

Environmental Assessment Advisory Committee Meeting 4

South Landfill Phase 2 Project Update

November 12, 2025



Presentation Agenda

- 1 EA Process Recap/Update**
- 2 Summary of Community Input**
- 3 EA Activities Since Last Meeting**
- 4 Facility Characteristics Report**



EA Process Recap/Update

- Selected a Recommended Method (June)
 - Landfill Configuration & Leachate Treatment
- Consultation loop on the Alternatives/Options and Recommend Method (June-Sept)
- Continued data collection (July-Dec)
- Developed the Facility Characteristics Report (Ongoing)
 - Engineering & Operations input



Community Input

- In Person Event – June 18, 2025
 - 8 Attendees
- Virtual Event (June 18 to July 7)
- Community, Gov't Agencies & Indigenous Communities
- Summary of Feedback
 - Continued/Expanded Use of Current Leachate Treatment preferred
 - Less construction/operations impacts, if capacity exists in system – use it, economic considerations
 - Landfill Options A-B preferred
 - Maximize use of the footprint, manage visual impact, maximize agricultural end use



EA Activities Since Last Meeting

Data Collection/Field Work

- Odour and dust monitoring & sampling
- Noise monitoring & sampling
- Archaeology fieldwork
- Ecology surveys
- Surface water/groundwater sampling
- Social & Economic surveys & interviews
- Responding to comments on Alt. Methods Report



EA Activities Since Last Meeting

Odour
Sampling ▶

**Data Collection
/ Field Work**



EA Activities Since Last Meeting

Noise
Monitoring



Data Collection
/ Field Work



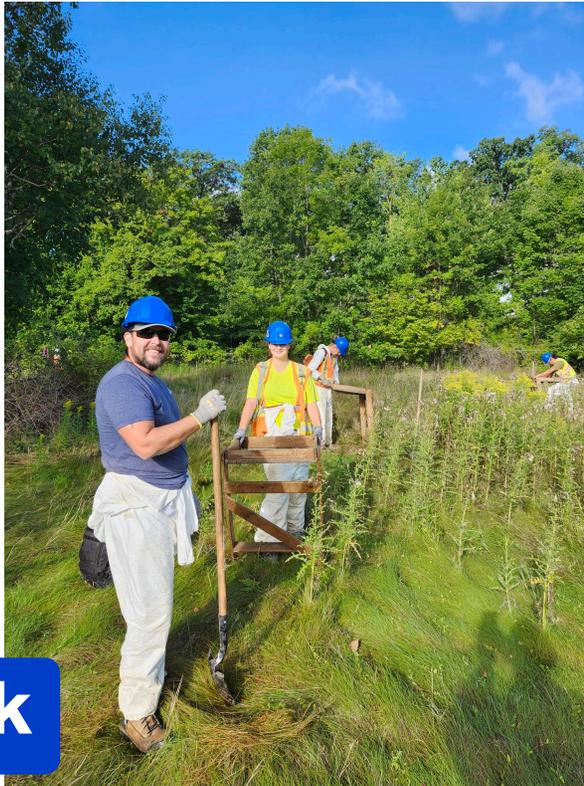
Dust Sampling



EA Activities Since Last Meeting

Archaeology ▶

Field Work



South Landfill Phase 2

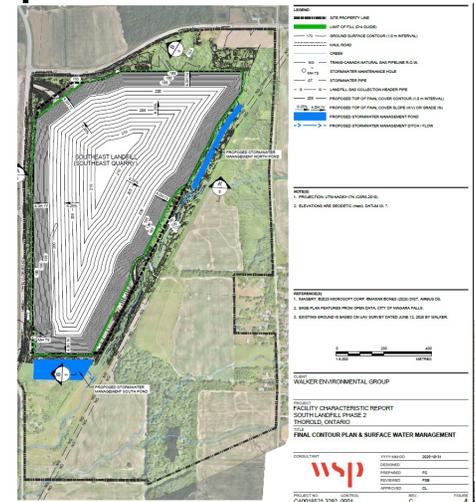


Facility Characteristics Report

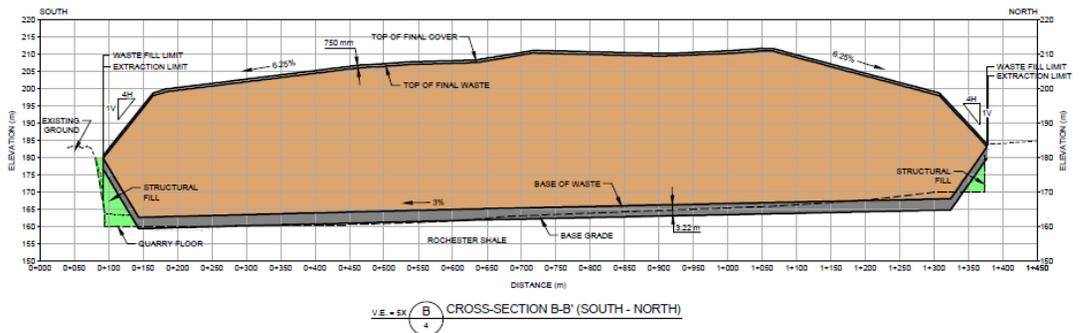
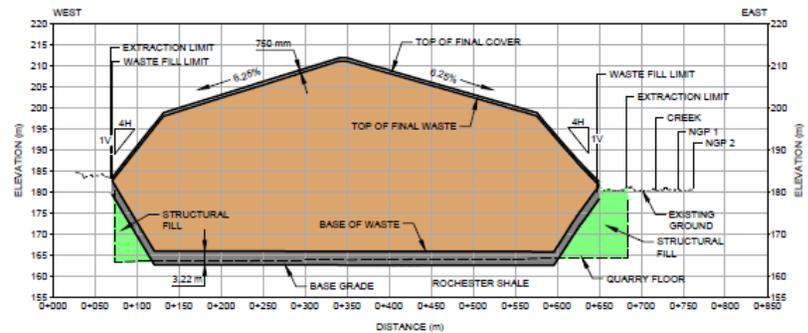
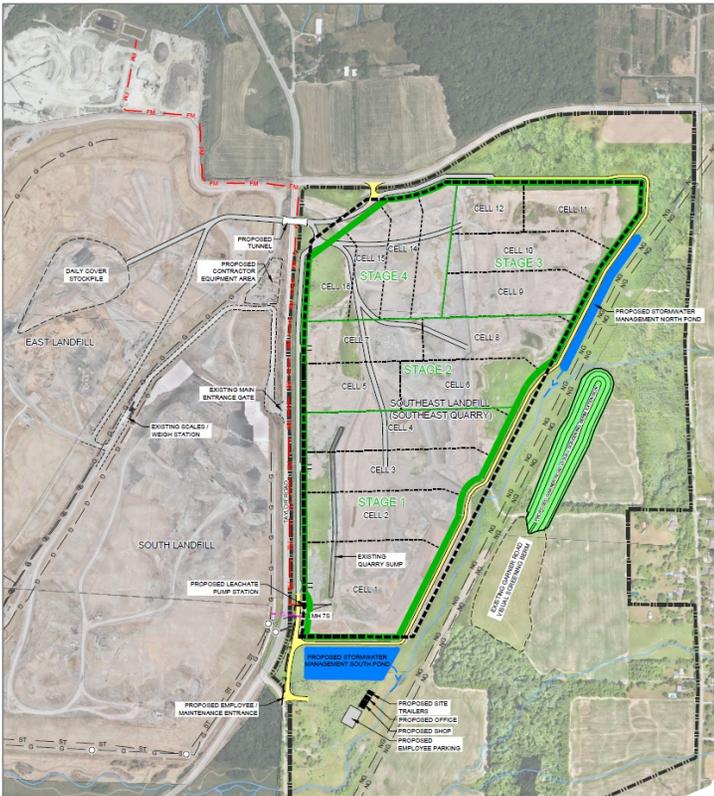
- Describes the preliminary site design and operations assumptions
- Prepared by WSP (design) & Walker (operations)
- Provides a standardized set of assumptions for the technical experts when completing the technical studies and impact assessments
 - Proposed Landfill Site Design
 - Key Infrastructure
 - Haul Road & Internal Roads
 - Operating considerations (hours of operation, traffic volume, types of equipment, etc.)

DRAFT FACILITY CHARACTERISTICS REPORT

South Landfill Phase 2
Environmental Assessment



Facility Characteristics Report



Thank you



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Environmental Assessment Advisory Committee Meeting 4

Social Impact Assessment

South Landfill Phase 2

November 2025





Agenda

1. Introduction and what is a “Social Impact Assessment”
?
 2. Study Areas and Assessment Criteria
 3. Assessment Methods / Integration with Other Studies
 4. Next Steps
-



Introduction

Social Assessment Lead – Tomasz Wlodarczyk, B.Sc., M.E.S

Senior Advisor, Environmental and Social Impact Assessment

- 30+ Years of Experience
- Expertise in Several Areas:
 - Environmental and Social Impact Assessment / Impact Management
 - Gender Based Analysis Plus (GBA+),
 - Cumulative Effects Assessment
 - Community Engagement
 - Strategic Environmental Assessment

Social Assessment Project Experience Examples:

- Walker's South Landfill (Niagara Falls), Taro Landfill (Hamilton), West Carleton (Ottawa)
- Renewable Energy
- Nuclear power generation / Nuclear waste disposal
- Mines
- Infrastructure (power, roads, airports, etc.)



What is a Social Impact Assessment (SIA)

A Social Impact Assessment:

- Is a process of describing existing and likely future conditions, analyzing and managing the changes or outcomes of a project.
- Considers both positive and negative outcomes.
- Results in recommendations for mitigation, monitoring and contingency measures
- Is often part of a larger environmental assessment process, undertaken in accordance with provincial or federal legislation (e.g., Ontario's Environmental Assessment Act)
- Is done from the perspective of those likely to be affected by a project.
- Must consider the changes in the biophysical environment (e.g., air quality, noise, ecology, etc.), traffic, land use.

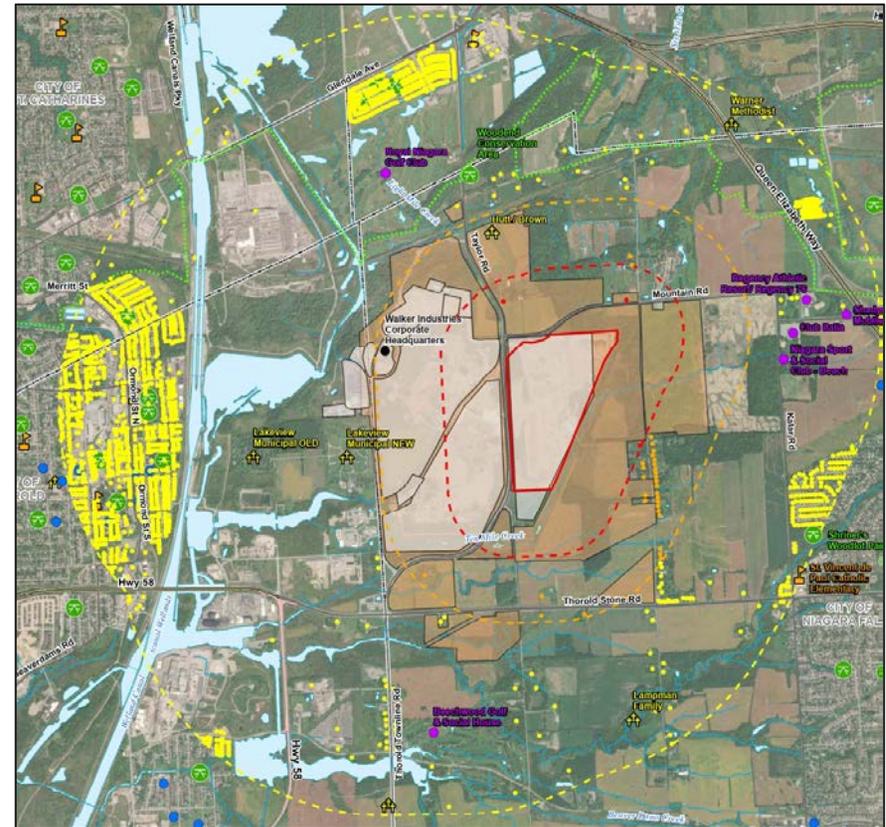


Local Study Area (LSA)

Includes all properties within a two (2) kilometer (km) radius line beyond the Walker Resource Management Campus boundary.

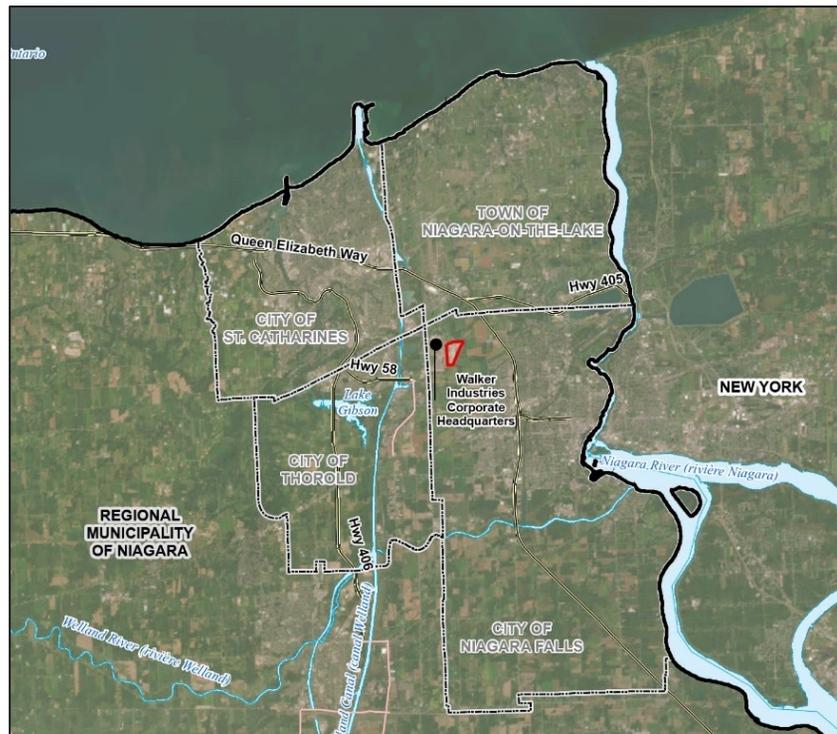
Includes portions of Niagara Falls, Niagara-on-the-Lake, St. Catharines and Thorold.

Extends to areas outside of the 2 km radius to include the White Oaks Conference Resort and Spa





Regional Study Area (RSA)



Includes the municipalities of Niagara Falls, St. Catharines, Niagara-on-the-Lake and Thorold.

Includes communities within the closest municipalities that might be aware of; use the services available at the Walker Resource Management Campus; visit the LSA and use its amenities; or have an interest in the Walker South Landfill Phase 2 Project.



Assessment Criteria

The Social Impact Assessment Criteria were developed and approved by the MECP during the Term of Reference stage of the Environmental Assessment process.

Assessment Criteria	Indicators
Displacement of Residents from Houses	<ul style="list-style-type: none">▪ The number of households/residents (property owners and tenants) to be displaced (i.e., forced relocation) by the project itself regardless of whether their property has been purchased or not▪ The potential for or likelihood of voluntary out-migration of residents for consideration of the indirect effects on community character and cohesion
Disruption to Use and Enjoyment of Residential Properties	<ul style="list-style-type: none">▪ The number of existing residential households and/or future households that are located at specific receptor locations and potentially affected by noise, dust, odour, traffic, agricultural and visual effects; and the potential for and likelihood of changes in the presence of vermin and gulls▪ The number of existing residential households fronting/backing onto a haul route and potentially affected by changes in project related traffic and traffic noise▪ Potential for or likelihood of changes in peoples' use of residential property
Disruption to Use and Enjoyment of Public Facilities and Institutions	<ul style="list-style-type: none">▪ The number of existing public facilities and institutions that may be affected by nuisance factors such as noise, dust, odour, traffic and visual effects; and the potential for and likelihood of changes in the presence of vermin and gulls▪ Potential for or likelihood of changes in operations of public facilities and institutions▪ Potential for or likelihood of changes in use and enjoyment of public facilities and institutions



Assessment Criteria

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Assessment Criteria	Indicators
Loss / Disruption of Recreational Resources	<ul style="list-style-type: none">▪ The number/nature of existing recreational resources and/or future features potentially affected by noise, dust, odour, visual effects and changes in project-related traffic; and the potential for and likelihood of changes in the presence of vermin and gulls▪ Potential for or likelihood of changes in operations of recreational features▪ Potential for or likelihood of changes in use and enjoyment of recreational resources
Changes to Community Character	<ul style="list-style-type: none">▪ Compatibility of landfill operations with the existing and likely future character of the community▪ Compatibility of the proposed end use with the existing and likely future character of the community
Changes to Community Cohesion	<ul style="list-style-type: none">▪ The extent of displacement▪ The potential for or likelihood of voluntary out-migration▪ Loss and the extent of disruption of recreational resources, public facilities and institutions, and the use and enjoyment of residential properties



Assessment Methods

Background data, including secondary source information and field mapping, is being collected:

- Field Reconnaissance Mapping;
- Secondary Source Data (e.g., databases, websites, reports)
- Statistics Canada Data (e.g., population, demographics, households, mobility, etc.)
- Case Study and Literature Review (e.g., South Landfill Phase 1 EA and compliance reports, other landfills and relevant studies)

Primary data is being collected through several field studies and questionnaires:

- Recreational Field Survey in the LSA (50 interviews at 10 locations)
- Site Neighbour Questionnaire in the Site Vicinity within the LSA (~ 260 households)
- Public Attitude Research (PAR) via telephone surveys conducted randomly in the RSA and LSA (A sample of 1,224 achieves a margin of error of $\pm 2.8\%$, 19 times out of 20)



Assessment Methods

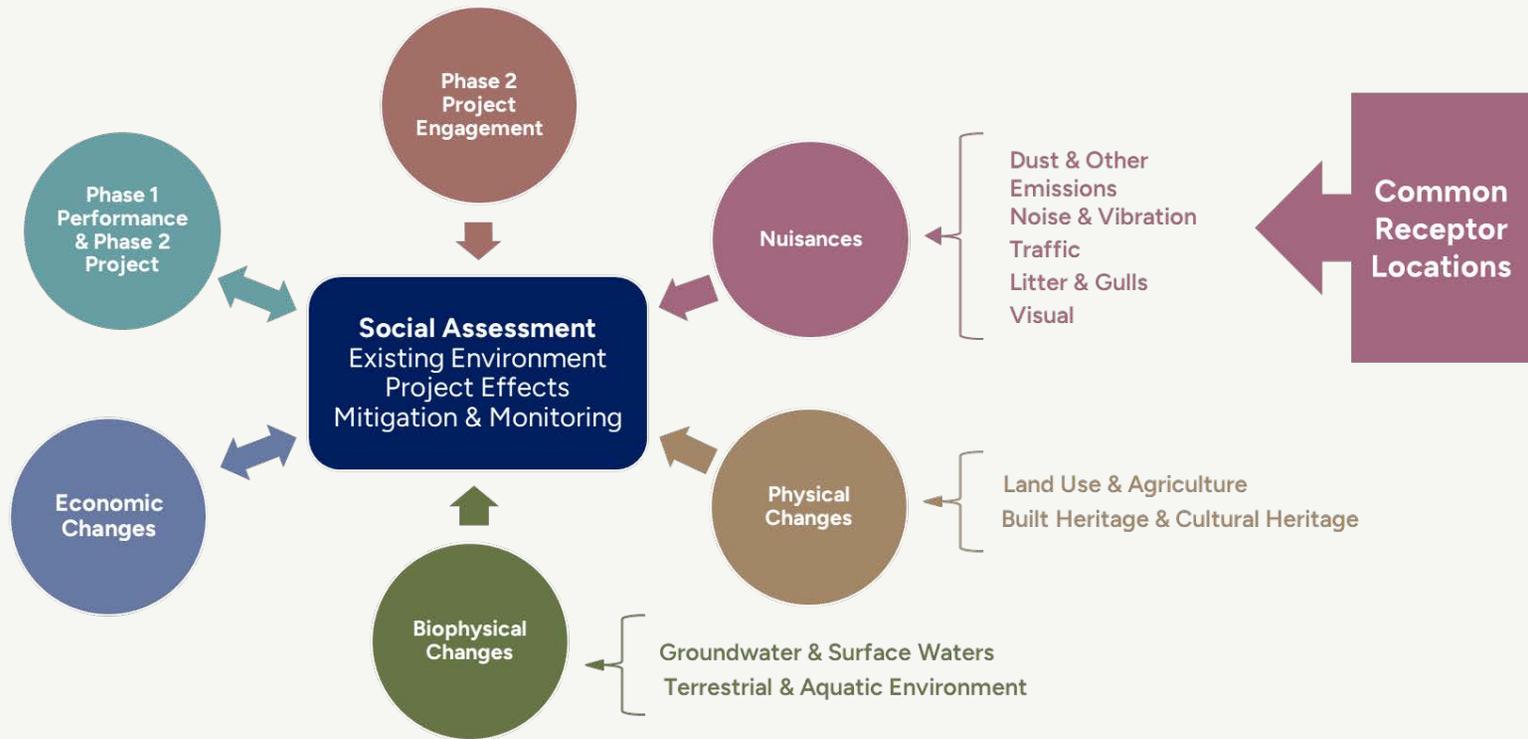
Interviews with Community Knowledge / Data Holders

- Community Facility Operators (e.g., Niagara public works, churches/cemetery operators)
- Educational Facility Operators (e.g., Niagara College, school boards, nearby schools and day cares)
- Woodend Conservation Area and the Niagara Peninsula Conservation Authority
- Community organizations and clubs (e.g., golf club, social clubs, cycling clubs, Bruce Trail club)
- Municipal Government Officials (e.g., Planning, Public Works, Transportation, Recreation/Parks, Public Health, EMS, Police, Tourism)





Integration with Other Studies





Next Steps – 2026

1. Complete Analysis of PAR and Recreational Survey Data
2. Receive Site Neighbour Surveys and Complete Analysis
3. Commence Interviews with Community Data / Knowledge Holders
 - *Your suggestions who we should be talking to are welcome*
4. Complete Existing Social Environment Report
5. Commence the Detailed Impact Assessment. This will:
 - integrate results from other studies
 - include analysis of nuisance effects at common receptors
 - include a cumulative effects assessment
 - recommend mitigation and monitoring





Do you
have any
questions?



Making
Sustainability
Happen

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Tomasz Włodarczyk

*Senior Advisor, Environmental Management,
Planning and Approvals*

E: twlodarczyk@slrconsulting.com



→ Janet Oswald
Environmental Planner
Nicole Charlton
Senior Terrestrial Ecologist

**EA Process &
Visual and Ecological Studies
Walker South Landfill Phase 2**

Welcome

Environmental Assessment Process

→ Detailed Impact Assessment

GHD's role in the Environmental Assessment Process

Planning

- Assist Walker with planning the EA so it is conducted in accordance with *Codes of Practice*, and general best practices

Coordination

- Supporting technical disciplines
- Connecting across disciplines
- Actively look for gaps or issues early to help make sure concerns are addressed

Consultation

- Government Review Team
- General support

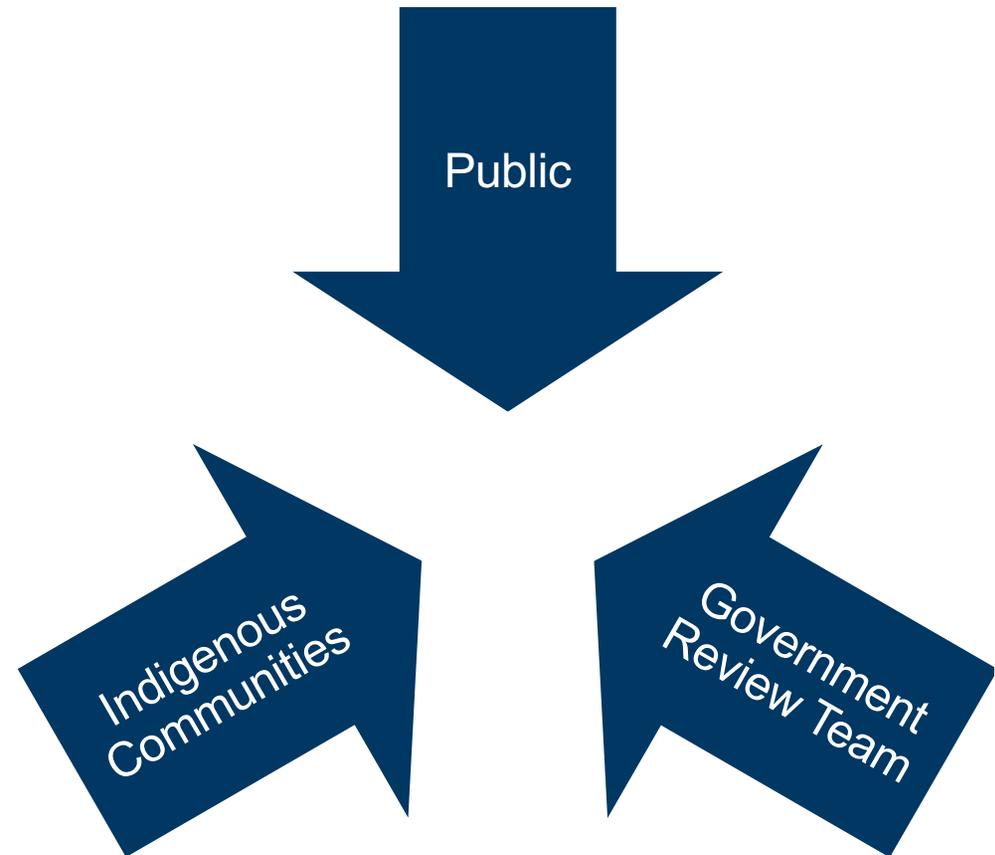
Documentation

- Lead authors of the core EA documents
- Focused on transparent and traceable documentation

Next Step in the EA Process

Detailed Impact Assessment

- Based on next level of design detail
- Modelling, for some technical disciplines
- Sharing of information between disciplines
- Re-visiting potential effects
- Re-confirming/updating mitigation measures
- Considering climate change and cumulative effects
- Identifying monitoring requirements
- Identifying opportunities for enhancement
- Further considering end use



Visual

→ **Impact Assessment Process**

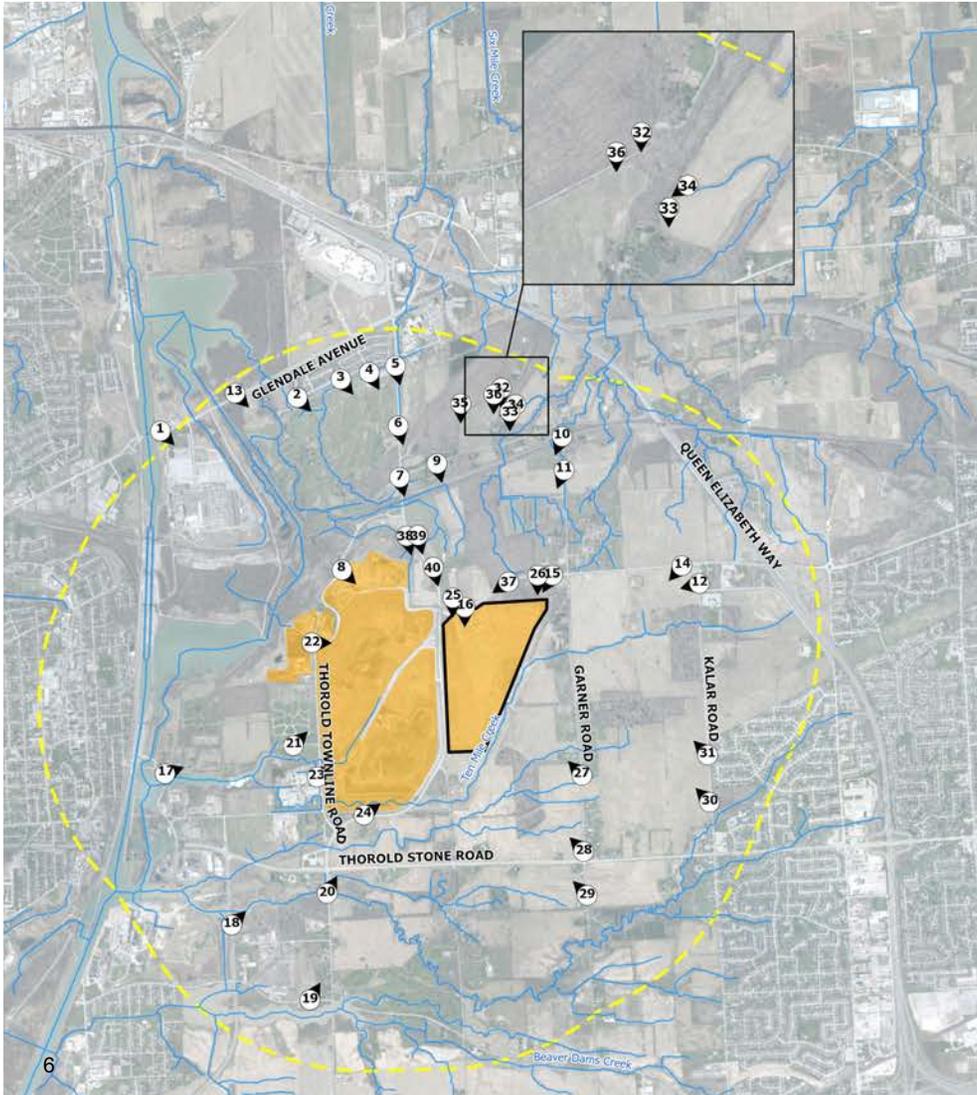
Existing Visual Conditions



Photos taken from 40 locations to:

- Document current views of the site.
- Identify locations from which we may need to mitigate changes to views.

Photos taken from additional locations in response to feedback from the Niagara Escarpment Commission.



Comparing the Alternative Landfill Configuration Options

A



B



C



– Artistic Impressions generated for each of the three options at three locations:

- #16 – Mountain Road, east of Taylor Road
- #27 – Garner Road, southeast of the site
- #40 – Taylor Road, north of the site**

– From the Visual perspective, Option C was the most preferred, due to its lower height.

– Option A selected as the recommended method, but its overall height has been decreased, in part to reduce the visual impact.

– Additional visual mitigation measures will be confirmed in the next step.

– Leachate Management Option A marginally preferred from the visual perspective.



Detailed Visual Impact Assessment

- Collection of additional photos (seeking input)
- Update artistic impressions
- Layer in mitigation measures, as needed, such as berms and vegetative screening
- Assess the net effects to the visual environment

Examples of Visual Mitigation

- Screening
 - Berms
 - Vegetation plantings
 - Fencing
- Operational
 - Placement/storage of equipment
 - Interim cover/seeding

Input, Review, and Knowledge Sharing

- Meeting with the Niagara Escarpment Commission
- The draft Visual Impact Assessment will be an appendix to the draft Environmental Assessment Report.
- Findings of the Visual Impact Assessment will inform the Social Impact Assessment

Ecology

→ Terrestrial and Aquatic Environment



Existing Ecological Conditions



Eighteen site visits between 2023-2025. Investigations included:

- Amphibian Call Count Surveys
- Aquatic Habitat Assessment
- Bat Acoustic Monitoring
- Breeding Bird Surveys
- Ecological Land Classification and Botanical Inventory
- Snake Coverboard Surveys
- Significant Wildlife Habitat Screening
- Species at Risk Screening
- Documenting Wetland Communities

Comparing the Alternative Methods

Landfill Configuration Options

- From the Terrestrial and Aquatic perspective, there were no differences in the three options.

Leachate Management Options

- From the Terrestrial and Aquatic perspective, assessment of both options resulted in low net effects.
- Option A, continued use of the municipal wastewater system, was preferred.





Examples of Mitigation

- Limit areas of impact/adjust through design
- Construction Environmental Management Plan
- Transplant/salvage vegetation
- Pre-construction survey for invasive/noxious plants
- Compensation

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Detailed Impact Assessment

- Based on the next stage of design detail and inputs from other technical teams
 - Re-visit potential effects to the terrestrial and aquatic environment
 - Refine proposed mitigation measures
 - Assess the net effects and identify enhancement opportunities for operation phase and at end-use

Input and Review

- Ongoing consultation with the Conservation Authority, municipalities, and provincial ministries
- The draft Detailed Impact Assessment will be made available for review along with the draft Environmental Assessment Report

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*** Thank you**

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