

TO:	CHAIR AND MEMBERS PLANNING AND ENVIRONMENT COMMITTEE MEETING ON OCTOBER 15, 2012
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	BEAVER MANAGEMENT STRATEGY FOR PROCEEDING WITH CONSTRUCTION OF APPROVED STANTON DRAIN REMEDIATION WORKS AND HYDE PARK STORMWATER MANAGEMENT FACILITY #4

RECOMMENDATION

That, on the recommendation of the Managing Director Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to recommended appropriate actions for the beaver management strategy for proceeding with the construction of the approved Stanton Drain Remediation Works and Hyde Park Stormwater Management (SWM) Facility #4:

- (a) Civic Administration **BE DIRECTED** to undertake appropriate actions to engage a licensed trapper to relocate the beavers in the Stanton Drain to Munsee-Delaware First Nation's lands, remove the beaver dam as it is creating flooding conditions, impacting the safety of people and property within the Stanton Drain servicing area, compromising the operation of water resources/SWM infrastructure and is interfering with the construction of the Stanton Drain remediation works and Hyde Park SWM Facility #4.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

COUNCIL – June 26 & 27, 2012 – 3rd, 4th, and 5th Reports of the Animal Welfare Advisory Committee

COUNCIL – July 24 & 25, 2012 and Report to the Planning and Environment Committee

BACKGROUND

Purpose:

The purpose of this report is to recommend a beaver management strategy that will be implemented by Civic Administration in October-November, 2012 to proceed with the construction of the approved Stanton Drain Remediation Works and SWM Facility #4, to improve and meet water quality requirements of Ontario watercourses, minimize flooding conditions and provide storm/drainage and SWM servicing and storm outlet for approximately more than 500 ha of the existing and new land development within the Hyde Park Area.

Context:

The existing Stanton Drain is an engineered drain that receives untreated stormwater runoff from existing agricultural lands as well as industrial, commercial and residential developments.

Following the completion of the Medway, Stanton and Mud Creeks Subwatershed Study in 1995, the Hyde Park Community Plan was completed in 1999-2000 and the Hyde Park Community Storm Drainage and SWM Municipal Class Environmental Assessment (EA) Schedule 'B' study, was completed in 2002 and provided the recommended preferred servicing option that included the Stanton Drain remediation works and the implementation of the Hyde Park SWM Facility #4 to improve water quality and minimize flooding conditions for the Hyde Park Community Plan lands under existing and post-development conditions.

This project is in the fourth component of implementation of the overall preferred servicing option identified in the EA that includes the construction of six SWM facilities (three constructed) and the remediation of the drain. In addition, this remediation project is a critical component for providing the required storm outlets for the Hyde Park and Sarnia Roads widening and it is also a key component of the Stanton Drain Subwatershed Study Implementation Strategy for Water Resources Strategy/SWM Infrastructure for the Hyde Park development area. This solution was

developed in consideration of the entire Stanton Drain system whereby all projects are required to be implemented in accordance with the strategy to function effectively.

The approved SWM Facility #4 is proposed to be constructed on the City's lands that were purchased in 2008. The proposed location displaces approximately 1.0 ha of wet area (in the location of the SWM facility), that was not evaluated/identified as a wetland by the original EA study, the Ministry of Natural Resources or the UTRCA's regulatory mapping. The existing natural heritage condition of the Stanton Drain drainage area has evolved due to irregular maintenance.

This recommended preferred servicing option is also designed to maintain and potentially enhance the natural resources within these areas through the remediation of the Stanton Drain and implementation of Hyde Park SWM Facility #4. The remediation of the Stanton Drain and implementation of Hyde Park SWM Facility #4 design has incorporated mitigation measures and proposed habitat enhancements expected to result in:

1. Increased connectivity for surface water conveyance and fish passage;
2. Improved fish community diversity;
3. Vast improvements in water quality and reduction in water temperature fluctuations;
4. Increased dissolved oxygen via aeration and reduction in nutrient loading;
5. Better canopy cover and maintained ecological function through riparian plantings of trees and shrubs; and
6. Reduction in sediment loading of water and improvements in bank stability.

The Stanton Drain remediation works will enhance the water resources system and is necessary such that existing infrastructure (tile and storm sewer outlets) and the Hyde Park SWM Facility #4 has an adequate outlet.

Section 15.5.1 vii of the Office Consolidation of the Official Plan (OP) 2002 and 2003 (in effect at the time when the Environmental Assessment for the works was completed) states:

When an Environmental Assessment of a proposal is carried out under the Ontario *Environmental Assessment Act* or relevant Federal legislation, that assessment will be considered as fulfilling the Environmental Impact Study (EIS) required by this Plan.

Therefore the City was not required to undertake an EIS as part of this project. However, given the transitional nature of this project a scoped EIS was intended to be in line with the updated and modified City OP Policies.

The City has met all obligations with respect to public consultation in accordance with the City of London Official Plan requirements under the public processes associated with the Subwatershed Study, the Hyde Park Area Plan, and the Municipal Class EA Study. We conducted approximately 14 Public Meetings and a list highlighting the public consultation that occurred during the Subwatershed Study, Area Plan and EA study are attached (please see Appendix. A).

During the functional/detailed design stage of the project Administration conducted a meeting with adjacent owners to obtain their consent. Consent from approximately 20 landowners was obtained in order to undertake design work and to construct the portion of the project on their lands. In addition, the public had the opportunity to attend Environmental and Ecological Planning Advisory Committee meetings to discuss the scoped Environmental Impact Study as well as attend Council meetings to provide comments on the project.

To achieve a net environmental benefit, the scoped EIS (finalized January 2012) recommended that the design of the works incorporate Phase 1 compensation works. In addition Phase 2 (the next phase) of the compensation works will be determined through the design of the proposed Hyde Park SWM Facility #5 system in coordination with the UTRCA and the Department of Fisheries and Oceans. The Parks, Planning and Design Division has reviewed and accepted the finalized scoped EIS for this project which was confirmed at the EEPAC meeting on September 20, 2012.

Due to the beaver damming activity several storm sewer and agricultural tile outlets are submerged by the water levels in the Stanton Drain. One landowner stopped farming a portion of his land due to the wet conditions caused by the beaver dams. Also, due to the above noted beaver activity the water in the Stanton Drain has backed up approximately 1000 meters with the estimated additional water depth of approximately 1 m and storing approximately 5000-7000 cubic metres of water.

Discussion:

The City cannot ignore the significant liability that would be associated with inaction in this case. The City recognizes the ongoing dilemma of urbanization and wildlife habitats and does its best to minimize habitat and wildlife disruption and provide an overall net benefit to the environment and ecological conditions of the water resources systems as part of construction projects.

In addition, provincial legislation including but not limited to the Municipal Act, *Drainage Act*, *Ontario Water Resources Act*, *Environmental Protection Act*, *Fisheries Act* and *Environmental Assessment Act* requires the City of London to maintain and operate water resources and municipal infrastructures within the City's boundaries and protect the people and properties safety.

As stated above, provided that beavers do not create damming conditions within streams that create flooding conditions that adversely impact water quality and safety of the people and/or property, the City's practice is to leave a beaver in nature consistent with current Council direction with respect to human-beaver conflicts.

Civic Administration has pursued relocation within the area but was unable to locate suitable habitat for the beavers within the Stanton Drain drainage area. The Mayor was in communication with Chief Waddilove of the Munsee Delaware First Nation who indicated that they are willing to assist the City in relocating the beavers to their Lands. Chief Waddilove advised that they have suitable habitat for the beavers and they have personnel who know how to safely capture them and settle them into a new home. The Chief is pleased to do this as a goodwill gesture.

Conclusions:

In this instance staff recommends that the appropriate action is to engage a licensed trapper to relocate the beavers in the Stanton Drain to Munsee-Delaware First Nation's lands and to remove beaver dams as the damming activity is creating flooding conditions that impacts the safety of people and property within the Stanton Drain servicing area, is compromising the operation of water resources/SWM infrastructure and is interfering with the construction of the Stanton Drain remediation works and Hyde Park SWM Facility #4.

SUBMITTED BY:	RECOMMENDED BY:
BERTA KRICKER, M.ENG., F.E.C., P.ENG. MANAGER OF STORMWATER STORMWATER MANAGEMENT UNIT	JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

October 12, 2012

Appendix 'A' - List of the Public Meetings
Appendix 'B' - Map of Stanton Drain Area