



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

**Stantec**

August 17, 2007  
File: 113731410

Transport Canada  
3<sup>rd</sup> Floor, 344 Edmonton Street  
Winnipeg MB R3C 0P6

**Attention: Yvette Labossiere**

Dear Ms. Labossiere:

**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.

We are seeking approval for this project under the Navigable Waters Act. The estimated navigational clearance, which is the distance from the soffit of the bridge to the 1 in 2 year water level, of the existing bridge is 0.364m. The navigational clearance of the proposed bridge is 1.015 m, an increase of 0.651m. The navigational clearance of the existing bridge on July 9, 2007 was 1.354m. The elevation of the bridge deck (soffit) is governed by the restrictions of the approach grades to the existing Bonner Ave and driveways. To obtain the currently proposed bridge configuration a 5% grade has been proposed to get from the bridge to Bonner Ave. which is currently the acceptable limit of the Winnipeg emergency services. The raising the bridge anymore may inhibit emergency vehicle access to the residences.

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



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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.

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.



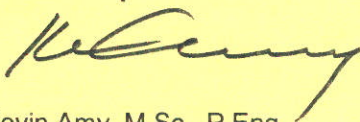
**Reference:** Proposed Replacement of City of Winnipeg's Access Bridge over Bunn's Creek to 330/334 Bonner Ave

- 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".
- 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  
                  Navigable Waters Application Form

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





























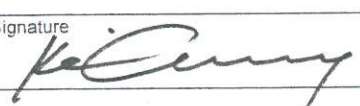






# Navigable Waters Protection Program Application

## Prairie and Northern Region

Proponent/Owner/Other Information		
Section A	Applicants File Number	113731410
	Previous NWPP File Number (if applicable)	
	*Name of Proponent/Owner	CITY OF WINNIPEG
	*Contact Name	
	BILL EBENSPANGER	
	Mailing Address	
	106-155 PACIFIC AVENUE	
	Street Address (if different than above)	
	City/Town	WINNIPEG
	Province/Territory	MB
Postal Code	R3E 3P1	
Telephone No.	(204) 986-3712	
Business No.		
Fax No.	(204) 986-5302	
*Name of Consultant/Representative/Contractor (if applicable)	STANTEC CONSULTING LTD	
*Contact Name		
KEVIN AMY, P. ENG		
Mailing Address		
905 WAVERLEY STREET		
Street Address (if different than above)		
City/Town	WINNIPEG	
Province/Territory	MB	
Postal Code	R3T 5P4	
Telephone No.	(204) 488-5743	
Business No.		
Fax Number	(204) 453-9012	
Location of the Project and Physical Description of the Site		
Name of the Nearest Community (City, Town, Village)	Province or Territory	*Name of Primary Waterway
CITY OF WINNIPEG	MB	BUNN'S CREEK
*Legal Description (Section, Township, Range)	UTM Northing/Easting/Zone	Average Width/Depth of Waterway at Site
	5585171/639106/14U	
Latitudes	Longitudes	Topographic/Chart No.
Description of Project (Please Attach Additional Information – See Section D)		
What is the Proposed Project? (Dock, Dam, Bridge, Culvert, etc.) <i>Note: Detailed Description of the Work Must be Attached</i>		
BRIDGE		
Is the Work Permanent or Temporary	Status of the Project (Check the Appropriate One)	
PERMANENT	<input type="checkbox"/> New <input type="checkbox"/> Existing <input type="checkbox"/> Addition <input checked="" type="checkbox"/> Repair	
Proposed Start Date (DD/MM/YYYY)	Proposed End Date (DD/MM/YYYY)	
01/12/2007	01/05/2008	
What to Send to Navigable Water Protection With The Application		
Attach the Following Document/ Information:		
<ul style="list-style-type: none"> <li>▪ Detailed project description with construction schedule</li> <li>▪ Detail of any temporary works method of construction activities</li> <li>▪ Property ownership status (if you are not the owner, attach a letter of permission from the owner)</li> <li>▪ Map or Chart to show location of the project (6 copies)</li> <li>▪ Sketch or drawing of the project, including side and top view and showing the dimensions of the project (6 copies)</li> <li>▪ Survey plans or sketch with dimensions indicating the location of existing buildings, shoreline structures, property lines, high and low water marks, and adjacent properties</li> <li>▪ Current photographs of the proposed work site (photos of open water period where possible)</li> <li>▪ A list of any equipment that may be used during the project</li> </ul>		
Date (DD/MM/YYYY)	Print Name	Signature
17/06/2007	KEVIN AMY	



Transport Canada

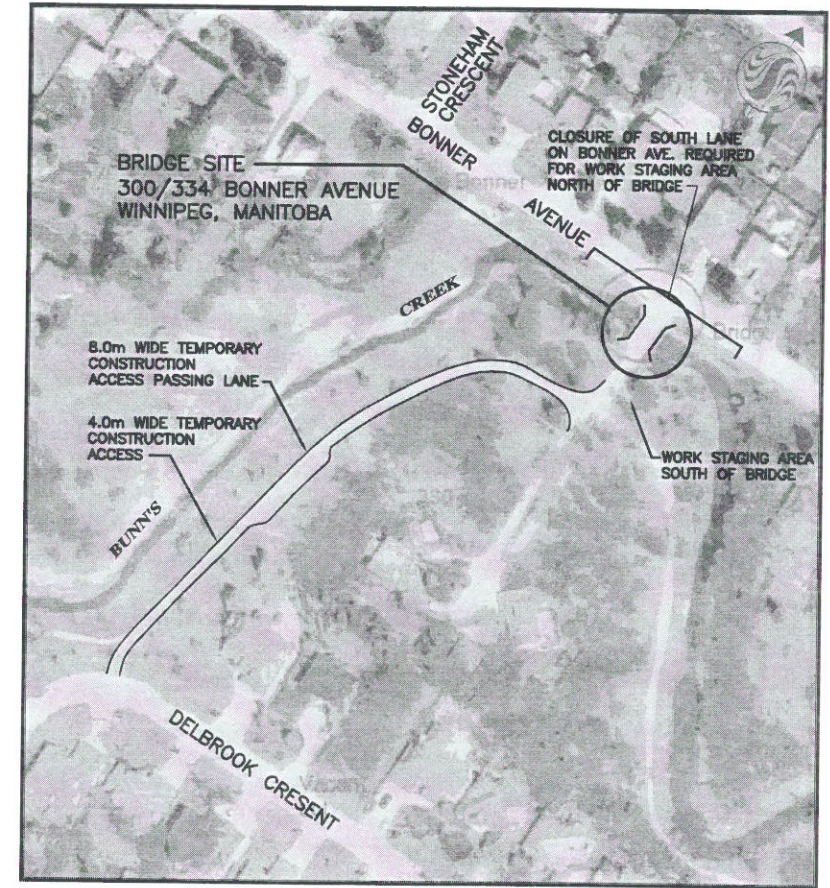
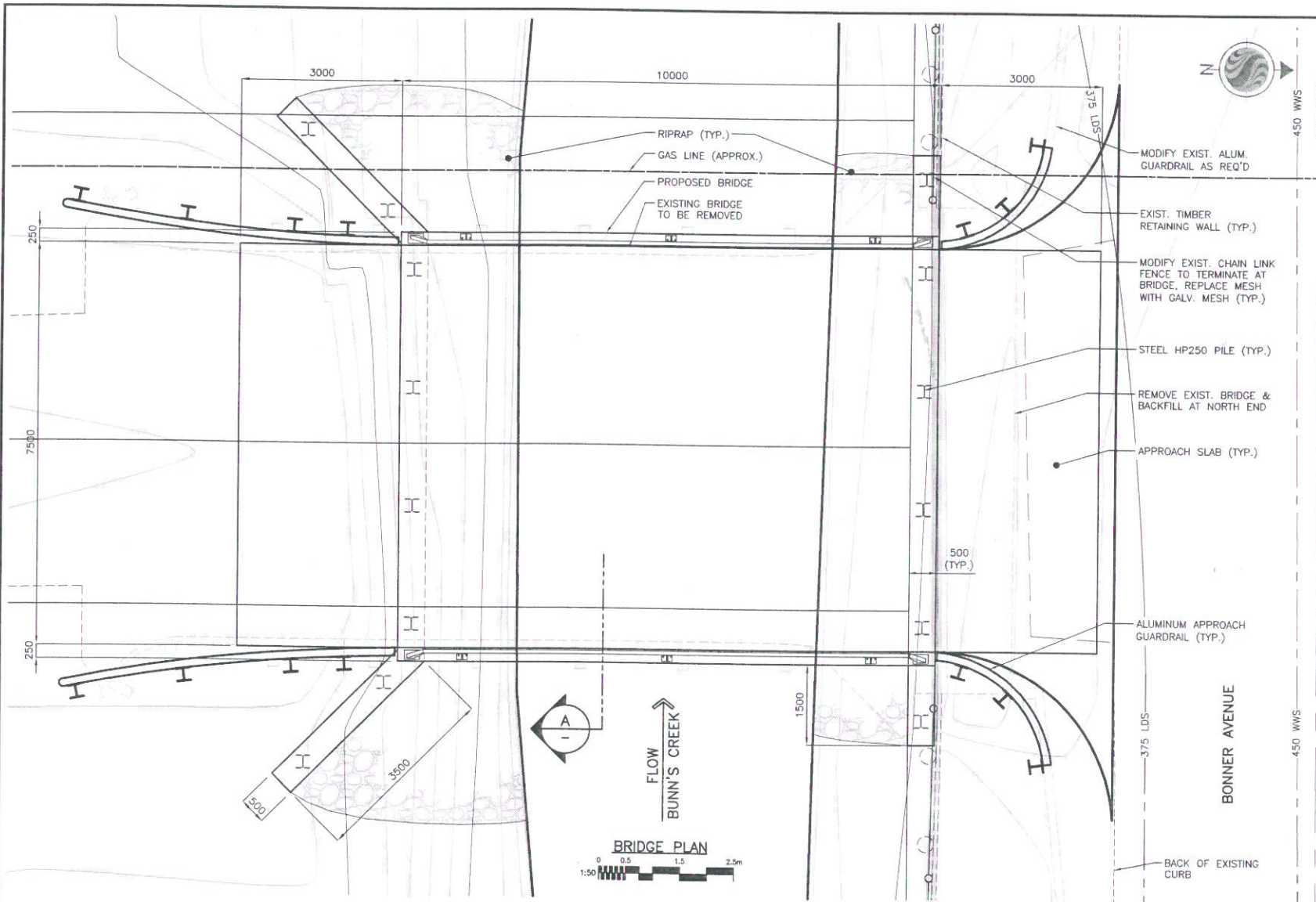
Prairies and Northern Region – Marine

Transports Canada

Région des Prairies et du Nord – Maritime

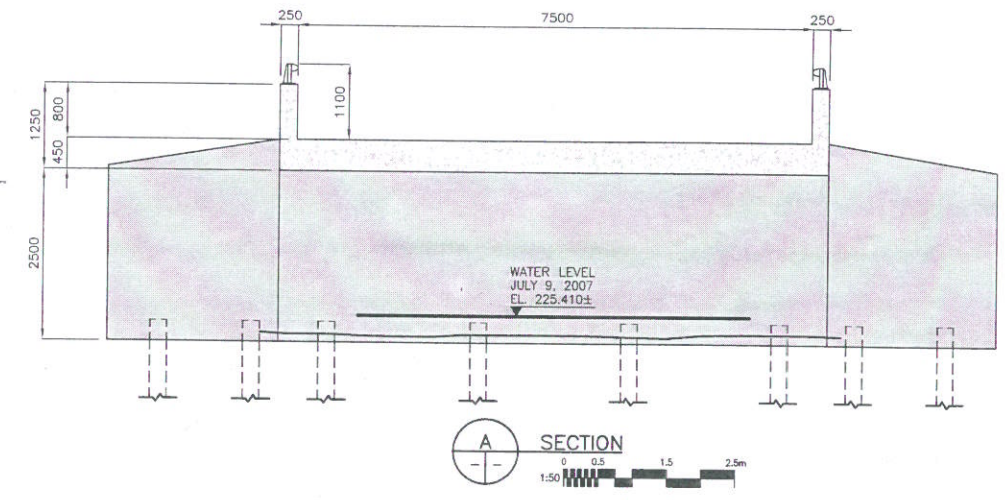
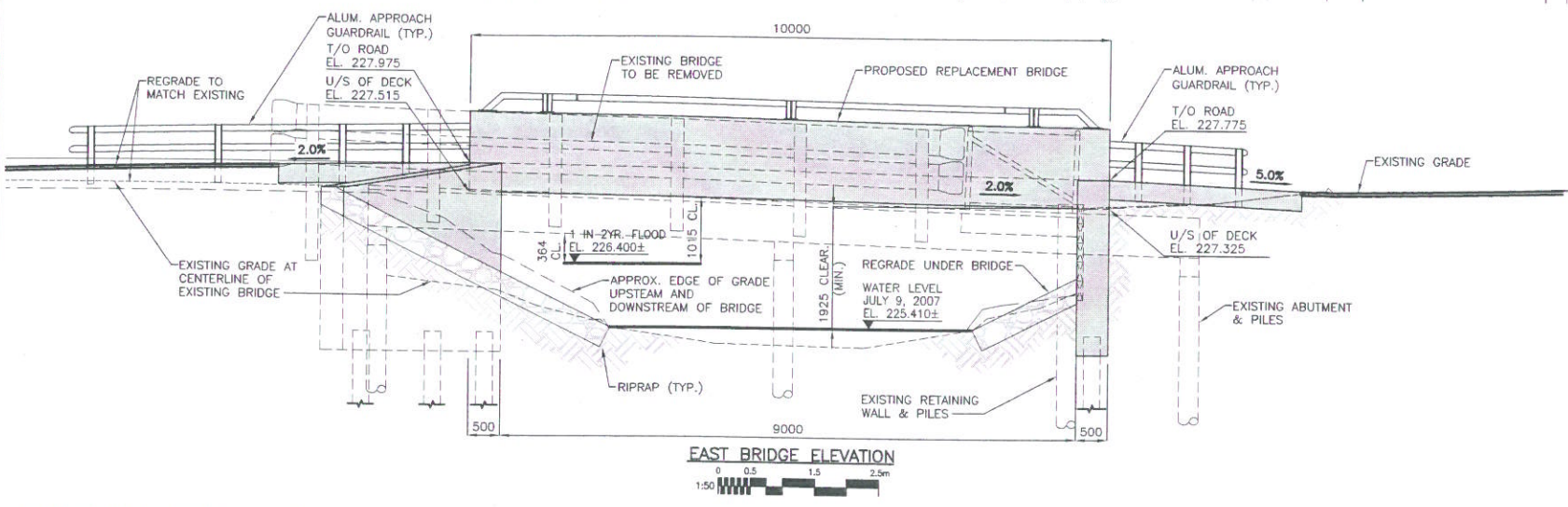
Canada





**BRIDGE SITE**  
 LOT 12 & 13 IN RL 43  
 PARISH OF KILDONAN

**KEY PLAN**



**SECTION A-A**  
 1:50

Deposited in the \_\_\_\_\_ Land Titles Office  
 this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_  
 as Railway Deposit No. \_\_\_\_\_  
 For District Registrar  
 Registration No. \_\_\_\_\_

**APEGM**  
 Certificate of Authorization  
 Stantec Consulting Ltd.  
 No. 1301 Expiry: April 30, 2008

LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.
NO.	REVISIONS	DATE
1	ISSUED FOR REGULATORY APPROVAL	07.08.17 K.S.A.
	DATE	DATE
	JULY 31, 2007	

**Stantec Consulting Ltd.**  
 905 Waverley Street, Winnipeg, Manitoba  
 Tel 204-489-5900 Fax 204-453-9012

DESIGNED BY: K.S.A.	CHECKED BY: G.W.M.
DRAWN BY: J.M.B.	APPROVED BY: K.S.A.
HOR. SCALE: AS SHOWN	AUTHORIZED BY: _____ DATE _____
VERTICAL: _____	B. EBENSPANER, P. ENG. BRIDGE PROJECTS ENGINEER

ENGINEER'S SEAL  
 CONSULTANT DRAWING NO.  
 31410-c-101

**THE CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT  
**Winnipeg ENGINEERING DIVISION**

**BUNN'S CREEK BRIDGE**  
 REPLACEMENT ACCESS DRIVEWAY  
 TO 330/334 BONNER AVENUE

GENERAL ARRANGEMENT

SHEET 1 OF 1  
 CAD FILE DRAWING NUMBER 31410c-101.dwg  
 CITY DRAWING NUMBER \_\_\_\_\_

V:\1171\1171.dwg (1171.dwg) (2007/08/17 10:10:10 AM) - regulatory approval 31410c-101.dwg  
 2007-12-22 02:02:00 By: jmorimoto