

For Information Only

Surplus Fill Yearly Statistics

Presented To:	Operations Committee
Presented:	Monday, Jan 18, 2016
Report Date	Thursday, Dec 31, 2015
Type:	Managers' Reports

Recommendation

For Information Only

BACKGROUND

In 2003, City Council passed By-Law 2003-282, being a By-Law to establish a Surplus Fill Policy. A copy of the By-Law is attached along with Schedule "A".

Clause 10 of Schedule "A" indicates the General Manager shall provide an annual report to Council on the use of surplus fill. This report provides a breakdown of the locations used for the disposal of fill.

SUMMARY

Approximately 93,000 cubic metres of material was removed from the various contracts tendered in 2015, with approximately 56,000 cubic metres from the Crean Hill contract alone.

Signed By

Report Prepared By

Peter Chiesa
Director of Engineering Services
Digitally Signed Dec 31, 15

Division Review

Peter Chiesa
Director of Engineering Services
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Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
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Recommended by the C.A.O.

Kevin Fowke
Acting Chief Administrative Officer
Digitally Signed Jan 5, 16

The chart below outlines the area and sites utilized:

AREA	AVAILABLE SITES	SITES USED
Azilda	1	1
Chelmsford	3	3
Hanmer	1	--
Lively	4	2
Dowling	1	1
Sudbury	7	7
Valley East	4	4
Whitefish	2	2

In addition to the above areas, the Sudbury Landfill Site was the designated fill dump site for the surplus fill from the Moonlight Avenue contract. Fill material brought to this site was utilized for the building of roadway.

Each year Engineering Services contacts other City sections and departments for any surplus fill needs that they may have and Engineering Services will include the location(s) in contract documents for the delivery of the surplus fill material.

In July 2015, a report on amendments to the Surplus Fill By-Law was presented to the Operations Committee (see attached report). The Committee did not decide on a recommendation and the report was deferred until such time as the Auditor General brought forward his report with recommendations and/or revisions.

Once this report is received, the General Manager will report back to the Operations Committee with any warranted or recommended revisions to the existing By-Law 2003-282.

D. Belisle
R. Sundellie (2)
Jeff. Poling

BY-LAW 2003-282

**A BY-LAW OF THE CITY OF GREATER SUDBURY
TO ESTABLISH A SURPLUS FILL POLICY**

WHEREAS the Council of the City of Greater Sudbury deems it desirable to adopt a policy for the dumping of surplus excavated material from City of Greater Sudbury construction projects or other works;

**NOW THEREFORE THE COUNCIL OF THE CITY OF GREATER SUDBURY
HEREBY ENACTS AS FOLLOWS:**

1. In this By-law:

"City" means the City of Greater Sudbury;

"former municipalities" means the former Regional Municipality of Sudbury or any of its constituent area municipalities or any of their predecessor municipalities;

"Manager of Construction Services" means the City's Manager of Construction Services from time to time and includes his or her authorized designate; and

"surplus fill" means surplus excavated material or fill generated by construction projects or other works conducted by or for the City of Greater Sudbury.

2. The Policy on Surplus Fill attached hereto as Schedule "A" is hereby adopted.

3. All previous Surplus Fill Policies of the former municipalities are hereby repealed.

4. The Manager of Construction Services is hereby authorized to process and approve or reject applications to have surplus fill disposed of on public land or private land and to authorize the disposition of surplus fill, all in accordance with the guidelines in the Policy on Surplus Fill, set out in Schedule "A" attached to and forming a part of this By-law.

5. No fee will be payable by the City for the right to deposit surplus fill generated by works conducted by the City of Greater Sudbury on public land or private land or charged by the City for the surplus fill provided to public land or private land.

6. This By-law shall come into force and take effect immediately upon the final passing thereof.

READ THREE TIMES AND PASSED IN OPEN COUNCIL this 13th day of
November, 2003.



Mayor



Clerk

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of the City of Greater Sudbury**

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POLICY CONCERNING SURPLUS FILL

Interpretation

1. In this Surplus Fill Policy:

"City" means the City of Greater Sudbury;

"City land" means land owned by the City, any local boards of the City or any corporation owned or controlled by the City;

"Manager of Construction Services" means the City's Manager of Construction Services from time to time and includes his or her authorized designate;

"owner" means the registered owner or registered owners of land;

"private land" means land which is not City land or public land;

"public land" means land owned by the Government of Canada, the Government of Ontario, any ministry, department, commission, corporation, authority, board or other agency established from time to time by the Government of Ontario or the Government of Canada, or by a school board; and

"surplus fill" means surplus excavated material or fill generated by construction projects or other works conducted by or for the City of Greater Sudbury.

Application of Policy

2. This Policy shall apply to all surplus fill generated in the City.

Guidelines - Disposition Surplus Fill

3. No surplus fill shall be deposited on private land or public land unless first authorized by the Manager of Construction Services.

4. An application to have surplus fill deposited on private land or public land shall:

- (a) be made in writing;
- (b) be signed by each owner of the land to which the application applies;
- (c) set out the legal description and where available, a municipal address of the land to which the application applies;
- (d) contain an acknowledgement by each applicant, that he or she understands that the City will not level any surplus fill deposited on the land;

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of the City of Greater Sudbury**

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- (e) contain adequate direction or explanation of the location at which the surplus fill is to be deposited;
- (f) include a written release of liability of the City, which is satisfactory to the Manager of Construction Services, as to form and content; and
- (g) contain such other information and be accompanied by such other documentation as may be determined by the Manager of Construction Services from time to time.

5. The Manager of Construction Services shall make such investigations as to title and other matters as he or she shall consider appropriate in processing each application to have surplus fill deposited on public land or private land.

6. The Manager of Construction Services shall reject any application for deposit of surplus fill on private land or public land which the Manager of Construction Services, in his sole discretion determines:

- (a) pertains to land of less than 0.5 hectare in area, provided, however, this limitation shall not apply if the application is made by the owner of land on which the City has an easement and relates only to surplus fill generated on the portion of the City easement located on that land;
- (b) pertains to land located in a flood plain or land which the Nickel District Conservation Authority advises would not be suitable for the deposit of surplus fill;
- (c) pertains to land to which access is not appropriate for depositing surplus fill; or
- (d) does not conform with the requirements of Section 4.

7. The Manager of Construction Services shall advise the applicant whether the application for surplus fill has been approved or rejected.

8. The Manager of Construction Services shall retain approved applications for surplus fill until the earliest of:

- (a) 5 years after the date of approval of the application;
- (b) a change in ownership of the land to which the application applies; or
- (c) any registered owner of the land to which the application applies requests the application be withdrawn.

9.-(1) The Manager of Construction Services shall authorize disposition of surplus fill in accordance with the following priorities:

- (a) if the surplus fill is generated on a City easement, and there is an approved application for surplus fill by the owner of the land on which the fill is generated, the surplus fill shall be disposed of on that land;
- (b) if paragraph 9(1)(a) does not apply, the surplus fill shall be deposited on City land;

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of the City of Greater Sudbury**

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- (c) if there is surplus fill which cannot be utilized on City land, the Manager of Construction Services may, in his or her sole discretion, authorize disposition of the surplus fill on public land or private land for which there is an approved application for surplus fill on file. In the event that there is more than one approved application for surplus fill on file, the Manager of Construction Services is authorized to determine where to deposit the surplus fill and his decision shall be final. In exercising his discretion the Manager of Construction Services shall consider the following factors:
 - (i) accessibility, location, cost and convenience of disposing of surplus fill should be considered in choosing a site from the approved applications on file; and
 - (ii) there shall be a preference to deposit surplus fill on public land in priority to private land.

(2) The Manager of Construction Services shall provide notice to the owner of land which was subject of an approved application for surplus fill prior to disposition of surplus fill on that land.

10. The General Manager of Public Works shall provide an annual report to Council on the use of surplus fill.

Request for Decision

Amendment to Surplus Fill By-Law 2003-282

Presented To: Operations Committee
Presented: Monday, Jul 06, 2015
Report Date Thursday, Jun 18, 2015
Type: Managers' Reports

Recommendation

THAT the City of Greater Sudbury directs staff to prepare revisions to the Surplus Fill By-Law 2003-282 all in accordance with Scenario 2 from the report dated June 18, 2015 from the General Manager of Infrastructure Services.

Summary of Recommended Changes

The purpose of this report is to obtain approval of Council to change the standard process for disposal of surplus fill summarized as follows.

1. City of Greater Sudbury (CGS) staff will continue to make best use of surplus fill on planned CGS future projects when possible.
2. When no CGS future projects have been identified, surplus fill will be turned over to the Contractor for disposal or re-use at their discretion.
3. Contractors will be obligated to obtain a release from private owners who receive surplus fill, removing the City from any liabilities or costs associated with receipt of the surplus fill.
4. The practice of identifying and approving private sites for disposal of surplus fill will be discontinued, although private owners may be required to obtain permits from other government agencies such as the Conservation Sudbury (formerly Nickel District Conservation Authority) and, owners may have to comply with other City by-laws such as zoning.
5. The current Surplus Fill By-law 2003-282 will be amended or rescinded as necessary.
6. Standard contract documents will be amended in accordance with this report and any amended by-laws.

Finance Implications

As the cost to dispose of surplus fill is not explicitly defined in our contracts, it is difficult to ascertain the financial impact. With the adoption of shifting disposal responsibility to the Contractor (Scenario 2), it is expected that disposal costs would not increase from the current method of disposal and the CGS may benefit from Contractor efficiencies and re-use.

Signed By

Report Prepared By

Kevin Shaw
Director of Engineering Services
Digitally Signed Jun 18, 15

Division Review

Kevin Shaw
Director of Engineering Services
Digitally Signed Jun 18, 15

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure Services
Digitally Signed Jun 18, 15

Recommended by the C.A.O.

Bob Johnston
Interim Chief Administrative Officer
Digitally Signed Jun 23, 15

Background

Current Method of Disposal (Scenario 1)

The current method of disposing of surplus fill tasks CGS Staff with reviewing and authorizing private site locations for our Contractor's use for the disposal of the surplus fill.

CGS Staff in conjunction with Conservation Sudbury jointly approve surplus fill sites, having the landowner sign a release form and provide a sketch or survey of the exact location where the surplus fill will be deposited on the property.

Our Contractor normally delivers surplus fill to an authorized private site and in many cases has to level the surplus fill because the receiving property owner has no means to do so. Leveling of the surplus fill is a necessity to the continuation of the disposal process. The cost associated with this method of disposal is normally carried in the contract pricing under the various items associated with the activities that generate the surplus fill, such as road excavation. In cases where work is performed by time and material such as emergency repairs, then excavation, disposal and leveling are all completed by time and material pricing.

The City's existing By-law 2003-282 does not allow City forces to level surplus fill on private property. It has not been practical to wait for private property owners to make arrangements to level the fill which is necessary for disposal to continue. Since the City is currently contractually obligated to delineate disposal locations, the additional cost of leveling surplus fill is deemed more practical than finding new disposal locations or paying for delays in contracts if sites are not available for disposal.

In addition to the practical challenges associated with disposal of surplus fill, the existing process is very restrictive to potential re-use. Should a Contractor have a potential re-use of the material, the City may benefit financially in the form of more favourable tender prices. The existing disposal method provides long term value to the property owner, but not to the Contractor or the City.

If the existing method of disposal of surplus fill were to be maintained then the surplus fill by-law should be amended. Alternatively, CGS staff considered two alternative methods of disposal of surplus fill, summarized in the following analysis.

Analysis

Scenario 1 – Existing Methodology

This Scenario is our current method of disposal as described above. The annual cost of disposal of surplus fill, under Scenario 1, based on an average of fill generated at construction projects over the past three years, amounts to approximately \$750,000. In addition to this disposal cost, is the cost to dispose of surplus fill generated through the Operations and Maintenance activities (CGS and contracted forces) for the repair of CGS underground infrastructure or culverts and ditching. This cost amounts to approximately \$300,000 annually.

For this scenario to continue, a modification to Surplus Fill By-law 2003-282 would be required to allow City crews and/or City Contractors to level fill on private property. This flexibility is deemed necessary under this scenario to allow City operating departments and Contractors the means to execute their work on schedule.

Scenario 2 – Transfer Responsibility for Disposal

This Scenario would shift the responsibility for the locating of private surplus fill sites and the ownership of the surplus fill to the Contractor.

In preparing the cost analysis for this scenario, it was assumed that the quantity of surplus fill and the haul distances would remain the same as those used in Scenario 1. The Contractor would merely take over the work currently done by CGS staff to secure private disposal sites and assume ownership of the surplus fill. The Contractor would be responsible for convening meetings with private fill site property owners, in conjunction with Conservation Sudbury, to physically review the site to ascertain suitability to receive surplus fill. A Property Owner Release Form including various stipulations attached to the placement of the fill would be obtained from the Contractors after conclusion of the work. The cost associated with Scenario 2 is approximately \$750,000 annually. Under Scenario 2, the Contractor could elect to fill personal property or haul to smaller fill sites than the current 0.5 hectare CGS stipulated size requirement, thus potentially finding efficiencies that could be reflected in contract pricing.

Where possible, CGS contracts involving emergency repairs would either be provided suitable City-owned property for disposal, or be transferred responsibility for disposal. These alternative arrangements would be a component of the competitive procurement process.

Scenario 3 – Purchase Disposal Sites

Under Scenario 3, the CGS would potentially purchase a number of large sites, in strategic locations across the geographic area of the CGS. This scenario would considerably increase the cost of the disposal of surplus fill as a result of land purchase; security requirements such as, fencing and gates to control access; substantially longer haul distances; and, the need to locate equipment for the purpose of fill leveling. The capital cost for Scenario 3 is estimated to be \$800,000. The annual operating cost could exceed \$1,000,000 with longer haul distances and the increased operating costs.

Other Considerations

It is recognized that the best use of surplus fill is for re-use on other CGS projects. For all scenarios, CGS staff will continue to endeavour to find suitable uses for the fill. When contracts are issued for tender, the specifications will direct Contractors where to dispose surplus fill at CGS property, if opportunities exist.

Contractors and private land owners may continue to require permits from other various government agencies. For example, Conservation Sudbury may restrict placement of fill in flood plains. The Ministry of Natural Resources may also have restrictions with fill placement adjacent to waterways. The City will only manage the acquisition of supplemental permits in Scenarios 1 and 3.

In reviewing alternatives for disposal of surplus fill, CGS staff reviewed the possibility of using this material at CGS landfill sites. It was determined that most excavation sites have minimal volumes of material of a suitable nature for use at the landfill. The material must be relatively clean sands and fine gravels with low moisture content. CGS staff will continue to look for opportunities to take surplus fill to CGS landfill sites.

Conservation Sudbury would continue to provide a prime role in the examination of potential surplus fill sites for the purpose of authorizing the sites to receive fill.

In 2009, the City of Greater Sudbury passed the Site Alteration By-law 2009-170 which regulates the alteration of grades and the placing and dumping of fill. Staff will be meeting to ensure that the approach

moving forward ensures compliance with this By-law.

Ontario Provincial Standard Specification (OPSS) 180 – General Specification for the Management of Excess Material that has been developed for use in provincial and municipal oriented Contracts will be included in future CGS Contracts.

Various municipalities were contacted to understand their methods of dealing with the disposal of surplus fill. The findings of these discussions are summarized in Table 1 below:

Table 1 – Discussions with Similar Sized Municipalities

Municipality	Disposal Responsibility	Time in Effect	Private Property Release Form	Fill Site Size	Public Sale	Landfill Cover
Barrie	Contractor	Many years	yes	any size	no	never
Kingston	Contractor	15 years	yes	large	no	periodically
North Bay	Contractor	2 Years	yes	any size	n/c	periodically
Peterborough	Contractor	Many years	yes	any size	no	periodically
Sault Ste. Marie	Contractor	Many years	yes	large	n/c	periodically
Timmins	Contractor	n/c	yes	n/c	no	often

n/c = No Comment

Recommendation

Staff recommends that the CGS adopt Scenario 2, which will shift the responsibility for surplus fill disposal to the Contractor. Under this Scenario, Conservation Sudbury would continue to be involved in the site approval process. Shifting of responsibilities would remove the burden from CGS staff to locate, review, and authorize surplus fill sites and it would provide the Contractor with the opportunity to sell surplus fill, potentially reflecting a reduction in contract pricing.

Staff will continue to make best use of surplus fill on planned CGS future projects when possible. Future contracts would be modified to stipulate methods of disposal, and conditions for release of obligations where material is disposed at private property.

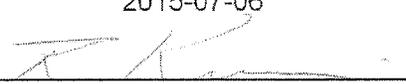
Subject to approval of this report, Surplus Fill By-law 2003-282 will be modified to reflect changes in surplus fill disposal methodology as well as to reflect an appropriate phase-out period.

RECOMMENDATION TO COUNCIL

Moved By *Emelyn Dufusac* No. OP2015-20
Seconded By *Fern Cormier* Date 2015-07-06

THAT the City of Greater Sudbury directs staff to prepare revisions to the Surplus Fill By-Law 2003-282 all in accordance with Scenario 2 from the report dated June 18, 2015 from the General Manager of Infrastructure Services.

deferred

CARRIED
2015-07-06

Councillor Kirwan, Chair
Recommendations are not ratified until
approved by City Council.