

Appendix 1-5

**Class EA for Sanitary Servicing of Lands Annexed from the Town of
Tecumseh, City of Windsor (June 2006)**

**SANITARY SEWER SERVICING STUDY FOR
LANDS ANNEXED FROM THE TOWN OF
TECUMSEH**

**SCHEDULE 'B' CLASS ENVIRONMENTAL
ASSESSMENT**

Prepared for:

Corporation of the City of Windsor

Prepared by:

Stantec Consulting Ltd.

****REVISED June 30, 2006****

****Revised November 14, 2005****

August 15, 2005

Project No. 65600648-109



Stantec

EXECUTIVE SUMMARY

E.1 INTRODUCTION

In December of 2002 the Province of Ontario approved the transfer of approximately 2,600 hectares of land (Annexed Lands) from the Town of Tecumseh and Essex County to the City of Windsor. The dominant existing use of the land at that time was rural agricultural, with small areas of residential and industrial uses. The City of Windsor initiated a Master Planning Study to review potential land use and Utility Servicing (i.e. sanitary, storm and drainage, water, roads, other utilities, etc.) within the Annexed Lands on March 17, 2003. Presently, the Master Planning Study of future land designations is on hold with the exception of this Sanitary Sewer Service Study component.

An agreement between the City of Windsor and the Town of Tecumseh dated November 1, 2004, requires the City to provide a trunk sanitary sewer on Banwell Road to service adjacent Town of Tecumseh lands. ***The trunk sanitary sewer will accommodate a maximum flow of 1308 L/s from the Town of Tecumseh. From this maximum flow 983 L/s will be introduced on Banwell Road south of the EC ROW Expressway (entry locations to be determined during detailed design), and 325 L/s will be introduced from the Oldcastle Hamlet Service Area.*** A cost sharing plan has also been agreed upon by all parties to pay for the additional capital costs of over sizing the trunk sewers, plant expansions, and treatment of sewage. The Annexed Lands require sanitary sewer services prior to any new development occurring.

The City of Windsor has faced considerable development pressure from adjacent lands in the Town of Tecumseh as well as developers within the Annexed Lands. In an attempt to accommodate the sanitary sewer servicing component of these development pressures, Stantec Consulting Ltd. was commissioned to review various alternatives.

A separate Schedule 'B' Environmental Assessment is currently being undertaken for expanding the Lou Romano Water Reclamation Plant Sanitary Sewer Service Area by an additional 110 hectares. The 110 hectare area is located along the western limits of the Annexed Lands, as depicted in "Figure 1.1 – Study Area".

E.2 PROBLEM IDENTIFICATION

Adjacent landowners in the Town of Tecumseh and owners of lands recently annexed by the City of Windsor require servicing by sanitary sewers before any development can proceed.

Based on the foregoing, the City of Windsor has recommended that a Class Environmental Assessment be carried out to evaluate all viable alternative solutions to the aforementioned problem and to recommend the most suitable option.

E.3 PUBLIC CONSULTATION

Letters indicating that the Sanitary Sewer Servicing portion of the Annexed Area Master Planning Study was resurrected and containing the original Notice of Commencement were mailed out to review agencies on June 9, 2005. These letters requested that all comments be submitted by June 30, 2005.

A Public Open House was held for the Sanitary Sewer Service Study (Schedule 'B') on Thursday June 23, 2005 at the Windsor Christian Fellowship Church from 4:00 p.m. to 7:00 p.m. to present the Recommended Alternative, and receive input and comments so they can be incorporated into the final design. A total of 17 people attended the meeting to view the displays of study information, while representatives from the City of Windsor and Stantec Consulting Ltd. were present to discuss issues and address concerns. A total of 2 comment sheets were submitted during the public meeting.

E.4 ALTERNATIVES AND SELECTION OF THE RECOMMENDED ALTERNATIVE

Option 1 – Do Nothing

In the "Do Nothing" Option, no improvements or changes would be made, and the existing treatment and collection systems would remain as they presently exist. This option will not address the identified problem since it will prevent future growth in the immediate area, and fail to address the requirements of the existing legal agreement between the City of Windsor and the Town of Tecumseh. This option was not considered appropriate.

Option 2 – Expand the Lou Romano Water Reclamation Plant (LRWRP) Sanitary Service Area

Under this option, sanitary sewage from the Annexed Lands, as well as the areas in the Town of Tecumseh and the Oldcastle Hamlet would come be collected and conveyed to the LRWRP for treatment. Expansion of the Lou Romano Plant would have to take place, and as well new trunk sanitary sewers would have to be constructed, approximately 32.4 kilometers. Additional manpower would be required to operate and maintain the expanded plant and the expanded collection system.

The preliminary construction estimate for Option 2 is \$133.7 million, including sanitary sewer construction costs of \$103.7 million and treatment plant expansion costs of \$30.0 million. Due to the high capital costs, construction phasing, the requirements of the Servicing Agreement between City of Windsor and Town of Tecumseh, and development pressures in the Annexed lands and the Town of Tecumseh, this option is not being recommended as the preferred alternative.

Option 3 – Construction of New Sewage Treatment Plant within the Annexed Area

In this option, sanitary sewage from the Annexed Lands, as well as the areas from the Town of Tecumseh and the Oldcastle Hamlet would be conveyed through a collection system to a new sewage treatment plant within the Annexed Lands, once the design and construction of the plant was complete. New staff would be hired and trained to operate and maintain the treatment plant, and the City would be required to maintain the additional sanitary sewers, approximately 20.0 kilometers.

The preliminary estimate for Option 3 is \$136.4 million, including sanitary sewer construction costs of \$24.4 million and the construction of a new treatment plant for \$112.0 million. Due to the high capital costs, the significantly longer construction time required for a new plant, construction phasing, the Servicing Agreement between City of Windsor and Town of Tecumseh, and existing development pressures, this is not being considered as the preferred alternative.

Option 4 – Expand the Little River Pollution Control Plant (LRPCP) Sanitary Service Area

In this option, sanitary sewage from the Annexed Lands, as well as the areas from the Town of Tecumseh and the Oldcastle Hamlet would be conveyed to the LRPCP for treatment. Expansion at the plant would have to take place, as well as construction of new trunk sanitary sewers, approximately 25.2 kilometers. Additional manpower would be required to operate and maintain the plant expansion.

The preliminary estimate for Option 4 is \$111.7 million, including sanitary sewer construction costs of \$43.9 million and treatment plant expansion costs of \$67.8 million. This is the lowest cost option of all of the options considered, other than the "Do Nothing" option. This option allows construction to be phased in an orderly and efficient manner. Issues in the Servicing Agreement between City of Windsor and Town of Tecumseh, as well as existing development pressures can also be properly addressed by this option. Consequently, Option 4, Expansion of the Little River Pollution Control Plant Sanitary Service Area, is the **RECOMMENDED ALTERNATIVE**.

Construction phasing would allow for development to begin in the northeast corner and proceed towards the southwest, with construction of the first three (3) phases beginning within the next couple of years.