

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: WILFRED LEONARD ARNASON AND
DONNA-MAE ARNASON.
PROPOSAL NAME: JILL'S JUNCTION
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: WATER DEVELOPMENT
CLIENT FILE NO.: 5485.00

OVERVIEW:

On September 17, 2010, Manitoba Conservation received a proposal dated September 13, 2010 filed by Wilfred Leonard Arnason and Donna-Mae Arnason to construct a 183 metre (600 foot) boat channel to Willow Creek as part of a proposed residential subdivision. The proposed development is located in part of SW¼ 33-18-4E in the Rural Municipality of Gimli.

The proposal was advertised in the Interlake Spectator on Thursday, September 30, 2010. The proposal was placed in the Public Registries at the Millennium Public Library, the Manitoba Eco-Network, Conservation Library (Main) and the Rural Municipality of Gimli Municipal Office. The proposal was distributed to TAC on September 29, 2010, with the closing date for TAC and Public comments on November 1, 2010.

COMMENTS FROM THE PUBLIC:

No public comments were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

- Based on the responses to the survey, the application of the *Canadian Environmental Assessment Act* by a federal authority may be required for this project. I can confirm that the project information was shared with the Department of Fisheries and Oceans Canada (DFO), the Department of Indian and Northern Affairs, Transport Canada (TC), and Environment Canada (EC) as part of the federal coordination process.

- TC has determined that an Approval pursuant to the Navigable Waters Protection Act may be required for this project. DFO has indicated it requires more information before it can determine its interest in this project.

Disposition: Comments were provided to the proponent. Manitoba Conservation will continue to work cooperatively with federal agencies on this project.

Manitoba Conservation, Pollution Prevention Branch

- I have no significant concern on the proposal. However, the proposed project has a potential to generate PM (dust) during construction from earthmoving, material handling/transport and emissions from heavy equipment and vehicles.

Disposition: Comments were provided to the proponent.

Manitoba Water Stewardship

- Manitoba Water Stewardship recommends an *Environment Act* Licence to include the following requirements:
 - The Licencee shall comply with Manitoba Water Stewardship's Wetland Policy:
 - The net loss of semi-permanent or permanent wetlands shall not occur. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water long enough to develop special characteristics including persistent water, low-oxygen soils, and vegetation adapted to wetland conditions. These include but are not limited to swamps, sleughs, potholes, marshes, bogs and fens.
 - A proponent shall establish and maintain a buffer zone with at least a 15-metre width.
 - The Licencee is required to submit—prior to beginning construction of the proposed development—an application for a Water Rights Licence to Construct Water Control Works, including the submission of an engineered drainage plan, prepared by a Professional Engineer, registered to practice in the Province of Manitoba.
 - A contact person is Mr. Geoff Reimer C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Water Stewardship, Box 4558, Stonewall, Manitoba

R0C 2Z0, telephone: (204) 467-4450, email:
geoff.reimer@gov.mb.ca.

- In order to protect riparian areas, establish and maintain an undisturbed native vegetation area located upslope from the ordinary high water mark and adjacent to all waterbodies and waterways connected to the provincial surface water network and canals:
 - A 15-metre undisturbed native vegetation area is required for lands located adjacent to all canals;
 - A 30-metre undisturbed native vegetation area is required for lands located adjacent to all surface waters;
 - Permanent development is prohibited within an undisturbed vegetation area;
 - Permanent development is not allowed within the 30-metre Crown Reserve, located adjacent to all surface waters, pursuant to *The Crown Lands Act*.
 - The combined alteration—including new and existing structures—within this undisturbed native vegetation area is limited to a maximum of 25 % of the canal and/or shoreline length (for example: 25 metres per 100 metres of canal and/or shoreline length) of each lot for a boat house, path, dock, etc.; and,
 - Alteration within this undisturbed native vegetation area—including a dock and/or the removal of near shore or stream aquatic habitat—shall not occur unless an activity conforms to a Department of Fisheries and Oceans Canada Operational Statement or an activity is reviewed by the Department of Fisheries and Oceans Canada.
- An *Environment Act* Licence shall clearly identify the responsibility for the long term operation and maintenance of canals, including the following:
 - Dredging;
 - Fish kills;
 - Water quality monitoring and issues; and,
 - Boat velocity restrictions.
- The Licencee shall be required to develop and implement the following water quality monitoring program:

- Water quality monitoring shall be implemented before and after the removal of the earthen plug, establishing a baseline for water quality.
- The water quality samples shall be analyzed for the following parameters:
 - Total phosphorus
 - Dissolved phosphorus
 - Total Kjeldahl nitrogen
 - Nitrate/nitrite nitrogen
 - Ammonia
 - Total suspended solids
 - Conductivity
 - pH
 - turbidity
- Baseline sampling shall be conducted at a location near the earthen plug in Willow Creek. A sample shall be collected, mid channel, in a location where Brad's Bay would empty in to Willow Creek. Monthly samples should be collected from April to October. One sample shall be collected under ice over the winter months.
 - Post-removal of earthen plug (year one and year two): monthly sampling shall continue from April to October.
 - In addition to monthly sampling, every two weeks from mid-May to mid-September, water samples shall be collected from the deepest area in Brad's Bay furthest from the mouth of Willow Creek.
 - Water quality samples shall be analyzed for dissolved oxygen during this summer sampling. One sample should also be collected under ice over the winter months.
 - Post-removal of earthen plug (year three): sampling shall continue with one sample collected in the spring (April to May), summer (June to August), fall (mid- September to October) and one sample collected in the winter (under ice).
 - In addition to seasonal sampling, monthly water samples shall be collected from the deepest area in Brad's Bay furthest from the mouth of Willow Creek between May and mid-September.
 - Water quality samples shall be analyzed for dissolved oxygen during this summer sampling. One sample should also be collected under ice over the winter months.

- Samples shall be submitted to a laboratory accredited by the Canadian Association for Laboratory Accreditation Inc. A copy of the laboratory test results shall be submitted within a month of sample submission to the Water Quality Management Section of Manitoba Water Stewardship.
 - The proponent shall provide a summary report once the sampling after year three is completed.
- The Licencee shall implement gravel/cobble substrates to diversify the bottom substrate of the canal.
- The Licencee shall not conduct in-stream work during the spring and summer (April 1st through June 30th) or precipitation events.
- An *Environment Act* Licence shall include scheduled routine maintenance and removal of wastes from holding tanks by a licensed operator.
- Manitoba Water Stewardship submits the following concerns:
 - The proponent needs to verify the existence of a 30-metre Crown Reserve, located adjacent to all surface waters, pursuant to *The Crown Lands Act*.
 - Canals need a flow through water exchange.
 - Canals should not interface with aquifers.
 - A rationale for requiring the proponent to conduct water quality monitoring is based on the fact that the development of new channels creates a situation during construction and/or development activities that will contribute nutrients, increase turbidity, and suspended sediments to surface waters. The variables listed for analyses would be reflective of influences caused by the proposed development.
 - The Department needs to assess the effects of the following on the surface water quality of the canal and surface waters:
 - Discharging directly into an area where recreation will occur;
 - Draining wetlands;
 - Boat traffic in the canal would transport bottom sediment and thus increase nutrient load to the canal and surface waters.

- The proponent needs to eliminate fertilizer and cosmetic pesticide use adjacent to surface waters to help prevent degradation of water quality.
- Manitoba Water Stewardship requests the proponent to provide additional information on the environmental effects and mitigation measures, such as the following:
 - Examination of the reduced/inadequate hydraulic functioning of Brad's Bay which may reduce water quality through poor flushing and sedimentation;
 - Impacts caused by storm-water and urban runoff from nearby roads and development;
 - Location of the “newly” sanded beaches (information does not appear on the included maps);
 - Soil conditions/ fill of excavated bay;
 - Erosion mitigation once plug is removed;
 - Water quality concerns (increased turbidity, decreased oxygen in Bay which is linked to Willow Creek and Lake Winnipeg);
 - Impacts to the fish and wildlife by possible decrease in dissolved oxygen concentrations due to possible stagnation of the water in Brad's Bay and the potential entrapment of fish; and,
 - Details of waste water disposal, and solid waste disposal including the capacity of local facilities to accommodate this development.
- Manitoba Water Stewardship submits the following comments:
 - Manitoba Water Stewardship does not object to this proposal, at this time.
 - The Manitoba Department of Water Stewardship is mandated to ensure the sustainable development of Manitoba's water resources. Manitoba Water Stewardship is committed to the goals of: protecting aquatic ecosystem health; ensuring drinking water is safe and clean for human health; managing water-related risks for human security; and stewarding the societal and economic values of our waterways, lakes and wetlands; for the best water for all life and lasting prosperity. Manitoba Water Stewardship achieves these goals, in part, through administering legislation, including *The Water Protection Act*, *The Water Rights Act*, and *The Water Power Act*.

- The proponent needs to be informed that erosion and sediment control measures should be implemented until all of the sites have stabilized.
- The Manitoba Department of Water Stewardship's recent policy direction recommending Public Reserves to protect water is founded, in part, on the 135 recommendations in the Lake Winnipeg Stewardship Board's (December 2006) report titled, "Reducing Nutrient Loading to Lake Winnipeg and its Watershed, Our Collective Responsibility and Commitment to Action." All 135 recommendations were accepted in principle by the Minister of the Manitoba Department of Water Stewardship, on behalf of the Government of Manitoba.
- Maintaining an undisturbed native vegetation area immediately adjacent to the shoreline of lakes, rivers, creeks, and streams helps stabilize banks, provides aquatic and wildlife habitat and protects water quality through filtering overland runoff. The width of an undisturbed native vegetation area should be the widest width possible and practical. In conjunction with other best management practices such as eliminating fertilizer use adjacent to surface waters, and the proper management and disposal of waste water, maintaining an undisturbed native vegetation adjacent to waterbodies is important to help prevent degradation of water quality.
- Section 3 of the *Nutrient Management Regulation* under *The Water Protection Act*, requires Nutrient Buffer Zones (set-back distances from the water's edge) be applied to all lakes, rivers, streams, creeks, wetlands, ditches, and groundwater features located across Manitoba including within urban and rural residential areas and within agricultural regions. That is the distance set back from the water's edge to either 3 metres (if the area is covered with permanent native vegetation), or 8 metres (if the area does not have permanent native vegetative cover). In circumstances where native vegetation is limited or absent, re-establishment of this vegetation should occur through natural succession or assisted through planting of vegetation native to the area.
 - Under the *Nutrient Management Regulation*, no person shall apply a substance containing nitrogen or phosphorus to land within the Nutrient Buffer Zone;

Disposition: Comments were provided to the proponent. Comments regarding long term operational responsibility and impacts to water quality and wildlife were forwarded to the proponent for further information (see 'Request for Additional Information' section of this summary). Comments related to nutrients, erosion, buffer zones and in-stream work can be accommodated with licence conditions.

ADDITIONAL INFORMATION REQUEST:

EAL Branch contacted the proponent with questions from TAC members concerning the project on November 3 and 25, 2010. A submittal in response to comments was received on December 2, 2010 and included the following response to TAC questions:

- 1. Who will be responsible for the long term operation of the canal, which may include regular maintenance, responding to water quality issues, and setting boat velocity restrictions?**

I will be responsible for all regular maintenance, water quality issues and setting boat velocity restrictions.

- 2. Do the local facilities have the capacity to accommodate the solid waste disposal generated at the facility?**

Until sewer is extended to the development, solid waste will be transported to the Gimli Sewage Treatment Plan. Sewage trucks provide this service in the Gimli Municipality.

- 3. Provide details on the location of the “newly” sanded beaches (information does not appear on the included maps).**

Lots 1, 2, 3, 4 and 5 front natural vegetation bordering Willow Creek. Lots 6, 7, 8, 9 and 10 front sloping sanded beaches (approximately 1:7 slope). The well-sanded beaches provide excellent spawning grounds.

- 4. Provide additional information on the soil conditions/ fill of excavated bay. Please note that it is recommended that the bottom substrate of the canal be diversified to improve fish habitat.**

The lots were raised to the appropriate elevation using fill from the excavated bay. Rocks and sand will be used to provide habitat for fish.

- 5. Provide additional information on the impacts (and associated mitigation measures) of this development on water quality. In your response, please discuss:**

- a. Erosion mitigation once plug is removed.**
- b. How will nutrients be managed (buffer zones, restrictions on fertilizer application, silt fencing during construction activities, etc..)?**

This development will have no adverse effects on water quality. The land slopes gently across the seeded lots to Willow Creek and the Bay thus preventing any erosion. Construction will take place during the winter and the entrance to Willow Creek will be rip-rapped with granite rock.

DISCUSSION AND ANALYSIS:

This information is sufficient to allow TAC concerns to be addressed through licence conditions. There are no overriding technical issues associated with this project that would preclude the issuance of an Environment Act Licence with appropriate conditions.

PUBLIC HEARING:

No requests were received for a public hearing on the project. Technical issues surrounding the project are sufficiently understood. A public hearing is not recommended for the project.

RECOMMENDATION:

All comments received on the proposal can be addressed as licence conditions or have been forwarded to the proponent for information. It is recommended that an Environment Act Licence be issued for the project subject to the limits, terms and conditions as described on the attached draft licence. Administration of the licence should be assigned to the Central Region, with technical assistance to be provided by Environmental Assessment and Licensing Branch upon request.

PREPARED BY:

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