Frequently Asked Questions (FAQs #8)

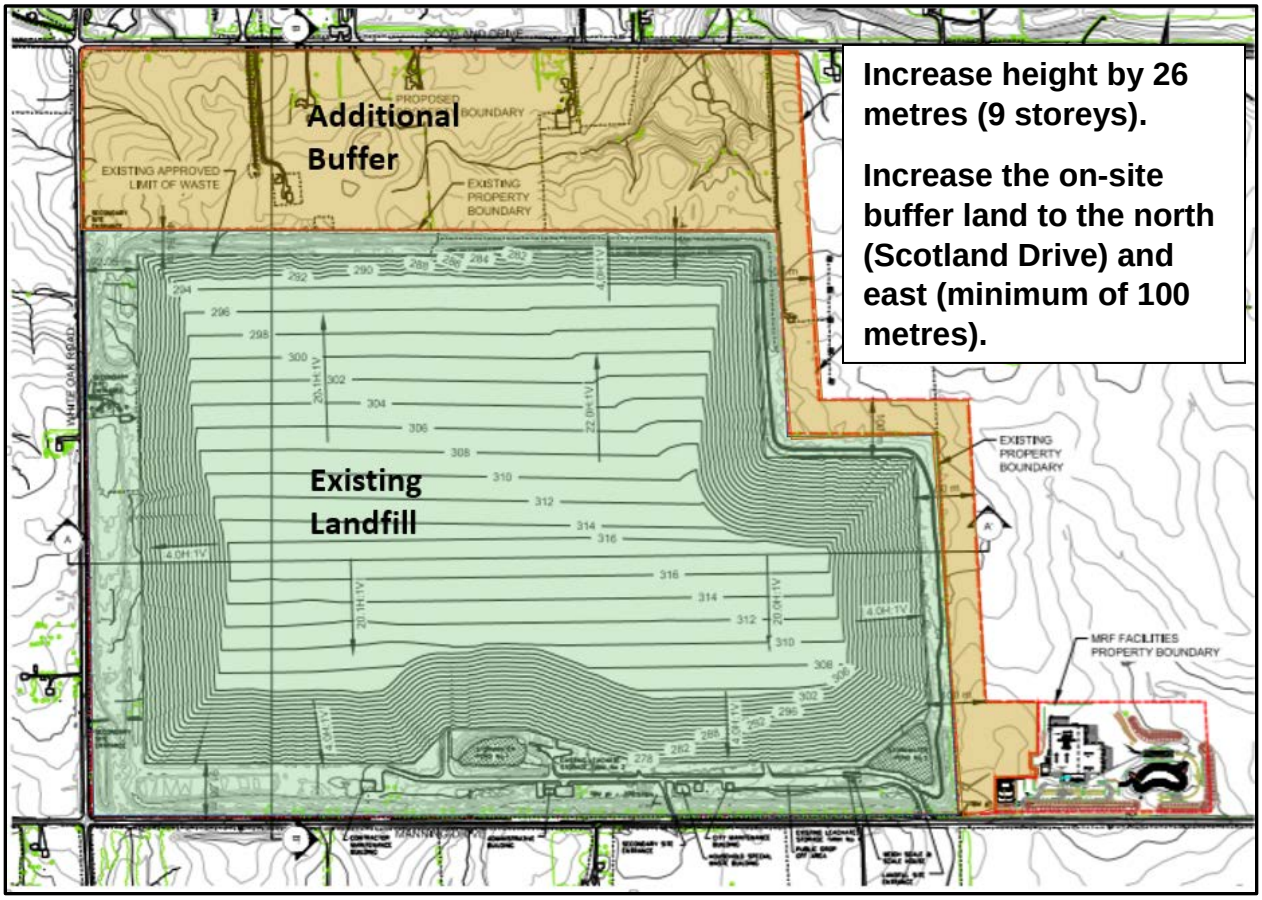
How much waste will the landfill expansion receive?

The design capacity for the proposed landfill expansion over the 25 year planning period is 9.6 million tonnes including 0.5 million tonnes from neighbouring municipalities (about 5%). The space required to hold the estimated waste quantities is approximately 13.8 million cubic metres.

For comparison purposes, the existing approved capacity of the W12A Landfill is approximately 10 million tonnes.

What is the preferred landfill expansion alternative?

Three landfill expansion alternatives (vertical expansion, expansion to the north and expansion to the east) were considered. Vertical expansion was selected as the preferred expansion alternative.



Why has Alternative #1 been identified as the preferred expansion alternative?

A number of detailed investigations and studies were completed in order to compare the three landfill expansion alternatives across a number of environmental, social and technical considerations (see appendix “A”).

The main advantages of Alternative #1 are:

- Highest degree of groundwater protection
- Best alternative to limit odours
- Fewest changes to existing stormwater management system
- Least potential for air quality, archaeology, agricultural, aquatic ecosystem, community, land use, noise and terrestrial ecosystem impacts
- Lowest cost alternative

The main disadvantages of Alternative #1 are:

- Greatest visual impact
- More complex design (more engineering infrastructure required to store leachate)

All three alternatives were considered to have similar transportation, heritage and cultural potential impacts.

Information on the various studies and investigations completed will be available at the open house.

What changes will be made to the landfill's operation and infrastructure?

There will be only minor changes to some of the daily operations (e.g., hours of operation, equipment being used, etc.). There will be major changes (improvement upgrades) to the landfill's infrastructure as summarized below:

Landfill Gas Collection and Flaring System:

- Gas collection system will go from using only vertical wells to having vertical wells and horizontal gas collection piping which will increase the amount of landfill gas captured and reduce odours,
- The existing flare will be replaced by a two flares doubling the amount of landfill gas that can be combusted.

Stormwater Management Ponds:

- Two of the four stormwater management ponds will be enlarged,
- Sediment removal efficiency of all the ponds will be increased to 80% (some ponds currently only have 70% removal efficiency),
- Improvements to outflow structures and other pond infrastructure,
- Upgrades will further protect downstream watersheds.

Groundwater Protection:

- The perimeter leachate collection system in the older part of the existing landfill will be replaced/upgraded and stone drains installed in the waste to improve collection efficiency,
- The thick clay soils underneath the landfill are the primary groundwater protection measures and contaminant transport modelling shows no off-site impacts are anticipated.

Environmental Monitoring

- Improvements, as required, to the existing environmental monitoring programs (litter, landfill gas, surface water & groundwater),
- Additional monitoring of noise and air quality have been incorporated.

Further details on changes to the landfill's operation and infrastructure can be found in the accompanying document *Overview of Proposed W12A Landfill Expansion*.

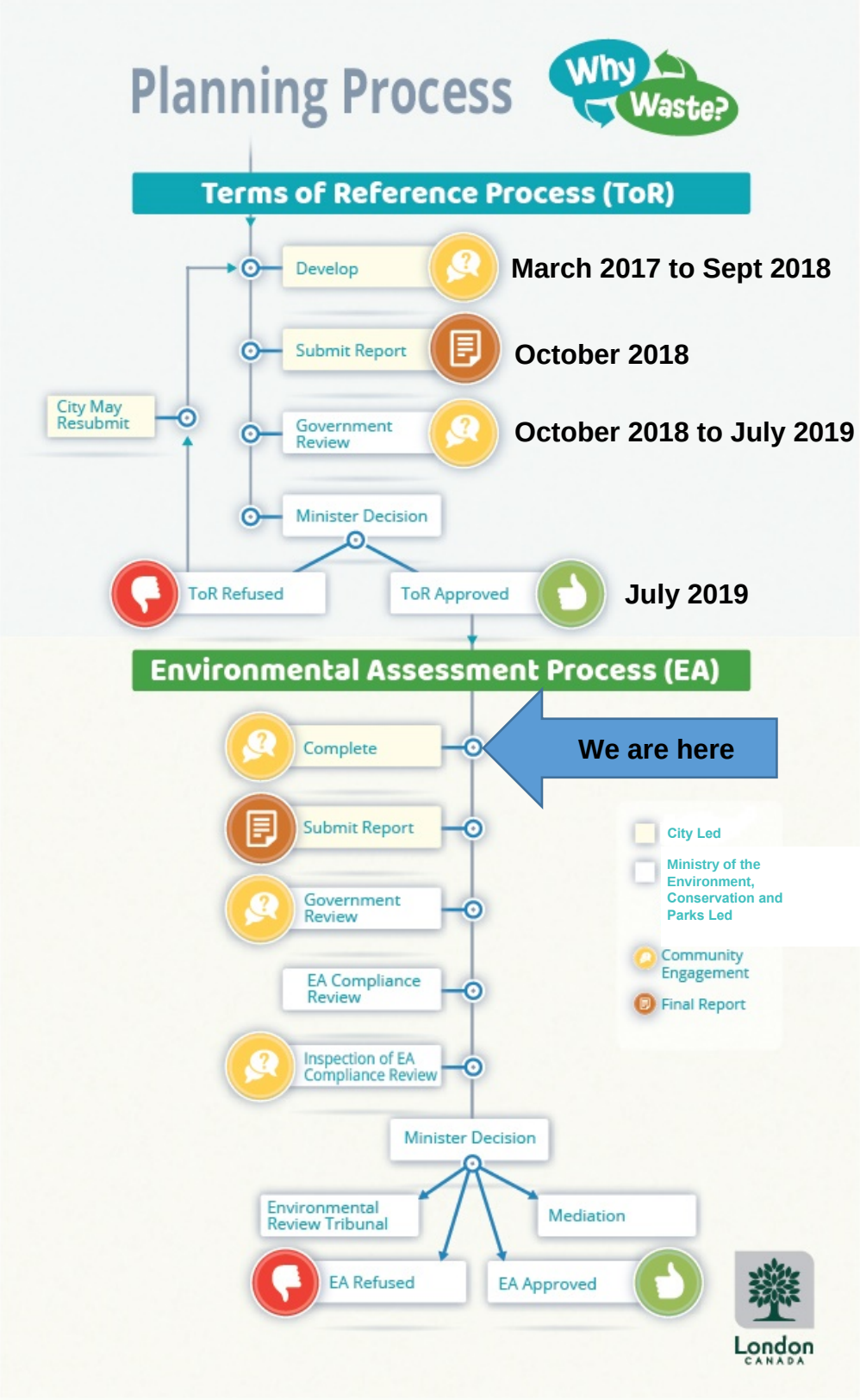
Where are we in the Process?

The EA process is expected to take approximately four to five years to complete (from the start date of March 2017).

The first phase was to develop the Terms of Reference that is the work plan or framework for completing the EA. This has been completed and was approved by the Minister of the Environment, Conservation & Parks.

The City is currently completing the EA study, which involves the completion of a number of technical investigations (e.g., groundwater) to help determine the best way to expand the landfill. The steps in completing the EA study are listed on page 5.

The completed EA must be approved by the Minister and Cabinet before the project can proceed.



Frequently Asked Questions

What are the remaining steps in completing the EA study?

Completion of the EA study will be undertaken in a series of nine steps, which are described below. The steps are described fully in the Terms of Reference. We are completing Step 6 at this time

Step listed in Terms of Reference		Description/Explanation
1	Characterize the existing environmental conditions	Complete technical studies (e.g., groundwater, surface water, traffic, air quality, archeology, etc.) on the area. This step is complete. **Complete**
2	Identify the 'Alternative Methods' of landfill expansion	Develop different vertical (higher) and/or lateral (northern or eastern) expansion alternatives. This step is complete. **Complete**
3	Qualitative or quantitative evaluation of 'Alternative Methods'	Determine the potential impact of each of the different expansion alternatives on the study areas. This step is complete. **Complete**
4	Compare the 'Alternative Methods' for landfill expansion and identify the preferred alternative	Select the expansion alternative that has the least overall impact. **Complete**
5	Determine the net effects of the preferred alternative	Detailed assessments will be completed on the potential impacts from the preferred expansion alternative. **Complete**
6	Describe the preferred 'Alternative Method' for landfill expansion	Prepare a detailed description of the preferred expansion alternative and confirm how leachate (water that has contacted garbage) will be managed. **We are currently completing this step and seeking feedback at this open house.**
7	Consideration of climate change	Look at how climate change (e.g. larger rainfall events) may impact the project and how to reduce the project's contribution to climate change.
8	Cumulative Impact Assessment	Consider the cumulative impact of expansion of the W12A Landfill with other facilities or activities in the area.
9	Preparation of the EA Study Report	Prepare the EA Study Report for review by stakeholders.

Where can more details about the Environmental Assessment and the landfill expansion be found?

More information can be found at:

- ***Overview of Proposed W12A Landfill Expansion*** – Companion document to these FAQs.
- **Attend an Open House** – The fourth series of open houses will be held on Wednesday, November 18 and Thursday, November 19, 2020 at the Hellenic Community Centre, 133 Southdale Road West, London. To book an appointment to attend please contact Tracey Lee by phone at (519) 661-CITY (2489) ext. 8413 or by e-mail at tlee@london.ca.
- **Project Website (*getinvolved.london.ca/WhyWasteDisposal*)** – All key documents and technical studies can be found on the project website.

Will there be other opportunities to provide feedback?

In addition to Open House #4 (by appointment only due to the pandemic and gathering restrictions), as shown in the Planning Process figure (page 3), there will be other opportunities to provide feedback during the completion of the EA study, finalization of the EA study report and the government review of the EA study.

Opportunities to provide input and feedback during completion of the EA study will include:

- **Virtual Open House** – will be available online until December 11, 2020 on the project website *getinvolved.london.ca/WhyWasteDisposal*;
- **Project Website (*getinvolved.london.ca/WhyWasteDisposal*)** - will inform the public on the EA process, public engagement activities and solicit comments from the public. Information on how to seek information or ask questions about the environmental assessment by email, phone, virtual meeting or in-person meeting (with appropriate COVID-19 safety measures) will also be posted;
- **Group and Committee Meetings** - to discuss the EA project and provide feedback as applicable; and
- **Circulation of Draft EA** for public feedback prior to finalization and submission to the Ministry of the Environment, Conservation and Parks (MECP) for approval. There will also be a review by the MECP who will ask for feedback from the public after the final EA Study has been submitted.

You will be informed in advance of all key consultation opportunities.

Frequently Asked Questions

What other approvals are required?

If the EA for the proposed expansion of the W12A Landfill is approved by the Minister of the Environment, Conservation and Parks, there are still other regulatory approvals that will be required before the landfill can be expanded. These approvals are:

- **Environmental Protection Act** (design features and operations related to waste management, air and noise)
- **Ontario Water Resources Act** (stormwater management features)
- **Ontario Planning Act** (zoning amendment)
- **Conservation Authorities** (permits for construction may be required)

Questions? Comments?

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Appendix A

The table below lists the studies/investigations that were completed and which alternative is preferred for each study/investigation.

Environmental Component	Environmental Sub-component	Preferred (Overall Result) Alternative 1	Alternative 2	Alternative 3	Public Ranking Group
Atmosphere	Air quality (including dust, odour and LFG)	✓			More Important
	Noise	✓			Less Important
Geology and Hydrogeology	Gound water quality	✓			More Important
Surface Water	Surface water quality	✓			More Important
	Surface water quantity	✓			Important
Biology	Aquatic ecosystems	✓			More Important
	Terrestrial ecosystems	✓			More Important
Land Use Agriculture	Current and planned future land uses	✓			Important
	Agriculture	✓			Important
Archaeology	Archaeology	✓		✓	Less Important
Cultural Heritage	Cultural heritage resources (including built heritage)	✓	✓	✓	Less Important
Socio-economic	Local economic		✓	✓	Important
	Residents and community	✓			More Important
Visual	Visual			✓	Less Important
Transportation	Traffic	✓	✓	✓	Less Important
Design and Operations	Technical considerations			✓	Important
	Financial considerations	✓			Important

(✓ means least impact)