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DATE: August 20, 2009

REPORT TITLE: **INFLOW AND INFILTRATION STUDIES  
CAPITAL PROJECT 09-2510  
DOCUMENT 2009-425P  
CITY OF MISSISSAUGA, WARDS 1 TO 11  
CITY OF BRAMPTON, WARDS 1, 3, 4, 5, 8, 10  
TOWN OF CALEDON, WARD 5**

FROM: Dan Labrecque, Commissioner of Environment, Transportation  
and Planning Services

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## RECOMMENDATION

That the contract (Document 2009-425P) for Inflow and Infiltration Studies in Caledon (Bolton), Brampton and Mississauga be awarded to Clarifica Incorporated in the estimated amount of \$748,825 (excluding applicable taxes), under Capital Project 09-2510 in accordance with Purchasing By-Law 63-2008;

And further, that the balance of funds under Capital Project 08-2510 in the amount of approximately \$294,000, the balance of funds under Capital Project 08-2535 in the amount of approximately \$178,000 and the balance of funds under Capital Project 08-2390 in the amount of approximately \$350,000 be transferred to Capital Project 09-2510 to cover the costs of the inflow and infiltration study.

## REPORT HIGHLIGHTS

- The Region is planning to undertake an inflow and infiltration study in Caledon (Bolton), Brampton and Mississauga under Capital Project 09-2510. This study is expected to reduce the potential for flooding in homes and to reduce flow to the wastewater treatment plants.
- Request for Proposal 2009-425P was competitively bid and Clarifica Incorporated is recommended for award.
- It is proposed to transfer funds from Capital Projects 08-2510, 08-2535, and 08-2390 to Capital Project 09-2510 for ease of administration of the project.

## DISCUSSION

### 1. Background

The Region of Peel is currently experiencing areas where the inflow and infiltration rate exceeds the allowable design limit. An Inflow and Infiltration Strategy report of the Region of Peel's sewers by EarthTech (2008) indicates that areas in Mississauga, Brampton and

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Caledon (Bolton) have a large amount of inflow. In Appendix I, on Figure 4.3, Areas 3, 4, 5, 8, and 9 shows inflow at greater than two times the design allowance. This Inflow and Infiltration study will focus on the Clarkson Wastewater Treatment Plant and Lakeview Wastewater Treatment Plant sewer sheds within the City of Mississauga and the City of Brampton and the sewer shed in Caledon (Bolton). Inflow and infiltration contributes to higher operating and maintenance costs at the Wastewater Treatment Plants and Pumping Stations, basement flooding, delayed development due to capacity restrictions and environmental hazards. The focus of this study is to collect and collate pertinent data on the system performance, evaluate the data, and make recommendations to reduce inflow and infiltration and the consequences of wastewater treatment plant impacts and basement flooding.

**2. Procurement Process**

The Region of Peel issued Request for Proposal 2009-425P to six consulting engineering firms for an inflow and infiltration study in the GE Booth Lakeview Wastewater Treatment Plant and the Clarkson Wastewater Treatment Plant sewer sheds and in Bolton. The firms included Clarifica Inc., ADS LLC, Associated Engineering, R.V. Anderson Associates Ltd., Stantec Consulting Ltd. and RJ Burnside.

One Consultant submitted its proposal on time and the documents were found to be in order. The proposal was reviewed and evaluated by a staff committee. The evaluation criteria included the consultant's understanding of the project, the proposed methodology, qualifications and experience of the proposed personnel, the consultant's previous experience in similar projects, schedule and estimated cost to complete the assignment.

The evaluation summary is as follows:

Vendor Name	Location	Overall Ranking	Technical (80 per cent)	Financial (20 per cent)
Clarifica Inc.	Markham, ON	1	1	1

The consultant demonstrated a thorough understanding of the assignment, proposed a comprehensive approach and presented an experienced team. Staff have concluded that the Clarifica Inc. proposal provides the best overall value for the Region of Peel.

**3. Future Considerations**

The EarthTech Inflow and Infiltration Strategy (2008) clearly indicated that the Region of Peel has high inflow. This system review will further target specific areas and will make recommendations for technical solutions to improve the current situation. In addition, staff will continue to investigate, in parallel, various options to address not only the source of inflow and infiltration but also other potential financial approaches to assist homeowners where corrective action on private property may be viable. Currently several municipalities, in particular, in the Greater Toronto Area, have homeowner subsidy programs for this.

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**FINANCIAL IMPLICATIONS**

It is proposed that approved funds from Capital Projects 08-2510, 08-2535 and 08-2390, totalling \$822,000 be transferred to Capital Project 09-2510. Once the funds are added, sufficient funding will be available under Capital Project 09-2510 to finance the contract award.

**CONCLUSION**

The Inflow and Infiltration Study in the GE Booth Lakeview Wastewater Treatment Plant and the Clarkson Wastewater Treatment Plant sewer sheds in Mississauga and Brampton and in Caledon (Bolton) will recommend remediation which will reduce the inflow and infiltration in the sanitary sewer system.

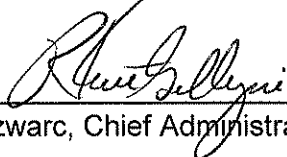
It is therefore recommended that approval be given to award this contract to Clarifica Incorporated to perform the Inflow and Infiltration Study in Caledon (Bolton), Bolton and Mississauga. It is also recommended that funds be transferred to Capital Project 09-2510.



ACTING FOR

Dan Labrecque  
Commissioner of Environment, Transportation  
and Planning Services

**Approved for Submission:**



for D. Szwarc, Chief Administrative Officer



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**APPENDIX I**

