

CITY OF HAMILTON

PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT Planning Division

ТО:	Chair and Members Planning Committee		
COMMITTEE DATE:	September 20, 2016		
SUBJECT/REPORT NO:	Terrapure Stoney Creek Regional Facility Environmental Assessment (EA) – Draft Proposed Terms of Reference (PED16184) (Ward 9)		
WARD(S) AFFECTED:	Ward 9		
PREPARED BY:	Eniber Cabrera Planner I (905) 546-2424 Ext. 6685 Alissa Mahood Senior Project Manager (905) 546-2424 Ext. 1250 Steve Robichaud Director of Planning and Chief Planner		
SUBMITTED BY:	Jason Thorne General Manager Planning and Economic Development Department		
SIGNATURE:			

RECOMMENDATION

That Council authorize and direct the Chief Planner to forward a Letter of Comment, attached as Appendix "A" to Report PED16184, to Terrapure Environmental outlining the City's comments respecting the "Stoney Creek Regional Facility Environmental Assessment (EA) - Draft Proposed Terms of Reference, June 21, 2016".

EXECUTIVE SUMMARY

Terrapure is the owner and operator of the Stoney Creek Regional Facility ("SCRF"), a landfill located at the northwest corner of Mud Street and Upper Centennial Parkway (Highway 20) in the former City of Stoney Creek (Ward 9). The landfill was approved under the Environment Protection Act ("EPA") to receive 2,000,000 m³ of industrial fill/soils ("non-waste") and 6,320,000 m³ of solid, non-hazardous residual materials from

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commercial, industrial and institutional sources (that have exhausted all recycling options) for a total approved site capacity of 8,320,000 m³. Appendix "B" to Report PED16184 shows the location of the SCRF.

In 2013, under previous ownership by Newalta Corporation ("Newalta"), the SCRF footprint was revised to reduce the size of the residual material footprint from what was originally approved in 1996 to an area consistent with the base linear system that had been constructed to date at that time. There was no change to the approved total disposal volume. However, the reconfiguration effectively increased the height of the landfill while reducing the overall footprint for residual material from 59.1 ha to 41.5 ha. As a result, the setback distance between the limit of residual material and Green Mountain Road West was increased from 30 m to a minimum of 140 m. This revision was approved by the MOECC in 2014 as an amendment to the Environmental Certificate of Approval ("ECA") under the Environmental Protection Act.

This Report responds to the request for comments received by Terrapure Environmental ("Terrapure") on June 23, 2016, on the 'Stoney Creek Regional Facility Environmental Assessment - Draft Proposed Terms of Reference, June 21, 2016' ("ToR") (Attached as Appendix "C" to Report PED16184). This ToR is the first step of a two-step approval process under the Environmental Assessment Act ("EA Act"). The ToR document sets out the framework and work plan for the planning and decision-making process to be followed during preparation of the Environmental Assessment ("EA").

In the Draft Proposed ToR, Terrapure is proposing to reconfigure the SCRF back to a footprint close to the original that was approved in 1996. This reconfiguration would permit an additional 3,680,000 m³ of solid non-hazardous residual material (by reallocating 2,000,000 m³ allowance for industrial fill / soils and adding some additional capacity), for a total site capacity of 10,000,000 m³.

The SCRF's current design is expected to reach capacity in the next 16 to 22 years, with the capacity for residual material exhausted in approximately 3 to 5 years, and the site continuing to accept industrial soils / fill for another 13 to 17 years thereafter. Terrapure indicates in its Proposed Draft ToR, that by changing the configuration of the site to accept more residual materials, SCRF may be able to close sooner (within 13 to 20 years) than currently anticipated.

Terrapure was initially soliciting comments from the community, stakeholders, and interested agencies by August 19, 2016, and has agreed to extend the commenting period for the City of Hamilton on the Draft Proposed ToR to September 30, 2016. The City staff comments to date on the Draft Proposed ToR for the EA are attached in

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Appendix "A" to Report PED16184. This is the City's first opportunity to provide comments during this EA process, however will not be its last. The City will be able to submit comments again when the final version of the ToR is submitted to, and circulated by, the Ministry of Environment and Climate Change ("MOECC") sometime in the fall. (Terrapure requires approval from the MOECC to implement the reconfiguration proposed in the EA).

Planning staff consulted a number of City staff to inform and gather input on this staff report and there were several working groups set up to discuss Terrapure's proposal. In particular, the report was reviewed by Development Planning staff and staff from Public Health, Public Works, and Legal Services prior to finalization.

Alternatives for Consideration – See Page 22

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: N/A

Staffing: N/A

Legal: The comments sought from the City of Hamilton are for the Draft

Proposed ToR for an EA prepared by Terrapure. There will be further opportunity for the City of Hamilton to provide submissions after the final version of the ToR and, if approved, the subsequent EA that will be submitted to the MOECC. The MOECC is the approval authority for the

EA.

HISTORICAL BACKGROUND

Terrapure Stoney Creek Regional Facility

Taro Aggregates Ltd., a subsidiary of Philips Environmental Inc., owned the lands of two former quarries south of Green Mountain Road West, in the former City of Stoney Creek: the Taro East Quarry (east of First Road West) and the Taro West Quarry (west of First Road West). These lands were used for bedrock extraction up until approximately 1977. From about 1980 to 1996 / 1997, the West Quarry lands were used as a landfill receiving non-hazardous and non-putrescible industrial waste. Following the closure of the West Quarry landfill, the northern portion of that area was sold to the City of Hamilton and developed as the Heritage Green Sports Park. The southern portion of the West Quarry landfill is designated as "General Open Space" in the Nash Neighbourhood Secondary Plan, and was developed as a passive park and dog park

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(Heritage Green Dog Free Community Park) which the City operates under a long-term licence with Terrapure. The East Quarry is the current location of the SCRF.

In 1996, the SCRF site was owned by a company called PSC Industrial Services Canada and in 2006 the site was acquired by a company called Newalta; Terrapure took over ownership in 2015. The facility is located at the northwest corner of Mud Street and Upper Centennial Parkway (Highway 20) in the former City of Stoney Creek (Ward 9). Appendix "B" to Report PED16184 shows the location of the SCRF.

The SCRF operates under the ECA No. A181008. The approval allows the facility to have a total disposal capacity of 6,320,000 m³ for residual materials, with an additional allowance for acceptance of 2,000,000 m³ of industrial fill / soils, for a site total of 8,320,000 m³. The annual maximum approved fill rate for the site is 750,000 tonnes per year. It operates Monday to Friday, from 7:00 am to 5:00 pm, and is permitted to receive up to 250 trucks per day. Terrapure indicates that the current average daily number of trucks received is around 70 to 80 trucks, well below the approved limit.

The footprint of the area for residual material is approximately 41.5 ha. The SCRF has an engineered landfill site double-liner system of approximately 10 ft high used to ensure maximum environmental protection. Approximately 50% of the material received annually at the SCRF comes from customers who operate businesses within the City of Hamilton. The site does not accept organic material or other putrescible material; consequently, very little gas is produced at the SCRF. For that reason the facility is not required to have a corresponding gas collection system in place.

Currently, the minimum setback of the area used for residual material to Green Mountain Road West is 140 m. The buffer area between the limit of the waste footprint and the eastern, western and southern site boundaries averages 30 m. The regulatory requirements laid out in Ontario Reg. 232/98 specify a 100 m wide buffer area between the limit of the waste footprint and the site boundary, but allow this to be reduced to 30 m if it is shown to be appropriate based on a site specific assessment (e.g., if the buffer provides adequate space for vehicle movements, ancillary facilities, and ensures that the landfill operation does not have unacceptable impacts outside the site).

CHRONOLOGY

1992 - Proposal for the Rehabilitation of the East Quarry lands

In 1992, Taro Aggregates submitted a proposal to rehabilitate the East Quarry lands by filling it with solid, industrial non-hazardous waste. The proposal was subject of an Environmental Assessment process which began in May 1992 and ended in July 1996

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with the approval to proceed with the undertaking given by the then Minister of Environment ("MOE"), the predecessor of the MOECC.

1996 - Environmental Compliance Approval for the SCFR Landfill

In 1996, after successfully completing an EA, Taro Aggregates received the ECA No. A181008 from the MOE and started the operation of the SCRF. Pursuant to the ECA, the facility was allowed to only accept non-hazardous solid waste from industrial, commercial and institutional sources, consisting mainly of waste from the steel making industry, and excavation materials from building sites and site remediation. As a condition of approval, the ECA includes 23 terms and conditions under the EA Act and 89 terms and conditions under the EPA. As part of the conditions, the proponent is required to issue, each year, until the fifth year the completion of closing of the site, a yearly report which describes compliance with the conditions of approval.

In accordance with one of the conditions of approval, Compensation Agreements were entered into between Taro (now replaced by Terrapure), the former City of Stoney Creek (now City of Hamilton), and a Community Group (now known as the Heritage Green Community Trust). Royalties are paid annually by Terrapure to each group based upon the tonnages of waste received at the landfill and the formula set out in the respective Compensation Agreements.

1998 - 2006 - Nash Neighbourhood Secondary Plan

In 1998, the former City of Stoney Creek Planning Department prepared a draft Secondary Plan for the Nash Neighbourhood. The Nash Neighbourhood Secondary Plan area is located east of Felker's Creek, south of the Niagara Escarpment, west of Upper Centennial Parkway, and north of Mud Street West in the former City of Stoney Creek (refer to Appendix "D" to Report PED16184 for the Nash Neighbourhood Secondary Plan Land Use Map).

A public meeting under the <u>Planning Act</u> was held on September 30, 1998, for the Draft Secondary Plan. Soon after the public meeting, questions were raised regarding the type of material being placed into the East Quarry/Landfill (now the SCRF). In November 1998, the Planning Committee placed the Nash Neighbourhood Secondary Plan under Council's "Unfinished Business" agenda. The matter was to be reconsidered by Committee upon the receipt of a report issued by the MOECC regarding the investigation into potential hazardous waste at the East Quarry/Landfill and after a final decision was made by Council on the location of the Leachate Treatment Facility.

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Upon resolution of the above mentioned issues, the City of Hamilton resumed the Secondary Planning process in 2004. In 2006, the Nash Neighbourhood Secondary Plan was presented to Council for adoption (PED06224). The Secondary Plan designated the East Quarry/Landfill lands (now SCRF) as "Open Space" and "Special Policy Area B". Through this Special Policy Area, the Secondary Plan intended to guide development on the Taro East Quarry Landfill lands once the landfill operation has finished. This site is intended for future open space and/or recreational uses.

The Secondary Plan also includes a policy requiring a Holding Zone provision for all lands intended for residential use within 160 m of the working licensed limits of the former quarry under rehabilitation (the SCRF site). The Holding cannot be removed from those lands until such time as the completion of rehabilitation of quarry lands immediately adjacent to the Residential Holding Zone (see Policy Implications and Legislated Requirements section).

The City has approved a number of development applications following the adoption of the Secondary Plan (see section below).

2009 - 2014 - Draft Approved Subdivisions North of Green Mountain Road

As a condition of approval of the Empire Communities Ltd. ("Empire") and Red Hill Developments Draft Plans of Subdivisions (north of Terrapure, refer to Appendix "E" to PED16184 for the location of the development applications), the proponents were required to submit a Landfill Impact Assessment. A report entitled "Red Hill Developments, Empire Communities and 706870 Ontario Limited, Nash Neighbourhood – Final Revised Landfill Impact Assessment", prepared by MTE and dated Sept. 14, 2010 was submitted for review. The report was peer reviewed on behalf of the City by AMEC.

The peer review agreed with the MTE report that the operation and maintenance of the operating and closed landfill did not prevent future development of the proponent lands. The MTE report identified a requirement for future residential dwellings to be constructed with a minimum one metre of clayey silt soil between highest groundwater elevation and basement level. This was confirmed through a follow-up peer review at the design stage.

It is also noted that Landfill Impact Assessments and peer reviews were completed for other developments in the area including the Nash ORC lands to the west of the closed landfill, and Penny Lane Estates south of Terrapure. In both instances, the Landfill Impact Assessment and the peer reviews concluded that the likelihood of potential

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future impacts on development as a result of the operating and closed landfills is low and that existing controls could mitigate any potential future issues.

22 Green Mountain Road (Empire Communities Ltd.)

In September 2009, Planning staff presented Report PED09275 to the Planning and Economic Development Committee, seeking approval for Zoning By-law Amendment and Draft Plan of Subdivision applications by Empire, to permit the development of lands located at 22 Green Mountain Road for a total of 423 dwelling units. Planning Committee deferred the report, with direction to staff to report on, among other matters, the Landfill Impact Assessment, once completed, and peer reviewed. The application was appealed to the Ontario Municipal Board ("OMB") by the applicant due to lack of decision by Council.

On December 9, 2010 the OMB issued a Decision and Order, based on a settlement between the parties, which allowed the appeals by Empire and amended Stoney Creek Zoning By-Law No.3692-92, with various provisions, including the addition of the following:

"That all residential lands within 160 m of the working licensed limits of an active quarry or the limits of a former quarry under rehabilitation shall not be developed until such time as the completion of mining and the completion of rehabilitation on the quarry lands immediately adjacent to the residential holding zone have been finalized to the City's satisfaction".

Subsequent to the approval of the Draft Plan of Subdivision, Empire proceeded to service Phases 1 and 2 of their lands, register the Plan of Subdivision for those phases and obtain the building permits. Phases 1 and 2 were not subject to the Holding provision. In 2015, Empire proceeded with a development application for Phase 3 of their lands, which was subject to the Holding Provision (see 2015-2016 - Holding Zones Lifted section below).

420 First Road West (Red Hill Developments)

On July 8, 2014, Planning staff presented Report PED14138 recommending the approval of the revised Zoning Application ZAC-09-007 for changes in zoning from the Neighbourhood Development "ND" zone to a number of zones, including Multiple Residential zones, Single Residential zones, and Local Commercial zones to permit the development of lands at the northeast intersection of First Road West and Green Mountain Road West. The Report noted that a portion of the subject lands was placed in a Holding Zone – H1 until such time as the completion of mining and rehabilitation on the quarry lands immediately adjacent to the residential lands has been completed (as per the Nash Neighbourhood Secondary Plan policy). This provision could only be lifted

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through Council approval when the quarry lands adjacent to the proposed residential units (the SCRF) have been rehabilitated to the satisfaction of the Director of Planning. The report also requested the approval to revised Draft Plan of Subdivision Application 25T-200901. By way of these applications, Red Hill Developments were seeking approval for one block for local commercial purposes and three blocks for future residential (consisting of a total of 302 dwelling units).

The recommendations in staff Report PED14138, as amended, were carried and at its July 11, 2014 meeting, Council passed By-law No. 14-180 to Amend Zoning By-law No. 3692-92.

2012 - Amendment to Waste Receipts & Service Area

In 2012, the SCRF went through an Environmental Screening Process under O. Reg 101/07 to amend the existing Environmental Certificate of Approval ("ECA") to allow the SCRF to continue to receive up to 750,000 tonnes of waste a year, but to allow for the limit to occur over any consecutive 12 month period instead of the calendar year. In addition, it was requested to allow the site to receive approved wastes from anywhere within the Province of Ontario. The amendments were approved by the MOE in 2013.

2013 - Landfill Footprint Reconfiguration

In 2013, Terrapure's predecessor, Newalta, requested reconfiguration of the SCRF to reduce the size of the residual material footprint from the originally approved 59.1 hectares to an area consistent with the base liner system that had been constructed to that date (approximately 41.5 ha). Although Newalta was not proposing to change the approved total disposal volume for residual materials in 2013 (6,320,000 m³), the proposed reconfiguration and reduction of the footprint area required an approval of an increase to the height of the SCRF landfill. As part of the change, authorization to accept approximately 2,000,000 m³ of fill to complete the final site grading (non-waste) was sought.

In response to the reconfiguration request, the Hamilton City Council passed a motion to forward comments to MOE and Newalta, expressing concern that the proposed change did not undergo sufficient public consultation, and requesting that the change be treated as environmentally significant and therefore be subject to increased public notice and consultation requirements.

Notwithstanding the City's comments, this revision was approved by the MOE in 2014 as an amendment to the ECA under the EPA process. As result, this reconfiguration increased the maximum height of the landfill by approximately 4.5 m and reduced the

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overall landfill footprint area, therefore, the setback distance between the limit of the landfill and Green Mountain Road West was increased from 30 m to a minimum of 140 m.

2015 - 2016 - Holding Zones Lifted

22 Green Mountain Road (Empire Communities Ltd.)

On January 9, 2015, Empire submitted an application for Holding Removal and supporting materials (ZAH-15-016) to justify the lifting of the "H" Holding Provision from Blocks 1 and 2 of the approved Draft Plan of Subdivision. As part of its submission, Empire included an amendment to the Revised Landfill Impact Assessment report that relied on the amendment to the ECA issued by the MOE in 2013 that reduced the footprint of the operational landfill. Empire indicated in the application that the realignment of the footprint moved the landfill limit southward, resulting in a greater distance between the limits of the landfill and the proposed development lands thus rendering the Holding Provision unnecessary.

At its meeting of October 14, 2015, based on public interest and concerns, Council requested that staff report back to the Planning Committee on how the requirements of the Holding Zone had been addressed based on current conditions.

On November 3, 2015 Planning staff presented Report PED15190, following up on the request of Council from October 14, 2015, to Planning and Economic Development Committee, which included a summary of staff analysis and conclusions from the review of the supporting documents submitted by the applicant. Appendix "C" to Report PED15190 included the Amendment to the Revised Landfill Impact Assessment Report provided by Urbantech outlining the realignment of this landfill footprint which moved the limit southward, resulting in a greater distance to the subject lands. The Amendment to the Revised Landfill Impact Assessment Report indicated that "with the realigned limit of the operating landfill, the 160 metre radius subject to the Holding Provision no longer encroaches onto the Empire lands... the new 160 metre radius is located entirely within Newalta' Corp's property, south of Green Mountain Road West. As such, the condition placed upon lifting of the Holding provision can be cleared" (p. 1).

On November 11, 2015, Council approved staff's recommendation to lift the "H" Holding Provision form the subject lands.

420 First Road West (Red Hill Developments)

An application was submitted by Red Hill Developments to lift the "H" Holding Provisions from lands known as 420 First Road West. On December 9, 2015, Council approved staff's recommendation to lift the residential holding zone from the subject

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lands as they were no longer located within 160 m of the working licensed limits of the landfill.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Provincial Policy Statement

Section 1.6.10 of the 2014 Provincial Policy Statement ("PPS") refers to waste management system and includes the following policy:

1.6.10.1 Waste management systems need to be provided that are of an appropriate size and type to accommodate present and future requirements, and facilitate, encourage and promote reduction, reuse and recycling objectives. Planning authorities should consider the implications of development and land use patterns on waste generation, management and diversion.
Waste management systems shall be located and designated in accordance with provincial legislation and standards.

Places to Grow, Growth Plan for the Greater Golden Horseshoe, 2013

Section 3.2.1 - Infrastructure Planning:

1. Infrastructure planning, land use planning, and infrastructure investment will be coordinated to implement this Plan. Infrastructure includes but is not limited to transit, transportation corridors, water and wastewater systems, waste management systems, and community infrastructure.

Section 4.2.4 - A Culture of Conservation:

- 1. Municipalities will develop and implement official plan policies and other strategies in support of the following conservation objectives:
 - d) Integrated waste management, including
 - i. enhanced waste reduction, composting, and recycling initiatives and the identification of new opportunities for source reduction, reuse, and diversion where appropriate
 - ii. a comprehensive plan with integrated approaches to waste management, including reduction, reuse, recycling, composting, diversion, and the disposal of residual waste
 - iii. promotion of reuse and recycling of construction materials

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iv. consideration of waste management initiatives within the context of long term regional planning, and in collaboration with neighbouring municipalities

Bill 51, Waste Free Ontario

The Waste Free Ontario Act, 2016 includes a draft Strategy for a Waste Free Ontario: Building the Circular Economy. This strategy is intended to support the provincial interest to work towards the goal of zero waste through resource recovery and waste reduction. The Province's strategy aims to ensure that landfills are well planned and managed to minimize the need for new landfills. Although Ontario has a zero waste goal, the legislation recognizes that there is still a need for landfill space. With population growth and an increase on the volume of waste generated, the province continues to look for innovative ways to reduce the impacts that landfills have in the environment and slow the number of landfills needed within the next 20 years.

Environmental Assessment Act

Increases to the SCRF footprint require the preparation of an Individual EA to satisfy the applicable requirements of the Ontario EA Act. The ToR sets out the proposed framework that will be followed during the preparation of the SCRF EA. For proposed "undertakings" in the Province of Ontario that are subject to the EA Act, The ToR is the first step of a two-step approval process. The ToR document sets out the framework or work plan for the planning and decision-making process to be followed during preparation of the EA. The ToR is to be submitted to the Ontario Minister of MOECC for approval.

Terrapure has prepared the Draft Proposed ToR in accordance with Sections 6(2)(c) and 6.1(3) of the EA Act. The ToR has been prepared in accordance with and having regard for the following MOECC guidance documents:

- Code of Practice Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario (MOECC, January 2014)
- Code of Practice Preparing and Reviewing Environmental Assessments in Ontario (MOECC, January 2014)
- Code of Practice Consultation in Ontario's Environmental Assessment Process (MOECC, January 2014)
- Guide to Environmental Assessment Requirements for Waste Management Projects in Ontario (MOECC, March 2007)

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A Record of Consultation will be prepared and submitted to the MOECC, along with the Proposed ToR, describing the consultation program during the development of the ToR and its results.

Ontario Ministry of Environment and Climate Change Guidelines D-1: Land Use Compatibility & D-4: Land Use On or Near Landfills and Dumps

MOECC Guideline D-1: Land Use Compatibility identifies recommended separation distances and control measures for sensitive land uses with respect to landfills in order to minimize potential adverse effects. Guideline D-1 also applies when considering proposed sensitive land uses with the potential influence area of an existing landfill facility.

MOECC Guideline D-4: Land Use On or Near Landfills and Dumps provides further direction for the restriction of land uses in vicinity of landfills. Guideline D-4 recommends that sensitive land uses be restricted within a 500 m of the fill area. However, this Guideline also recognizes that the influence area for each landfill varies and is dependent on a number of factors.

Urban and Rural Hamilton Official Plans

Urban Hamilton Official Plan

The SCRF site is located within the jurisdiction of the Urban Hamilton Official Plan, however, the Proposed Draft ToR identifies a 500 m and a 1.5 kilometre Study Area boundary which extends into lands within the Rural Hamilton Official Plan (refer to Appendix "F" to Report PED16184 for a map showing both study areas). The SCRF is identified as "Neighbourhoods" on Schedule E (Urban Structure) and designated as "Open Space" on Schedule E-1 (Land Use Designations) of the Urban Hamilton Official Plan, Vol. 1.

In addition, Upper Centennial Parkway, located on the eastern boundary of the SCRF, is identified as a "Secondary Corridor" on Schedule E. Schedule C (Functional Road Classifications) shows the following classifications for the roads bordering the SCRF site:

- Major Arterial: Mud Street, Upper Centennial Parkway, and
- Collector Road: First Road West, Green Mountain Road.

The SCRF site is located within the Nash Neighbourhood Secondary Plan. The site is designated as "General Open Space" and contains a Site Specific Policy Area, "Area

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B". The lands located to the north of the site and fronting onto Green Mountain Road West are designated "Low Density Residential 2", "Low Density Residential 2h", "Medium Density Residential 2" and "Local Commercial". The lands located to the west of the site are designated "Community Park" and "General Open Space". Lands located immediately south and east of the site are designated "Arterial Commercial". The lands located west of First Road West, north of Green Mountain Road West are designated as "Institutional", "Natural Open Space" and "Neighbourhood Park" (refer to Appendix "D" to Report PED16184 for the Nash Neighbourhood Secondary Plan land use map).

The following policies of the Secondary Plan are to be considered:

B.7.5.6.4 The former Taro Quarry West lands designated Open Space located west of First Road West, between Mud Street West and the Heritage Green Community Park and east of the unopened road allowance are ultimately intended for open space and/or recreational use and may include a golf course.

B.7.5.11 Environment Policies

7.5.11.3 Development proposals for residential or institutional uses located within 500 metres of the Taro East Quarry/Landfill site and former Taro West Quarry/Landfill site may be required to submit studies demonstrating that there are no adverse effects on the development or that the effects can be mitigated. Said studies may include but not be limited to hydrogeology, traffic, air quality, noise, etc. subject to the requirements of the City.

B.7.5.13 Implementation

B. 7.5.13.4 Lands intended for residential use within 160 metres of the working licensed limits of an active quarry or the limits of a former quarry under rehabilitation shall be placed in a Holding Zone in accordance with Section F.1.8 – Holding By-laws. The Holding Zone will not be removed for those lands immediately adjacent to the quarry properties, until such time as the completion of mining and the completion of rehabilitation on quarry lands immediately adjacent to the Residential Holding Zone.

Site Specific Policy - Area B

B. 7.5.14.2 For Lands shown as Site Specific Policy - Area B on Map B.7.5-1 - Nash Neighbourhood - Land Use Plan, the following policies shall apply:

- a) In addition to the uses permitted in Section C.3.3 Open Space Designation and Policy E.5.3.6 of Volume 1, the existing waste disposal facility shall be permitted in Site Specific Policy Area B.
- b) Site Specific Policy Area B is ultimately intended for open space and/or recreational uses and may include a golf course. However, these lands may be used for landfill and quarry operations in accordance with the Terms and Conditions of the Agreement among the Corporation of the former City of Stoney Creek, Taro Aggregates Ltd. and Philip Environmental Inc. dated February, 1997; the Provisional Certificate of Approval for a Waste Disposal Title No. A181008 dated September 6, 1996; and Notice of Approval to proceed with the undertaking under Section 14 of the Environmental Assessment Act dated July 15, 1996; the existing licence to extract mineral aggregate resource issued under the Aggregate Resources Act and any amendments to the aforementioned documents.
- c) Final closure of this site, and the after-use of this site for recreational and open space uses, such as a golf course, will require the approval of the Minister of Environment pursuant to the provisions of the Environmental Protection Act, as amended, and surrender of the Aggregate Resources Act licence.
- d) Recreational and open space uses, when approved by the Minister of Environment, can occur without amendment to this Plan subject to the surrender of the Aggregate Resources Act licence and any necessary Site Plan and Development Agreements being approved by the City.

The southern boundary of the Study Areas identified in the ToR extends into the West Mountain Area (Heritage Green) Secondary Plan. Most of the lands within the 500 m Study Area are designated Residential in the Secondary Plan. The following policies are to be considered:

B.7.6.1.2 Lands intended for residential use within 160 metres of the working licensed limits of an active quarry or the limits of a former quarry under rehabilitation shall be placed in a Holding Zone in accordance with Section F.1.8 – Holding By-laws, of Volume 1. The Holding Zone shall not be removed for those lands immediately adjacent to the quarry properties, until such time as the completion of mining and the completion of rehabilitation on quarry lands immediately adjacent to the Residential Holding Zone.

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B.7.6.1.3 Proponents of development proposals for residential and other sensitive land uses located within 500 metres of the Taro East Quarry/Landfill site and former Taro West Quarry/Landfill site shall be required to submit studies demonstrating there are no adverse effects on the development or that the effects can be mitigated. These studies may include, but not be limited to, ground and surface water, leachate migrating onto the subject lands, traffic, air quality, noise, soil contamination and hazardous waste and landfill generated gases, subject to the requirements of the City.

Rural Hamilton Official Plan

The western boundaries of the study area identified in the Draft Proposed ToR extend into area designated under the Rural Hamilton Official Plan. The lands located west of Upper Centennial Parkway, north of Mud Street East are designated as "Specialty Crop". The lands located west of Upper Centennial Parkway, south of Mud Street East are designated "Rural" and "Open Space".

City of Stoney Creek Zoning By-law

The SCRF site conforms to the City of Stoney Creek Zoning By-law No. 3692-92 under Section 9.8.5 'Special Exemptions', as ME-1. In addition to permitted uses under Extractive Industrial "ME" Zone, lands zoned ME-1 are permitted for operations associated with non-hazardous waste from industrial, commercial, and institutional sources.

RELEVANT CONSULTATION

The Code of Practice Consultation in Ontario's Environmental Assessment Process (MOECC, January 2014), outlines the Ministry's expectations regarding appropriate consultation. There are many opportunities for interested parties, including government agencies, to provide input on the EA. In addition to this opportunity to provide comments on the Draft Proposed ToR, the City of Hamilton will have the opportunity to provide input on the final ToR and on the EA once the documents are submitted to the MOECC for review.

On June 7, 2016, Terrapure issued a Notice of Commencement and Open House to residents, stakeholders and government agencies within the local study area (500 meters). Council was presented with the Notice at its July 8, 2016 meeting (item 5.5). The Notice was received and referred to General Manager of Planning and Economic Development. Terrapure hosted an Open House on June 21, 2016, at the Salvation Army, Winterberry Heights Church (300 Winterberry Drive, Stoney Creek).

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In addition, the SCRF EA Draft Proposed ToR and Supporting Documents and the Open House panels were posted on Terrapure's Project Website on June 22, 2016. Terrapure is soliciting comments from the community, stakeholders, and interested agencies by August 19, 2016. However, following the City's request, Terrapure has extended the deadline for comments from the City to September 30, 2016.

On June 22, 2016, Terrapure and its consultants (GHD Consulting) met with the Government Review Team at the MOECC – Hamilton office. Staff from Community Planning attended the meeting.

On July 14, 2016, staff from the Planning and Economic Development, Public Works, Public Health Services, and the City Manager's Office (Legal Services) met with Terrapure and GHD Consulting. Terrapure presented an overview of the alternatives proposed in the Draft Proposed ToR, the EA process, and a summary of the feedback they have received to date. At the time of preparation of this Report, a meeting of internal City staff was scheduled for September 9, 2016, to discuss the comments on the Draft Proposed ToR. The summary of staff comments are outlined in Appendix "A" to Report PED16184. A meeting with Terrapure and City staff to discuss the City's key comments and concerns was scheduled for September 12, 2016. Staff will provide an update of said meeting at Committee.

In addition, Terrapure and GHD Consulting have indicated that they have met with the Hamilton Conservation Authority, the Heritage Green Community Trust, the Hamilton Wentworth District School Board, Pros Golf Course, Empire Developments Ltd., and other interested stakeholders.

Terrapure will include a summary of the consultation activities and comments from the interested parties as a Record of Consultation Report that will be attached to the Proposed ToR submission to the MOECC in the Fall 2016.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

Environmental Assessment for Reconfiguring the Facility (2016 Proposal)

In the Draft Proposed ToR, Terrapure is proposing to reconfigure the SCRF back to a footprint close to the original that was approved in 1996. This reconfiguration would permit an additional 3,680,000 m³ of solid non-hazardous residual material (by reallocating the 2,000,000 m³ allowance for industrial fill/soils and adding some additional capacity), for a total site capacity of 10,000,000 m³. This proposal would extend the footprint of the landfill back towards Green Mountain Road to what was initially approved in 1996.

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Terrapure has indicated that under the current operation and market conditions, the existing SCRF is expected to reach its approved capacity in the next 16-22 years, accepting a combination of solid, non-hazardous industrial residual material as well as non-hazardous industrial soils or fill. Terrapure also indicated that because the market for residuals is much stronger and consistent than that for soils/fill, the proposed changes will allow the site to close earlier than currently anticipated (within 13-20 years compared to 16-22 years). The proposed reconfiguration would maintain the type and maximum annual volume of residual materials allowed at the facility, as well as the maximum number of vehicles to the site per day. Terrapure stated that they would continue with the royalty program in which over \$22 million has been provided to date to the City of Hamilton and the Heritage Green Community Trust for local infrastructure projects and charitable initiatives over the history of the SCRF.

Terrapure identified four potential alternatives for consideration to address the opportunity available to Terrapure to provide regional solid, non-hazardous industrial residual material disposal capacity within the Greater Toronto Area and Hamilton. These four alternatives are as follows:

Alternative 1: Do Nothing – The SCRF would no longer have the capacity to accept solid, non-hazardous industrial waste residual material after the currently approved capacity is exhausted in approximately 3 to 5 years. However, the site would then continue to accept industrial soils/fill for another 13 to 17 years.

Alternative 2: New Disposal Site in Hamilton – Terrapure would initiate an EA and other required approval processes to find, construct and operate a new (greenfield) site within the City of Hamilton. The existing SCRF would continue to operate and accept Industrial fill / soils until the maximum approved limit of this material is accepted (2,000,000 m3) which is anticipated to be an additional 13 to 17 years on top of the 3 to 5 year capacity for residual materials.

Alternative 3: Reconfigure Existing SCRF – The SCRF would be reconfigured to add capacity on the lands that include the existing footprint, as well as the area designated to receive industrial soils / fill. This alternative would review options to go back to a footprint close to the original approved in 1996.

Alternative 4: Export to Other Location – The SCRF would be used until it reaches its approved solid, non-hazardous industrial waste capacity limits, at which point additional industrial non-hazardous waste would be delivered to another location (such as Terrapure's Brant Street transfer station), processed (if necessary) and then transferred to other waste disposal facilities able to accept solid, non-hazardous waste. SCRF would continue to receive industrial fill for another 13 to 17 years as well.

Preferred Alternative

Terrapure conducted a preliminary screening of the four alternatives as part of their internal business planning before the EA process was initiated. This screening identified Alternative 3 – Reconfigure Existing SCRF, to allow for additional capacity, as the preferred alternative. This preferred alternative is Terrapure's proposed undertaking which will be considered further in the EA.

Alternative 3 (Preferred): Proposed Alternative Footprints

For Alternative 3, Terrapure has proposed two reconfigured footprints ("alternative footprints") to create additional capacity at the SCRF (these alternative footprints are at a conceptual design level only and will be further refined, as appropriate, during the EA).

The Draft Proposed ToR provides an overview of the alternative footprints that were generated and will be assessed in the EA. Further information on how the assessment and evaluation of the alternative methods will be undertaken during the EA is described in the Draft Proposed ToR. Table 1 below includes a summary of the approved SCRF footprint and regulations and the two alternative footprints that Terrapure is proposing that will be evaluated during the Environmental Assessment. Appendix "G" to Report PED16184 includes figures showing the original footprint approved in 1996, the amended 2013 footprint (current footprint) and the two proposed alternative footprints.

Under the two proposed footprints, the section closest to Green Mountain Road West would switch back to accepting solid, non-hazardous industrial residual material, rather than accepting industrial fill. Terrapure would retain the same overall geographic size of the site and there would be no change to the type or maximum annual volumes of materials that are currently received at the site. Buffer areas to the south, east and west are already approved and established and would not be altered as part of this undertaking. Buffer areas to the north (towards Green Mountain Road West) would be a minimum of 28 m under the alternative conceptual designs, consistent with the remainder of the site.

The two footprint options would entail an approximate 2.5 m crest height increase and potential overall peak height increase of up to 4 m. Slopes of 4:1 (33%) were used in developing the alternatives in order to meet the desired additional capacity.

Table 1. Summary of SCRF Approved and Proposed Alternative Footprint

	Current Footprint	Alternative 1	Alternative 2
Residual Material	6,320,000 m ³	10,000,000 m ³	10,000,000 m ³
Capacity			
Soil/fill Capacity	2,000,000 m ³	-	-

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Total Site Capacity	8,320,000 m ³	10,000,000 m ³	10,000,000 m ³
Footprint Size	41.5 ha	54.3 ha	50.0 ha
Peak Elevation	218.5 m	221.4 m	222.8 m
Crest Elevation	213.0 m	212.5 m	215.5 m
Setback to Green	Min. 140 m	Min. 79 m	Min. 28 m
Mountain Road W			
Annual Max. Fill Rate	750,000 tonnes	750,000 tonnes	750,000 tonnes
Daily Max. Truck Loads	250 (1)	250	250
Est. Facility Closure	16-22 years	13-20 years	13-20 years

Note: (1) As per five-year historical waste vehicle counts at the SCRF, the site received an average of 24,415 vehicles per year, or approximately 90 vehicles per day. Typical conditions at the site see anywhere between 70-80 trucks per day.

Summary of Staff Comments Regarding the Proposed ToR

Planning staff have coordinated comments from City departments on the Draft Proposed ToR in response to Terrapure's request for comments. The following section includes a summary of the key comments from Staff. Detailed comments are included in Appendix "A" to Report PED16184.

Impacts on Existing and Proposed/Approved Development

The Proposed Draft ToR indicates that the EA will assess and evaluate the potential effects of the various alternative footprints on the sensitive land uses located within the local study area (500 m of the SCRF site – refer to Appendix "F" to Report PED16184). There are two approved Draft Plan of Subdivisions across Green Mountain Road West, very close to the facility property boundary. Policy B.7.5.13.4 of the Nash Neighbourhood Secondary Plan requires a Holding Zone for lands intended for residential use within 160 m of the SCRF operating limits (i.e., landfill footprint). The purpose of the Holding "H" Provisions is to restrict development within 160 m of the boundary of the landfill site in order to protect the public's interest. After 2013 when facility's footprint was amended, Empire and Red Hill Development requested the Holding provision to be lifted from the affected portions of two approved Draft of Subdivisions located at 22 Green Mountain Road West and at 420 First Road West, respectively. In the applications to lift the holding provisions, Empire demonstrated that the realignment of the footprint moved the landfill southward, resulting in a greater distance to the subject lands and rendering the holding provision unnecessary. City of Hamilton Planning staff was of the opinion that all of the requirements of the holding provisions were fulfilled and it could be removed from the subject lands and Council approved the removal of the "H" Provision on these lands.

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According to the Draft Proposed ToR, in both alternative footprints, the section closest to Green Mountain Road West would switch back to accepting solid, non-hazardous industrial residual material, rather than accepting industrial fill. The proposed alternative footprints will place portions of the approved Draft Plans of Subdivisions at 22 Green Mountain Road West and at 420 First Road West within the 160 m setback from the landfill and in Holding Provision area. Should Terrapure choose to modify the boundary of their operation again, there are no opportunities to implement development restrictions to protect future residents within the approved plans to the north of the operations, as there are no Planning applications to trigger such provisions.

Staff is also concerned that Terrapure has not mentioned or addressed the 160 m Holding Zone policy from the Nash Neighbourhood Secondary Plan in the Draft Proposed ToR nor have they included this factor in the evaluation of alternatives. The ToR should be updated to indicate that new dwellings will be located in the proximity of the proposed alternative footprints. The EA should include a comprehensive assessment of the effects of the alternative methods on the residential uses to be built within the 160 metres holding zone that was previously stipulated for those developments north of Green Mountain Road West.

Staff strongly recommends that Terrapure consider additional alternative footprints that would keep the already approved Draft Plans of Subdivisions located at 22 Green Mountain Road West and at 420 First Road West outside the 160 m Holding Zone boundary or alternatively develop a plan of action to inform / alert people of issue and if warranted provide compensation and/or any other required mitigation measures.

Elevation Changes and Visual Impacts

The two proposed alternative footprints identified in the ToR propose an additional elevation increase to the peak elevation of the landfill (Footprint Alternative #1 is 221.4 m and Footprint Alternative #2 is 222.8 m) whereas currently, the peak elevation of the site is 218.5 m. Current visual barriers may block the top of waste elevation from the site south residential survey, however the berm doesn't block operations equipment or litter screens from residential views that work on top of the waste. Numerous complaints have already been received based on the current elevation of the site.

In addition, the Niagara Escarpment Plan area borders the subject lands to the north. Terrapure should consult with the Niagara Escarpment Commission ("NEC") as a change to the maximum height could be of interest to the NEC in terms of visual impact.

Traffic

All intersections within 500 m of site that may be impacted from additional truck traffic should be evaluated. A Traffic Impact Study is also needed to determine if there are any additional impacts from the proposed footprints. There is also a need to assess the impact on pedestrian and cycling movements along First Road West and Green Mountain Road. The EA should address the proposed haul routes including manoeuvres from City roads in and out of site.

Site Servicing, Sanitary and Drainage

As part of the Red Hill Development servicing, they are constructing a dedicated cleanwater storm sewer from the existing pond at the southeast corner of Green Mountain Road West and First Road West to the outfall, this should be reflected in the ToR.

A detailed plan outlining how the site is currently serviced should be provided. All scenarios (current, interim, and ultimate) related to drainage need to be documented and evaluated in terms of downstream impact via the Site Plan Application protocol/requirements through Planning & Economic Development. In addition, all drainage and runoff scenarios (current, interim and ultimate) related to drainage need to be documented and evaluated in terms of downstream impact. Any increase in sanitary sewage discharge or daily water demand must be documented and are subject to the Adequate Services By-law.

With regards to geology and hydrology / surface water resources, Terrapure will be required to modify the existing leachate collection system to reflect the revised footprint. Leachate assessment should include laboratory test results of leachate and its treatability by the Wastewater Treatment Plan, including any Compliance Agreements with the City of Hamilton, and their progress/compliance. Data sources should include Spills Records with MOECC Spills Control and the City of Hamilton – Spills Response, with Compliance and Regulations Section of Hamilton Water Division of Public Works.

Noise

The ToR identified a noise study completed in 2012. This study may need to be updated given that the MOECC issued "NPC-300-Environmental Noise Guidelines – Stationary and Transportation Sources – Approvals and Planning" in August of 2013. Accordingly, requirements may have changed in this most recent guideline.

As indicated in the Relevant Consultation Section of this Report, there will be additional opportunities for the City of Hamilton to provide input on the Environmental Assessment

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once the documents are submitted by Terrapure to the MOECC for review, however, staff are recommending that the comments contained in Appendix "A" to Report PED16184 be forwarded to Terrapure before they submit their ToR to the MOECC.

Summary of Concerns / Issues

Staff has a number of outstanding concerns that have not been adequately addressed through the Draft Proposed Terms of Reference (see Appendix "A" to Report PED16184 for more detail). These concerns include:

- Reduced buffering / setbacks and impacts to approved residential building lots;
- Traffic concerns;
- Drainage and servicing impacts;
- Noise;
- Lack of data on the GHG emissions;
- Confusing / Conflicting information on the total amount of waste / fill; and,
- Visual Impacts.

In addition to these concerns, staff feel that the full range of options / alternatives have not been explored through this process and suggest that Terrapure investigate other alternatives to those presented in the draft ToR. In particular, it is recommended that Terrapure review alternative footprints that would increase the buffer between the residual waste area and the lands approved for development through Draft Plans of Subdivision located at 22 Green Mountain Road W and 420 First Road West. Given the approvals are in place for the residential development, it is important to consider the effects of the proposed changes on these future residents.

ALTERNATIVES FOR CONSIDERATION

The City could forego the opportunity to provide comments to the Terrapure at this time and only provide comments when the document is circulated to the City by the MOECC.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

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Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

 Appendix "A": City of Hamilton Letter and Staff Comments on the Draft Proposed ToR

Appendix "B": SCRF Location

Appendix "C": Stoney Creek Regional Facility Environmental Assessment - Draft

Proposed Terms of Reference, June 21, 2016

Appendix "D": Nash Neighbourhood Secondary Plan Land Use Map

Appendix "E": Draft Approved Subdivisions

Appendix "F": Environmental Assessment Study Area

Appendix "G": SCRF 1996, 2013 and Alternative Footprints