

COMMITTEE OF THE WHOLE - JULY 6, 2010

ASSUMPTION – SUGARBUSH DEVELOPMENTS LIMITED SUBDIVISION, PHASE 1 19T-97V20 / 65M-3521 WARD 4

Recommendation

The Commissioner of Engineering and Public Works, in consultation with the Director of Reserves and Investments, recommends:

1. That Council enact the necessary by-law assuming the municipal services that are set out in the Subdivision Agreement for Plan 65M-3521 subject to the Owner providing the City with the following payments:
 - a) A voluntary payment of \$245,165 in lieu of removing the accumulated sediment within the two constructed wetland storm water management facilities in the Plan.
 - b) \$138,500 for the 16 cracked service connection tee fittings within the Plan as per the Repair Protocol adopted by Council on March 9, 2010;
2. That the Municipal Services Letter of Credit held by the City in connection with Plan 65M-3521 be released once the payments referenced in Recommendation No. 1 above have been received by the City.
3. That the Letter of Credit in the amount of \$99,176.00 held by the City pursuant to Subsection 21.1.5 of the Subdivision Agreement for the potential twinning of the Concord Sanitary Subtrunk be released as the work is no longer required because the sewage flows from the development in Block 10 were diverted into the Langstaff and Bathurst Trunk Sanitary System by the Region on June 11, 2010.

Contribution to Sustainability

The municipal services recommended for assumption in this report have been designed and constructed in accordance with City standards which include consideration for sustainability.

Economic Impact

Upon assumption of this subdivision approximately 3.2 lane kilometers of roadway and associated municipal services including sanitary and storm sewers, watermain, two storm water management facilities, street lighting, streetscaping, sidewalk, etc., will be added to the City's network of infrastructure. This additional infrastructure will incur the normal expense associated with annual operation and maintenance activities plus eventual life cycle renewal.

Communications Plan

The pertinent City departments will be notified of the assumption of this subdivision.

Purpose

This report pertains to the assumption of the municipal services in Plan of Subdivision 65M-3521 by the City.

Background - Analysis and Options

The Sugarbush Developments Limited, Plan of Subdivision 65M-3521 is a 390 lot residential development located north of Highway 7 and east of Dufferin Street in Block 10 as shown on Attachment No.1.

The Subdivision Agreement with Sugarbush Developments Limited was executed on June 21, 2001, and the Plan of Subdivision was subsequently registered on August 23, 2001. The construction of the roads and municipal services in Plan 65M-3521 was completed in 2006.

The Developer has maintained the municipal services in the subdivision during the required minimum thirteen month maintenance period and has rectified all deficiencies with the exception of the removal of the accumulated sediment from the storm water management ponds as outlined below.

Storm Water Management Facilities

The Sugar Bush Phase 1 Subdivision contains two storm water management facilities; one is located on the east side of the subdivision next to the Sugarbush Heritage Park and the other one is on the west side next to a woodlot as shown on Attachment No.1. Both of these ponds were designed as constructed wetland facilities. Constructed wetland facilities are similar to a typical wet pond but generally have shallower permanent pool ranging between 150mm to 300m deep. The shallower water depths promote the growth of emergent vegetation such as bull rushes and eventually mature into a complex ecosystem. Wetland facilities are considered one of the preferred end-of-pipe storm water management facilities for water quality enhancement.

These two wetland facilities were originally constructed with more permanent pool storage volume than was required. During the construction of the subdivision, the storm drainage system transported sediment into the facilities and deposited into the forebay and permanent pool components of the facility. As a standard requirement, the City requires that all accumulated silt and sediment be removed from a storm water management facility before issuance of completion approval. To verify that a storm water management pond has been adequately cleaned, the developer's consulting engineer provides the City with a bathymetric survey. This survey established the profile of the base of the storm pond, which can be compared to the original design drawings.

The Bathymetric survey for the Sugarbush wetland facilities confirmed that the sediment forebays were adequately cleaned out but revealed that there was still about 300mm of sediment in the permanent pool cell. Using current construction practices, removing this accumulated sediment from the pond would result in significant impact to the well established vegetation and ecosystem in the pond. The survey also showed that despite the existence of the sediment in the permanent pool there was sufficient storage volume remaining in the facility to meet the original design requirements. Accordingly, the sediment will need to be removed at some point in the future but there isn't a need to remove it now. Given this situation, the developer has proposed to provide the City with a voluntary cash payment equivalent to the present value to cover the cost of the future removal of the accumulated sediment in the permanent pool. This money would be used by the City to offset the cost of removing this extra material from the pond when the pond requires a full cleaning out in about 10 years from now. Based on the Bathymetric survey there is approximately a total of 3,045 cubic metres of sediment in the two Sugarbush wetland facilities. Based on recent construction contract prices, it costs on average about \$85 to remove and dispose of one cubic metre of sediment from a storm water management facility. Accordingly, the removal of the existing sediment from the Sugarbush ponds would cost today approximately \$258,825 (current value). Assuming a rate of 3.0 percent inflation, the value of this work in 10 years time would be approximately \$347,840 (future value). Currently, a 10 year Canada T-Bill

has an estimated rate of return of 3.6 percent per year. Accordingly, a present value of \$245,165 would need to be invested today to achieve a future value of \$347,840. Given that removal of the sediment now will needlessly impact the existing emergent vegetation in the pond, staff is recommending that the City accept the proposed financial contribution from the Developer in lieu of cleaning the storm ponds at this time. This money will be placed in the Subdividers Contribution Reserve and earmarked specifically for the future removal of accumulated sediment in the Sugarbush storm water management facilities. This arrangement will not set a precedence as these are the only unassumed constructed wetland facilities in the City.

Cracked Service Connection Tee

The routine camera inspection of the sewer system identified 16 cracked PVC service connection tee fittings in the subdivision. These tee fittings have a bury depth of between 4.0 and 6.0 metres deep and have been repaired using fiberglass tee liners. According to the City's Cracked Tee Repair Protocol, which was approved by Council on March 9, 2010, the Developer is required to provide the City with a cash contribution for the ongoing inspection and maintenance of these tee liners, and the ultimately replacing the sewer fitting when necessary in the future. The cash contribution is established based on the current cost of replacing the tee fittings. Based on the number and bury depth of the cracked tee fittings in the Plan, the developer is required to pay the City \$138,500 prior to the assumption of the Subdivision.

Concord Subtrunk Improvements

The Sugarbush Phase 1 Subdivision is within the service area of the Langstaff and Bathurst Regional Trunk Sewers. The Subdivision proceeded prior to the completion of these Regional trunk sewers. Accordingly, the Subdivision was serviced on an interim basis through the Concord Sanitary Subtrunk. Theoretical modeling of the Concord Subtrunk predicted the possible need to twin certain sewer segments to accommodate the additional wastewater from the development in Block 10 including the Sugarbush Phase 1 Subdivision. Accordingly, Subsection 21.1.5 of the Subdivision Agreement required the Developer to provide the City with a letter of credit in the amount of \$99,176 to secure the Developers share of the potential downstream sewer improvements.

The Bathurst and Langstaff Regional Trunk Sewers were completed and functioning in 2008 and 2009, respectively. The Region of York has recently advised that the work associated with connecting the local sewer connection to the Langstaff trunk sewer at the intersection of Langstaff and Pleasant Ridge was completed on June 11, 2010. Now that the diversion of sewage flows from Block 10 is completed, there is no longer a need to undertake capacity improvements to the Concord Sanitary Subtrunk sewer system. Accordingly, the aforementioned letter of credit may now be released.

Documents & Clearances

All documentation required by the Subdivision Agreement for assumption has been submitted. Engineering staff, in conjunction with the Developer's Consulting Engineer, have conducted all the necessary inspections of the municipal services in the subdivision and are now satisfied with the extent of the works subject to the receipt of the recommended payments.

The Developer's Engineering Consultant has certified that the grading and drainage of all the lots in the subdivision have been constructed in accordance with City standards and in general conformity with the approved construction drawings.

The Commissioner of Engineering and Public Works has received clearance from all pertinent City Departments including Development/Transportation Engineering, Development Planning, Building Standards, Parks Development, Parks Operations and Forestry, Public Works, and

Clerks. In addition, the Reserves and Investments Department has confirmed that all of the City's financial requirements associated with this subdivision have been satisfied.

Relationship to Vaughan Vision 2020

The development of this subdivision and the assumption of the municipal services are consistent with Vaughan Vision 2020, which encourages management excellence through planned and managed growth and the maintenance of City assets and infrastructure. This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

Regional Implications

There are no Regional implications with respect to the assumption of the municipal works within this subdivision development.

Conclusion

The construction of the roads and municipal services associated with the Sugarbush Developments Limited, Plan of Subdivision 65M-3521, has been completed in accordance with the Subdivision Agreement. Accordingly, it is appropriate that the roads and municipal services in 65M-3521 be assumed subject to the recommended financial payments. Once these payments have been made, the Municipal Services Letter of Credit may be released. In addition, it is appropriate that the letter of credit which is being held by the City for the potential twinning of the Concord Sanitary Subtrunk be released as the work is no longer required.

Attachments

1. Location Map

Report prepared by:

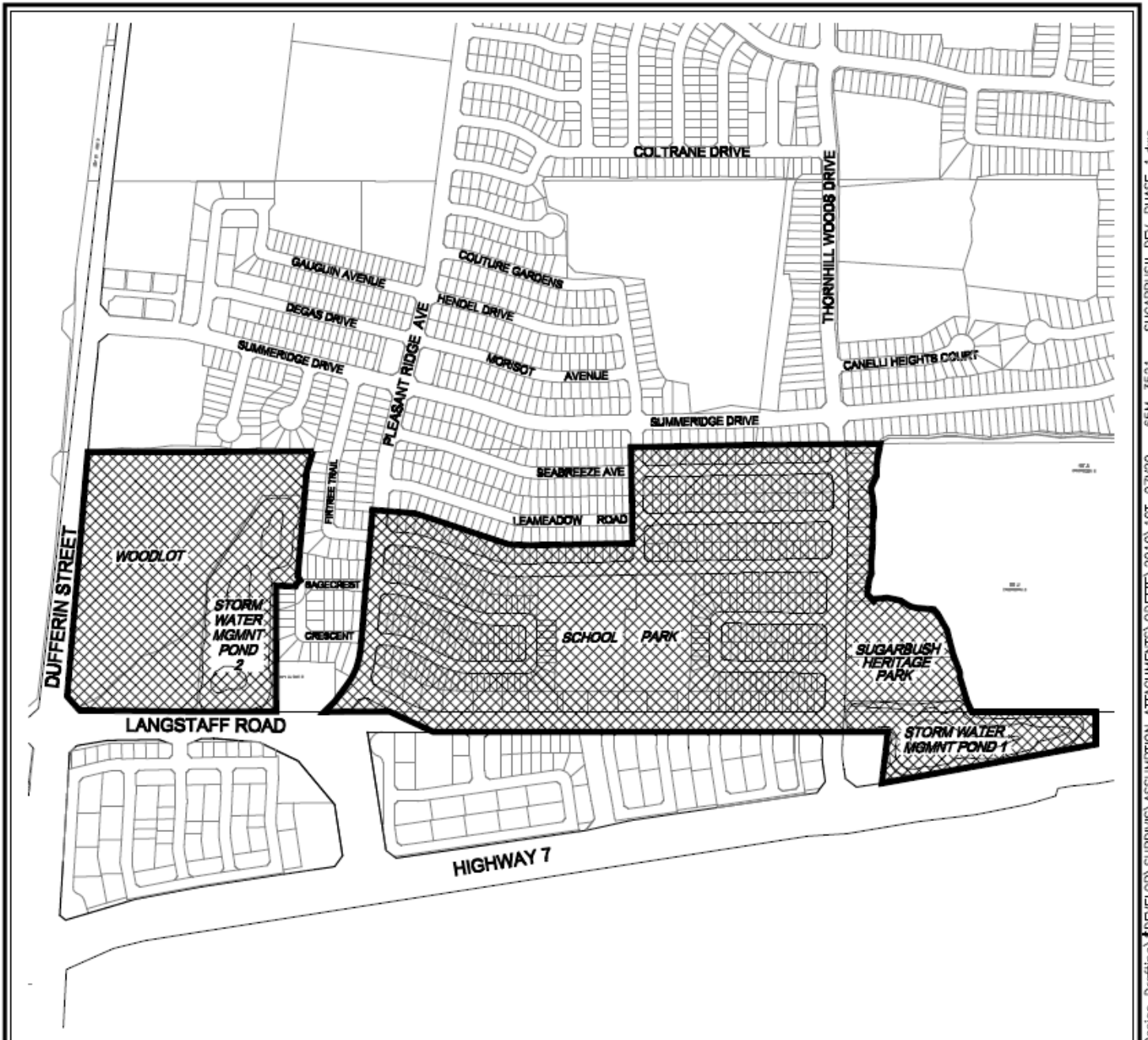
Odetta McIntyre, C.Tech. – Engineering Technologist - Development, ext. 8461
Frank Suppa, Manager of Development Inspection and Grading, ext. 8073

Respectfully submitted,

Bill Robinson, P. Eng.
Commissioner of Engineering and Public Works

Andrew Pearce, C.E.T.
Director of Development/
Transportation Engineering

ATTACHMENT No. 1



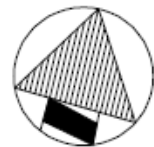
SUBDIVISION ASSUMPTION
SUGARBUSH DEVELOPMENTS PHASE 1
19T-97V20 - 65M-3521

LOCATION : Part of Lot 11, Concession 2

LEGEND



SUBJECT LANDS



NOT TO SCALE