliadine River and Char River Bridges dated January 26, 2012 and requested drawings for same bridges.
JE: Committed to provide requested drawings.

2. In-stream, near-stream works in Char River during excavation for and construction of foundations. Water level in Char River during same works

JE: Excavation and construction is planned to take place after the spring runoff, when the river retreats into the summer channel. The work will be conducted beyond the wetted perimeter of the river. No in-stream work is anticipated.
DFO: Accepts the proposed plan

3. Fording the Char River by construction equipment

JE: The road crossing Char River leads to the Rankin Inlet municipal granular material sources (gravel pits). The existing Char River Bridge is suitable for light traffic only. Historically and currently gravel trucks and heavy equipment working in the gravel pits regularly cross the river on a ford located some 20 meters downstream from the existing bridge. It is proposed to use the same ford by heavy equipment (excavator, loader, bulldozer) involved in the construction of the proposed bridge. Fording the river by trucks loaded with rock and gravel is not anticipated.
DFO: Accepts, subject to limiting the number of crossings to the minimum possible, particularly during fish runs.

4. Restoration of the Char River Channel under and adjacent to the proposed bridge

JE: At summer water levels the natural watercourse at the bridge site is 16 m to 18 m wide. At spring runoff the width is over 30 m. The horizontal clearance under the existing bridge is around 10 m. In an attempt to guide the river into the narrow opening, rock armoured berms of funnel like configuration have been built on the upstream side of the river. Due to intensive scour action during the spring runoff, these rock armours and the base of the existing bridge abutments are subject to regular maintenance and upgrading. Excavator involved in the maintenance is often deployed on the riverbed.

The proposed bridge abutments are located on the land side, beyond the armoured berms. It is likely, after the new bridge construction, if not removed from the riverbed, the material of these berms would be washed out during spring runoff, thus further constricting the narrow opening of the existing bridge. Our

bridge design contemplates removal of those berms in the area of the new bridge and restoration the channel to its original width. For the completion of this work midsize excavator could deployed alternatively on both river banks. This work could be done after the spring fish run, before installation of the bridge superstructure.

Alteration of the rock armoured berms on the upstream side of the existing bridge would leave its abutments exposed to more intensive erosion, likely leading to the collapse of the existing bridge. We strongly recommend removal of the existing bridge in the same season after opening the new bridge for traffic. This could be done in late fall when the riverbed is almost completely dry. Removal of the existing bridge is not part of the Jivko's contract.

DFO: With respect to the excavation on the Char River bank to return the river channel to its original width, this is acceptable if it is done before August 15th to avoid the period of sensitivity for Fall spawning fish. The excavation of the river channel should only be done in the area in front of the abutments for the proposed bridge; the river bank near the existing bridge should be left as is.

AEM: The hamlet owns the old bridge and their plans for it are unknown at present.

5. Fording the Meliadine River by heavy equipment

JE: It is proposed crossing the river by loader and excavator to take place on a wide and shallow section of the river located some 100 m downstream from the proposed bridge site. The proposed location is occasionally being used by local residents for crossing the river on ATV's. Estimated less than 20 cubic meters blasted rock, clean of fines, would have to be placed to fill existing holes on the riverbed.

Crossing the river by heavy trucks loaded with rock or gravel is not anticipated.

DFO: Accepts, subject to limiting the number of crossings to the minimum possible, particularly during fish runs.

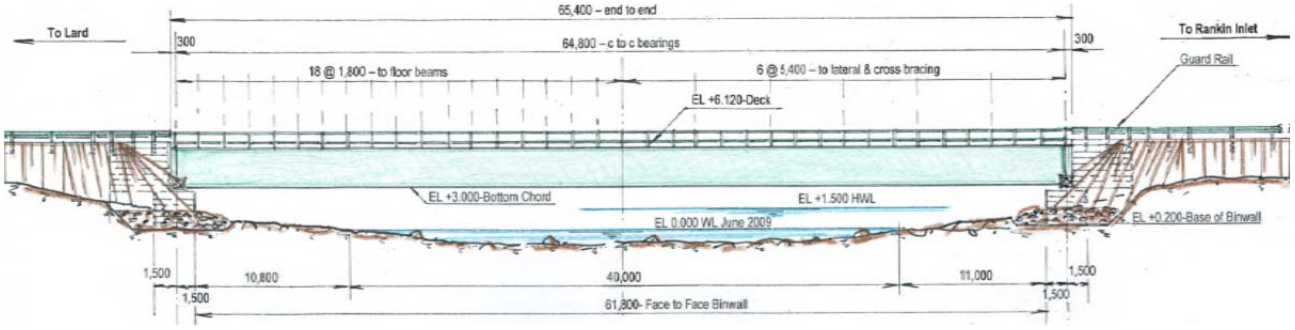
6. Temporary supports on both water edges of the Meliadine River

JE: For the purpose of the superstructure installation, we are planning to install on the water edges two temporary supports consisting of heavy scaffolding or Bin-wall. Geotextile blanket would be placed on top of the shore, under the temporary supports. Depending on the water level in the river, these supports may encroach into a border area of the riverbed consisting of 80% dry boulders and cobbles and 20% standing water between them. The temporary supports would remain in place for a few days only. After dismantling the area would be thoroughly cleaned from any foreign material and landscaped.

DFO: Accepts the proposed plan

Prepared by:
Jivko Jivkov, P. Eng.

Description, Schedule and Method of Construction
Char River Bridge and Meliadine River Bridge
Rankin Inlet, NU



Prepared for:

Mr. Bertho Caron, P. Eng.
Construction Manager
Meliadine Project
Agnico-Eagle Mines Ltd

Prepared by:
Jivko Jivkov, P. Eng.
Jivko Engineering

Description, Schedule and Method of Construction
Char River Bridge and Meliadine River Bridge

1. General

In spring 2011 Agnico Eagle Mining of Toronto ON (the Client), contracted Jivko Engineering of Yellowknife, NT to design, supply material and construct three highway bridges on the proposed all weather road linking Rankin Inlet, NU with the Meliadine River Mining Property located some 24 km to the north of Rankin Inlet. The construction of the road was subject to contract with others. The bridges are described as follows:

Name of bridge	Girder span	Clear Opening	Deck width	Distance from Rankin Inlet
Char River Bridge	28.8 m	25.8 m	6.5 m	6.5 km
Meliadine River Bridge	64.8 m	61.8 m	6.5 m	8.5 km
M5 Crossing Bridge	21.6 m	18.6 m	6.5 m	11.5 km

The design of the bridges is based on bridge geometry and loading criteria provided by the Client and is in accordance with the Canadian Highways Bridge Design Code S6-00. The bridges are designed and fabricated for estimated 75 years life expectancy of the structure.

The original contract schedule contemplated construction of bridge abutments in summer/fall 2011 and completion of remaining works by end of November 2011. The installation plan included construction of snow berms between the abutments to support equipment and material involved in the assembly of the superstructure.

Design, material supply and delivery to Rankin Inlet for the three bridges were completed in 2011. Due to issues related to Construction Permits the Client advised that the beginning of the construction on site was deferred for 2012. In recent meeting, the Client requested Jivko Engineering to submit a proposal for the construction of Meliadine and Char River Bridges, beginning in early July 2012 with completion scheduled for mid October 2012.

The construction of M5 Crossing Bridge will be dealt with once the Client finalises the intended construction schedule.

The following information is proposed as Amendment to the submission of Application for Construction Permits for the above specified highway bridges. It includes brief description of the work, schedule and proposed method for construction on site of the two bridges.

2. Char River Bridge

2.1 Watercourse Condition at the Proposed Crossing

At average summer water level, the natural river bed at the proposed bridge crossing is 16 m to 18 m wide and less than 0.3 m deep. Occasional boulders are protruding above the water surface. The riverbanks are over 3 m high sloping towards the watercourse roughly 1:4 on the south side and 1:2 on the north side. In early spring, successive overflows produce ice buildups along the river channel and over the banks. In some years the elevation of the ice buildup could reach up to 2.5 m above the riverbed. During breakup time, in late May and early June, the obstructed by the ice river spills over the banks to a width in excess of 30 m.

Approximately 20 m downstream from the proposed bridge crossing there is an existing light capacity bridge. The clear opening under this bridge is approximately 10 m. Significant cavities observed under the abutments are evidence of intensive local scour. In an attempt to channel the river into the narrow opening, the upstream embankments are dressed with armour rock of funnel like configuration. After the construction of the proposed bridge most of this armour will be removed and the riverbed restored its original width.

Another 20 m downstream from the existing bridge there is a ford routinely used for crossing the river by heavy trucks and construction equipment.

2.2 Proposed Foundations

The proposed abutments are Bin type, galvanised steel retaining wall. The base of the abutments is set at approximate elevation of 0.2 m above the water level at the time of construction. The bins are laid on top of Geotextile membrane and are in-filled with structural backfill. The lower part of the backfill is cement stabilised. The bridge bearings are fixed on reinforced concrete footing panels installed on top of the Bin walls.

The footprints of the proposed abutments are located well beyond the August-September water marks. However, during the maximum discharges in late May and early June the abutments would be partially submerged in water. In order to prevent scour under the abutments during that period, adequate rock armour (rip-rap) will be installed in front and on the sides of the Bin walls.

The construction of the abutments on Char River Bridge would be carried out in July after the river recedes into its summer channel. Excavation for foundations will be completed with an excavator deployed on the land side of each abutment. At least 3.0 m wide undisturbed river bank would be left between the excavated area and the water edge. Assembly and backfill of the Bin-walls will be done by local crew supported by wheel loader and excavator. In this phase of the work the concrete footings will be installed on top of the Bin-walls and the bridge approaches will be constructed to the elevation of the concrete surface. No in-stream excavation or deployment of equipment in the river is foreseen for this phase of the work.

2.3 Superstructure

The proposed superstructure consists of twin steel girders with adequate lateral and cross bracings. The length and the depth of the girders are 29.4m and 1.26 m respectively. The deck is IDSI type steel grating with 5-3/16” rolled main bar and 2” by 4” square openings. The grating is supported on W250x58 rolled beams spaced at 1.8m. Girders, bracing and floor members are fabricated of corrosion resistant bridge steel with enhanced low temperature performance. No painting of any part of the superstructure is being contemplated.

The installation of the superstructure will involve preassembly of the girders on the north approach and launching the superstructure across the river. Equipment used for the assembly and launching includes two midsize excavators and one bulldozer. In order to facilitate the launching, one temporary intermediate support of heavy scaffolding might need to be installed on the riverbank in front of the south abutment. Grating for deck and bridge rail will be installed after setting the girders in final position.

No equipment will be deployed in the water for the purpose of superstructure installation. However, excavators, bulldozer and loader will be crossing the river several times at the commonly used ford located approximately 40 m downstream from the proposed bridge site.

2.4 Back Walls and Road Work

After installation of the superstructure back walls will be installed on both ends of the bridge and the road approaches will be constructed. It is planned the bridge will be open for traffic by the end of August 2012.

2.5 Restoration of the River Channel

After expiration of the fish spawning period established by the DFO, in-water earthworks will take place to restore the river channel to its original condition. The excavated material will be placed out and away from the riverbed. Based on the geotechnical investigation report

provided by the Client, the excavated material would consist of coarse sand mixed with cobbles, occasional boulders and limited amount of fines. We anticipate that the suspended in water component of this material would be minimal and would settle a short distance downstream from the excavation.

The riprap around the abutments would be placed at the end of this phase. The restoration of the river channel will be limited to the area in front of the abutments of the proposed bridge. Removal of the existing bridge and widening of the channel in that area is not part of our contract.

3. Meliadine River Bridge

3.1 Watercourse Condition at the Proposed Crossing

The proposed bridge crossing is located between two rapids, on a natural narrow, some 40 m downstream from a river bent. In late summer and early fall the river channel at this site is around 30 m wide with less than 1.0 m deep water. Occasional boulders are protruding above the water surface. The riverbanks are nearly 3 m high, sloping towards the watercourse roughly 1:10. In early spring, successive overflows produce ice buildups along the river channel and over the banks. In some years the elevation of the ice buildups could reach up to 3.0 m above the riverbed. During spring break up, in late May and early June, the obstructed by the ice river is observed to spill over the banks and flood the river plane.

Some 100 m downstream from the proposed crossing, near the rapids, the river channel in late August is over 70 m wide with around 0.3 m water depth. The riverbed is fairly smooth consisting of small boulders, cobbles and coarse gravel. Local residents occasionally cross the river at this location with ATV. We are proposing to use this location for crossing the river with heavy equipment including Excavator and Loader. An estimated 20 cubic meters rock may need to be placed in the river to fill up holes on the riverbed. This will be selected rock of 2” to 10” diameter and clean of fines. We anticipate no more than a dozen individual equipment crossings would be required during the construction of the bridge.

3.2 Proposed Foundations

The proposed abutments are Bin type, galvanised steel retaining wall. The base of the abutments is set at approximate elevation of 0.2 m above the water level at the time of construction. The bins are laid on top of Geotextile membrane and are in-filled with structural backfill. The lower part of the backfill is cement stabilised. The bridge bearings are fixed on reinforced concrete footing panels installed on top of the Bin walls.

The footprints of the proposed abutments are located well beyond the August-September water marks. However, during the maximum discharges in late May and early June the abutments would be partially submerged in water. In order to prevent scour under the abutments, adequate rock armour (rip-rap) will be installed in front and on the sides of the Bin walls.

The construction of the abutments on Meliadine River Bridge would be carried out in late August and 5early September. Excavation for foundations will be completed with an excavator deployed on the land side of each abutment. At least 10.0 m wide undisturbed river bank would be left between the excavated area and the water edge. Assembly and backfill of the Bin-walls will be done by local crew supported by wheel loader and excavator. In this phase of the work the concrete footings will be installed on top of the Bin-walls and the bridge approaches will be constructed to the elevation of the concrete surface. Also, rip-rap will be placed in front and on the sides of the abutments to protect them from scour during the spring flood. No in-stream excavation or deployment of equipment in the river is foreseen for this phase of the work.

3.3 Superstructure

The proposed superstructure consists of twin steel girders with adequate lateral and cross bracings. The length and the depth of the girders are 65.3 m and 2.7 m respectively. The deck is IDSI type steel grating with 5-3/16" rolled main bar and 2" by 4" square openings. The grating is supported on W250x58 rolled beams spaced at 1.8 m. Girders, bracing and floor members are fabricated of corrosion resistant bridge steel with enhanced low temperature performance. No painting of any part of the superstructure is being contemplated.

The installation of the superstructure will involve preassembly of the girders on the south approach and launching the superstructure across the river. Equipment used for the assembly and launching includes two midsize excavators, a bulldozer and a loader.

In order to facilitate the launching, two temporary intermediate supports of heavy scaffolding or Bin-wall will be installed 14.5 m in front of each abutment face, on the edge of the river channel. The opening over the river between the temporary supports will be around 32 m. The temporary supports will be removed immediately after the launching of the bridge. The footprint of the temporary supports will be cleaned and landscaped. The grating for deck and bridge rail will be installed after setting the girders in final position.

No equipment will be deployed in the water for the purpose of superstructure installation. However, excavators, bulldozer and loader will be crossing the river several times at the downstream location proposed in item 3.1.

3.4 Back Walls and Road Work

After installation of the superstructure, the back walls will be installed on both ends of the bridge and the road approaches will be constructed. It is planned the bridge will be opened for traffic by mid to late October 2012.

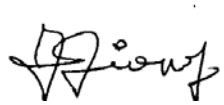
4. Preventive Measures for Protecting the Rivers from Contamination and Spills

All equipment working near, or in the water will be in good working condition. Equipment will be thoroughly inspected on a regular basis for leaks and other imperfections. While working on the restoration of the Char River channel the operators will be instructed to work in a manner creating minimum disturbance of the riverbed and generating minimal amount of suspended particles.

Silt fences will be installed between the disturbed areas of the riverbanks and the watercourse to prevent siltation of the river in case of rain. No construction debris will be allowed to fall into the river during construction.

Fueling of the equipment will take place on a designated area sloping away from the watercourse. Spill contingency plan and spill control equipment will be in place and all workers involved in the work will be instructed accordingly. Construction permits will be displayed at visible location on the construction sites.

Prepared by:



Jivko Jivkov, P. Eng.
Principal, Jivko Engineering