

Township of Leeds and the Thousand Islands

Briar Hill Waste Disposal Site Design and Operations Report



NOTICE TO READER

This document has been prepared by Malroz Engineering Inc. (Malroz) on behalf of the Township of Leeds and the Thousand Islands (TLTI), in fulfilment of Condition 7(6) of Amended Environmental Compliance Approval (ECA) No. A442103.

Malroz has relied upon TLTI staff to provide historic data upon which the current data interpretation and conceptual understanding of the Site are partially based. Malroz accepts no responsibility for the integrity of the data provided by TLTI or for missing data. Any third-party use or reliance of this report, or decisions made based on this report, are the responsibilities of the third party. Malroz accepts no responsibility for damages suffered by any third party as a result of decisions made or actions taken based on the contents of this report.

This document has been prepared for TLTI for submission to the Ministry of Environment, Conservation and Parks (Ministry) as required by the ECA. Unauthorized re-use of this document for any other purpose, or by third parties without the express written consent of Malroz shall be at such party's sole risk.

This page is an integral part of this document and must remain with it at all times.

Respectfully Submitted,

MALROZ ENGINEERING INC.


per: Ryan Fox, P. Eng.
Environmental Engineer


and: John Pyke, P. Geo.
Project Manager




and: Paula R. Klink, P. Eng.
Senior Environmental Engineer



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1.0 Introduction to Site

The Briar Hill Waste Disposal Site (the Site) operates under Amended Environmental Compliance Approval (ECA) No. A442103 issued by the Ministry of the Environment and Climate Change (now the Ministry of Environment, Conservation and Parks, or Ministry), dated April 24, 2024 (see Appendix C). In accordance with the ECA, a monitoring, development, and operations report (AMR) is to be completed annually and submitted to the District Manager by March 31 of the following calendar year.

The Site is located at 114 Turk Rock Road on part of Lot 18, Concession 11 in the Township of Leeds and the Thousand Islands (TLTI), Ontario (Figure 1 and Figure 2, Appendix A). The Site is located approximately 3.5 km east of Highway 15 at the Village of Morton River and approximately 5.0 km west of Lyndhurst, Ontario. The Site is adjacent to an active sand and gravel pit to the south, an agricultural property and a forested area to the west, and an agricultural/residential property to the north. Turk Rock Road is adjacent to the eastern property boundary, and a forested area is present further to the east.

Geodetic coordinates for the Site entrance from Turk Rock Road off Briar Hill Road are as follows (2013 Site survey):

Zone:	NAD 83, 18T
Easting:	407020.1 m (+/- 0.5 m)
Northing:	4933135.1 m (+/- 0.5 m)

A gravel road leads from the locked gate entrance at Turk Rock Road, through material drop off, and exits to Turk Rock Road. (Requirement 7(6)c, d). The Site operates as a 2.4 hectare waste disposal area and transfer site within a total site area of 16 hectares. The corners of the landfilling area are marked and secured by wire fencing (Requirement 7(6)d). The site is in a rural location, with treed areas providing a visual and noise barrier for the public (Requirement 7(6)e).

2.0 Site Design

The Site Plan shown in Figure 2, Appendix A delineates the current footprint of the landfill, including past landfills on site and the elevation contours of the site from a survey completed in December 2024. The ECA maximum landfill volume is listed as 85,600 cubic metres (m³). A detailed inspection including test pitting was made in August 2025 of the area surrounding the active waste identified in the 2024 survey, focusing on determining the footprint of the landfill. Satellite photos and a survey from 2014 (possibly by BluMetric) were used to estimate historical footprints and provide a

better estimate of current waste deposited in the landfill. The total landfill volume in 2024 was estimated to be 23,300 m³, with a remaining capacity of 62,300 m³. From 2017 to 2024, the fill rate was estimated at approximately 1,200 m³. The fill rate has steadily decreased from 1,630 m³ since 2016 (Requirement 7(6)a, b). In recent years TLTI has made efforts to better compact waste applied to the landfill which possibly supports the reduced fill rate.

The Site is located within a former sand pit characterized by highly permeable soil. Due to the soil permeability, issues related to water pooling and drainage after storms have not been observed, as such additional storm water management works have not been required at the Site (Requirement 7(6)f, v). In addition, landfill gas control and management is not completed, however methane is monitored at the Site and included as part of the Annual Monitoring Report (Requirement 7(6)q).

The proposed final contours and storm management considerations are found in Appendix E. The current active area is outlined in orange (see Figure C-100). Note that the new contours will pull the waste back to 30 m from the west property border. Upon closing, enhanced drainage will be in place, including additional swales for proper drainage around both the landfill and the waste transfer station. (Requirement 7(6)a, c, d, f, v)

3.0 Site Operations

The Site operates Mondays, Wednesdays, Thursdays, and Saturdays from 8:30 am to 4:30 pm when a Site Attendant who inspects incoming waste loads for compliance is on duty. No waste is received at the Site outside of the hours of operation. The entrance and exit gates are locked during non-operating hours. Waste compaction, waste coverage, and pick up of other material occurs during site operating hours. The hours of operation and the schedule do not change seasonally. TLTI provides snow removal as needed in the winter (Requirement 7(6)h).

Winter operations require advanced planning to allow continuous safe and efficient operations. Snow clearing operations are planned, with snow storage areas selected to minimize spring drainage problems. Dry granular material is available for periodic winter cover operations. A local source of suitable periodic cover material is established prior to the onset of winter if sufficient material is not stockpiled on site (Requirement 7(6)i).

3.1 Landfill Operations

Waste at the site is compacted using a wheeled compactor and should be covered weekly. The site is covered using either soil, clay, or shredded brush. Between compaction events, cover material is applied from an on-site stockpile as necessary. (Requirement 7(6)g, j). As electricity has recently been installed at the site, compacting

waste before depositing is being explored to extend the life of the landfill using better compaction, as well as improve site housekeeping.

The Site has two phases of waste filling: a former landfill area in the northeast part of the site (now closed), and an operational fill area in the center of the site. Active filling is currently occurring on as shown in Figure 2 (Appendix A) (Requirement 7(6)g).

The landfill receives household garbage from residences, as well as construction and demolition waste, and household cleanup wastes. Hazardous waste, including vehicle and boat batteries, are not accepted (Requirement 7(6)b).

3.2 Waste Diversion Operations

TLTI works with the Resource Productivity and Recovery Authority (RPRA) to manage recycling on Site. An area of the Site is leased to a producer-run Blue Box program vendor who provides roll-off bins with capacities up to 40 cubic yards (up to 5000 kg) are provided so residents can self-sort recyclable waste. Bins are provided for deposit of blue box recyclables, cardboard, metals, propane cylinders, organic, and e-wastes, and are emptied on an as required basis. If quantities warrant, additional or larger bins can be installed. Separate storage areas are identified for brush and clean lumber. White goods are accepted; however, appliances containing refrigerants are only received when accompanied by a certificate verifying that the refrigerant has been drained from the device as defined in O. Reg. 463/10. TLTI ensures that separated materials are removed from the site before the stored quantities exceed the limits (Requirement 7(6)b, l).

Tires are accepted at the Briar Hill Site, then transferred off site when a load has accumulated or when the storage volume exceeds the size of the bunker. Tires dumped at the gates of the Site are stockpiled on Site and shipped to the Lansdowne Site for recycling (Requirement 7(6)l).

3.3 Site Monitoring, Housekeeping, and Maintenance

Inspections are conducted daily by the Site Attendant when the Site is open to the public. Inspections include a site walkthrough with observations noted for erosion of the cover, leachate springs, surface water ponding, the presence of vermin or vector, the presence of litter, and the condition of signage and fencing. The Site Attendant is responsible for keeping records of items vital to site activities including, but not limited to quantities of waste disposed, tipping fees charged, schedules of site covering operations, and unusual occurrences. Records required by the Site's ECA include daily logs that include the date and time of the inspections, a record of deficiencies identified, recommendations for remedial action, as well as the date, time, and description of efforts taken to correct the deficiency. Daily logs record the quantity and type of waste

accepted, and wastes rejected with the reason for refusal, and the origin of the waste. A copy of a Daily Inspection Log is included in Appendix B. (Requirement 7(6)s).

All complaints are recorded. TLTI assigns staff to record the complaint, initiate steps to resolve the complaint and to record the outcome. TLTI retains a report of all complaints and actions taken. TLTI also has an online complaint reporting system which is monitored.

The municipal responsibilities administered through by the Site Attendant include control of users, control of waste received, segregation of waste, control of disposal area, prevention of scavenging, litter control, rodent control, and record keeping. (Requirement 7(6)k).

The site is operated and maintained so vermin, vectors, dust, litter, odour, noise, and traffic do not create a nuisance. Routine litter pick-ups are required to maintain a neat site. Windblown litter is controlled through pickups by the Site Attendant during the walkthrough or as needed programs coordinated by TLTI if the issue is more significant. A routine pest control program is undertaken to maintain control of rodents and other vectors. As required, a licensed vector exterminator is retained to ensure that work is carried out in compliance with Ministry requirements. Complaints received about unwanted vectors are followed up promptly by the Site Attendants and brought to the attention of TLTI. (Requirement 7(6)m, r).

3.4 Supervision, Training, and Emergency Preparedness

The Site is supervised during all operating hours. Site Attendants are hired or contracted by TLTI to supervise all site activities, including but not limited to maintaining user records, collecting user fees, maintaining and operating the Site to acceptable standards, and overseeing litter clean-up. The Site Attendants can request identification from all users and are accountable to the TLTI with respect to activities occurring at the Site.

Site Attendants receive training on landfill operations when they first assume site operation responsibilities, and on an ongoing basis. As a minimum, training includes terms, conditions, and operating requirements of the Site's ECA, operation and management of the landfill and the other waste storage areas, responsibilities of the operators, environmental concerns relating to wastes being handled at the Site, proper inspection, receiving, and recording procedures and the activities to be undertaken during and after a load rejection, occupational health and safety concerns pertaining to the wastes to be handled at the Site, relevant environmental legislation and regulations, including but not limited to the EPA and O. Reg. 347; and operation of equipment and procedures to be followed in the event of an emergency (Requirement 7(6)t).

The Emergency Response Plan is found in Appendix D (Requirement 7(6)u).

4.0 Landfill Closure Considerations

The final contours, cover (including estimated permeability, thickness, and source), thickness of the topsoil, and vegetation proposed for the closed waste mound will meet Landfill standards set in O. Reg. 232/98 or subsequent regulations set at the time of closure (Requirement 7(6)n), including 600 mm clay cap, and a 150 mm seeded topsoil cover.

5.0 Environmental Monitoring Program

The surveillance, monitoring, and sample programs are conducted in accordance with the monitoring plan pursuant to Section 8 of the Site's ECA (Appendix C).

5.1 Site Surveillance

Site inspections are conducted during sampling events, twice per year. These inspections include a check of operational compliance with the ECA including signage, Site Attendant presence, hazardous or liquid wastes, vermin, vectors, litter, dust, brush, clean wood burning, and interim cover. In addition, observations of general site conditions including drainage, surface water, condition of landfill cap, seeps, and onsite structures are noted.

5.2 Well Inspection

Well inspections are undertaken during all sampling events. These inspections include a visual inspection of accessible portions of the well piezometer, monument casing, cap, lock, and well seal. Wells that require attention are reported to the Project Manager for repairs (Requirement 7(6)r).

5.3 Groundwater Monitoring Program

A summary of the groundwater monitoring program is found in Appendix C. Prior to sampling, each well is monitored for depth to water, depth to well bottom, and combustible gas vapours. Results from overburden and bedrock wells (including two residential wells) are compared to background wells to evaluate leachate impacts. Groundwater samples are analyzed for Per- and Polyfluoroalkyl Substances (PFAS) annually as per the amended ECA Appendix (Requirement 7(6)o).

5.4 Surface Water Monitoring Program

A summary of the surface water monitoring program is found in Appendix C. The surface water monitoring program includes collecting samples at three active surface water sampling stations located along the adjacent tributary to Morton Creek: SW1, SW4 and SW5 (Figure 2, Appendix A) (Requirement 7(6)o).

5.5 Data Quality Evaluation

Water analyses are undertaken by a Canadian Association for Laboratory Accreditation (CALA) certified laboratory that uses industry recognized methods to conduct laboratory analyses.

Field activities in accordance with standard operating protocols to ensure precise sample collection and reduce the risk of cross-contamination.

Information from both the laboratory and field is validated by Malroz before data analysis (Requirement 7(6)o).

6.0 Trigger Mechanisms

Trigger mechanisms have not been established at the Site as it is in an area where elevated background concentrations of many indicators (such as metals or nitrogen compounds) traditionally used for triggers are observed. Concentrations of PFAS in wells OW23, OW24R1, the residential wells at 122 Turk Rock Road and 151 Fortune Line Road, are considered a trigger. Health Canada is developing and updating guidelines and guidance as the science continues to evolve. Currently perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) have Canadian Drinking Water Quality guidelines. Perfluorobutanoate (PFBA), perfluorobutane sulfonate (PFBS), perfluorohexanesulfonate (PFHxS), perfluoropentanoate (PFPeA), perfluorohexanoate (PFHxA), perfluoroheptanoate (PFHpA), perfluorononanoate (PFNA), 6:2 fluorotelomer sulfonate (6:2 FTS), 8:2 fluorotelomer sulfonate (8:2 FTS) have Health Canada Drinking Water Screening Values and are anticipated to change. The analytical results will be compared to these values as they evolve.

A cascading PFAS groundwater trigger mechanism is proposed (Requirement 7(6)p):

If a result of any sample collected from the untreated residential water supply at 122 Turk Rock Road or 151 Fortune Line Road has a total PFAS concentration at or greater than 30 ng/L, the District Manager shall be notified. (Requirement 8(6)) The well will be resampled within three weeks of receipt of the lab results to ensure the results are not due to a sampling or analysis error.

If the results of the second sampling event indicate total PFAS concentrations below 30 ng/L, the results of the initial sampling event are flagged, and field staff will receive PFAS sampling refresher training prior to the next PFAS sampling event.

If the results of the second sampling event indicate total PFAS concentrations above 30 ng/L, the Ministry will be notified, field staff will receive

PFAS sampling refresher training prior to the next PFAS sampling event, and samples will be submitted for analysis of PFAS to two separate laboratories for comparison during the next regularly scheduled sampling event (spring or fall).

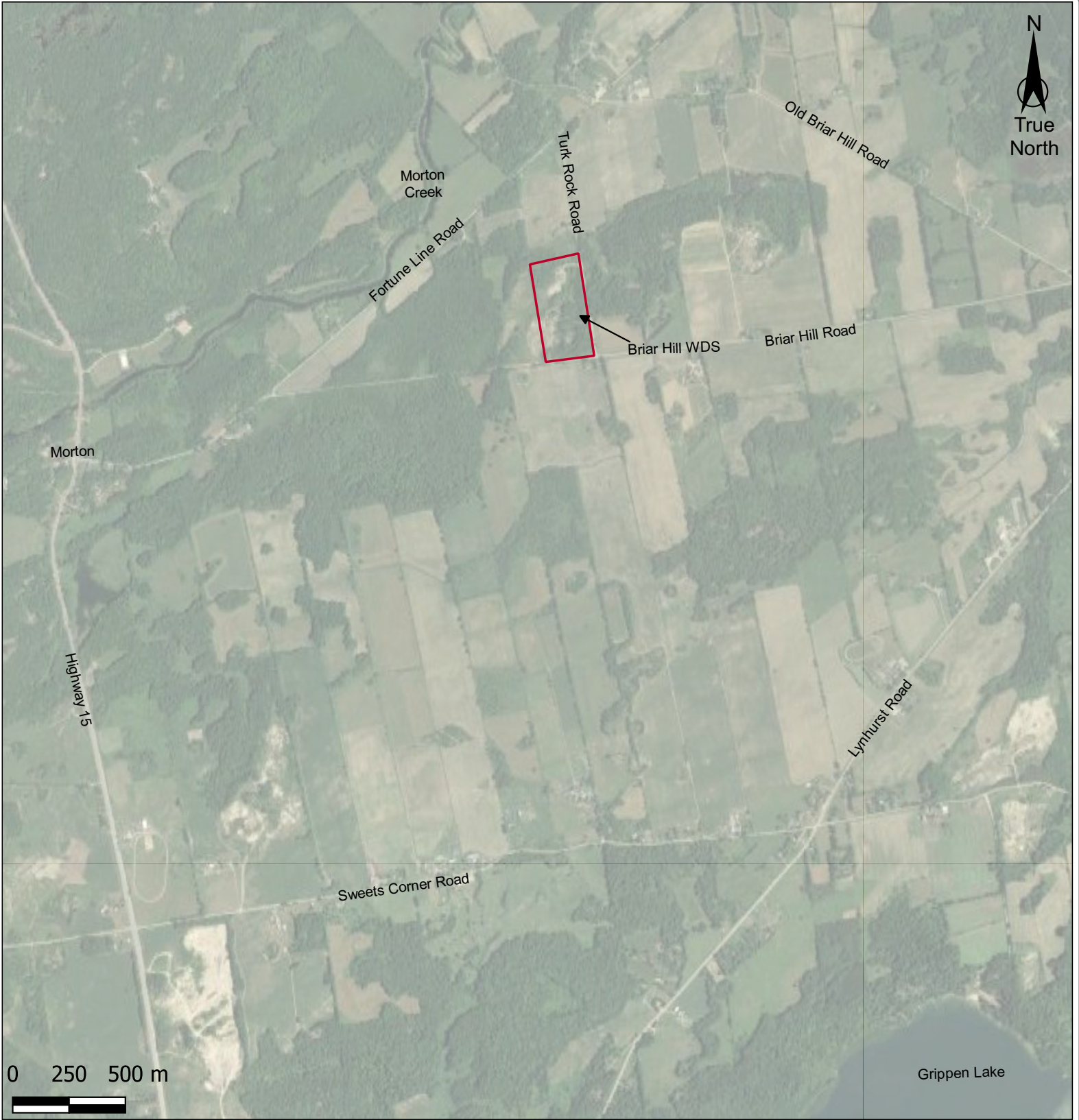
If the results of the following regularly scheduled sampling event (spring or fall) indicate total PFAS concentrations below 30 ng/L, the trigger mechanism resets.

If the results of the following regularly scheduled sampling event (spring or fall) indicate total PFAS concentrations above 30 ng/L, the Ministry is notified, and a deeper evaluation of groundwater flow at the Site will be conducted. The Ministry will be involved in further consultation.

A surface water trigger is not proposed (Requirement 7(6)p) based on comments from the surface water review of the 2023 Annual Report. If the consultant identifies the need for a trigger in the future, the Ministry will be consulted on its development.

Appendix A

Figures



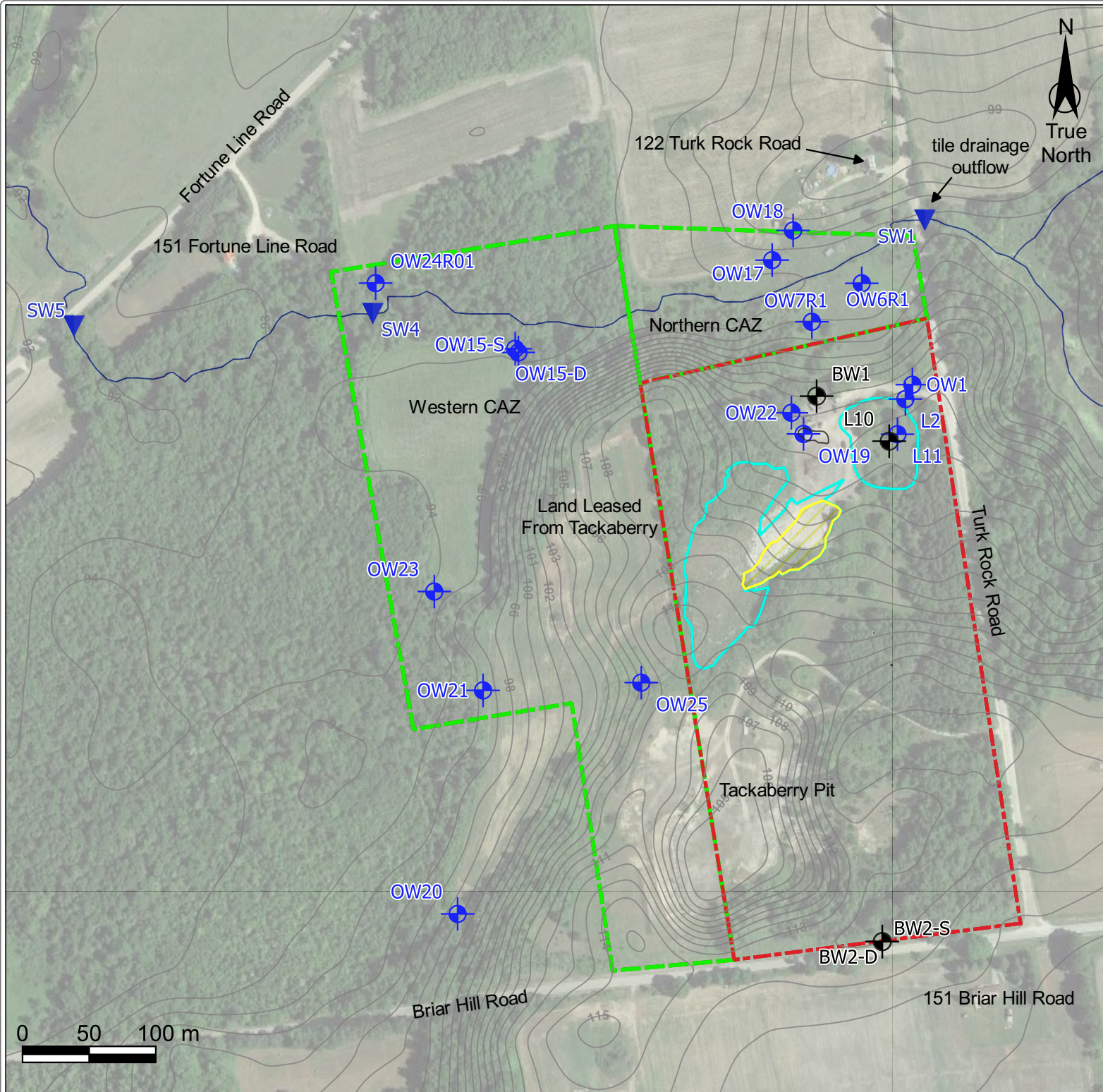
Legend
[red rectangle] approximate site boundary

R0	2024-01-16	issued in final	CM	PK
Rev	Date	Description	By	Chkd

Site Location Plan

Operations and Closure Plan
Briar Hill Waste Disposal Site
Township of Leeds and the Thousand Islands

Data Sources: Figure based on Malroz field observations and Google Earth imagery; topographic contours based on Digital Raster Aquisition Project Eastern Ontario, MNRF, 2014; stream based on Ontario Hydro Network, MNRF, 2020.



Legend

- approximate Site property boundary
- CAZ
- approximate landfill area
- approximate topographic contours (MNRF, 2014)
- current landfill area
- + approximate overburden monitoring well location
- + approximate bedrock monitoring well location
- ▼ surface water monitoring location
- stream

R0	2024-01-16	issued in final	CM	PK
Rev	Date	Description	By	Chkd

Site Plan

Operations and Closure Plan
Briar Hill Waste Disposal Site
Township of Leeds and the Thousand Islands

File: 1036-125.00

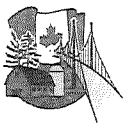
Figure
2



Data Sources: Figure based on Malroz field observations and Google Earth imagery; topographic contours based on Digital Raster Acquisition Project Eastern Ontario, MNRF, 2014; stream based on Ontario Hydro Network, MNRF, 2020.

Appendix B

Daily Inspection Example



- ☐ Lansdowne
☐ Lyndhurst
☐ Escott

**WASTE DISPOSAL SITE
DAILY INSPECTION FORM**

DATE: Jan 2 TIME: 8:10 STAFF: Julie McDonald 90

DEFICIENCIES OBSERVED:

Ponded Water: Yes / No

Windblown Litter: Yes / No

Leachate Springs: Yes / No

Animals: Yes / No

Other: Yes / No

Description / Location

many muddy

RECOMMENDED ACTIONS / ACTIONS TAKEN:

RECYCLING:

TYPE

DATE BINS WERE ORDERED: 12/3/11 plastic corrugated mixed paper

DATES BINS WERE PICKED UP: 02/01/11 plastic corrugated

REJECTED LOADS:

compost picked up

TIME	HAULER NAME	REASON FOR REJECTION
<u>11:10</u>	<u>Local customer</u>	<u>B2 2T6737</u>

OTHER COMMENTS / OBSERVATIONS

fried out gravel pile

COMMERCIAL HAULER OR LARGE LOADS

Time	Hauler	Material	Quantity (estimate volume & weight)	Visual Check (Yes/No)

TOTAL COUNT OF HOUSEHOLD USERS: _____

AREA OF WASTE DISPOSAL: All waste sent to active face: Yes / No

IF NO: Waste Sent To: 79

LITTER CONTROL: Yes / No

DETAILS: 2 bags

APPLICATION OF DUST SUPPRESSANT: Yes / No

DETAILS: _____

DAILY INSPECTION FORM COMPLETED: Yes / No

DETAILS: _____

COMPLAINTS RECEIVED: Yes / No

If Yes, complaint file number(s) and topic: _____

SIGNATURE [Signature] Print Staff Name: Julie McDonald

OFFICE USE:

Date Reviewed: _____ Reviewer: _____ File Number: _____

Appendix C

ECA and Monitoring Plan

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A442103
Issue Date: April 14, 2024

The Corporation of the Township of Leeds and the Thousand Islands
1233 Prince St
Lansdowne, Ontario
K0E 1L0

Site Location: 114 Turk Rock Rd
Leeds and the Thousand Islands Township, United Counties of Leeds and Grenville
K0E 1N0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the use and operation of 2.4 hectare waste disposal landfilling/transfer site within a total site area of 16 hectares.

For the purpose of this environmental compliance approval, the following definitions apply:

"Adverse Effect" means adverse effect as defined in the EPA;

"Approval" means this Environmental Compliance Approval and any Schedules to it;

"Contaminating Life Span" means contaminating life span as defined in Ontario Regulation 232/98;

"Director" means any Ministry employee appointed in writing by the Minister pursuant to section 5 of the EPA as a Director for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the local district office of the Ministry in which the Site is geographically located;

"EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

“NMA” means the *Nutrient Management Act, 2002*, S.O. 2002, c. 4, as amended;

"O. Reg. 463/10" means Ontario Regulation 463/10 (Ozone Depleting Substances and Other Halocarbons), made under the EPA, as amended;

“Ontario Drinking Water Quality Standards” means Ontario Regulation 169/03 (Ontario Drinking Water Quality Standards), made under the SDWA, as amended;

“Operator” means any person, other than the Owner's employees, authorized by the Owner as having the charge, management or control of any aspect of the Site and includes its successors or assigns;

“Owner” means any person that is responsible for the establishment or operation of the Site being approved by this Approval, and includes the Corporation of the Township of Leeds and the Thousand Islands and its successors and assigns;

"OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;

“PA” means the *Pesticides Act*, R.S.O. (1990), c. P.11, as amended;

“Provincial Officer” means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the OWRA, Section 5 of the EPA, Section 17 of the PA, Section 4 of the NMA, or Section 8 of the SDWA;

“Regional Director” means the Regional Director of the local Regional Office of the Ministry in which the Site is located;

“Reg. 347” means R.R.O. 1990, Reg. 347: (General - Waste Management), made under the EPA, as amended;

“Reg. 903” means R.R.O. 1990, Reg. 903: (Wells), made under the OWRA, as amended;

"Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:

- o Schedule 1 - Supporting Documentation;
- o Schedule 2 - Surface Water Monitoring Program; and
- o Schedule 3 - Groundwater Monitoring Program;

“SDWA” means the *Safe Drinking Water Act, 2002*, S.O. 2002, c. 32, as amended;

“Site” means the entire waste disposal site, including the buffer lands, and contaminant attenuation zone at Briar Hill Landfill Site, Ward 2, Township of Leeds and the Thousand Islands, Lot 18, Concession 11, Leeds and the Thousand Islands Township, United Counties of Leeds and Grenville;

“Trained Personnel” means personnel knowledgeable in the following through instruction and/or practice:

- o relevant waste management legislation, regulations and guidelines;
- o major environmental concerns pertaining to the waste to be handled;
- o occupational health and safety concerns pertaining to the processes and wastes to be handled;
- o management procedures including the use and operation of equipment for the processes and wastes to be handled;
- o emergency response procedures;
- o specific written procedures for the control of nuisance conditions;
- o specific written procedures for refusal of unacceptable waste loads; and
- o the requirements of this Approval; and

"White Goods" means household appliances which use, or may use refrigerants, and which include, but is not limited to, refrigerators, freezers and air-conditioning systems.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL

Compliance

1. The Owner and Operator shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

In Accordance

3. Except as otherwise provided by this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the documentation listed in the attached Schedule 1.

Interpretation

4. Where there is a conflict between a provision of any document listed in Schedule 1 in this Approval, and the conditions of this Approval, the conditions in this Approval shall take precedence.
5. Where there is a conflict between the application and a provision in any document listed in Schedule 1, the application shall take precedence, unless it is clear that the purpose of

the document was to amend the application and that the Ministry approved the amendment.

6. Where there is a conflict between any two documents listed in Schedule 1, the document bearing the most recent date shall take precedence.
7. The conditions of this Approval are severable. If any condition of this Approval, or the application of any condition of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

Other Legal Obligations

8. The issuance of, and compliance with, this Approval does not:
 - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
 - b. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner and Operator to furnish any further information related to compliance with this Approval.

Adverse Effect

9. The Owner and Operator shall take steps to minimize and ameliorate any Adverse Effect, as defined in the EPA, on the natural environment or impairment of water quality resulting from the Site, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
10. Despite the Owner, Operator or any other person fulfilling any obligations imposed by this Approval the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.

Change of Ownership

11. The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:
 - a. the ownership of the Site;
 - b. the Operator of the Site;
 - c. the address of the Owner or Operator; and
 - d. the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R. S. O. 1990, c. B.17, shall be included in the notification.

12. No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out.
13. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

Registration on Title Requirement

14. Prior to dealing with the property in any way, the Owner shall provide a copy of this Approval and any amendments, to any person who will acquire an interest in the property as a result of the dealing.
15.
 - a. Within thirty (30) calendar days from the date of issuance of this Approval, the Owner shall submit to the Director a completed Certificate of Requirement which shall include:
 - i. a plan of survey prepared, signed and sealed by an Ontario Land Surveyor, which shows the area of the Site where waste has been or is to be deposited at the Site;
 - ii. proof of ownership of the Site;
 - iii. a letter signed by a member of the Law Society of Upper Canada or other qualified legal practitioner acceptable to the Director, verifying the legal description provided in the Certificate of Requirement;
 - iv. the legal abstract of the property; and
 - v. any supporting documents including a registerable description of the Site.
 - b. Within fifteen (15) calendar days of receiving a Certificate of Requirement authorized by the Director, the Owner shall:
 - i. register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property; and
 - ii. submit to the Director and the District Manager, written verification that the Certificate of Requirement has been registered on title.

Inspections by the Ministry

16. No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, the PA, the SDWA or the NMA, of any place to which this Approval relates, and without limiting the foregoing:
 - a. to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this Approval are kept;
 - b. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;

- c. to inspect the Site, related equipment and appurtenances;
- d. to inspect the practices, procedures, or operations required by the conditions of this Approval; and
- e. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA, the PA, the SDWA or the NMA.

Information and Record Retention

- 17.
 - a. Except as authorized in writing by the Director, all records required by this Approval shall be retained at the Site or the Township Municipal office for a minimum of two (2) years from their date of creation.
 - b. The Owner shall retain all documentation listed in Schedule 1 for as long as this Approval is valid.
 - c. All monthly summary reports of waste records collected are to be kept at the Site or the Township Municipal office until they are included in the Annual Report.
 - d. The Owner shall retain employee training records as long as the employee is working at the Site.
 - e. The Owner shall make all of the above documents available for inspection upon request of Ministry staff.
- 18. The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
 - a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
 - b. acceptance by the Ministry of the information's completeness or accuracy.
- 19. The Owner shall ensure that a copy of this Approval, in its entirety and including all its Notices of Amendment, and documentation listed in Schedule 1, are retained at the Site at all times.
- 20. Any information related to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, RSO 1990, CF-31.

2. SITE OPERATION

Operation

1. The Site shall be operated and maintained at all times including management and disposal of all waste, in accordance with the EPA, Reg. 347, and the conditions of this Approval. At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.

Signs

2. The Owner shall install and maintain a sign at the entrance to the Site. The sign shall be visible and readable from the main road leading to the Site. The following information shall be included on the sign:
 - a. the name of the Site and Owner;
 - b. the number of the Approval;
 - c. the name of the Operator;
 - d. the normal hours of operation;
 - e. the allowable and prohibited waste types;
 - f. the telephone number to which complaints may be directed;
 - g. a warning against unauthorized access;
 - h. a twenty-four (24) hour emergency telephone number (if different from above); and
 - i. a warning against dumping outside the Site.
3. The Owner shall install and maintain signs to direct vehicles to the working face and recycling areas.
4. The Owner shall provide signs at recycling area informing users what materials are acceptable and directing users to appropriate storage areas.

Vermin, Vectors, Dust, Litter, Odour, Noise and Traffic

5. The Site shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.

Burning Waste Prohibited

6.
 - a. Burning of waste at the Site is prohibited.
 - b. Notwithstanding condition 2.6.a above, burning of segregated, clean wood and brush at the landfill may be carried out in strict compliance with the Ministry of the Environment Document titled "Guideline C-7, Burning at Landfill Sites" dated April 1994.

Site Access

7. Waste shall only be accepted during the following time periods:

Monday	8:30 a.m. - 4:45 p.m.
Wednesday	8:30 a.m. - 4:45 p.m.
Thursday	8:30 a.m. - 4:45 p.m.
Saturday	8:30 a.m. - 4:45 p.m.
8. On-site equipment used for daily site preparation and closing activities may be operated one (1) hour before and one (1) hour after the hours of operation approved by this Approval.
9. With the prior written approval from the District Manager, the time periods may be extended to accommodate seasonal or unusual quantities of waste.

Site Security

10. No waste shall be received, landfilled or removed from the Site unless a site supervisor or an attendant is present and supervises the operations during operating hours. The Site shall be closed when a site attendant is not present to supervise landfilling operations.
11. The Site shall be operated and maintained in a safe and secure manner. During non-operating hours, the Site entrance and exit gates shall be locked and the Site shall be secured against access by unauthorized persons.

Stormwater Management

12. The Site shall be maintained to prevent erosion or washing of fill, liner or cover material. Regular grading shall be carried out to drain rain water and snow melt water from fill areas and to prevent standing water.

3. EMPLOYEE TRAINING

1. A training plan for all employees that operate any aspect of the Site shall be developed and implemented by the Owner or the Operator. Only Trained Personnel shall operate any aspect of the Site or carry out any activity required under this Approval.

4. COMPLAINTS RESPONSE PROCEDURE

1. If at any time the Owner receives complaints regarding the operation of the Site, the Owner shall respond to these complaints according to the following procedure:

- a. The Owner shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information and the time and date of the complaint;
- b. The Owner, upon notification of the complaint, shall initiate appropriate steps to determine possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
- c. The Owner shall complete and retain on-site a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents.

5. EMERGENCY RESPONSE

1. All Spills as defined in the EPA shall be immediately reported to the **Ministry's Spills Action Centre at 1-800-268-6060** and shall be recorded in the log book as to the nature of the emergency situation, and the action taken for clean-up, correction and prevention of future occurrences.
2. In addition, the Owner shall submit, to the District Manager a written report within three (3) business days of the emergency situation, outlining the nature of the incident, remedial measures taken, handling of waste generated as a result of the emergency situation and the measures taken to prevent future occurrences at the Site.
3. All wastes resulting from an emergency situation shall be managed and disposed of in accordance with Reg. 347.
4. All equipment and materials required to handle the emergency situations shall be:
 - a. kept on hand at all times that waste landfilling and/or handling is undertaken at the Site; and
 - b. adequately maintained and kept in good repair.
5. The Owner shall ensure that the emergency response personnel are familiar with the use of such equipment and its location(s).

6. INSPECTIONS, RECORD KEEPING AND REPORTING

Daily Log Book

1. A daily log shall be maintained in written or electronic format and shall include the following information:
 - a. the type, date and time of arrival, hauler, and quantity (tonnes) of all waste and cover material received at the *Site*.
 - b. Notwithstanding condition 6.1.a, for household users a count of number of users and an estimated quantity of waste may be recorded;
 - c. the area of the *Site* in which waste disposal operations are taking place;
 - d. a record of litter collection activities and the application of any dust suppressants;
 - e. a record of the daily inspections; and
 - f. a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore and maintain service.
2. Any information requested, by the Director or a Provincial Officer, concerning the *Site* and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall be provided to the Ministry, upon request.

Daily Inspections and Log Book

3. An inspection of the entire *Site* and all equipment on the *Site* shall be conducted each day the *Site* is in operation to ensure that: the *Site* is secure; that the operation of the *Site* is not causing any nuisances; that the operation of the *Site* is not causing any adverse effects on the environment and that the *Site* is being operated in compliance with this Approval. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the *Site* if needed.
4. A record of the inspections shall be kept in a daily log book that includes:
 - a. the name and signature of person that conducted the inspection;
 - b. the date and time of the inspection;
 - c. the list of any deficiencies discovered;
 - d. the recommendations for remedial action; and
 - e. the date, time and description of actions taken.
5. A record shall be kept in the daily log book of all refusals of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.

Annual Report

6. A written report on the development, operation and monitoring of the *Site*, shall be

completed annually (Annual Report). The Annual Report shall be submitted to the District Manager, by March 31st of the year following the period being reported upon.

7. The Annual Report shall include but not be limited to the following information:
 - a. the results and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs;
 - b. In the event that the results of the monitoring program are such that an off-site exceedance of the RUP, ODWS, PWQO or 30 ng/L PFAS value can reasonably be predicted to occur, the Owner shall include:
 - i. the details of any such predicted off-site exceedance, including the assumptions upon which the prediction is based;
 - ii. a discussion of the modifications, if any, to intended operations which would be necessary to prevent the predicted off-site exceedance;
 - iii. a discussion of the modifications, if any, which should be made to the monitoring program; and
 - iv. a discussion of other mitigation measures or contingency actions, if any, which may be necessary to prevent off-site impacts and/or establishment of a Contamination Attenuation Zone (CAZ).
 - c. an assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the Site, and the adequacy of and need to implement the contingency plans;
 - d. site plans showing the existing contours of the Site; areas of landfilling operation during the reporting period; areas of intended operation during the next reporting period; areas of excavation during the reporting period; the progress of final cover, vegetative cover, and any intermediate cover application; facilities existing, added or removed during the reporting period; and site preparations and facilities planned for installation during the next reporting period;
 - e. calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the Site during the reporting period and a calculation of the total volume of Site capacity used during the reporting period;
 - f. a calculation of the remaining capacity of the Site and an estimate of the remaining Site life;
 - g. a summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the Site and recyclables transferred from the Site;
 - h. a summary of any complaints received and the responses made;
 - i. a discussion of any operational problems encountered at the Site and corrective action taken;
 - j. any changes to the Design and Operations Report and the Closure Plan that have been approved by the Director since the last Annual Report;
 - k. a report on the status of all monitoring wells and a statement as to compliance with Reg. 903; and

1. any other information with respect to the Site which the District Manager may require from time to time.

7. LANDFILL DESIGN AND DEVELOPMENT

Approved Waste Types

1. Only municipal waste as defined under Reg. 347 being solid non-hazardous shall be accepted at the Site for landfilling.
2. The Owner shall develop and implement a program to inspect waste to ensure that the waste received at the Site is of a type approved for acceptance under this Approval.
3. The Owner shall ensure that all loads of waste are properly inspected by Trained Personnel prior to acceptance at the Site and that the waste vehicles are directed to the appropriate areas for disposal or transfer of the waste. The Owner shall notify the District Manager, in writing, of load rejections at the Site within three (3) business days from their occurrence.

Capacity

4. Maximum volumetric capacity approved for the Site, consisting of the waste, daily cover, intermediate cover and the final cover is 85,600 cubic metres. This volume does not include the historical volume of waste deposited prior to May 2003 within the 1.5 hectare area of the old landfill.

Service Area

5. Only waste that is generated within the boundaries of the Township of Leeds and the Thousand Islands may be accepted at the Site.

Design and Operations Report

6. Within one hundred and eighty (180) days from the date of this Approval, the Owner shall submit for the Director's approval, a Design and Operations Report that includes as a minimum the following information:
 - a. proposed landfill design including the footprint, final contours, capacity and an estimate of the amount of existing waste;
 - b. an estimate of waste types and quantities to be landfilled at the site and recycling and resource recovering activities at the Site;
 - c. location and description of the access road and the on-site roads at the Site;
 - d. description and location of the fencing and the gate(s);
 - e. screening of the Site from the public, both visual and the protection from the noise

- impact;
- f. details of the clean surface water drainage from the Site and any works required to prevent extraneous surface water from contacting the active working face;
- g. description of the fill method, the equipment used at the Site, the areas used for various fill methods of landfilling, and timelines for various phases of the Site development;
- h. the operating hours of the Site and the hours for the various activities to be undertaken at the Site, including waste compaction, waste coverage and other activities within the Site;
- i. details on winter operations;
- j. the equipment used and the procedures used for waste deposition, spreading and covering;
- k. details on supervision and monitoring of the activities at the Site;
- l. details on handling of other wastes, including the types and amounts of wastes handled, storage locations, storage facility design/description and the frequency of removal from the Site;
- m. details on housekeeping practices undertaken to control noise, dust, litter, odour, rodents, insects and other disease vectors, scavenging birds or animals;
- n. details on the closure of the Site, including the description of the final cover and its estimated permeability, its thickness, the source of the final cover material, the thickness of the top soil and the vegetation proposed for the closed waste mound, as well as the timeframe for the progressive waste coverage;
- o. monitoring program for the surface and ground water;
- p. site-specific trigger mechanism program for the implementation of the groundwater and surface water, contingency measures and a description of such measures;
- q. landfill gas control or management required at the Site;
- r. maintenance activities proposed for the Site and for the monitoring well network, including the type of the activities, the frequency of the activities and the personnel responsible for them;
- s. inspection activities proposed for the Site, including the frequency of the activities and the personnel responsible for them;
- t. details of training provided for the personnel responsible for the activities at the Site;
- u. contingency plans for the emergency situations that may occur at the Site;
- v. storm water management, including the location and the design of any works required; and
- w. any other information relevant to the design and operation of the Site or the information required by the District Manager.

Cover

7. Alternative materials to soil may be used as weekly and interim cover material, based on an application with supporting information and applicable fee for a trial use or permanent use, submitted by the Owner to the Director, copied to the District Manager and as

approved by the Director via an amendment to this Approval. The alternative material shall be non-hazardous according to Reg. 347 and will be expected to perform at least as well as soil in relation to the following functions:

- a. Control of blowing litter, odours, dust, landfill gas, gulls, vectors, vermin and fires;
- b. Provision for an aesthetic condition of the landfill during the active life of the Site;
- c. Provision for vehicle access to the active tipping face; and
- d. Compatibility with the design of the Site for groundwater protection, leachate management and landfill gas management.

8. Cover material shall be applied as follows:

- a. **Weekly Cover** - Weather permitting, deposited waste shall be covered **weekly** in a manner acceptable to the District Manager so that no waste is exposed to the atmosphere;
- b. **Intermediate Cover** - In areas where landfilling has been temporarily discontinued for six (6) months or more, a minimum thickness of 300 millimetre of soil cover or an approved thickness of alternative cover material shall be placed; and
- c. **Final Cover** - In areas where landfilling has been completed to final contours, a minimum 600 millimetre thick layer of soil of medium permeability and 150 millimetres of top soil (vegetative cover) shall be placed. Fill areas shall be progressively completed and rehabilitated as landfill development reaches final contours.

8. LANDFILL MONITORING

Landfill Gas

1. The Owner shall ensure that any buildings or structures at the Site contain adequate ventilation systems to relieve any possible landfill gas accumulation to prevent methane concentration reaching the levels within its explosive range. Routine monitoring for explosive methane gas levels shall be conducted in all buildings or structures at the Site, especially enclosed structures which at times are occupied by people.

Compliance

2. The Site shall be operated in such a way as to ensure compliance with the following:
 - a. Reasonable Use Guideline B-7 for the protection of the groundwater at the Site;
 - b. Provincial Water Quality Objectives included in the July 1994 publication entitled Water Management Policies, Guidelines, Provincial Water Quality Objectives, as amended from time to time or limits set by the Regional Director, for the protection of the surface water at and off the Site; and

- c. Ontario Drinking Water Quality Standards.

Surface Water and Groundwater

- 3. The Owner shall monitor surface water and ground water in accordance with the monitoring programs outlined in Schedules 2 and 3.
- 4. All groundwater PFAS sampling results shall be compared for compliance to a standard of 30 ng/L for the sum of all detected PFAS compounds in each sample. The District Manager, with the guidance of the MECP's Technical Assessment and Standards Development Branch, may change this compliance standard without approval of the Director.
- 5. A certified Professional Geoscientist or Engineer possessing appropriate hydrogeologic training and experience shall execute or directly supervise the execution of the groundwater monitoring and reporting program.

Notification

- 6. If a result of any sample collected from the untreated residential water supply at 122 Turk Rock Road or 151 Fortune Line Road has a total PFAS concentration at or greater than 30 ng/L, the Owner shall immediately notify the District Manager.

Groundwater Wells and Monitors

- 7. The Owner shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly capped, locked and protected from damage.
- 8. Where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and the wells shall be properly re-secured.
- 9. Any groundwater monitoring well included in the on-going monitoring program that is damaged shall be assessed, repaired, replaced or decommissioned by the Owner, as required.
 - a. The Owner shall repair or replace any monitoring well which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed.
 - b. All monitoring wells which are no longer required as part of the groundwater monitoring program, and have been approved by the Director for abandonment, shall be decommissioned by the Owner, as required, in accordance with Reg. 903, to prevent contamination through the abandoned well. A report on the

decommissioning of the well shall be included in the Annual Report for the period during which the well was decommissioned.

Trigger Mechanisms and Contingency Plans

10.
 - a. Within three (3) months from acquiring contaminant attenuation zone to the west of the fill area, the Owner shall submit to the District Manager, details of a trigger mechanisms plan for surface water and groundwater quality monitoring for the purpose of initiating investigative activities into the cause of increased contaminant concentrations.
 - b. Within three (3) months from acquiring contaminant attenuation zone to the west of the fill area, the Owner shall submit to the District Manager, details of a contingency plan to be implemented in the event that the surface water or groundwater quality exceeds any trigger mechanism.
11. In the event of a confirmed exceedance of a site-specific trigger level relating to leachate mounding or groundwater or surface water impacts due to leachate, the Owner shall immediately notify the District Manager, and an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the Owner in accordance with the approved trigger mechanisms and associated contingency plans.
12. If monitoring results, investigative activities and/or trigger mechanisms indicate the need to implement contingency measures, the Owner shall ensure that the following steps are taken:
 - a. The Owner shall notify the District Manager, in writing of the need to implement contingency measures, no later than 30 days after confirmation of the exceedances;
 - b. Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the Owner to the Director for approval; and
 - c. The contingency measures shall be implemented by the Owner upon approval by the Director.
13. The Owner shall ensure that any proposed changes to the site-specific trigger levels for leachate impacts to the surface water or groundwater, are approved in advance by the Director via an amendment to this Approval.

Changes to the Monitoring Programs, Trigger Mechanisms and Contingency Plans

14. The Owner may request to make changes to the monitoring program(s), trigger mechanisms and/or contingency plans to the District Manager in accordance with the recommendations of the annual report. The Owner shall make clear reference to the proposed changes in a separate letter that shall accompany the annual report.

15. Within fourteen (14) days of receiving the written correspondence from the District Manager confirming that the District Manager is in agreement with the proposed changes to the environmental monitoring program, trigger mechanisms and/or contingency plans, the Owner shall forward a letter identifying the proposed changes and a copy of the correspondences from the District Manager and all other correspondences and responses related to the changes, to the Director requesting the Approval be amended to approve the proposed changes to the environmental monitoring plan prior to implementation.

9. CLOSURE PLAN

1. At least two (2) years prior to closure, the Owner shall submit to the Director for approval, with copies to the District Manager, a detailed Site closure plan pertaining to the termination of landfilling operations at this Site, post-closure inspection, maintenance and monitoring, and end use. The plan shall include the following as a minimum but are not limited to:
 - a. a plan showing Site appearance after closure;
 - b. a description of the proposed end use of the Site, that shall include a discussion on the Environmental Assessment commitments (if applicable) to dedicate portion of the lands within the Site that are not required for site post-closure operations and monitoring, to be used for community recreational purpose;
 - c. a description of how pollinator friendly plants were considered in the final vegetative cover for the landfill and/or in the landscaping within the Site;
 - d. a description of the procedures for closure of the Site:
 - i. advance notification of the public of the landfill closure;
 - ii. posting a sign at the Site entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
 - iii. completion, inspection and maintenance of the final cover and landscaping;
 - iv. site security;
 - v. removal of unnecessary landfill-related structures, buildings and facilities; and
 - vi. final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - e. a schedule indicating the time-period for implementing sub-conditions i to vi above.
 - f. descriptions of the procedures for post-closure care of the Site, including:
 - i. operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - ii. record keeping and reporting; and
 - iii. complaint contact and response procedures;
 - g. an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas; and

- h. an updated estimate of the Contaminating Life Span of the Site, based on the results of the monitoring programs to date.
- 2. The Site shall be closed in accordance with the closure plan as approved by the Director.

10. WASTE DIVERSION

- 1. The Owner shall ensure that:
 - a. all bins and waste storage areas are clearly labelled;
 - b. all lids or doors on bins shall be kept closed during non-operating hours and during high wind events; and
 - c. if necessary to prevent litter, waste storage areas shall be covered during high winds events.
- 2. The Owner/Operator shall remove the refrigerant as defined in O. Reg. 463/10 in accordance with the following:
 - a. all White Goods containing refrigerants, which have not been tagged by a licensed technician to verify that the equipment no longer contains refrigerants, shall be stored in a separate area in an upright position; and
 - b. White Goods containing refrigerants received at the Site shall be shipped off-Site in order to have the refrigerants removed by a licensed technician in accordance with O. Reg. 463/10; or
 - c. the refrigerant shall be removed at the Site by a licensed technician, in accordance with O. Reg. 463/10, prior to shipping White Goods off-Site; and
 - d. a detailed log of all White Goods containing refrigerants received shall be maintained. The log shall include the following:
 - i. date of the record;
 - ii. types, quantities and source of White Goods containing refrigerants received;
 - iii. details on removal of refrigerants as required by O. Reg. 463/10; and
 - iv. the quantities and destination of the White Goods and/or refrigerants transferred from the Site.
- 3. Propane cylinders shall be stored in a segregated area in a manner which prevents cylinders from being knocked over or cylinder valves from breaking.
- 4. The Owner shall transfer waste and recyclable materials from the Site as follows:
 - a. recyclable materials shall be transferred off-site once their storage bins are full;
 - b. scrap metal shall be transferred off-site at least twice a year;
 - c. tires shall be transferred off-site as soon as a load for the contractor hired by the Owner has accumulated, or as soon as the accumulated volume exceeds the

- d. storage capacity of its bunker; and immediately, in the event that waste is creating an odour or vector problem.
- 5. The Owner shall notify the appropriate contractors that waste and recyclable wastes that are to be transferred off-site are ready for removal. Appropriate notice time, as determined by the contract, shall be accommodated in the notification procedure.
- 6. Collection, storage and transfer of Waste Electrical and Electronic Equipment shall be in accordance with the documents in the Schedule 1. If there is any discrepancy between the guideline titled "Collection Site Organizing & Operating Waste Electrical and Electronic Equipment (WEEE) Guidebook" dated November 2012 as amended prepared by Ontario Electronic Stewardship and the documents in Schedule 1, the guideline shall take precedence.

Schedule 2
Surface Water Monitoring Plan

Monitoring Locations :SW1, SW4 & SW5	
frequency: Spring and Fall	
Lab Parameters	
Alkalinity	Arsenic
Ammonia	Barium
Ammonia (UI)(N)	Boron
BOD	Cadmium
COD	Chromium
DOC	Calcium
Conductivity	Cobalt
Hardness	Copper
pH	Iron
Phenols	Lead
Phosphorous, total	Magnesium
Phosphorous, total dissolved	Manganese
TDS	Nickel
TSS	Potassium
Total Kjeldahl - N	Silver
Chloride	Sodium
Nitrate	Strontium
Nitrite	Vanadium
Sulphate	Zinc
Aluminum, dissolved	
Mercury, dissolved	
Field Parameters	
pH	
N-NH3 unionized (Calc)	
Temperature	
Dissolved Oxygen	
Conductivity	

Schedule 3
Groundwater Monitoring Plan
Table 3.1

Spring and Fall Sampling: BW1, BW2(s/d), OW1, OW6R1, OW7R1, OW15(s/d), OW17, OW18, OW19, OW20, OW21, OW22, OW23, OW24R01, OW25, Residential well at 122 Turk Rock Road	
Spring annually :L2, L10, L11	
Lab Parameters	
Alkalinity	Arsenic
Ammonia	Barium
BOD	Boron
COD	Cadmium
DOC	Chromium
Conductivity	Calcium
Hardness	Cobalt
pH	Copper
Phenols	Iron
Phosphorous, total	Lead
TDS	Magnesium
TSS	Manganese
Total Kjeldahl - N	Potassium
Chloride	Silver
Nitrate	Sodium
Nitrite	Strontium
Sulphate	Uranium
Mercury	Vanadium
Aluminum	Zinc
Field Parameters	
pH	
N-NH3 unionized (Calc)	
Temperature	
Dissolved Oxygen	
Conductivity	

Table 3.2
Annual Spring and VOC

Groundwater VOCs (L10, OW15 -S, OW15-D, OW19, OW22)	
Acetone	Ethylbenzene
Benzene	Hexachlorobutadiene
Bromobenzene	Hexane
Bromodichloromethane	Isopropylbenzene
Bromoform	4-Isopropyltoluene
Bromomethane	Methyl Butyl Ketone
Carbon Tetrachloride	Methyl Ethyl Ketone
Chloroethane	Methyl Isobutyl Ketone
Chloroform	Methyl tert-butyl ether
Chloromethane	Chlorobenzene
2-Chlorotoluene	Naphthalene
4-Chlorotoluene	n-Butylbenzene
1,2-Dibromo-3-Chloropropane	n-Propylbenzene
Dibromochloromethane	sec-Butylbenzene
1,2-Dibromoethane	Styrene
Dibromomethane	tert-Butylbenzene
1,2-Dichlorobenzene	1,1,1,2-Tetrachloroethane
1,3-Dichlorobenzene	1,1,2,2-Tetrachloroethane
1,4-Dichlorobenzene	Tetrachloroethylene Toluene
Dichlorodifluoromethane	1,2,3-Trichlorobenzene
1,1-Dichloroethane	1,2,4-Trichlorobenzene
1,2-Dichloroethane	1,1,1-Trichloroethane
1,1-Dichloroethylene	1,1,2-Trichloroethane
cis-1,2-Dichloroethylene	Trichloroethylene
trans-1,2-Dichloroethylene	Trichlorofluoromethane
Methylene Chloride	1,2,3-Trichloropropane
1,2-Dichloropropane	1,2,4-Trimethylbenzene
1,3-Dichloropropane	1,3,5-Trimethylbenzene
2,2-Dichloropropane	Vinyl Chloride
cis-1,3-Dichloropropene	m/p-Xylene
trans-1,3-Dichloropropene	o-Xylene
1,3-Dichloropropene, total	Xylenes, total
1,1-Dichloropropene	

Table 3.3
Table 3.3-Annual Sampling and PFAS

Groundwater PFAS: 122 Turk Rock Road and 151 Fortune Line Road, OW22, OW23, and OW24R01
eicosafluoro-3-oxaundecane-1-sulfonic acid, 11-chloro- [11Cl-PF3OUdS] ethyl perfluorooctanesulfonamide, n- [NEtFOSA] ethyl perfluorooctanesulfonamidoacetic acid, n- [NEtFOSAA] ethyl perfluorooctanesulfonamidoethanol, n- [NEtFOSE] fluorotelomer sulfonic acid, 10:2 [10:2 FTS] fluorotelomer sulfonic acid, 4:2 [4:2 FTS] fluorotelomer sulfonic acid, 6:2 [6:2 FTS] fluorotelomer sulfonic acid, 8:2 [8:2 FTS] hexadecafluoro-3-oxanonane-1-sulfonic acid, 9-chloro- [9Cl-PF3ONS] hexafluoropropylene oxide dimer acid [HFPO-DA] (GenX) methyl perfluorooctanesulfonamide, n- [NMeFOSA] methyl perfluorooctanesulfonamidoacetic acid, n- [NMeFOSAA] methyl perfluorooctanesulfonamidoethanol, n- [NMeFOSE] perfluorobutanesulfonic acid [PFBS] perfluorobutanoic acid [PFBA] perfluorodecanesulfonic acid [PFDS] perfluorodecanoic acid [PFDA] perfluorododecanoic acid [PFDoA] perfluoroheptanesulfonic acid [PFHpS] perfluoroheptanoic acid [PFHpA] perfluorohexanesulfonic acid [PFHxS] perfluorohexanoic acid [PFHxA] perfluorononanesulfonic acid [PFNS] perfluorononanoic acid [PFNA] perfluorononanoic acid, 4,8-dioxa-3H- [ADONA] perfluorooctanesulfonamide [PFOSA] perfluorooctanesulfonic acid [PFOS] perfluorooctanoic acid [PFOA] perfluoropentanesulfonic acid [PFPeS] perfluoropentanoic acid [PFPeA] perfluorotetradecanoic acid [PFTeDA] perfluorotridecanoic acid [PFTrDA] perfluoroundecanoic acid [PFUnA]

The reasons for the imposition of these terms and conditions are as follows:

GENERAL

- The reason for Conditions 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.17, 1.18 and 1.19 is to clarify the legal rights and responsibilities of the Owner and Operator under this Approval.
- The reasons for Conditions 1.3 and 7.6 are to ensure that the Site is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.
- The reasons for Condition 1.11 are to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.
- The reasons for Condition 1.12 are to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.
- The reason for Condition 1.13 is to ensure that the successor is aware of its legal responsibilities.
- The reasons for Condition 1.14 and 1.15 are that the Part II.1 Director is an individual with authority pursuant to Section 197 of the Environmental Protection Act to require registration on title and provide any person with an interest in property before dealing with the property in any way to give a copy of the Approval to any person who will acquire an interest in the property as a result of the dealing.
- The reason for Condition 1.16 is to ensure that appropriate Ministry staff has ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this Approval. This Condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the Act, the OWRA, the PA, the NMA and the SDWA.
- Condition 1.20 has been included in order to clarify what information may be subject to the Freedom of Information Act.

SITE OPERATION

- The reasons for Conditions 2.1, 2.5 and 6.3 are to ensure that the Site is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.
- The reason for Conditions 2.2, 2.3 and 2.4 is to ensure that users of the Site are fully aware of important information and restrictions related to Site operations and access under this Approval.

- The reasons for Condition 2.6 are open burning of municipal waste is unacceptable because of concerns with air emissions, smoke and other nuisance effects, and the potential fire hazard and to make sure burning of brush and wood are carried out in accordance with Ministry guidelines.
- The reasons for Condition 2.7, 2.8 and 2.9 are to specify the hours of operation for the landfill site and a mechanism for amendment of the hours of operation, as required.
- The reasons for Condition 2.10 and 2.11 are to ensure that the Site is supervised by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person and to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.
- The reason for condition 2.12 is to ensure the stormwater within the Site is managed in a manner which does not result in a hazard or nuisance to the natural environment.

EMPLOYEE TRAINING

- The reason for Condition 3.1 is to ensure that the Site is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.

COMPLAINTS RESPONSE PROCEDURE

- The reason for Condition 4.1 is to ensure that any complaints regarding landfill operations at this Site are responded to in a timely and efficient manner.

EMERGENCY RESPONSE

- Conditions 5.1 and 5.2 are included to ensure that emergency situations are reported to the Ministry to ensure public health and safety and environmental protection.
- Conditions 5.3, 5.4 and 5.5 are included to ensure that emergency situations are handled in a manner to minimize the likelihood of an adverse effect and to ensure public health and safety and environmental protection.

RECORD KEEPING AND REPORTING

- The reason for Conditions 6.1 and 6.2 is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this Approval (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the EPA and its regulations.
- The reason for Conditions 6.4 and 6.5 is to ensure that detailed records of Site inspections are recorded and maintained for inspection and information purposes.

- The reasons for Conditions 6.6 and 6.7 are to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.

LANDFILL DESIGN AND DEVELOPMENT

- The reason for Conditions 7.1 to 7.5 inclusive is to specify the approved areas from which waste may be accepted at the Site and the types and amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation.
- Condition 7.7 is to provide the Owner the process for getting the approval for alternative daily and intermediate cover material.
- The reasons for Condition 7.8 are to ensure that daily/weekly and intermediate cover are used to control potential nuisance effects, to facilitate vehicle access on the Site, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the Site.

LANDFILL MONITORING

- Reasons for Condition 8.1 are to ensure that off-site migration of landfill gas is monitored and all buildings at the Site are free of any landfill gas accumulation, which due to a methane gas component may be explosive and thus create a danger to any persons at the Site.
- Condition 8.2 is included to provide the groundwater and surface water limits to prevent water pollution at the Site.
- Conditions 8.3, 8.4, 8.5 and 8.6 are included to require the Owner to demonstrate that the Site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken.
- Conditions 8.7, 8.8 and 8.9 are included to ensure the integrity of the groundwater monitoring network so that accurate monitoring results are achieved and the natural environment is protected.
- Conditions 8.10 to 8.13 inclusive are added to ensure the Owner has a plan with an organized set of procedures for identifying and responding to potential issues relating to groundwater and surface water contamination at the Site's compliance point.
- Conditions 8.14 and 8.15 are included to streamline the approval of the changes to the monitoring plan.

CLOSURE PLAN

- The reasons for Condition 9 are to ensure that final closure of the Site is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure the long-term protection of the health and safety of the public and the environment.

WASTE DIVERSION

- Condition 10 is included to ensure that the recyclable materials are stored in their temporary storage location and transferred off-site in a manner as to minimize a likelihood of an adverse effect or a hazard to the natural environment or any person.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A442103 issued on August 20, 2015

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 14th day of April, 2024



Mohsen Keyvani, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

RM/

c: District Manager, MECP Kingston - District
John Pyke, P.Geo.
, Malroz Engineering Inc.

Appendix D

Emergency Response Plan

**CORPORATION OF THE TOWNSHIP OF LEEDS AND THE
THOUSAND ISLANDS**

BY-LAW 19-051

BEING A BY-LAW RESPECTING AN EMERGENCY MANAGEMENT PROGRAM FOR THE PROTECTION OF PUBLIC SAFETY, HEALTH, THE ENVIRONMENT, THE CRITICAL INFRASTRUCTURE AND PROPERTY, AND TO PROMOTE A DISASTER-RESILIENT COMMUNITY WITHIN THE TOWNSHIP OF LEEDS AND THE THOUSAND ISLANDS.

WHEREAS the Province of Ontario has passed an Act which provides for the formulation and implementation of an Emergency Management Program called: "The Emergency Management and Civil Protection Act (EMCPA)" R.S.O. 1990, Ont. Reg. 380/04, by the council of a municipality;

AND WHEREAS this Act requires the emergency management program to conform to standards promulgated by Emergency Management Ontario in accordance with international best practices, including the four core components of emergency management, namely: mitigation/prevention, preparedness, response and recovery; and also makes provision for the municipality and council to develop and implement an emergency management program to protect public safety, public health, the environment, and critical infrastructure and property, and to promote economic stability and a disaster-resilient community;

AND WHEREAS this Act makes provision for the Head of Council to declare that an emergency exists in the community or in any part thereof, and also provides the Head of Council with authority to take such action or make such orders as he/she considers necessary and not contrary to law, to implement the emergency response plan and respond to an emergency;

AND WHEREAS the Act provides for the designation of one or more members of council who may exercise the powers and perform the duties of the Head of Council during his/her absence or his/her inability to act;

AND WHEREAS the Act authorizes employees of a community to respond to an emergency in accordance with the emergency response plan where an emergency exists but has not yet been declared to exist;

NOW THEREFORE the Council of the Corporation of the Township of Leeds and the Thousand Islands hereby enacts as follows:

1. That an Emergency Management Program and Plan be developed, implemented, reviewed and updated in accordance with the *Emergency Management and Civil Protection Act R.S.O 1990*;
2. That the Head of Council; Mayor or Deputy Mayor (in the absence of the Mayor) is empowered to declare an emergency;

3. That certain appointed officials or their alternate, as provided in the approved emergency plan are empowered to cause an emergency notification to be issued to members of the Community Control Group, and to respond to an emergency in accordance with the emergency plan where an emergency exists but has not yet been declared to exist;
4. That the Council of the Corporation provides for sufficient monies for emergency expenditures related to a situation that constitutes a danger of major proportions to life or property. The Chief Administrative Officer will authorize these expenditures provided the emergency plan has been activated and that a declaration of a local emergency has been proclaimed.
5. That, where required by law and for personal privacy and protection, certain personal information and resources identified in the Emergency Management Plan, be kept confidential.
6. That the Emergency Management Program Committee review annually the Emergency Management Program and make such changes as are necessary and that changes to emergency policy will be referred to Council for review and approval.
7. That the Emergency Response Plan attached hereto as Schedule "A" of this by-law, is hereby adopted.
8. That By-law #18-071 is hereby repealed.

READ A FIRST AND SECOND TIME THIS 9th DAY OF DECEMBER, 2019.

READ A THIRD TIME AND FINALLY PASSED THIS 9th DAY OF DECEMBER, 2019.


Corinna Smith-Gatcke, Mayor


Vanessa Latimer, Clerk





Township of
Leeds and the
Thousand Islands

EMERGENCY RESPONSE PLAN

Revised August 2019

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Appendix E – Hazard Identification and Risk Assessment (HIRA)

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Appendix F – Critical Infrastructure Identification

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Appendix G – EOC Sign-in Sheet and Activity Log's

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Appendix H – Declaration of Emergency Checklist

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Appendix I – Declaration of Emergency Form

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Appendix K – Guide to Emergency Media Relations

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Appendix L – Glossary of Terms

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Appendix M – Spill Response Action Plan for Vulnerable Areas

- [SRAP](#)

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1.1 Emergency Quick Reference Guide

Once Municipal Emergency Control Group has been notified:

- Upon the arrival of three or more members, the Municipal Emergency Control Group (MECG) may initiate its function.
- Ensure that all Township departments have been notified and either activated or placed on standby. Each Municipal Emergency Control Group member is responsible for their own department.
- The Mayor must inform the Province of Ontario that the Township of Leeds and The Thousand Islands (Township) has declared an emergency and specify the nature of the emergency situation. The provision of a return contact number is required for communications purposes. The call is made to the Emergency Management Ontario.
- The number to use for this purpose is **(416) 314-0472**.
- Turn to individual responsibilities within the plan. Provide input and assistance as required.
- Each member of the Municipal Emergency Control Group will report and respond to immediate needs in accordance with the Operations Cycle format.

1.2 Introduction

The Emergency Plan for the Township has been developed to reflect the public safety requirements of our community. The effective use and maintenance of this plan is reliant upon all concerned being aware of its provisions and prepared to fulfill their roles and responsibilities in the event of an emergency. Responsible individuals are expected to participate in emergency training, and exercises which will assist them in the fulfillment of their roles accordingly.

The heads of departments are expected to develop their own internal notification lists, procedures and contingency plans to fulfill their departmental responsibilities.

Together we work to ensure that our community is prepared to respond to an emergency in the most effective manner possible.

1.3 Aim

The Aim of this plan is to protect the health, safety, welfare and property of our citizens, from the effects of a natural, technological or human caused emergency.

1.4 Authority

This Plan has been developed and will be implemented in accordance with the Emergency Management and Civil Protection Act, detailed in Appendix "D", which is the Provincial statute under which all emergency management activities are conducted in the Province of Ontario.

Declaration of emergency:

4.(1) "The head of council of a municipality may declare that an emergency exists in the municipality or in any part thereof and may take such action and make such orders as he or she considers necessary and are not contrary to law to implement the emergency plan of the municipality and to protect property and the health, safety and welfare of the inhabitants of the emergency area. R.S.O.1990,c.E.9,s. 4 (1).

This Emergency Plan and its elements has been issued under the authority of the Township of Leeds and the Thousand Islands By-law No. **19-051**. A copy of the By-law is available on the Township's website and at the Municipal Office.

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1.5 Definition of an Emergency

“Emergency” means a situation or an impending situation that constitutes danger of major proportions that could result in serious harm to persons or substantial damage to property and that is caused by the forces of nature, a disease or other health risk, an accident or an act whether intentional or otherwise.

1.6 Action Prior to Declaration

When an emergency exists but has not yet been declared to exist, community employees may take such action(s) under this emergency response plan as may be required to protect property and the health, safety and welfare of the citizens of the Township.

1.7 Requests for Outside Assistance

Assistance may be requested from the United Counties of Leeds Grenville at any time by contacting the County Warden or the County Chief Administrative Officer (CAO). The request shall NOT be deemed to be a request that the County assume authority and control of the emergency.

Assistance may also be requested from the Province of Ontario at any time without any loss of control or authority. Any request for assistance should be made by contacting Emergency Management Ontario.

The Emergency Notification Contact List, including contact numbers for requesting assistance, is contained within “Appendix A”.

1.8 Freedom of Information and Protection of Privacy

Any personal information collected under the authority of this Plan shall be used solely for the purpose of planning, preparing and conducting response to emergencies as defined with the Emergency Management and Civil Protection Act, and the release of information under this Plan shall be made in conformity with the Municipal Freedom of Information and Protection of Privacy Act.

The Plan was originally written in 2004; updated annually and it is essential that it be kept current and viable by adherence to a maintenance schedule. Responsibility for the plan being kept up to date rests with the Community Emergency Management Coordinator (CEMC) who may delegate tasks accordingly. The following shall be carried out:

- The Emergency Management Program Committee (EMPC) shall meet once a year to assist the CEMC with updating the plan.
- The emergency telephone numbers will be reviewed on an annual basis.
- The notification system will be tested annually.
- The plan will be exercised once every year as a minimum requirement.
- The Control Group and Support Staff shall receive training and participate in an exercise, once every year as a minimum requirement as per the Civil Protection Act.
- The Local Services Directory should be updated annually.
- The Community Emergency Management Coordinator will determine the schedule under which the maintenance activities will be performed.

The Community Emergency Management Coordinator may update, correct or amend information contained within the appendices of this emergency plan on an 'as required' basis.

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1.10 Distribution List

- Mayor *
- Chief Administrative Officer *
- Administrative Assistant
- Fire Chief
- Public Works Director
- Treasurer
- CEMC *
- Public Information Officer
- Emergency Management Ontario
- Emergency Operations Centre *

* = complete copy of plan with Appendices

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1.11 Emergency Response Plan Amendments

Amendment No.	Date of Amendment	Date Entered	Entered by
1	Dec. 17, 2007	Dec. 10, 2007	Wayne Shields
2	Sept. 10, 2009	Sept.10, 2009	Wayne Shields
3	Oct. 5, 2010	Oct. 5, 2010	Wayne Shields
4	Oct. 11, 2011	Oct. 11, 2011	Wayne Shields
5	Nov. 28, 2013	Nov. 28, 2013	Wayne Shields
6	June 23, 2015	August 1, 2015	Kimberly Almeida
7	Sept. 22, 2015	Oct. 13, 2015	Kimberly Almeida
8	August 15, 2016	August 15, 2016	Kimberly Almeida
9	January 17, 2017	January 17, 2017	Kimberly Almeida
10	August 24, 2017	August 27, 2017	Kimberly Almeida
11	March 6, 2018	March 6, 2018	Kimberly Almeida
12	December 2018	November 29, 2018	Kimberly Westgate
13	November 2019	December 2019	Kimberly Westgate

PART 2 – EMERGENCY OPERATIONS AND PROCEDURES

2.1 Municipal Emergency Control Group (MECG)

Membership:

The Municipal Emergency Control Group is the group which is responsible for the direction and control of the overall emergency response within the community. The MECG ensures the provision of the essential services necessary to minimize the effects of an emergency on the community.

The MECG is comprised of the following members;

- Mayor
- Chief Administrative Officer
- Administrative Assistant
- Fire Chief
- Director of Operations
- Director of Finance
- CEMC
- Public Information Officer

Implementation:

Several members of the Municipal Emergency Control Group may request, through the CAO/Operations Officer, that the Emergency Plan be implemented (see responsibilities).

The Emergency Plan may be implemented in whole, or in part, based on conditions at the site or severity of the situation.

The CAO will immediately notify the Mayor and other members of the Control Group. Notification lists and procedures are located in Appendix A.

2.2 Emergency Operations Centre Procedures (EOC)

The Emergency Operations Centre has both a primary and a secondary or alternate location. During the notification process, direction as to which location members of the Municipal Emergency Control Group will report to will be given. For example, members will be told that this is an emergency plan activation and they should report to the primary Emergency Operations Centre immediately. The primary and secondary locations are geographically separated so that if one or the other is endangered or rendered non-functional as a result of the emergency situation the other should be safe and operational.

Primary EOC Location: Leeds 1000 Islands Municipal Office
1233 Prince Street, Lansdowne

Alternate EOC Location: Leeds 1000 Islands Fire Training Centre
312 Lyndhurst Road, Lyndhurst

Upon receiving notification, the CAO will contact the administrative staff who have been assigned the task of setting up the EOC. The EOC will be set up and operational within one hour of activation. The CAO/Operations Officer will supervise the set up and ensure operational viability.

Upon arrival at the EOC, each Municipal Emergency Control Group member/designate shall:

- Sign In
- Check telephone/communications devices.
- Open personal log.
- Participate in the initial briefing.
- Participate in planning initial response/decision making process.
- Pass Municipal Emergency Control Group decisions on to member's agencies/areas of responsibility.
- Continue participation in the Emergency Operations Centre Operations Cycle.

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Upon leaving the EOC, each Control Group member shall:

- Conduct a hand over with the person relieving them.
- Sign out on the location board indicating where they can be reached.

Once the initial response is established, routines are put into place by the Operations Officer. The MEOG functions most efficiently on a system known as an Operations Cycle.

Operations Guidelines:

Each department is responsible to ensure that senior and support staff are available to support the Emergency Operations Centre twenty-four hours a day on a weekly basis. At the same time, each department is responsible to support the emergency site and continue to provide a level of service to the unaffected areas of the municipality.

Under emergency conditions, employees of the Township, working in the EOC, may expect to remain on duty up to ten (10) hours. A staggered release will begin after eight hours. Anyone that is required to work beyond the ten-hour schedule must have the approval from the CAO. After an employee has worked under emergency conditions for three consecutive days, the employee may have the next twenty-four hours off. This regulation applies to all employees and volunteers including senior management.

In order to ensure that the eight to ten-hour rotation is maintained, some employees will be sent home on a standby basis in order to return later at an appointed time. Employees may be required to report for duty at a location other than their normal workplace depending on conditions and the location of the EOC.

Should the emergency be prolonged, the CAO will activate mutual assistance agreements with other municipalities or with the United Counties of Leeds and Grenville.

Notification of Family Members:

All employees are responsible to inquire as to the state of their family as a result of the emergency. In addition, the family will be informed of the emergency situation and its possible duration. This shall be done during the first six hours of the emergency. Any major problem that might preclude an employee's continued presence will be discussed with the CAO within the EOC, or his/her supervisor outside of the Emergency Operations Centre. Every effort will be made to relieve the employee.

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Should telephones not be operating, the fire department or public works department staff may check on family members at the request of an employee. Employees will verify the status of their own family members to the extent possible.

Emergency Telecommunications:

The primary means of communicating outside of the EOC will be by telephone (landline and cellular), text message, email, two-way radio (depending on the location) and supplemented when required through the United Counties Telecommunications Coordinator.

2.3 Operations Cycle

An operations cycle is how the Municipal Emergency Control Group manages overall emergency operations. MECG members will come together usually around a planning board or map at which time they will in turn report their departmental status to the Mayor and Operations Officer. It is essential that every member, covering each area of responsibility, be heard from during this process. The MECG is a team, and the actions taken by one, or the lack of action by one, may have a significant impact upon operations.

The round table discussion should include problems, questions, resources requests and any other relevant information so that timely informed decisions can be made as a group. Once the meeting is completed, the members should contact their departments and pass on any relevant information or directives that come out of the Control Group meeting. The frequency of the meetings is determined by the Operations Officer in conjunction with the Mayor but should reflect the pace of the emergency and occur on a scheduled basis which may be adjusted accordingly.

During the period after the meeting and dissemination of information, members will be in the process of gathering information and preparing for the next scheduled meeting. The MECG members use this time to follow up and ensure that Control Group decisions are being implemented. Each member is responsible for informing their respective department of the schedule for MECG meetings. No calls are supposed to interrupt the proceedings. All calls must occur prior to or after the formal meetings of the MECG. It is essential that the EOC is comfortable, has good communications and is secure from unnecessary distractions. Only MECG members, and support staff should have access to the EOC. No media are allowed into the EOC, nor is anyone who has not been authorized by the Operations Officer.

2.4 Roles of the Municipal Emergency Control Group (MECG)

The Municipal Emergency Control Group is responsible for the following:

1. Implementing the Emergency Plan in whole or in part to respond to an impending, potential, or existing emergency.
2. Coordination and direction of Community resources used to mitigate the effects of an emergency.
3. Ensuring that the composition of the Control Group is appropriate to mitigate the effects of a given emergency situation, by determining which, if any, ad-hoc members are required.
4. Advise the Head of Council regarding need for declaration or termination of an emergency.
5. Advising the Head of Council regarding requests for assistance from the County, Province, and the Federal Government.
6. Ensuring the provision of essential resources and services to support emergency response activities.
7. Coordination of services provided by outside agencies.
8. Appointing or Confirming an Emergency Site Manager.
9. Ensuring that the Public Information Officer is kept informed and up to date to facilitate the information flow to the media and the public.
10. Coordinating the evacuation of citizens who may be in danger.
11. Discontinuing utilities or services provided by public or private concerns, (ie. Hydro, water, gas, closing businesses)
12. Appeals for volunteers.
13. Establishment of advisory subcommittees to work on specific problem area related to the emergency, as required.
14. Authorization of expenditures during the emergency; provision for cost accounting and facilitation of cost recovery.
15. Maintenance of an operational log detailing the group's decisions and activities.

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16. Deactivating the plan and notifying all of those who had been notified of its activation.
17. Conducting and participating in a debriefing, generating a post-emergency report and implementing recommendations for improvement of the emergency response plan.

2.5 Role of the Mayor

The Head of Council, or alternate, is responsible for:

- a. Reviewing the Declaration of an Emergency Checklist to confirm that an Emergency should be declared. (Appendix H)
- b. Upon consultation of the Municipal Emergency Control Group, Declaration of an Emergency. (Form in Appendix I)
- c. Upon consultation of the Municipal Emergency Control Group, Termination of an Emergency. (Form in Appendix J)
- d. Notifying the Province of Ontario of the declaration of emergency, and termination of the emergency (*Contact made through Emergency Management Ontario*).
- e. Take such action and make such orders, as considered necessary and not contrary to law, in order to protect the health, safety, welfare, environment and property of residents in the Township of Leeds and The Thousand Islands.
- f. Ensuring the members of Council are advised of the declaration and termination of an emergency and are kept informed of the emergency operational situation. (Members of Council Phone Numbers – Appendix A)
- g. Ensuring that the local MPP and MP, neighboring municipalities and the County are advised of the declaration and termination and kept informed of the emergency situation.
- h. Approving all major announcements and media releases prepared by the Public Information Officer, in conjunction with the Control Group.
- i. Maintaining a personal log. (Appendix G)

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2.6 Role of the Chief Administrative Officer / Operations Officer

The Chief Administrative Officer is referred to as the “Operations Officer” for emergency purposes. The responsibilities of the Operations Officer (*or alternate*) are:

- a. Upon request for activation of The Emergency Plan, the Operations Officer will refer to Check List in consideration of a Declaration of Emergency (Appendix H).
- b. If it qualifies, activate the emergency notification system (Appendix A).
- c. As the Operations Officer, coordinating all operations within the Emergency Operations Centre, including the scheduling of regular meetings.
- d. Chair meetings of the Municipal Emergency Control Group.
- e. Advising the head of council on policies and procedures, as appropriate.
- f. Approving, in conjunction with the head of council, major announcements and media releases prepared by the Public Information Officer, in conjunction with the Municipal Emergency Control Group.
- g. Establish and maintain a communications line between the Municipal Emergency Control Group and the Emergency Site Manager.
- h. Ensure Municipal facilities are available for evacuation or reception center purposes if required.
- i. Calling out additional staff as required.
- j. Maintaining a master record of all events and actions taken (main events board).
- k. Maintaining a personal log (Appendix G).

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2.7 Role of the Administrative Assistant

The Administrative Assistant or alternate is responsible for:

- a. Assisting the Chief Administrative Officer and/or the Community Emergency Management Coordinator, as required.
- b. Ensuring all important decisions made and actions taken by the Municipal Emergency Control Group are recorded.
- c. Ensure that EOC is set-up for operation and that maps and status boards are kept up to date.
- d. Notifying any additional support staff required to assist.
- e. Arranging for printing of material, as required.
- f. Coordinating the provision of clerical staff to assist in the Emergency Operations Centre, as required.
- g. Ensuring identification cards are issued to authorized Municipal Emergency Control Group members and Support Staff for access to Emergency Operations Centre.
- h. Other duties as assigned by the Chief Administrative Officer and/or the Community Emergency Management Coordinator.
- i. Check that the Municipal facilities are available for evacuation or for reception center if required.
- j. Maintain a personal log (Appendix G).

Revised: November 2019

2.8 Role of the Fire Chief

The Fire Chief, or alternate, is responsible for:

- a. Requesting activation of the emergency notification system by calling the Chief Administrative Officer.
- b. Providing the Municipal Emergency Control Group with the information and advice on the firefighting and rescue matters.
- c. Establish an ongoing communications link with the senior fire official at the scene of the emergency.
- d. Initiate Mutual Aid as required.
- e. Determine if additional or specialized equipment is required ie. protective suits, Chemical, Biological, Radiological, Nuclear team (Haz-Mat), etc.
- f. Coordinate or provide assistance with, rescue, first aid, casualty collection, evacuation etc.
- g. Maintain a personal log (Appendix G)

Revised: November 2019

2.9 Role of the Director of Operations

The Director of Operations, or alternate, is responsible for:

- a. Requesting activation of the emergency notification system by calling the Chief Administrative Officer.
- b. Providing the Municipal Emergency Control Group with information and advice on Public Works matters.
- c. Liaison with the senior public works officers from the neighbouring community(s) to ensure a coordinated response.
- d. The provision of engineering assistance
- e. The construction, maintenance and repair of public roads.
- f. Assistance with road closures and/or roadblocks.
- g. Maintenance of sanitation and a safe supply of potable water, as required.
- h. The provision of equipment for emergency pumping operations.
- i. Discontinuing any public works service to any consumer, as required, and restoring these services when appropriate.
- j. Liaise with Electrical and Gas utilities.
- k. Providing public works vehicles and resources to any other emergency service, as required.
- l. Maintain liaison with flood control, conservation and environmental agencies and being prepared to take preventative action.
- m. Providing an Emergency Site Manager if required
- n. Maintain a personal log (Appendix G).

Revised: November 2019

2.10 Role of the Treasurer

The Treasurer (or alternate) is responsible for;

- a. Open and maintain the Main Event Board – Actions taken and by whom.
- b. Advise regarding all financial aspects of an emergency.
- c. Documentation of expenditures, accounts payable and receivable.
- d. Other duties as assigned by Chief Administrative Officer.
- e. Maintain a personal log (Appendix G).

Revised: November 2019

2.11 Role of the Community Emergency Management Coordinator - CEMC

The Community Emergency Management Coordinator (or alternate), is responsible for:

- a. Request activation of the emergency notification system by calling the Chief Administrative Officer.
- b. Provide information, advice and assistance to members of the Municipal Emergency Control Group on Emergency Management programs and principles.
- c. Provide direction to Emergency Operations Centre support staff as required in support of the Control Group and ensure proper set-up and operation of the Emergency Operations Centre.
- d. Maintain Emergency Response Plan in accordance with requirements of the Emergency Management and Civil Protection Act.
- e. In conjunction with the Chief Administrative Officer, coordinate a post-emergency debriefing and assist in the development of a final report to Mayor and Council.
- f. Maintain a personal log. (Appendix G)

Revised: November 2019

2.12 Role of the Public Information Officer

The Public Information Officer, or alternate, is responsible for:

- a. Notifying information center staff.
- b. Ensuring that the Information Centre is set up and operational.
- c. Initial and subsequent media releases, subject to approval by the Mayor and in conjunction with the Municipal Emergency Control Group.
- d. Establish and maintain media linkages with Mayor, County, Provincial and industry media officials as appropriate.
- e. Coordinate interviews and media conferences. (Appendix K)
- f. Designate a site media spokesperson as appropriate.
- g. Ensuring set up and staffing of public inquiry lines. (Appendix K)
- h. Coordination of public inquiries.
- i. Monitoring news coverage.
- j. Maintain copies of all media releases.
- k. Maintain personal log. (Appendix G)

Revised: November 2019

PART 3 – EMERGENCY SUPPORT

3.1 Role of the OPP Representative

The Ontario Provincial Police Representative or alternate is responsible for;

- a. Requesting activation of the emergency notification system.
- b. Establishing and maintaining ongoing communications with the senior police representative at the emergency site.
- c. The provision of traffic control to facilitate the movement of emergency vehicles.
- d. Coordination of evacuation routes.
- e. The protection of life and property and the provision of law and order.
- f. Ensure perimeter security and crowd control at emergency site.
- g. The provision of police services in evacuation centers, morgues, and other facilities as required.
- h. Notifying the coroner of fatalities.
- i. Liaison with external police agencies, as required.
- j. Providing an Emergency Site Manager if requested to by the Municipal Emergency Control Group.
- k. Maintain a personal log

Revised: November 2019

3.2 Role of EMS/Ambulance

The EMS/Ambulance is responsible for;

- a. Requesting activation of the emergency notification system.
- b. Providing the Municipal Emergency Control Group with information and advice on treatment and transport of casualties.
- c. Liaise with Medical Officer of Health, area hospitals, police and fire officials during an emergency situation.
- d. Alert all staff using the Provincial Health Emergency Alert System.
- e. Take charge of casualties within the emergency area and be responsible for triage, lifesaving care, and the transport to area hospitals.
- f. Maintaining a personal log

Revised: November 2019

The Medical Officer of Health, or designate, is responsible for;

- a. Acting as a coordinating link for all emergency health services at the Municipal Emergency Control Group.
- b. Liaison with the Ontario Ministry of Health, Public Health Branch.
- c. Liaison with ambulance service representatives.
- d. Liaison with Community Care Access representative.
- e. Providing assistance on any matter which may adversely affect public health.
- f. Providing authoritative instructions on health and safety matters to the public through the Public Information Officer.
- g. Coordinating the response to disease related emergencies or anticipated emergencies such as epidemics, according to Ministry of Health policies.
- h. Ensuring liaison with voluntary and private agencies, as required, for augmenting and coordinating public health resources.
- i. Ensuring coordination of all efforts to prevent and control the spread of disease during a emergency.
- j. Ensuring the safety of drinking water in conjunction with the public works representative.
- k. Liaison with the senior social services representative regarding health services in evacuee centers.

Maintaining a personal log

Revised: November 2019

The Director of Social Services or alternate is responsible for:

- a. Ensuring for the care, feeding and shelter of evacuees.
- b. Management of reception and evacuation centers.
- c. Liaison with the Recreation Assistant regarding use of municipal facilities for evacuation/reception centers.
- d. Liaison with the local Medical Officer of Health in areas regarding public health in evacuation centers.
- e. Liaison with the public and separate school boards regarding the use of school facilities for reception and evacuation centers if required.
- f. Liaison with the nursing homes and homes for the aged.
- g. Maintain a personal log

3.5 Board of Education - Responsibilities

The local Board of Education representative is responsible for:

- a. Providing schools for reception centres as required and/or applicable.
- b. Providing schools for evacuation centres, as required and/or applicable.
- c. Providing liaison with the Director, Social Services and the Municipal Emergency Control Group.
- d. Maintain a personal log.

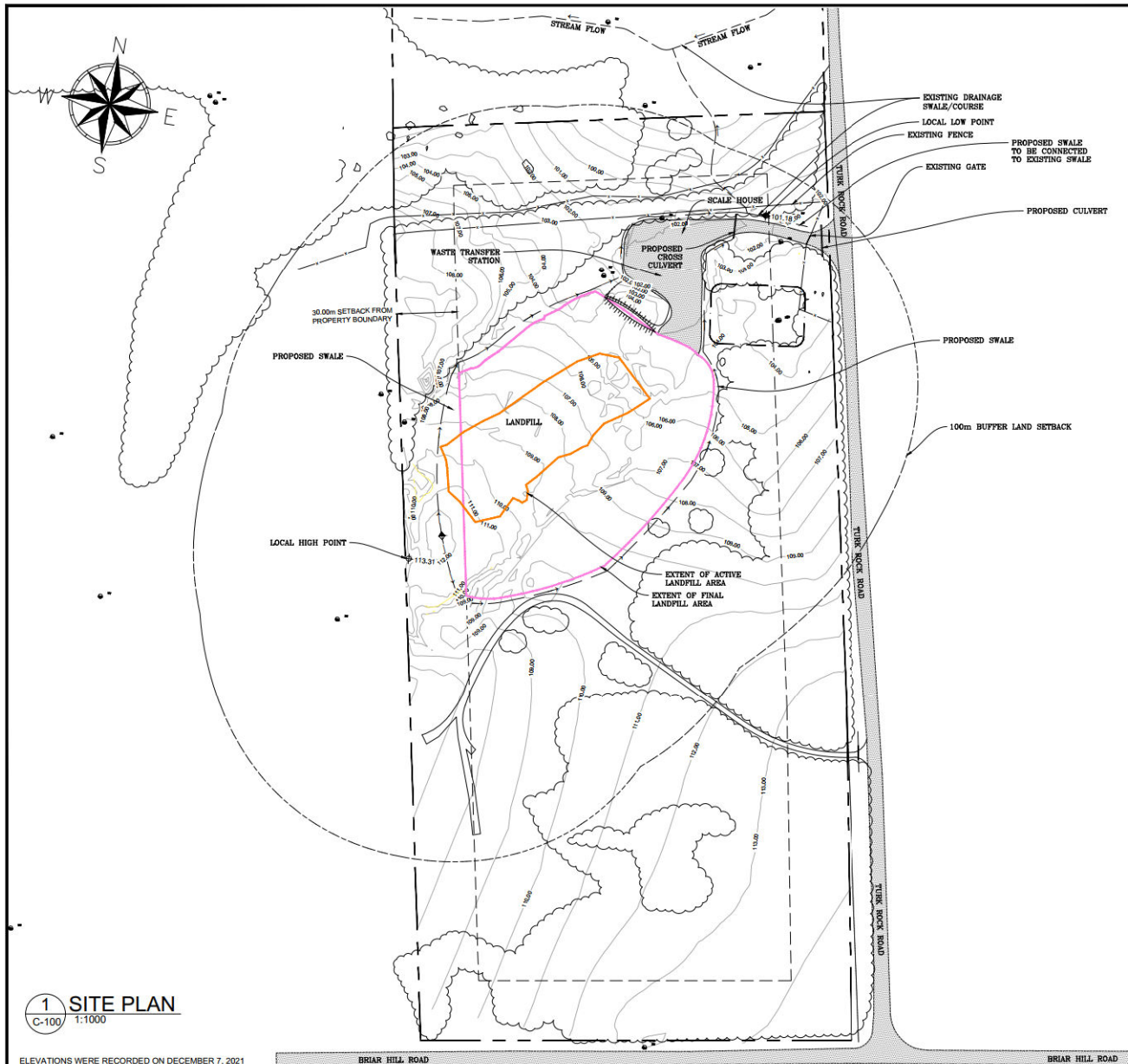
3.6 Legal Advisor - Responsibilities

The municipal legal advisor is responsible for:

- a. Providing legal opinions and advice to the Municipal Emergency Control Group as required.
- b. Providing legal representation as required.
- c. Maintain personal log.

Revised: November 2019

Appendix E
Proposed Final Contours

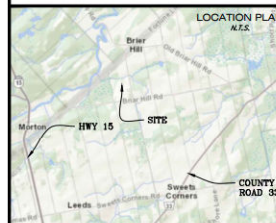


1 SITE PLAN C-100/ 1:1000

ELEVATIONS WERE RECORDED ON DECEMBER 7, 2021
USING CAN-NET GNSS REAL-TIME CORRECTION
NETWORK



UNIT 400 - 854 HURON COUNTY
COMMUNITY OFFICE
LEEDS, ONTARIO L9E 4P8
www.groundworkeng.com



LEGEND	
◆ XXX	PROPOSED ELEVATION
◆ XXX	EXISTING ELEVATION
--- XXXXX	EXISTING MAJOR CONTOUR (1m)
--- XXXXX	EXISTING MINOR CONTOUR (0.25m)
---	PROPERTY LINE
---	FENCE LINE
---	TREE LINE
→	FLOW DIRECTION
□	SPECIFIED WASTE BIN
▨	GRAVEL SURFACE TRAVELED AREA

REVISIONS		
No.	Description	Date
01	ISSUED FOR REVIEW	2022/04/08
02	REVISED PER 2023 CAPACITY SURVEY	2024/1/20/2
03	REVISED PER CLIENT COMMENTS	2025/02/13

BENCHMARK:		
No.	DESCRIPTION	ELEVATION
##	XXX	XXXXX



Client / Land Owner: Leeds and Thousand Islands

Project: BRIAR HILL LANDFILL

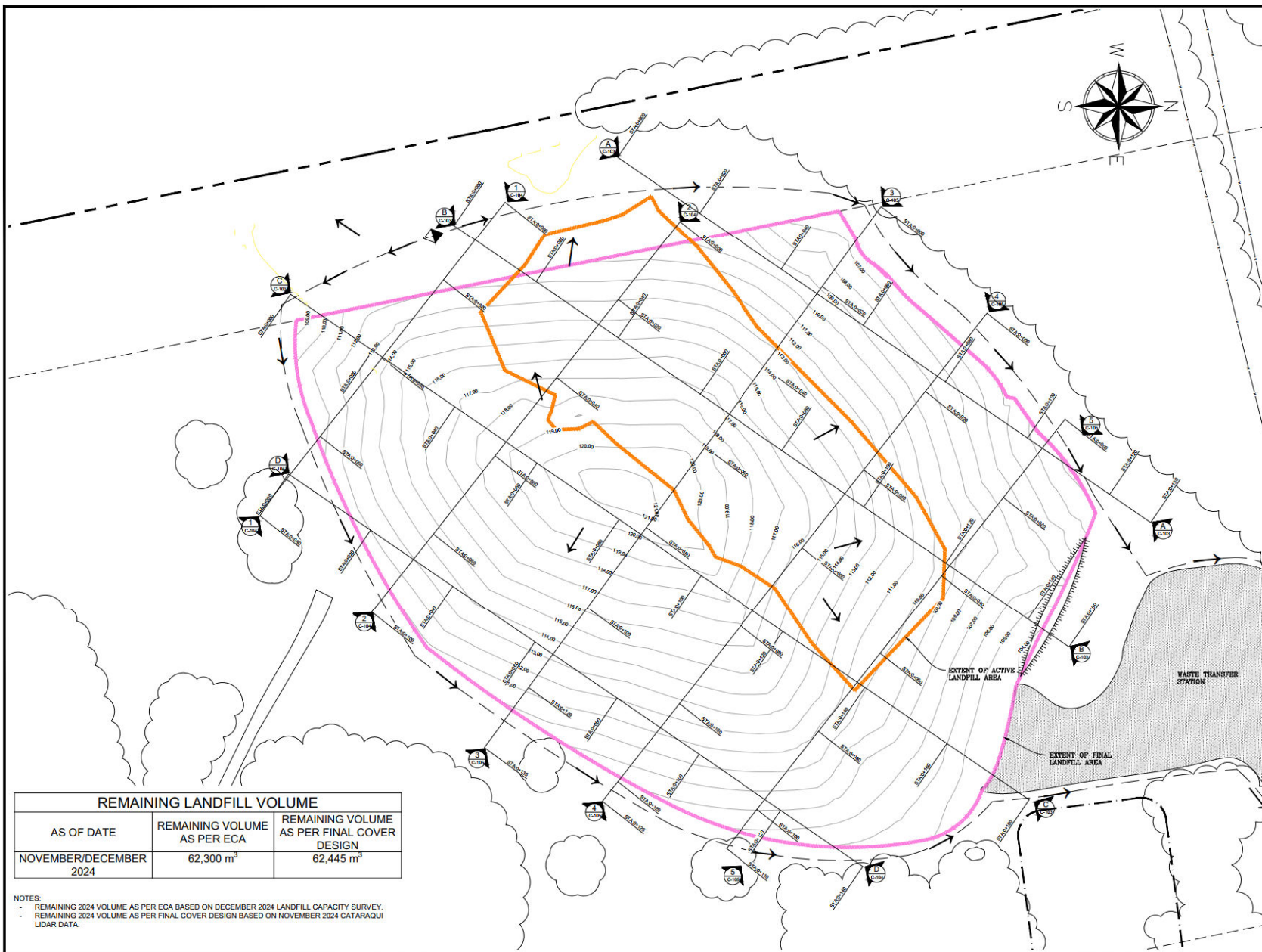
LEEDS AND THOUSAND ISLANDS ONTARIO

Drawing Title: SITE PLAN

Drawn by: LM Project Number: GW-21033

Checked by: MB Scale: 24"x36" AS NOTED Drawing Number: C-100

Date: FEB 13, 2025 SHEET 1 of 6





**GROUNDWORK
ENGINEERING
LIMITED**

UNIT 400 - 884 HURON COUNTY
WATERLOO ONTARIO
CANADA N2L 2P9
www.groundwork.ca

LOCATION PLAN



NOTES:

1. FINAL COVER TO MEET THE REQUIREMENTS AS PER O. REG. 232/98.
2. FINAL COVER SLOPES TO BE 1V:4H (25%) MAXIMUM AND 1V:20H (5%) MINIMUM.
3. FINAL COVER IS TO CONSIST OF MINIMUM 150mm TOPSOIL AND MINIMUM 600mm COVER MATERIAL.
4. COVER MATERIAL TO HAVE AN INFILTRATION RATE OF LESS THAN OR EQUAL TO 0.1mm PER YEAR.

LEGEND

---x---x---x--- PROPOSED MAJOR CONTOUR (2m)

---x---x---x---x--- PROPOSED MINOR CONTOUR (1m)

No.	Description	Date
01	ISSUED FOR REVIEW	2023/04/08
02	REVISED PER 2023 CAPACITY SURVEY	2024/12/02
03	REVISED PER 2024 CAPACITY SURVEY	2025/02/19
04	REVISED PER CLIENT COMMENTS	2025/02/19

BENCHMARK:

No.	DESCRIPTION	ELEVATION
100	XXX	XXXX

Client / Land Owner:  Leedstown and Township of Leedstown

REMAINING LANDFILL VOLUME		
AS OF DATE	REMAINING VOLUME AS PER ECA	REMAINING VOLUME AS PER FINAL COVER DESIGN
NOVEMBER/DECEMBER 2024	62,300 m ³	62,445 m ³

NOTES:

- REMAINING 2024 VOLUME AS PER ECA BASED ON DECEMBER 2024 LANDFILL CAPACITY SURVEY.
- REMAINING 2024 VOLUME AS PER FINAL COVER DESIGN BASED ON NOVEMBER 2024 CATARAQUI LIDAR DATA.

Project: BRIAR HILL LANDFILL

Drawing Title: POST COVER CONTOURS

Drawn By: LM

Checked By: MB

Scale: 24"x36" 1:200

Date: FEB 13, 2025

Project Number: GW-21033

Drawing Number: C-102

SHEET 3 of 6

The graph displays two elevation profiles over a station range from 0+00.00 to 1+30.00. The y-axis represents Elevation from 102.00 to 120.00. The 'NOV. 2024 LIDAR SURFACE' is shown as a solid line, and the 'PROPOSED FINAL POST COVER SURFACE' is shown as a dashed line. The two surfaces are nearly identical until station 0+65.00, where the proposed surface is raised. A label '3 MAX 1' is placed near the proposed surface at station 0+90.00.

A
C-103

The graph displays two elevation profiles over a station range from 0+00.00 to 1+50.00. The y-axis represents Elevation from 102.00 to 120.00. The dashed line, labeled 'PROPOSED FINAL POST COVER SURFACE', starts at approximately 112.50, peaks at 117.50 around station 0+60.00, and ends at 104.50. The solid line, labeled 'NOV. 2024 LIDAR SURFACE', starts at approximately 112.50, remains relatively flat until station 0+20.00, then gradually declines to 104.00 at station 1+50.00. A vertical offset of 3 MAX 1 is indicated between the two lines at station 1+10.00.

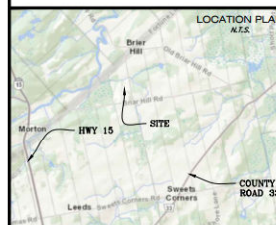
Station	Proposed Final Post Cover Surface (Elevation)	Nov. 2024 Lidar Surface (Elevation)
0+00.00	112.50	112.50
0+10.00	112.50	112.00
0+20.00	113.00	111.50
0+30.00	114.00	110.50
0+40.00	115.00	109.50
0+50.00	116.50	108.50
0+60.00	117.50	107.50
0+70.00	116.50	106.50
0+80.00	115.50	105.50
0+90.00	114.50	104.50
1+00.00	113.00	104.00
1+10.00	111.50	103.50
1+20.00	110.00	103.00
1+30.00	108.50	102.50
1+40.00	107.00	102.00
1+50.00	104.50	104.00

B
C-103

C
C-103



**UNIT 649 - 654 HURON COURT
KINGSTON ONTARIO
OFFICE (613) 634-1788
www.greenbank.ca**



NOTES:

1. ELEVATIONS ARE GEODETIC CVD258 HT2_2010 DATUM.
2. 2014 IMAGERY SURFACE BASED ON DRAPE2014 IMAGERY DATA.
3. 2024 LIDAR SURFACE BASED ON 2024 CATARAQUI LIDAR DATA WITH A VERTICAL ACCURACY CLASS OF 5cm. 2024 CATARAQUI LIDAR DATA RECORDED ON 3/25/2024.
4. DECEMBER 2024 SURFACE BASED ON 2024 WASTE CAPACITY SURVEY PERFORMED BY MALROZ ENGINEERING INC.
5. FINAL COVER TO MEET THE REQUIREMENTS AS PER O. REG. 232/98.
6. FINAL COVER SLOPES TO BE 1V:3H (33%) MAXIMUM AND 1V:20H (5%) MINIMUM.
7. FINAL COVER IS TO BE CONSIST OF MINIMUM 150mm TOPSOIL AND MINIMUM 600mm COVER MATERIAL.
8. FINAL COVERED AREA SHALL BE 10% GREATER OF LESS THAN OR EQUAL TO 0.15m per YEAR.

REVISIONS		
No.	Description	Date
01	XXX	2022/04/0
02	REVISED PER 2023 CAPACITY SURVEY	2024/12/0
03	REVISED PER 2024 CAPACITY SURVEY	2025/06/1
04	REVISED PER CLIENT COMMENTS	2026/02/1

BENCHMARK:		
No.	DESCRIPTION	ELEVATION
##.	XXX	XXX.XX

1969-2000

M. H. BURGER

M. H. Burger

PROVINCE OF ONTARIO

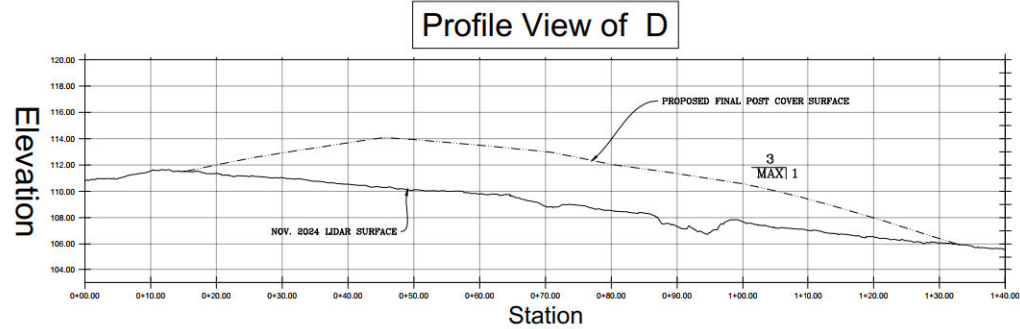
Client / Land Owner:  Township of
**Leeds and the
Thousand Islands**

Project: **BRIAR HILL LANDFILL**

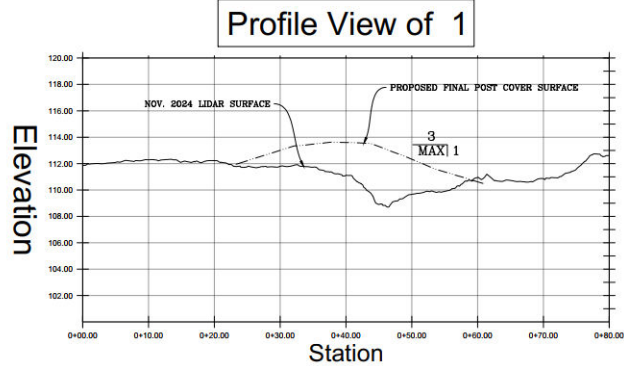
LEEDS AND THOUSAND ISLANDS **ONTARIO**

Drawing Title: **CROSS SECTIONS**

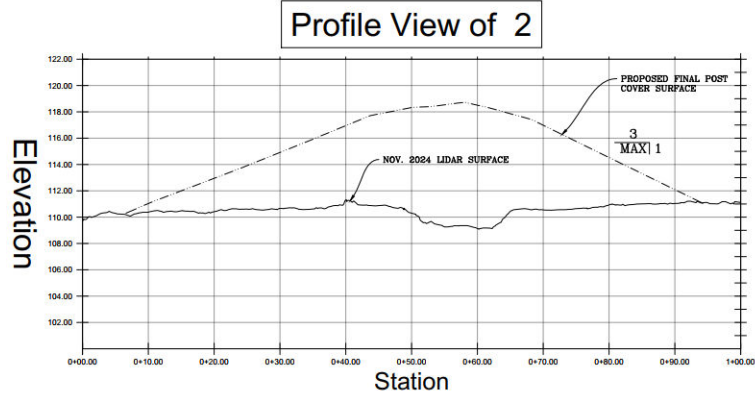
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Checked By: MB	
Scale: 24"x36" NTS	Drawing Number: C-103
Date: FEB 13, 2025	SHEET 4 of 6



D
C-104



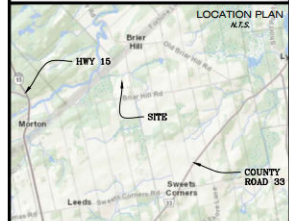
1
C-104



2
C-104



UNIT 400 - 664 HURON COUNTY
HIGHWAY 104
GOREN (416) 634-4789
www.groundwork.ca



NOTES:

1. ELEVATIONS ARE GEODETIC CGVD28 HT2_2010 DATUM.
2. 2014 IMAGERY SURFACE BASED ON DRAP2014 IMAGERY DATA.
3. 2024 LIDAR SURFACE BASED ON 2024 CATARAQUI LIDAR DATA WITH A VERTICAL ACCURACY CLASS OF 5cm. 2024 CATARAQUI LIDAR DATA RECORDED ON NOVEMBER 3, 2024.
4. DECEMBER 2024 SURFACE BASED ON 2024 WASTE CAPACITY SURVEY PERFORMED BY MALCOLM ENGINEERING INC.
5. FINAL COVER TO MEET THE REQUIREMENTS AS PER O. REG. 232/08.
6. FINAL COVER SLOPES TO BE 1V:3H (33%) MAXIMUM AND 1V:20H (5%) MINIMUM.
7. FINAL COVER IS TO CONSIST OF MINIMUM 150mm TOPSOIL AND MINIMUM 600mm COVER MATERIAL.
8. COVER MATERIAL TO HAVE AN INFILTRATION RATE OF LESS THAN OR EQUAL TO 0.15m PER YEAR.

REVISIONS

No.	Description	Date
01	ISSUED FOR REVIEW	2023/04/08
02	REVISED PER 2023 CAPACITY SURVEY	2024/12/02
03	REVISED PER 2024 CAPACITY SURVEY	2025/02/13
04	REVISED PER CLIENT COMMENTS	2025/02/13

BENCHMARK:

No.	DESCRIPTION	ELEVATION
##	XXX	XXXXX

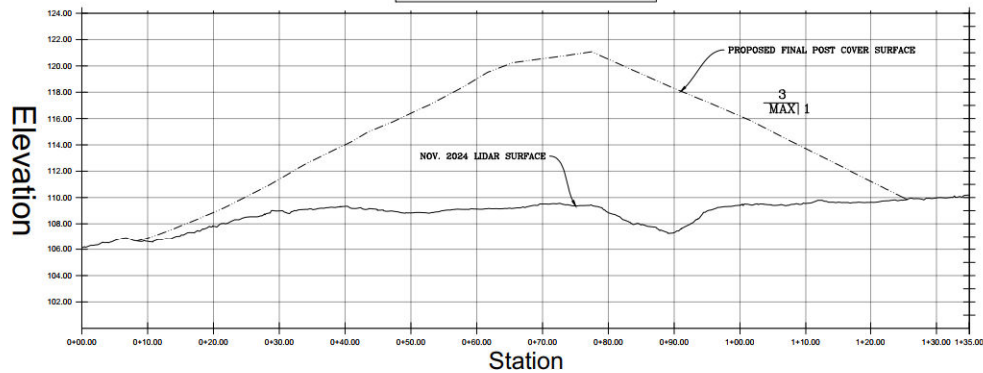


Client / Land Owner: Leeds and Thousan Islands

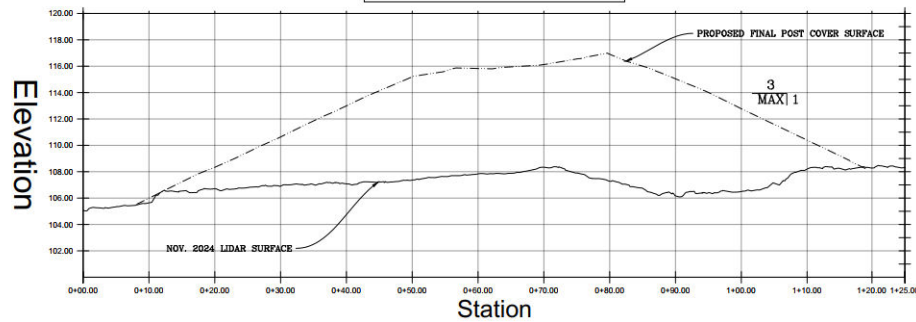
Project: BRIAR HILL LANDFILL
LEEDS AND THOUSAN ISLANDS ONTARIO
Drawing Title: CROSS SECTIONS

Drawn by: LM	Project Number: GW-21033
Checked by: MB	Drawing Number: C-104
Scale: 24"x36" NTS	SHEET 5 of 6
Date: FEB 13, 2026	

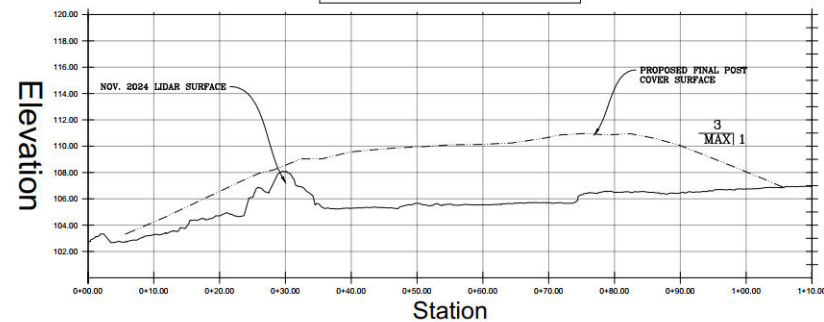
Profile View of 3



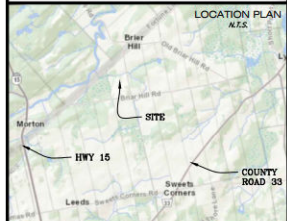
Profile View of 4



Profile View of 5



UNIT 400 - 664 HURON COUNTY
KINGSTON ONTARIO
CANADA K7M 1Y9
www.groundwork.ca



NOTES:

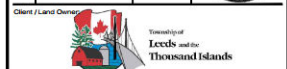
1. ELEVATIONS ARE GEODETIC COVD2011 HTS_2010 DATUM.
2. 2014 IMAGERY SURFACE BASED ON DRAPE2014 IMAGERY DATA.
3. 2024 LIDAR SURFACE BASED ON 2024 CATARAQUI LIDAR DATA WITH A VERTICAL ACCURACY CLASS OF 5cm. 2024 CATARAQUI LIDAR DATA RECORDED ON NOVEMBER 3, 2024.
4. DECEMBER 2024 SURFACE BASED ON 2024 WASTE CAPACITY SURVEY PERFORMED BY MALROZ ENGINEERING INC.
5. FINAL COVER TO MEET THE REQUIREMENTS AS PER O. REG. 232/06.
6. FINAL COVER SLOPES TO BE 1V:3H (33%) MAXIMUM AND 1V:20H (5%) MINIMUM.
7. FINAL COVER IS TO CONSIST OF MINIMUM 150mm TOPSOIL AND MINIMUM 600mm COVER MATERIAL.
8. COVER MATERIAL TO HAVE AN INFILTRATION RATE OF LESS THAN OR EQUAL TO 0.15m PER YEAR.

REVISIONS

No.	Description	Date
01	ISSUED FOR REVIEW	2023/04/08
02	REVISED PER 2023 CAPACITY SURVEY	2024/12/02
03	REVISED PER 2024 CAPACITY SURVEY	2025/02/13
04	REVISED PER CLIENT COMMENTS	2025/02/13

BENCHMARK:

No.	DESCRIPTION	ELEVATION
1	XXX	XXXX



Client / Land Owner: Leeds and Thousand Islands

Project: BRIAR HILL LANDFILL

LEEDS AND THOUSAND ISLANDS ONTARIO

Drawing Title: CROSS SECTIONS

Drawn by: LM Project Number: GW-21033

Checked by: MB Drawing Number: C-105

Scale: 24"x36" NTS SHEET 6 of 6

Date: FEB 13, 2025