CITY WIDE
IMPLICATIONS

To: Chair and Members
Economic Development and Planning Committee
PED08164

From: Tim McCabe
General Manager
Planning and Economic Development Department
Telephone: 905 546-2424 x4339
Facsimile: 905 546-4364
E-mail: tjmccabe@hamilton.ca

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Re: Outstanding Business Item S - Clarification on Estimates for the Cost of Sewer, Storm and Water Hook-Ups and the Variation between City-Initiated and Best Efforts Situations (PED08164) (City Wide)

COUNCIL DIRECTION:

Council, at its meeting on November 9, 2008 requested an Information Report from staff for Clarification on Estimates for the Cost of Sewer, Storm and Water Hook-Ups and the Variation between City-Initiated and Best Efforts Situations.

INFORMATION:

The City of Hamilton has authority through the Municipal Act (previously the Local Improvement Act) to assess fees and charges related to the cost of services provided to benefiting property owners by passing a Municipal Act Cost Recovery By-law. The supporting policy document, “Funding Methodology for Municipal Infrastructure Extensions” approved in 2001 (updated in 2007) is based on a full cost recovery model and outlines the approach the City takes to approve, implement, and assess charges to benefiting property owners for projects constructed by the City and on behalf of the City by developers.

Variation in Types of Projects

Owner Initiated Petitions (Constructed and Administered by the City)
These projects are initiated by residents typically in outlying urban fringe areas where full services do not exist. The City facilitates a formal petition process whereby residents vote on a project. If the petition is successful, the project and a rating by-law is approved by Council and constructed by the City on behalf of residents. The residents are required to pay upon construction of the improvement which includes costs for design, installation of service and restoration of the road. Per the policy, the City can finance the cost of the project for residents with a special charge on their tax bill.
Recent examples of Owner Initiated Petitioned projects include:
- North Service Road Sanitary Sewer – Stoney Creek (2006)
- Lochside Drive Sanitary Sewer – Stoney Creek (2002)

City Initiated (Constructed and Administered by the City)
These projects are coordinated by the City to take advantage of a planned road project where local services do not exist. Using the funding policy, residents are advised of the City’s intent to install services as part of the project and are given the opportunity to formally petition against the works. If the majority do not petition against the improvement then the project and a rating by-law is approved by Council and constructed by the City on behalf of residents as part of the road project. The residents are required to pay upon construction of the improvement which includes costs for design and installation of service; because the road surface is to be replaced regardless, benefiting owners do not pay for the restoration portion of the road. Per the policy, the City can finance the cost for residents with a special charge on their tax bill. Recent examples of City Initiated Petitioned projects include:
- Stone Church Road – West 5th to Upper James
- Hamilton Drive in Ancaster - north section south of Hwy. 403

Developer Initiated (Constructed by Developer and Administered by the City)
Developers often have to extend services on existing roads in order to service their lands. The developer front-ends the cost of these works and through the subdivision agreement process, the City applies the funding methodology and City’s Best Efforts Policy to recover costs on behalf of the developer from existing property owners when they take benefit of (connect to) the services. Benefiting property owners include those where the new service extends across the frontage of the lands and can be existing residents, businesses, etc. and also other developers. Infrastructure extensions on existing roads that service large growth areas normally have a proportion of the cost (up to 100%) funded from the Development Charges reserve. The following is a description of the variation in developer initiated projects:

a) When only other developers benefit from the Servicing – the City uses provisions of the Best Efforts policy to recover costs on behalf of a developer who constructs services that benefit other developers. The City includes a condition in the subdivision agreement to recover these costs. As a mechanism to collect, the City will typically place a one foot reserve across the future development lands which would only be lifted when the developer proceeds with his subdivision plan or severance; the City will also place conditions of approval on the development coming forward. A cost recovery by-law is not required because there are no existing property owners that would take benefit.

b) When only existing property owners benefit from the Servicing – in addition to using the Best Efforts policy the City must also pass a cost recovery by-law in order to recover costs from benefiting property owners on behalf of the developer. In this case, while the funding methodology is used to apportion costs and for preparation of the by-law, there is no provision for existing property owners to petition against the project; as such, they only pay the proportionate share of the cost when they
connect to the service. Following the funding methodology policy, a cost recovery by-law is required as the legal mechanism to recover costs from existing property owners.

c) When both existing property owners and other developers benefit from the Servicing – in this case, the same as b), the City uses Best Efforts; the funding methodology to apportion costs; and, because there are existing property owners, prepares a cost recovery by-law to recover costs for the developer.

d) When Servicing is funded from the Development Charge Reserve – the City applies provisions of the funding methodology where residents are charged a minimum Flat Rate Fee for cost of the mainline service; the service laterals are charged at full cost. As with the other variations in projects, because there are existing property owners that can take benefit, a cost recovery by-law is required. Depending on the funding allocation from the Development Charge Reserve, monies collected using the Flat Rate Fee provision is paid back to the Development Charge Reserve and / or the Developer while the cost of the service laterals are paid back to the developer when the property owner connects to the system.

**Variations in Costs**

In general the variation in cost for projects can be attributed to:

- the size of the pipe;
- the depth of the installation;
- the subsurface conditions encountered; and
- the ability to coordinate the servicing with other works

Sewer projects generally cost more than watermain because of larger pipe sizes and because they are deeper and thus require more excavation and road restoration. It's important to note that both subsurface conditions and the ability to coordinate the work with other related works can significantly affect the cost. For example, rock excavation can double the cost of a project depending on the volume to be removed, and conversely, if the road is being reconstructed as part of the work property owners will get the benefit of not paying for road restoration.

**How Projects are Estimated**

a) **Resident Initiated / City Initiated Projects (Petition)**

Estimates prepared by City staff based on current unit prices for similar work, depth of the service, and anticipated field conditions (rock, water, etc.) and includes design, construction and contract administration. Projects are approved by property owners (by petition) based on estimated costs but property owners pay the actual costs upon construction in accordance with the cost recovery by-law plus interest and an administrative charge if financed by the City. If tendered costs are greater than 10% of the estimated costs, residents must be re-petitioned. Total cost of the project is normally apportioned on a per lot basis (everybody pays the same), but can be based on frontage if it is more equitable to owners.
For sanitary sewer, costs for the mainline service plus private drains to the street line can vary considerably depending on the location, depth and subsurface conditions. Watermain costs tend to be lower and more consistent because they are placed at a standard depth. Residents are advised to expect costs to range from $15,000-$20,000 for sewers and about $10,000 for watermain.

Below is a list illustrating the costs (main line plus service lateral) for recent Resident Initiated / City Initiated Projects:

- Stone Church Road – Upper James to West 5th (2001) - $17,753
- North Service Road Sanitary Sewer – Stoney Creek (2006) - $27,633
- Lochside Drive Sanitary Sewer – Stoney Creek (2002) - $14,408

b) Developer Initiated (Best Efforts)

Estimates prepared by developer’s engineering consultant based on current unit prices for similar work, depth of the service, and anticipated field conditions (rock, water, etc.); also includes cost for design, construction and contract administration. Costs approved by City as part of development application (no petition). Benefiting property owners pay the actual costs upon connection in accordance with the cost recovery by-law prepared by the City. Developer is paid back using provisions of the Best Efforts policy. Cost of the project is normally apportioned on a per lot basis (everybody pays the same), but can be based on frontage if it is more equitable to owners.

For sanitary sewer, costs for the mainline service plus private drains to the street line can vary considerably depending on the location, depth and subsurface conditions. Watermain costs tend to be lower and more consistent because they are placed at a standard depth. Residents can expect costs to range from $5,000-$15,000 plus private drains for sewers; and about $7,000 for watermain plus service laterals to the street line. Below is a list illustrating the costs (main line plus service lateral) for each benefiting property owner for recent Developer Initiated Projects:

- Second Road West Sanitary Sewer - Stoney Creek (2002) – $2,896-$5,849 (frontage based)
- Seabreeze Crescent Sanitary Sewer - Stoney Creek (2003) - $7,556
- Fifty Road Sanitary Sewer – Stoney Creek (2003) - $5,626
- Hamilton Drive Sanitary Sewer – Ancaster (2004) - $10,394
- RR56 Sanitary Sewer - south of Binbrook Rd. (2006) - $14,600
- Binbrook Road Watermain – west of RR56 (2005) - $7,169
- RR56 Watermain – south of Binbrook Rd. (2006) - $8,361
- White Church Road Watermain – west of Hwy.6 Mount Hope (2003) - $1,697-$6,411 (frontage based)
c) Development Charge Funded Flat Rate Fee Projects

The Flat Fee Rate for mainline servicing was established in 2007 in order to provide a nominal fixed cost to existing property owners who choose to take benefit of services being extended for growth where 100% of the project cost is allocated to the Development Charge Reserve. This approach recognizes that growth is driving the need for servicing and that existing residents should only pay a proportionate share of the cost based on the size of a local sewer at minimum depth (service laterals are charged at full cost).

Prior to the Flat Rate Fee there were instances where costs to benefiting property owners were assessed unreasonably high ($50,000-$75,000) because of deep, large capacity pipes that were servicing Greenfield development (Garner Road / Hamilton Drive in Ancaster).

The Flat Fee Rate was derived by assuming local sized service, average lot frontage, and a unit price analysis of historical pricing for Greenfield projects (three year contract pricing) checked against Public Works cost data for conformance. Currently the Flat Rate Fees for mainline servicing has been set as follows:

- Sanitary sewer (2007) - $5,900.00 plus sanitary drain to property line
- Storm Sewer (2007) - $6,900.00 plus drain to property line
- Watermain (2007) - $4,100.00 plus service lateral to property line

To date two projects have been constructed using the flat rate fee approach:

- Rymal Road Sanitary Sewer (2006) – west of Pritchard Rd. to Dakota Boulevard

In cases where Development Charges only partially fund the servicing project, the benefiting owner’s share of the cost is the actual cost of the project, net of the DC share, or the approved flat fee charges in force at the time, whichever is the greatest.