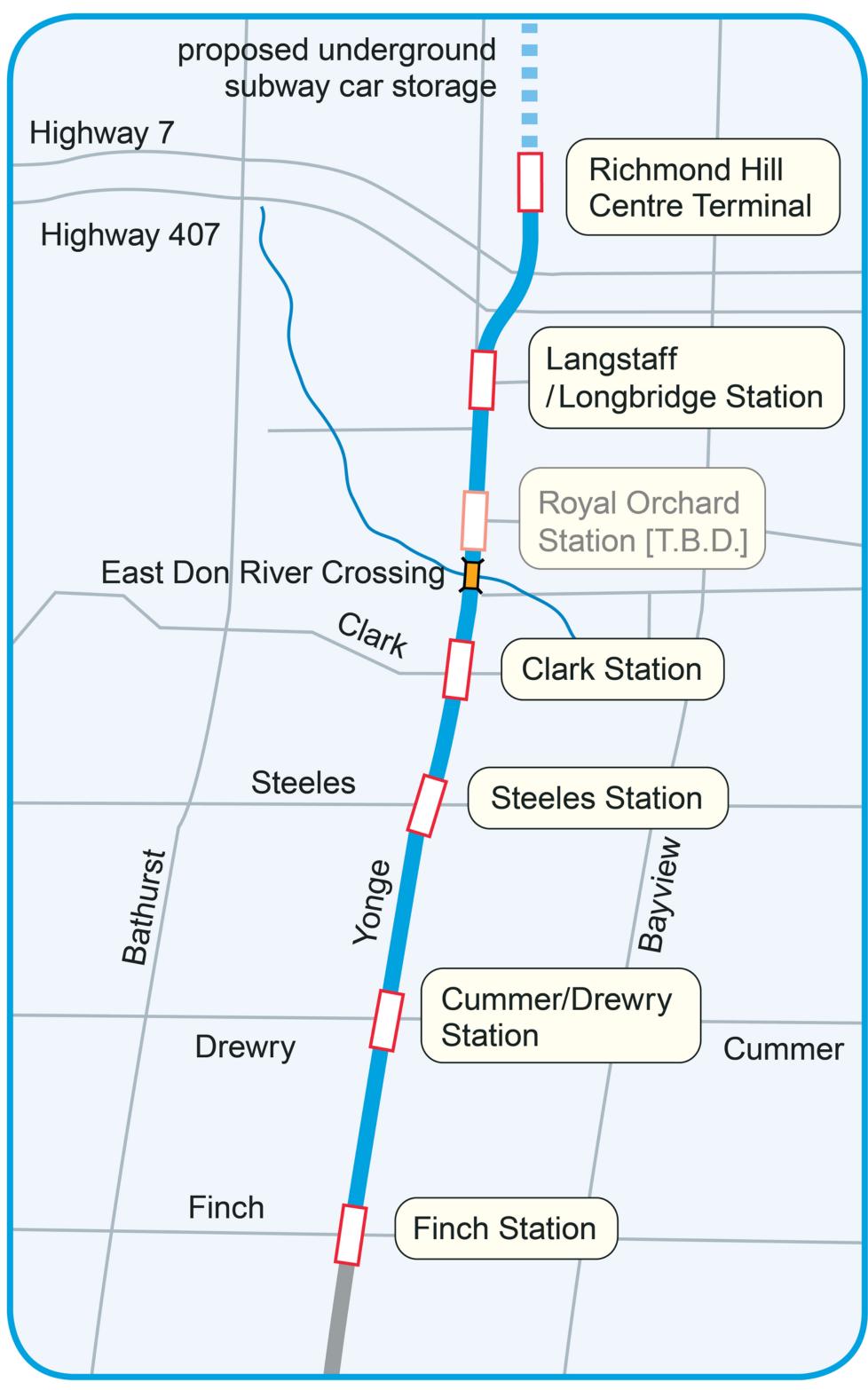
the yonge subway extension

The planned Yonge Subway Extension will extend 6.8 kilometres north from Finch Station to the Richmond Hill / Langstaff Urban Growth Centre at Highway 7. This centre will be a major transit hub where riders will be able to make seamless and convenient connections to viva and many other transit systems.

project features

- 6.8 kilometres long
- Up to six stations
- Underground train storage
- Two major bus terminals
- Park & Ride lot for up to 2,000 cars
- Bridge over the East Don River





map not to scale



metrolinx - top priority for funding

- Metrolinx's most recent funding announcement reaffirms the Yonge Subway Extension to the Richmond Hill/ Langstaff Urban Growth Centre as one of the priority projects in the next wave of The Big Move.
- The Environmental Assessment and Conceptual Design Study are completed, placing this project in a strong position for funding consideration as part of Metrolinx's investment strategy.
- We'll continue to work with Metrolinx to assess the needs and plan for expanding and better-connecting transit services for everyone in the Greater Toronto and Hamilton Area.

Hamilton





- Yonge North Subway Extension
- Brampton Queen Street Rapid Transit
- Dundas Street Bus Rapid Transit
- Durham-Scarborough Bus Rapid Transit
- Downtown Relief Line
- Go Rail Expansion: More Two-Way, All-Day and Rush Hour Service
- Electrification of GO Kitchener line and Union Pearson Express
- Go Lakeshore Express Rail Service Phase 1 (including Electrification)
- Hamilton Rapid Transit
- Hurontario-Main Light Rapid Transit

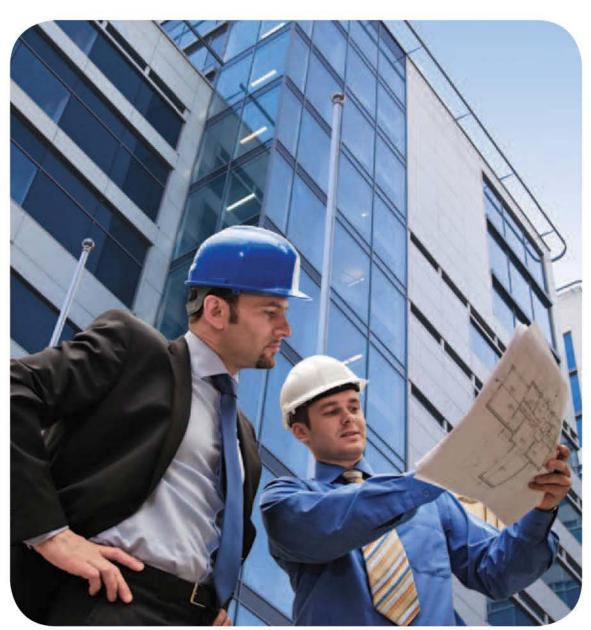
*projects listed in no particular order





conceptual design study

- The Conceptual Design Study built upon the original Environmental Assessment, to further develop station concepts, property needs, cost estimates etc.
- The study also assessed options to accommodate TTC train storage requirements identified in the TTC Subway Rail Yard Needs Study.
- Various train storage locations were studied, and potential locations at the north end of the Yonge line in Richmond Hill were identified.
- Plans for the preferred 14-car train storage facilities will be submitted to the Ministry of the Environment as an addendum to the 2009 Environmental Assessment.







rail yard needs study

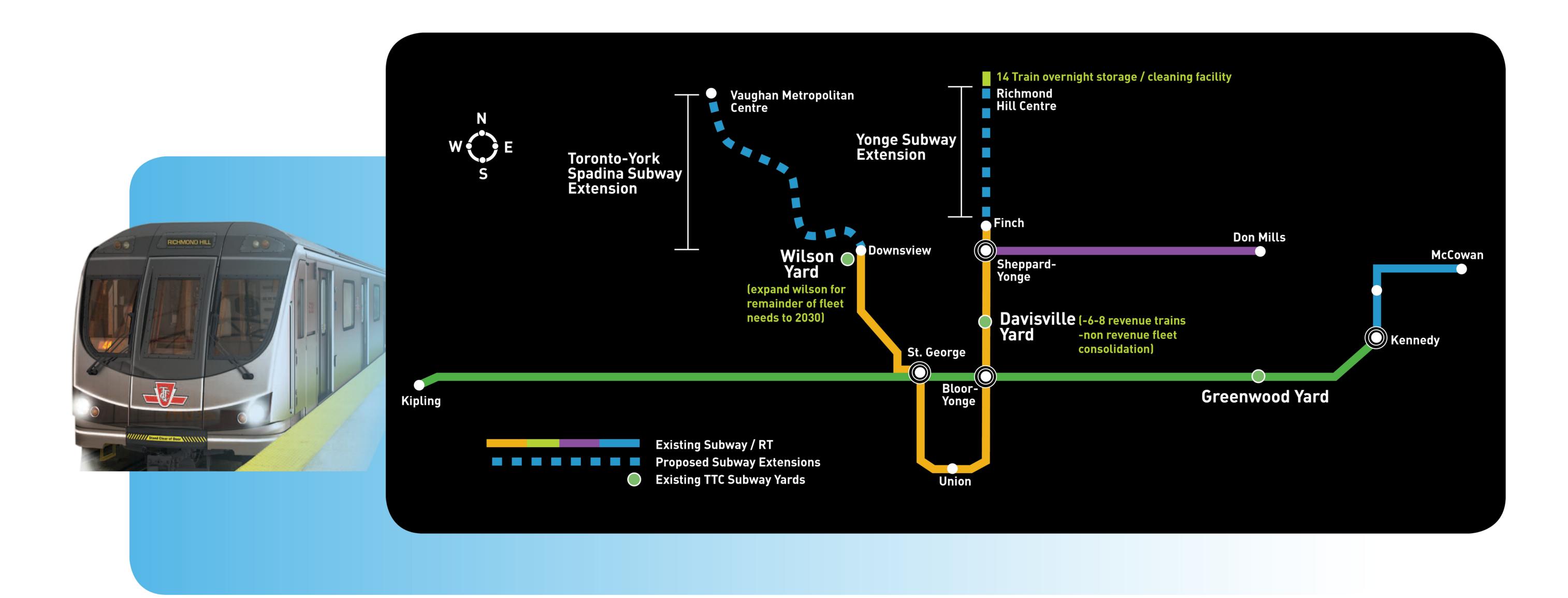
The TTC Subway Rail Yard Needs Study analyzed future requirements which included:

- The Toronto-York Spadina Subway Extension
- The Yonge Subway Extension
- Future growth requirements

It was determined that:

- The subway car fleet would grow from 62 trains to a total of 88 trains by 2030
- A 14-car train storage facility was required north of Steeles Avenue on the Yonge subway line

The findings of the TTC Subway Rail Yard Needs Study require us to proceed with an addendum to the Yonge Subway Extension Environmental Assessment





where we are now

- In 2009, the Ontario Ministry of the Environment unconditionally approved the Environmental Project Report for the Yonge Subway Extension. This officially completed the Environmental Assessment [EA] process for this project.
- A TTC Subway Rail Yard Needs Study and a Conceptual Design Study have since been completed to modify plans for train storage that were included in the original EA.





project preliminary timeline

Yonge Subway Extension
Environmental Assessment
including public consultation

TTC Subway Rail Yard Needs Study

Conceptual Design Study

Train Storage Addendum to the Environmental Assessment

started in 2006 - approved in 2009

2009 - 2013

2013

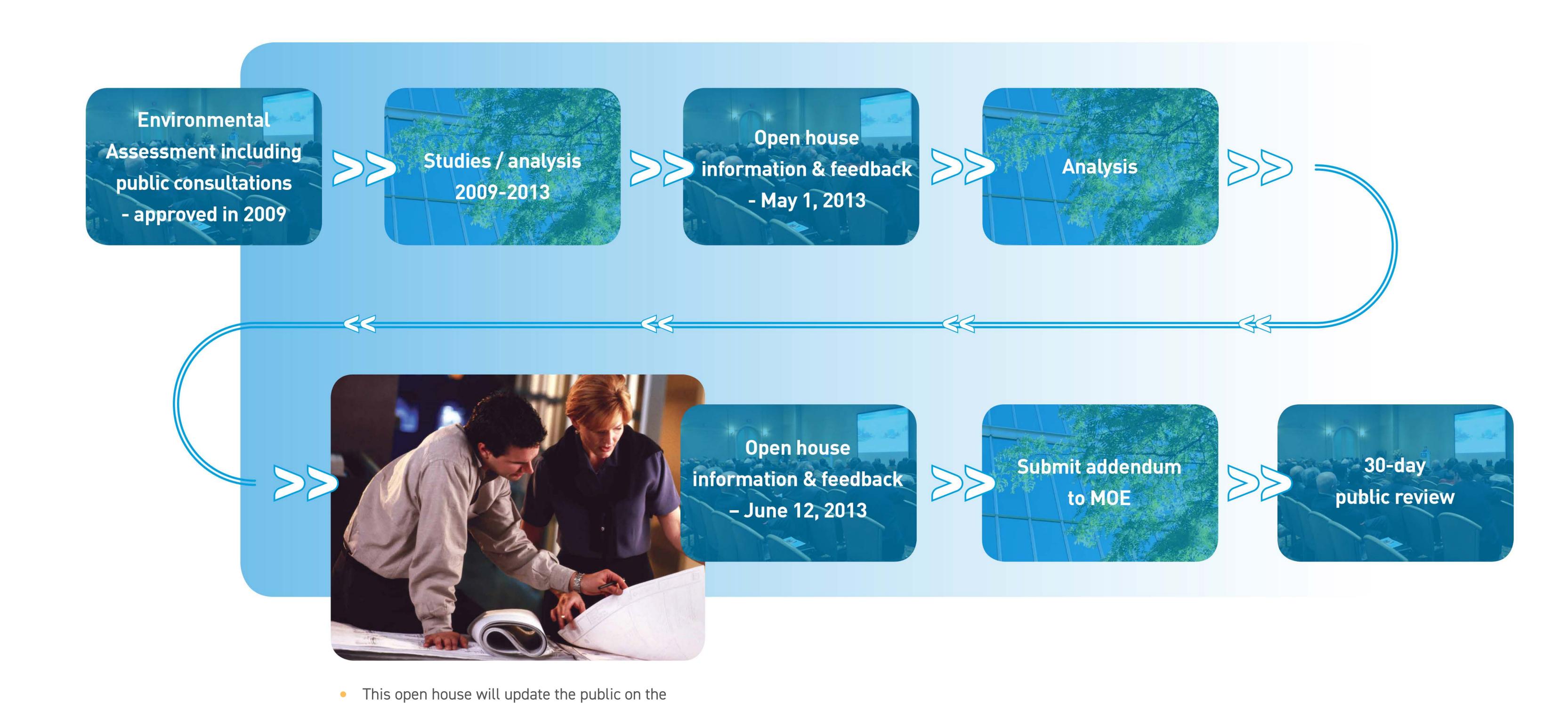


process for the yonge subway addendum

revised design and construction techniques for the

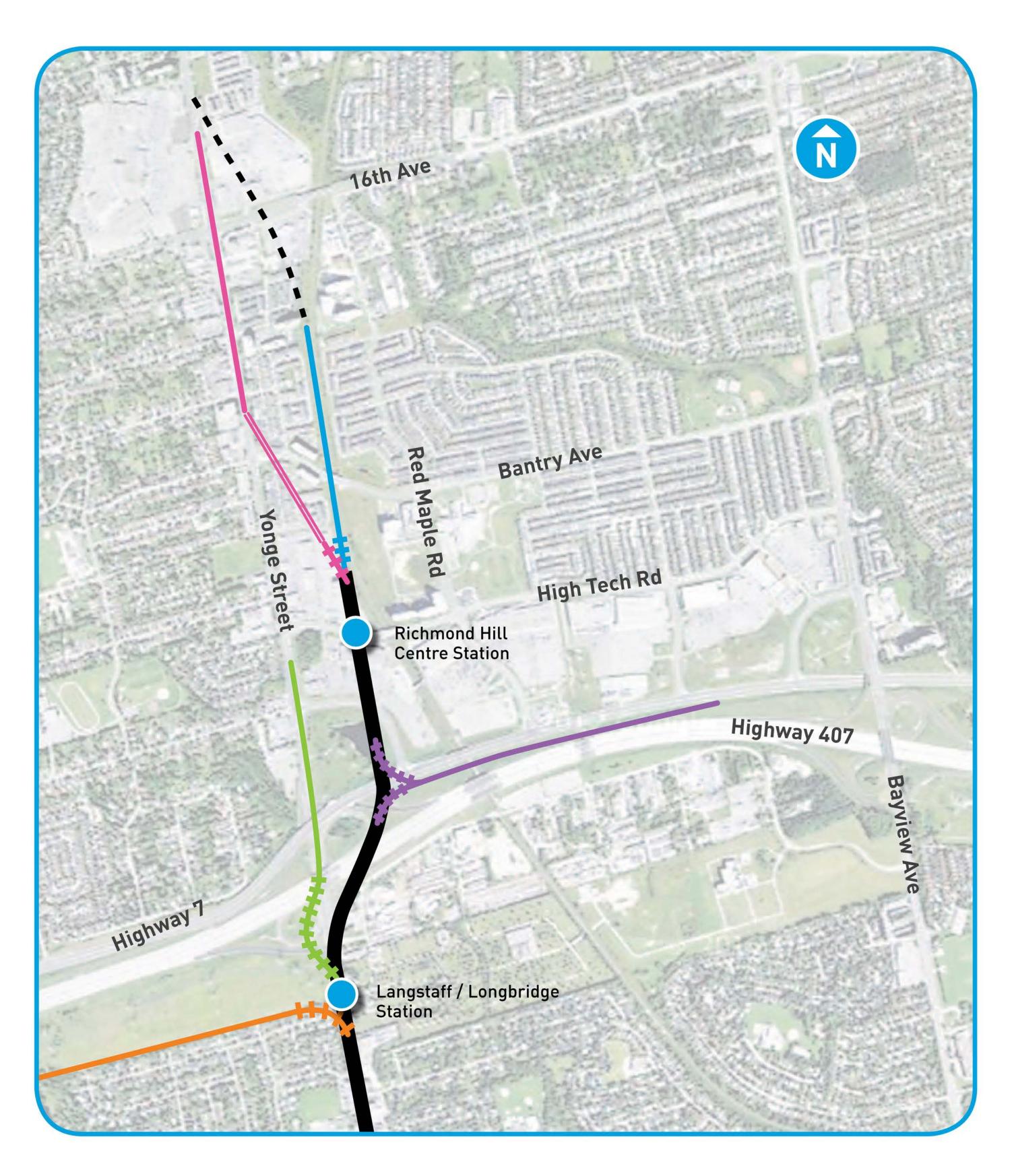
proposed underground train storage facility, and

provide an opportunity for additional feedback.





train storage options studied in the conceptual design



Each option was compared, based on the following criteria:

- Future station location
- Subway operations
- Future northerly extension
- Property and building impacts
- Constructability [traffic, property, tunneling versus open cut]
- Cost [initial and future]
 - Approved Yonge Subway alignment
 - Intended future Yonge Subway alignment
 - Subway station
- Option 1 Train storage north of Highway 7, east of Yonge Street beside GO rail tracks
 Special track work
- > Option 2 Train storage under Yonge Street, north of Bantry Avenue
 - Special track work

 Special tunnel work
- > Option 3 Train storage under Yonge Street, starting at Highway 407

 Special track work
- > Option 4 Train storage east of Yonge Street, between Highway 7 and Highway 407
 - Special track work
- > Option 5 Train storage west of Yonge Street, in the hydro corridor south of Highway 407

 HHH Special track work



options 2, 3, 4 and 5 - rationale for elimination

Option 2

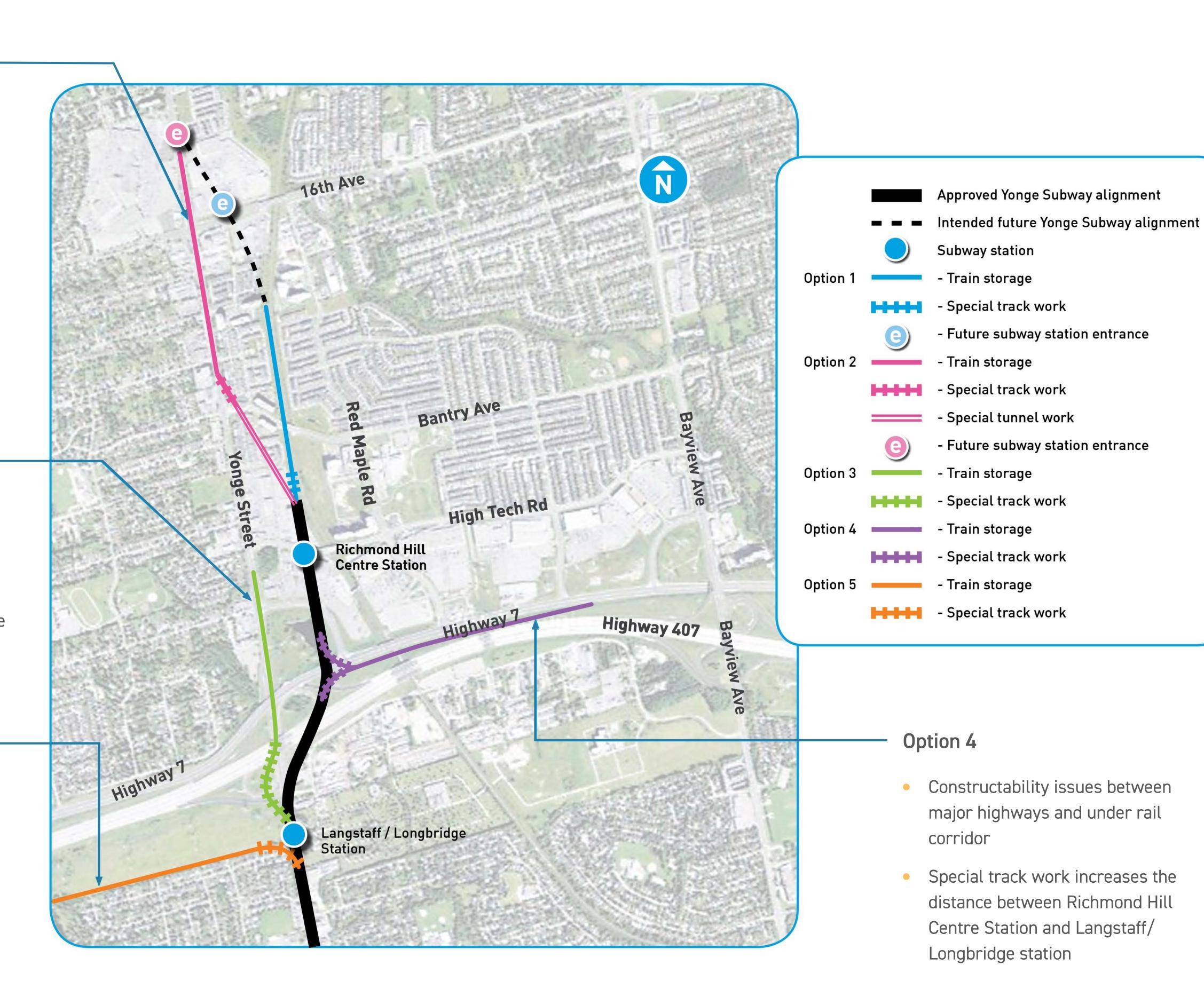
- Significant impact on properties and traffic along Yonge Street
- Higher capital costs
- Pushes future 16th Avenue
 Subway Station well north of 16th
 Avenue
- Requires property for service building along Yonge Street
- Does not meet operational requirements

Option 3

- Constructability issues with construction under Highway 407 bridge
- Operational issues with trains
 backtracking to Richmond Hill Centre
- Requires property for service building along Yonge Street

Option 5

- Significant environmental impacts
 train storage extends into West
 Don River Valley
- Operational issues associated with reverse movements of trains in and out of the mainline





preferred option — detailed analysis



Option 1

- Underground facility east of Yonge
 Street, adjacent to the CN rail tracks.
- Construction will be adjacent to the rail property immediately to the west of the rail tracks, within property currently owned by Town of Richmond Hill and CN Rail.
- Some temporary lane closures will be required on Beresford Drive and Coburg Crescent during construction, however, access will be maintained to residences in the area.
- No direct impacts to property and traffic on Yonge Street.
- The only option that meets operational requirements.
- Lower capital costs.
- Requires Bantry Avenue bridge to be rebuilt with local traffic diverted.
- Future 16th Avenue Subway Station will be 150 metres east of Yonge Street.



what we heard about option #1

Feedback collected to date includes:

Local Community

- Vehicle disturbances late at night and early in the morning
- Disruption from parking lot illumination and headlights
- Obstructs the view of the green space
- Effect on property values in the surrounding community
- Public safety during construction
- Traffic infiltration on local/surrounding streets
- Noise and vibration during operations

Environmental

 Disruption to wildlife habitats and health concerns for residents [i.e. pollution] due to increased development/ construction

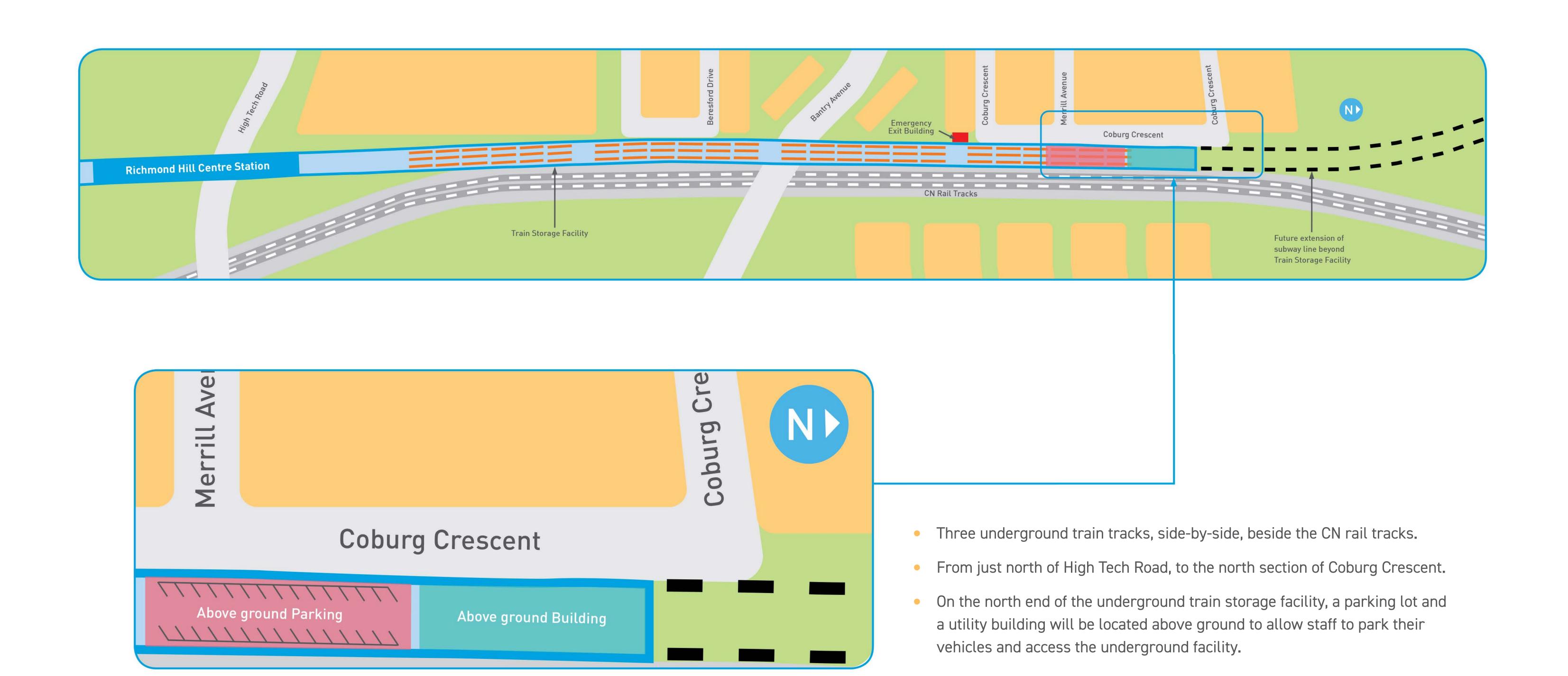
Construction

- Increased dirt and dust as a result of construction for residents in close proximity
- Noise and vibration during construction
- Construction vehicle access to the work area
- Construction traffic on local streets
- Disruption in travel patterns and difficulty crossing rail corridor from Bantry Bridge closure

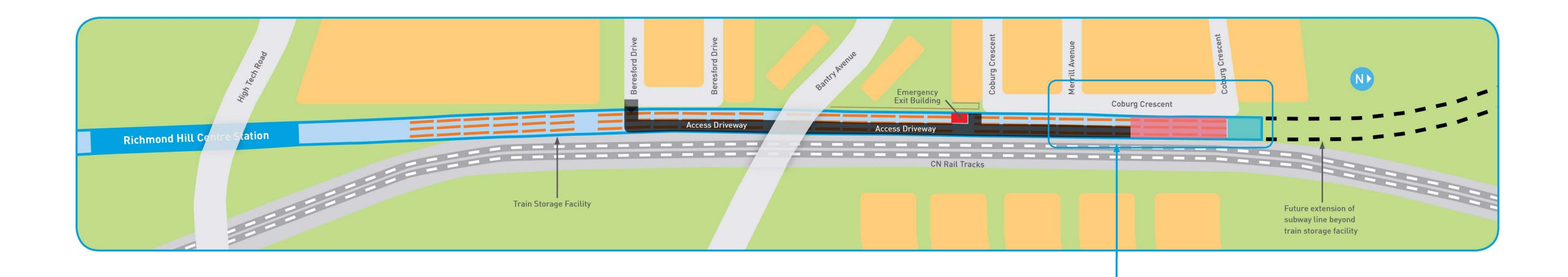


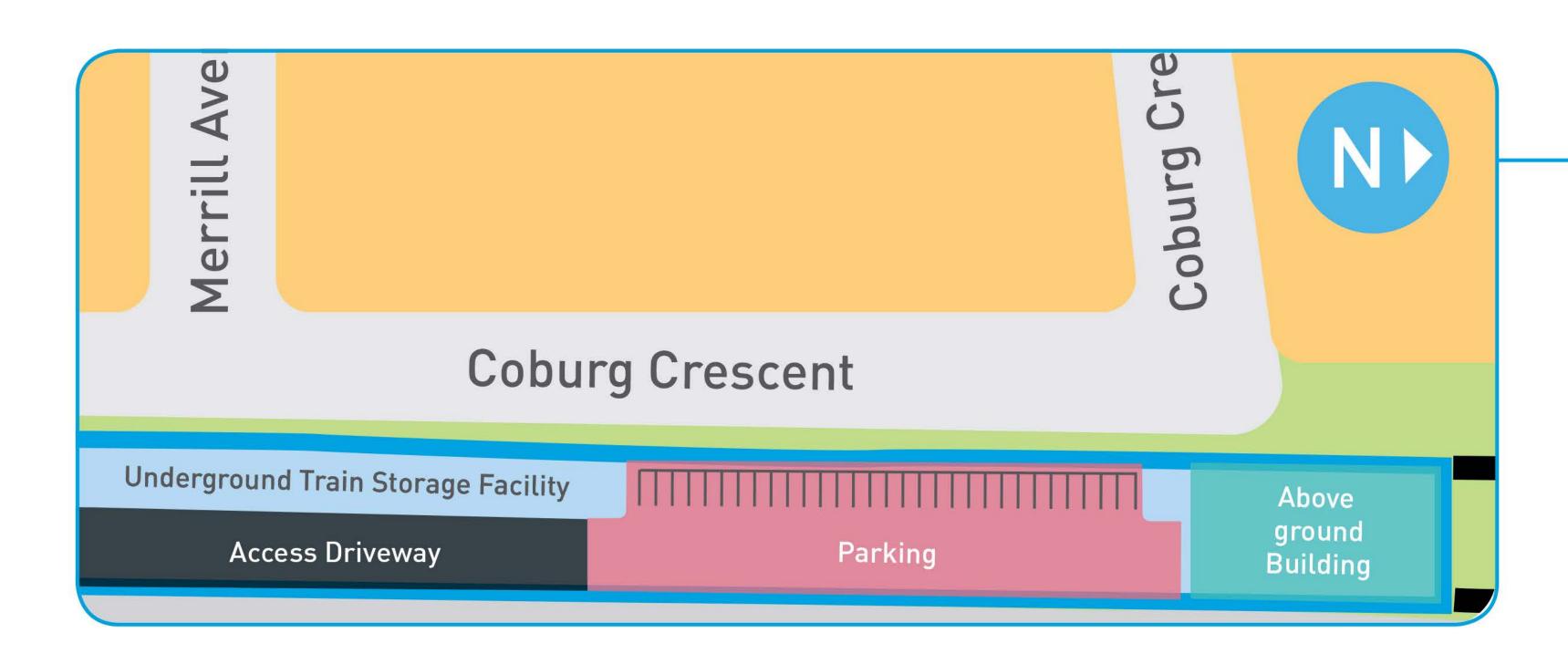


preferred option — original layout







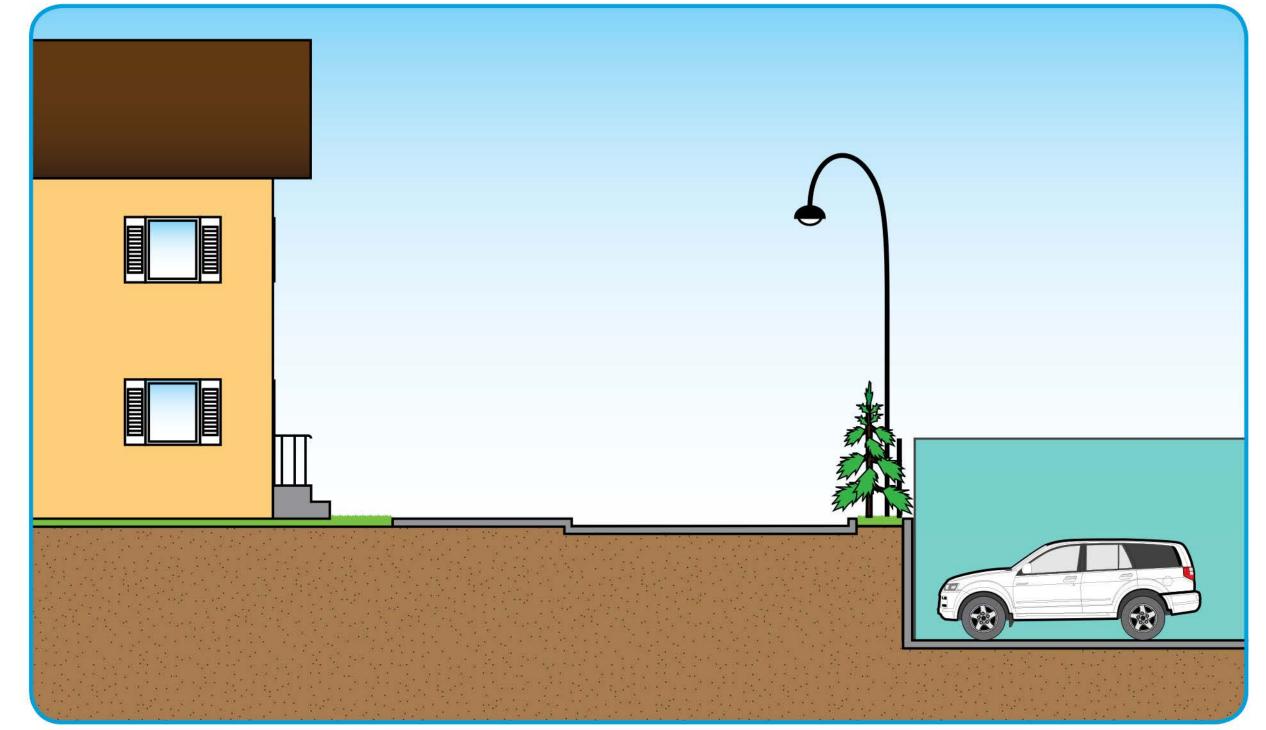


- Shift the location of the building north to minimize visibility of the building for local residents
- Modify the building to be half below-grade
- Lower the grade of the building and parking lot by 1-2 metres to further minimize visibility of the facility
- Provide a driveway connection from Beresford Road for access to the train storage facility
- Emergency exit building to be located within the Town of Richmond Hill lands
- Does not preclude future pedestrian connectivity to Richmond Hill Centre Station

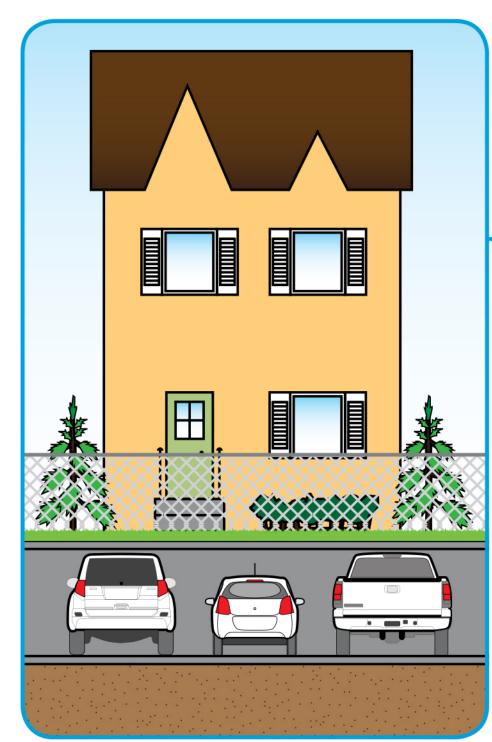




looking north



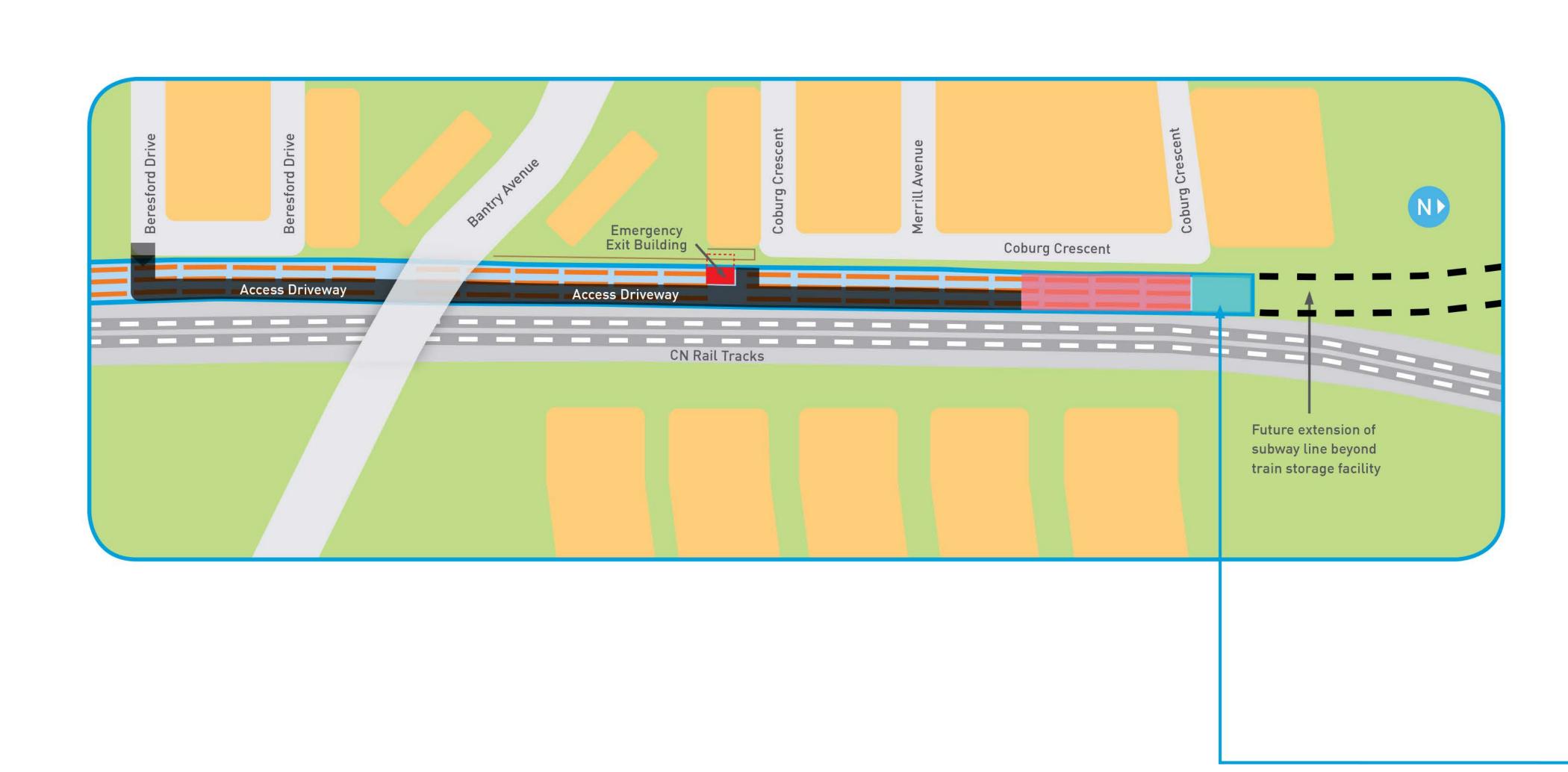
looking west



Parking cross-section

- Driveway access via Beresford Drive
- Building and parking elevation lowered by approximately 1-2 metres

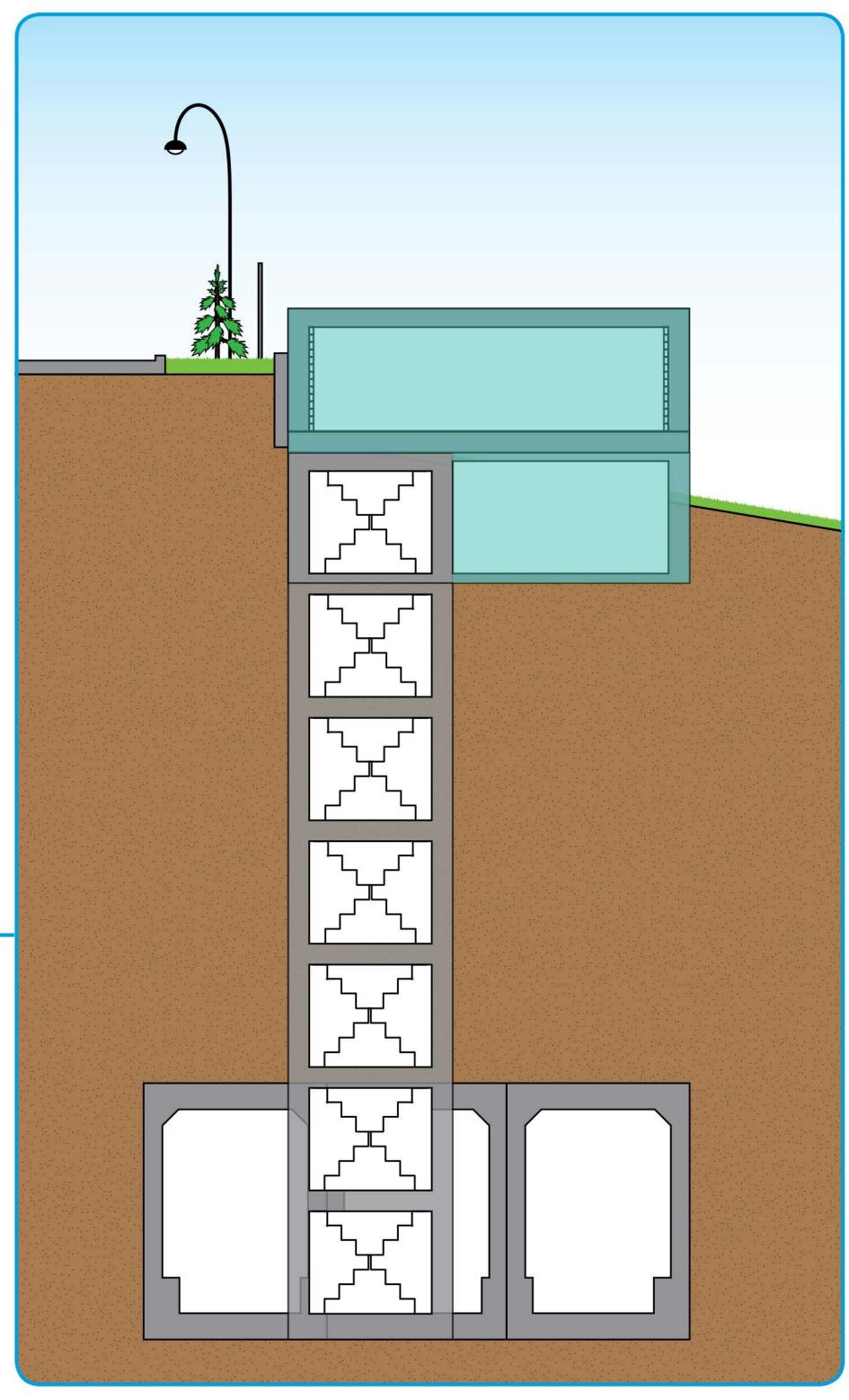




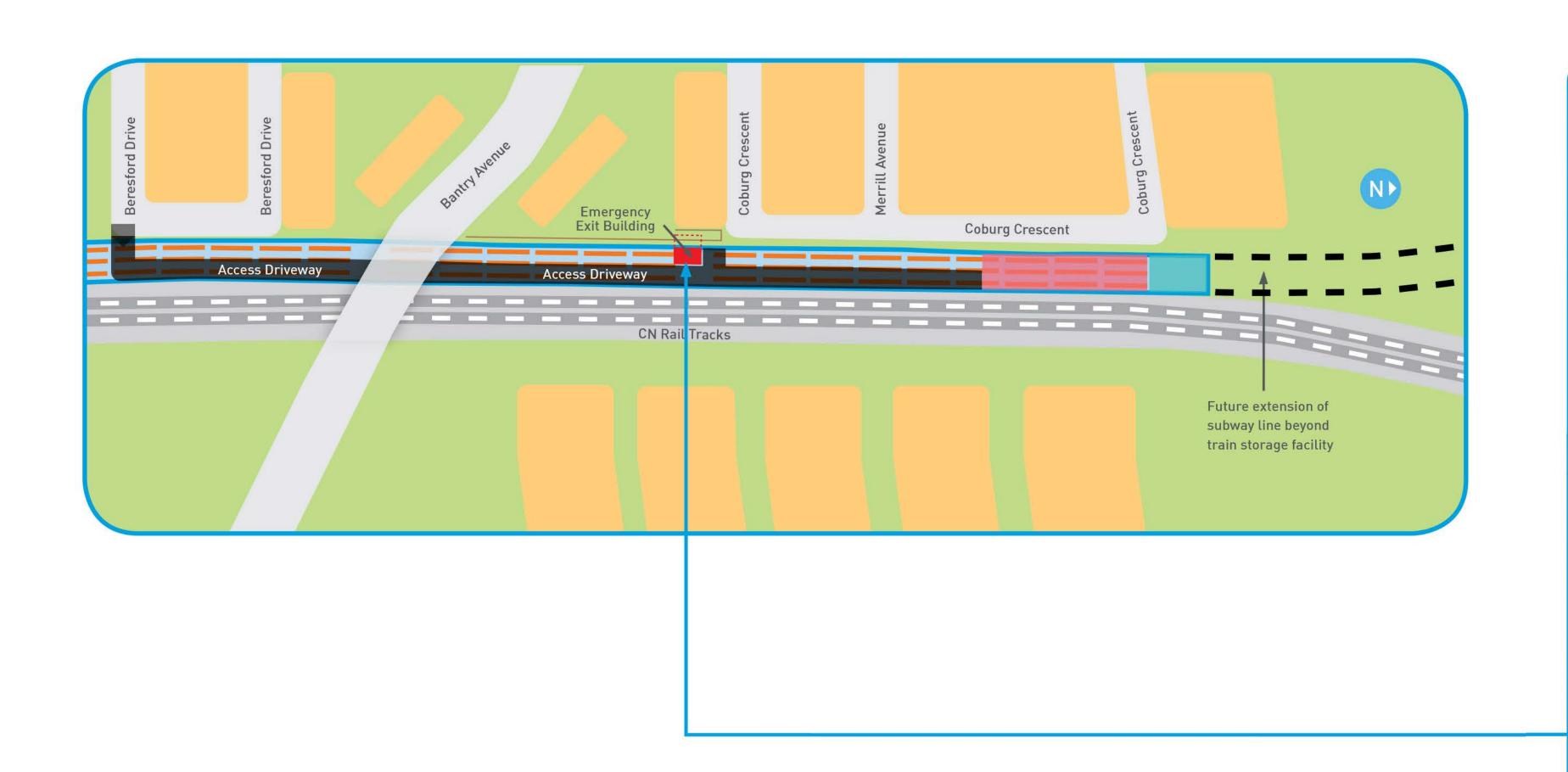
Building cross-section

- Driveway access via Beresford Drive
- Building revised to be two floors, one above ground and one underground

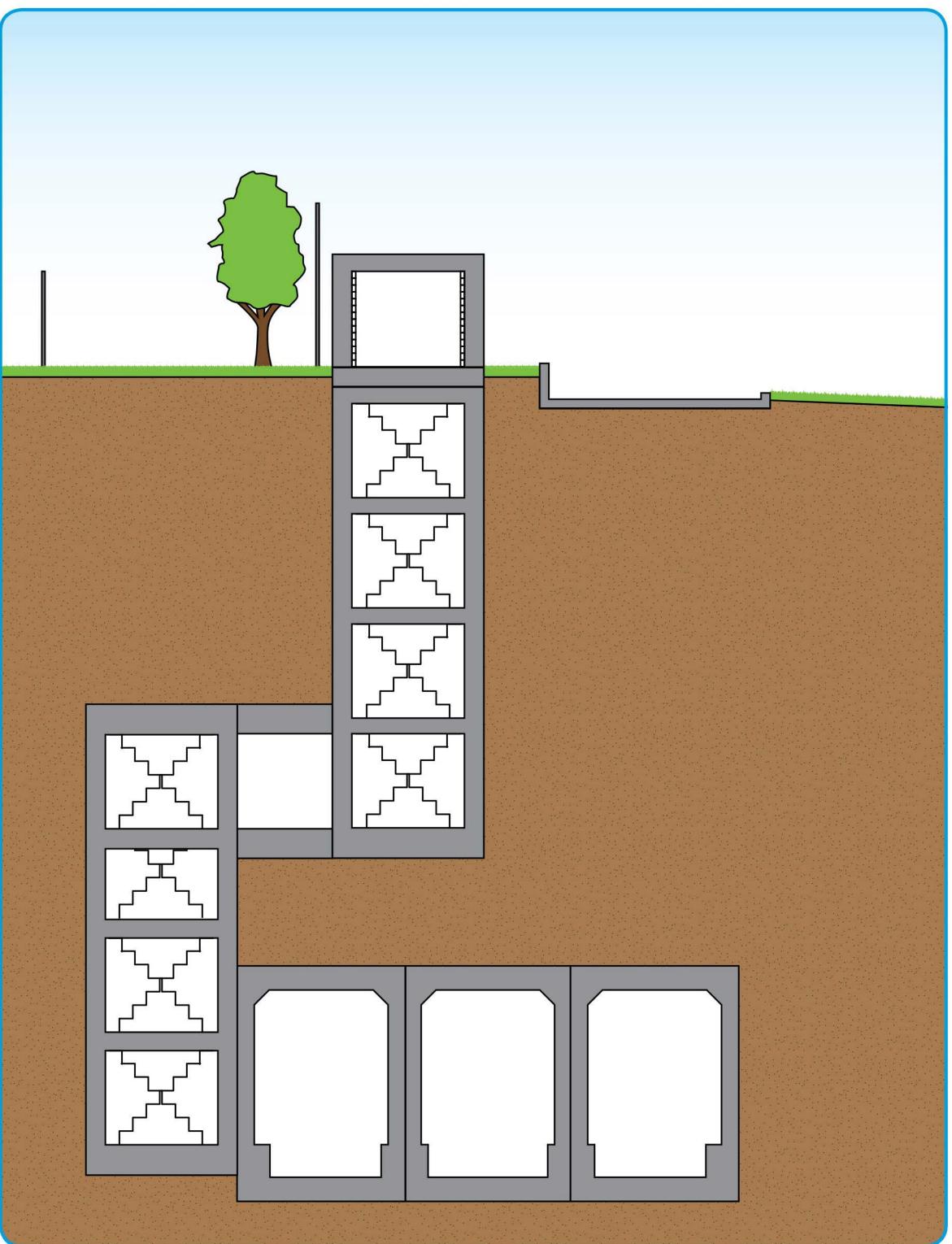
looking north







looking north



Emergency exit building cross-section

- Driveway access via Beresford Drive
- Above ground building located on Town of Richmond Hill lands

suggested modifications resulting from feedback

local community

Potential Impact	Proposed Mitigation
 Look and feel of building/landscaping 	The Town of Richmond Hill Site Plan Application process will determine the specific look/style of the building and the extent and type of landscaping on the site. We will continue to work with the Town throughout this process and inform residents and stakeholders of public consultation sessions.
• Work hours	Whenever possible, construction of this facility will take place during normal work hours [7am – 7pm]. If construction hours are extended we will ensure the public is informed in advance. Any questions or concerns regarding this project or construction work can be directed to your Community Liaison.
 Impacts on local streets 	To minimize traffic disruptions, an access driveway off of Beresford Drive has been included in the revised design for access to the train storage and maintenance facility.

Studies that will be finalized and submitted as part of the Train Storage Addendum:

Traffic impacts will be documented in the Environmental Project Report





suggested modifications resulting from feedback

environmental

Potential Impact	Proposed Mitigation
 Loss of vegetation due to subway construction 	Prior to construction, we will prepare a landscape restoration plan in consultation with the Town of Richmond Hill.
 Impact to groundwater during construction 	Before construction begins, we will prepare a groundwater management plan and permit applications to ensure impacts caused by construction are minimized. Water quality testing will be ongoing throughout construction.

Studies that will be finalized and submitted as part of the Train Storage Addendum:

- Natural Heritage Assessment Memorandum
- Geotechnical Assessment Report
- Groundwater Assessment Report
- Contamination Overview Study Report





suggested modifications resulting from feedback

construction

Potential Impact	Proposed Mitigation
 Air quality impacts 	Construction of the facility will follow best practices for dust suppression and construction vehicles will be monitored and well maintained.
 Noise and vibration 	Noise and vibration studies are being completed as part of the Environmental Assessment Addendum to identify and mitigate any possible negative noise and vibration issues as a result of construction. During operation noise and vibration will be minimal, as trains will be moving slowly to and from the facility.
 Noise impact resulting from emergency fan operations 	The vent will be located a sufficient distance from residential properties and will be equipped with silencers to ensure noise levels are kept to a minimum.
 Traffic detours/closed roads/Bantry Bridge closure 	The traffic analysis conducted indicates that the streets surrounding this construction zone [High Tech Road and 16th Avenue] have capacity to accommodate displaced traffic from Bantry Avenue [see map to right].

Studies that will be finalized and submitted as part of the Train Storage Addendum:

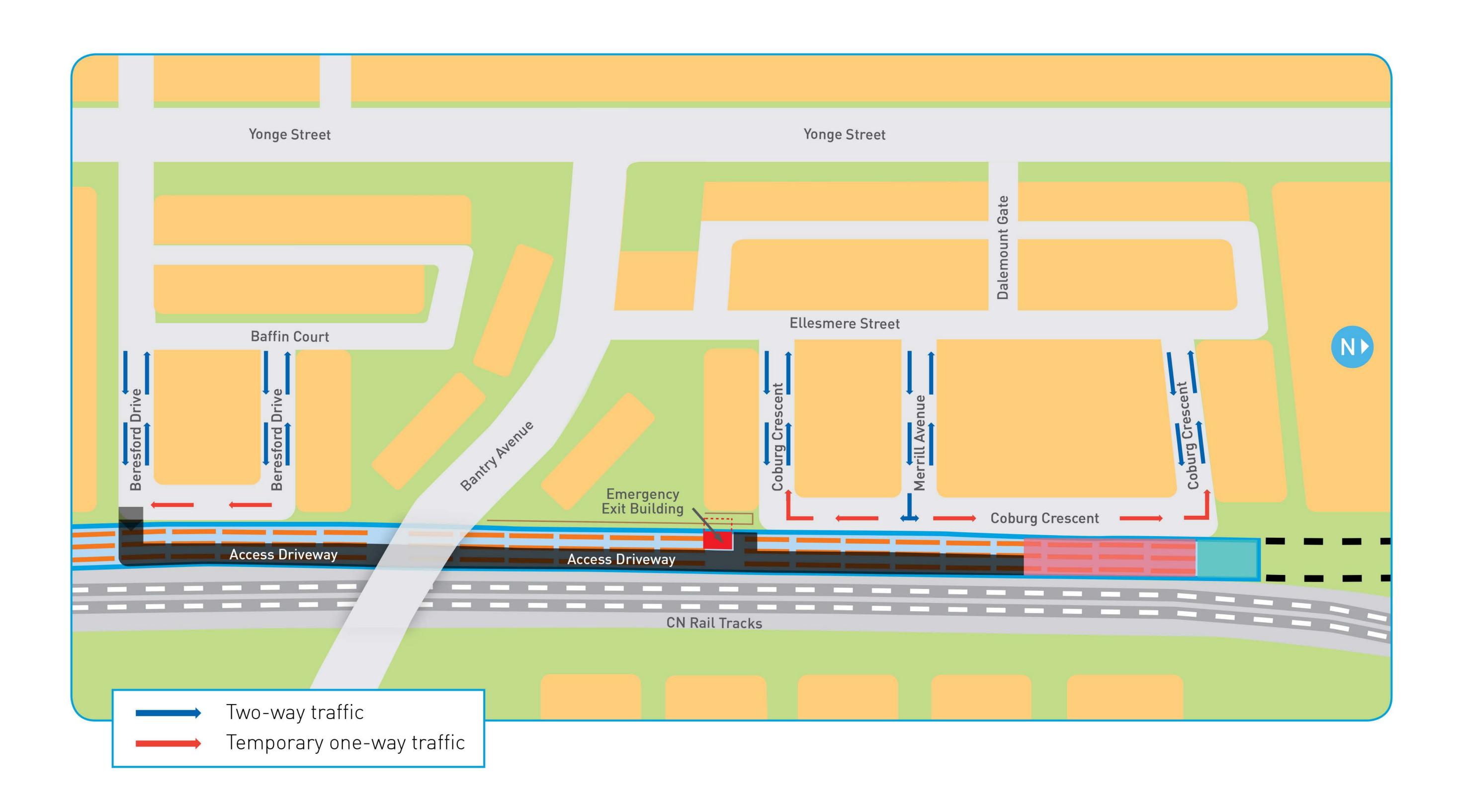
- Construction Air Quality Report
- Construction Noise and Vibration Report
- Cultural Heritage Assessment Report
- Stage 1-2 Archaeological Assessment Report
- Traffic impacts will be documented in the Environmental Project Report

Bantry Avenue closure detour route





construction staging - local traffic options

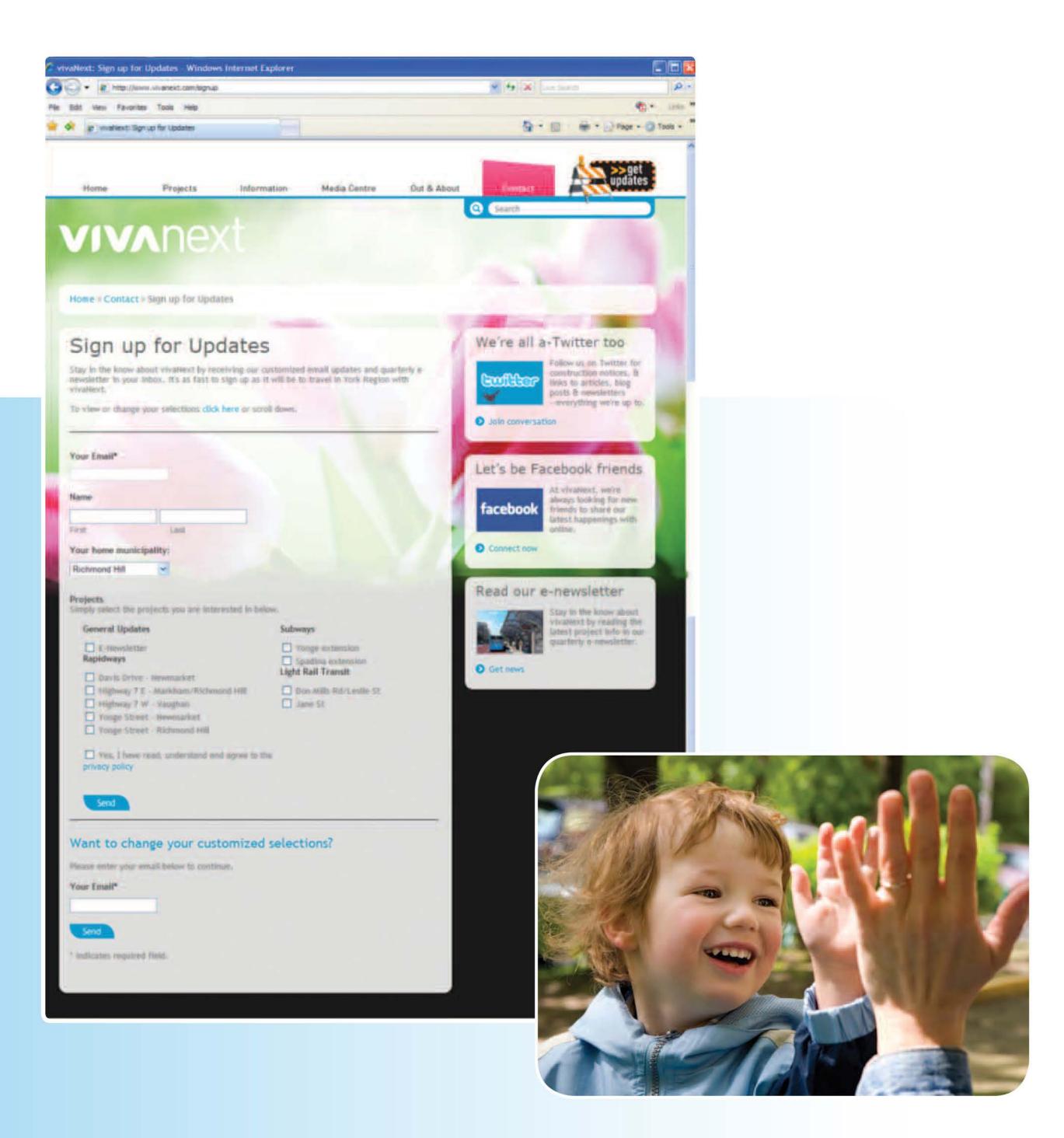




we want to know what you think

- Fill out a community consultation form in paper or on vivanext.com.
- Ask us questions, and discuss options and impacts.
- To receive an invitation to a follow-up meeting, and information about the Yonge Subway Extension project, sign up for updates on vivanext.com.







timeline



key 2013 dates

May 1

today's open house

summer 2013

follow-up meeting

fall / winter 2013

 submit addendum to Ministry of the Environment, followed by 30-day public review period.

project preliminary timeline							
Yonge Subway Extension Environmental Assessment including Public Consultation	TTC Subway Rail Yard Needs Study	Conceptual Design Study	Train Storage Addendum to the Environmental Assessment	Preliminary Engineering	Funding / Construction		
started in 2006 - approved in 2009	2009 - 2013		2013				

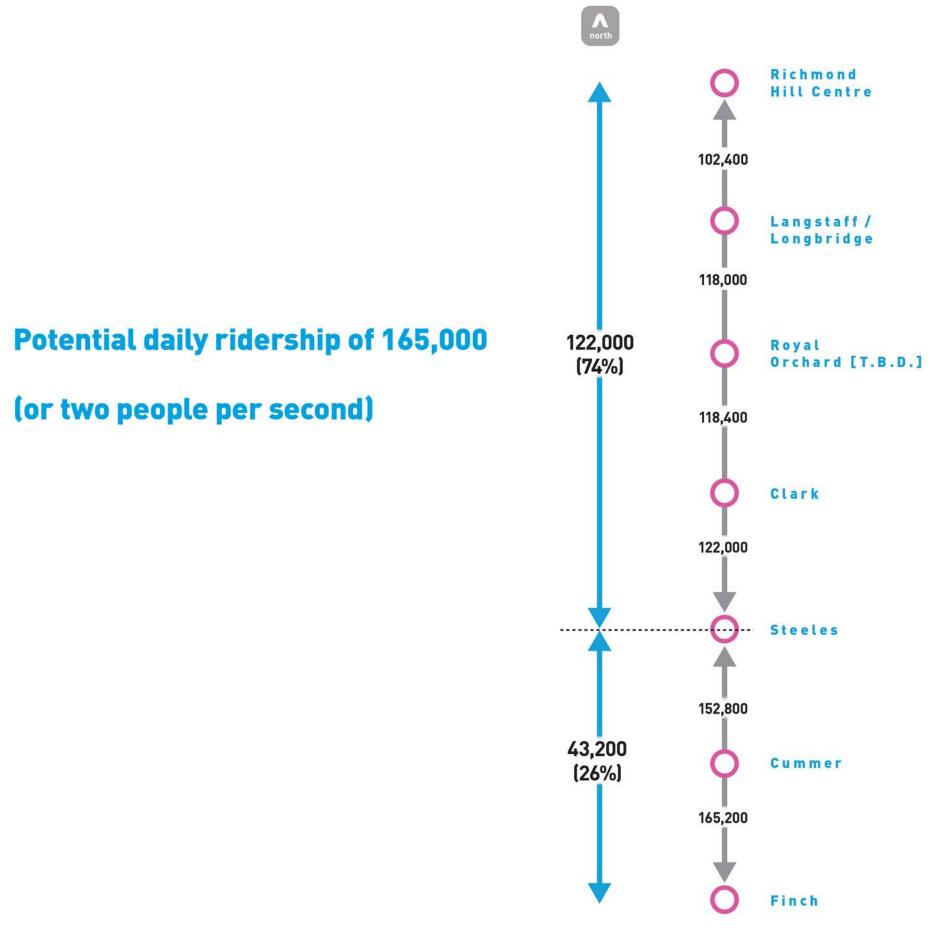


the big move - next steps

Funding has not yet been secured for this project which would provide the critical missing link to a regional transit system. With the Environmental Assessment approved and the Conceptual Design Study completed, this project is truly in a state of readiness for funding.

The Yonge Subway Extension would be:

- A critical link in a Greater Toronto and Hamilton Area regional transportation network.
- The best strategy to move people through the already crowded roadway between Finch and Highway 7.
- A responsible investment based on solid development plans, approved policy documents, and existing and new riders.
- An effective way to reduce road congestion and air pollution, with increased subway ridership.
- Meeting demand York Region has the highest growth rate in the GTA for the past 10 years.







let's keep in touch

- We want to let you know what's happening, so be sure to sign up for construction notices at vivanext.com/signup, read our blog at vivanext.com/blog, and find us on Facebook and Twitter.
- You'll also receive newsletters from us in the mail, and when we're hosting another open house we'll be sure to let you know.





community liaison info

• Having information, updates and answers makes the construction process easier. As projects move forward, we're committed to being available to you by phone, email or in person.





Tamas Hertel Community Liaison Tel: 905.886.6767 Ext. 71357

Cell: 905.505.1430

Email: tamas.hertel@york.ca

