

COMMITTEE OF THE WHOLE – AUGUST 19, 2002

FINAL ENGINEERING REPORTS
STEELES AVENUE LOCAL IMPROVEMENTS

Recommendation

The Commissioner of Engineering and Public Works in consultation with the Directors of Legal Services, Reserves and Investments, and the City Clerk recommends:

That the final engineering reports dated June 26, 2002, for the installation of sanitary and storm sewers, watermain and appurtenances, and sidewalk as a local improvement on Steeles Avenue and Yonge Street in Thornhill be adopted and that the City Clerk be authorized to notify property owners of the final costs and to schedule a Court of Revision in the fall of 2002.

Purpose

To adopt the final engineering reports dated June 26, 2002, for the installation of sanitary and storm sewer, watermain and appurtenances, and sidewalk as a local improvement on Steeles Avenue and Yonge Street in Thornhill and to authorize the City Clerk to schedule a Court of Revision.

Background - Analysis and Options

The City installed sanitary and storm sewers, watermain and sidewalk on Steeles Avenue between Hilda Avenue and Yonge Street and sanitary and storm sewers and watermain on Yonge Street Between Steeles Avenue West and Crestwood Road.

The following is a comparison between the advertised and the final costs.

| <u>ITEMS</u> | <u>ESTIMATED COST</u> | <u>FINAL COST</u> |
|------------------------------------|----------------------------|----------------------------|
| Sanitary sewer and Appurtenances | \$108,345.81 per hectare | \$61,793.10 per hectare |
| Sanitary sewer lateral Connections | \$6,202.59 each | \$6,732.22 each |
| Storm sewer and Appurtenances | \$36,742.70 per hectare | \$119,396.78 per hectare |
| Storm sewer lateral Connections | \$7,129.41 each | \$7,959.79 each |
| Watermain and Appurtenances | \$21,019.84 per hectare | \$41,671.14 per hectare |
| Hydrants and secondary Valves | \$18,000.00 | \$51,332.63 |
| Lateral water Connections | \$9,696.00 each | \$7,568.52 each |
| Sidewalk | \$97.36 per metre frontage | \$50.68 per metre frontage |

The original cost in the Engineer's report for the Steeles Avenue Local Improvement was \$2,827,753.38. The actual final cost was \$3,496,407.21. The reasons for the cost differential are due to final design refinements and escalated prices due to a strong economy at the time of construction.

Construction of this project was completed in 1988, however, a joint expropriation by both the Cities of Toronto and Vaughan was required to obtain easements for the construction. Vaughan awaited finalization of the City of Toronto expropriation before finalizing its expropriation so that values were comparable. The largest expropriation matter was finalized by Vaughan a few years ago. There are still some outstanding smaller expropriations to be finalized and estimates of land cost for these matters have been included in the Engineering Report. Accordingly, we are now in a position to finalize the Engineering Report and come forward for approval.

Conclusion

It is necessary for Council to adopt the final cost report prior to the City Clerk notifying the property owners of the costs and to schedule the Court of Revision in the fall of 2002.

Attachments

1. Addendum 1
2. Addendum 2
3. Addendum 3
4. Location Map

Report prepared by:

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Respectfully submitted,

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

TU:FL

ADDENDUM No. 1

FINAL ENGINEERING REPORT**RE: The Installation of Sanitary Sewer and Appurtenances
and Storm Sewer and Appurtenances as a Local Improvement**

The following is the Final Engineering Report as required under the Local Improvement Act for the installation of a sanitary sewer, appurtenances and service connections and storm sewer, appurtenances and service connections on the following streets:

Steeles Avenue - North side only, from Hilda Avenue to Yonge Street.

Yonge Street - West side only, from Steeles Avenue to 60 metres South of the center line of Crestwood Road.

The estimated life expectancy of the works is sixty (60) years.

FINAL COSTS**PART 1 - SANITARY SEWER**

- (a) To construct 955.02 metres of sanitary sewer and appurtenances.

| | | |
|---------------------------------------|----------------------|----------------------|
| Construction Cost | | \$324,421.26 |
| Additional Costs | | |
| O.M.B. fees | \$ 619.25 | |
| Survey prints | \$ 20.00 | |
| Consultant fees | \$ 84,890.12 | |
| Land valuation | \$ 2,500.00 | |
| Bell Canada temporary easement | \$ 2,000.00 | |
| Other miscellaneous Bell Canada costs | \$ 15.90 | |
| Other miscellaneous costs | \$ 2,872.20 | |
| Land acquisition | \$111,701.17 | |
| Finance administration | \$ 9,984.36 | |
| Interim financing (incl. land cost) | <u>\$371,731.28</u> | |
| | \$586,334.28 | \$586,334.28 |
| Revenue | | |
| Sale of Tender packages | (\$ 950.00) | |
| Transferred from Revenue Fund | <u>(\$26,347.80)</u> | |
| | (\$27,297.80) | <u>(\$27,297.80)</u> |
| | Total Direct Cost | \$883,457.74 |
| Debenture: (1% of \$883,457.74) | | <u>\$ 8,834.58</u> |
| Total Cost of Sanitary Sewer | | \$892,292.32 |

(b) To construct fifteen (15) private sanitary service connections, including inspection manholes:

| | | |
|--|---------------------|---------------------|
| Construction cost | | \$ 42,900.00 |
| Consultant fees | | \$ 11,225.49 |
| Interim financing | | \$ 44,537.64 |
| Finance administration | | <u>\$ 1,320.40</u> |
| | Total Direct Cost | \$ 99,983.53 |
| Debenture: | (1% of \$99,983.53) | <u>\$ 999.84</u> |
| Total Cost of Private Sanitary Connections: | | \$100,983.37 |

PART 2 - STORM SEWER

(a) To construct 959.74 metres of storm sewer and appurtenances.

| | | |
|-------------------------------------|------------------------|-----------------------|
| Construction Cost | | \$671,982.01 |
| Additional Costs | | |
| Consultant fees | \$175,835.07 | |
| O.M.B. fees | \$ 510.25 | |
| Survey costs | \$ 3,888.00 | |
| Miscellaneous costs | \$ 9,655.36 | |
| Land acquisition | \$111,701.17 | |
| Finance administration | \$ 21,675.84 | |
| Interim financing (incl. land cost) | <u>\$764,929.77</u> | |
| | \$1,088,195.46 | \$1,088,195.46 |
| Revenue | | |
| Transferred from Revenue Fund | <u>(\$ 53,158.14)</u> | |
| | Total Direct Cost | \$1,707,019.33 |
| Debenture: | (1% of \$1,707,019.33) | <u>\$ 17,070.19</u> |
| Total Cost of Storm Sewer | | \$1,724,089.52 |

(b) To construct fifteen (15) private storm service connections, including inspection manholes:

| | | |
|---|----------------------|----------------------|
| Construction cost | | \$ 49,680.00 |
| Consultant fees | | \$ 12,999.58 |
| Interim financing | | \$ 53,903.17 |
| Finance administration | | <u>\$ 1,606.48</u> |
| | Total Direct Cost: | \$ 118,189.23 |
| Debenture: | (1% of \$118,189.23) | <u>\$ 1,181.89</u> |
| Total Cost of Private Storm Connections: | | \$ 119,371.12 |

Total Cost of Local Improvement \$2,836,736.33

SANITARY SEWER AREA RATE

Total capital cost to be assessed against benefiting lands: \$892,292.32
Total assessable area = 14.440 Ha.
Cost per hectare: \$892,292.32 ÷ 14.440 = \$61,793.10

SANITARY SERVICE CONNECTIONS

To construct 15 private sanitary service connections, including inspection manholes: \$100,983.37
Cost to be assessed per connection: \$100,983.37 ÷ 15 = \$ 6,732.22

STORM SEWER AREA RATE

Total capital cost to be assessed against benefiting lands: \$1,724,089.52
Total assessable area = 14.440 Ha.
Cost per hectare: \$1,724,089.52 ÷ 14.440 = \$119,396.78

STORM SERVICE CONNECTIONS

To construct 15 private storm service connections, including inspection manholes: \$119,396.78
Cost to be assessed per connection: \$119,396.78 ÷ 15 = \$7,959.79

COST APPORTIONMENT

Corporation's Share

Corporation's share of benefiting area = 0.441 Ha.

| | | | |
|-----------------------------------|-----|--|---------------------------|
| Part 1 | (a) | Corporation's share of Sanitary Sewer Area Rate: 0.441 x \$61,793.10 = | \$27,250.76 |
| | (b) | Sanitary Service Connections: | 0.00 |
| Part 2 | (a) | Corporation's share of Storm Sewer Area Rate: 0.441 x \$119,396.78 = | \$52,653.98 |
| | (b) | Storm Service Connections: | 0.00 |
| Total Corporation's share: | | | <u>\$79,904.74</u> |

Owners' Share

Owners' share of benefiting area = 13.999 Ha.

Cost per Hectare: \$ 61,793.10 for sanitary sewer and \$ 119,396.78 for storm sewer.

| | | | |
|-----------------------------|-----|---|------------------------------|
| Part 1 | (a) | Owners' share of Sanitary Sewer Area Rate: 13.999 x \$61,793.10 = | \$ 865,041.61 |
| | (b) | Sanitary Service Connections: | \$ 100,983.37 |
| Part 2 | (a) | Owners' share of Storm Sewer Area Rate: 13.999 x \$119,396.78 = | \$1,671,435.52 |
| | (b) | Storm Service Connections: | <u>\$ 119,396.78</u> |
| Total Owners' share: | | | <u>\$2,756,857.28</u> |

This special assessment may be paid as a lump sum or in 10 annual installments.

Total Cost of Local Improvement: \$2,836,762.02

Wm. E. Robinson, P.Eng.
Commissioner of Engineering and Public Works

ADDENDUM No. 2

FINAL ENGINEERING REPORT**RE: The Installation of Watermain and Appurtenances
as a Local Improvement**

The following is the Final Engineering Report as required under the Local Improvement Act for the installation of a watermain, appurtenances and service connections on the following streets:

- Steeles Avenue - North side only, from Hilda Avenue to a point 218.3 metres East of the center line of Hilda Avenue.
- Steeles Avenue - North side only, from a point 338.3 metres East of the center line of Hilda Avenue to Yonge Street.
- Yonge Street - West side only, from Steeles Avenue to a point 57 metres North of the centre line of Steeles Avenue.

The estimated life expectancy of the Watermain is sixty (60) years.

FINAL COSTS

- (a) To construct 659.06 metres of watermain and appurtenances.

| | | |
|-------------------------------------|--------------------------------|----------------------|
| Construction Cost | | \$ 214,965.54 |
| Additional Costs | | |
| O.M.B. fees | \$ 407.00 | |
| Miscellaneous Bell Canada costs | \$ 7.96 | |
| Other miscellaneous costs | \$ 2,880.14 | |
| Land acquisition | | \$ 11,906.63 |
| Consultant fees | \$ 56,249.25 | |
| Finance administration | \$ 6,562.16 | |
| Interim Financing (incl. land cost) | <u>\$191,945.20</u> | |
| | \$269,958.34 | \$269,958.34 |
| Revenue | | |
| Provincial grant - M.O.E.E. | (\$30,274.00) | |
| Transferred from Revenue Fund | <u>(\$30,470.69)</u> | |
| | (\$60,744.69) | <u>(\$60,744.69)</u> |
| | Total Direct Cost | \$424,179.19 |
| Debenture: (1% of \$424,179.19) | | <u>\$ 4,241.79</u> |
| | Total Cost of Watermain | \$428,420.98 |

- (b) To construct Hydrants and Secondary Valves

| | | |
|--|------------------|--------------------|
| Construction cost | \$23,750.00 | |
| Consultant fees | \$ 6,214.58 | |
| Interim financing | \$20,643.08 | |
| Finance administration | <u>\$ 724.97</u> | |
| Total Cost of Hydrants and Secondary Valves | \$51,332.63 | \$51,332.63 |

(c) To construct seven (7) water service connections including inspection manholes:

| | | |
|--|------------------|--------------------|
| Construction cost | \$24,275.00 | |
| Consultant fees | \$ 6,351.95 | |
| Interim financing | \$21,087.14 | |
| Administration | <u>\$ 741.03</u> | |
| Total Direct Cost: | \$52,455.12 | |
| Debenture: (1% of \$52,455.12) | <u>\$ 524.55</u> | |
| Total Cost of Lateral Service Connections | \$52,979.67 | \$52,979.67 |

Total Cost of Local Improvement \$532,733.28

WATERMAIN AREA RATE

Total capital cost to be assessed against benefiting lands: \$ 428,420.98

Total assessable area = 10.281 Ha.

Cost per hectare: \$ 428,420.98 ÷ 10.281 = \$ 41,671.14

HYDRANTS AND SECONDARY VALVES

Total cost to construct hydrants and secondary valves to be paid by the Corporation from the City of Vaughan Water Reserve Account \$51,332.63

WATER SERVICE CONNECTIONS

Total cost to construct seven (7) private water service connections, including inspection manholes: \$52,979.67

Cost to be assessed per connection: \$52,979.67 ÷ 7 = \$ 7,568.52

COST APPORTIONMENT

Corporation's Share

Corporation's share of benefiting area = 0.441 Ha.

| | | |
|-----------------------------------|--|---------------------------|
| (a) | Corporation's share of Watermain Area Rate: $0.441 \times \$41,671.14 =$ | \$18,376.97 |
| (b) | Hydrants and Secondary Valves | \$51,332.63 |
| (c) | Water Service Connections: | <u>nil</u> |
| Total Corporation's Share: | | <u>\$69,709.60</u> |

Owners' Share

Owners' share of benefiting area = 9.840 Ha.

| | | |
|----------------------------|--|----------------------------|
| (a) | Owner's share of Watermain Area Rate: $9.840 \times \$41,671.14 =$ | \$ 410,044.02 |
| (b) | Water Service Connections: | <u>\$ 52,979.67</u> |
| Total Owners' Share | | <u>\$463,023.69</u> |

The Special Assessment may be paid as a lump sum or in 10 annual installments.

Total Cost of Local Improvement **\$532,733.29**

Wm. E. Robinson, P.Eng.
Commissioner of Engineering and Public Works

FINAL ENGINEERING REPORT

**RE: The Installation of a Concrete Sidewalk
as a Local Improvement**

The following is the Final Engineering Report as required under the Local Improvement Act for the installation of a concrete sidewalk on the following street:

Steeles Avenue - North side only, from Hilda Avenue to a point 76.0 metres West of Yonge Street.

The estimated life expectancy of the works is twenty (20) years.

FINAL COSTS

To construct 1142.48 square metres of concrete sidewalk.

| | | | |
|--|--|----------------------|----------------------|
| Construction Cost | | | \$ 26,095.00 |
| Additional Costs | | | |
| Miscellaneous costs | \$ | 76.95 | |
| O.M.B. fee | \$ | 69.00 | |
| Consultant cost | \$ | 6,828.18 | |
| Finance administration | \$ | 792.01 | |
| Interim financing | | <u>\$11,702.06</u> | |
| | | \$19,468.20 | \$ 19,468.20 |
| Revenue | | | |
| Transferred from Revenue Fund | | (\$ 2,416.79) | |
| Cash received from Shallot Investments | | <u>(\$ 3,500.00)</u> | |
| | | (\$ 5,916.79) | <u>(\$ 5,916.79)</u> |
| | Total Direct Cost | | \$ 39,646.41 |
| Debenture: | $\frac{(1\% \text{ of } \$39,646.41 \times 685.08)}{789.03}$ | = | <u>\$ 344.23</u> |
| | Total Cost of Sidewalk | | \$ 39,990.64 |

FRONTAGE RATE OF SIDEWALK

Total cost to be assessed against frontage: \$39,990.64

Total assessable frontage: 789.03 m. (2406.48 ft.)

Cost per metre frontage: $\$39,990.64 \div 789.03 = \50.68
(Cost per foot frontage) = (\$15.45)

ATTACHMENT No. 4

