

REGION OF OTTAWA CARLETON  
RÉGION D'OTTAWA CARLETON

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REPORT  
RAPPORT

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Our File/N/Réf.            19-92-0027-V  
Your File/V/Réf.

DATE                        20 October 1998

TO/DEST.                 Co-ordinator  
                                 Planning and Environment Committee

FROM/EXP.                Environment and Transportation Commissioner

SUBJECT/OBJET         **MUNSTER HAMLET - WASTEWATER TREATMENT  
ALTERNATIVE EVALUATION**

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### **DEPARTMENTAL RECOMMENDATIONS**

**That Planning and Environment Committee recommend that Council:**

- 1. Receive the report of the independent consultant Conestoga-Rovers and Associates (CRA) "Wastewater Treatment Alternatives Evaluation - Munster Hamlet";**
- 2. Approve the recommendation of the independent consultant to construct a pipeline to convey the wastewater from Munster Hamlet to the Region's central collection system;**
- 3. Direct staff to:**
  - a) Immediately initiate a Route Selection Process and increase the scope of CRA's assignment to include identifying a preferred routing for the pipeline;**
  - b) Upon completion of the Route Selection Process to proceed with submission of the ESR Addendum to the Ministry of the Environment;**
  - c) Initiate the required Official Plan Amendment;**
  - d) Advise the Ministry of the Environment of the revised project schedule.**

## BACKGROUND

The existing wastewater treatment facility in Munster Hamlet consists of a lagoon and spray irrigation system that has several limitations. The lagoons have insufficient capacity for treatment of flows to the facility and the spray field is undersized. In addition, the structural integrity of the lagoons is poor resulting in inadequate containment of the wastewater. An Environmental Study Report (ESR) completed in 1996, recommended an upgrade and expansion of the existing lagoon and spray irrigation system as the preferred solution. As a result of the recommendations contained in the ESR, the Region was proceeding to implement the solution in 1998.

In early 1998, unsolicited private sector proposals for innovative alternative approaches to the preferred solution were submitted to the Region. The proposals indicated that treatment alternatives were available to provide environmental and financial benefits exceeding those of the preferred solution. Based on this new information and continued public concerns with the preferred alternative, on 11 March 1998 Council directed staff:

“..to prepare an Addendum to the Munster Wastewater Treatment Plant ESR, that properly and accurately reflects the Delta Snowfluent combination Intermittent Filtration proposal as an alternative to Spray Irrigation, as well as any other proposal that meets the requirements outlined in the final paragraph of the Committee recommendation, for submission to the Region of Ottawa-Carleton and appropriate authorities.”

The final paragraph of the Committee recommendation reads:

"Further that any other proponents of wastewater treatment facilities who can meet the requirements of improving the level of treatment; can guarantee to meet the compliance schedule; and can guarantee its price, be allowed to submit a proposal for the treatment of wastewater for the Munster Hamlet lagoon system".

As a result of this direction, the firm of Conestoga-Rovers and Associates (CRA) was retained to complete the review and prepare the Addendum.

## PROGRAM OVERVIEW

CRA's mandate was to complete an open, transparent and independent evaluation of wastewater treatment alternatives for Munster Hamlet. In addition they were requested to identify any interim measures the Region should undertake to mitigate potential impacts on the surrounding environment until a permanent solution is implemented.

The evaluation of alternatives included an extensive public and government consultation process. This consultation took the form of the creation of an eleven member Public Liaison Committee (PLC), two formal public meetings, five community newsletters and solicitation of input from various government agencies at two different stages of the project.

The evaluation included information received from the private sector through a Request for Proposal process that saw the submission of five complete proposals for alternative treatment methods. These proposals have been exhaustively reviewed in the evaluation process.

### INTERIM MEASURES

Interim measures were established for the existing facility to ensure that any potential impacts of the system could be identified, monitored and corrected should the need arise. These measures include an enhanced surface and groundwater monitoring programme and a sewage hauling contingency plan to manage excess wastewater. With the concurrence of the Ministry of the Environment, staff have continued to fully utilize the existing spray irrigation system.

### REPORT RECOMMENDATION

The report prepared by CRA identifies that the preferred solution for addressing the wastewater treatment requirements for Munster Hamlet is to construct a pipeline to convey the wastewater to the Region's wastewater collection system.

The selection was based on the following criteria: impact on natural environment, impact on social environment, impact on land use, wastewater treatment and economics. Each of the criteria was assigned a weight factor that was based on its importance. The factors were developed based on the information collected from the public (i.e., comment sheets) throughout the process and from the first public Open House. Additional input from the CRA project team was also included in the development of the weighting factors.

Three well established methods were then used to evaluate the alternatives. In addition to the five treatment alternatives, the "Do Nothing" scenario was also evaluated to establish a baseline for assessing impacts relative to the existing conditions. The preferred alternative was selected based on the fact that it had the highest scoring in each of the three independent evaluation methods.

The results of a sensitivity analysis indicated that the identification of the pipeline option as a preferred alternative was not sensitive to significant changes to any of the weighting criteria. In other words, elimination of any one of the criteria, economics, land use, demonstrated experience or the use of the most costly pipeline alternative, resulted in the same alternative, the pipeline, being the preferred alternative.

### ROUTE SELECTION PROCESS

As the pipeline option is now being recommended as the preferred alternative, it remains to determine the most appropriate routing. While CRA's original mandate was to prepare an Addendum, it could not be foreseen that a pipeline would be the preferred solution and that a routing for the pipeline would have to be determined. Should Planning and Environment Committee and Council accept this recommendation, an increase in the scope of CRA's

assignment to include conducting a Route Selection Process complete with public consultation will be recommended. It is expected that this scope increase will cost approximately \$100,000., of which about 50% will be for the public consultation component. The Route Selection Process must be completed in order to finalize the Addendum to the Environmental Study Report in accordance with the Class Environmental Assessment for Municipal Water and Wastewater Projects.

The Route Selection Process will include significant Public and Stakeholder consultation, as well as a technical review of the issues associated with each of the proposed routes. This review would culminate in a completed Addendum that would be presented to Planning and Environment Committee and Council prior to it being submitted to the Ministry of the Environment and placed on the Public Record for the 30 day review period. It is anticipated the review will be completed in late February and brought to Committee in March 1999.

### OFFICIAL PLAN AMENDMENT

During this period we will also be initiating a Regional Official Plan Amendment (ROPA) for approval to connect the community of Munster Hamlet to the Regional wastewater collection system. This amendment is required as this work is not contemplated in the current Regional Official Plan or Master Plans. The alignment of the pipeline will need to be shown on Schedule H of the Official Plan and the text modified as needed. The ROPA process requires public consultation and if appealed will require an Ontario Municipal Board (OMB) hearing. It is anticipated that the Official Plan Amendment would be in place in 1999 assuming there is no OMB appeal.

### PROJECT SCHEDULE

The design for the recommended pipeline could be completed by late 1999 assuming approval of the Official Plan Amendment by that time. Some aspects of the work could begin in 1999 but the bulk of the construction would likely occur in the spring and summer of 2000. As this schedule is beyond what was originally anticipated, staff recommend that discussions begin immediately with the Ministry of the Environment to advise them of the proposed schedule and the Region's continued commitment to minimize environmental impacts in the interim.

### FINANCIAL IMPLICATIONS

The 1998 Budget has an allocation of \$6.05 million identified for the Munster Hamlet Sewage Rehabilitation Program. The total amount paid and committed to date is \$1.6 million. A budget revision will be submitted upon completion of the route selection process.

## CONSULTATION

The independent review included an extensive public consultation process with four meetings of the Public Liaison Committee (PLC), two formal public meetings, five public newsletters, weekly press updates and the distribution of a questionnaire to all residents of the community. Further public input will be obtained through the Route Selection Process and the Official Plan Amendment process.

*Approved by  
M.J.E. Sheflin, P.Eng.*

SF/jw