

Stantec Consulting Ltd. 905 Waverley Street Winnipeg MB R3T 5P4 Tel: (204) 489-5900 Fax: (204) 453-9012

August 17, 2007 File: 113731410

Manitoba Conservation 123 Main St., Suite 160 Winnipeg MB R3C 1A5

Attention:

Mr. Bryan Blunt

Dear Mr. Blunt:

Reference:

Proposed Replacement of City of Winnipeg's Access Bridge over Bunn's

Creek to 330/334 Bonner Ave

The City of Winnipeg proposes to replace the existing bridge over Bunn's Creek that serve's as the access driveway to 330 and 334 Bonner Ave. The bridge also provides public access to a pathway along Bunn's Creek. The existing bridge is a two span timber stringer bridge founded on timber piles and is in poor condition. Photographs taken April 19, 2007 showing existing site conditions are attached. The City of Winnipeg would like to replace the deteriorated structure with a new cast-in-place concrete structure.

The replacement bridge is proposed to be a single span, approximately 10 m long, semi-integral abutment cast-in-place concrete slab with concrete abutments founded on steel driven piles. A drawing showing a general arrangement of the proposed replacement bridge is attached.

The construction of the proposed bridge should not disturb the Bunn's Creek and aquatic life within. The proposed construction schedule is tentatively set for winter of 2007/2008. Construction access to the bridge during construction will be via Bonner Ave at the north and via the gravel pathway off of Delbrook Crescent from the south. The pathway will provide temporary access for the local residents and emergency services. Removal of the existing abutments and pier may cause some minimal disturbance to Bunn's Creek but this disturbance is extremely temporary and short term.

The installation of the proposed steel H-piles should not affect the fish habitat or aquatic environment provided care is taken during installation. The installation of the piles requires use of a pile driving crane, either diesel or gravity drop hammer. The piles are placed into their surveyed location and pounded into the ground until they refuse, as determined by the criteria developed during the geotechnical investigation.

Once the piles have been installed the abutments can be constructed. Construction of the abutments will comprise of standard concrete construction practice. Untreated wood forms will be used to support the wet concrete until it hardens. The proposed abutments are located outside of the existing waterway and therefore construction of the abutments will not adversely affect the environment.

Stantec

August 17, 2007 Bryan Blunt Page 2 of 3

Reference: Proposed Replacement of City of Winnipeg's Access Bridge over Bunn's Creek to 330/334 Bonner Ave

Shored, untreated forms are envisioned to construct the cast-in-place slab superstructure. The contractor will be required to develop and submit for review a proposed shoring installation procedure after project has been awarded.

As part of the bridge replacement, the east and west abutment embankments will be reshaped to suit site conditions. The embankments will be shaped locally around the abutments to provide a stable slope and to suit riprap placement and better match the natural slopes of the creek upstream and down. The embankments will be protected by 350 - mm nominal field stone riprap. The riprap will be clean and free of fines prior to placing. The embankments are not to be reshaped below the water level.

Stantec is very familiar with current environmental regulations and have completed numerous bridge replacement projects involving environmental approvals. A hard copy of Stantec's letter requesting approval and the Letters of Advice, or approval letters, received will be attached to the tender documents forming part of the legal contract.

As part of our sediment and erosion control mitigation measures, Stantec will request the following task be implemented throughout the course of construction:

- Removing the debris from the ice.
- Installation of silt fences isolating our abutment construction areas if the creek thaws (this is not
 anticipated to be an issue as construction should be completed during the winter months).
- No in-water construction to be undertaken between April 1 through June 30.
- Non-reusable demolition or construction materials will be disposed of in an authorized waste disposal facility.
- Demolition materials will not be allowed to enter Bunn's Creek.
- Construction will be halted during periods of heavy rainfall (this is not anticipated to be an issue as construction should be completed during the winter months).
- Stock piled backfill material will be covered with poly during heavy rainfall events and if to remain on site for an extended period of time (this is not anticipated to be an issue as construction should be completed during the winter months).
- Riprap to be placed to the waters edge and not within the river.
- The riprap will be clean fieldstone or quarried rock free of fines.
- Construction machinery may not be refueled or serviced within 100m adjacent to Bunn's Creek or any body of water.
- All construction work shall be performed in a workmanship like manner and shall be in accordance with "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat".

Stantec

August 17, 2007 Bryan Blunt Page 3 of 3

Reference: Proposed Replacement of City of Winnipeg's Access Bridge over Bunn's Creek to 330/334 Bonner Ave

- At no time shall the arm of a back-ho or any other machinery extensions enter the waterway
 where exposed hydraulic cylinders, engines or other devices containing grease, oil, gas and
 other toxins could enter and contaminate the waterway and environment.
- The contractor shall have on site at all times, oil absorbent pads in the event of an oil spill or accidental submergence of toxin covered machinery occurs.
- The excavated material for abutment construction shall be placed where it is not likely to erode
 or be washed into the waterway.

Please review the proposed work and attached Navigable Waters Protection Application form, photos and the General Arrangement drawing. Please advise as soon as possible if advertisement of this project in two local news papers and the Canada Gazette is required. Please contact the undersigned if you require further information or clarification.

Sincerely,

STANTEC CONSULTING LTD.

Kevin Amy, M.Sc., P.Eng.,

Structural Engineer Tel: (204) 489-5900 Direct: (204) 488-5743 Fax: (204) 453-9012 kevin.amy@stantec.com

Attachment:

Photographs

General Arrangement Drawing

c. Bill Ebenspanger, P.Eng., City of Winnipeg

klb v:\1137\active\113731410\correspondence\201_agency\tr - mc - bunn's - aug 16 2007.doc





























































