

September 08, 2022

BY ELECTRONIC MAIL ONLY

Township of Wollaston

90 Wollaston Lake Road
PO Box 99
Coe Hill, Ontario
K0L 1P0
(clerk@wollaston.ca)

Attention: Bernice Crocker
Clerk/Administrator

**Re: Waste Management Asset Review & Update
Asset Management Plan Report (Version 2.0)
Greenview File: 128.21.001**

Dear Bernice:

Pursuant to the Federation of Canadian Municipalities (FCM) Municipal Asset Management Program (MAMP) Project Number MAMP-17419 for the Township of Wollaston (Township), this *Waste Management Asset Review and Update* (Review) letter report, to satisfy the requirements of Activity 2b of the FCM MAMP project.

The preparation of this Review was carried out with assistance from the Government of Canada and the FCM. Notwithstanding this support, the views expressed are the personal views of the authors, and the FCM and the Government of Canada accept no responsibility for them.

This Review letter report has been prepared in order to provide an update on the current solid waste assets managed by the Township, review potential future asset needs at the Wollaston Waste Disposal Site, and to update all necessary data to Table 3c – Detailed Summary of Municipal Assets – Solid Waste of Version 2.0 of the Asset Management Plan.

Plate 1: Overhead View of Wollaston Waste Disposal Site Transfer Station and Approved Waste Disposal Area (AWDA)



1.0 Update on Current Solid Waste Assets

Current assets related to solid waste management for the Township include the following:

1. Lands associated with the Landfill (Landfill)
2. Lands associated with the Contaminant Attenuation Zone (Land)
3. Structures

The following sub-sections provide details on each of the Township's solid waste-related assets.

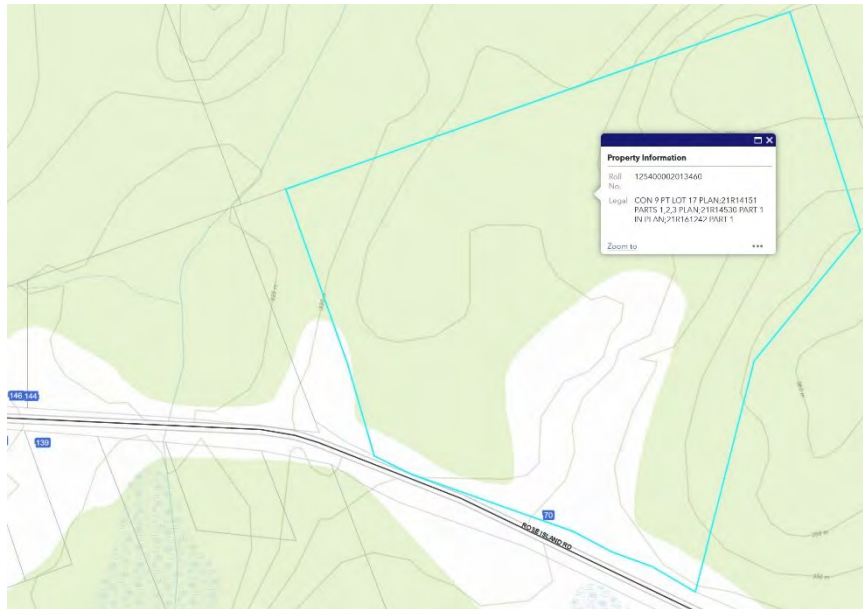
1.1 Asset ID SW1 – Wollaston Waste Disposal Site (Landfill)

The lands associated with the Wollaston Waste Disposal Site that include the existing Approved Waste Disposal Area (AWDA), the 30 meter (m) buffer, the waste and recycling transfer station, and part of the Contaminant Attenuation Zone (CAZ) are included under Asset ID SW1 (Table 3c).

The Wollaston Waste Disposal Site has been in operation since at least 1971, and operates under Environmental Compliance Approval (ECA) A362901; however, based on the Township's 2021 Asset Register prepared by municipal auditors, the lands associated with Asset SW1 have been in service since 1993. The 1971 date is understood to be the most accurate representation of the age of the Wollaston Waste Disposal Site. The oldest available ECA for the Wollaston Waste Disposal Site is dated December 31, 1971.

The address associated with Asset ID SW1 is 70 Rose Island Road, under Roll Number 125400002013460, with a description of Concession 9 Part Lot 17 Plan 21R14151, Parts 1, 2, 3 Plan 21R14530, Part 1 in Plan 21R161242 (from Hastings County GIS, 2022). The lands associated with Asset ID SW1 are understood to be approximately 8.06 hectares (ha) in land area.

Plate 2: Asset ID SW1 - Wollaston Waste Disposal Site Lands (from Hastings County GIS, 2022)



The most recent topographic waste capacity survey for the site was conducted on October 28, 2021, and the remaining waste disposal capacity for the Wollaston site was calculated to be approximately 4,015 cubic metres (m³); however, most of the approved remaining capacity for the site is not planned to be utilized for landfilling purposes as the capacity is mostly associated with the areas currently used for the transfer station. It is the Township's intent to proceed with closure of the AWDA at the site starting in 2022. Based on the *Revised Design, Operations, Development, and Progressive Closure Plan* for the site (Greenview, 2020), approved by the Ontario Ministry of the Environment, Conservation, and Parks (MECP) with the issuance of the Amended ECA for the site dated September 14, 2021, the Township is to complete closure operations of the AWDA over a three (3) year

period (2022 to 2024).

In fall 2021, the Township constructed a new Waste Site Transfer Station Retaining Wall at the site, in order to facilitate future waste management operations (i.e. export of regular Municipal Solid Waste [garbage]). Details on the new Waste Site Transfer Station Retaining Wall are included in Section 1.6 (below).

A detailed grade stake survey was completed at the Wollaston Waste Disposal Site on July 26, 2022, in order to assist Township staff with final closure operations in 2022, 2023, and 2024 with respect to site grading, and application of final cover materials (including barrier soil and vegetative cover). Grade stakes were installed using steel t-posts and ABS piping, and specific elevations for top of waste (final contours at closure; FCC), top of barrier soil, and top of vegetative cover were marked on the ABS piping using specific colours of tape. Below is an example of some grade stakes installed within the AWDA of the Wollaston Waste Disposal Site.

Plate 3: Photograph of New Grade Stakes Installed on July 26, 2022



Given the plan to proceed to final closure of the AWDA and continued use of Asset ID SW1 lands for waste and recycling transfer operations, Asset ID SW1 is not required to be replaced in future and no upgrade cost is anticipated to be required. Continued environmental monitoring of the site is planned to continue annually, for an estimated twenty-five (25) years from the date of completion of final closure operations (i.e. 2024 + 25 years = 2049).

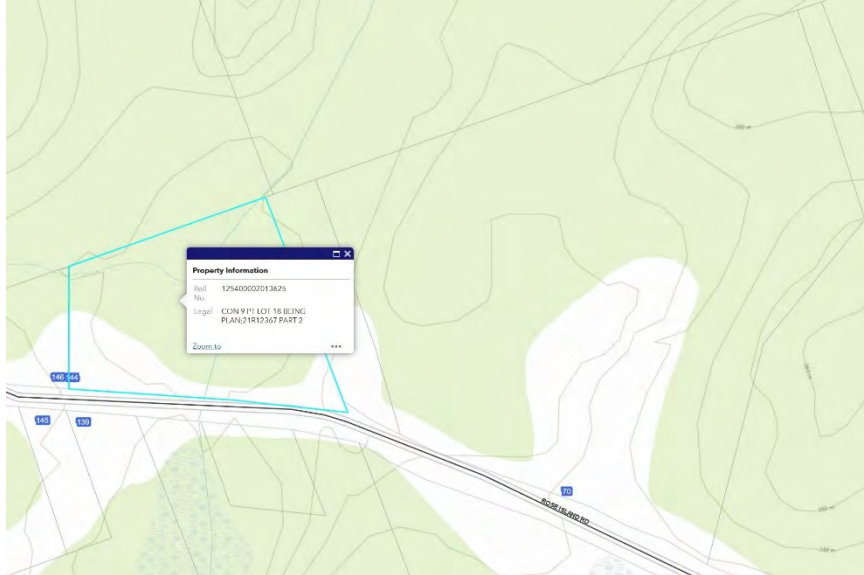
1.2 Asset ID SW2 – Wollaston Waste Disposal Site (Land)

The address associated with Asset ID SW2 is 144 Rose Island Road, under Roll Number 125400002013625, with a description of Concession 9 Part Lot 18 Plan 21R12367 Part 2. The lands associated with Asset ID SW2 are understood to have an area of approximately 1.74 ha.

The lands associated with Asset ID SW2 are understood to have been purchased by the Township in 2012, and have since been used as part of the CAZ for the Wollaston Waste Disposal Site.

Given the plan to proceed to final closure of the AWDA and continued use of the lands associated with Asset ID SW2 for CAZ purposes, SW2 is not required to be replaced in future and no upgrade cost is anticipated to be required. Continued environmental monitoring of the site is planned to continue annually, for an estimated twenty-five (25) years from the date of completion of final closure operations.

Plate 4: Asset ID SW2 - Wollaston Waste Disposal Site Lands (from Hastings County GIS, 2022)



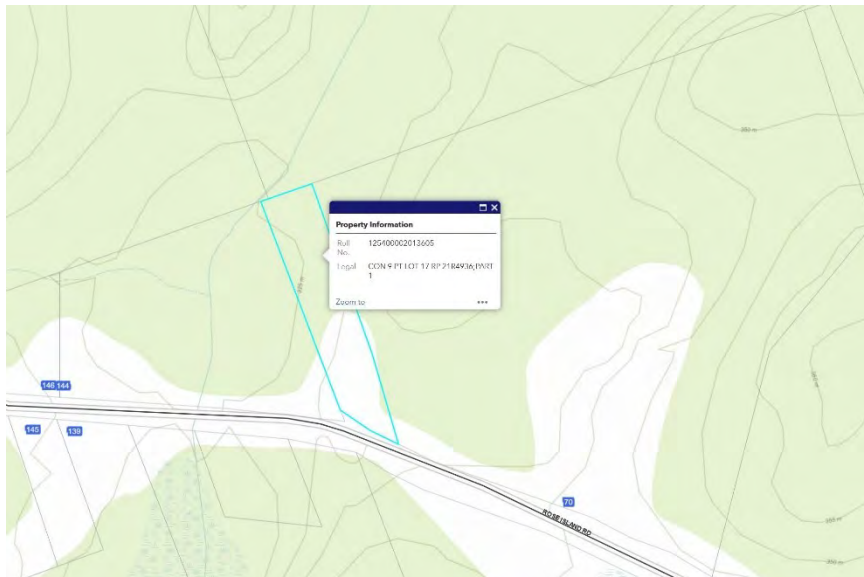
1.3 Asset ID SW3 – Wollaston Waste Disposal Site (Land)

No street address is associated with Asset ID SW3, but Roll Number 125400002013605, with a description of Concession 9 Part Lot 17 Plan 21R4936 Part 1 is understood to describe the lands. The lands associated with Asset ID SW3 are understood to have an area of approximately 0.6 ha.

The lands associated with Asset ID SW3 are understood to have been purchased by the Township in 1994, and have since been used as part of the CAZ for the Wollaston Waste Disposal Site. It is understood that a right-of-way to access property to the north is also associated with Asset ID SW3.

Given the plan to proceed to final closure of the AWDA and continued use of the Asset ID SW3 lands for CAZ purposes, SW3 is not required to be replaced in future and no upgrade cost is anticipated to be required. Continued environmental monitoring of the site is planned to continue annually, for an estimated twenty-five (25) years from the date of completion of final closure operations.

Plate 5: Asset ID SW3 - Wollaston Waste Disposal Site Lands (from Hastings County GIS, 2022)



1.4 Asset ID SW4 – Waste Site Office (Structure)

Asset ID SW4 – Waste Site Office is a small building used by Township staff for operations at the waste and recycling transfer station. The building has one (1) person door and two horizontal sliding vinyl windows, and is clad in vinyl siding. The roofing is made of asphalt shingles, and is flashed with aluminum soffit and fascia materials. The interior walls of the building are clad with plywood. Heating and lighting in the office is provided by a propane lights and heating system. There is no electricity associated with the Waste Site Office.

The Waste Site Office is predominately used by site operations staff for office-related work, to store documents related to site operations, and storage of miscellaneous materials and other supplies for site staff.

As part of the redesign for the waste transfer station in 2020, as included in the *Revised Design, Operations, Development, and Progressive Closure Plan* (Greenview, 2020), the Waste Site Office is planned to be relocated adjacent to the Waste Site Recycling Building and the site entrance, and used to better control site access to ratepayers. Relocation of the Waste Site Office is understood to be planned for 2023.

The Waste Site Office is understood to be in fair condition. Upgrades are recommended to the Waste Site Office, including for a new concrete foundation (as part of relocating the office) and ventilation upgrades. The noted upgrades are recommended for completion by the end of 2023.

The estimated upgrade costs for the structure are estimated at approximately \$35,000.

Plate 6: Asset ID SW4 – Waste Site Office



1.5 Asset ID SW5 – Waste Site Recycling Building (Structure)

Asset ID SW5 – Waste Site Recycling Building is a Quonset hut used by Township staff for storage of recyclables and other materials for operations at the site, and the operation of a Re-use Centre. The building is approximately 9 m wide by 12 m long, with an area of approximately 110 m². The Waste Site Recycling Building has one (1) person door and two overhead doors, and is constructed of steel. The roof includes integrated skylights to assist in illuminating the interior of the structure during daylight hours. The Waste Site Recycling Building is not insulated, and there is no heating or electricity associated with structure.

Historically, the Waste Site Recycling Building was used predominantly to store Blue Box Recyclables in rolling totes (in addition to housing the Re-Use Centre and other recyclable materials); however, as of January 01, 2021 the Township began storing Blue Box Recyclables in front-loading tipper bins as part of a new Blue Box contract with Emterra Environmental, which are located outdoors. The Waste Site Recycling Building is now predominantly used for operation of the Re-Use Centre, for diversion of other recyclable materials, and for site equipment.

The Waste Site Office is understood to be in fair condition. Ventilation upgrades are recommended to the Waste Site Recycling Building. The noted upgrades are recommended for completion by the end of 2023.

The estimated upgrade costs for the structure are estimated at approximately \$15,000.

Plate 7: Asset ID SW5 – Waste Site Recycling Building



1.6 Asset ID SW6 – Waste Site Transfer Station Retaining Wall (Structure)

Asset ID SW6 – Waste Site Transfer Station Retaining Wall is a concrete block retaining wall system with steel safety railings, and is used for staging of open-topped roll-off containers for the on-site storage of regular Municipal Solid Waste (i.e. bagged garbage [and equivalent]) prior to export to an approved waste disposal facility.

The Waste Site Transfer Station Retaining Wall was constructed by Township staff in Fall 2021, and since construction, all Municipal Solid Waste accepted at the site has been exported by disposal at an approved landfill. Waste landfilling operations at the Wollaston Waste Disposal Site ceased as of the completion of construction of the retaining wall in Fall 2021.

The Waste Site Transfer Station Retaining Wall structure is understood to be in good condition, and upgrades are not likely anticipated to be required in the near future. The anticipated asset life expectancy for the Waste Site Transfer Station Retaining Wall is estimated at approximately 30 years from its date of construction (2021).

The replacement and/or upgrade cost for the structure is estimated at approximately \$120,000.

Plate 8: Asset ID SW6 – Waste Site Transfer Station Retaining Wall



2.0 Potential Future Asset Needs

Based on the future needs assessment completed as part of this *Waste Management Asset Review & Update* letter report, including discussions with Township staff, it is not anticipated that the Township would need to invest

in significant infrastructure at the site with respect to new buildings or other structures. The existing buildings are deemed to be sufficient in order to maintain the current level of service to its ratepayers (considered to be a high level of service = 5).

However, upgrades to the site could be considered in order to improve the working environment for Township staff, including:

1. Installation of electrical services to the two (2) buildings on-site.
2. Installation of a water well.
3. Installation of a septic system and related washroom facilities.

In the event that the Township is interested in pursuing the above noted upgrades, then a detailed review of the anticipated costs involved in the site upgrades, and a site evaluation for the determination of ideal locations of a potential septic system and water well, should be conducted. Given that bedrock is observed daylighting to surface in many areas of the site, and in particular to the east of the transfer station and site buildings, bedrock impacts to the potential construction of a water well and septic system would need to be considered and reviewed.

Additionally, and given the historical use of the site as an active landfill, the potability of water from any new groundwater well would need to be investigated/analysed. It recommended that an alternative supply of drinking water be provided to site staff from a risk mitigation perspective (i.e. bottled water).

3.0 Updates to Asset Management Planning Table for Solid Waste Assets

Updates to Table 3c – Detailed Summary of Municipal Assets – Solid Waste have been completed as part of this *Waste Management Asset Review & Update* and is included as an attachment. Table 3c is also included as part of Version 2.0 of the Asset Management Plan Report for the Township.

4.0 Closing

This Waste Management Asset Review & Update (and accompanying table) have been prepared in order to satisfy the requirements of Activity 2b of the FCM MAMP Project Number MAMP-17419 for the Township of Wollaston.

This report and its details are subject to the attached Statement of Qualifications and Limitations.

All respectfully submitted by,

Greenview Environmental Management Limited



Dan Hagan, P.Geo.

Senior Project Manager / Geologist

*Attachments: Table 3c – Detailed Summary of Municipal Assets (Solid Waste)
Greenview Environmental Management Statement of Service Conditions & Limitations*



Table 3c
Detailed Summary of Municipal Assets - Solid Waste
 Asset Management Planning Tables
 Township of Wollaston
 128.21.003

Asset ID	Asset Name ^{1,3}	Detailed Asset Description (Landfill / Land / Structure) ^{1,3}	Address ^{2,3}	UTM Coordinates			Remaining Capacity (m ³) ²	Year in Service or Last Upgrade Year ^{1,2,3}	Asset Life Expectancy (years) ^{2,3}	Projected Replacement or Upgrade Year	Last Topographic Survey ²	Tangible Capital Asset Report Financials				Replacement and/or Upgrade Cost ^{1,3}	Condition Rating (good / fair / poor) ³	Current Level of Service (5 = high / 1 = low) ⁴	Additional Information (Identify repair/rehabilitation requirements, maintenance needs, specific cost breakdown, etc.)
				Zone	Northing	Easting						Original Value (2021 Starting Balance) ¹	Accumulated Amortization (2021) ¹	Additions and Betterments (2021)	Ending Value (2021 Net Book Value) ¹				
SW1	Wollaston Waste Disposal Site	Landfill	70 Rose Island Rd - CON 9 PT LOT 17 PLAN:21R14151 PARTS 1,2,3 PLAN:21R14530 PART 1 IN PLAN:21R161242 PART 1 (Roll Number 125400002013460)	18 T	4971963	274753	4,015	1993	28	2021	2021	\$ 70,000	\$ -	\$ -	\$ 70,000	\$ -	Good	5	Approximately 8.06 ha. Approved Waste Disposal Area (AWDA), 30 m buffer, and Contaminant Attenuation Zone (CAZ) lands. No further landfilling anticipated for the AWDA as of September 2021. Closure Operations of AWDA scheduled for 2022.
SW2	Wollaston Waste Disposal Site	Land	144 Rose Island Road - CON 9 PT LOT 18 BEING PLAN:21R12367 PART 2 (Roll Number 125400002013625)	18 T	4972011	274486	n/a	2012	unlimited	n/a	n/a	\$ 18,773	\$ -	\$ -	\$ 18,773	\$ -	Good	5	Approximately 1.74 ha. Roll Number 125400002013625. Part of Contaminant Attenuation Zone (CAZ) lands.
SW3	Wollaston Waste Disposal Site	Land	CON 9 PT LOT 17 RP 21R4936;PART 1 (Roll Number 125400002013605)	18 T	4972012	274580	n/a	1994	unlimited	n/a	n/a	\$ 9,900	\$ -	\$ -	\$ 9,900	\$ -	Good	5	Approximately 0.6 ha. Roll Number 125400002013605. Part of Contaminant Attenuation Zone (CAZ) lands.
SW4	Waste Site Office	Structure	70 Rose Island Rd	18 T	4971950	274779	n/a	2004	19	2023	n/a	\$ 11,716	\$ 5,273	\$ -	\$ 6,443	\$ 35,000	Fair	3	Small office with heating (propane), no electricity. Upgrade recommendations include replacement of foundation of office as part of relocation of structure & ventilation upgrades.
SW5	Waste Site Recycling Building	Structure	70 Rose Island Rd	18 T	4971925	274767	n/a	2002	21	2023	n/a	\$ 27,131	\$ 13,565	\$ -	\$ 13,566	\$ 15,000	Fair	5	Approximately 30'x40' Quonset Hut. Upgrade recommendations include ventilation upgrades.
SW6	Waste Site Transfer Station Retaining Wall	Structure	70 Rose Island Rd	18 T	4971976	274763	n/a	2021	30	2051	2021	\$ 105,819	\$ -	\$ -	\$ 105,819	\$ 120,000	Good	5	New Waste Transfer Station Retaining Wall constructed in fall 2021.

Detailed Asset Description	Quantity	Remaining Capacity (m ³)	Average Age (years)	Replacement and/or Upgrade Cost
Landfill	1	4,015	Unknown	\$ -
Land	2	-	indefinite	\$ -
Structures	3	-	18	\$ 170,000
TOTAL	6	4,015	-	\$ 170,000

Notes:

1. Data from Township of Wollaston Asset Register (2021) and/or provided by Municipality.
2. Data from 2021 Annual Monitoring Report & Waste Management Asset Review & Update (Greenview, 2022).
3. Data from Building Asset Study - 2021 Update (Greenview, 2022) and Township of Wollaston (Gap Analysis Meetings).
4. Level of Service. 1 = very low priority, 5 = very high priority.

Selected Focus Items

YEAR
2021

Statement of Service Conditions & Limitations

The following conditions and limitations shall form an integral part of any agreement between Greenview and the Client. In the event of duplication or conflict, the most stringent shall supercede the other.

Provision of Services and Payment

Upon documented acceptance of Greenview's proposed services and conditions in written form by the Client, Greenview may commence work on the proposed services directly.

Greenview's offers for services in the form of proposals, quotations, bids, tenders, or other like an offering to a Client are formulated upon available information at the time of the offer submission. In the event of discovery of unknown conditions, or any other unknown circumstance that may arise following the presentation of Greenview's offer to the Client, Greenview reserves the right to negotiate terms with the Client with respect to changes in scope, fees, disbursements, or the like as may be fair and reasonable considering the discovery.

Upon retention of Greenview's services related to any commission, the Client agrees to remit payment for the services rendered for the specified period within (30) days of the invoice date as invoiced by Greenview on a typical monthly basis, unless otherwise arranged between the Client and Greenview. In the event of non-payment by the Client, Greenview reserves the right, without external influence or expense, to discontinue services and retain any documentation, data, reports, or other project information until such time as payment is received by Greenview. Interest on any overdue accounts may be applied accordingly.

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Greenview relies on background and historical information from the Client to determine the appropriate scope of services to meet the Client's objectives, in accordance with applicable legislation, guidelines, industry practices, and accepted methodologies.

Greenview provides its services under the specific terms and conditions of a specific proposal (and where necessary formal contract), in accordance with the above requirements and the *Limitations Act 2002*, as amended, only.

The hypotheses, results, conclusions, and recommendations presented in documentation authored by Greenview are founded on the information provided by the Client to Greenview in preparation for the work. Facts, conditions, and circumstances discovered by Greenview during the performance of the work requested by the Client are assumed by Greenview to be part of preparatory information provided by the Client as part of the proposal stage of the project. Greenview assumes that, until notified or discovered otherwise, that the information provided by, or obtained by Greenview from, the Client is factual, accurate, and represents a true depiction of the circumstances that exist related to the time of the work.

Greenview relies on its Clients to inform Greenview if there are changes to any related information to the work. Greenview does not review, analyze, or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Greenview will not be responsible for matters arising from incomplete, incorrect, or misleading information or from facts or circumstances that are not fully disclosed to, or that are concealed from Greenview during the period that proposals, services, work, or documentation preparation was performed by Greenview.

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A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Greenview's work or report considers any locations or times other than those from which information, sample results and data were specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those based on extrapolations.

Only conditions, and substances, at the site and locations chosen for study by the Client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the Client. Any physical or other aspects of the site that were not chosen for study by the Client, or any other matter not specifically addressed in a report prepared by Greenview, are beyond the scope of the work performed by Greenview and such matters have not been investigated or addressed.

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