



Trow Associates Inc.

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Telephone: (613) 225-9940
Facsimile: (613) 225-7337
E-mail: ottawa@trow.com
Web Site: www.trow.com

Reference: OTCD00018088A

June 28, 2006

Joe Murdock
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0B 1J0

Executive Summary Nunavut Arctic College Student Accommodations Drainage Course Relocation

Dear Mr. Murdock:

The Department of Education, Government of Nunavut, propose to construct new student accommodations at the Nunavut Arctic College campus in Iqaluit, on the Northwest corner of Saputi Drive & Qulliq Court, as shown on the attached Site Plan. The site is currently undeveloped, and surface drainage crosses the site by sheet drainage as well as by a small ditch. In order to proceed with the proposed building construction, the existing drainage paths (sheet drainage and the existing ditch) that transect the site must be diverted around the site. It is proposed to divert the water through the construction of a drainage ditch along the northeastern boundary of the site.

The proposed site is sloped from back to front (Northeast to Southwest) towards Qulliq Court. The site is generally covered with limited vegetation, a surficial layer of topsoil, underlain by sandy silt to silty sand with gravel, cobbles and boulders that extends to a depth of 1.5 to 3.6 m. Surface water is transported across the proposed site by the existing ditch or sheet drainage during spring melt or a rainfall event, otherwise the site, including the existing ditch is dry. The drainage area hydraulically above the site is relatively small with a total area of approximately 1.7 hectares. The site drains to an existing roadside ditch on the northeastern side of Qulliq Court, which outlets to a 900mm CSP culvert at the corner of Qulliq Court and Saputi Drive.

The proposed diversion ditch is to be constructed along the back (northeast) property line. The proposed diversion ditch will have an average slope of 1.0%, is trapezoidal shape with 2:1 side slope and 0.75m deep. Downstream of the proposed diversion ditch, the flow enters the City's roadside ditch system at Saputi Drive, and ultimately rejoins its original drainage route through the culvert at the corner of Saputi Drive and Qulliq Court. As the existing ditch to be abandoned only has water in it during a rainfall event or spring melt it is not fish habitat.

Construction of the proposed ditch is scheduled for late summer or early fall 2006. It is anticipated that the construction of the ditch will occur by excavation with a track mounted

excavator. Appropriate silt protection measures will be in place during construction, including silt fences adjacent to the construction, and a silt fence at the culvert at the corner of Qulliq Court and Saputi Drive.

If you have any questions, or require additional information, please contact Steven Burden at (613) 225-9940.

Yours truly,

Trow Associates Inc.



Abdal Zarad, P.Eng.
Project Engineer
Civil Engineering Services



Steve Burden, P.Eng.
Senior Project Manager
Civil Engineering Services