

New Sanitary Sewer on Fair Birch Drive and Birchview Drive in the City of Mississauga

Online Public Engagement / Public Information Centre (PIC) #2
September 2020

Welcome!

The purpose of this Online Public Engagement is to:

- Provide a project overview and explain why the project is being undertaken.
- Review the construction phasing, schedule, work areas and traffic management.
- Explain what to expect during construction.
- Provide information on impacts to trees and site restoration following construction.

Project Overview

Why is the Fair Birch and Birchview Sanitary Sewer Project taking place?

- A Schedule 'B' Municipal Class Environmental Assessment (EA) Study was completed in 2019 for sanitary sewer improvements on Fair Birch Drive, Birchview Drive, Queen Victoria Avenue and Lorne Park Road. These improvements are required to **address aging and deteriorating sanitary sewer infrastructure and to relocate sanitary sewers to be more accessible for maintenance.**
- The EA Project File Report can be viewed and downloaded from the Region of Peel website:

<https://www.peelregion.ca/pw/water/environ-assess/pdf/042560-fair-birch-EA-PFR.pdf>

Project Overview

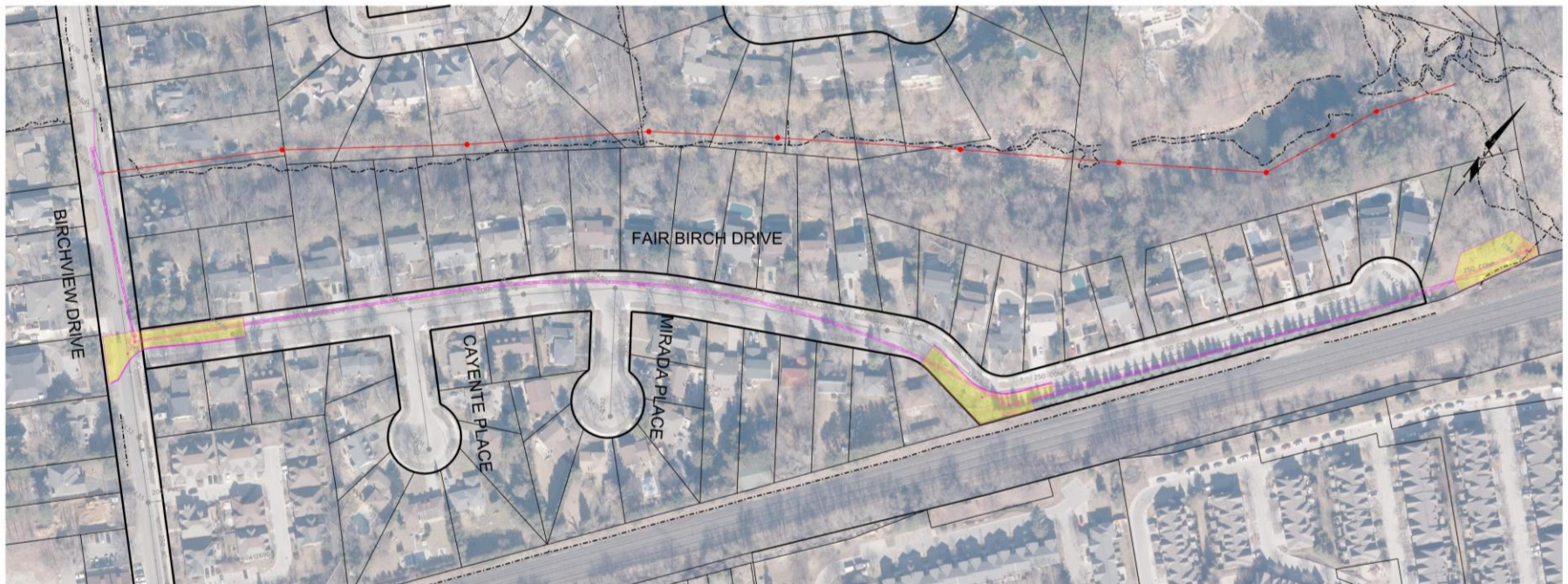
Preferred Alternative

- The preferred alternative, as identified in the EA and subsequently refined in detailed design, is to:
 1. construct a new deep sanitary sewer along Birchview Drive and Fair Birch Drive, and
 2. abandon the existing sanitary sewer that runs through rear-yard easements north of Fair Birch Drive.










Project Overview

- The Region of Peel will be working in your neighbourhood to install new sanitary sewer pipes and maintenance holes to collect wastewater and direct it to the treatment plant. Specifically, we will be installing the following:
 - New 1200mm diameter sanitary sewer by microtunnelling on Fair Birch Drive from Birchview Drive to the end.
 - Temporary microtunnel launching shaft and compound on Fair Birch Drive.
 - Temporary microtunnel receiving shaft and compound at Fair Birch Drive/ Birchview Drive intersection.
 - Temporary microtunnel receiving shaft and compound at Fair Birch Parkette.
 - New 300mm diameter sanitary sewer by microtunnelling (or an alternative trenchless method) on Birchview Drive from Fair Birch Drive to approximately 100m north of Fair Birch Drive.
 - Existing utilities (Alectra and Bell) at the intersection of Birchview Drive and Fair Birch Drive will be relocated in the Fall of 2020 / Winter 2021 in advance of the sanitary sewer construction.

Project Overview



LEGEND:

- | | | | | | | | |
|---|---------------------------|---|---|---|---------------------------|---|-----------------------------|
|  | EXISTING SANITARY MANHOLE |  | EXISTING SANITARY MANHOLE - TO BE ABANDONED |  | PROPOSED SANITARY MANHOLE |  | PROPOSED SHAFT SITE |
|  | EXISTING SANITARY SEWER |  | EXISTING SANITARY SEWER - TO BE ABANDONED |  | PROPOSED SANITARY SEWER |  | PROPOSED TEMPORARY COMPOUND |
| | | | | | |  | WATER COURSES |

Project Overview

- The proposed deep sanitary sewer on Birchview Drive and Fair Birch Drive will be constructed primarily by microtunnelling (a trenchless method) to minimize impacts to the surrounding area; however temporary compounds or working areas will be required where the microtunnelling machines are launched and received and where connections to existing sewers are made.
- There are 4 proposed temporary compounds or working areas required to facilitate the construction of the sanitary sewers (refer to the photo of a typical temporary microtunnel compound in a residential neighbourhood shown on the next slide)
- Construction is anticipated **beginning in Spring 2021 and ending in Winter 2022.**
- No sanitary sewer construction work is proposed on Queen Victoria Avenue or Lorne Park Road at this time.

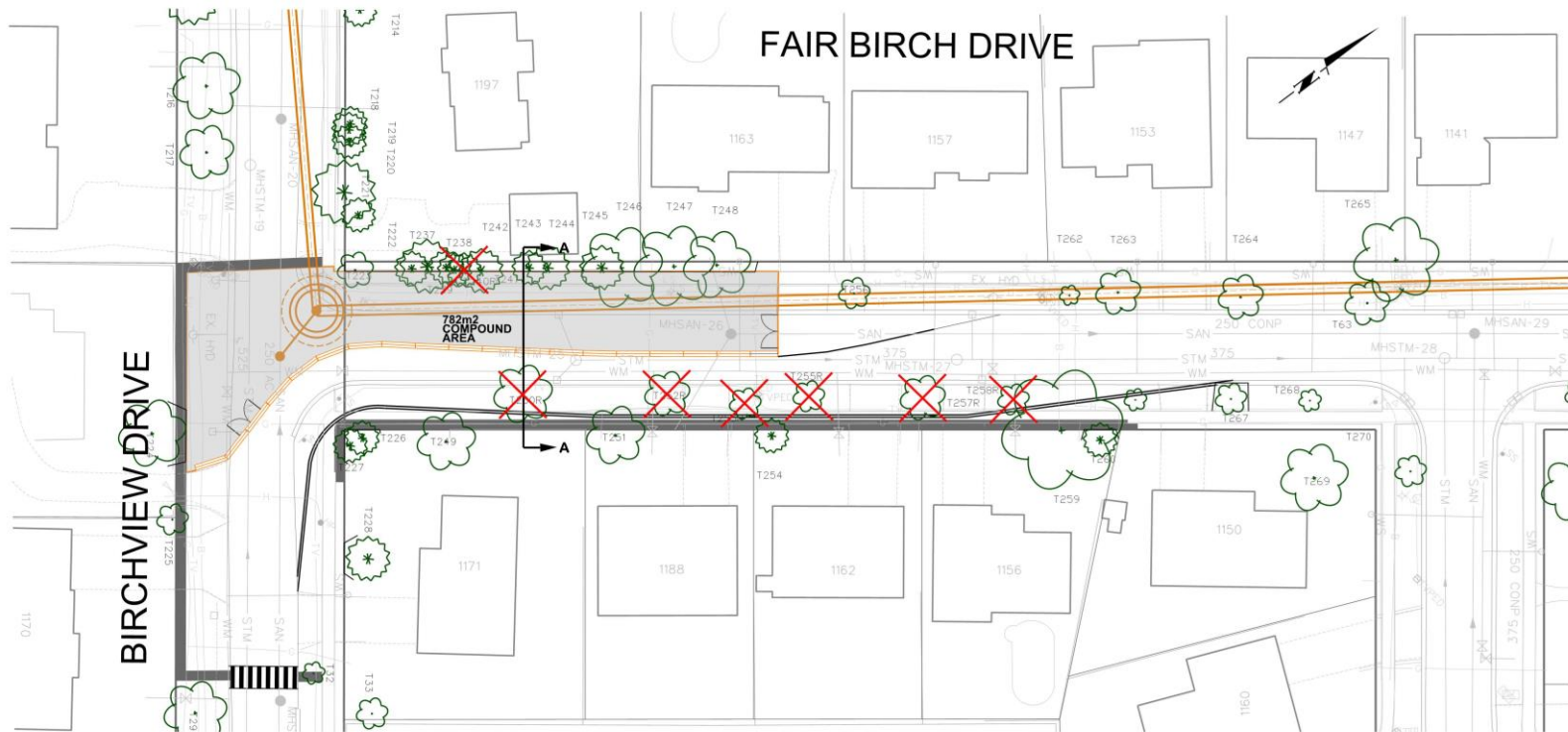
Example of Temporary Compound for a Microtunnelling Receiving Shaft












Temporary Compound at Birchview Drive & Fair Birch Drive

- Construction of a temporary receiving shaft and compound (i.e., working area) will be required at the intersection of Birchview Drive and Fair Birch Drive.
- The temporary compound will be fully enclosed with 2.4m high hoarding and will allow for a construction working area of approximately 800m².
- **A temporary road closure of approximately 8-9 months will be required along Birchview Drive** in the north/south direction at Fair Birch Drive.
- The road will be temporarily widened into the south boulevard of Fair Birch Drive to maintain two lanes of traffic on Fair Birch Drive at the intersection. **Access to Fair Birch Drive will be from Lorne Park Road via Birchview Drive.**
- Some boulevard trees will be removed to facilitate the construction. Tree impacts and restoration will be discussed later in this presentation.

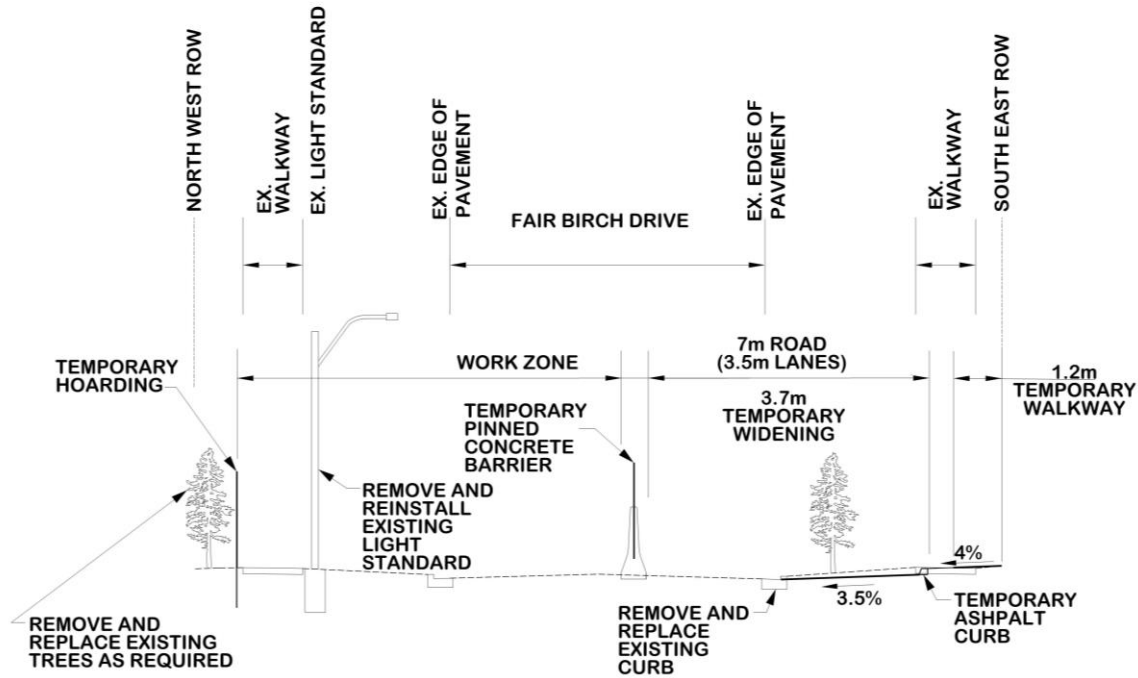
Temporary Compound at Birchview Drive & Fair Birch Drive



LEGEND:

-  TEMPORARY HOARDING
-  TEMPORARY CURB
-  TEMPORARY COMPOUND AREA
-  PROPOSED SANITARY
-  TEMPORARY MICROTUNNELLING SHAFT
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY WALKWAY
-  TEMPORARY CROSSWALK
-  TREE TO BE REMOVED

Temporary Cross Section A-A on Fair Birch Drive

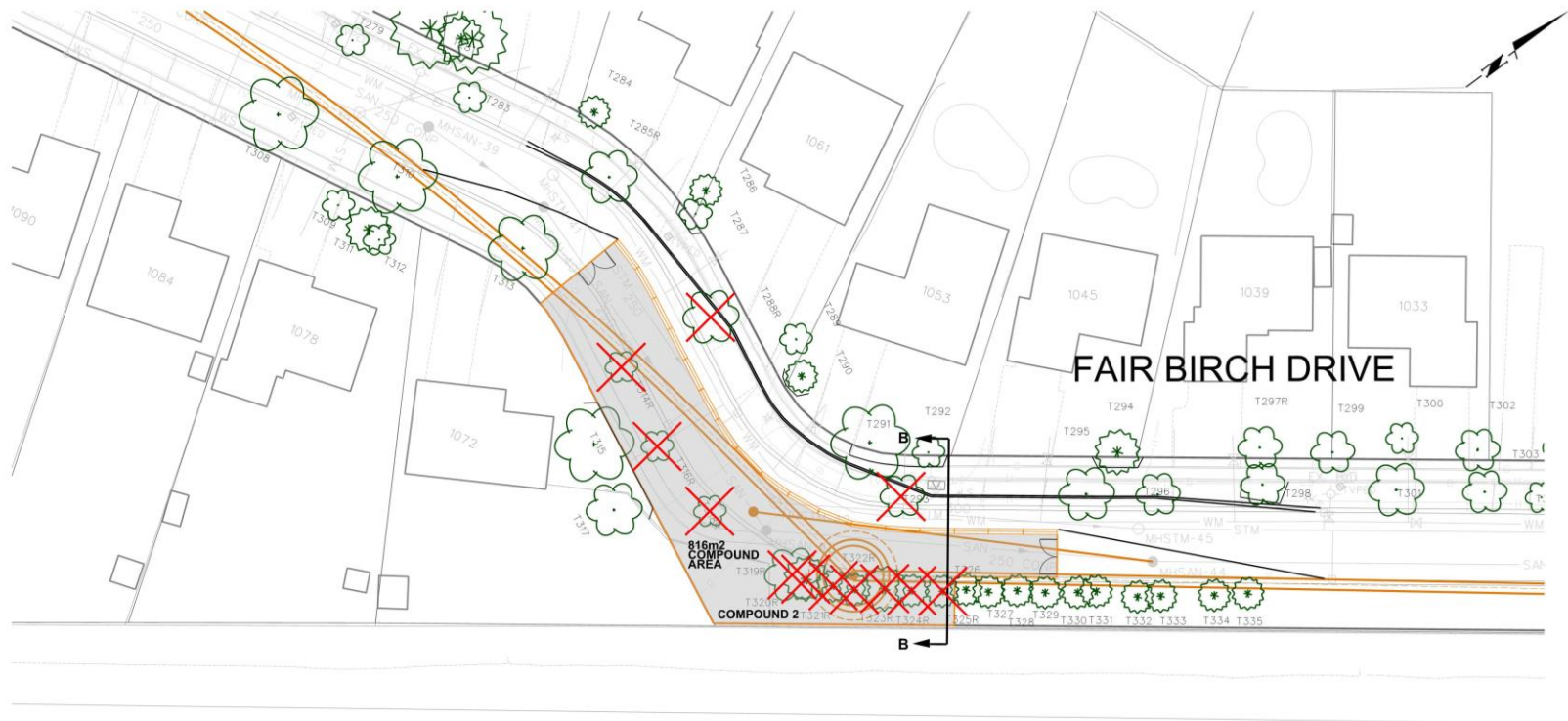


SECTION A-A








Temporary Compound on Fair Birch Drive

- Construction of a temporary launching shaft and compound (i.e., working area) will be required at the 'S' bend of Fair Birch Drive.
- The temporary compound will be fully enclosed with 2.4m high hoarding and will allow for a construction working area of approximately 800m².
- The compound is anticipated to remain in place for approximately 9-12 months.
- The road will be temporarily widened into the north boulevard of Fair Birch Drive to **maintain one lane of traffic on Fair Birch Drive** at this location. Residents and visitors driving the route will need to exercise caution through this area by reducing their speed.
- Some boulevard trees will be removed to facilitate construction. Tree impacts and restoration will be discussed later in this presentation.

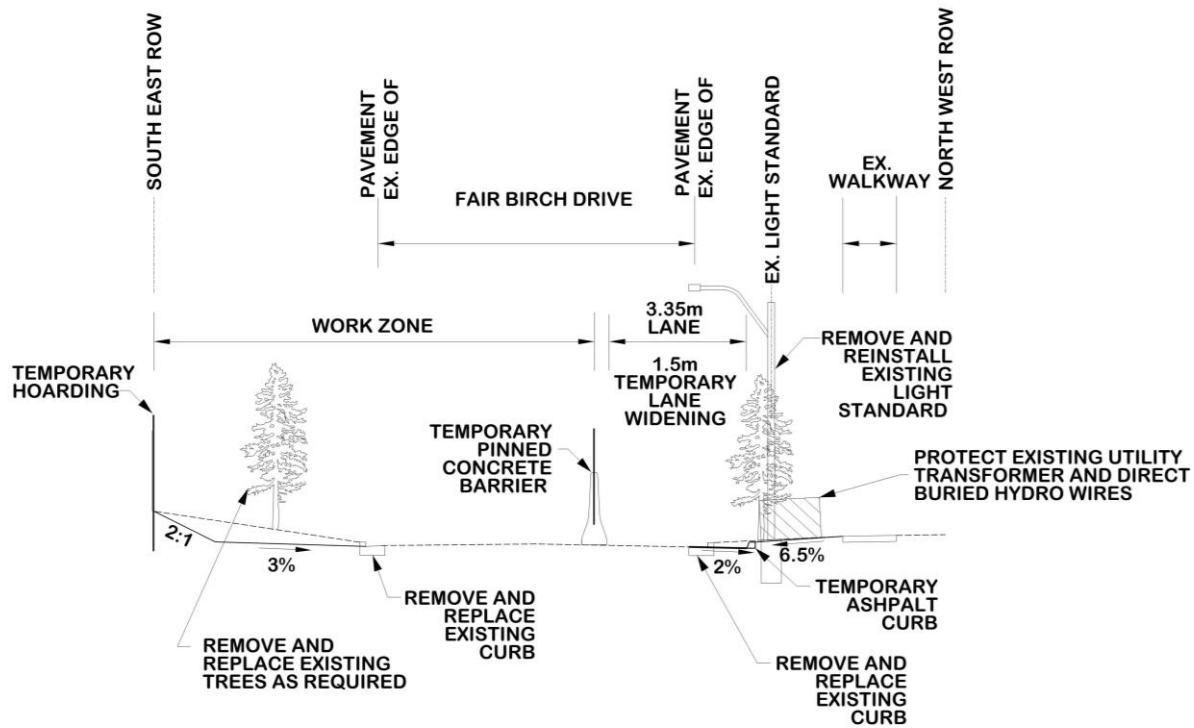
Temporary Compound on Fair Birch Drive



LEGEND:

-  TEMPORARY HOARDING
-  TEMPORARY CONCRETE BARRIER
-  PROPOSED SANITARY
-  TEMPORARY CURB
-  TEMPORARY COMPOUND AREA
-  TREE TO BE REMOVED
-  TEMPORARY SHAFT

Temporary Cross Section B-B on Fair Birch Drive



SECTION B-B

Temporary Compound in “Parkette” at End of Fair Birch Drive

- Construction of a temporary receiving shaft and compound (i.e., working area) will be required in the Fair Birch Drive Parkette.
- The temporary compound will be fully enclosed with 2.4m high hoarding and will allow for a construction working area of approximately 650m². The compound is anticipated to remain in place for approximately 6-8 months.
- Some trees will be removed to facilitate the construction. Tree impacts and restoration will be discussed later in this presentation.

Temporary Compound in “Parkette” at End of Fair Birch Drive

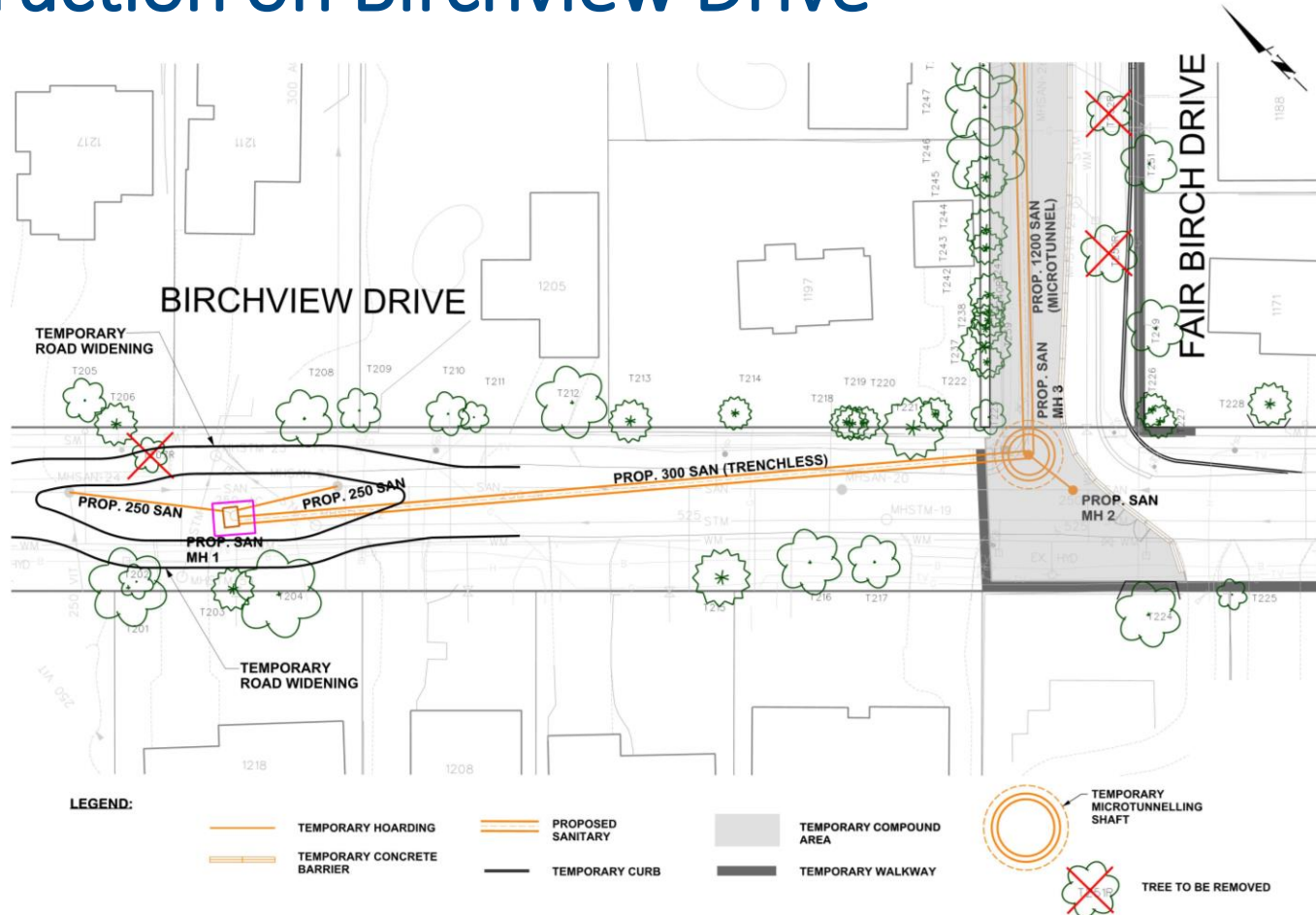


- LEGEND:**
- TEMPORARY HOARDING
 - PROPOSED SANITARY
 - TEMPORARY COMPOUND AREA
 - X
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R TREE TO BE REMOVED
 - TEMPORARY SHAFT

Temporary Working Area and Open-Cut Construction on Birchview Drive

- This location will involve both trenchless and open-cut sanitary sewer construction. Construction is generally within the centre of the paved road at the location of SAN MH 1 (refer to figure, next slide).
- As noted earlier, Birchview Drive at Fair Birch Drive will have a temporary full road closure in the north/south direction for 8-9 months to allow for the construction of the shaft and compound at the intersection. Birchview Drive north of the temporary work compound will be “Closed – Local Traffic only” to allow driveway access for residents.
- It is expected that temporary driving lanes may be provided within the boulevard around the work area at SAN MH 1 on Birchview Drive. Tree impacts and restoration details will be discussed later in this presentation.

Temporary Working Area and Open-Cut Construction on Birchview Drive



Easement Sewer Abandonment

- The existing sanitary sewer located within rear-yard easements north of Fair Birch (between Birchview Drive and the Lornewood Creek trunk sewer to the east) will be abandoned.
- The abandonment work includes the use of small construction equipment and manual labour to fill the pipe, break down each maintenance hole below the surface, and fill and restore the immediate area.
- The abandonment work is anticipated to take place through the Winter 2022 when the ground is frozen in order to minimize disturbance to the area.
- Trees will be protected during the work. Tree pruning may be necessary.

Anticipated Construction Schedule

- Alectra and Bell will relocate utilities at the intersection of Birchview Drive and Fair Birch Drive in advance of the sanitary sewer construction. Residents will be notified by Alectra/Bell in advance of utility relocation work, which is anticipated to take place in Fall 2020 or Winter 2021.
- The construction contract for the sanitary sewer work will be tendered in Winter 2021.
- Construction of the Fair Birch Sanitary Sewer is anticipated to begin in Spring 2021 and be completed by Winter/Spring 2022.
- Abandonment of the easement sewer between Birchview Drive and the Lornewood Creek trunk sewer is anticipated to take place in the Winter 2022.

What to Expect During Construction

- The Region of Peel will let you know if there are any major changes to the plans.
- We will try to disturb you as little as possible.
- Please call the Project Manager if you have any concerns or special needs.
- You may experience low to moderate dust and noise, temporary road detours and other inconveniences.
- Where possible, work will be phased to minimize traffic disruption in the area.
- Pedestrian and vehicular access to houses will always be maintained.
- The Contractor will be required to employ pest control to ensure that working areas remain pest-free throughout construction.
- The Region of Peel provides a safe environment that conforms to the Occupational Health and Safety Act at all times.
- The Region will make efforts to reduce the impacts. We appreciate your patience.

Physical Distancing

- There are times when the Project Team and/or Contractor may need to communicate with homeowners about what is happening on-site. This could be about driveway access, exterior pre-construction inspections, site restoration work (landscaping, installing pavers, etc.) or other aspects.
- Contractor's staff will be identifiable by their high-visibility clothing. At times, the Contractor may knock on your door, but will then step away to provide the necessary distance to discuss the work that is taking place and what can be expected that day.
- Please practice physical distancing with workers so everyone can remain safe.

Pre-Construction Inspection

- The Contractor will survey all properties within 30m of the construction area before construction starts.
- **Participation in the survey is voluntary**; however, participating is important to establish a baseline against which to later compare and identify any damage that have been caused by construction activities.
- The inspection will look at the exterior of all properties to verify existing conditions. The inspection company will deliver a separate notice requesting a time to set up appointments for interior inspections, if permitted.
- All **inspection staff will carry photo identification** and will use photographic equipment during their work.

Tree Impacts, Removals, Pruning

- Effort will be made to preserve vegetation and trees on private property wherever possible.
- Some publicly owned trees require removal in the vicinity of the temporary compound areas identified earlier.
- The trees which have canopies that lie over proposed excavations may need to be removed as tree survival and sustainability is compromised due to impacts to the tree roots.
- No trees will be removed without consent from the City of Mississauga.
- Following construction, trees will be planted in compensation for trees that were removed. Compensation planting will in accordance with the City and Credit Valley Conservation guidelines.
- Certain street trees may be replaced with large native trees using a tree spade.
- Boulevard will be sodded and landscaped to the City's standards.
- If you have any questions with respect to tree removal and restoration, please contact the Region's Project Manager.

Tree Impacts, Removals, Pruning

- The Consultant has completed a detailed tree inventory for all City owned trees and some privately owned trees along property line and City property.
- Mitigative tree protection fencing will surround vulnerable vegetation during construction.
- If tree branches within the right-of-way interfere with construction, the trees will be pruned before construction equipment enters the drip line of the tree.
- If tree branches from trees on private property interfere with construction, they will be tied back or pruned back to the nearest suitable trunk, crotch or branch. The Contractor **will ask you for permission** before tying back or cutting any branches on private property.

Road, Sidewalk and Driveway Access

- In order to complete the work in a safe manner, there will be road and sidewalk restrictions within the construction work zone.
- **Access for emergency vehicles will always be maintained.**
- The Contractor will notify you of any temporary restrictions to your driveway access.
- Residents who require accessible accommodation (level entry, longer notice, etc.) are requested to contact the Region's Project Manager prior to construction to arrange for access during the construction period.

Noise and Vibration Monitoring

- During construction, the Contractor will be required to implement a program to monitor and ensure that noise and vibration from construction activities does not exceed applicable limits. This will involve a Third Party setting up temporary monitoring equipment in the vicinity of the work area to record the noise and vibration (refer to the photo of typical noise and vibration monitoring equipment on the next slide).
- The Contractor will be required to employ effective noise control techniques during construction (including use of mufflers, intake silencers, acoustic attenuating shields, etc.) for all equipment and trucks to reduce construction noise impacts.

Typical Noise & Vibration Monitoring Equipment



Working Hours

- The Contractor's normal working hours are anticipated to be from 7 a.m. to 7 p.m. These hours are consistent with the City's By-laws. We understand this may cause some inconvenience, but a shorter working day would mean the project would take longer to complete.
- It is typically preferable for microtunnelling work to proceed on a continuous basis, 24 hours a day, 7 days a week. Working in this manner reduces the need to stop and start the tunneling operations, which in turn reduces the risk of the microtunnelling machine getting stuck. The need for 24-hour microtunnelling may be considered at the time of construction and would require that the Contractor apply for a Noise By-law Exemption. "After-hours" work would be limited to microtunnelling activities only.

Garbage & Recycling

- Your garbage, recycling and organics containers will be picked up on your regularly scheduled collection day. It is the Contractor's responsibility to move your containers to a location where our collection vehicles can pick them up, if necessary.
- Empty containers will be returned to their related address so please ensure your house number is clearly marked on each bin.

Restoration

- Road and boulevard restoration will take place when underground construction is complete and as weather permits.
- The construction work area will be restored with sod, asphalt and/or concrete where required. Interlocking bricks, flagstone on a granular base, or other similar features that are removed from public and private property during construction will be replaced.
- Sod will be replaced in areas of disturbance in the boulevard. Laying of sod will be done as needed during ideal growing seasons only - in the Spring (April to June) and Fall (September to October).
- The Contractor will take care of watering replacement sod for 30 days. You can help the sod to stay healthy by watering it for one hour in the early morning, two or three times a week. This is especially important in hot or dry weather.

Questions? Comments?

Have questions or comments? Please let us know!

- Submit questions or comments to the Region's Project Manager

Sarah Lobo, P. Eng.

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Conveyance, Region of Peel

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- Please provide your feedback before October 16, 2020.