



REPORT TO: Co-Chairs and Members of the
Planning and Public Works Committee

SUBJECT: Update on the Wainfleet Servicing Project and Proposed Next Steps

RECOMMENDATION(S)

That this Committee recommend to Regional Council:

- That staff be directed to proceed to implement a review of alternative technologies as identified through the pre-design Expression of Interest (EOI) process, including the establishment of a Technical Review Team to carry out the assessment.
- That staff be directed to support the efforts the Township of Wainfleet to continue to advise Lakeshore area residents of progress made in the Wainfleet Servicing Project through the implementation of a communication plan.
- That staff commence with the Social Impact and Archaeological Assessments for the Lakeshore area, as required by the Minister of the Environment, and other required studies in keeping with the approved recommendations of the pre-design Expression of Interest (EOI) process.

EXECUTIVE SUMMARY

This report describes the actions taken by staff regarding Council's direction to conduct an assessment of alternative technologies and approaches identified through the EOI process in connection with the Wainfleet Servicing Project. It also provides an update on other recent events associated with this project.

FINANCIAL IMPLICATIONS

Sufficient funds are available in Parent Projects ZSW0404 and ZCW0403 to accommodate costs associated with undertaking a review of alternative technologies and carrying out the studies required to satisfy the Minister's Class EA approval conditions. Such work does not involve advancing the detailed design and construction components of the project. Cost details will be provided through normal reporting procedures prior to the commencement of related work.

PURPOSE

This report provides members of the Planning and Public Works Committee with an update on the Wainfleet Servicing Project, particularly the steps taken to undertake an assessment of alternative technologies as previously directed. Additional information on the proposed technical review process, discussions with Wainfleet Council and financial aspects of the project is provided.

BACKGROUND

In January 2003, Regional Council directed Public Works staff in cooperation with Public Health and Wainfleet Township to commence a Class Environmental Assessment (EA) process for the Township's Lakeshore area. The Class EA was intended to identify and assess servicing solutions that would address confirmed public health and environmental issues faced by residents of the Lakeshore area. These issues were related to aging and failing private septic systems and contaminated private water wells (See PWA 7-2003).

In accordance with the prescribed provincial legislative process and supplemented by the results of several scientific studies, including water testing and geotechnical investigations, a draft Class EA documentation was prepared. The preferred servicing scheme is comprised of both a conventional water transmission/distribution system and wastewater collection/conveyance system connected to Regional water and wastewater treatment facilities in Port Colborne.

In February 2005, this preferred system was the subject of a Value Analysis Exercise (VAE) that focused on alternative water and wastewater solutions for Wainfleet. The VAE workshop included an intensive 7-day work session during which alternative servicing solutions and designs were examined, capital and life-cycle costs identified, and locally-identified issues considered. The VAE's findings and conclusions supported the preferred solution; namely, the provision of conventional water and sewer services identified by the Class EA process.

These conclusions were included in the final Environmental Study Report submitted to the Minister of the Environment in July 2005. On September 25, 2006, the Minister of the Environment approved the Wainfleet Servicing Class Environmental Assessment and imposed conditions requiring additional follow-up studies.

Following a separate process, the Medical Officer of Health conducted an extensive consultation with a panel of national medical and technical experts. On April 10 2006, after receiving advice from the Chief Medical Officer of Health of the Province of Ontario, a Boil Water Advisory was issued for all properties located south of the Trans Canada Trail in Wainfleet, extending to the Lake Erie shoreline. Scientific studies confirmed that there is no question that significant bacterial contamination exists in the groundwater source for private and communal wells in the Lakeshore area. Dr. Williams stated that the consequence of ingesting contaminated water can be serious and deadly.

During the Class EA study process, formal and informal private sector overtures were presented to Public Works staff and the Committee. Various private sector firms expressed interest in proffering technical, financial, and project/service delivery alternatives as solutions to public health and environmental contamination issues that beset the Lakeshore area.

Subsequently, by adopting PWA 181-2006, Council directed staff to implement a pre-design Expression of Interest (EOI) process to assess technical alternatives that could result in refinements to the MOE approved servicing solution and enhance its affordability for benefiting property owners. Staff was also directed to develop and implement a program to carry out conditions imposed by the Minister in conjunction with the September 2006 Class EA approval.

REPORT

Response to Pre-design Expression of Interest Process

In late November 2006, Expressions of Interest (EOI) notices were placed in local newspapers and the Daily Commercial News. These notices requested submissions from the engineering community regarding alternative technologies, innovative concepts and project delivery approaches that could have the potential to reduce costs and improve the functionality of the MOE approved servicing scheme. Twenty-two responses were received from technology vendors, consultants and consortia teams asking for copies of technical information and background data previously developed for the project.

By the end of December deadline, eight bona fide EOI submissions were received from engineering firms and industry groups. Table 1 provides a brief summary of the submissions received. This information will be considered by the Technical Review Team along with submissions previously received from industry representatives as part of the Value Analysis exercise conducted in February, 2005.

EOI Review Panel and Process

Following Council's direction, arrangements were made to establish a Technical Review Team comprised of technical experts and Regional/Township staff. The purpose of the Technical Review Team is to review submissions received from the EOI request along with other documentation. The Team will identify those refinements that have the greatest potential for reducing design, construction and operating costs of water and wastewater servicing systems in a manner that is approvable and satisfies provincial requirements. The Technical Review Team will also explore ways of improving the affordability of the project for Lakeshore area residents.

In order to technically and financially review submissions received under this pre-design EOI process, the Technical Review Team will include experts representing those areas of specialization summarized in Table 2.

In addition to these technical experts, Township appointed representatives of the Lakeshore community will be invited to participate in the EOI workshop. This will involve members of the yet-to-be-appointed Wainfleet Planning Advisory Committee, as described in a later section of this report. A three-day workshop will be held from March 20 to 23, 2007 at the Four Points Sheraton Hotel in Thorold.

The Technical Review Team will undertake the assessment of alternative technologies using a Functional Performance Specification technique in which both the technical and social functions of the servicing project will be examined. Using this framework, each of the functions required to complete the project, including technical requirements, user needs and constraints will be examined.

The Technical Review Team will develop performance criteria which will be used to assess each proposed servicing solution. The outcome of this step will be to determine which system will provide the best value to the community in terms of functionality and life cycle costs. This framework will be used to provide the rationale to support the Technical Review Team's recommended system refinements.

Meetings with Township Council and Staff

In early 2007, Township and Regional Councillors and staff met on three occasions. During the discussions, the following points were emphasized:

- The Township and Region will work with the community to find a solution that has their support, is technically acceptable, satisfies public health and environmental concerns and is affordable
- Township Councillors recognize that the Lakeshore community is faced with a public health and environmental problem that must be solved. Doing nothing is not an option
- Because of the extent of the bacterial contamination across the Lakeshore residential area, Township Councillors consider this to be a community challenge that requires a community solution, not an individual one.
- The Township supports an open and inclusive public consultation process that encourages reliable two-way communication
- Township Councillors support a closer liaison with the Region in executing the Wainfleet Servicing project. This includes hosting a series of briefing sessions for new Councillors, preparing and distributing a joint newsletter and holding community meetings at strategic points in the process.
- The Township supports the initiation of a land use planning process. The process will provide a focussed sense of direction, address the Lakeshore Community's current/future growth and development issues, and inform its servicing needs

With regard to the Township's proposed land use planning initiative, Council has authorized staff to undertake an update to Wainfleet's Official Plan. The Official Plan Update will involve establishing a Planning Advisory Committee comprised of Township

citizens. The Committee will prioritize the Lakeshore community as its initial area of focus. Regional Planning will cost-share planning consultant costs associated with this undertaking.

Regional Public Works staff will support this activity by providing timely servicing input into the proposed Lakeshore area secondary plan. In addition, Public Works has committed to the following actions to advance the pre-design phase of the servicing project and convey transparency in support of the final outcome:

- Meet with Township Council to provide technical briefings and improve new councillors' technical understanding of the servicing project
- Continue to direct mail newsletters to all residents, informing them of progress and issues
- Assist the new Planning Advisory Committee with regard to servicing aspects of the secondary plan for the Lakeshore community
- Hold public information meetings, as required, and provide updates
- Provide information on Regional and Township websites
- Prepare news releases on a timely basis

Communication Strategy

Communication has been a key component of the Lakeshore area servicing project. In 2004 and 2005, the Region and Township created a Public Advisory Committee, engaged the Lakeshore community in public meetings associated with the Class EA process, actively involved area representatives in a Value Analysis Exercise, and distributed direct mail newsletters. It is important that such activities continue to keep residents informed of the status of this project and satisfy the Minister of the Environment's approval conditions.

A key to successful communication, however, is to ensure that the process is two-way and measured. To date, Township and Regional politicians and staff have created public channels to communicate public health, environmental and servicing issues. In this pre-design phase, it is crucial that all affected parties informed of progress and provided with details on the results of technical, financial and affordability investigations undertaken subsequent to the Class EA approval.

Wainfleet's Intake 3 COMRIF Application

In January 2007, Wainfleet Township was advised that its Intake Three application under The Canada Ontario Municipal Rural Infrastructure Program (COMRIF) had not been approved. The Township's application for approximately \$9 million in federal/provincial subsidy represented the first phase of the water and wastewater project.

Discussions with Ministry staff revealed that only nine such wastewater projects were approved in the Province. The nine projects totalled approximately \$25 million in federal/provincial subsidy out of a COMRIF total of approximately \$46 million for all

infrastructure categories. Ministry staff indicated that most of the nine benefiting communities receiving wastewater funding faced “imminent threat” of municipal treatment system failure and demonstrated very high risk factors.

Unlike other funding programs, COMRIF is not entitlement-based. Funding is awarded in accordance with competitive project scoring based on prescribed criteria. In the case of Wainfleet, provincial reviewers scored the project high under the “public health and safety” category, but low in terms of “value for dollar”. This recognizes the high project costs for a relatively small number of benefiting properties. Overall, the project was given a relatively high score, but not enough to qualify among the province’s top nine approved wastewater submissions.

Despite the lack of success in three COMRIF applications, provincial staff indicated that an announcement will be made in early 2007 regarding an extension of the new Canada-Ontario Infrastructure Program (COIP) agreement. New funding will be made available along with different qualification criteria. Public Works staff will continue to track such funding programs and advise Council of financing opportunities for this and other projects.

The Minister’s Conditions of Approval

In PWA 181-2006 staff advised the Committee that the Minister of the Environment imposed approval conditions on the Wainfleet Class EA. To satisfy these conditions, the Region must undertake the following studies:

- Cost Evaluation and Sharing Plan
- Social Impact Assessment
- Archaeological Assessment
- Natural Resource Impact Assessment (on the proposed right-of-way)

In order to undertake the Natural Resource Impact Assessment additional site-specific information is required, notably confirmation of the alignment of the proposed water and sewer systems. Consequently, it would be appropriate to postpone commencement of this study until the conclusions of the EOI Technical Review Team are reported.

On the other hand, the Social Impact Assessment that will examine the socio-economic characteristics of the Lakeshore area and identified potential long-term economic hardship should be undertaken as soon as possible. Similarly, the Archaeological Assessment of the Lakeshore area environs can be undertaken without delay. Consultants with expertise in these fields have been contacted and steps are currently underway to satisfy Ministerial conditions.

Information related to the Cost Evaluation and Sharing Plan is currently being gathered by consultants engaged by Corporate Services, in accordance with Council’s previous direction. After up-to-date cost information is provided by the EOI Technical Review Team, the Cost Evaluation and Sharing Plan can also proceed. This will include developing the requisite cost sharing scenarios between Township, Region, senior

governments and benefiting property owners, as well as recommending contingency measures to be followed if external funds are not secured.

Utilization of Current Provincial Funding

In October 2004, the Province approved funding in the amount of approximately \$7.4 million to be applied to the Wainfleet Water and Sewer Servicing Project under the Millennium Partnerships Program. Because of the protracted Class EA approval process, an extension to the Provincial/Regional funding agreement to March 2008 was requested and secured.

The Wainfleet project is currently at the early pre-design stage. Considering Council's direction to review technical alternatives, the requirement to satisfy Ministerial conditions and the time required to carry out a competitive design/construction process, it is highly unlikely that expenditures could be incurred before the revised Millennium deadline of March 3, 2008.

Regional staff has held discussions with the Province regarding options available to the Region to reallocate these funds to other Millennium projects in order to avoid the risk of losing the funding. A report recommending the reallocation of Millennium funding for this and other projects will be tabled in the near future. Should this transfer be approved, it will be recommended that equivalent funds be earmarked by the Region for application to the Wainfleet Servicing project in subsequent budget.

Submitted by:

Approved by:

Ian Neville, MPA, P.Eng.
Commissioner of Public Works

Mike Trojan
Chief Administrative Officer

This report was prepared by Bob Steele, MA, MCIP, RPP, Project Manager/Coordinator and reviewed by Leo Gohier, P. Eng., Acting Director, Water and Wastewater Services Division.

Table 1
Summary of EOI Submissions

Lead Firm	Brief Summary of Submission
Avalon	This submission is essentially a RFP pre-qualification. Ideas on system improvements are provided.
John Brooks Co.	This equipment supplier provided information on the E/One low pressure system which incorporates grinder pumps.
Clearford Industries Consortium	The submission promotes the firm's small bore water and wastewater distribution/collection system and package membrane treatment plants. It also puts forward unspecific DFBO options
EPCOR Water Services (East) Inc.	This utility company proposes a DFBO delivery model and provides servicing suggestions.
Genivar	This submission is an RFP pre-qualification and promotes a DFBO delivery model. System improvement ideas are provided.
Infrastructure Development Management (iDM)	This firm promotes its DFBO delivery model. A local example of a suitable innovative system is provided.
MS Filter	The firm provided data on its multi-stage water filtration treatment package.
METCON Sales & Engineering	This equipment manufacturer provided generic information for both central and decentralized systems and related equipment.

Table 2
Composition of Technical Review Team

Technical Area	Expertise
Civil Engineering	Experienced civil engineering firm with appropriate expertise in municipal water and wastewater (W&WW) servicing and related construction.
Hands-on Alternative Technology	A qualified engineer with first-hand experience in small bore and low-pressure water and wastewater systems.
Water and wastewater Systems Operations	A senior member of Public Works' Operations Management Team (OMT) to address operations and maintenance issues.
Cost estimator and Facility Constructor	An experienced professional with previous experience in cost planning, life cycle costing and cost estimation in the field of W&WW infrastructure.
Project Finance and Risk Control	Expertise in financial management, business case assessment and capital/life cycle costing provided through the Corporate Services Department, or upon their advisement.
Public Health & Safety Issues	An appointed representative of the Public Health Department
Legal Matters	Legal advice with regard to "DFBO" submissions or other service delivery options provided through the Legal Services Division of Corporate Services.
Environmental Approvals	Expertise in project approval under the provincial EA Act
Local Technical Knowledge	Township staff representatives, appointed PAC members and Councillors

Table 3
Summary of Conditions of Approval
For the Wainfleet Servicing Class EA

Condition	Description of Provincial Condition
Cost Evaluation And Sharing Plan	A cost evaluation/sharing plan must be prepared for the project. The plan will include detailed cost estimates based on the most up-to-date information available; various cost-sharing scenarios between the Province, Region, Township and benefiting property owners; and contingency measures to be followed if external funds are not secured.
Social Impact Assessment	In addition to information previously provided in the Class EA documents, the Minister requires that a social impact assessment be prepared. This must address the financial impacts of the cost-sharing scenarios and a determination as to whether benefiting property owners would be caused long-term hardship as a result of the project.
Natural Resource Impact Assessment	As part of the project's detailed design, the Minister requires that a site-specific natural resources impact assessment be undertaken that builds upon the ecological investigations completed as part of the Class EA submission. This will focus on the proposed facility alignment and pumping station sites and evaluate potential construction impacts and mitigation. This condition includes a commitment by the proponent to follow an environmental monitoring program during and after construction.
Archaeological Assessment	The Minister requires the preparation of a Stage 1 Archaeological Assessment along the proposed infrastructure right-of-way to determine if the project will impact areas of archaeological potential. If evidence of archaeological resources is encountered, further work may be warranted in accordance with provincial regulations.
Public Consultation	The Minister requires that the public continue to be consulted through to the completion of construction of the project. At a minimum, this includes one public open house to present the findings of the above-noted studies, solicitation of public comment into the findings of these reports, and filing of the reports for public review.
Report on How Provincial Conditions Were Satisfied	Along with copies of the aforementioned reports, the Region will be required to advise the MOE as to how the above conditions were fulfilled.