

# STAFF REPORT ENG002-11 May 16, 2011

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File: E02-2010-106T

D12-355 Pending #:

TO:

**GENERAL COMMITTEE** 

SUBJECT:

ASSUMPTION OF STANLEY HEIGHTS PLAN OF SUBDIVISION AND ARCH

**BROWN COURT CHANNEL IMPROVEMENTS** 

PREPARED BY AND KEY

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**CONTACT:** 

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SUBMITTED BY:

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DIRECTOR OF ENGINEERING

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GENERAL MANAGER APPROVAL:

R. J. FORWARD, MBA, M. Sc., P. Eng.

GENERAL MANAGER OF INFRASTRUCTURE, DEVELOPMENT & CULTURE

CHIEF ADMINISTRATIVE OFFICER APPROVAL:

JON M. BABULIC.

CHIEF ADMINISTRATIVE OFFICER

#### RECOMMENDED MOTION

- 1. That the "as-constructed" municipal services within, and complementary to, the plan of subdivision by Stanley Heights Limited, described as Registered Plan 51M-871 (Ministry File 43T-050228) and the Stanley Street extension be accepted, and that a by-law be prepared to assume the streets within the plan of subdivision as public highways subject to the satisfaction of the Director of Legal Services, City Clerk, Director of Engineering, PowerStream Barrie Hydro Distribution Inc., and subject to the following conditions:
  - a) That a Letter of Credit in the amount of \$12,905.00 be held for the purpose of securing uncompleted work including \$5,905.00 for works associated with the removal and replacement of boulevard trees, \$2,000.00 for works associated with lot grading certification, side yard swale and \$5,000.00 for works associated with the maintenance entrance to Georgian Mall.
  - b) That the developer contributes a total of \$53,000.00 which represents one-third of the construction costs towards the reconstruction/relocation of the existing drainage channel at the northerly boundary of the subject plan.
  - c) That the City waives its requirement for a one year maintenance period on all municipal works within the plan.
- 2. That funding from the Tax Capital Reserve (Account 13-04-0440) be increased by \$20,333 for Arch Brown Court Channel Improvements, Contract 2010-106T.
- That the drainage easement width be adjusted to suit the Arch Brown Court Channel Improvements.

### **PURPOSE AND BACKGROUND**

4. The purpose of this report is to recommend assumption of the plan of subdivision and obtain Council's approval to draw additional funds from the Tax Capital Reserve to pay for improvements to a drainage channel at the northerly boundary of the subject plan. Although funds were included for the drainage channel improvements in the 2010 Capital Budget, a reduction in the developer's contribution has required an adjustment to funding.

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5. Assuming a plan of subdivision is a routine matter, however, as described in this report, issues related to a pre-existing drainage channel exist that prompted staff to recommend its reconstruction/relocation in response to resident concerns. The developer has agreed to share the cost of the work in exchange for the waiver of the standard one-year maintenance period on all municipal works within the plan.

6. Because access to the site is limited, in collaboration with the developer staff identified an approach for completing the work that relies on accessing the site via a lot that has not yet been developed. The opportunity to take advantage of this approach is limited, however, so Council's timely consideration of this matter is required.

## Subdivision Assumption

- On October 16, 2006, Council adopted Motion 06-G-507 which approved the engineering conditions and drawings for the above noted subdivision located on the east side of Stanley Street, between Livingstone Street East and Hanmer Street East.
- 8. The site location is illustrated in Appendix "A", and the Stanley Heights Plan of Subdivision, which was registered on February 26, 2007, (Plan 51M-871), is shown in Appendix "B",
- 9. The plan contained an existing 15 metre wide storm water easement and drainage channel within Lots 1 to 8 on Arch Brown Court. The north limit of the easement is along the north property line of Arch Brown Court lots. The drainage channel was constructed within a drainage easement well in advance of the draft plan approval of the subdivision.
- 10. The developer has now requested that the City accept the work and assume the streets within the Stanley Heights Plan of Subdivision Registered Plan 51M-871 including the Stanley Street extension.
- 11. In addition, the developer has requested, that in light of his current offer concerning the relocation of the noted drainage channel wherein the developer contributes 1/3 of the construction cost (\$53,000), that the City waive the standard one year maintenance period.

### Storm Channel

- 12. The approved lot grading drawing prepared as part of the engineering drawings for the subdivision development indicated that houses could be situated on lots 1 to 8 while meeting the City's lot grading criteria, despite the location of the existing drainage channel.
- 13. The existing drainage channel was designed and constructed in 2000/2001 for the purpose of providing a storm water outlet for the Bayfield Street reconstruction/storm outlet and surrounding lands.
- 14. At the time a drainage easement (instead of a conveyance in title) was negotiated from the owners of the land, which saved costs on the Bayfield Street reconstruction/storm outlet project.
- 15. Subsequent to the occupancy of Lots 1 to 8 of the subdivision, the residents felt strongly that the existing channel was an eyesore and negates full use of their back yard property. The houses do not encroach on the easement; however, the distance between the house corners and the easement generally varies from 1.5 metres to over 5 metres. Per the City's lot grading criteria, the minimum flat back yard on residential properties should be not less than 5 metres.

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- 16. As a result, the City organized several meetings over a number of months with the residents, the developer and Ward Councillor in order to resolve their issues. It was eventually agreed, subject to Council approval, that the channel should be relocated northerly to reduce the impact to the residents.
- 17. The project was included in the 2010 Business Plan and Budget to realign the channel toward achieving that objective. The budgeted funds of \$220,000 were for:
  - a) Preparing detailed design and tender documents; and
  - b) Constructing the Channel Improvements works.
- 18. The developer had previously offered to pay for fifty per cent of the cost of reconstruction/relocation of the existing channel, conditional upon the City granting a 10-year deferral on payment of the development charges for his affordable housing project (located at the south end of the subdivision). This proposal was denied by Council under Motion 10-G-343.
- 19. The existing storm channel has a rock lined and vegetated lining. It has not received regular maintenance. As a result, silt and winter sand is partially filling the channel and the vegetation is thriving. The channel is not performing according to its intended design. At the least, the original channel requires maintenance work. The proposed channel is anticipated to be easier and less costly to maintain because of its smooth channel lining.
- 20. Eight tenders were opened on Tuesday, December 7, 2010, at 2:15 p.m. for Contract 2010-106T. The three lowest compliant bids (excluding HST) were:

B & J Contracting \$ 267,483.00; a) Georgian Paving & Construction \$ 286,139.00; and b) R & M Construction C) \$ 325,389.00.

- 21. The tender submitted by B & J Contracting was reviewed and found to be in good order and compliant, however, costs exceeded the available budget.
- 22. In response to the tender pricing and the change in the level of funding from the developer, staff reduced the project's scope. Adjustments included:

Scope Adjustment	Project Impact	
a) An access driveway through East Bayfield Park to the channel was deleted in favour of access through Lot 1;	Reduces total cost, subject to the developer making Lot 1 available for accessing the channel	
b) Sanitary sewer adjustment work was deleted; and	Reduces total cost, one maintenance hole remains difficult to access	
c) Channel improvements, beyond the back yards, were reduced.	Reduces total cost, reduced length of work at project extremities, reduced landscaping	

A post tender addendum was issued to the low bidder which included no new items but reduced the quantities and work of items already bid. The low bidder's revised bid value is \$163,790.00.

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23. The total project cost for Arch Brown Court Channel Improvements, Contract 2010-106T, is estimated to be \$220,000 based on the revised low tender including construction, engineering, consultant fees, property, contract administration, site inspection, and contingencies (see the following table). The project cost matches project budget. The property costs include legal fees and registration fees associated with adjusting the easement limits to co-relate to the narrower storm channel while still providing a minimum 3 metre wide access to the channel.

	Based on Tender	Original Budget
Total Tender Price (Excluding HST)	\$163,790	\$143,000
Contingencies	\$4,000	\$57,000
HST non recoverable (1.76%)	\$2,953	\$0
Design Expenses	\$38,257	\$10,000
Property (Easements)	\$5,000	\$0
Contract Administration, Inspection and Material Testing	\$6,000	\$10,000
TOTAL PROJECT WORK	\$220,000	\$220,000

#### **ANALYSIS**

#### Subdivision Assumption

- 24. At the time of engineering approval and subsequent registration of the subdivision, staff believed that the subject lots could be developed such that the City's lot grading criteria could be met and future residents would have a reasonably useable back yard space (i.e. a minimum 5 metre useable back vard).
- 25. The Developer's Engineer, in conjunction with the home builder, prepared plot plans for the houses on the individual lots as a requirement for Building Permit issuance. The plot plans show general conformance with lot grading criteria, however, for the most part, construction of decks and balconies at the back of the houses is precluded due to the proximity of the drainage easement.
- 26. The plot plans for each lot consistently showed a minimum 5 metre wide back yard. The "as constructed" back yards do not consistently conform to the plot plans and some back yards do not have a 5 metre wide relatively flat usable area.
- 27. Future land owners/residents should have known of the drainage easement and channel as the channel existed prior to lot development, building construction and property purchase by the homeowner.
- 28. Certain uncompleted municipal work associated with the removal and replacement of boulevard trees which are undersized or unhealthy, lot grading certification, side yard swale, and the maintenance entrance to Georgian Mall, exist within this plan which is anticipated to be completed by the developer. The estimated cost of this work is \$12,905.00. The various certificates and documentation concerning the "as constructed" roads and servicing have been received by the Engineering Department and PowerStream Barrie Hydro Distribution Inc. who find them satisfactory for the purpose of municipal acceptance.

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# Storm Channel

- 29. B & J Construction is a well known contractor that has successfully completed several projects of similar size and scope for the City of Barrie and other municipalities.
- 30. Approvals from review agencies such as the Nottawasaga Valley Conservation Authority and Ministry of the Environment are not required.
- 31. Staff feel the latest proposal of financial contribution from the developer, being 1/3 of the channel improvement cost or \$53,000, is acceptable given the circumstances associated with this issue (i.e. channel existed before housing). The infrastructure being assumed has been in place since June 2006. A complete inspection occurred in Spring 2011. Therefore, staff believe the risk associated with removing the one year maintenance period is very low.

# **ENVIRONMENTAL MATTERS**

32. There are no environmental matters related to these recommendations

## **ALTERNATIVES**

33. The following alternative is available for consideration by General Committee:

### Alternative #1

General Committee could decide to expend no funds, assume the subdivision with the normal one year maintenance period and carry out maintenance on the existing channel when required.

This is a viable alternative for General Committee consideration. The drainage channel existed prior to the subdivision's construction and it was clearly indicated on drawings associated with the subdivision's development. Subsequent to their home purchase, residents feel they do not have an acceptable back vard and have threatened a legal recourse and unwanted publicity if the channel is not realigned.

## Alternative #2

General Committee could decide not to accept the plan of subdivision, the infrastructure, or assume the streets within the plan as a public highway.

This alternative is not recommended since acceptance and assumption of municipal services and roadways, within plans of subdivisions, are a standard practice upon substantial completion of the works.

#### Alternative #3

General Committee could decide to retain the one year maintenance period.

This alternative is not recommended as it would result in the loss of the \$53,000 developer contribution.

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## **FINANCIAL**

# Subdivision Assumption

- 34. Assumption of this development increases operating, maintenance and capital funding requirements due to the addition of assets to the City's asset inventory. As a result of the development and assumption of the subdivision, all municipal infrastructure, including but not limited, to roads, sewers and watermains will be the City's responsibility in perpetuity. Similarly, the City assumes responsibility for services like winter control and solid waste collection which occurs with the first occupancy and increases in service as further homes are occupied. Responsibilities include operation of the assets, reactive and preventative maintenance, renewal and lifecycle activities and ultimately replacement of the assets. It is anticipated that the costs will be offset, in part, by property taxes collected from the lots within this plan and through the collection of the sewer and water rate by those individual uses.
- 35. Renewal costs are based on best practice lifecycle activities for each asset that are required in order to reach its maximum potential life. The total cost of life cycle activities has been estimated, summed, and divided by the expected useful life to determine the average annual renewal cost. Additional investigation into the life cycle costs, associated with various assets, is ongoing as part of the implementation of the Corporate Asset Management Strategy.
- 36. Specifically this subdivision includes the following infrastructure which will become part of the City's asset inventory.

#### **Asset Life Cycle Cost**

Asset Type	Length (m)	Useful life (Years)	Annual Renewal Cost (\$/year) <sup>1</sup>	Replacement Cost (\$) <sup>1&amp;3</sup>
Roads - Local	540	75	2700.00	335,340.00
Sidewalks	530	35		34,450.00
Sanitary Sewers 250 PVC 300 PVC	160 240	85		312,000.00
Watermains 200 PVC 150 PVC	310 310	85		248,000.00
Storm Sewers 300 CONC 375 CONC 450 CONC 675 CONC	90 200 80 60	85		342,500.00
3000 X 2400 CULVERT Stormwater Facility	30	1		345,000.00
Subtotal – Lifecycle Costs				1,617,290.00



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# Service Delivery Related Costs

Asset Type	Lane Length (m)	Lane Length (km)	Annual Operating Cost (\$/year) <sup>2</sup>
Roads (e.g. Street Sweeping)	1180	1.18	3,948.00
Winter Control	1180	1.18	4,213.00
Sanitary Sewers	400	0.40	1,491.00
Watermains	620	0.62	4,183.00
Storm Sewers	460	0.46	1,076.00
Solid Waste			5,425.00
Subtotal – Service Delivery Costs	}		20,336.00

- 1. Renewal and replacement costs are based on 2010 dollars.
- 2. Annual operating costs are derived from the 2010 cost estimates (this does not include treatment costs).
- The replacement costs include the cost to reconstruct the assets as they currently exist.

## Storm Channel

- 37. The budget funding for the Arch Brown Court Channel Improvements is shown in Appendix "C" along with the proposed funding based on the total project cost including construction, engineering, consultant fees, property, contract administration, site inspection, and contingencies. It includes one third funding from the developer for the construction component of the work rather than the full project cost. This results in a \$20,333 shortfall in the developer contribution to be paid from the Tax Capital Reserve.
- 38. The total funding in the 2010 Business Plan for this project was \$220,000. The estimated net total project cost represents 100% of the total budget value for this project. As per Appendix "C", the adjusted funding is:
  - a) \$20,333 Tax Capital Reserve
  - b) (\$20,333) Developer Contribution

### **LINKAGE TO COUNCIL STRATEGIC PRIORITIES**

39. The recommendations included in this Staff Report are not specifically related to the goals identified in the 2010 – 2014 City Council Strategic Plan.

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# APPENDIX "A" Project Location Plan

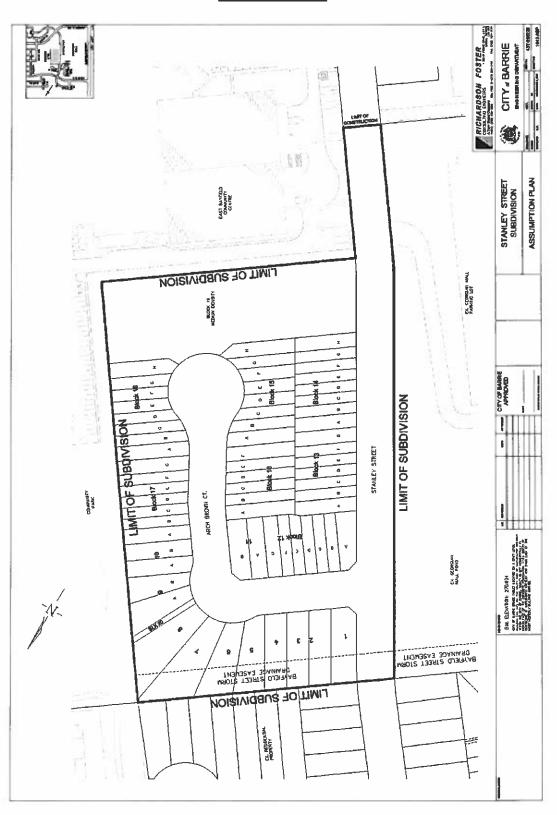


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# APPENDIX "B" Assumption Plan



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# **APPENDIX "C"**

# **Funding Details**

# Attachment # 1 Funding Details

# **BUDGET FUNDING**

Component	Arch Brown Court Channel Improvements STORM	
· ·		
	14-16-2520-1143	
Tax Capital Reserve	\$146,667	
Developer Contribution	\$73,333	
TOTAL	\$220,000	

# **PROPOSED FUNDING**

Component	Arch Brown Court Channel Improvements	
•	STORM	
	14-16-2520-1143	
Tax Capital Reserve	\$167,000	
Developer Contribution	\$53,000	
TOTAL	\$220,000	

# **FUNDING ADJUSTMENT**

Component	Arch Brown Court Channel Improvements	
	STORM	
	14-16-2520-1143	
Tax Capital Reserve	\$20,333	
Developer Contribution	-\$20,333	
TOTAL	¢o.	
TOTAL	\$0	