

Frequently Asked Questions and Clarifications on Ground Disturbance and Excavation Works

The purpose of this document is to provide clarity and general guidance on excavations and ground disturbance works adjacent to in-service track(s) within Metrolinx right-of-way. The objective is to clarify distinctions between excavations and ground disturbance, summarize requirements for Geotechnical Engineering Scope and TIG Track inspection for various activities, and facilitate the submission, review, and approval process of Ground Disturbance permits.

Reference Documents:

- [GO Transit Track Standards](#)
- [GO Track Standards Bulletin #008](#)
- [Excavation Zone Calculator](#)
- [Metrolinx Trenchless Utility Works Design and Construction Guidelines](#)

Frequently Asked Questions (FAQ)

1 Where does the Excavation Permit apply?

All ground disturbance work (with the exceptions in item 3) within Excavation Zone 1, 2 or 3 of Metrolinx ROW, as defined in Appendix W of the GO Transit Track Standards (GTTS), requires an approved Excavation Permit. Metrolinx right-of-way is any Metrolinx-owned land on which a railway line is situated, including yard tracks, sidings, and spurs, including up to the fence line or, if there is no fence at a station, up to the furthest platform edge.

2 What is the definition of ground disturbance work and excavation?

Ground disturbance work is classified as mechanical excavation, handdigging, daylighting, caisson and borehole drilling, trenching or grading. This includes any work, operation, or activity that results in a disturbance of the soil mass, whereas an excavation is a type of ground disturbance which is any cut, trench, or depression in the ground surface formed by soil removal.

3 Is there work that would be considered exempt from needing an excavation permit?

- Trenchless works (Jack & Bore, Microtunneling, Pipe Ramming and Horizontal Directional Drilling). However, if the sending and receiving pits are located within Metrolinx right-of-way, a Permit is required;
- Installation of tiebacks on previously excavated shoring walls;
- Backfilling or granular fill placement of previously excavated areas;
- Work on Metrolinx lands outside and adjacent to the Metrolinx right-of-way, including work on municipal rights-of-way, which pass under the Metrolinx right-of-way;
- Excavation works on CN or CP territory.
- Refer to Table 1 for additional details.

4 Do all excavation activities require separate Permits?

One Permit per Work Plan Methodology is required. Work Plan Methodology can include multiple activities.

5 If I have a previously approved work plan, do I need to Stop work, and is an Excavation Permit required?

Yes, excavation work must stop until an excavation permit is approved.

6 Once a permit is submitted, what is the timeline for review/approval?

10 business days (urgent review 2-3 days)

7 How long is the Permit valid for?

A new permit is required following the expiration as shown on the excavation permit. Project Delivery Teams (PDT) and contractors are advised to seek new permits before the existing permit expires. No work is allowed with an expired permit.

8 Is a Permit required for the installation and removal of the monitoring points?

Excavation Permit is not required for shallow in-ground points (up to 1.2 m) installation. However, an Excavation Permit is required to install deep in-ground points within the Metrolinx right-of-way. An excavation permit is not required for the removal of monitoring points. Refer to Table 1 for additional details.

9 Does Fence Post Foundation Installation Require a Permit?

Yes. Refer to Table 1 for additional details.

10 Is a Permit required for lagging installation for shoring walls?

Yes. Refer to Table 1 for additional details.

11 Is a Permit required for the removal of utilities?

No, an Excavation Permit is not required for overhead utilities. If excavation is necessary to remove underground utilities, a Permit is required.

12 Does Backfilling require a Permit?

Backfilling does not require a Permit.

13 Do Works around Bridges and superstructures require a Permit?

Does not require a Permit but must be reviewed by Metrolinx Bridges & Structures.

14 Is daylighting included in the Permit, or will we have to submit a separate Work Plan for it?

Daylighting would require a Permit. However, it can be included in the Work Plan Methodologies when submitted.

15 How do I send heavy files?

WeTransfer or SharePoint is acceptable for larger files.

16 Within the USRC, how is the existing CMO permitting process different from this new excavation permit?

This is a new process. Both EAM and CMO are looking to align these two processes.

17 While backfilling a Zone 3 excavation, what is required from site?

Upon completion of backfilling and prior to cancellation of track protection, a daily report (including relevant photos) on the backfilling activities will be submitted to: track.coe.dept@metrolinx.com. Refer to Table 1 for additional details.

Table 1 clarifies the requirements for Excavation Permits, Geotechnical Engineering Scope, and TIG Inspection for ground disturbance and excavation works to ensure compliance with Metrolinx Requirements and Standards. The table below intends to provide general guidance and clarification only.

Table 1 - Excavation Permits, Geotechnical Engineering Scope, and TIG Inspection requirements

| Ground Disturbance and Excavation Works | Excavation Permit | Excavation Zone (Per GTTS Appendix W) | Geotechnical Engineering Scopes | TIG Inspection (Track Inspection Guidelines) | Additional Comments |
|--|--|--|---|---|---|
| <ul style="list-style-type: none"> • Soil removal using an excavator • Grading work by backhoe/dozer | Required | 1 | Written authorization / design from a Geotechnical Engineer or under onsite Supervision of a Geotechnical Engineer | Not Required | |
| | | 2 | | Required ^Δ | ^Δ A TIG inspector must inspect the track if any track movement or settlement is observed |
| | 3 <i>(Not allowed under train load)</i> | | <ul style="list-style-type: none"> • Written authorization/design from a Geotechnical Engineer • A Geotechnical Engineer or their designate (identified in writing) must supervise the backfilling and compaction work before the passage of the next train. The minimum degree of compaction is 98% SPMDD, and the maximum lift thickness is 6 - 12 inches (150 - 300 mm). | Required | A TIG inspector must inspect the track prior to returning the track in service |

| Ground Disturbance and Excavation Works | Excavation Permit | Excavation Zone (Per GTTS Appendix W) | Geotechnical Engineering Scopes | TIG Inspection (Track Inspection Guidelines) | Additional Comments |
|--|-------------------|--|---|---|--|
| <ul style="list-style-type: none"> • Pile driving including micropiles and helical piles • Installation of Shoring / Lagging • Caisson and Secant Pile drilling, and soil stabilization work (including soil nails) | Required | 1 | Geotechnical Engineering design required | Not Required | |
| | | 2 | | Required ¹ | |
| | | 3 <i>(Not allowed under train load)</i> | | Required ¹ | |
| Trenchless drilling | Not Required | All zones | Geotechnical Engineering design required | Not Required | An excavation permit is ONLY required for sending and receiving pits located within the Right-of-Way. |
| <ul style="list-style-type: none"> • Borehole drilling • Installation of Deep-in-Ground Monitoring Points (DIMP) <i>(Deeper than 1.2 m below ground surface)</i> | Yes | 1 | Geotechnical Engineering design or written direction required | Not Required | |
| | | 2 | | | |
| | | 3 | <ul style="list-style-type: none"> • Geotechnical Engineering design or written direction required • A written geotechnical authorization is required to drill in zone 3 under train load | Required* | * Boreholes located within the track infrastructure will require a TIG inspection. |

| Ground Disturbance and Excavation Works | Excavation Permit | Excavation Zone (Per GTTS Appendix W) | Geotechnical Engineering Scopes | TIG Inspection (Track Inspection Guidelines) | Additional Comments |
|---|-------------------|--|--|---|---------------------|
| Interconnected Hydrovac holes that form a trench | Required | 1 | Not Required | Not Required | |
| | | 2 | Written authorization/design from a Geotechnical Engineer or under onsite Supervision of a Geotechnical Engineer | Required ¹ | |
| | | 3 <i>(Not allowed under train load)</i> | | | |
| <ul style="list-style-type: none"> Single / Spot Hydrovac hole <i>Diameter not larger than 12 inches (305 mm)</i> Fence Post Foundation | Required | 1 | Not Required | Not Required | |
| | | 2 | | Required ¹ | |
| | | 3 <i>(Not allowed under train load)</i> | | | |
| Hand Digging using shovel | Required | 1 | Not Required | Not Required | |
| | | 2 | | Required ¹ | |
| | | 3 <i>(Not allowed under train load)</i> | | | |
| <ul style="list-style-type: none"> Stakes U-post Installation by driving Decommissioning of monitoring points (shallow and deep) | Not Required | All Zones | Not Required | Not Required | |
| Track and Signalling work, limited to any activity that disturbs only the ballast section | Not Required | All zones | Not Required | Required | |

¹ TIG inspection is only required if the excavation and ground disturbance work is proposed within the track infrastructure (including ballast section) or has potential impacts to the track.