

COMMITTEE OF THE WHOLE – MAY 6, 2002

UPLANDS AREA WATERMAIN REPLACEMENT AND ROAD RECONSTRUCTION

Recommendation

The Commissioner, Development Services in consultation with the Director of Reserves and Investments recommends:

- 1) That Capital Budget Project 1269.2.02 be modified to include the repair and replacement of the existing sanitary and storm sewer system in the Uplands Area.
- 2) That the project be implemented in three phases – namely Phase 1 in 2002 for Longbridge Avenue and Fee Avenue, Phase II in 2003 for the area south of Longbridge Avenue to Uplands Avenue and Phase III in 2004 for the area south of Uplands Avenue.

Purpose

To seek Council approval for the inclusion of the repair and replacement of the sanitary sewer and storm sewer system in the Uplands Area in conjunction with the watermain replacement and road reconstruction project and for the implementation of the project in three phases over three years from 2002 to 2004.

Background - Analysis and Options

Replacement of the old cast iron watermain on Uplands Avenue, Helen Avenue, Thornhill Avenue, Riverside Boulevard, Fairlea Avenue and Parkway Avenue in the Uplands Area of Thornhill was completed in 2000 under Capital Projects 1276.0, 1265.0, 1263.0, 1266.0 and 1264.0. The road section of Riverside Boulevard from Parkway Avenue to Uplands Avenue was also reconstructed in 2001 under Capital Project 1140.2 for Road Resurfacing.

Replacement of the existing cast iron watermains on Longbridge Avenue and Idleswift Drive in the Uplands Area were included in the 2001 Capital Budget under Projects 1268.0 and 1269.0. During the pre-engineering stage, it was further identified that the existing cast iron watermains in the remaining streets in the Uplands Area also required replacement due to old age and deterioration. At the same time, the Road Needs Study 2000 Update report has identified the majority of the streets in the Uplands Area as “Now” to 5 years resurfacing or reconstruction needs. The streets in the Uplands Area were constructed in the 1960’s and have never been resurfaced or reconstructed, except for one section of Riverside Boulevard as noted above.

Capital Project 1269.2 was approved in the 2002 Capital Budget to include watermain replacement for the remaining streets in the north part of the Uplands Area and for the reconstruction of all the streets in the entire Uplands Area over a two year period (2002-2003). Combining watermain replacement with road reconstruction provides the most cost effective approach with the least inconvenience to the public.

During the pre-engineering stage for the road reconstruction, video inspection of the storm and sanitary sewer systems was carried out in order to ensure that areas where manholes and service laterals need repairs or replacements were identified and included in the road reconstruction project. Results of the video inspection indicated that the sanitary sewer system is generally in good condition except for some service laterals which need to be replaced due to severe clogging or damage by tree roots. However, the storm sewer system (installed in the 1960’s) is in very poor condition throughout, with serious structural deficiencies including severely cracked and broken pipes. In order to ensure proper road drainage and the integrity of the subsoil to support the pavement structure, the storm system must be replaced in its entirety.

The Uplands Area Project should now include replacement of watermain, storm sewer and reconstruction of roads. Due to the extent of the project, staff recommend the implementation of the project in three phases. Phase I should include watermain and storm sewer replacement followed by road reconstruction of Longbridge Avenue and Fee Avenue in 2002. Phase II includes watermain and storm sewer replacement followed by road reconstruction of the streets south of Longbridge Avenue up to and including Uplands Avenue in 2003. Phase III includes storm sewer replacement road reconstruction of the streets south of Uplands Avenue (watermain already replaced in 2000) in 2004. (Refer to Attachment 1).

Subject to Council approval on the modification of the project to include storm sewer replacement, staff will proceed with tendering for the Phase I of the work at the end of May. The financial analysis of the recommended changes will be provided in the tender award report.

Conclusion

The storm sewer system in the Uplands Area is in a very poor condition and should be replaced in conjunction with the road reconstruction project. Due to the revised scope of the Uplands Area watermain replacement and road reconstruction project, the project should be implemented in three phases from 2002 to 2004.

Attachments

1. Location and Phasing Map

Report prepared by:

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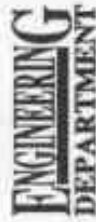
Dan Stevens, P. Eng. – Manager of Engineering/Construction Services, ext. 8257

Respectfully submitted,

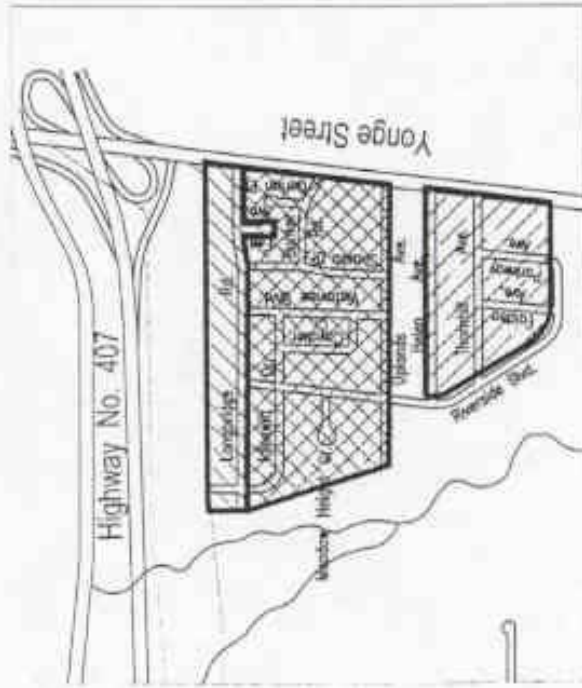
FRANK MIELE
Commissioner, Development Services

Bill Robinson, P. Eng.
Executive Director of City Engineering
and Public Works

FL:MC



**PROPOSED CONSTRUCTION SCHEDULE FOR THE
THORNHILL-UPLANDS AREA**



PHASE I - 2002

LIMBRIIDGE ROAD
FEE AVENUE

- Watermain Replacement
- Storm Sewer Replacement
- Sanitary Sewer Repairs
- Road Reconstruction



PHASE II - 2003

IRL SWIFT DRIVE
MEADOW HEIGHT CRESCENT
* EPLANDS AVENUE
CAMLERT CRESCENT
* VISTAVIEW BOULEVARD
* RIVERSIDE BOULEVARD
SHASTA DRIVE
BUHRER ROAD
DORIAN PLACE

- Watermain Replacement
- Storm Sewer Replacement
- Sanitary Sewer Repairs
- Road Reconstruction



* WATERMAIN WAS REPLACED IN 2000/2001
NO FURTHER ACTION REQUIRED ON
WATERMAIN

PHASE III - 2004

HELEN AVENUE
THORNHILL AVENUE
FARLEA AVENUE
PARKWAY AVENUE

- Storm Sewer Replacement
- Sanitary Sewer Repairs
- Road Reconstruction



DATE PLOTTED: 2002/05/06 10:00 AM