
Concentric Project #11-3676

March 15, 2011

Phyllis Beaulieu
Manager of Licensing
Nunavut Water Board
PO Box 119
Gjoa Haven, NU
X0A 0H0

Re: City of Iqaluit Apex Bridge Water Course Environmental Protection Measures

Dear Ms. Beaulieu:

On behalf of the City of Iqaluit, please accept the following letter from Concentric, as notification of modification to Apex Bridge.

The City of Iqaluit is preparing to repair the Apex Bridge during the 2011 construction season. Appendix A shows the location of Apex Bridge. The following is a summary of the scope of work:

- Localized repairs to existing components of the steel bailey trusses of the bridge.
- Replacement of the 3 course wood deck with a 2 course wood deck. The wood deck is to be removed and disposed in an authorized location.
- Installation of a new gabion basket directly beside existing gabion basket.
- During construction the contractor will provide signage, barriers, hoarding, etc. to protect the work site from entry. All traffic will be re-routed along the bypass for the duration of work.

Environmental Protection Measures:

Bridge maintenance activities have the potential to negatively impact the environment by introducing sediment and construction materials (e.g. grout, paint, solvents, general refuse, oil and grease etc.) into water bodies. In addition, operation of machinery and other construction related activities may impact habitat on the banks and bed of the water body resulting in erosion and sedimentation. Furthermore, bank stabilization techniques may disrupt the natural flow of the waterway.

Formal Specifications regarding water course environmental protection measures will be included in the Tender Packages for Apex Bridge Upgrade projects in order to ensure that negative impacts to the environment are eliminated or mitigated to a practicable extent. It will be made clear within the specifications that the successful proponent for each project must comply with environmental protection measures therein.



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Concentric is pleased to provide a summary of the information that is intended for inclusion in the specifications below:

The Department of Fisheries and Oceans Canada (DFO) provides operational statements that outline the measures required to reduce the negative impacts associated with various construction related activities in or near water bodies. The following (based on DFO guidelines) outlines the environmental protection measures that should be undertaken during planned work at the Apex Bridge in the City of Iqaluit, Nunavut.

- If possible, bridge work should be conducted during periods of low flow.
- Wherever possible, access to the sites should be on existing roads and trails.
- To minimize erosion, construction should be halted during periods of heavy precipitation and/or runoff.
- Wherever possible retain existing vegetation thereby reducing the potential for erosion.
- Effective bank erosion control measures such as filter cloth, rock, matting, or polyethylene etc. must be installed prior to starting work to prevent the entry of sediment into the water course resulting from the operation of machinery or other activities which may disturb the bank.
- When possible all machinery should be operated on land (out of the water) and in a way that minimizes disturbance to the bank.
- Erosion control measures should be inspected on a regular basis and repairs made as needed.
- Eroded sediment should be contained on-site using devices such as silt fences and sediment traps.
- Banks should be restored to their original condition if any disturbance occurs.
- Machinery should arrive on-site in clean condition and in good repair (i.e. free of any leaks).
- All fuelling, washing and servicing of vehicles must be conducted as far as practicable from the water to prevent any substances from entering the water body.
- Storage of fuel, other materials required for the vehicles, and waste oils/lubricants will be stored in leak-proof containers and as far away from the water as practicable to prevent any spills or leaks from impacting the water body. These materials should also be contained in a secure area to prevent vandalism.
- An emergency spill kit should be kept at the site in case of fluid leaks or spills from machinery. Any spills of fuels etc. should immediately be contained and the contaminated soil removed from the site and disposed of at an approved disposal site. Spill kits vary, but at a minimum should contain the following:
 - Absorbent pads
 - Absorbent socks
 - Absorbent pillows
 - Granular absorbent



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- Hazardous materials disposal bags
 - Nitrile gloves
 - Spill instruction sheet
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- A shroud should be installed beneath the dam and bridge to trap and prevent construction materials (grout, paint flakes, rust, solvents, etc.) from entering the watercourse.
 - All waste construction materials including (but not limited to) grout, wood wastes, paint chips etc. should be removed from the site and disposed of at an approved disposal site.
 - Waste bins for designated for general refuse should be placed at each site.

If you have any questions or concerns regarding the above, please do not hesitate to contact us.

Respectfully submitted,

Concentric Associates International Incorporated

Nancy Caldwell, B.A.

Allan Murray, P.Eng.

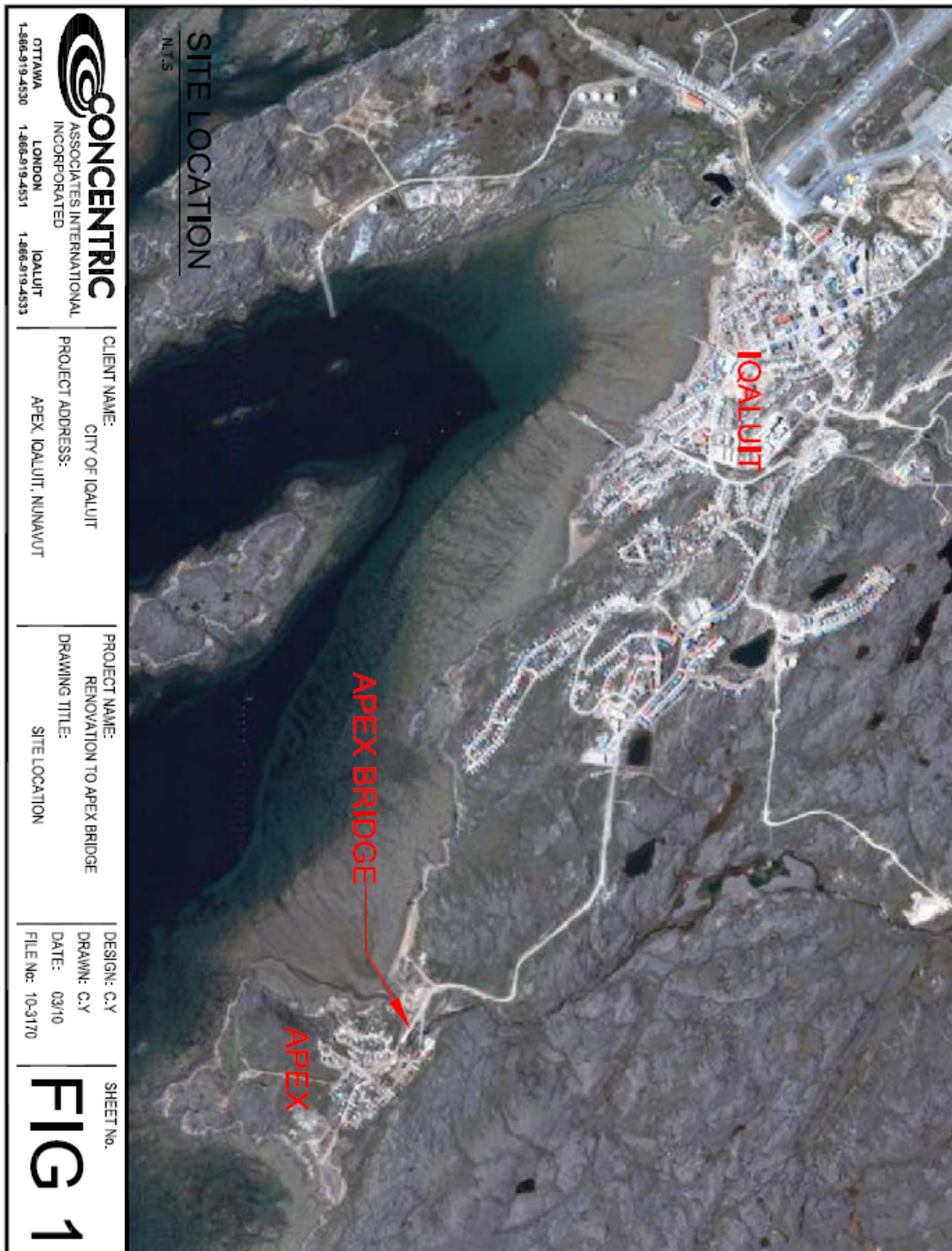


Appendix A

Location of Apex Bridge



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