



**Manning Road Secondary
Plan Area – Stormwater
Management Study
Class EA Environmental
Study Report**

Final Report

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Corporation of the Town of Tecumseh

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Submitted by

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1.0 INTRODUCTION

1.1 Study Purpose

The Town of Tecumseh has initiated a Class Environmental Assessment (Class EA) to evaluate the impact of one or more stormwater management (SWM) facilities to service land owners within the Manning Road Secondary Plan Area. The study area, illustrated in **Figure 1.0 - Study Area**, is bounded by Essex County Road 22 to the north, Manning Road (Essex County Road 19) to the east, the Canadian Pacific Railway to the south, and the westside of St. Anne Street and Lesperance Road to the west. The study area is compromised of nearly 250 hectares, approximately 150 hectares of which are undeveloped lands. Development applications have been submitted for the majority of the undeveloped parcels, which have multiple owners. Ultimately, within approximately ten years, as many as 800 new residential units and approximately 5 hectares of commercial development are anticipated within the study area.

1.2 Problem Statement

To ensure consistency and quality in evaluation and identifying infrastructure improvements to support the proposed development, the Town of Tecumseh is coordinating the study of stormwater needs for the full development of the study area through the Class EA process.

The purpose of this study is to identify the best possible solution for addressing the stormwater drainage needs to accommodate future development in the Manning Road Secondary Plan Area in the Town of Tecumseh.

1.3 Class Environmental Assessment Process

The stated purpose of the Environmental Assessment Act (EAA) is the “betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment” where the broad environment includes the natural, social, cultural, built, and economic environments.

The provisions of the EAA require all municipalities to undertake an environmental assessment for virtually all public works projects. The procedures and requirements under the EAA are described in the document entitled *Municipal Class Environmental Assessment* that was prepared by the Ontario Municipal Engineers Association (June 2000). The Municipal Class EA process is



a five phased decision-making framework for the planning and design of municipal stormwater projects that are undertaken on a frequent basis, are normally limited in scale and have a predictable range of environmental impacts.

The Class EA document also serves as the public statement of the decision-making process followed by the municipalities in the planning and implementation of the needed infrastructure.

Studies conducted using this framework are considered to have satisfied the requirements of the Ontario Environmental Assessment Act by virtue of having followed the key principles of environmental planning outlined below:

- Consultation with affected parties early in and throughout the process, such that the planning process is a cooperative venture.
- Consideration of a reasonable range of alternatives, both the functionally different “alternatives to” and the “alternative methods” of implementing the solution.
- Identification and consideration of the effects of each alternative on all aspects of the environment.
- Systematic evaluation of alternatives in terms of their advantages and disadvantages to determine their net environmental effects.
- Provision of clear and complete documentation of the planning process followed, to ensure “traceability” of decision-making with respect to the project.

The five Phases of the Class EA process, as described in the *Municipal Class Environmental Assessment* (June, 2000) document and considered essential for the fulfillment of the EAA requirements, are described below:

- *Phase 1* – Identification of the problem or opportunity;
- *Phase 2* – Identification of alternative solutions to the problem which take into account the existing environment, and the establishment of the preferred solution with public



and agency consultation; this phase also includes the confirmation of the appropriate project schedule;

- *Phase 3* - Examination of alternative means of implementing the preferred solution based on the existing environment, potential environmental effects, methods for minimizing effects, input from government agencies and the public, and opportunities for maximizing positive effects;
- *Phase 4* – Preparation of an Environmental Study Report that documents the rationale for the undertaking, and the planning, design and consultation process that was followed; and the placement of the document on the public record for review and comment by government agencies and interested parties; and,
- *Phase 5* – Completion of engineering drawings and documents, followed by the construction and operation of the project, with appropriate monitoring to ensure compliance with environmental provisions and commitments.

In a meeting on February 15, 2005 with Dr. Ron Griffiths, Regional Class EA Co-ordinator, Southwestern Region of the Ministry of Environment (MOE), it was confirmed that a Class EA must be initiated for the SWM facilities within the Manning Road Secondary Plan Area if:

- the SWM facility cannot be included within the applicant's lands which are the subject of an application under the Planning Act (e.g., Plan of Subdivision), or
- the SWM facility will service two or more properties with different ownerships.

It was also confirmed during this meeting that SWM facilities may no longer be constructed as "on-line" facilities within municipal drains designated under the Drainage Act.

The Municipal Class EA document classifies projects into three separate categories: "Schedule A, B, or C". The Manning Road Secondary Plan Area Stormwater Management Study was originally conducted as a "Schedule B" Class EA under the definition of MOE. As described further in this report, the Town of Tecumseh made the decision to go forward with a "Schedule C" project after the first Public Information Centre and upon reviewing and confirming the schedule. "Schedule C" projects require the completion of Phases 1 through 5 of the EA process.



Such projects include “the establishment of new stormwater retention / detention ponds and appurtenances or infiltration systems including outfall to receiving water body.”

In brief, the specific objectives of this Class EA study are as follows:

- define the purpose and description of the undertaking;
- identify and evaluate alternative solutions;
- conduct a Public Information Centre;
- identify and evaluate alternative design concepts;
- conduct a second Public Information Centre;
- document study findings in an Environmental Screening Report; and
- respond to a Part II Order, if required.

Refer to **Figure 2.0 Class Environmental Assessment Process** for a visual description and flow chart of the requirements of the “Schedule C” Class EA process.

1.4 Report Organization

The remainder of the report is organized into the following sections:

Section 2 – Existing Conditions – This section presents a summary of existing conditions that constitutes the ‘Problem Statement’ under Phase 1 of the Class Environmental Assessment process, including a description of the Drainage System and existing land use, as well as a summary of previous studies of the study area. Additional existing conditions characteristics including fisheries, natural heritage, and hydrological considerations are also summarized.

Section 3 – Stormwater Management (SWM) – This section describes the potential stormwater management measures and design criteria that are being considered. These measures include lot-level BMPs, conveyance controls, and centralized and local end-of-pipe facilities with various operational requirements and configurations.



Section 4 – Alternative Solutions – Recommendations in this section form the basis of the Class EA. Each alternative solution is considered via a review of existing system characteristics, and an evaluation of feasible alternatives. Alternative solutions are subject to environmental criteria including social, economic, and natural considerations. The identification and evaluation of alternative solutions addresses key requirements of Phase 2 the Class EA process. This section also summarizes the public and agency consultation activities that are required under Phase 2 of the Class EA.

Section 5 – Alternative Design Concepts – A preferred solution was selected, and the alternative design concepts for the preferred solution were formulated. Each alternative design concept was considered via a review of existing system characteristics, and an evaluation of feasible alternatives. Alternative design concepts, like the alternative solutions, are also subject to environmental criteria including social, economic, and natural considerations. The identification and evaluation of alternative design concepts addresses key requirements of Phase 3 of the Class EA process. This section also summarizes the public and agency consultation activities that are required under Phase 3 of the Class EA.

Section 6 – Development of Preferred Design – This section provides details of the preferred design concept with an indication of the recommended elements of improvement to the degree of development that has been completed during this Environmental Assessment Study.

Section 7 – Project Implementation and Mitigation of Environmental Impacts During Construction – This section provides details of the project construction schedule, mitigation of environmental impacts during construction, and the required construction approvals.

Section 8 – Cost Estimates and Cost Sharing Methodologies – This section describes the proposed cost estimates and cost sharing methodologies for implementation and construction of the project.

1.5 Public Consultation Program

Public and agency consultation is a key element of the EA planning process, and accordingly, extensive efforts have been made to provide the public and agencies with information on the study and to solicit input.



A contact list of potential stakeholder groups and agencies was established in consultation with the Town of Tecumseh in order to identify interested parties. The contact list for this project includes Federal agencies, Provincial Ministries, local agencies, and interest groups, as well as over five hundred property owners within the study area (see **Appendix A: Comprehensive Mailing List** for the complete list).

A Notice of Project Initiation, as shown in **Appendix B: Notice of Project Initiation**, was published in the Windsor Star on June 30, 2005 to notify the public of the proposed undertakings. Notices were also mailed to property owners within the study area and agencies with an interest in the project or study area.

Two Public Information Centres (PICs) were held on March 22, 2006 and December 5, 2006 at the Town of Tecumseh Council Chambers. The first PIC consisted of an informal walk-in session with displays summarizing the work completed to date and the recommended solution. The second PIC was held in order to provide property owners in the study area with a recommended design concept based on the preferred alternative solution. The PIC results are further described in Sections 4.3 and 5.3 of this report.

2.0 EXISTING CONDITIONS

2.1 Existing Land Use

The majority of the undeveloped area is agricultural land and vacant lots. Developed land within the study area includes commercial properties along County Road No. 22 and Manning Road. A developed light industrial area also exists along Manning Road. Developed residential properties lie at the western edge of the study area along Lesperance Road. More specifically, land situated within the study area can be described as follows:

- undeveloped and non-subdivided tracts of land between Manning Road and the existing limits of Tecumseh Hamlet primarily consist of relatively large parcels of land that are currently owned by ten individuals and/or corporations and the parcels range in size from 2.5 to 26.2 ha.