

COMMITTEE OF THE WHOLE - JUNE 17, 2002

CLASS ENVIRONMENTAL ASSESSMENT PINE VALLEY WASTEWATER PUMPING STATION EXPANSION AND DIVERSION SEWER NOTICE OF COMPLETION

Recommendation

The Commissioner of Engineering and Public Works, in consultation with the Directors of Purchasing and Reserves and Investments, recommends:

1. That the Project File Report, prepared by KMK Consultants Limited, documenting the engineering planning process that was followed in regards to the Schedule "B" Class Environmental Assessment for the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer be received, and that the Notice of Completion for the study be issued in accordance with the Municipal Class Environmental Assessment;
2. That the Mayor and Clerk be authorized to execute an Agreement, with the Vellore Village Developers Group – Block 39 for the detailed engineering design and property acquisition for the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer project; and
3. Notwithstanding the City Purchasing Policy and Procedures, that the City extend the contract with KMK Consultants Limited to include the detailed engineering design of the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer (2002 Capital Budget Project No. 1225-2) at an upset engineering fee of \$100,000.

Purpose

To inform Council of the conclusions of the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer Class Environmental Assessment, and to seek approval to proceed with detailed engineering design of this wastewater project subject to obtaining the necessary approvals and front-end financing.

Background - Analysis and Options

The existing Pine Valley Wastewater Pumping Station is located on the east side of Pine Valley Drive just north of Langstaff Road in Woodbridge as shown on Attachment 1. To provide sanitary servicing to the planned development within the west half of Block 39 and the southwest corner of Block 40 (OPA 400), the expansion of the Pine Valley Pumping Station and the diversion of the sewage flows to the Islington Ave. Trunk Sewer is required.

In December 2000, the Vellore Village Developers Group expressed an interest in proceeding with the development of their lands on the west half of Block 39 and committed to front end finance the cost of the necessary Class Environmental Assessment (Class EA) and preliminary design of the Pine Valley Wastewater Pumping Station expansion. With this financial commitment, Council authorized Staff on February 26, 2001 to seek proposals and retain a qualified engineering firm to carry out this Class EA and preliminary design work. Through the consultant selection process, the engineering firm of KMK Consultants Limited was retained in September 2001 for this engineering planning assignment.

Class Environmental Assessment

The Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer project is being planned as a Schedule "B" undertaking according to the Municipal Class Environmental Assessment. A Notice of Commencement was issued to the various public agencies, utilities,

stakeholders and effected landowners in December 2001 advising of the proposed undertaking. After taking into consideration the natural, socio-economic and cultural environments in the study area together with the comments received from the public and agencies, the Consultant developed five potential pumping station location alternatives, and three diversion sewer alignment options. These alternatives were presented to the public at an Information Centre that was held at the Woodbridge Public Library on April 18, 2002. The Consultant subsequently completed the evaluation of the alternatives, and compiled the documentation of the engineering planning and evaluation process that was followed in establishing the preferred location for the expanded pumping station and diversion sewer alignment in a Project File Report.

Based on the conclusions of the Class EA, Alternative Five was identified as the preferred pumping station site. This site is located on the west side of Pine Valley Drive within the Boyd Conservation Area just north of the existing TRCA access road known as Don Eddy Road as shown on Attachment 1. This site is acceptable in principal to the TRCA as it contains minimal woody vegetation and is outside the Regional Flood Plain. However, TRCA has advised that any proposal at this location would be subject to the normal detailed archeological review and property acquisition. The preferred diversion sewer route would extend from the pumping station southerly along Pine Valley Drive to Langstaff Road, then westerly on Langstaff Road to the proposed Regional Sanitary Trunk Sewer on Islington Avenue. To avoid any intrusion into the Humber River Valley, the forcemain will be attached to the deck of the Langstaff Road Bridge. The preliminary cost of the preferred alternative is estimated at about \$5.0 million including capital, property acquisition, electrical power supply, engineering and contingencies.

Staff has been involved throughout the planning and evaluation process of this Class EA and concurs with the consultants' conclusions and recommendations. Accordingly, it is appropriate to issue the Notice of Completion for the study and start the 30-day public review period in accordance with the Municipal Class Environmental Assessment process. Subject to comments received as a result of the Notice of Completion, and the receipt of necessary approvals, the City may proceed with the detailed design and construction of the pumping station and diversion sewer.

It is proposed that a Special Area Development Charge be enacted following the completion of the Environmental Assessment to collect the necessary funds for the engineering planning, design and capital cost of the pumping station expansion.

Block 40/47 North Sanitary Servicing

Council, at its meeting of February 26, 2001, requested staff to include the option of servicing the lands designated urban area within Block 40 and 47, north of Cold Creek Road, south of Teston Road, east and west of Pine Valley Drive (known as the Block 40/47 North Development Area) through the Environmental Assessment for the Pine Valley Wastewater Pumping Station Expansion.

The City's engineering consultant undertook a review of this servicing option and identified the following implications. Currently, the Block 40/47 North Development Area has been included in the Maple Service Area of the York-Durham Servicing Scheme. The existing trunk sewers, including the recently constructed Jane/Rutherford Sanitary Trunk Sewer and the sewers internal to Blocks 32 West and 39, have been designed and oversized for this area. Flow of sewage through this sewer system to the York-Durham Servicing Scheme is for the most part facilitated by gravity.

The Block 40/47 North Development Area has a developable area of about 150 hectares with an estimated ultimate population of 4,000 persons. The estimated sewage flow from this area would increase the ultimate peak sewage flow at the Pine Valley Pumping Station from 328 L/s to 403 L/s. This additional sewage flow would have a significant impact on the existing sewers and the proposed new pumping station. Specifically, portions of the existing trunk sewer that extends along Babak Drive, Muzich Place, Sugarbush Court, Golf Avenue, Clubhouse Road and Pine

Valley Drive leading to the Pine Valley Pumping Station are inadequate to accommodate these additional sewage flows and would need to be upgraded. The capacity of the pumps, motors, and emergency diesel generator within the proposed new pumping station would need to be greater, and the diversion sewer would change from a single 500 mm diameter forcemain to twin 400 mm diameter forcemains. The total cost of upgrading the existing sewers, pumping station and forcemains to accommodate the Block 40/47 North Development Area is estimated at \$1.6 million.

There is also a cost associated with oversizing the future sewers and pumping station in Block 39 and 40. An estimation of the cost of this oversizing is not possible at this time until details of servicing Block 39 and 40 are known. However, it is anticipated that it may be in the order of about \$2.0 million.

Since the Block 40/47 North Development Area has been included in the Maple service area for the York-Durham Servicing Scheme, allowances were not made for this sewage to be conveyed through the Woodbridge Collector and Islington Avenue Trunk Sewers. Inter-Regional Sewage Servicing Agreements between Peel and York may also limit the amount of sewage that can be diverted to the Region of Peel sewer system. Also, it is anticipated that the City's long term operating and maintenance cost will increase given that sewage flows in this sewer system will be pumped multiple times before entering the Region of Peel sewer system. Accordingly, considering all this, Staff recommend that the servicing of the Block 40/47 North Development Area remain from the Maple Service Area of the York-Durham Servicing Scheme as originally proposed.

A meeting was held with the engineering consultant acting for the Block 40/47 North Landowners Group on May 3, 2002 to present and discuss these findings. Based on this meeting, Staff is of the understanding that the landowners concur with this recommendation, but wish to explore through the Master Environmental Servicing Plan the opportunity of servicing the first phase of the Block 40/47 North executive housing development by an interim connection to the Woodbridge Service Area. Staff has no objections in principle to this proposal.

Detailed Engineering Design

The Vellore Village Developers Group has advised that they are prepared to front-end finance the cost of the detailed design and property acquisition for the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer. Given that KMK Consultants Limited are very familiar with this project, and are experienced in the design of wastewater pumping station, it is recommended that notwithstanding the Purchasing Policy and Procedures, the City extend the existing contract with KMK Consultants Limited to include the detailed engineering design of the Pine Valley Wastewater Pumping Station and Diversion Sewer at an upset engineering fee of \$100,000. Funding for this work is included in the approved 2002 Capital Budget as Project No. 1225-2, funded as a Special Service Area Charge in the new Development Charges.

Conclusion

The Notice of Completion for the Pine Valley Wastewater Pumping Station Expansion and Diversion Sewer Class EA study will be issued shortly. It is recommended that the detailed engineering design of this municipal wastewater project be undertaken once the necessary approvals and funding are in place.

Attachment

1. Location Map

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Respectfully submitted,

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Commissioner of Engineering and Public Works

AP/mp

ATTACHMENT No. 1

