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APPENDIX 'B' DFO Submission and Letter of Advice



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

December 24, 2009 File:

Department of Fisheries and Oceans 501 University Crescent Winnipeg MB R3T 2N6

Attention:

Todd Schwartz

Dear:

Reference:

Route 90 Extension Project Culvert Extension at Lot 16 Drain

1. Introduction

Originally the proposed Route 90 Extension Project was intended to be part of the planned Waverley West Arterial Road system and involved a cost share arrangement between the developer and the City of Winnipeg. The project involves several components, including construction of two interchanges, road widening, the realignment of existing roads, and other related road work along Waverley Street and Kenaston Boulevard in Winnipeg. The Project was expected to be constructed over two years beginning in 2010. With the recently announced Building Canada Fund - Major Infrastructure Component, this project may become subject to the funding structure of that program with a break down in funding as follows: 1/3 Federal Government, 1/3 Provincial Government and 1/3 City of Winnipeg. While the Building Canada Project boundaries are considerably more broad based and includes the extension of Kenaston Boulevard south to PTH 100, this submission deals specifically with the construction of a culvert extension at the Lot 16 Drain located at the existing transition between Bishop Grandin Boulevard and Kenaston Boulevard. Extension of this culvert is required to facilitate the construction of an intersection of Bishop Grandin Boulevard and Kenaston Boulevard allowing Kenaston Boulevard to extend south into the Waverley West lands and beyond

This submission is prepared and submitted on behalf of the Manitoba Housing Renewal Corporation; contact person is Jim Gallagher MCIP 2702-83 Garry Street Winnipeg, MB R3C 4J9. The end owner will be the City of Winnipeg; contact person is Michelle Harms, P.Eng. 106-1155 Pacific Ave. Winnipeg, MB R3E 3P1. The City of Winnipeg and the Manitoba Housing Renewal Corporation have a development agreement in place as related to this Project. requiring the developer to construct this intersection prior to the year 2011.

Project Need

Kenaston Boulevard has been identified as a Strategic and Economic Route for the City of Winnipeg and the Provincial Capital Region. It is also considered to be a key link in the Inner City Ring Road system proposed by the Mayor's Trade Council Report, which establishes a strategy for the future growth and economic development of Winnipeg as a major inland port and international

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trade hub. It has become critical that an innovative and cost effective solution to projected traffic congestion be found for the important intersection of Bishop Grandin and Kenaston Boulevards. The intra-city commuter traffic volumes at this intersection, especially the south to east and west to north movements, are among the highest in the city. The projected additional traffic from the Waverley West development that will utilize this intersection reinforces the need to develop a long term solution at this location.

As the initial phase of the project, a new two lane road will extend north from the first collector street, North Town Road, in the Waverley West Development to Bishop Grandin Boulevard. The two new lane road will be an extension of Kenaston Boulevard and tee into Bishop Grandin. The simple tee intersection will be signalized.

A new two lane road will be built to the north of and paralleling the existing lanes along Bishop Grandin Boulevard allowing eastbound to north bound traffic to flow freely. The new two lane road to the north will connect into the existing road north of the existing culvert on the Lot 16 drain. Lot 16 drain culvert must be extended to accommodate the construction of the new two lane road to the north of the existing north bound lanes of Bishop Grandin Boulevard.

3. Project Description - Proposed Lot 16 Drain Culvert Extension

The proposed culvert extension will be proceeding to Tender mid January 2010 with construction of the proposed culvert extension to commence in early February 2010 and be completed by March 15, 2010. This is the first, critical step in the construction of the subsequent works such as the land drainage and sewers and the proposed roadways. Completion of the culvert extension within the winter months is critical to the overall project schedule.

The proposed culvert extension will be a 20m long cast-in-place concrete culvert having interior dimensions of 3.0x3.0m to match the existing culvert. The overall dimensions of the existing pipe, including grade will be matched by they proposed culvert extension. The headwall and wingwall geometries have been altered for the proposed culvert extension, as compared to the existing culvert, to address the revised proximity of the outlet to the Lot 16 Drain.

The existing headwall, wingwalls and apron are to be removed. To accomplish this, temporary shoring may be utilized to the north of the outlet of the culvert. The temporary shoring will allow for the dewatering of the Site, if the water is not frozen to the bottom of the drain at the time of construction. Should the drain be frozen through to the bottom of the drain the temporary shoring would not be installed. The Contractor will have the responsibility to design and submit for review a temporary shoring and dewatering plan. It is expected at this time, the temporary shoring, if required, will be constructed from steel sheet piling which will be removed upon the completion of the work. The existing concrete headwall, wingwalls and apron will be demolished and the ruble removed from the site and disposed of at an environmentally acceptable location/facility. As construction will be completed in the winter, as well as in the dry, the Contractor will be able to readily collect the rubble and thus it will not enter the drain.

Once the noted demolition of the existing culvert is complete the proposed culvert extension will then be constructed. The temporary shoring, if installed, would remain in place until the

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construction of the proposed culvert is complete. The works included to complete the construction of the proposed culvert extension are the construction of a 75mm thick concrete working slab, use of untreated forms, placement of steel reinforcing and concrete, regarding of the Site, and riprap placement.

The embankments will be shaped locally around the headwall and wingwalls to provide a stable slope and to suit riprap placement. The embankments will be protected by a 1000mm thick layer of 250 to 650mm rock with 50% of the rock being at least 500mm. The riprap will be nominal field stone or quarried rock and will be clean and free of fines prior to placing. The embankments are not to be reshaped below the water level as the proposed grading is to match the elevation of the existing embankments at the waterline. The proposed extent of the riprap is shown on the attached site plan.

It should be noted that Stantec anticipates at this time to have a Site Plan and General Arrangement drawings completed early in the week of January 4, 2010. These drawings, once completed, will be submitted in addition to the drawings attached to this document, for review. The attached drawings (note that these are scans of larger drawings and the notes scale is no longer valid) are intended to demonstrate the intent and general limits of the project.

As it is Stantec's understanding that the existing culvert grades and invert elevations are functioning to ensure the culvert is not perched at low flows, the proposed culvert will match the existing culvert grade.

As apart of these works a retaining wall is to be constructed to the west of the culvert. This retaining wall, approximately 25m long, will be constructed of cast-in-place concrete but is not anticipated to be within the Lot 16 Drain waters at any time during construction. The slopes between the retaining wall and the drain will be covered by riprap details, as previously discussed, to ensure the long term stability of the retaining wall.

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, if available at that time.

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 the construction areas if the creek thaws (this is not
 anticipated to be an issue as construction should be completed during the winter months).
- Placement of coconut or straw blankets on all exposed slopes upon the completion of final grading.
- Re-vegetation of all disrupted areas of the embankment.
- 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.

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- Demolition materials will not be allowed to enter Lot 16 Drain.
- 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 it is 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 to match the extent of the existing riprap.
- The riprap will be clean fieldstone or quarried rock free of fines.
- Construction machinery may not be refueled or serviced within 100m adjacent to 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 the culvert construction shall be placed where it is not likely to erode or be washed into the waterway.

Please contact the undersigned if you require further information, clarification or have comments.

Sincerely,

STANTEC CONSULTING LTD.

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

Tel: (204) 488-5743 Fax: (204) 453-9012 kevin.amy@stantec.com

Attachment:

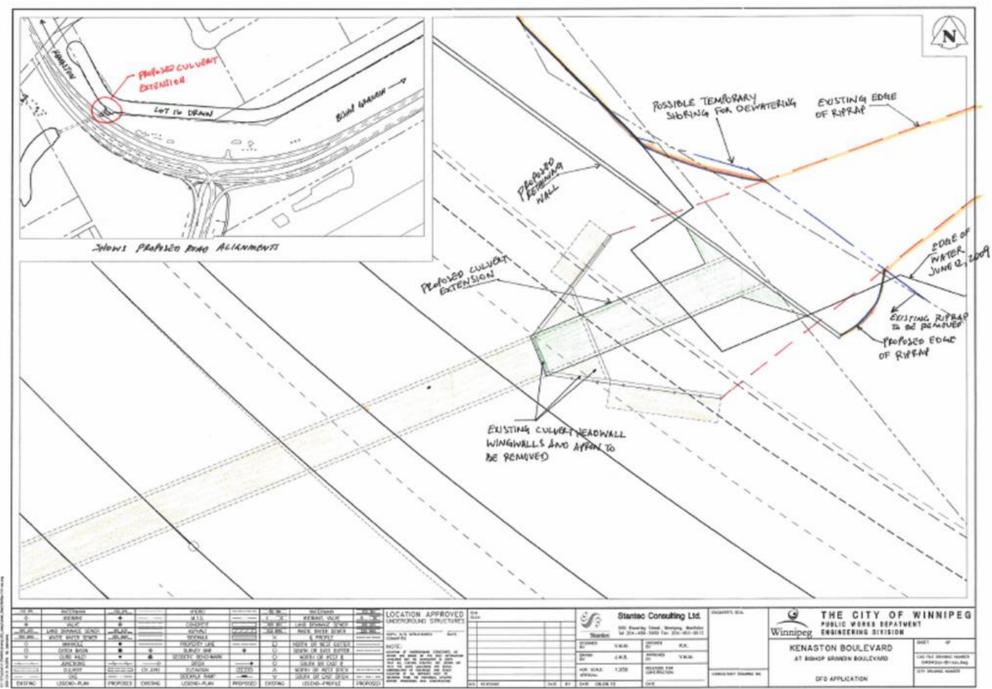
Proposed Site Plan
Existing Culvert Drawings
Power Point Presentation

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Fisheries and Oceans Pêches et Océans Canada Canada

Freshwater Institute

Prairies Area, Manitoba District 501 University Crescent Winnipeg, Manitoba R3T 2N6 (204) 983-4231 Institut des eaux douces Secteur des Prairies, District du Manitoba 501 University Crescent Winnipeg, (Manitoba) R3T 2N6 (204) 983-4231

January 4, 2010

Your file Votre référence

Our file Notre référence WI-09-3720

Michelle Harms City of Winnipeg, Public Works 106-1155 Pacific Ave Winnipeg, MB R3E 3P1

Dear Mrs. Harms:

Subject: Proposal not likely to result in impacts to fish and fish habitat.

Fisheries and Oceans Canada - Fish Habitat Management Program (DFO) received your proposal from Stantec Consulting Ltd. (Kevin Amy) on December 24, 2009 for the extension of a culvert on Lot 16 Drain at Kenaston Boulevard. Please refer to the file number and title below:

DFO File No.: **WI-09-3720**

Title: Lot 16 Drain culvert extension at Route 90 (Kenaston

Boulevard), in Winnipeg, Manitoba

Your proposal has been reviewed to determine whether it is likely to result in impacts to fish and fish habitat which are prohibited by the habitat protection provisions of the *Fisheries Act* or those prohibitions of the *Species at Risk Act* that apply to aquatic species.*

Our review consisted of:

Information provided by email from Stantec Consulting on December 24, 2009 including a
project description, design drawings, photographs, map location and a description of best
management practices to be followed during construction.

We understand that you propose to:

- Extend the existing box culver on Lot 16 Drain at Kenaston Boulevard by 20 m in length to accommodate the construction of an additional lane of traffic.
- Construction will be completed by March 31, 2010
- This project is funded in part through the Federal Building Canada Fund infrastructure program.

No fish species which are currently listed as species at risk in Canada are believed to use this area. If you would like more information about fish species at risk please visit the *Species at Risk Act* Public registry at www.sararegistry.gc.ca.

^{*}Those sections most relevant to the review of development proposals include 20, 22, 32 and 35 of the *Fisheries Act* and sections 32, 33 and 58 of the *Species at Risk Act*. For more information please visit www.dfo-mpo.gc.ca.



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Provided that your plans are implemented as described DFO has concluded that your proposal is not likely to result in impacts to fish and fish habitat.

You will not need to obtain a formal approval from DFO in order to proceed with your proposal.

Please notify this office at least 10 days before starting the work. A copy of this letter should be kept on site while the work is in progress.

If the plans have changed or if the description of your proposal is incomplete you should contact this office to determine if the advice in this letter still applies.

Please be advised that any impacts to fish and fish habitat which result from a failure to implement this proposal as described could lead to corrective action such as enforcement.

If you have any questions please contact Todd Schwartz at our Winnipeg office at (204) 983-4231, by fax at (204) 984-2402, or by email at <u>Todd.Schwartz@dfo-mpo.gc.ca</u>.

Yours sincerely,

Todd Schwartz

Fish Habitat Biologist

Prairies Area, Winnipeg Office

cc: Winnipeg Distribution

J. Hunt (MB Water Stewardship, Winnipeg)

G. Klein (MB Water Stewardship, Gimli)

Jim Gallagher (Manitoba Housing Renewal Corporation, Winnipeg)

Elizabeth Newgard (Transport Canada, Ottawa)

Kevin Amy (Stantec Consulting Ltd., Winnipeg)