12
CONSULTANT SELECTION FOR DUFFIN CREEK WPCP EXPANSION AND STOUFFVILLE ZONE 1 PUMPING STATION AND ZONE 2 WATERMAIN

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, August 25, 2004, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. The requirements of the Purchasing By-law be waived and the consulting engineering firm of CH2M HILL Canada Limited be engaged to undertake the Schedule 'C' Municipal Class Environmental Assessment (EA) for the Duffin Creek WPCP Expansion at an upset cost of $247,200 excluding GST.

2. The requirements of the Purchasing By-law be waived and the consulting engineering firm of MacViro Consultants be engaged to undertake the Design and Contract Administration (CA) Services for the Stouffville Zone 1 Booster Pumping Station and Zone 2 Watermain at an upset limit cost of $244,225 excluding GST.

2. PURPOSE

This report is provided to obtain Council authorization to retain consultant engineering services for the Duffin Creek WPCP Expansion and the Stouffville Zone 1 Booster Pump Station and Zone 2 Watermain.

3. BACKGROUND

3.1 Schedule 'C' Municipal Class Environmental Assessment for Duffin Creek WPCP

CH2M HILL Canada Limited was retained to complete a Facility Master Plan for the expansion of the YDSS Duffin Creek WPCP early in 2003. This document was intended to be the initial collection and analysis of data on how to achieve additional capacity for the Duffin Creek WPCP. Some of the works were expected to be undertaken as a Schedule "A" undertaking in accordance with the Class Environmental Assessment process. When York and Durham Regions recognized the need to complete a Schedule "C" Class EA with full public consultation and an Environmental Study Report (ESR), it was decided that the information developed through the Facility Master Plan would be used as working technical papers in support of the Schedule "C" Class EA. Subsequently,

CH2M HILL was requested in April 2004 to proceed with the preliminary work involved with Schedule 'C' Municipal Class EA for the provision of additional capacity for the Duffin Creek WPCP, and develop a work plan to complete the Class EA. This was done to ensure that there were no delays to this critical project.

The Notice of Commencement for this Class EA was published in July 2004 with the filing of the ESR expected to be in April 2005.

3.2 Design and Contract Administration for Stouffville Zone 1 Pumping Station and Zone 2 Watermain

MacViro Consultants Inc. was retained to provide Engineering Services for the Class EA, Design and CA for the Stouffville Zone 1 Elevated Tank and Watermain. In an addendum to the Request For Proposal (RFP), proponents were requested to include a Booster Pumping Station for the EA component only. The Booster Pumping Station and the Zone 2 watermain were not required until 2011; however, as MacViro proceeded to develop the preliminary design and operation of the Stouffville system during the Class EA, it became apparent that the water to fill the elevated tank would have to come from different wells than originally supposed and would therefore require the design and construction of the Booster Pumping Station and additional watermain at an earlier date than originally planned. It is considered prudent and expedient, for timely completion, to maintain continuity and to avoid two separate consultants and two contractors working in the same area, to ask MacViro to complete the detailed design and provide contract administration services for the pump station and extra watermain. The construction of the pump station and the watermain must be initiated in 2004 to ensure the completion coincides with the completion of the elevated tank in 2005.

4. ANALYSIS AND OPTIONS

4.1 Schedule 'C' Municipal Class Environmental Assessment for Duffin Creek WPCP

During the development of the Duffin Creek WPCP Facility Master Plan the need for the initiation of the Stage 3 capacity expansion to accommodate projected population growth in York and Durham Regions was recognized. The first requirement to increase the capacity of the Duffin WPCP is the completion of a Class EA. To proactively meet the Provincial and Federal requirements, it is necessary to complete a Schedule 'C' Class EA and meet all applicable requirements of the Canadian Environmental Assessment Act (CEAA). This will avoid delays that might occur if CEAA requirements are not satisfied until after completion of the Class EA. The undertaking of this Class EA is directly related to the Facility Master Plan and is a continuation of the technical work completed to date.

As well, the working papers developed through the Facility Master Plan will provide much of the necessary support documentation required for the Class EA process thereby avoiding a duplication of work. The consultant's submission of tasks, schedule and fees

to undertake the Class EA has been reviewed by Regional staff and is considered reasonable and is clearly additional from the original scope of the project.

4.2 Design and Contract Administration for Stouffville Zone 1 Pumping Station and Zone 2 Watermain

The Stouffville Master Water Servicing Study 2003 identified a plan to split Stouffville into 3 new pressure zones. The works associated with this Zone 1 / 2 split identified the need for a Booster Pumping Station within Zone 1 to supply the elevated tank. The study further identified the need for a new Zone 2 watermain to separate Zone 1 from the existing local distribution system. It was at the completion of this study that the need to design and build the Booster Pumping Station and Zone 2 watermain concurrently with the elevated tank and watermain was recognized.

By spring 2004 MacViro had completed the EA, which incorporated the booster pumping station and Zone 2 watermain, and had already completed a preliminary design for both as required for the EA evaluation and assessment of options. Upon acceptance of the proposed costs, tasks and services to complete the Design and CA for the pumping station and the watermain, Regional staff authorized MacViro to proceed with the Final Design and CA component for the pumping station and watermain to avoid delays to the construction and commissioning of the system. The consultant's submission of tasks, schedule and fees has been reviewed by Regional staff and is considered reasonable and beyond the original scope of the project.

4.3 Purchasing By-law

The reasons for waiving the requirements of the Purchasing By-Law to engage CH2M HILL and MacViro are as follows:

- The additional work is directly related to the work performed by the two consultants.
- The approach will ensure one source of accountability for related works.
- The approach ensures proper coordination and continuity of processes related to the various infrastructure projects that are inter-dependent.
- The projects are required on a "fast track" basis to meet the servicing requirements, and as such, the approach results in an expedited schedule.
- Fees proposed by the two firms are reasonable and consistent with typical engineering fees for similar assignments on a percentage basis.

5. FINANCIAL IMPLICATIONS

The upset limit for the two engineering assignments are provided in Table 1. There are sufficient funds in the 2004 capital budgets to cover the expenditures associated with the engineering assignments.

Table 1
Engineering Consultant Fees

Consultant	Project	Upset Limit Fee (excluding GST)
CH2M HILL Canada Ltd	Duffin Creek WPCP Expansion Class EA	$247,200
MacViro Consultants Inc.	Stouffville – Booster Pump Station and Watermain	$244,225

6. LOCAL MUNICIPAL IMPACT

The completion of the Schedule 'C' Class EA for the capacity expansion of the Duffin Creek WPCP will transition into the design and construction of necessary capacity increases to accommodate projected growth and development in York and Durham Regions. The expansion of this vital environmental protection facility will be beneficial to all communities serviced by the YDSS.

The Stouffville Zone 1 Elevated Tank and Watermain project is a necessary component to supply water to the new development areas within Stouffville. The booster pumping station and Zone 2 watermain are an integral part of the water supply project to ensure proper system function and meet the water supply needs and fire protection requirements for new development within Stouffville.

7. CONCLUSION

Retaining CH2M HILL Canada Limited to undertake the Duffin Creek WPCP Expansion Class EA will result in timely execution of this critical infrastructure project. In addition, it will ensure continuity with their current assignment to develop the Facility Master Plan.

Retaining MacViro Consultants Inc. to provide design and contract administration services for the Stouffville Booster Pump Station and Watermain will enable the Region to meet the commissioning schedule for the elevated tank that is required to service new development. In addition, it will ensure proper coordination between the various infrastructure and maintain one source of accountability for the design and contract administration of the new infrastructure.

The Senior Management Group has reviewed this report.

(A copy of the attachments referred to in the foregoing is included with this report and is also on file in the Regional Clerk's office.)