

Council-In-Committee Meeting – April 05, 2016

Subject: Misner Dam, Update for Council Direction
 Report Number: P.W.16- 25
 Department: Public Works and Environmental Services
 Division: Engineering

Closed Session:	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Budget Amendment:	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Strategic Plan Linkage:	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No

Recommendations:

THAT Council receives the report P.W. 16- 25, Misner Dam, Update for Council Direction for information;

[AND THAT council directs staff to undertake all required activities, consultant selection, agency consultation and up to and including design and construction, to remediate Misner dam further to the report “Misner Dam Engineering Services, Investigation of Short Term Alternatives”];

- Or -

[AND THAT council directs staff to commence a Class Environmental Assessment to assess all alternatives including decommissioning for Misner Dam;]

AND FURTHER THAT staff report back to Council at project milestones.

Introduction/Background:

Misner Dam is a concrete hydraulic structure located on the Lynn River in Port Dover. Silver Lake Drive crosses on a bridge independent of, but parallel to, the dam. The water upstream impounded by the dam has formed a water body known as Silver Lake. The dam was constructed over 150 years ago to provide hydraulic power for local industry. That role for the dam no longer exists and it does not serve the above function at present and most likely will not in the future.

The dam concrete structure above the water level exhibited clear evidence of deterioration and as a result, the County, in the interest of public safety, began investigations in 2010. The initial assessment of the dam confirmed the need for remedial actions. Under Council direction, staff initiated meetings with the Ministry of Natural Resources and Forests (MNRF), as they administer the Lakes and Rivers Improvement Act (LRIA), and further studies were completed.

This report to Council summarizes the results of the activities to date, and seeks council direction for further actions.

Discussion/Analysis:

Activities related to this structure will involve other agencies, depending on the remedial activity, most notably:

- the Long Point Region Conservation Authority (LPRCA) with respect to works in or adjacent to the waterway;
- the MNRF with respect to the LIRA;
- Ministry of Environment and Climate Change (MOEE) with respect to various environmental acts and regulations, including the Environmental Assessment Act; and,
- The Federal Department of Fisheries and Oceans, with respect to fishery impacts.

Discussions in Council in the past indicated that Council did not believe that they “owned” Misner dam. Notwithstanding that, Council directed staff, through a resolution at the July 9, 2013 regular Council meeting, to select a consultant to undertake an investigation of short term alternatives (recognizing that long term measures may be needed to maintain the structure, but are of less urgency) to identify any immediate works to stabilize the structure. To support this effort, it was necessary to also complete an Inflow Flood Study to determine the impacts of flood conditions.

Of the agencies noted above, it was recognized that the LRIA was the principal instrument governing future activities, hence the MNRF have been the main contact throughout this process. MNRF have been provided copies of the above reports, and there have been discussions and report revisions based on comments received. Comments have been most recently received from the MNRF on March 1, 2016. While it is important to fully address the MNRF comments, there appears to be general agreement from the MNRF that remedial works are required for this “high hazard” structure.

On the above basis, staff are seeking Council direction to continue with the activities needed to complete dam remediation. Note that the Stantec report (“Misner Dam Engineering Services, Investigation of Short Term Alternatives”) identified repairs in the amount of approximately \$928,000. In summary these repairs involved: sediment removal; concrete repairs; rock anchors (anchoring the dam to the underlying rock); water control gate; and, the related efforts to complete the work, such as engineering, site clearing, traffic control, etc....

If council direction to proceed with the remediation activities is received, the continuation activities would include:

- Retain a consultant to assist in the remediation activities (as further described in the following points);
- Prepare a preliminary design based on remediation items identified in the Stantec report, including a preliminary cost estimate;
- Contact the various stakeholder agencies noted above and others that may be identified as having an interest in the remediation;
- Following agency stakeholder input, prepare detail design and contract documents for the remediation; and,
- Tender the remediation contract and, through Council approval, award and execute the contract.

Another option that is available to Council is that Council determines that they are not willing to commit to take the actions that will lead to the improved security of this structure, in which case staff requests that Council advise the MNRF that they are abandoning any further remedial efforts, and that the MNRF undertake to secure the structure in the interest of public safety. Should Council elect to abandon this project in this fashion, they are cautioned that County actions to date respecting the dam, including the various studies and activities related to operating the dam (adjusting the water level through stop log removal - albeit to lower the risk on the structure, and not to demonstrate ownership - and the use of the dam to support the, now abandoned, municipal bridge) may result in the MNRF “deeming” that the County owns the dam. Should the MNRF reach that decision, it is probable that they would order the County to take remedial action.

The above steps are in the context that the Stantec report identifies works needed to remediate the structure. These works would appear to fall within a Schedule “A” Class Environmental Assessment (Class EA) project. This means that, provided that the regulatory approvals are received (ie., LPRCA, DFO, MNRF, etc..), the project may proceed without further consultation under the Environmental Protection Act. However it should be noted that a variety of permits from various agencies will be required.

Through the agency consultation, if concerns are expressed that impact the proposed remediation (ie., such as additional studies or modifications to the dam), staff will report to Council for information and direction.

This report provides Council with information directly related to repair of the dam. However, Council is asked to broaden their consideration of options to include dam decommissioning (removal). As noted, the dam no longer serves its original function of power supply for a local industry. Accordingly, the need to retain and continue to operate and maintain the dam, along with associated liabilities, should be investigated. As environmental stewards as stated in the County’s Strategic Plan, there is a need for Council to evaluate the impact that this structure has on the ecosystem. Through their presence, dams artificially impound large volumes of water and can interrupt fish movement, both potentially having a significant negative impact on the natural environment.

Staff suggests that the Council pass the resolution to commence a Class Environmental Assessment to consider both remedial and decommissioning options, principally so the decommissioning option may be fully explored.

Interdepartmental Implications:

Not applicable.

Financial Services Comments:

The Approved 2016 Capital Plan includes an allocation of \$1,100,000 for the Misner Dam Rehabilitation project with funding to be provided from the Roadway Reconstruction Reserve in the amount of \$990,000 and Debenture Proceeds in the amount of \$110,000. To date, a total of \$233,949 has been spent on the Misner Dam Rehabilitation project.

Sufficient funds exist to commence a Class Environmental Assessment to consider both remedial and decommissioning options as recommended by staff. Once, results of the Class Environmental Assessment has been completed a subsequent report will be provided to Council to approve either rehabilitation or decommissioning. At that time, any changes to funding will be determined at that time.

Staffing/Legal Implications:

Not applicable.

Corporate Strategic Plan Linkage:

- Goal 1: Financial Sustainability and Fiscal Responsibility
- Goal 2: Improved Essential Infrastructure
- Goal 3: Recruitment and Succession Management
- Goal 4: Corporate Communications Strategy

Communication Plan:

- Not Required
- Media Release
- Public Consultation / Information
- Public Participation Plan

Conclusion:

A report has been completed and identified a means to remediate the Misner Dam. This report is currently under review with the MNRF, however, it is clear that action must be taken, and that there is a feasible technical solution. Council has been presented with draft resolutions to take steps to move forward to improving the safety of this high hazard structure: either through directly proceeding to agency consultation, detail

design and construction; or, a Class Environmental Assessment to include the option of dam decommissioning, so that the future of the dam may be evaluated within all socio-economic and environmental factors. The latter recognizes that the dam is no longer needed for its original function of providing power, and its future need should be properly assessed to address the environmental impacts of the dam, and its sustainability, as it presents ongoing operating, maintenance and liability needs.

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