

# Future Development of the Eastern Ontario Waste Handling Facility



## Public Open House #1 on the Environmental Assessment (EA) Terms of Reference



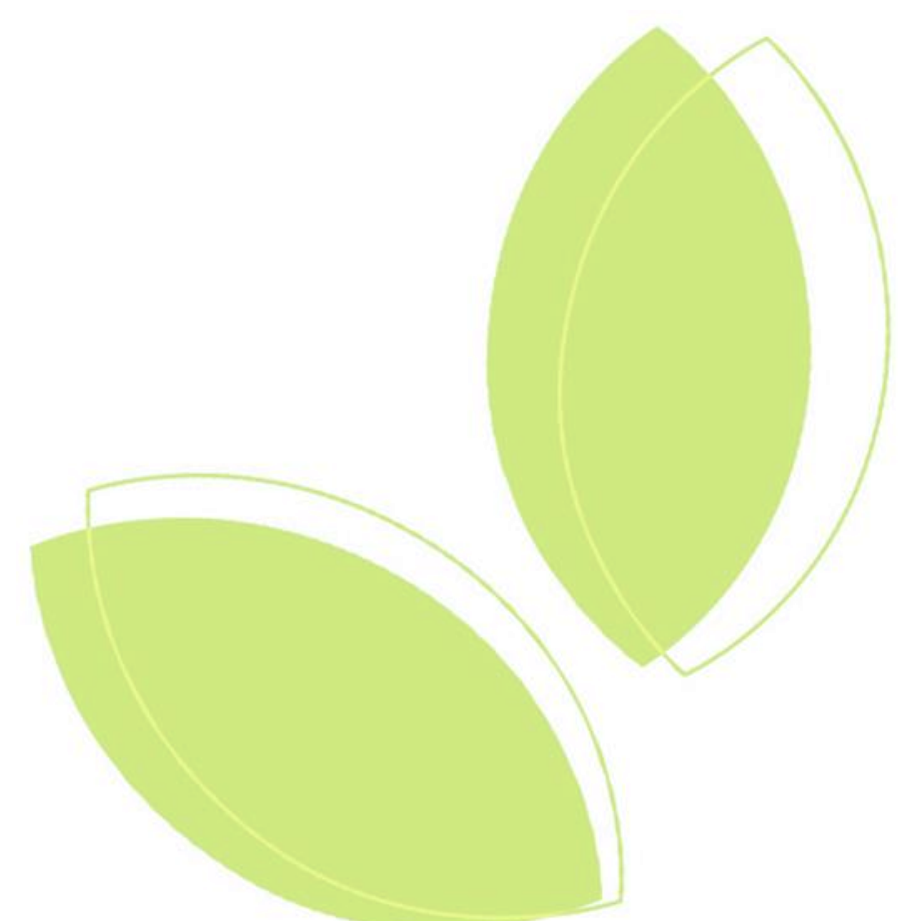
January 30, 2020

Welcome to **Public Open House #1**  
on the Terms of Reference for the Future Development of  
the Eastern Ontario Waste Handling Facility (EOWHF)

This **Public Open House** is being held to:

- Provide an overview of the project
- Discuss the development and contents of the Terms of Reference (ToR)
- Present the Environmental Assessment (EA) process
- Provide information on:
  - the rationale for the project and alternatives being considered
  - the proposed EA evaluation process and criteria
  - the consultation process that will be followed during the development of the ToR and EA

Please take a few moments to browse the display materials. GFL staff and consultants are available to answer any questions you may have.



**GFL Environmental Inc.** is the owner and operator of the existing Eastern Ontario Waste Handling Facility (EOWHF) in Moose Creek, Ontario.

GFL's **guiding principles** are applied to our business partners, workers, suppliers and customers and ensure that we all work towards the same goals – **protecting the environment, supporting the community, protecting the health and safety of our workplace, and to customer service excellence.**

GFL's **values** are reflected in our commitment to:

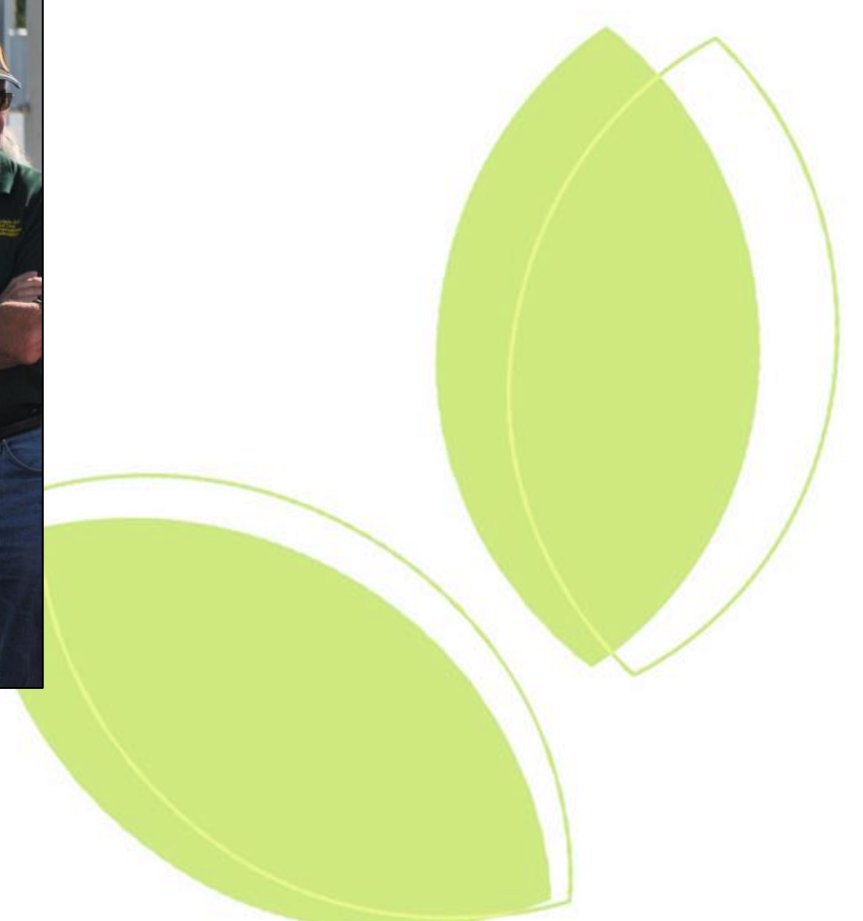
- Reduce our environmental impact
- Promote environmentally responsible business activities
- Offer and expand our environmental services
- Continue to comply with all relevant environmental legislation and applicable requirements
- Minimize waste, promote diversion through recycling, composting, soil and water remediation, reduce energy and raw material consumption, and reduce greenhouse gas emissions



# GFL in the Community

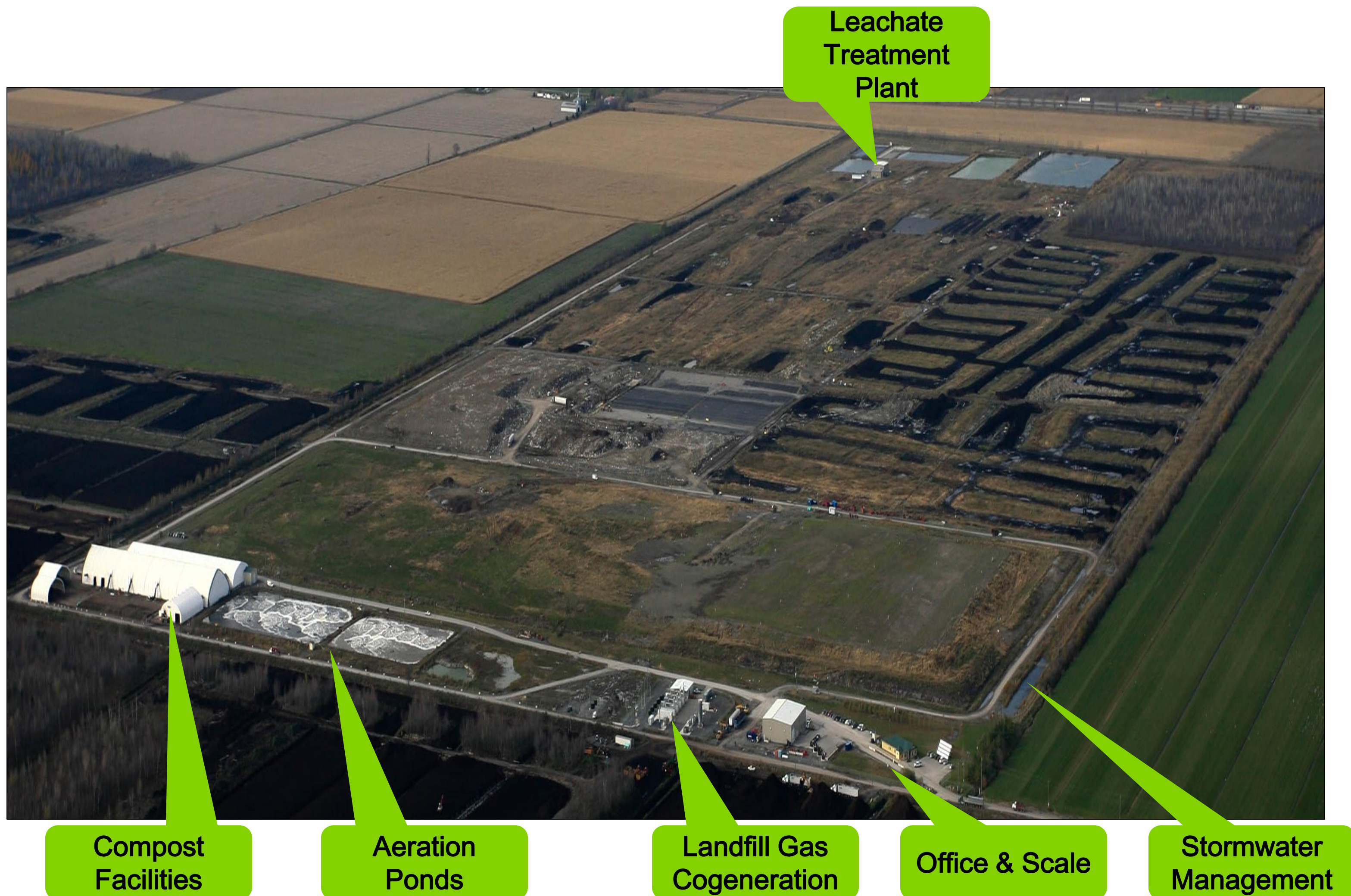
GFL is committed to **enhancing the community and supporting sustainable development** by investing in the growth of our communities. Some of our initiatives include:

- Annual royalties paid to the Township of North Stormont, ~\$583,000 in 2018
- Creating local employment opportunities, over 45 full time jobs
- Supporting local charities, sports teams, community events and public facilities (Finch Arena, Moose Creek Pool)
- Hosting educational events, presentations and facility tours for municipal groups, local schools, various organizations and interest groups, customers and the general public
- Supporting environmental research projects
- Partnering with Habitat for Humanity to allow individuals to drop off items for redistribution
- Working with the local horticultural society to develop a large pollinator garden on the EOWHF site
- Actively participating with the Compost Council of Canada and Ministry of Environment, Conservation and Parks in the development of the Organics Strategy as part of Waste-Free Ontario
- Planning for use of landfill gas as a fuel source to support local business and the development of new business opportunities in the area

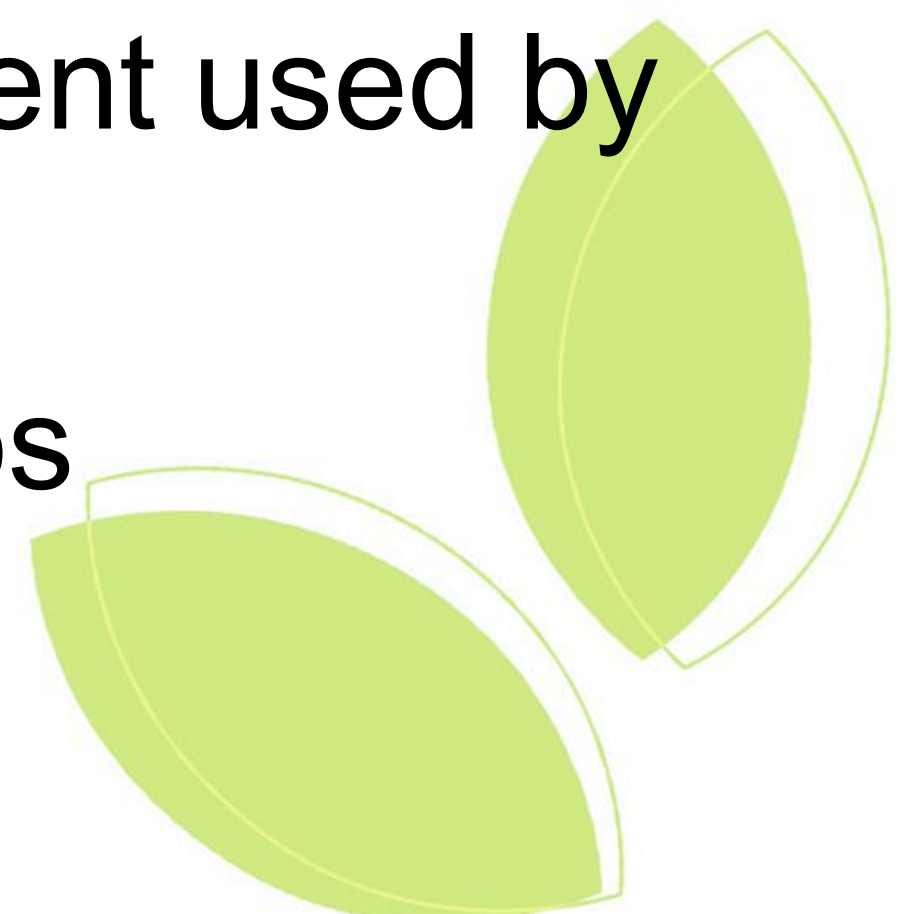


# Role of the EOWHF

The EOWHF is located within the Township of North Stormont, approximately 5 km north-northwest of the village of Moose Creek, Ontario, and 5 km east of the village of Casselman, Ontario.



- Critical component of the Provincial waste management infrastructure
- Proudly serving Eastern Ontario municipalities, communities, residents and businesses since 2000
- Over 500 villages/towns/cities across Eastern Ontario plus Indigenous communities served, providing broad regional service
- Services include organics composting, electronic waste collection, tire collection, plus residential drop off, in addition to landfill
- Over 45 full-time employees
- Millions of dollars invested through purchase of goods and services in the local area for the past 20 years
- Significant secondary contracted services and employment used by GFL in all of the operations and support
- Education and research centre for various interest groups and schools



# Contributions toward Ontario's Waste Management Goals

The EOWHF supports the *Waste Free Ontario Act* and the *MECP's Preserving and Protecting our Environment for Future Generations* by:

- Providing services to maximize the diversion of materials away from disposal, which includes the largest composting facility in Ontario capable of managing food and organic wastes and producing a high quality compost end product
- Processing organic material at the composting facility that supports Ontario's proposed organics ban and also reduces GHG emissions through the avoidance of methane generation from the decomposition of organics
- Collecting methane and producing 4.5 MW of renewable energy for the Ontario Power grid (supporting approximately 4,000 homes), with capacity to manage additional gas volumes collected from the future development
- Collecting and diverting tires, waste electrical and electronic equipment
- Planning for the development of greenhouses and/or comparable facilities at the EOWHF to use the heat from the LFG utilization facility



# The Proposed Project

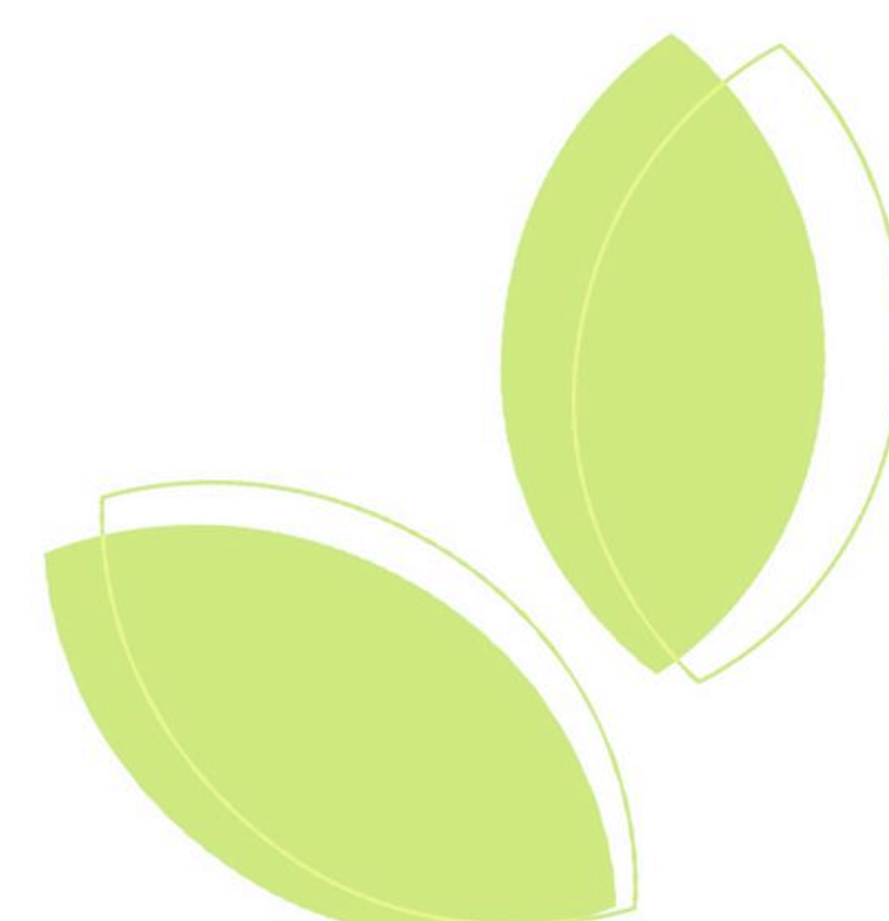
The proposed future development of the EOWHF would consist of the ongoing development and operation of the landfill to the east of the existing EOWHF on lands owned by GFL.

The purpose of the undertaking is to provide an additional 15.1 million m<sup>3</sup> of landfill disposal capacity over approximately 20 years of operation at the maximum annual fill rate of 755,000 tonnes per year.

**No changes to the approved annual fill rate or site access route are proposed**

	2020				2021				2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
EA Terms of Reference (ToR)	█																							
Undertake EA Baseline Studies	█																							
Environmental Assessment (EA)									█															
Environmental Compliance Approval													█											
Land Use													█											
Construction																	█							

The lands being considered for the future development include lands within the existing EOWHF and the eastern half of Lot 16, Lots 14 and 15, and part of Lot 13 of Concession 10 east of the EOWHF, which has an area of approximately 233 hectares.

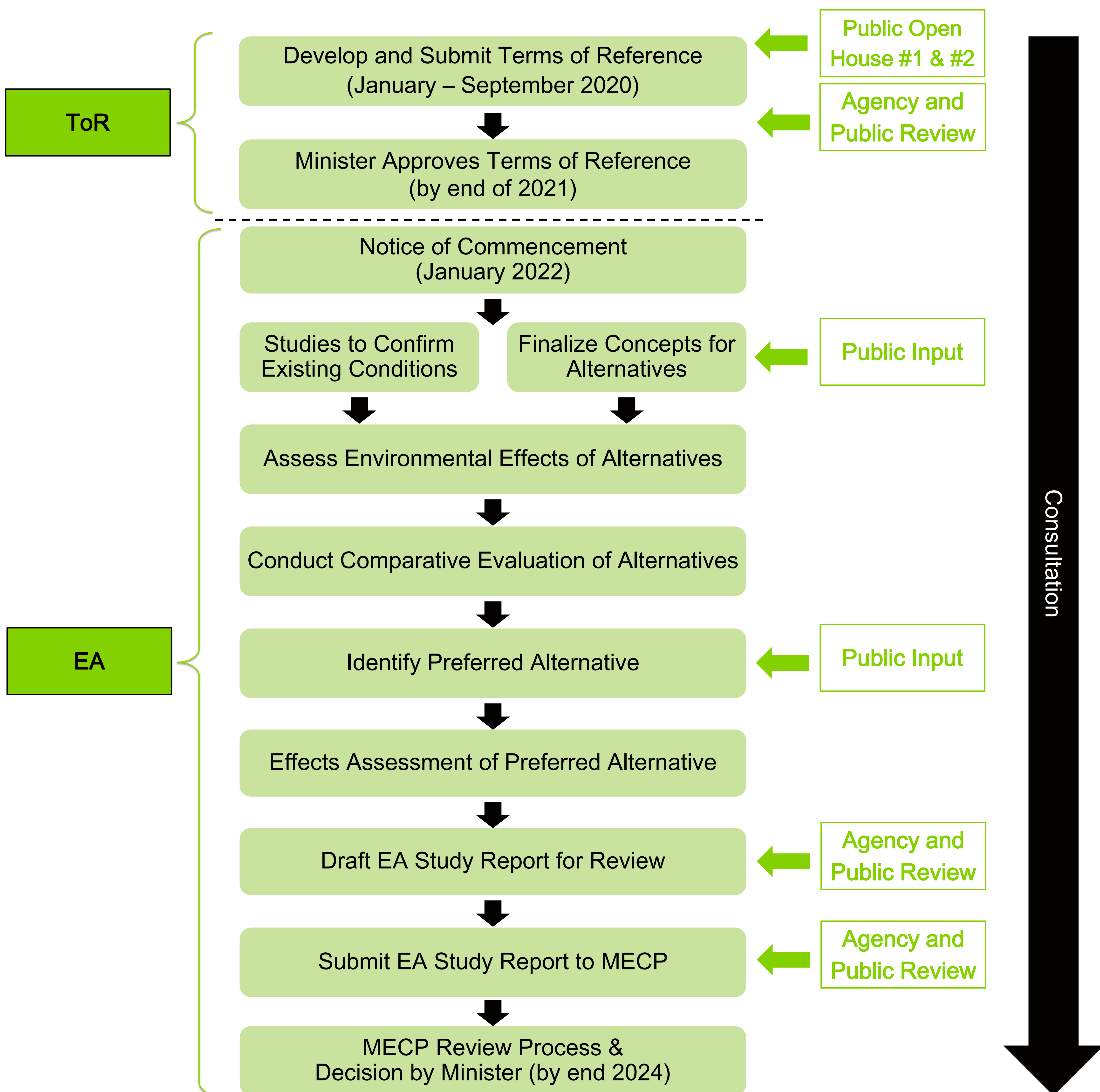


# Proposed Future Development Area



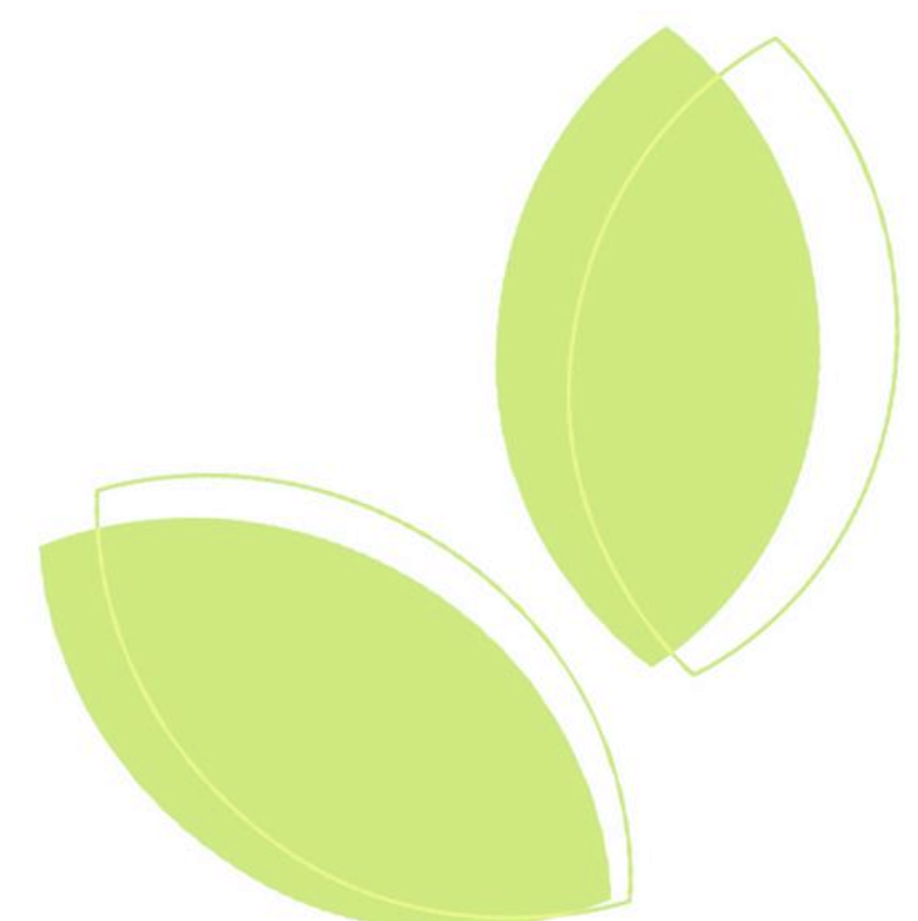


# Environmental Assessment Process Overview



# The Rationale for the Undertaking

- There is a need for the future development of the EOWHF as it is a significant component of the provincial waste management network and infrastructure in a region lacking in sufficient and secure long-term disposal capacity
- GFL is providing waste management services and facilities that are well positioned to continue to support Ontario's transition to becoming waste-free and achieving a circular economy, while supporting a reduction in GHG production and the amount of waste going to landfill, consistent with provincial legislation
- Continued operation of the EOWHF aligns with the Province of Ontario's Strategy for a Waste Free Ontario, Climate Change Action Plan goal of reducing GHG emissions, and the Made in Ontario Environment Plan to reduce litter and waste in communities
- The future development of the EOWHF is required to continue sustainable business operations and to continue providing the essential financial support for a wide range of additional services and programs



# Alternatives to the Undertaking

GFL identified a range of ‘alternatives to’ the undertaking (or project) for providing long term disposal capacity that are appropriate and reasonable for them (a private sector company) to implement.

1. Do nothing
2. Redirect waste to a disposal facility elsewhere
3. Develop a thermal treatment facility at the EOWHF
4. Develop additional disposal capacity at the EOWHF

Each of the ‘alternatives to’ were considered in the context of their ability to meet the needs of the Eastern Ontario region and the business opportunity identified by GFL.

Future development and ongoing operation of the EOWHF landfill is the only reasonable option for GFL, its customers and Ontario. This alternative will also support the ongoing operation of the integrated facilities at the EOWHF including the organics composting facility and the landfill gas to energy facility.

The other alternatives do not address GFL’s business opportunity to meet long-term customer commitments or avoid business risks, and are not supportive of the Ontario government priorities of addressing waste diversion and climate change.



# Alternative Methods

**Alternative methods** are different ways of implementing the proposed undertaking. Two preliminary alternative methods have been identified for consideration as follows:

## Alternative 1

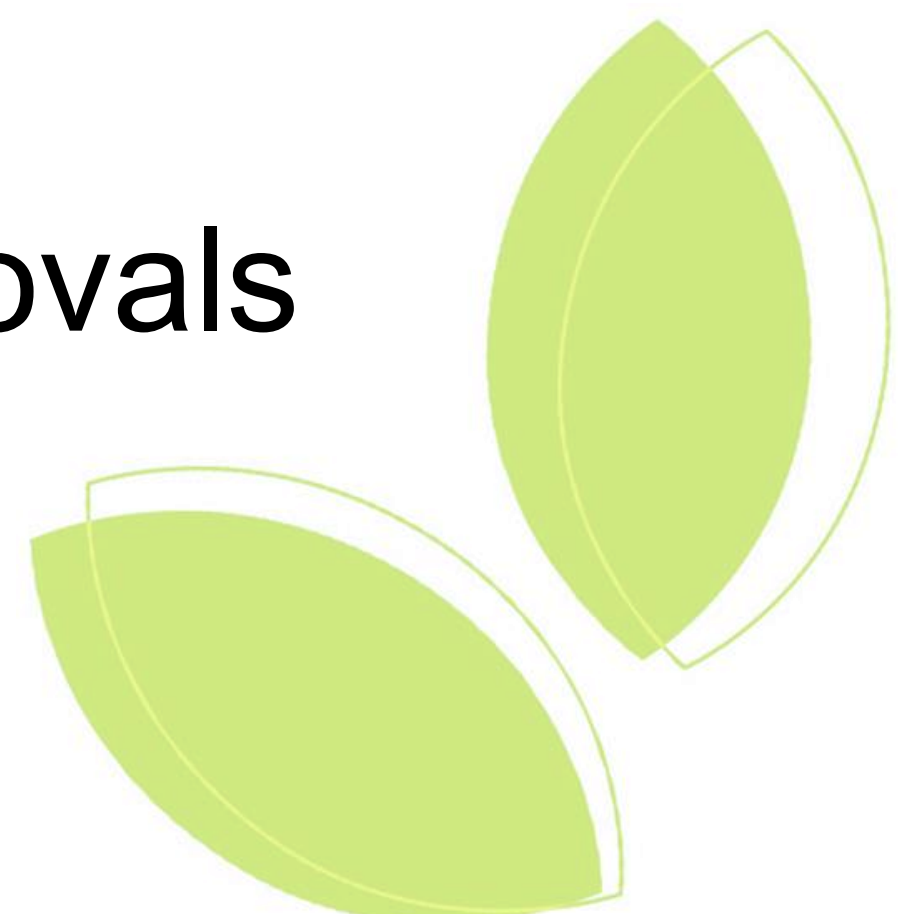
- Utilizes three stages oriented east-west, similar to the existing EOWHF landfill

## Alternative 2

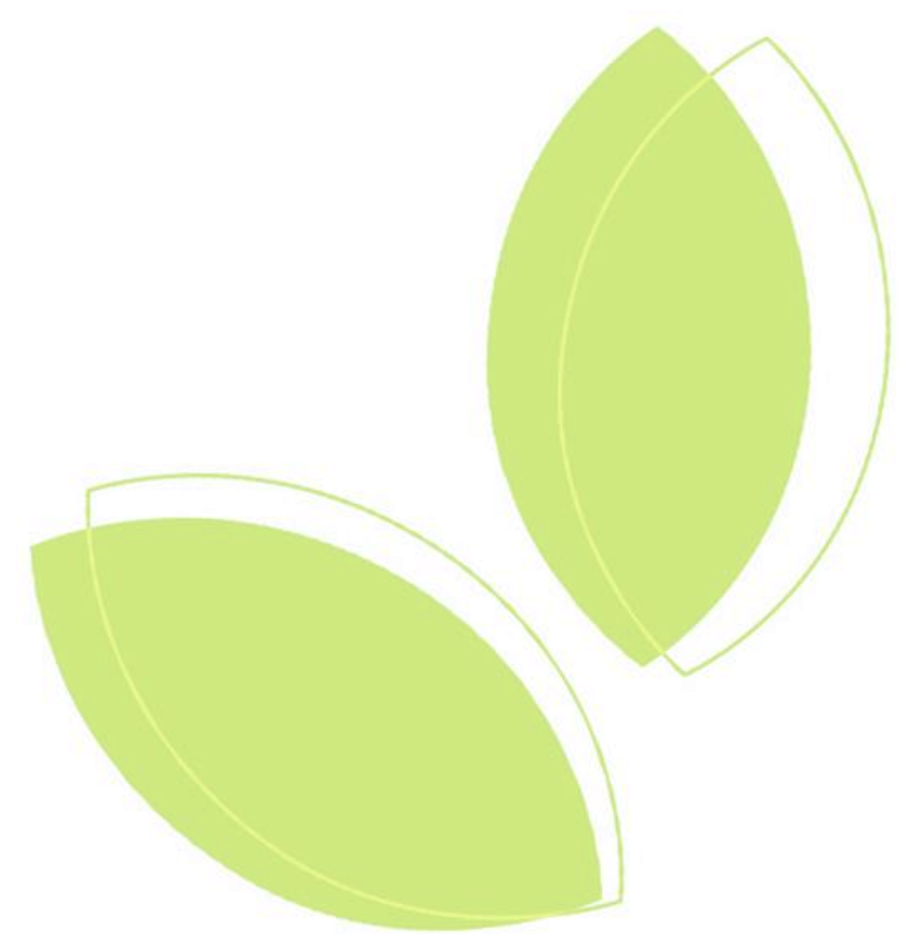
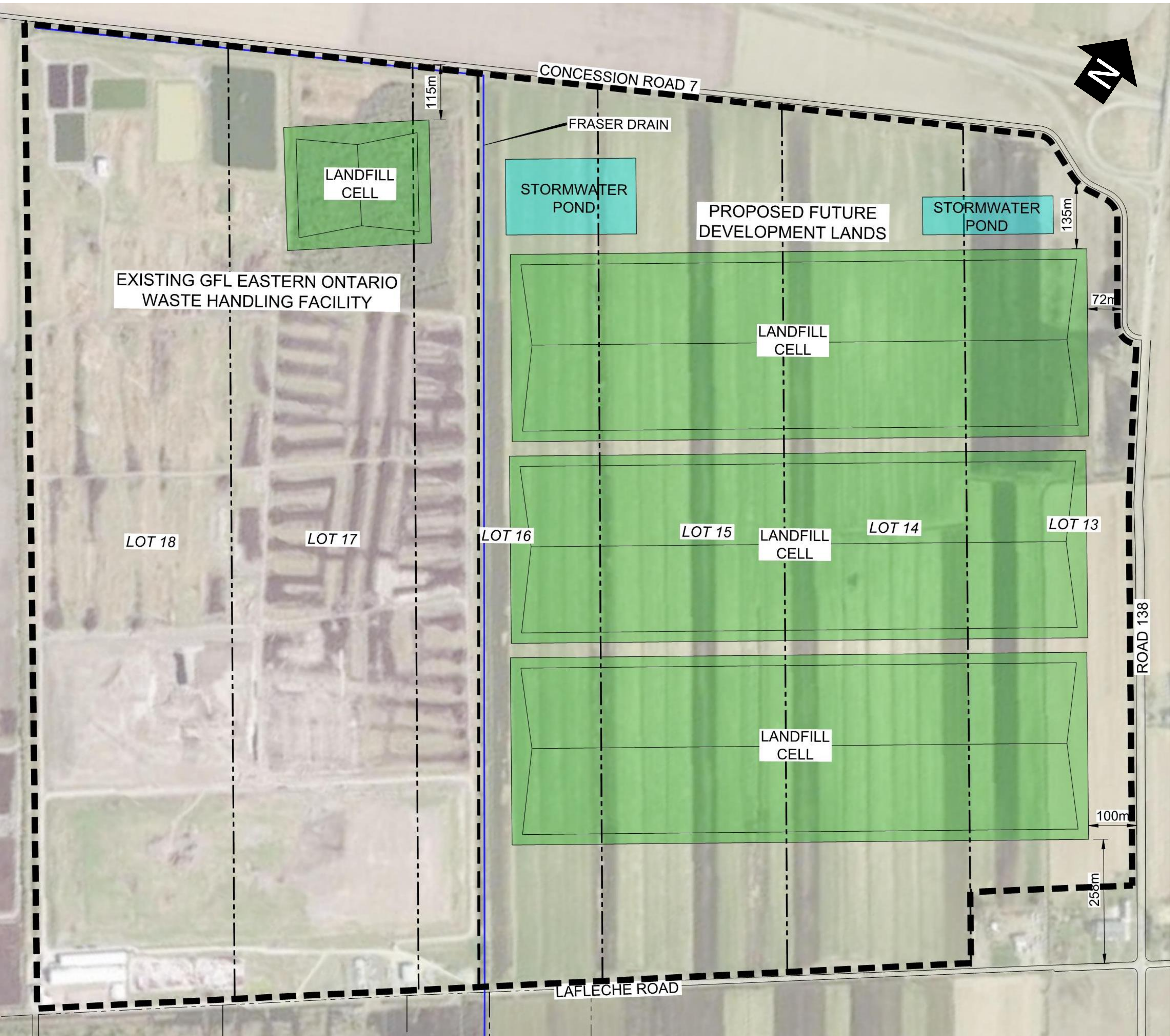
- Utilizes three stages oriented north-south

## Both Alternatives

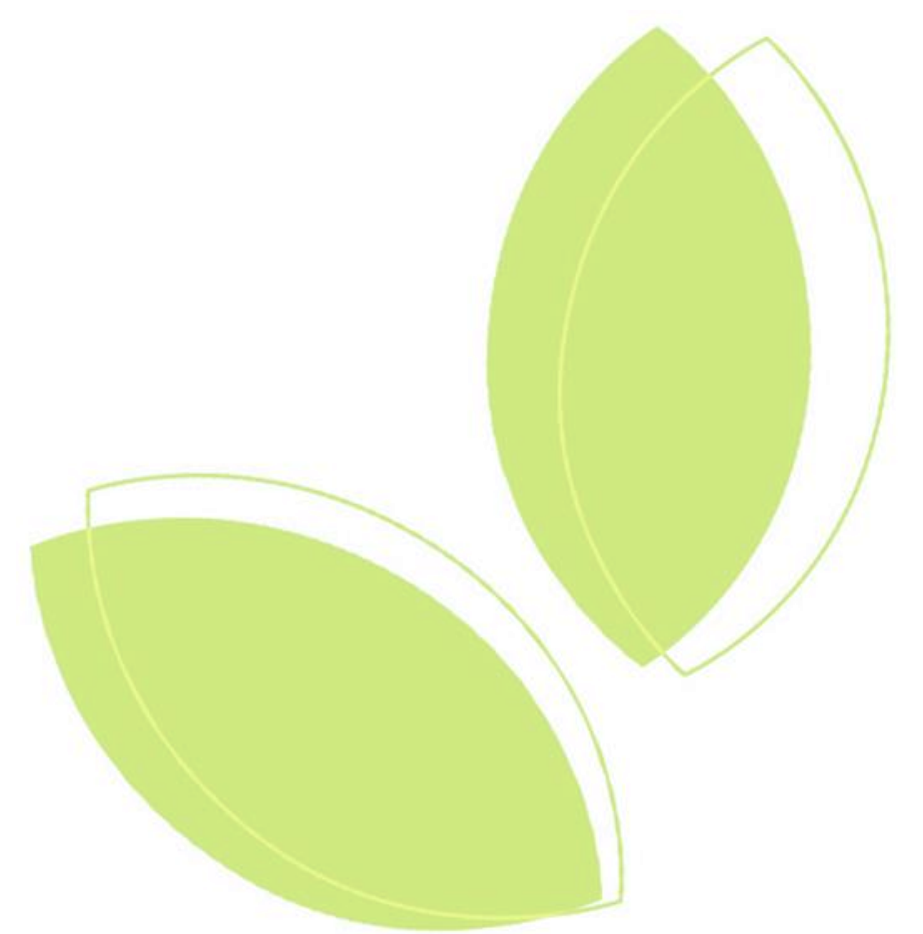
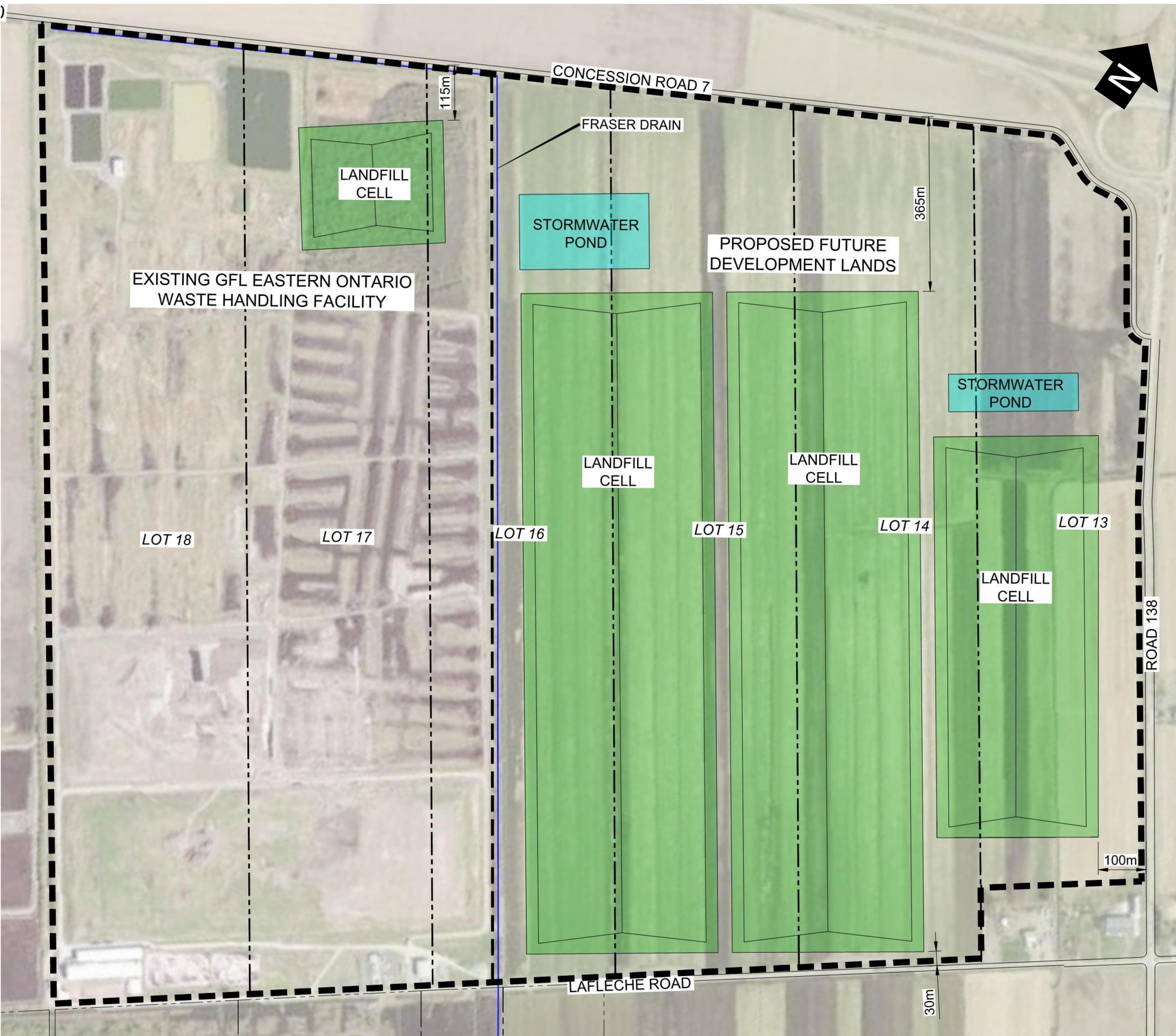
- Landfill volume of approximately 15.1 million m<sup>3</sup>, based on the approved fill rate of 755,000 tonnes/year over a 20 year planning period
- A relatively small volume of capacity may be available in the northeast corner of the existing EOWHF site
- Landfill stages would be developed according to similar width, height/depth, spacing and side slopes as the existing landfill
- Typical buffer widths of approximately 100 meters from property boundaries, with some exceptions
- Visual screening around the perimeter through combination of berm and vegetation
- Utilize existing site access road and infrastructure including gas to energy plant and leachate treatment plant
- Official Plan and Zoning By-Law amendment approvals are anticipated



# Alternative 1

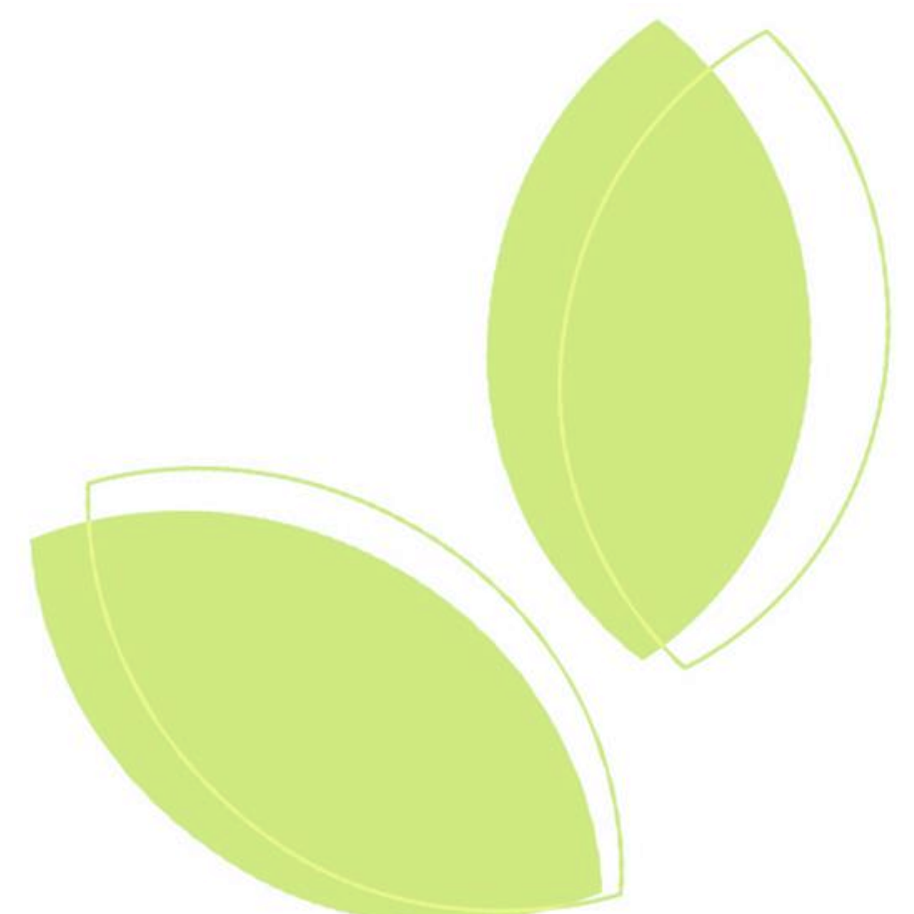


# Alternative 2



The proposed evaluation process for the EA includes:

- Describe the environment potentially affected (existing conditions) based on evaluation criteria
- Describe the conceptual design details for the alternative methods (i.e., the two expansion alternatives), including mitigation measures
- Predict the environmental effects from each alternative based on evaluation criteria
- Refine mitigation measures and predict net effects on the environment
- Comparatively evaluate alternatives based on evaluation criteria
- Identify the preferred alternative
- Effects assessment of the preferred alternative



The proposed evaluation and assessment criteria considers environments as outlined by the MECP including Natural Environment, Socio-Economic Environment, Cultural Environment and Built Environment. Proposed criteria will consider potential effects on:

## Natural Environment

- Atmospheric Environment (Air Quality, Noise, Odour)
- Geology, Hydrogeology, and Groundwater (Quality and Quantity)
- Surface Water Environment (Quality and Quantity)
- Ecological Environment (Terrestrial and Aquatic Ecosystems)

## Socio-Economic Environment

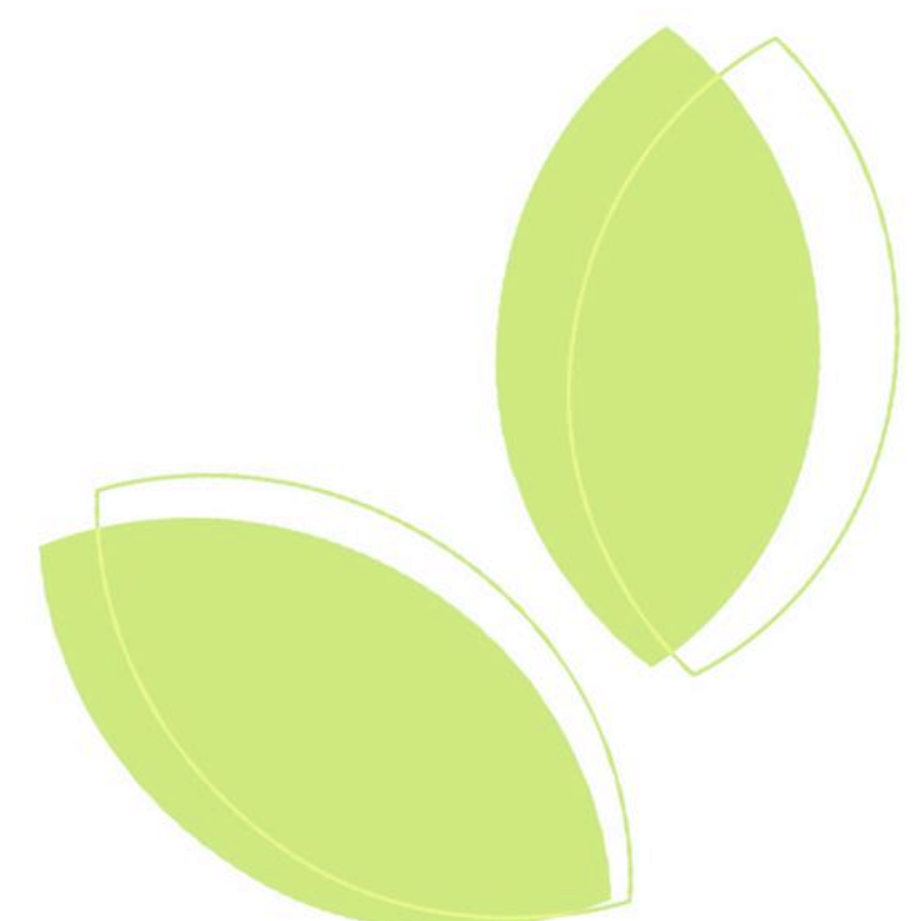
- Economic effects/benefits
- Local community
- Visual landscape

## Cultural Environment

- Archaeological and Cultural Heritage Resources

## Built Environment

- Transportation
- Current and Planned Future Land Use
- Agricultural and Aggregate Extraction



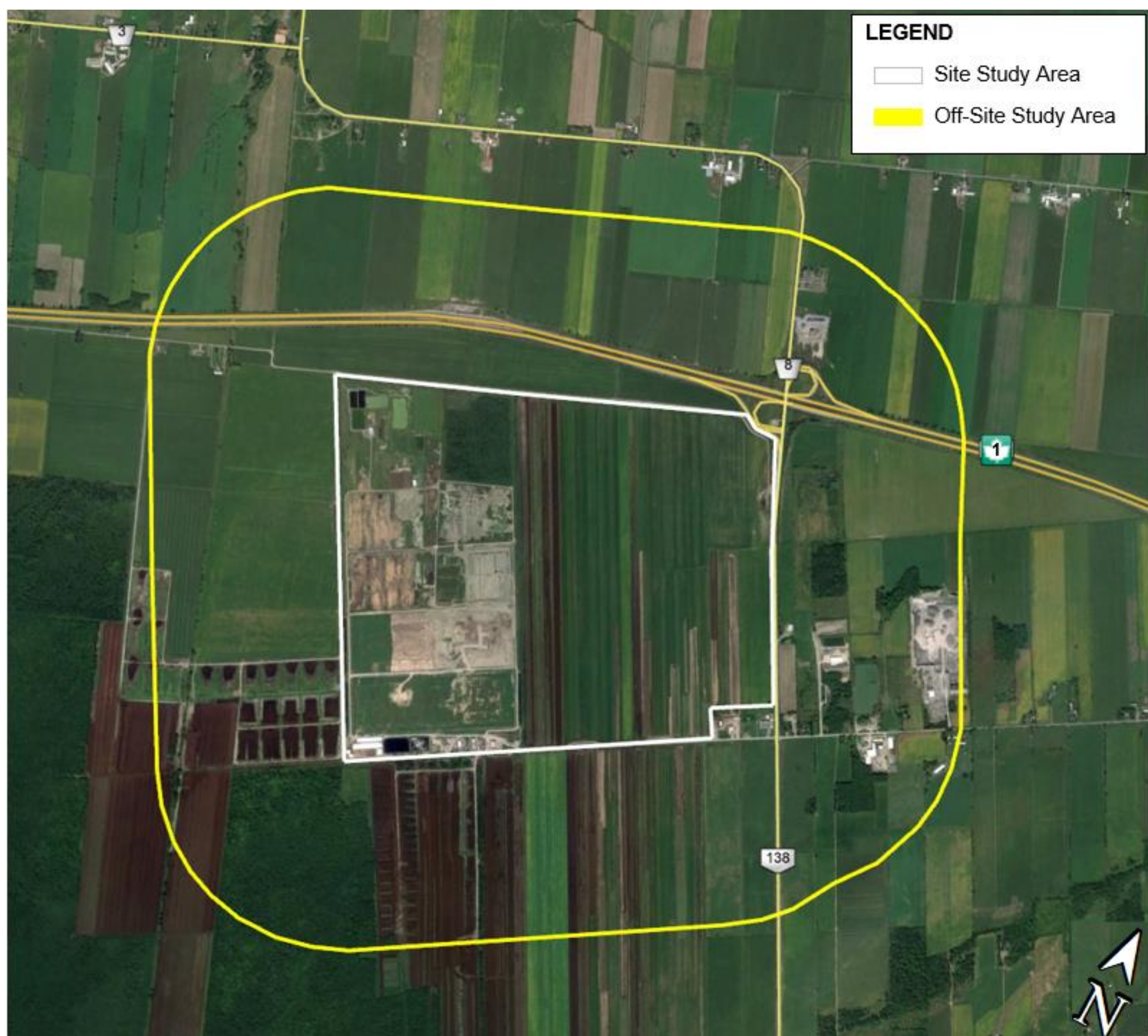


# Study Areas

Potential effects are proposed to be considered in terms of the following study areas:

**On-site study area** – the existing EOWHF, and the future development area comprising the eastern half of Lot 16, Lots 14 and 15, and part of Lot 13 of Concession 10 east of the EOWHF

**Off-site study area** – the lands in the vicinity of the future development extending approximately 1 km from the on-site study area



Discipline specific studies will be carried out, as required, in support of the EA to obtain information needed to assess the alternatives based on the evaluation criteria, considering the:

- Description of the environment potentially affected
- Prediction of potential effects on the environment for each alternative
- Identification of mitigation measures and potential net effects on the environment for alternatives considered
- Comparative evaluation of the alternatives



# Consultation and Engagement

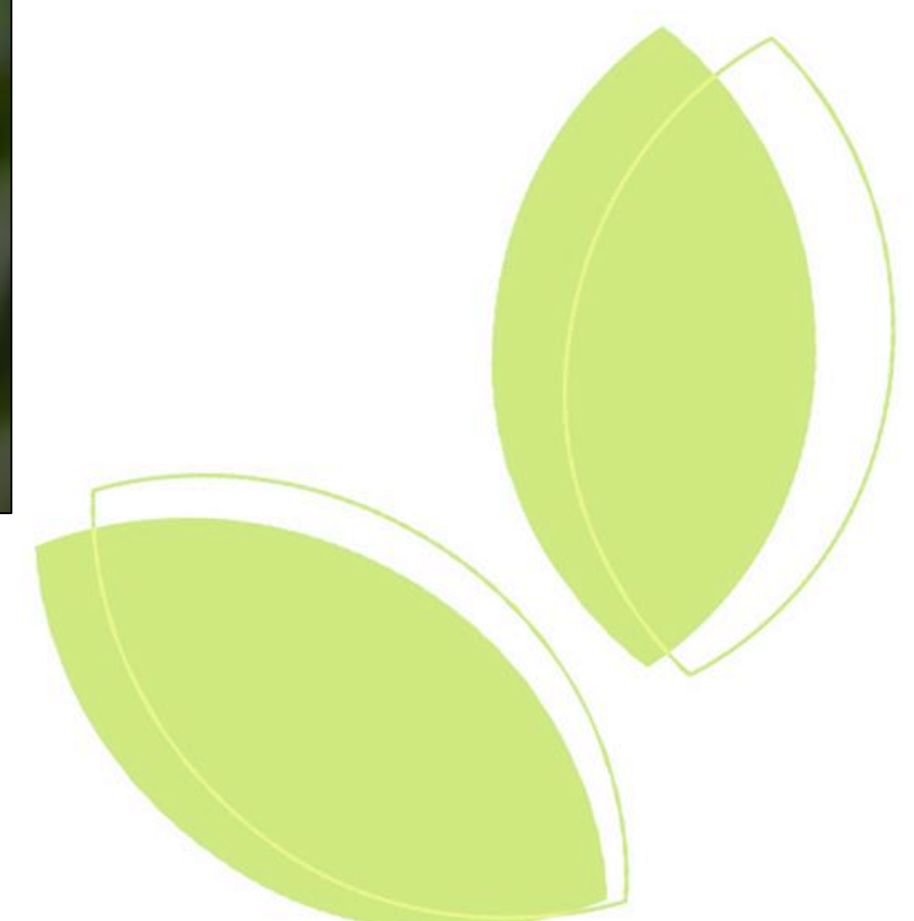
Public consultation throughout the ToR and EA process will involve the local community, applicable agencies, Indigenous communities, and other interested and/or affected stakeholders.

Consultation will include:

- Notification through local newspapers, by letter or email
- **Public Open Houses** (two during ToR and two during the EA)
- Posting of materials on the company project website [www.gflenv.com/moose-creek-eowhf](http://www.gflenv.com/moose-creek-eowhf)

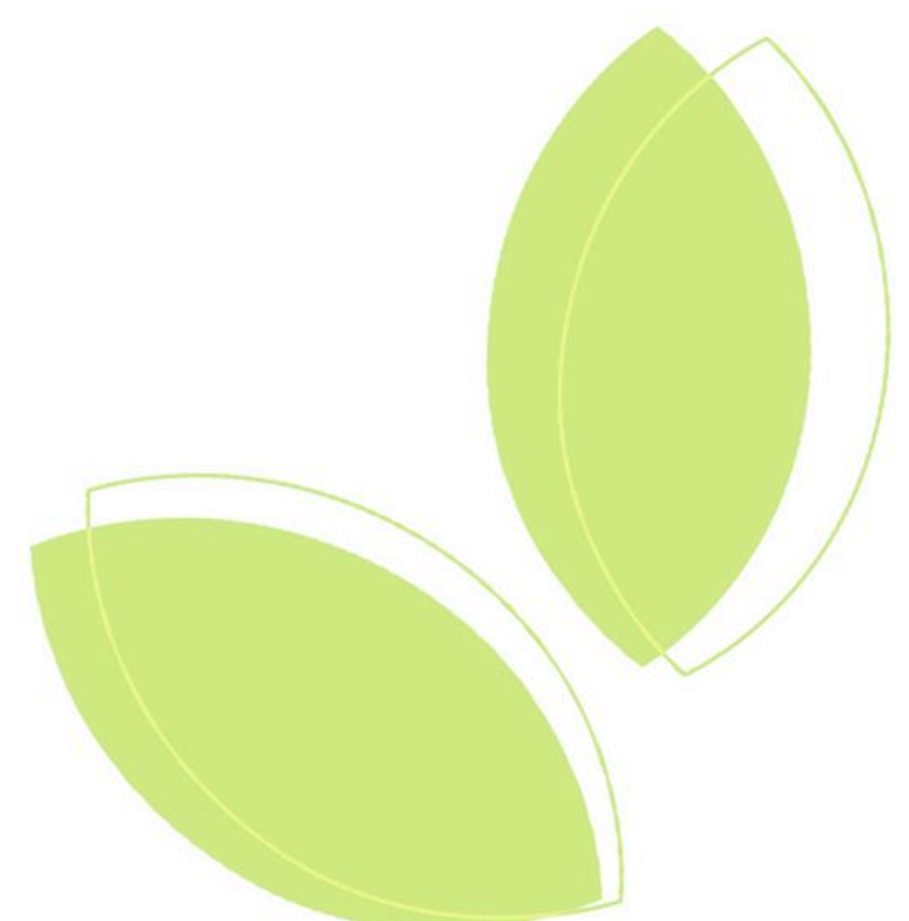
GFL will receive and respond to comments by telephone, email and in writing.

**If you wish to have a meeting with GFL or members of the project study team, please let us know.**



# Next Steps

- **Input received** through this Public Open House and other comments received will be used to develop and refine the proposed ToR for the EA
- A **second Open House** on the ToR will be held in Spring 2020
- GFL will circulate the **draft ToR** in Summer 2020 for review and comment
- The ToR will be finalized based on comments received on the draft and formally submitted to MECP for review and approval
- A 30-day review period commences upon submission of the proposed ToR to the MECP
- Public, agencies, Indigenous communities, and other key stakeholders can review and submit comments on the ToR to the MECP during this review period
- Notification of the draft and final ToR submissions will be provided in the local newspapers, by letter/email and on our website [www.gflenv.com/moose-creek-eowhf](http://www.gflenv.com/moose-creek-eowhf)





# Thank you

If you would like to be added to the project mailing list or have project-related questions, please contact:

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**GFL and the Project Team thank you for your  
attendance and comments on the project**

