COMMENTS ON:

"City of Winnipeg - Ness Avenue Bridge Construction at Sturgeon Creek Environment Act Proposal File 5790.00"

Prepared by:

Helios Hernandez, M. Sc. and Marilyn J. Hernandez, MLS

Winnipeg, Manitoba

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INTRODUCTION

We have lived on Valley View Drive since May 1975. We back onto the east side of Sturgeon Creek, just north of Ness Avenue, where we can see the project area from our back yard. One of us has over 45 years' experience as a plant ecologist and impact assessment specialist, and the other has been involved in libraries and information research for over 44 years.

The comments in this submission to the "City of Winnipeg – Ness Avenue Bridge Construction at Sturgeon Creek – File 5790.00" (referred to subsequently as the "the Bridge Project") are drawn from both our personal experience as long-time area residents, and our respective educational and professional expertise. They are in response to the "Notice of Environment Act Proposal" printed on page A13 of the Saturday August 15, 2015 print edition of the Winnipeg Free Press and posted on the Public Registry File 5790.00 (http://www.gov.mb.ca/conservation/eal/registries/5790ness/): "Anyone likely to be affected by the above operation and who wishes to make a representation either for or against the proposal should contact the Department, in writing or by E-mail (bruce.webb@gov.mb.ca), not later than SEPTEMBER 14, 2015."

NESS BRIDGE PROJECT COMMENTS

We have reviewed the City of Winnipeg application for an environment Act Licence "Ness Avenue Crossing Replacement at Sturgeon Creek, Environmental Assessment Report July 24, 2015 http://www.gov.mb.ca/conservation/eal/registries/5790ness/eap.pdf (hereafter referred to as the Bridge Project Report).

In principle, we do not oppose the proposal to replace the existing 2-cell concrete box culvert on Ness Avenue at Sturgeon Creek with an elevated bridge. However, as detailed in the following sections of our submission, we have several concerns with the accuracy and adequacy of some of the information provided in the report and its comprehensiveness, especially the extent to which the natural environment and cumulative impacts are addressed.

The Bridge Project Report may meet the letter of the law, but it lacks thoroughness in places and it seems to have a generic, "cookie-cutter, cut-and-paste" feel to it based on a standard template document. For example, Table E.1.1 on page ii of the Bridge Report Executive Summary is titled:" *Table E.1.1 Summary of the Environmental Impact Assessment for the Remediation of the Former Dominion Bridge Operations Yard during Construction* (emphasis ours). The contents of this table, however, appear to be specific to the Ness Bridge project.

Possible Project Changes: The project schedule appears to have changed from that applied-for in the Bridge Project Report. On September 9, 2015 the City of Winnipeg posted a "Project Update" http://www.winnipeg.ca/publicworks/MajorProjects/NessAtSturgeonCreekCulvertReplacement/default.asp (Accessed Sept 10, 2015), as a result of the September 4, 2015 "sink hole" at the southwest corner of the Bridge project area (see Appendix 1 for a copy of the update).

Figure 1.2, the original project schedule for the Bridge Project Report, shows that, although some project related activities were scheduled to start in October, project mobilization - - and presumably

closure of Ness Avenue - - would begin November 18, 2015 and that Ness Avenue would reopen to traffic September 28, 2016.

The September 9 City Bridge Project Update states: "Design of the new bridge is in its final stages and construction is slated to commence in late December/early January and will extend to October 2016".

On September 10, 2015 we contacted Mr. Bruce Webb, the designated contact person in Environmental Approvals for the Ness Bridge Project. He said: "So far, the City has not contacted me about any changes to the crossing replacement project. So, as far as I'm concerned, the project remains as it was proposed. They can file an alteration at any time before a licence is issued and we will consider whether an alteration is major or minor (i.e. with or without significant environmental effects)."

As a result, in the following comments we will try to address, where appropriate, both what is applied for, and the possible implications of such project scheduling changes.

Comments on Culvert History and Flooding History

Culvert History: The Bridge Project Report Executive Summary (page i) states: "The **existing** (emphasis ours) culvert on Ness Avenue over Sturgeon Creek, constructed in 1962 is a 30.82 m long two-cell concrete box culvert." Similar information is also given on page 1 in the Report's Introduction and on page 9 "Section 2.1.1 Existing Site Conditions".

These statements are partly incorrect. A more accurate and comprehensive history of the evolution of the culvert system should have been provided in the Ness Bridge Project Report. The culvert predates our arrival, but we do not question that Ness Avenue was extended west across Sturgeon Creek in 1962 since our house was surveyed and built in 1966-1967. When we moved to Valley View Drive in May 1975, the culvert system consisted of twin metal culverts. These culverts were damaged in some floods over the years, and they were eventually replaced with the current concrete box culvert. We do not have a record of when that occurred. The City of Winnipeg should have such basic information in the City files for the culvert.

Flooding History: The Bridge Project Report Executive summary (page i) states: "In addition, the crossing periodically experiences overflow during high water events which has damaged the roadway and culvert." The Report Introduction (page 1) also adds: "The culvert flow capacity has proven to be insufficient with Sturgeon Creek regularly overtopping Ness Avenue during spring freshet and high water events. The high flows force road closures, damage the culvert and embankments, and cause channel scour and bank instability downstream." Section 2.1.1 Existing Site Conditions (page 9) adds: "The existing structure is in poor condition despite several rehabilitation programs undertaken between 1979 and 1996 for regular maintenance and other repairs following flood damage."

We concur with this information. During the 40 years we have lived here, Ness Avenue was closed due to flooding some 10-12 times, and the water was high almost every spring. The flood events were relatively well-spaced out in the first couple of decades, and have been more frequent in the 2000s. Unfortunately, we have not kept a detailed history. The Bridge Project Report should have provided a list of the flood events since 1962 that resulted in road closures, giving their dates of occurrence and the duration of each road closure. This basic information should be available in the City of Winnipeg files for the project.

Comments on Terrestrial Environment Section of Report

Section 3.2 of the Bridge Project Report (pages 21-24) describes the Terrestrial Environment along Sturgeon Creek. This section is woefully inadequate. Specific examples are discussed in the following paragraphs.

The Bridge Project Report generally fails to provide the bare minimum of information that one would expect in any application for an Environment Act licence for a development project. The City of Winnipeg should be required to provide information and analysis, identical to what is provided in development applications for mines, roads, hydro lines, etc. The Bridge Report also fails to use all of the information available on the City of Winnipeg Naturalist Services website http://winnipeg.ca/publicworks/Naturalist/ns/.

Based on the recent history of flooding, erosion and instability on the southwest bank of Sturgeon Creek (Report page 1, Introduction), it is apparent that The City of Winnipeg has evaluated, for several years, various engineering options that led to the decision to replace the existing box culvert with a bridge.

At the same time as it was conducting engineering studies, the City should have undertaken concurrent biological studies to get a detailed and accurate description of the natural environment to be affected by the project. The City of Winnipeg's failure to do so should be severely reprimanded. In future, The City of Winnipeg must be required to do more than pay lip service to environmental laws, regulations and responsibilities. The City expects citizens to adhere to the rules and obey the law; The City should be required to do the same.

Vegetation and Habitat: Section 3.2.1 (pages 21-23) is the only part of the Terrestrial Environment that can be considered barely acceptable. It concisely, yet adequately, summarises the current state of the area's vegetation and habitat based on the City of Winnipeg Naturalist Services periodic vegetation surveys. We agree that the area is a low-grade disturbed habitat with minimal river bottom forest characteristics.

Wildlife: Page 23 deals with Wildlife in one paragraph, consisting of 4 sentences that is 9 lines long. No wildlife data gathered by City staff or environmental consultants are provided. Instead, the Report states: "Community groups have reported observations of a number of wildlife species within the greenway." This is totally unacceptable. City staff or consultants should have conducted actual wildlife surveys along Sturgeon Creek. The City Naturalists Services has a website on flora and fauna http://winnipeg.ca/publicworks/naturalist/ns/ff/animal_lists.asp. However, it was last updated in 2008.

<u>Mammals</u>

Only 10 mammal species are listed in the second sentence that deals with mammals: "Mammals that can occur in Winnipeg urban green spaces include chipmunks (Tamias spp.), eastern cottontail rabbit (Sylvilagus floridanus), eastern gray squirrel (Sciurus carolinensis), American red squirrel (Tamiasciurus hudsonicus), ground squirrels (Spermophilus spp.), meadow voles (Microtus pennsylvanicus), raccoon (Procyon lotor), striped skunk (Mephitis mephitis), muskrat (Ondatra zibethicus), and red fox (Vulpes vulpes)." The most glaring omission is the absence of beaver from the list, yet the City has a web page on beavers: http://winnipeg.ca/publicworks/naturalist/NS/ff/beaver.asp.

Over the 40 years we have lived here, we have seen beaver fairly often, and we experienced personally the effects of beaver activity, felling some unprotected hybrid poplar trees at our western property line along Sturgeon Creek, (see photos below) mostly during high water spring flood events, some of which also resulted in the closing of Ness Avenue. We have photos from 1993, 1996, 2009, 2011 and 2013. We have also seen white-tailed deer on occasion.





Beaver feeding on poplar, April 14, 2009.

Beaver, April 10, 2011.

Amphibians

The third sentence in the Terrestrial Environment Section deals with amphibians: "Amphibians that could reasonably be expected to occur along the greenway and make use of permanent water cover include Northern Leopard Frog (Lithobates pipiens), Wood Frog (Lithobates sylvaticus), and Boreal Chorus Frog (Pseudacris maculata) (NatureNorth 2015) ". The Nature North 2015 interactive public database, https://www.google.com/fusiontables/DataSource?snapid=S435635HspS, only has one record for Sturgeon Creek, the wood frog.

Birds

The last sentence deals with birds: "Migratory and resident birds could also be expected to make use of the greenway." It lacks any detail. More information should have been provided on the diversity of bird species we see and hear here every year. The City of Winnipeg Naturalists Services website, http://winnipeg.ca/publicworks/naturalist/ns/ff/animal_lists.asp, contains a few bird lists, but none for Sturgeon Creek. It was last updated in 2008.

At the very least, the Report should have stated that every year geese, red-wing blackbird and mallard families arrive along Sturgeon Creek in early spring as the creek rises, and raise their young. They can be seen throughout the summer. At flood stage we also often see wood ducks. In the fall, geese gather here in large numbers before heading south by early November. Below are photos we have taken in the past 6 years of some of the birds seen along the creek or in our front and back yard at various times of the year.



Geese, September 6, 2010



April 5, 2012 Front lawn living "ornaments"



Downy Woodpecker on north fence, June 9, 2011

Yellow-shafted Flicker, April 25, 2011



Yellowthroat & Yellow Warbler, May 20, 2009

Great Blue Heron & Mallards, September 20, 2010

Other Wildlife

The Bridge Project Report also lacks any mention of other wildlife, such as insects. This is another major shortcoming, especially since the City of Winnipeg Naturalists Services website has a list of dragonflies for Sturgeon Creek. http://winnipeg.ca/publicworks/naturalist/ns/ff/DragonflySampling/1.html

Terrestrial Species of Concern: Section 3.2.3 (pages 23-24) discusses terrestrial species of concern. The discussion acknowledges the existence both the provincial *Endangered Species and Ecosystems Act* and federal *Species at Risk Act*, and addresses the species listed under both acts that would most likely be of concern. However, given the lack of detail and the general lack of site-specific biological survey data along Sturgeon Creek provided in the Report, this discussion is barely acceptable.

Comments on Aquatic Environment Section of Report

Section 3.3 of the Bridge Project Report (Pages 24-31) describes the Aquatic Environment of Sturgeon Creek. This section is satisfactory, since numerous agencies, including the City of Winnipeg, have conducted studies and routinely gather data on hydrology (Water Survey of Canada, Manitoba Water Stewardship), water quality (City of Winnipeg, Water and Waste) and fish and fish habitat (Manitoba Fisheries Branch, City of Winnipeg Naturalists Services reports

http://www.winnipeg.ca/publicworks/naturalist/ns/ff/Animal_map.asp, published literature). The discussion on Aquatic Species of Concern Page 31, is also adequate.

Comments on Public Engagement Section of the Report

Section 1.6 of the Bridge Project Report (Pages 7-8) describes the public engagement activities that were carried out for the Bridge Project. We have no concerns with how public engagement was handled by the City of Winnipeg for this project. A notice advising that a public information session was scheduled for January 13, 2015 was dropped off in our mailbox. It contained contact information.

Traffic Concerns: Since we knew we could not attend the public information session, we contacted the person designated as a contact for the project who provided us with copies of the display boards and comments form for the public information session.

http://www.winnipeg.ca/publicworks/MajorProjects/NessAtSturgeonCreekCulvertReplacement/NessAtSturgeon-OpenHouse-DISPLAYBOARDS.pdf. We submitted our comments and concerns by email.

At the time, our major concern with the Project was with how traffic - especially transit - would be rerouted during the entire time that Ness Avenue would be closed to through traffic. In April 2011, Ness Avenue was closed for several days during a food event. Buses and other traffic were rerouted in both directions along Valley View Drive. Valley View Drive has no sidewalks, and our houses shook as traffic, especially buses and other heavy vehicles, barreled along the street. There was no reduction in speed limits, nor were any formal signs put up to address safety concerns of the residents.

After reviewing the information provided in the display boards, we were pleased to see that the transit reroute plan called for transit reroute from Ness Avenue, north/south along Sturgeon Road to Silver Avenue, to Hamilton Avenue, to Vimy Road northbound and Parkhill Street southbound (Appendix 2).

Section 1.6 (Page 8) of the Bridge Project Report concluded with the statement: *Responses to concerns will be posted to a "Frequently Asked Questions" page on the City's Project website.* We have checked the website and, to date, have been unable to find a "frequently asked questions" page. The only update was on September 9, 2015 as a result of the September 7 "sink hole" event (Appendix 1).

Linkage of Ness Bridge Project to Sturgeon Road Roundabout

Transit Plan Reroute: Our comfort with the transit reroute plan disappeared in late August, when we became aware of the start of construction of the Sturgeon Road Roundabout project and especially the closure of Silver Avenue from August 23 to December. (Appendix 3). On August 30, we immediately contacted Councillors Dobson and Gillingham, since Sturgeon Road is their joint Ward boundary, asking about what was being planned to handle transit reroutes, since Silver would be closed when the construction of the Ness Bridge project was scheduled for October/November.

The sink hole on September 7 exacerbated the problem by forcing the closure of Ness Avenue. Through the Labour Day weekend, buses used Valley View Drive. But transit was rerouted south to Portage Avenue on September 8, and city crews put up several "Road Closed, Local Access Only" signs on Ness Avenue east and west of Sturgeon Creek.

The September 9 Bridge Project Update (Appendix 1) indicates that project construction is now scheduled to start in late December 2015 or early January 2016, presumably on the basis that Silver Avenue will then be available for the original Bridge Project transit reroute plan to be implemented.

Additional Wrinkle With Sturgeon Road Roundabout: On September 7, 2015, we sent an email to The Director of Environmental Approvals, with copies to Councillors Dobson and Gillingham, asking that the Roundabout project be reviewed. Our request was based on need for the proponent to obtain licencing under the Environment Act, on the basis of the damage that already had been done to tallgrass prairie, an ecosystem that was designated as endangered May 20, 2015 (see Province of Manitoba Press release announcement of tallgrass prairie as endangered ecosystem,

http://m.news.gov.mb.ca/news/?item=35211&posted=2015-06-16W and the Winnipeg Free Press story, http://www.winnipegfreepress.com/local/protection-for-ecosystems-bats-307799801.html.)

We have also requested that work stop on the Roundabout Project until the licencing process is completed, but work has not stopped. We have yet to receive a reply to our email.

A public information session on the Roundabout Project is planned for September 14, 2015 at 7:00 p.m. http://www.winnipeg.ca/publicworks/MajorProjects/sturgeonRoadRoundabout/SturgeonRoundaboutInfoSessionBOARDS.pdf. The Information Session materials (Appendix 3) refer to "grassland", not tallgrass prairie.

Recommendations: Given the uncertainty of both the start of Ness Bridge Project construction and the completion of the Sturgeon Road Roundabout, we request that City of Winnipeg provide a definitive transit closure plan and/or backup closure plan, and that these transit reroute plans be made a condition of any Environment Act Licence issued for the Ness Bridge Project.

If anything comes out of the Roundabout meeting on September 14 that affects our comments on the Ness Bridge Project, we reserve the right to submit additional concerns.

Comments on Environmental Assessment Approach Section of the Report

The Bridge Project Report addresses various aspects of the environmental assessment carried out for the project, including the Executive Summary, and particularly in Section 4. Overall, the project focusses on the immediate effects around the bridge and project area, with minimal examination of effects on surrounding areas, such as from traffic and transit reroutes. That is understandable, but the report would have benefitted from a more explicit and detailed acknowledgement that the project will affect nearby areas. Some examples follow.

Also, as stated above, The City of Winnipeg needs to provide a <u>definitive</u> start date for closure of Ness Avenue, and a transit reroute plan.

Noise and Vibration: Ness Bridge Project Section 3.1.5 (page 20), Table 4.5 Environmental Assessment results (page 42) and Section 4.2.1.2 (page 46) address noise and vibration. They only mention effects on Ness Avenue, and not on the surrounding streets where transit and traffic is rerouted. The omission of effects outside the immediate bridge site is a major shortcoming.

Climate Change: Section 4.2.5.1 of the Bridge Project report discusses the effects of climate change on the Bridge Project, and concludes that going from a culvert to a bridge will eliminate the scouring effects of the culvert, provide additional erosion protection, and provide increased flow capacity for an increase in more severe events. Overall, this conclusion may be valid, but there still are some details left out. The report uses temperature and precipitation data for the 30-year period 1978-2007 (report table 3.1, page 15), but rainfall intensity data only are available for the 30-year period 1967-1996 (report Table 3.3, page 16). Presumably, these data were used in designing the bridge's flow capacity. It has been standard industry practice to use Environment Canada 30-year "normals" in impact assessment reports submitted for licensing approval. Given the increase in extreme events in recent years, relying on such old data for rainfall intensity, and a mixture of relatively old and relatively recent data for precipitation, may lead one to question whether these data are adequate for estimating the severity of future climatic events affecting the Ness Bridge catchment area.

Comments on Cumulative Effects Section of the Report

Ness Bridge Project Section 4.2.6 (page 51) addresses cumulative effects of the Project. For the most part, the discussion is project-specific. However, there is insufficient detail provided. The Bridge Project Report fails to adequately consider and present information on alternatives, if events arose between the completion of the Report and the start of construction, as actually happened with the "sink hole" event Friday September 4, 2015.

Sturgeon Road Bridge Over Sturgeon Creek South of Grace Hospital at Portage Avenue: The Bridge Report fails to address the implications of the reconstruction of the bridge on Sturgeon Road over Sturgeon Creek at Portage Avenue. This bridge was rebuilt and opened a couple of years ago. To our surprise, this summer the western span is being rebuilt. So far as we are aware, the City has not given any explanation as to why reconstruction was required. Based on our travel over the new bridge, it appeared to wear down very quickly, leading one to conclude that something happened to the concrete (possibly improperly mixed or cured). The Ness Bridge Report should have addressed the <u>cumulative</u> effects of virtually continuous construction activity on the Sturgeon Creek environment, from the initial Sturgeon Road bridge near Portage Avenue, its subsequent reconstruction, and now the new Ness Avenue bridge, as well as the effects of the simultaneous activity from both the Sturgeon Road Bridge reconstruction near Portage Avenue and the new Ness Bridge project.

The Sturgeon Road Bridge reconstruction project near Portage Avenue has inconvenienced residents and exacerbated the use of Sturgeon Road between Ness and Portage Avenue as a transit reroute. This should have been addressed in the Ness Bridge report since the proponent should have been aware of the timing of the Sturgeon Creek Bridge Reconstruction Project.

This lack of foresight also leads us to question whether the new Ness Avenue Bridge will also need immediate reconstruction when it is built. There have been too many instances of The City of Winnipeg having to "fix" new infrastructure, which has led many citizens to lose confidence in the Planning Department.

Sturgeon Road Roundabout: The Sturgeon Road Roundabout (Appendix 3) was being planned at the same time as planning of the Ness Bridge project was proceeding, but there does not seem to have been any recognition, in the Ness Bridge Project Report, that the timing of the Roundabout Project had implications for the Ness Avenue Bridge Project, especially the transit reroute plan.

CONCLUSIONS & RECOMMENDATIONS

Overall we do not oppose the construction of the Ness Bridge project. However, a review of the Ness Bridge Project Report, and the information provided recently by the City of Winnipeg, makes it clear that the Report is largely a cursory, cut-and paste submission using a standard template, intended to meet the letter of *The Environment Act*, but not its spirit.

The City of Winnipeg has failed to provide even rudimentary natural environment data in its assessment, and even failed to cite data in its own Naturalists Services files. Accordingly, as a condition of licence, The City of Winnipeg must be required, in future, to ensure that it submits adequate project assessments to the Province of Manitoba for licencing, using all available information within its files and after conducting thoroughly-documented research.

More effort is needed to ensure that The City of Winnipeg keeps up to date on its natural environment baseline information. Although the flora sections of The City Naturalists Services website appears to be updated regularly, the pages dealing with animals largely are from 2008.

The City must be required to provide a real "cumulative impacts assessments", and demonstrate reasonable detailed planning. Other nearby projects, especially if they have implications for contingency plans, <u>must be developed jointly and not in isolation</u>. For the Ness Bridge Project, this would include the Sturgeon Road Roundabout Project and the Reconstruction Project of the Sturgeon Road Bridge over Sturgeon Creek near Portage Avenue.

As the Sturgeon Road Roundabout demonstrates concerning tallgrass prairie, The City of Winnipeg needs to ensure that it stays up to date on ever-changing environmental legislation, requirements and sensitivities, just as it requires citizens to meet City of Winnipeg By-law requirements.

APPENDIX 1 – City of Winnipeg Ness Bridge Project Update September 9, 2015

http://www.winnipeg.ca/publicworks/MajorProjects/NessAtSturgeonCreekCulvertReplacement/default.asp (Accessed Sept 10, 2015).

Ness Avenue at Sturgeon Creek Culvert Replacement

Project Update - September 9, 2015:

Land Drainage Sewer "Sink Hole" at the Southwest Corner of the Bridge

A land drainage sewer "sink hole" opened up on Friday, September 4, 2015, southwest of the bridge at one of the land drainage sewer outfalls, eroding the ground. The outfall pipes were in poor condition and are slated to be replaced as part of the upcoming bridge construction. A "sink hole" is created when a gap in the pipe allows rain water to enter and erode soils surrounding the pipe until the surface collapses. Ness Avenue between School Road and Valley View has been closed until repairs are completed. Repairs to restore conditions and open Ness Avenue will be undertaken by the Water and Waste Department and will be completed as quickly as possible.

Design and Construction Schedule

Design of the new bridge is in its final stages and construction is slated to commence in late December/early January and will extend to October 2016. Winter construction allows creek, embankment and bridge foundation works to be completed prior to the "no in-stream work period" in the spring and minimizes the construction schedule. Bridge superstructure concrete works, road works, and sewer and water renewals will be completed over the summer and early fall.

Project Description:

The Ness Avenue at Sturgeon Creek culvert is slated for replacement with a bridge in early 2016. The road which floods every few years will be raised over the creek and an underbridge path will be created. Plans are underway to undertake construction in the best way possible. A Public Information Session was held January 13, 2015.

The open house <u>display boards</u> show information about the project including:

- Traffic in the area;
- Potential detours;
- Access during construction;
- Transit detours;
- Project timelines;
- Environment impacts.

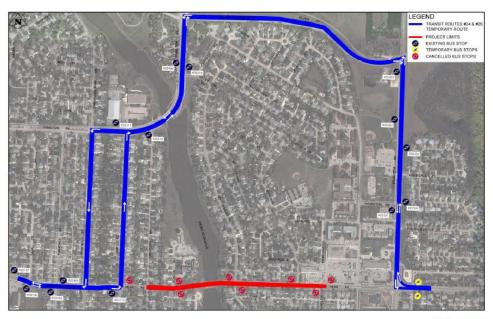


APPENDIX 2

Proposed Winnipeg Transit Detour Plan from January 13, 2015 Open House Display Boards for Ness Bridge Project



WINNIPEG TRANSIT DETOURS









Source: January 13, 2015 Open House Display Boards http://www.winnipeg.ca/publicworks/MajorProjects/NessAtSturgeonCreekCulvertReplacement/NessAtSturgeon-OpenHouse-DISPLAYBOARDS.pdf

Also appended to: Ness Avenue Crossing Replacement at Sturgeon Creek, Environmental Assessment Report July 24, 2015

http://www.gov.mb.ca/conservation/eal/registries/5790ness/eap.pdf

APPENDIX 3

Sturgeon Road Roundabout Project

http://www.winnipeg.ca/publicworks/MajorProjects/sturgeonRoadRoundabout/default.asp (Accessed Sept 10, 2015)

Sturgeon Road Roundabout

More information on the Sturgeon Road - Silver Avenue - Murray Park Road roundabout will be available at a public information meeting scheduled for 7:00 p.m. on September 14, 2015 at the Heritage Victoria Community Club.

What's happening?

The existing 4-way stop at the intersection of Sturgeon Road, Silver Ave and Murray Park Road is being replaced with a roundabout. The new roundabout will be constructed within the current City right-of-way.

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View a map of the roundabout and construction detour.

http://www.winnipeq.ca/publicworks/MajorProjects/sturgeonRoadRoundabout/SturgeonRoundaboutConstructionNoticeMap.pdf (Accessed Sep 10, 2015)

Why is an intersection improvement needed?

The existing 4-way stop intersection currently experiences traffic delays. The roundabout will improve traffic flow as well as the intersection geometry to better accommodate larger commercial vehicles.

Why a roundabout and not a traffic signal?

Reasons that a roundabout was chosen for this intersection include:

- Collision severity is generally higher for traffic signals as compared to roundabouts due to lower vehicle operating speeds for roundabouts.
- Roundabouts are more environmentally friendly; vehicle delays and stops are greater for traffic signals resulting in higher vehicle emissions and fuel consumption.
- Traffic signals result in higher noise levels associated with vehicles starting and stopping.
- Roundabouts offer opportunities for enhanced neighbourhood aesthetics and gateway features.

Are roundabouts safe?

According to the Office of Safety of the <u>U.S. Federal Highway Administration</u>, numerous traffic-related studies have shown significant safety improvements at intersections converted from conventional forms (4-way stop signs, traffic signals, etc.) to roundabouts. The physical shape of roundabouts eliminate crossing conflicts that are present at conventional intersections (e.g., T-bone conflicts), thus reducing the total number of potential conflict points and the most severe of those conflict points. The most comprehensive and recent study showed overall reductions of 35 per cent in total crashes and 76 per cent in injury crashes. Severe, incapacitating injuries and fatalities are rare, with one study reporting 89 per cent reduction in these types of crashes and another reporting 100 per cent reduction in fatalities.

<u>Other studies</u> have shown that pedestrian safety at roundabouts is increased. Roundabouts have advantages for pedestrians including the fact that crossings are shorter distances and less complex, traffic speeds are generally lower in a roundabout and drivers are more likely to see pedestrians.

Read more about roundabouts and how to drive, cycle and walk a roundabout here.

Will trucks and emergency vehicles be able to use the roundabout?

The design of the roundabout incorporates a "truck apron", which is a portion of the roundabout that allows large vehicles to track over it as they go through the roundabout. Large vehicle activity is always considered as part of the design of roundabouts and the truck apron is always incorporated to accommodate a variety of vehicle sizes-from regular passenger cars to single unit trucks to tractor semi-trailers.

What about the grassland area? Was an environmental assessment done for this project?

Formal environmental investigations were not conducted on this project as it is an existing route(s) in an existing right-of-way. Potential damage to the grasslands within the right-of-way have been managed through a per-square meter charge to the contractor for damage resulting from the detour construction (encouraging minimization of the total damage). As well, our Parks staff have preserved many of the plants and seeds prior to commencement of construction.

Was a potential increase in traffic due to new development and CentrePort considered when a roundabout was chosen?

The roundabout has been designed to accommodate traffic that has been estimated to be the result of development in the area occurring between now and 2031.

What will happen to the sidewalk and bike path?

The sidewalk and bike path will be fully restored as part of the project. An active transportation detour is also being constructed to accommodate pedestrians and cyclists during construction.

What is the timeline for completion?

Construction of a detour roadway will commence the week of August 10, 2015, allowing traffic to be maintained on Sturgeon Road throughout construction. Traffic will also be maintained on Murray Park Road. Roundabout construction is anticipated to occur between August and November 2015, and again in May to July 2016.

Questions?

Read more about City of Winnipeg Roundabouts.

Contact 311.