

Ontario Line

Exhibition Station

Construction Liaison Committee

November 13, 2024

 METROLINX



Agenda

Welcome

- Land Acknowledgement
- Ontario Line & Exhibition Station Overview

Presentation

- Action Items
- Community Safety
- Atlantic Avenue & Station Access
- Update on Exhibition Station Construction
- Rail Corridor Works
- Traffic Management Update
- CLC Terms of Reference

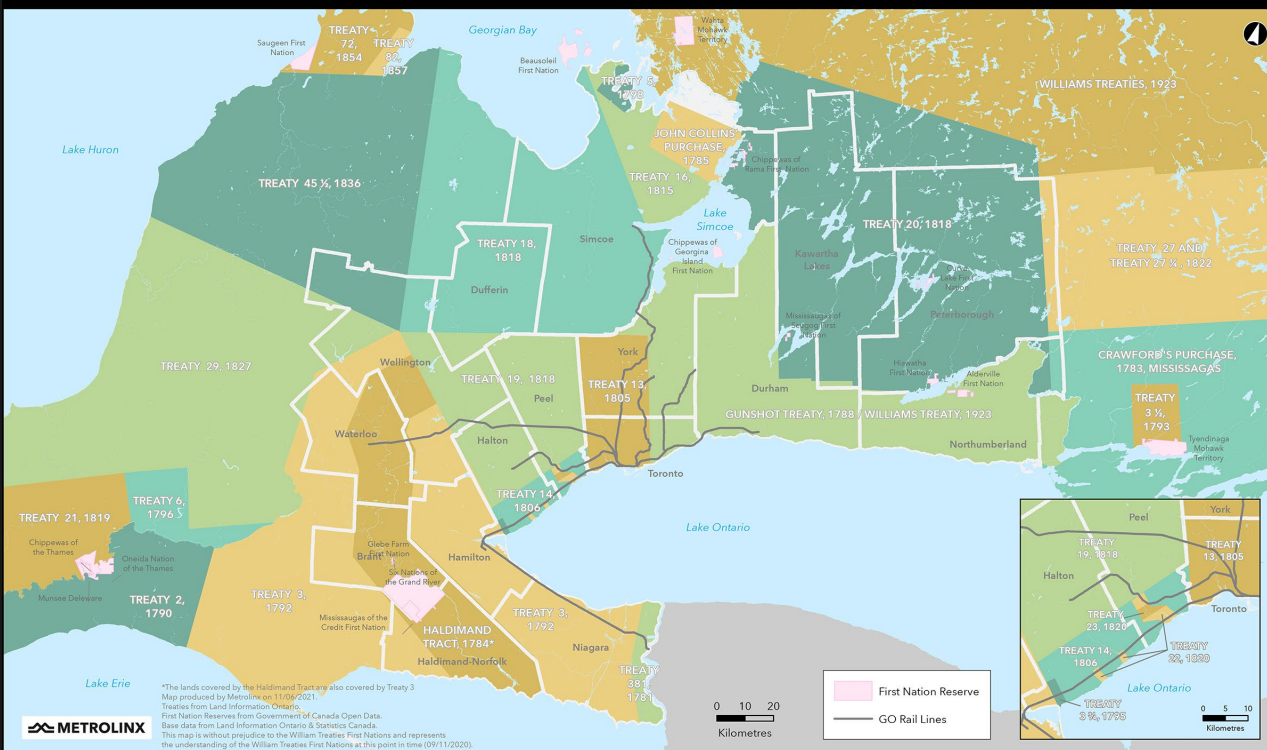
Q/A and Discussion

EXHIBITION CONSTRUCTION LIAISON COMMITTEE - NOVEMBER 2024



LAND ACKNOWLEDGEMENT

Treaties and Reserves in the Greater Golden Horseshoe



Let us take a moment to acknowledge we are on lands that have been, and continue to be, home to many Indigenous Peoples including the Anishnabeg, the Haudenosaunee and the Huron-Wendat peoples.

We are all Treaty people. Many of us have come here as settlers, as immigrants or involuntarily as part of the trans-Atlantic slave trade, in this generation, or generations past.

We acknowledge the historic and continued impacts of colonization and the need to work towards meaningful reconciliation with the original caretakers of this land.

We acknowledge that Metrolinx operates on territories and lands covered by many treaties that affirm and value the rights of Indigenous communities, Nations and Peoples.

We understand the importance of working towards reconciliation with the original caretakers of this land. At Metrolinx, we will conduct business in a manner that is built on a foundation of trust, respect and collaboration.

SAFETY MOMENT - COMMUNITY SAFETY AROUND CONSTRUCTION

As the work continues to deliver the Ontario Line, numerous safety protocols for trucks have been implemented across the various work sites, throughout Liberty Village, to keep pedestrians, cyclists and vehicles safe:

- Traffic control flag persons are present at construction vehicle entry and exit points (gates) to give verbal and hand signals to approaching & exiting trucks.
- Constant communication with other traffic control persons using radio, coordinating vehicle movements.
- Speed limit signs (10km/hr) that are posted and displayed at gates.
- Ongoing briefing with delivery truck companies to follow site safety requirements when entering and exiting.
- More signs will be posted regarding speed limits and construction hazards for the public awareness.
- **As a pedestrian or cyclist, be aware of vehicles and look both ways.**



Liberty Village, looking east from East Liberty Street and King West Laneway.



Traffic control person aiding pedestrians

CLC ACTION ITEMS

#	ACTION ITEM	RESPONSE	STATUS
1	Investigate noise from piling machines	<p>In early October, a series noise complaints were received in relation to the ongoing piling work, near the portal work area. This noise was caused by piling machines being redirected to different locations, working on removal of buried caissons from the Ontario Line work zone.</p> <p>This was a one-off event and was completed as quickly as possible. Piling machines have resumed their normal activities and locations.</p>	Complete
2	Host an information session at 15 Solidarity Way	In October, Metrolinx conducted a pop-up at 15 Solidarity Way, to engage and inform residents regarding Ontario Line construction, to provide contact information, and to act as general Q/A on Ontario Line delivery.	Complete
3	Provide update on station naming convention	<p>Exhibition Station has been in existence since the late 1960s and is well known to our valued customers and users who use the station to access large events at Exhibition Place. This station will also become a future interchange terminus station for the future Ontario Line.</p> <p>So, the Exhibition Station is not recommended to go through the Ontario Line station re-naming process; there may be future opportunities to seek community feedback on station naming.</p>	Complete
4	Update on traffic management	An overview and response will be provided at this CLC session.	Complete

Ontario Line

Exhibition Station: Construction Update



UPDATE: ATLANTIC AVENUE LAYOUT CHANGE & STATION ENTRANCE

- **A new entrance to Exhibition GO has officially opened.**
- The new entrance can be accessed from the east side of Atlantic Avenue, north of the former station access point, **marked by new wayfinding signage.**
- The **southern foot of Atlantic Avenue, has been closed** to accommodate an expanded Ontario Line construction zone, operating in parallel with the railway.



Left: Overview of the new layout



Right: Exhibition Station temporary pedestrian bridge, looking east.

UPDATE: EXHIBITION STATION ENTRANCE OVERVIEW



UPDATE: EXHIBITION STATION

- As a complementary component of the Atlantic Avenue closure, the **new pedestrian bridge and extended tunnel** are officially open.
- The bridge and tunnel now ensure **added capacity** at Exhibition for commuters and pedestrians, especially during events.
- The **new tunnel extension is accessible**, with an elevator available on the Atlantic Avenue entrance, and the Manitoba drive exit.



Exhibition Station temporary pedestrian bridge, looking east.

UPDATE: SOUTH LIBERTY TRAIL SILO STORAGE

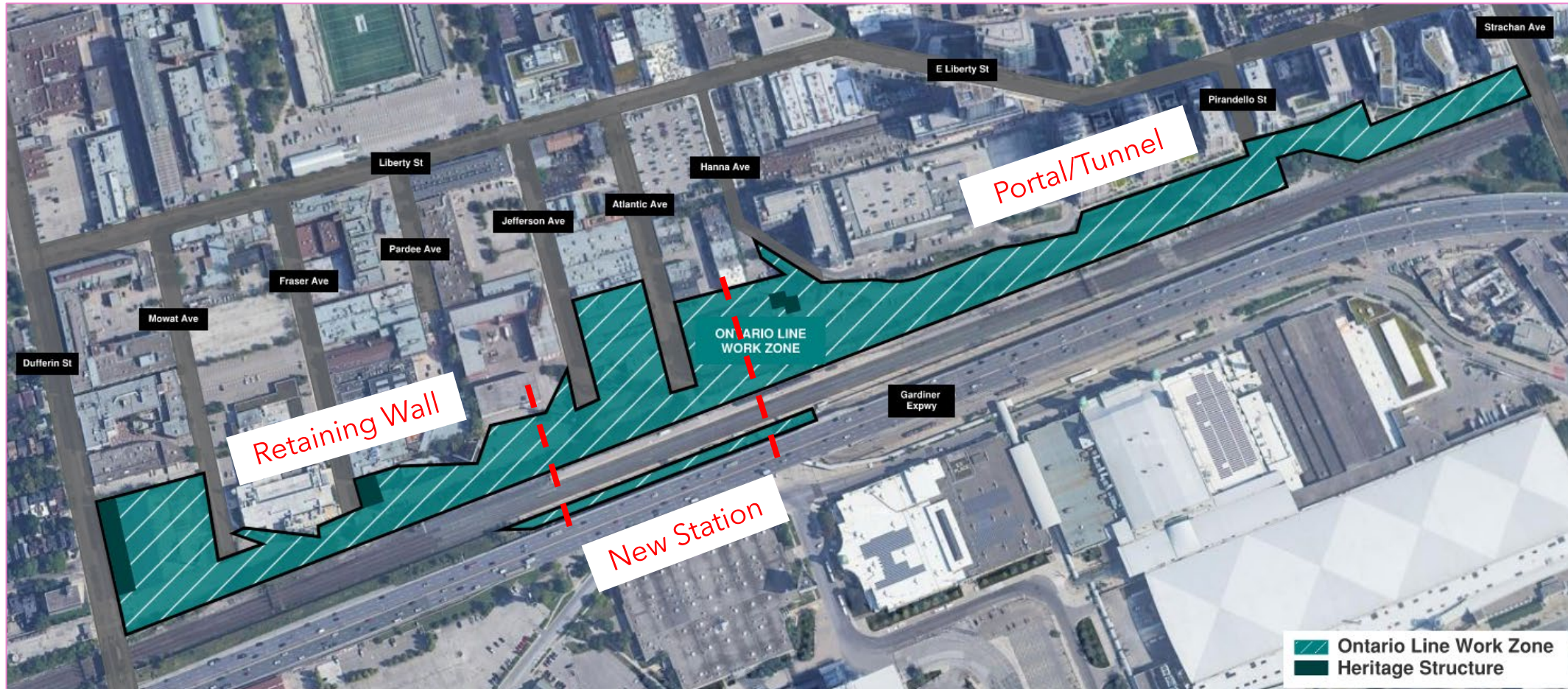
- As Ontario Line construction progresses and the landscape surrounding the future subway & Exhibition Station evolves, the artwork-adorned silos along the former South Liberty Trail are being removed for the time being.



An example of one of the existing silos with community art, being stored during construction.

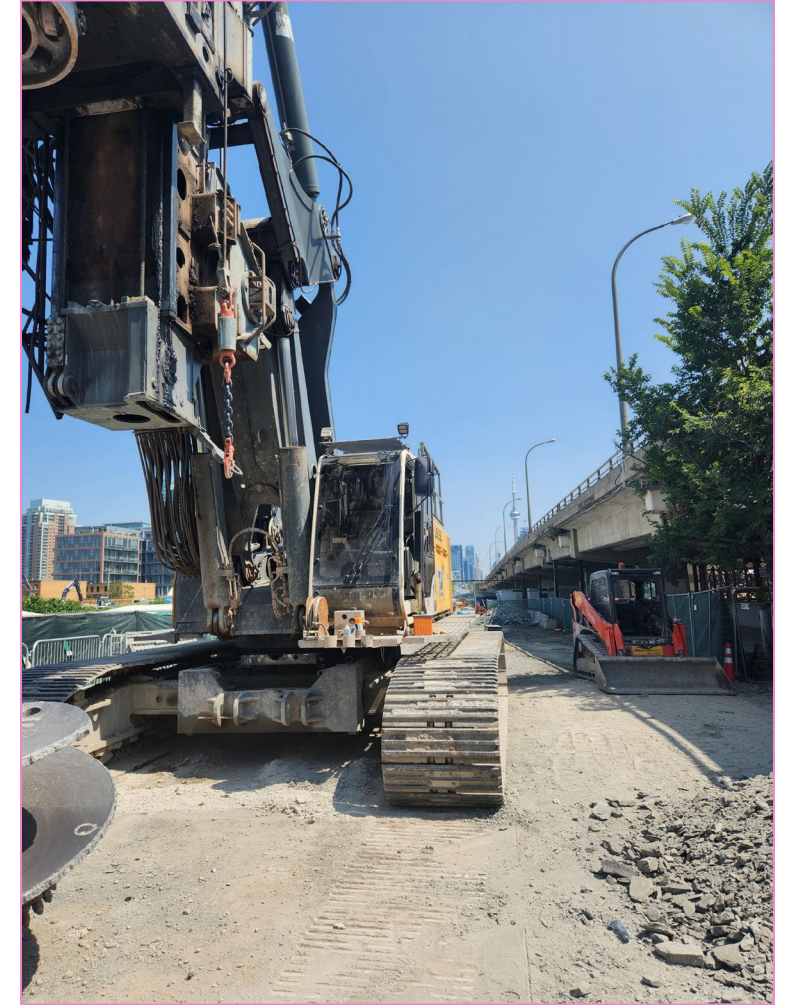
ONTARIO LINE WORK ZONE AT EXHIBITION/LIBERTY VILLAGE

To enable the Ontario Line to be built at Exhibition, construction works are **operating in a linear work zone parallel to the GO Transit Lakeshore West tracks**, south of Liberty Village from Strachan Avenue to Dufferin Street, where the future Ontario Line will exist.



COMPLETED WORK: UTILITIES RELOCATION UNDER THE RAILWAY

- **To build the future station entrance between Atlantic Avenue and Jefferson Avenue, underground Toronto Hydro utilities had to be moved slightly west.**
- On the west end of the site, two new shafts were created on either side of the railway with a connecting tunnel to relocate utilities under the railway.
- The utilities have been relocated away from construction and will now be available for the new south and north station buildings at Exhibition.
- This work was completed without disrupting any existing GO, VIA or Amtrak passenger service.



Left: Looking up the bottom of the north cable chamber, Right: a drill rig on site at the south side shaft.

COMPLETED WORK: ONTARIO LINE PORTAL PILING PROGRESS & EXCAVATION

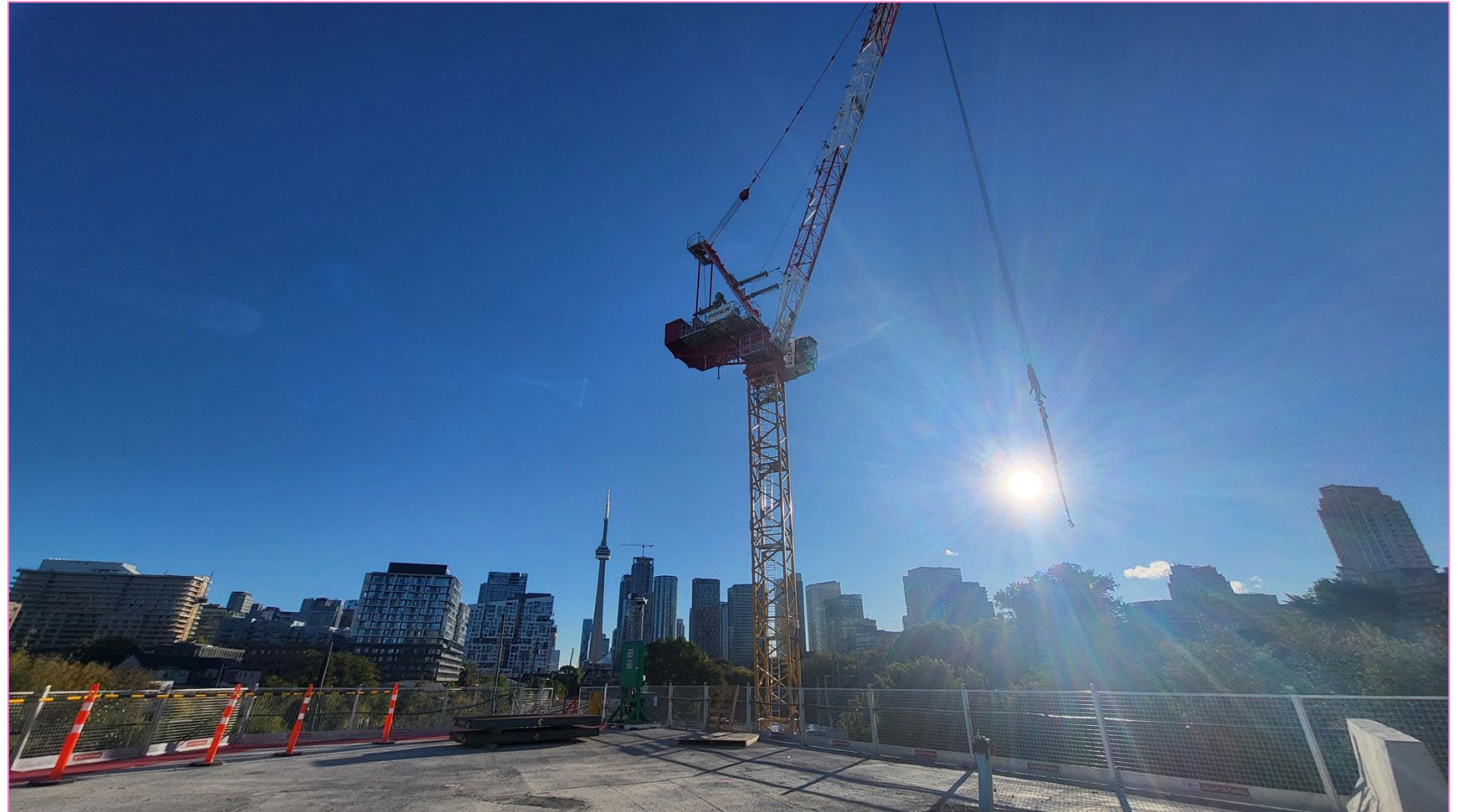
- **Piling is complete at the future portal location.**
- This work ensures the ground is level and reinforced, in advance of excavation and tunneling.
- **Crews will now begin excavation of the portal**, creating the future entry point for tunnel boring machines and eventually, Ontario Line trains.



Piling to reinforce the ground to ensure structural integrity for excavation and foundations.

ONGOING WORK: ORDNANCE PARK EMERGENCY EXIT BUILDING (EEB) PROGRESS

- East of Liberty Village, excavation work is underway at Ordnance Park, enabling the construction of the future Ontario Line emergency exit building (EEB) to be constructed.
- Secant pile works were completed in late August.
- An installed tower crane will support excavation of the future emergency exit building.



The new tower crane at Ordnance Park, supporting excavation for the future emergency exit building

ONGOING WORK: NORTH HEADHOUSE & STATION BUILDING PILING

- Between Atlantic Avenue and Jefferson Avenue at the south end of Liberty Village and north of the railway, land for the future home of the Exhibition GO station building has been graded and prepared for piling.
- Piling work is underway, building the foundation for the future station building site.
- Once piling is done a concrete base will be poured.
- A tower crane is expected to be delivered and installed on site by early 2025, to support future excavation works.



Graded land between Atlantic Avenue and Jefferson Avenue, looking south.

ONGOING WORK: ISLAND PLATFORM WORKS - EXHIBITION STATION

- Construction is underway to create the new station foundations and platforms, between the existing rail tracks at the existing Exhibition station.
- The first new concrete base platform has been installed. This “island” platform will eventually serve as one of four new platforms to be constructed:
 - 2 new platforms for GO Transit
 - 1 new Ontario Line subway platform
 - 1 shared platform for GO Transit and Ontario Line subway



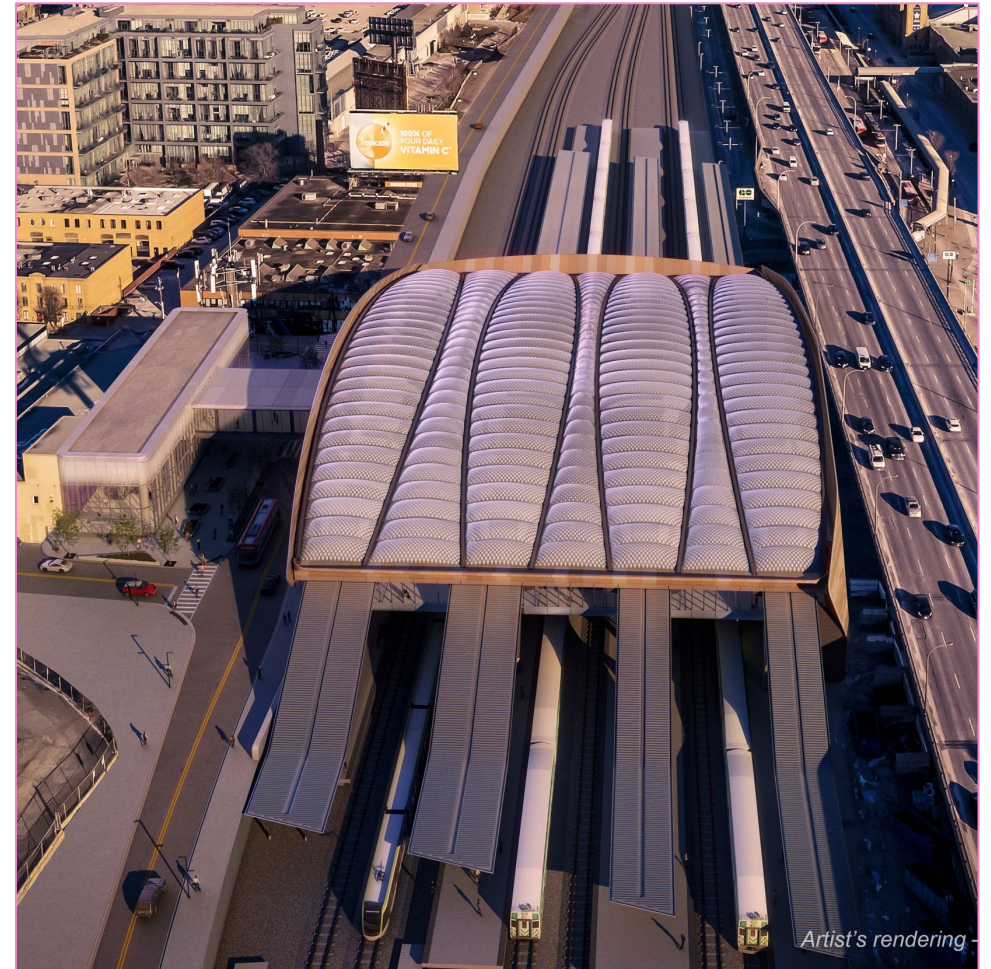
Platform foundation grading and foundational early works at Exhibition Station.

ONGOING WORK: EXHIBITION STATION ISLAND PLATFORM WORK

Extended works are planned during an existing upcoming GO Lakeshore West track closure period. A series of rail closures and schedule changes will occur over 4 consecutive weekends, starting in late November (weekend of November 30) and running up to four weekends ending December 21.

Information on GO train service during this time is available through gotransit.com.

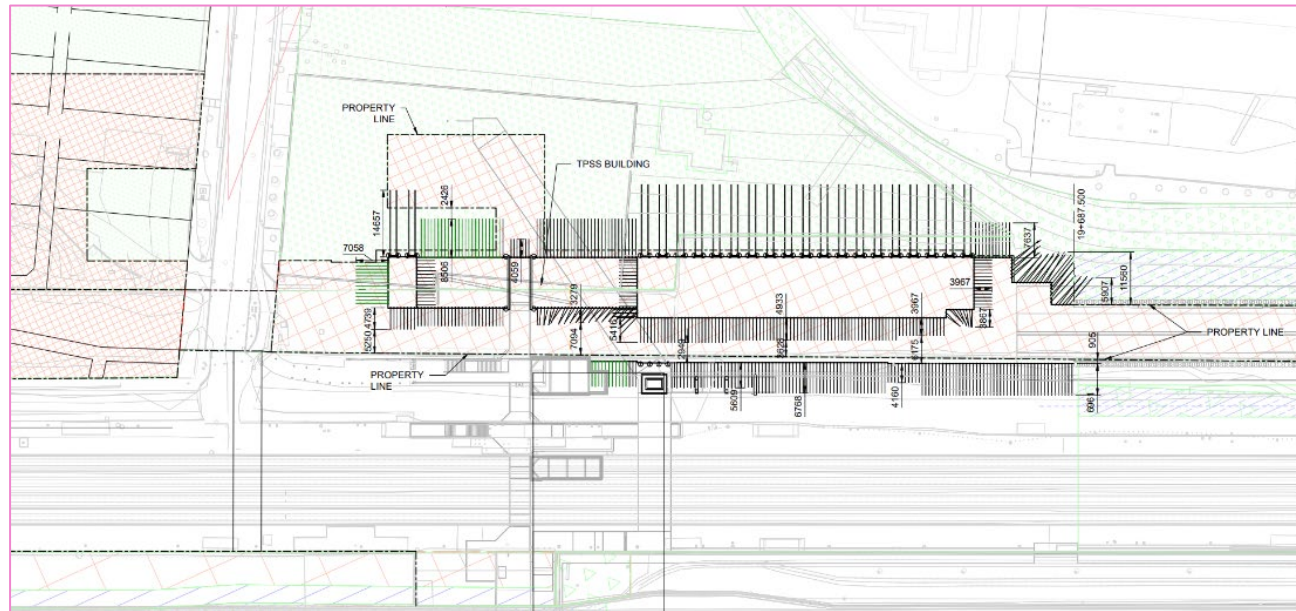
Hours of work	Construction Activity	Work Details
<ul style="list-style-type: none"> Daytime hours: 5:30 a.m. to 10:00 p.m. 	<p>Crews will be piling new station foundations, supporting construction of a new island platform between the tracks. The platform will increase GO capacity and serve the new Ontario Line at Exhibition Station.</p>	<ul style="list-style-type: none"> Drill rigs will be used during the day to complete piling work.
<ul style="list-style-type: none"> Overnight hours: 10:00 p.m. to 5:30 a.m. 	<p>Crews will place rebar and pour concrete during the overnight period. Additional piling may occur during the overnight hours.</p>	<ul style="list-style-type: none"> Materials hauled off site for disposal. Rebar placement for durability, safety and longevity station platforms. Concrete pouring reinforcing the piles.



Rendering of the station roof and island platforms to be constructed.

UPCOMING WORK: UNDERGROUND TRACTION POWER SUBSTATION (TPSS)

- In November 2024, piling work is expected to move to the future site of the traction power substation (TPSS), roughly underneath the pedestrian bridge, north of the railway. Excavation will follow in early winter.
- This is preliminary work will create a foundation for a dedicated power station. The underground power station will feed and distribute ongoing electricity to the Ontario Line, once complete.



Schematic and layout of the Ontario Line Exhibition TPSS

MITIGATIONS TO REDUCE COMMUNITY IMPACT

- **Noise and vibration monitoring** devices are placed for active tracking of impact to ambient noise levels.
- **New hoarding** is being installed around the existing north entrance of Exhibition GO, including **new wayfinding signs** to guide customers and pedestrians accessing the station.
- **Traffic control persons** and **safety gates**, to ensure safe movement of vehicles, pedestrians, cyclists and transit, when construction vehicles need to access the sites.
- **Street sweepers** and **wheel cleaning** are used as needed, to ensure soil and sediment is kept off city streets and sidewalks.



New wayfinding signage to guide customers.



Street sweeper cleaning debris and dirt from city streets.



Wheel cleaning shaker mat, to ensure trucks do not bring mud and soil into city streets.

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Exhibition Station: Traffic Management Update



SUMMARY

City* and Community Priorities:

- Minimize use of highly congested Liberty Street, East Liberty Street
- Minimize use of Strachan and East Liberty Street intersection
- Minimize use of Ordnance Street

Actions:

- Metrolinx completed an assessment of alternative traffic management options to address city priorities including the use of Dufferin Street.
- A haul route option across the site to Dufferin is being prepared.
- We will continue to use Hanna Ave for the portal excavation.
- Other options within the rail corridor were not feasible.
- Strachan Ave., will be not be used for portal excavation but will be used for other tunnelling needs like machinery delivery.
- We want to minimize stockpiling and rehandling the spoils (rock.)
- In the new year we will bring more information about tunnelling operations.

** Source: Item 3 of TE16.56 Liberty Village Traffic Action Plan Update*

ALTERNATIVES EVALUATED

- **Alt. 1:** Build a conveyor belt that takes the spoil from east to West (Dufferin) utilizing/repurposing space within the work zone limit.
- **Alt. 2:** Direct the construction traffic from east to west within the construction boundary to egress the site from Mowat Avenue (or as close as possible to Dufferin Street).
- **Alt. 3:** Build/extend a conveyor belt from the tunnel via under the Strachan bridge to Ordnance Park for trucks to be loaded with muck and egress the site to Strachan Avenue north from the driveway north of Ordnance St.
- **Alt. 4:** Create a truck haul route from Strachan via the driveway north of Ordnance Street to Ordnance Park
- **Alt. 5:** Move the spoil from north to south using a conveyor or a tunnel.
- **Alt. 6:** Extend a track spur next to T1 and use an engineering train to move the spoil
- **Alt. 7:** Only move tunnel spoil trucks during nighttime.

ALTERNATIVE 1 - CONVEYOR BELT WEST TO EAST

Safety Concerns:

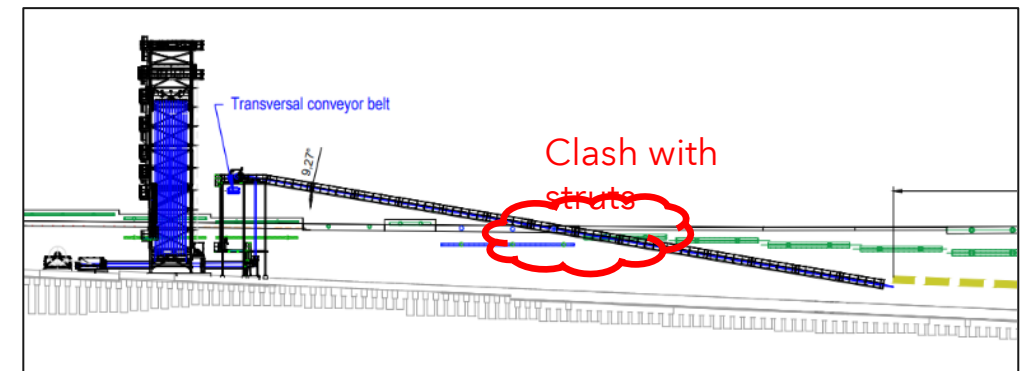
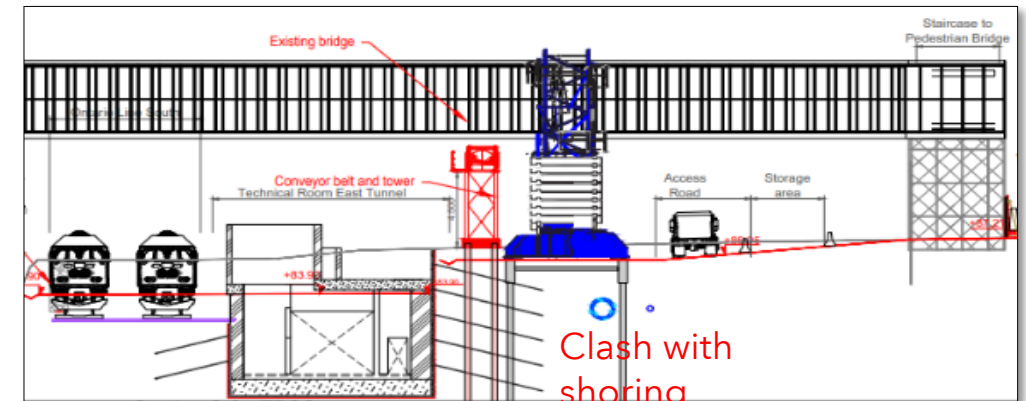
- Interface with cranes: additional constraints and risks of clashes.

Construction impact:

- Conveyor belt impacts all site accesses.
- Storage areas are reduced.
 - Therefore, limited space on site and **build up of traffic outside the site**
- Major impact for MSE wall construction: we will have to postpone the walls

Conveyor impact:

- Complex geometry of the conveyor belt: 3 transversal conveyor belts, several changes of direction. This can affect the production rate of the TBM.
- The conveyor belt + 2 conveyor belts need to be designed, manufactured and supplied.
 - Estimated time : **2 years - Impact on TBM works 13 months minimum.**
- **Unknown utilities** that may impact the conveyor belt design.



The option is not discounted although there are conflicts with the tunnel portal struts, the shoring of TPSS and retaining wall. Further assessment is required

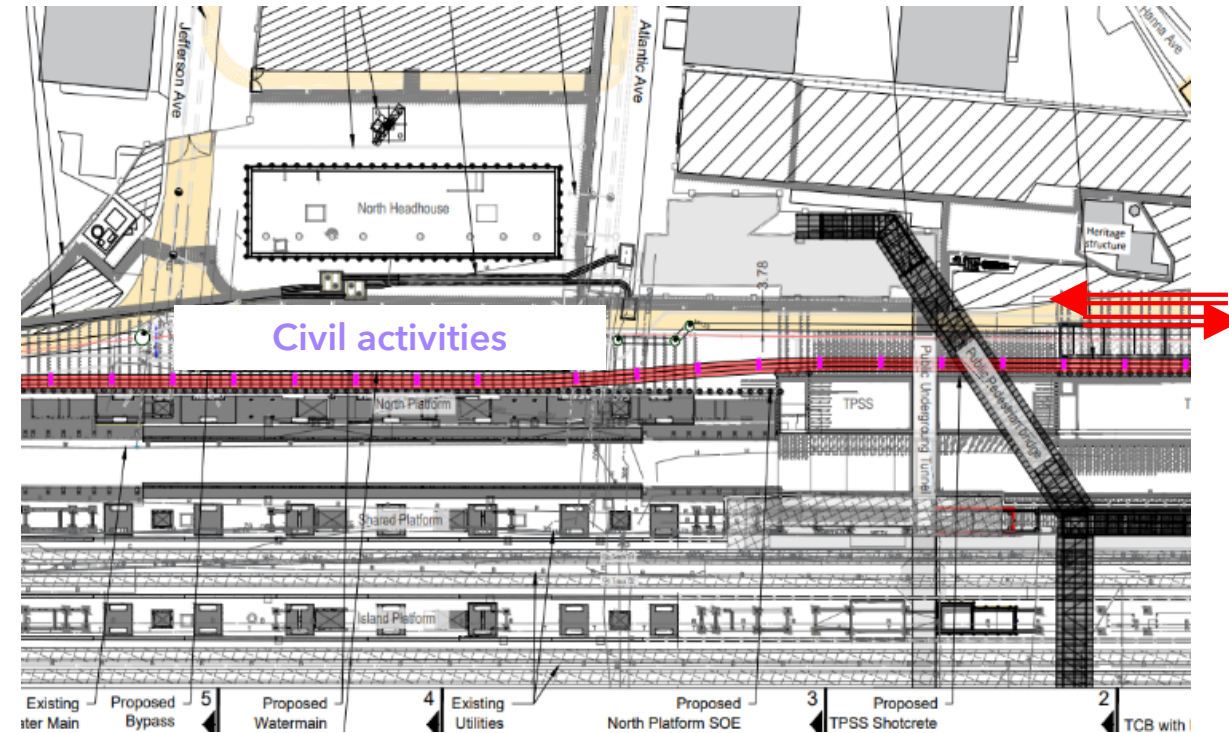
ALTERNATIVE 2 - DIRECT THE CONSTRUCTION TRAFFIC FROM EAST TO WEST

Safety Concerns:

- Not enough space for trucks to turn around in the work area.
- TBM Traffic and civil traffic will cause too many trucks on site.
- Same access used for civil and TBM works

Construction impact:

- Critical Area 2: North Headhouse / Station / TPSS - Only one lane of circulation
- Not sufficient space for trucks to turn around in work area.
- We cannot maintain the TBM production rates with only one mucking area
- Storage areas are reduced.
- Production can be affected if the site logistics is not sufficient to support the production.
- Move the traffic impacts to new stakeholders "Dufferin"



The option is not discounted however; it may result in delays to the station construction or affecting tunnelling productivity rates

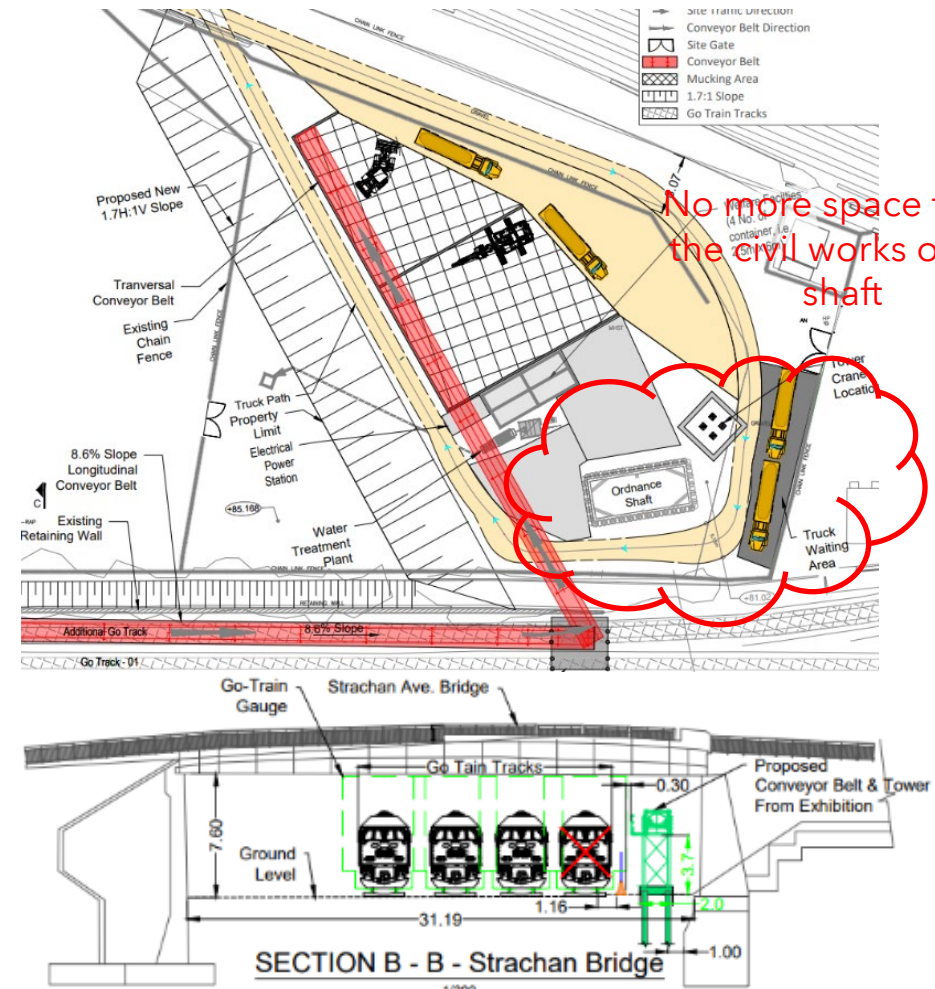
ALTERNATIVE 3 - BUILD/EXTEND A CONVEYOR BELT UNDER THE STRACHAN BRIDGE

Safety Concerns:

- Limited access compared to the expected number of trucks
- There's not a fluid entry and exit since the route between Ordnance and Strachan is narrow and only allows for one lane

Construction impact:

- **Not enough space to accommodate it next to the trains, it encroaches T1**
- **Doesn't improve the traffic condition on Strachan**
- Not enough space for mucking. With this option we only have 20% of the required mucking capacity. **Will affect the production time.**
- Impacts to the construction schedule to build the retaining wall
- This option will cause **a delay for Ordnance civil works.**
- We need a rail permit to build a platform and conveyor belt on top of existing rails (12 months estimate)
- Major site preparation at Ordnance to build the shaft structure
 - Site is too small to allow coactivity
- Impacting Strachan & King intersection as well as Shaw and Queen St W.
- The conveyor belt needs to be designed, manufactured and supplied.
 - **Estimated time : 2 years - Impact on TBM works 13 months minimum.**



Option discounted as there is not enough space to accommodate it

- Unknown utilities that may impact the conveyor belt design.

ALTERNATIVE 4 - TRUCK HAUL ROUTE UNDER THE STRACHAN BRIDGE

Safety Concerns:

- High volume of trucks driving through the site. Too much traffic with TBM and Civil traffic.
- Increased plant / pedestrian risk interface

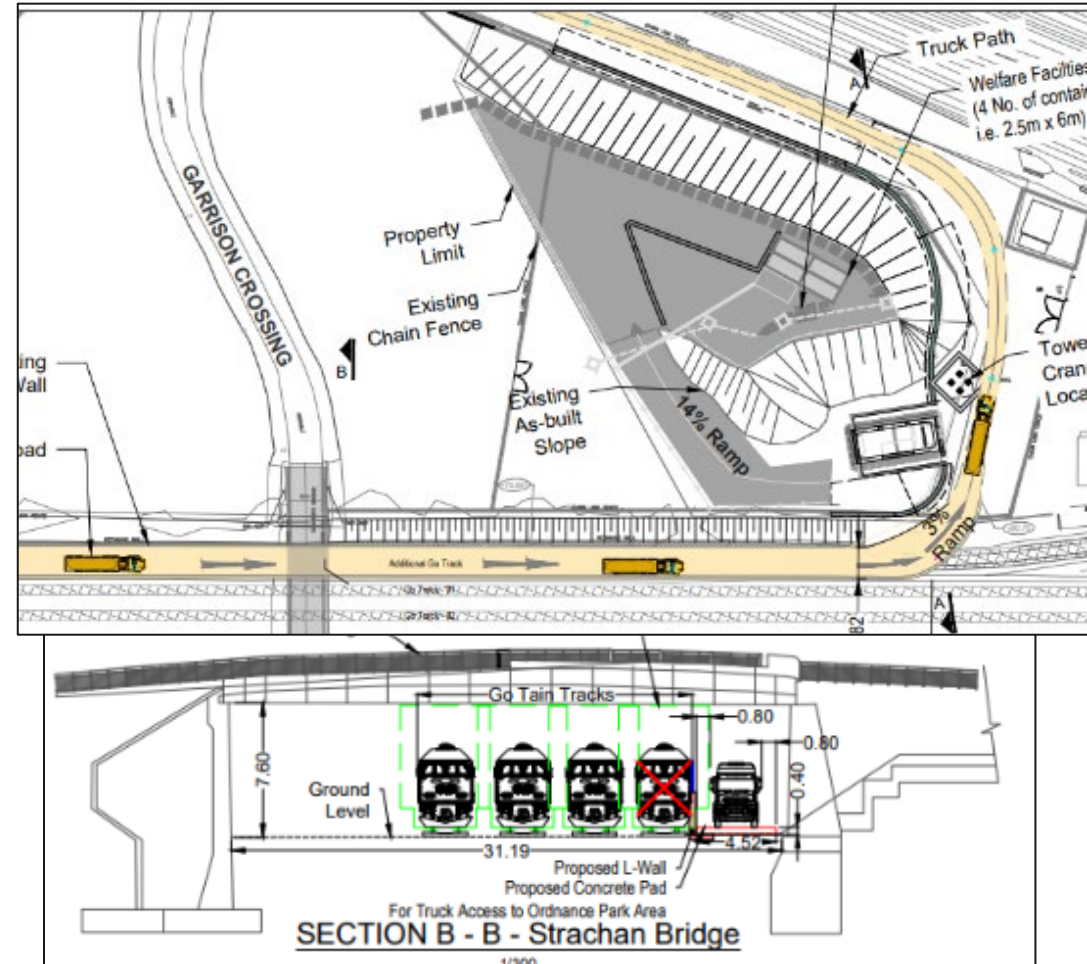
Construction impact:

- The Mucking area will have to be reduced to allow the trucks crossing.
- Production will be affected due to lack of space for mucking.
- A rail corridor permit will be required
 - track one will have to be shut down.
- City parks department plans to rebuild Ordnance Park during our Construction.

Traffic impact (same for option 3 and 4):

Due to the number of trucks, queue lengths are expected to block the intersection upstream at morning and evening peak hours.

- Strachan / Douro
- Strachan / Lakeshore Boulevard
- Strachan / King Street



Option discounted as there is not enough space to accommodate it

ALTERNATIVE 5 - RELOCATING SPOILS FROM NORTH TO SOUTH

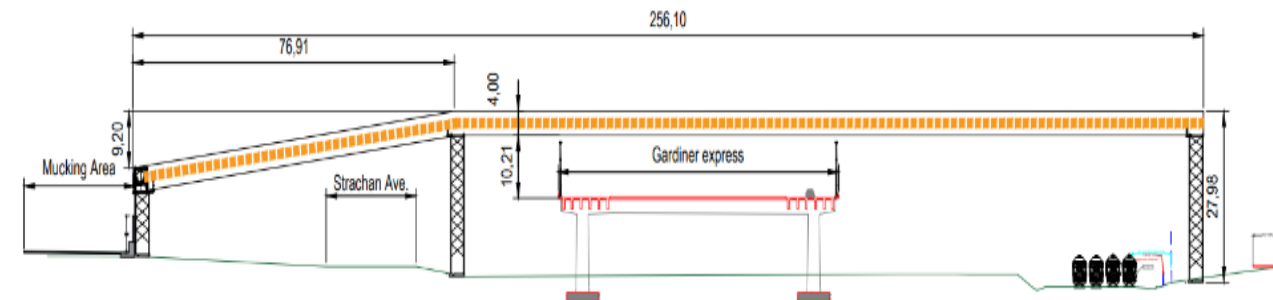
Safety Concerns:

- Limited access compared to the expected number of trucks
- There's not a fluid entry and exit
- Safety risks with potential breakdown of the conveyor over the rail corridor and Gardiner

Construction Impact:

- Design and Preparatory works will take **at least 3 years.**
- Risk of spoil moving over Gardner.
- Gardiner is being demolished and rebuilt.
- We need a rail permit to build a platform on top of existing rails
- The conveyor belt needs to be designed, manufactured and supplied= another big project within our Project
- Need an additional permits and agreements with stakeholders for the conveyor belt.
- Unknown utilities that may impact the conveyor belt design.

Option discounted as the schedule for getting it ready won't meet the tunnelling timelines.



This is a 9-storey building over the rail corridor and the Gardiner Expressway

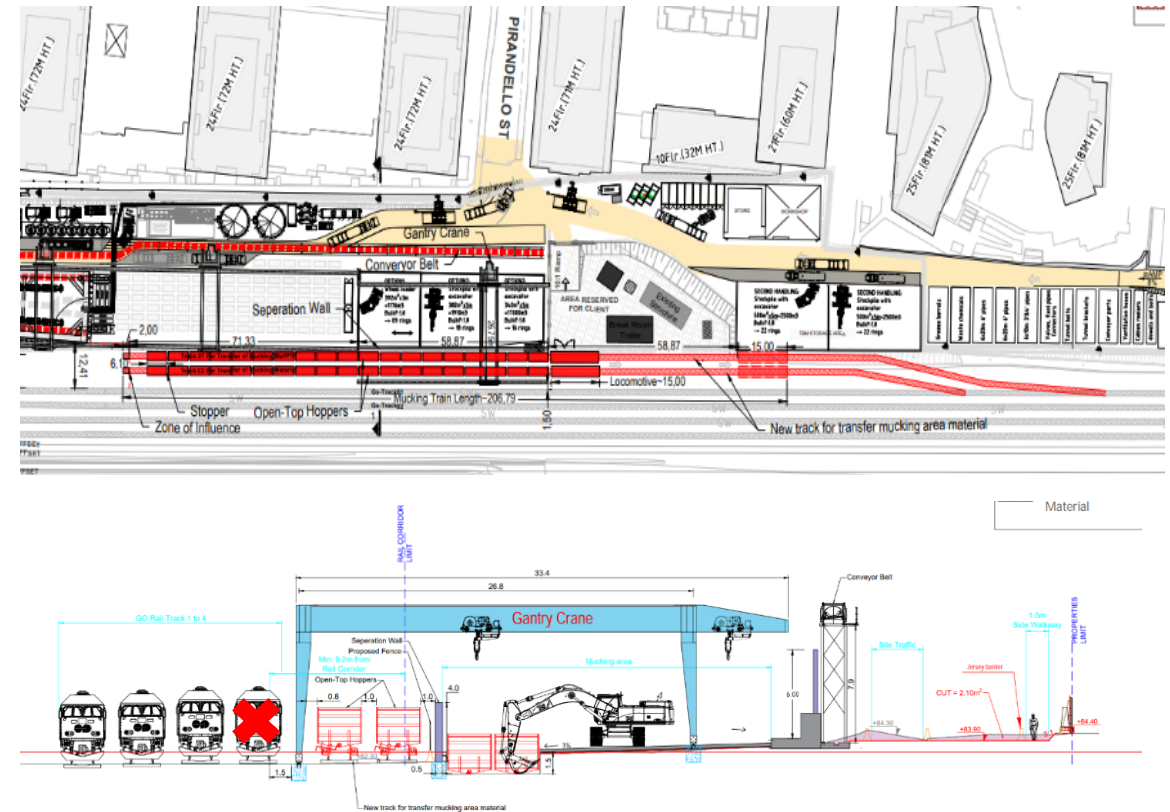
ALTERNATIVE 6 - EXTEND A TRACK SPUR NEXT TO T1 (ENGINEERING TRAIN)

Construction Impact:

- Preparatory works will be major works and **take years to be completed**
- We need a rail permit to build a platform on top of existing rails = another big project within our Project
- **There isn't enough space to accommodate the tracks proposed without having impact on the in-service tracks**

Rail Solution Impact:

- The conveyor belt needs to be modified, manufactured, and supplied
- Unknown utilities that may impact the conveyor belt design
- Rail corridor permits needed for operation as well
- Impacted by current rail operations - dependent on other parameters / risk of being mucked in
- **We are only moving the problem somewhere else within the city (or to a different city / municipality)**
 - **Double handling**



Option discounted as the schedule for getting it ready won't meet the tunnelling timelines. It also moves the issue from an area to another area in the city.

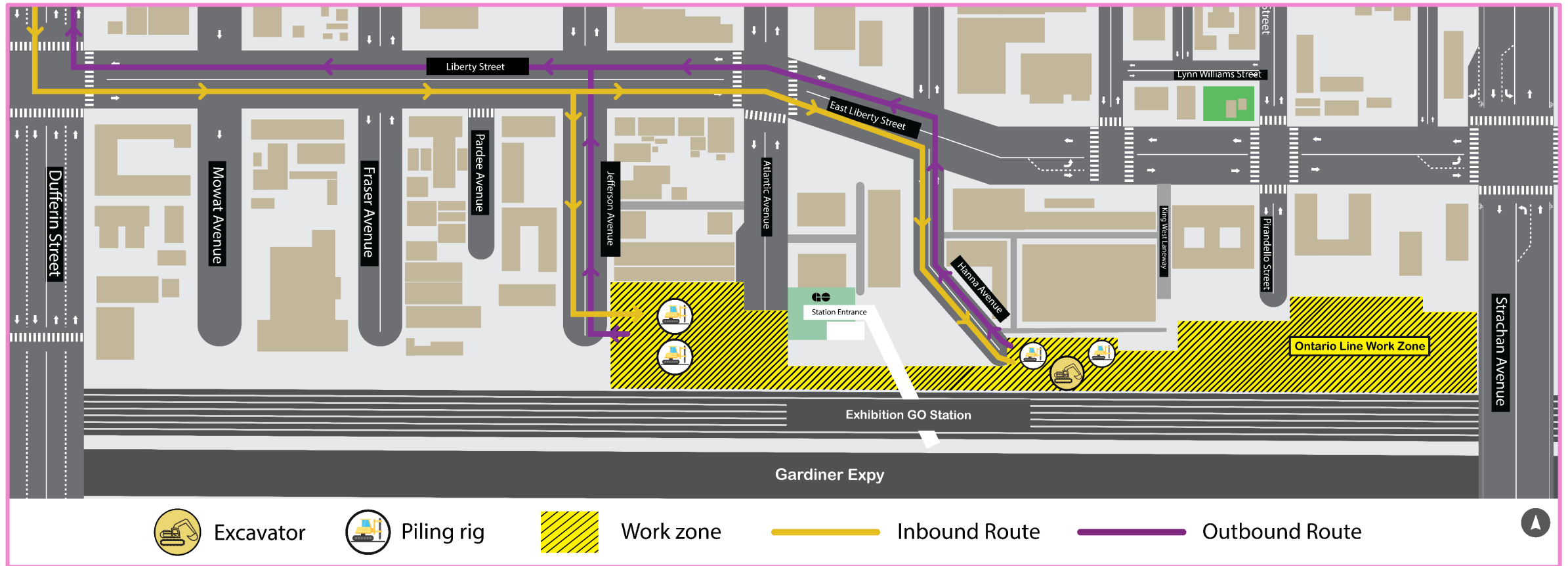
ALTERNATIVE 7 - MOVE THE SPOILS FROM NORTH TO SOUTH

Impact:

- 6pm to 7am night-time off peak (maximum possible 13 hours)
- Cost premium night-time
 - Tipping facility
 - Operatives
 - Supervision
- Less support available at night in case of logistic issues / breakdown
- Winter months traffic slower at night
- Environmental Impacts during night-time (Noise and Dust)

This remains an option that can help reducing the number of trucks but can't be relied upon as an alternative.

TRAFFIC MANAGEMENT PLAN - CURRENT ARRANGEMENT



- This layout represents the key inbound and outbound traffic routes, supporting piling, excavation and various other new station works.

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Q&A and Discussion

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Construction Liaison Committee

Terms of Reference

CLC TERMS OF REFERENCE EXCERPTS

Purpose

- The CLC is a forum for all participants to engage, listen and participate in open, transparent, collaborative, and respectful conversations regarding the construction of the Ontario Line.
- The CLC is an advisory body, not a decision-making body.

CLC Membership

- CLC community members include residents, business improvement area (BIA) representatives, resident associations, business owners or community groups who reside or work in the neighbourhood and who have a direct interest in the project or are most impacted by the project.
- Metrolinx selects CLC members at its discretion to ensure appropriate representation from the community. CLC meetings are not open to individuals, groups or associations that are not confirmed members. Meeting invitations are not to be shared beyond confirmed CLC members.

CLC Scope

- Metrolinx makes decisions about the project, such as its design, route, construction method, construction sequencing, and the location of station(s) and essential transit infrastructure, which are outside the scope of the CLC.
- Discussions at CLCs, however, may touch upon these and other topics related to the Ontario Line to facilitate inclusive and meaningful two-way communication and information sharing and allow impacted communities to provide feedback to Metrolinx on community concerns and proposals.

CLC TERMS OF REFERENCE EXCERPTS CONTINUED

Membership Roles and Responsibilities

- The CLC is a collaborative forum between the various stakeholders involved in the construction of the Ontario Line, including Metrolinx, the contractor, the local community, and the City of Toronto.
- The CLC provides a platform for these groups to work together to discuss project details, issues/concerns for resolution and to facilitate communication, collaboration and engagement among these stakeholders throughout the construction period.
- The committee will be chaired by a Metrolinx representative, who is responsible for ensuring meetings start and end on time, are conducted in an orderly manner, follow the agenda, and facilitate discussions that encourage diverse opinions and collaborative problem-solving.

Meeting Format

- The CLC will meet monthly or bi-monthly where established. CLC dates will be set at least six months in advance. CLCs can be virtual, in-person, or hybrid in format.
- Meetings will run for approximately 60 minutes, depending on the agenda items.
- CLC meeting agendas will be established with input from CLC members.

KEEPING YOU INFORMED

Metrolinx will keep the community, residents and businesses informed by providing project updates, seeking input and feedback, while addressing questions and concerns effectively and quickly.

Next meeting: An open house is expected in early 2025, to be scheduled. Date to be announced.

Connect with us:

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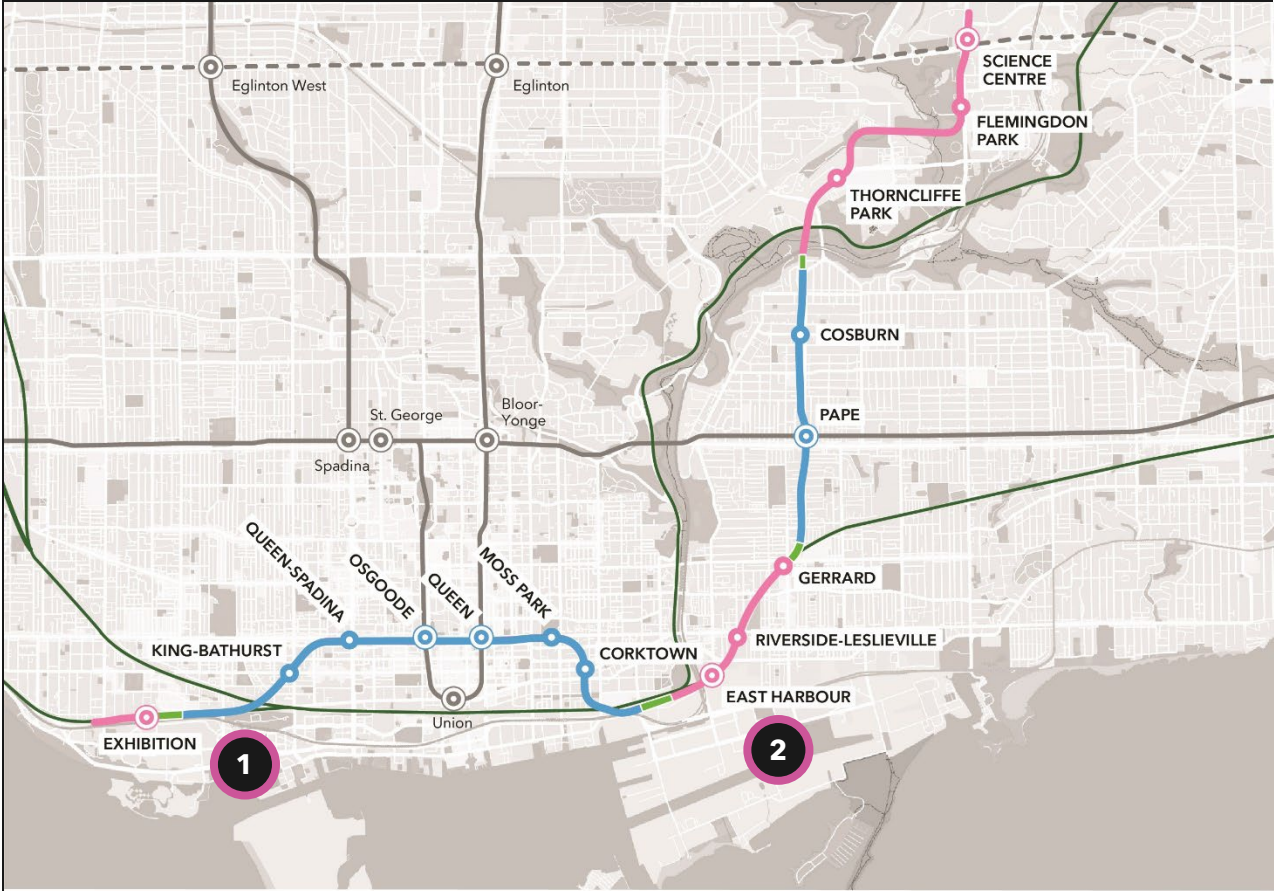
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Community Engagement

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Appendix - Future State Exhibition Station

ONTARIO LINE SUBWAY



— At Grade / Elevated
 ● Station
 — Existing GO Rail
 - - - Future Line 5 Eglinton

 0 0.5 1 km

— Tunnelled
 ● Interchange Station
 — Tunnel Portal
 — Existing Subway

1 South Alignment of Ontario Line (Exhibition to Corktown/Don Yard)

2 North Alignment of Ontario Line (East Harbour to Science Centre)



15.6 kilometres long



15 stations



As frequent as every 90 seconds during rush hour



227,500 more people within walking distance to transit



388,000 daily boardings



40+ connections to other transit options



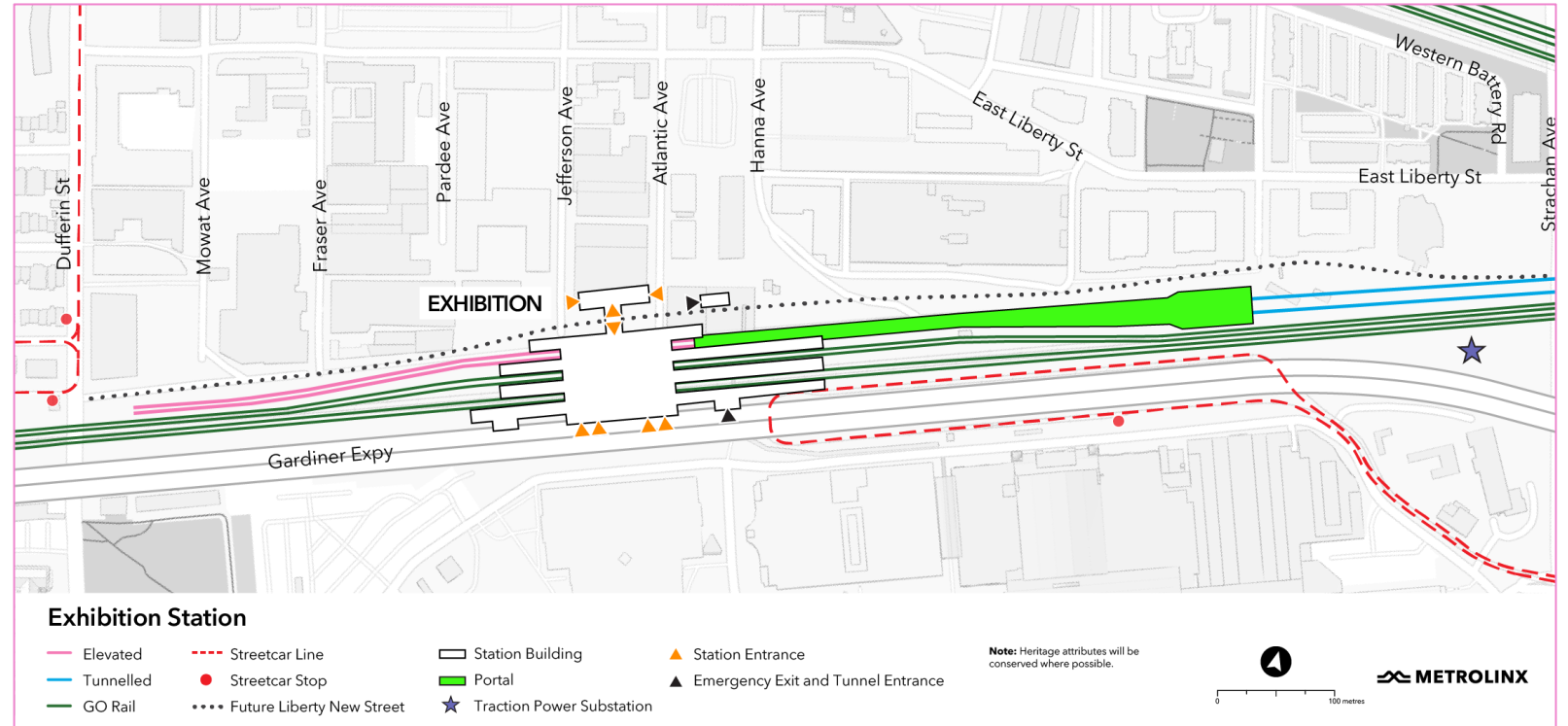
Up to 47,000 more jobs accessible in 45 minutes or less, on average



28,000 fewer cars off the road each day

AN ACCESSIBLE, UPGRADED TRANSIT HUB SERVING EXHIBITION & LIBERTY VILLAGE

- The Ontario Line station at Exhibition Place will create a connection to the GO Transit rail network and **bring the subway system closer to many homes and businesses** in the growing and vibrant Liberty Village community.
- The shared concourse between the Ontario Line and Lakeshore West GO train will **make transferring quick and seamless**.
- Giving customers another way to transfer from subway to GO train will take pressure off Union Station, the country's busiest transit hub.
- This new interchange will help reduce crowding at Union Station by about 14 per cent - or 14,000 fewer people - during rush hour.





Artist's rendering – subject to change. Transit-Oriented Community proposals not shown.





Artist's rendering – subject to change. Transit-Oriented Community proposals not shown.