

407 TRANSITWAY

HURONTARIO STREET TO HIGHWAY 400

PUBLIC INFORMATION CENTRE #1



BRAMPTON PUBLIC INFORMATION CENTRE

Date: December 6, 2016
Time: 4:00 p.m. to 8:00 p.m.
Location: Greenbriar Recreation Centre
1100 Central Park Drive
Brampton, Ontario L6S 2C9

WOODBRIIDGE PUBLIC INFORMATION CENTRE

Date: December 8, 2016
Time: 4:00 p.m. to 8:00 p.m.
Location: Woodbridge Pool and Memorial Arena
5020 Highway 7
Woodbridge, Ontario L4L 1T1

PROJECT WEBSITE: 407Transitway.com

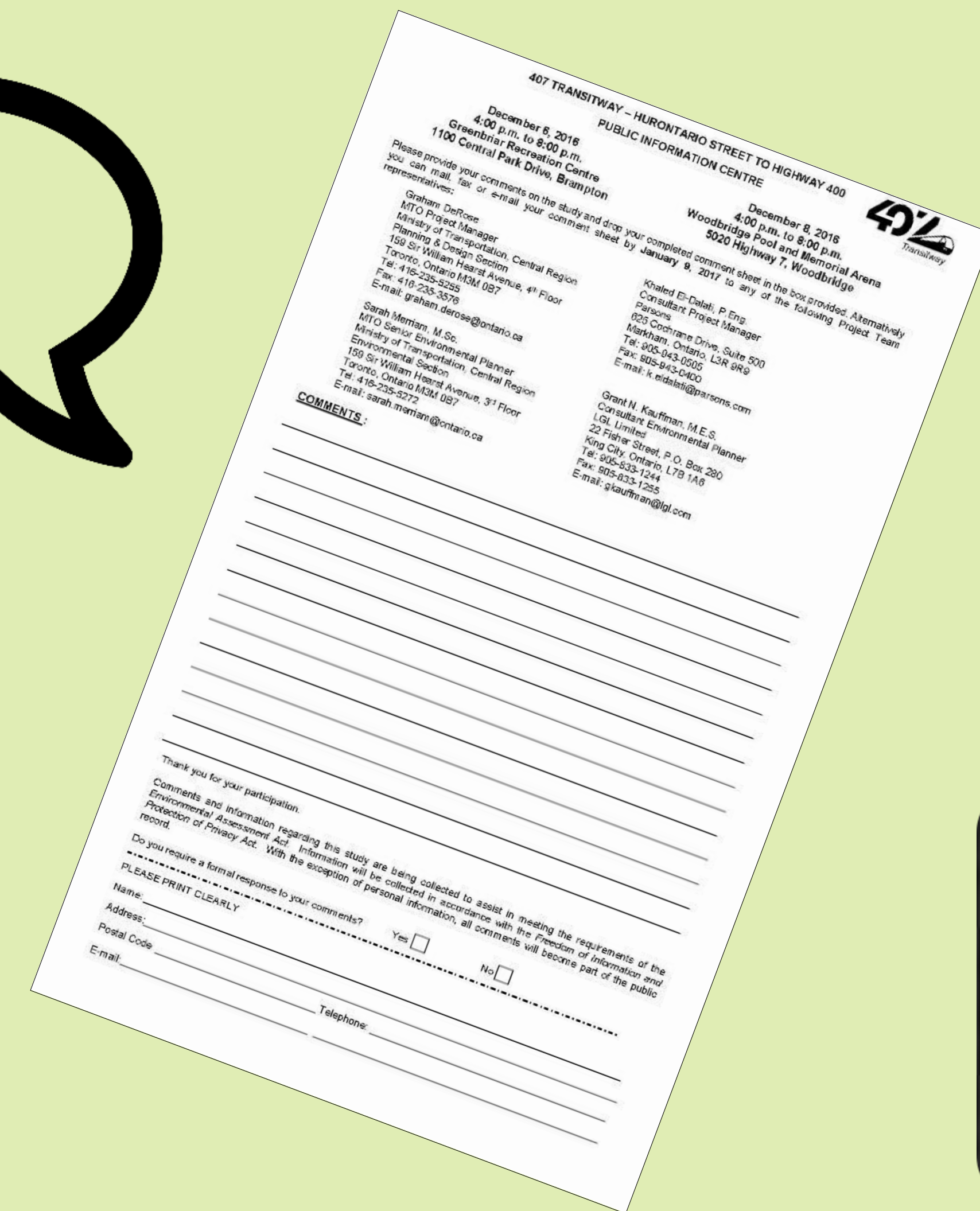


- Introduce the 407 Transitway project to the Public.
- Present planning alignment and station alternatives.
- Present initial alternative recommendations.
- Present alternatives evaluation criteria and methodology being applied.
- Obtain feed-back from the Public.

Project Website: 407Transitway.com

How can you comment?

1. Fill out a comment sheet.
2. Place a post-it with comments on any of the presentation boards.

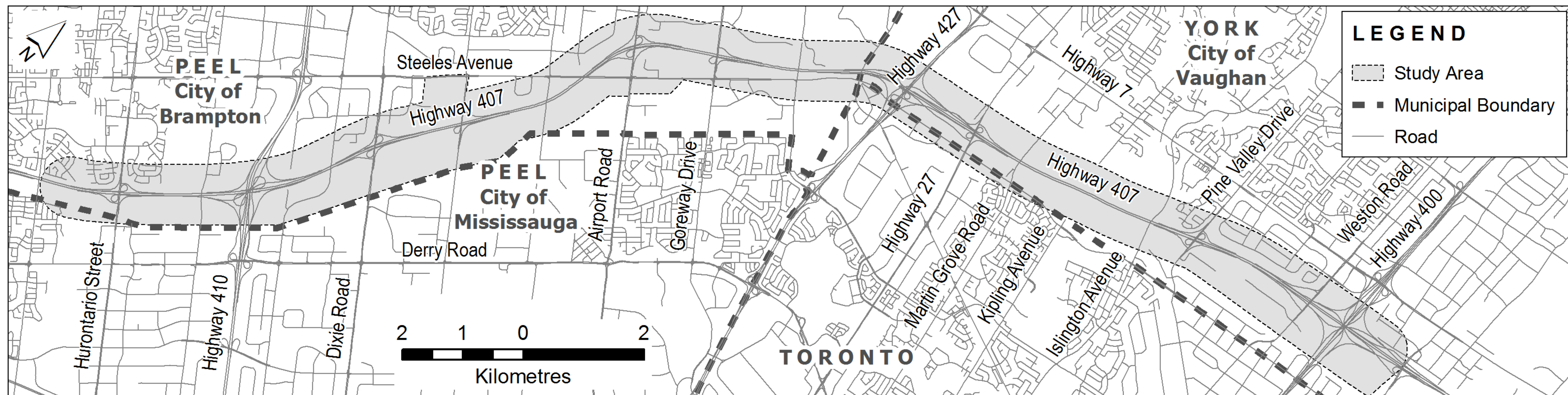


Comments would be appreciated by January 9th, 2017

What is the 407 Transitway?



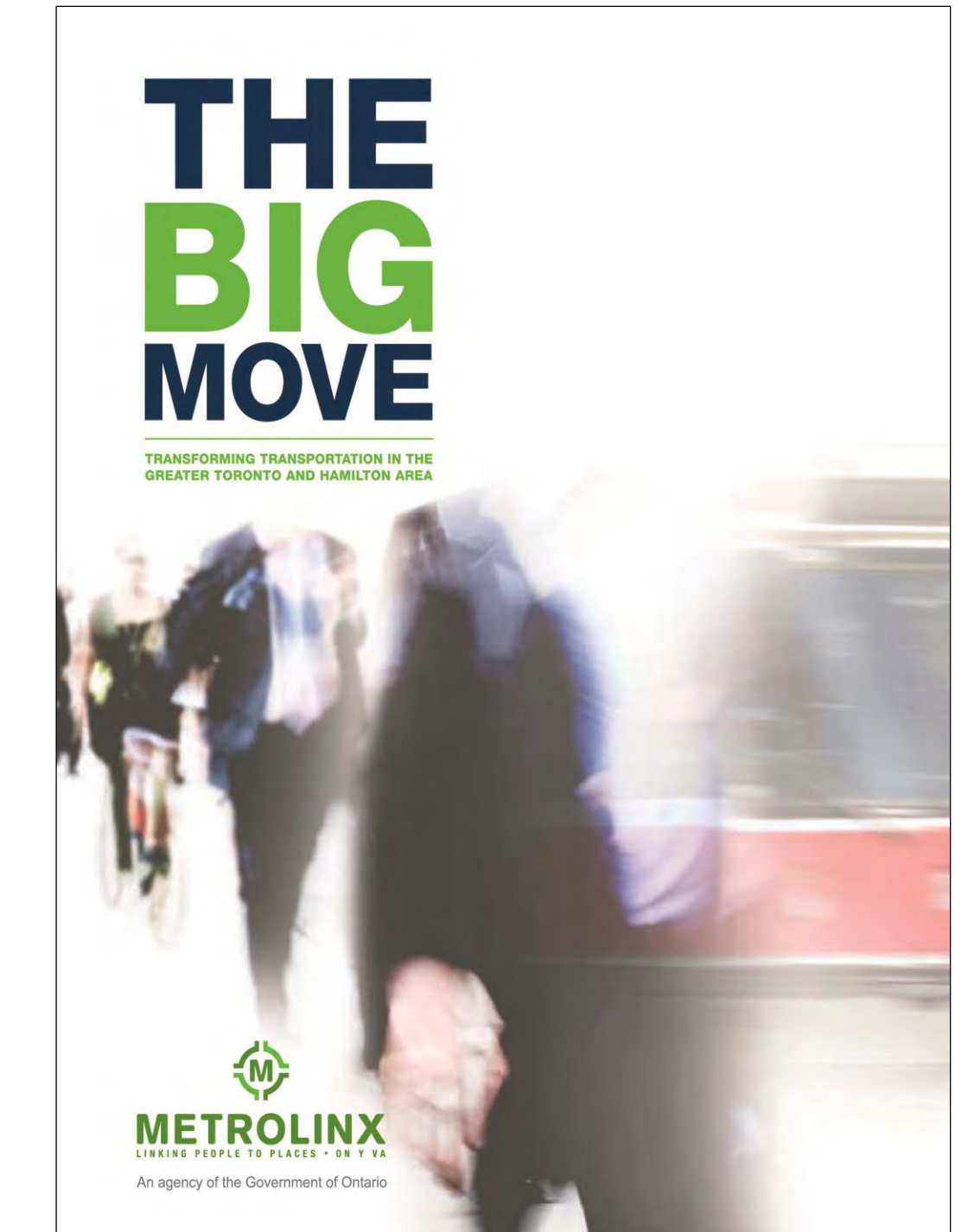
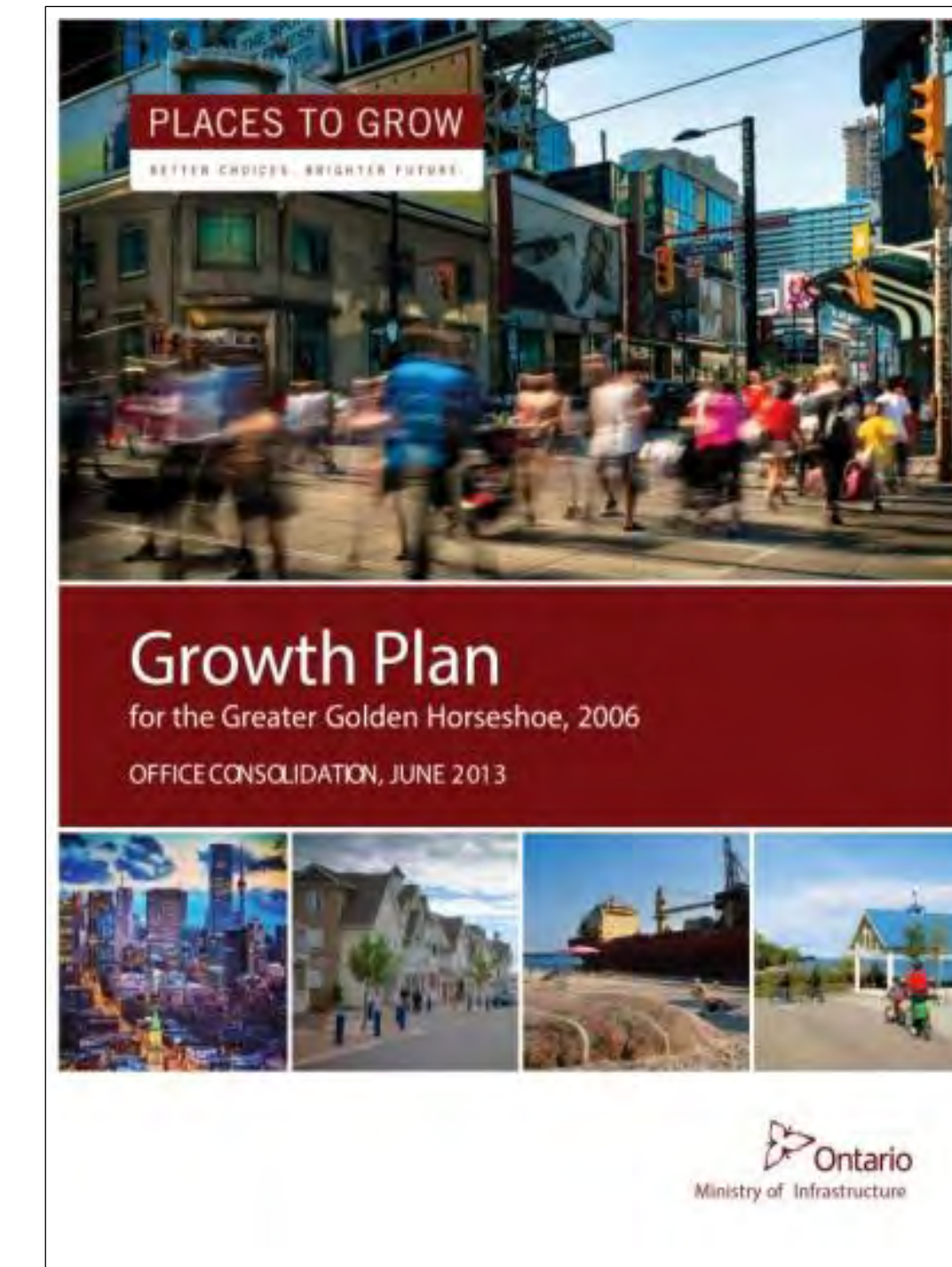
- Exclusive right-of-way, fully grade separated rapid transit runningway (Bus Rapid Transit - BRT or Light Rail Transit - LRT) parallel to Highway 407.
- The 407 Transitway will connect Burlington to Highway 35/115, a length of 150 km, with up to 50 surface stations.
- Study limits for this Section: West of Hurontario Street to east of Highway 400.



What is Driving the 407 Transitway Project?



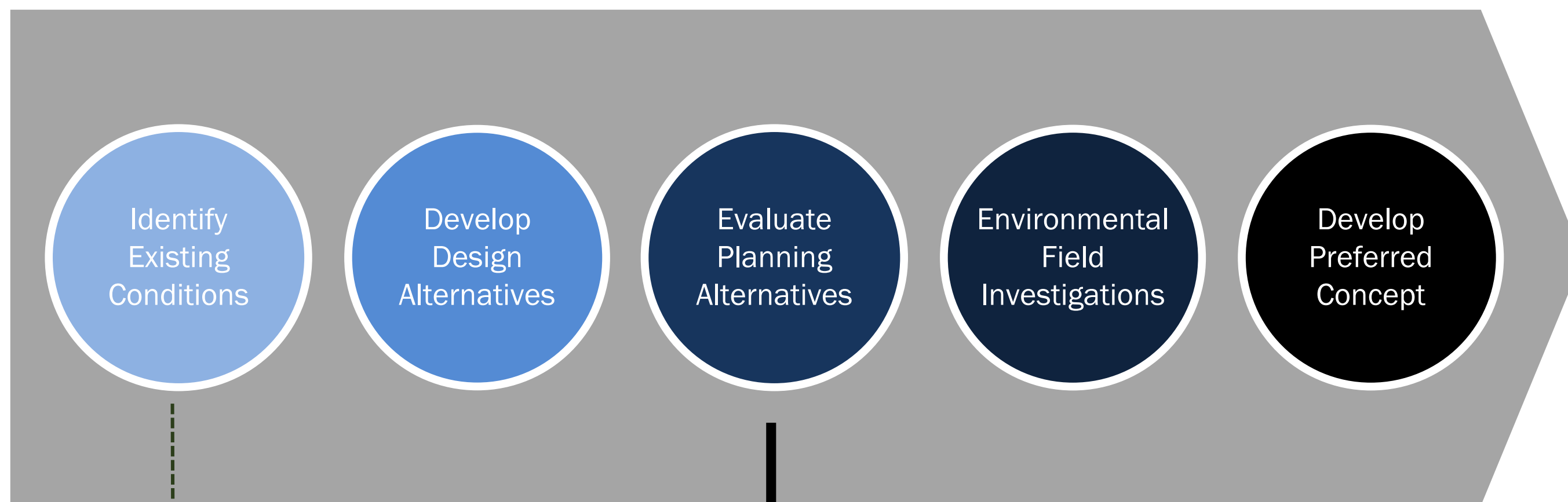
- The 407 Transitway will support current and future Greater Toronto and Hamilton Area rapid transit policies and initiatives.
- *It will* enhance east-west cross-regional mobility and increase transit capacity to meet forecasted travel demand.
- *It will* offer a viable, cost-effective way of moving people in the Highway 407 corridor.
- *It will* improve accessibility to existing/planned major urban centres/nodes, post secondary educational institutions, and other places of high demand.
- *It will* increase integration with regional transportation networks.
- *It will* reduce automobile dependence and green house gas emissions.
- *It will* alleviate congestion on Highway 407.
- The project builds on extensive work completed to date and will define the Transitway footprint and property requirements, address environmental impacts and receive Environmental Assessment approval.



Schedule & Process



Step 1 Planning Stage

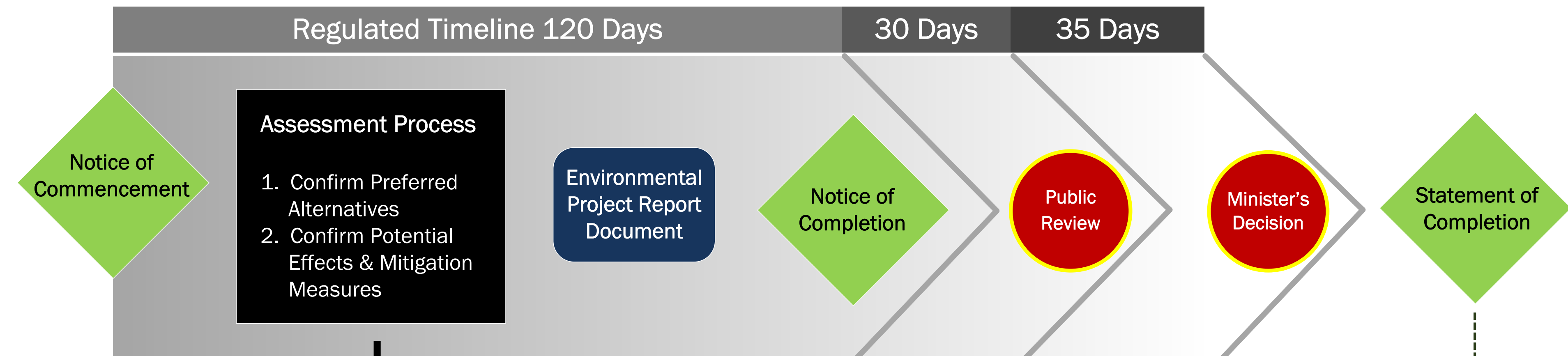



Existing Conditions & Ridership Analysis


Public Information Centre 1


WE ARE HERE

Step 2 Transit Project Assessment Process (TPAP)




Public Information Centre 2

Environmental Assessment Project Approval (can proceed to Detail Design)

Service Concept

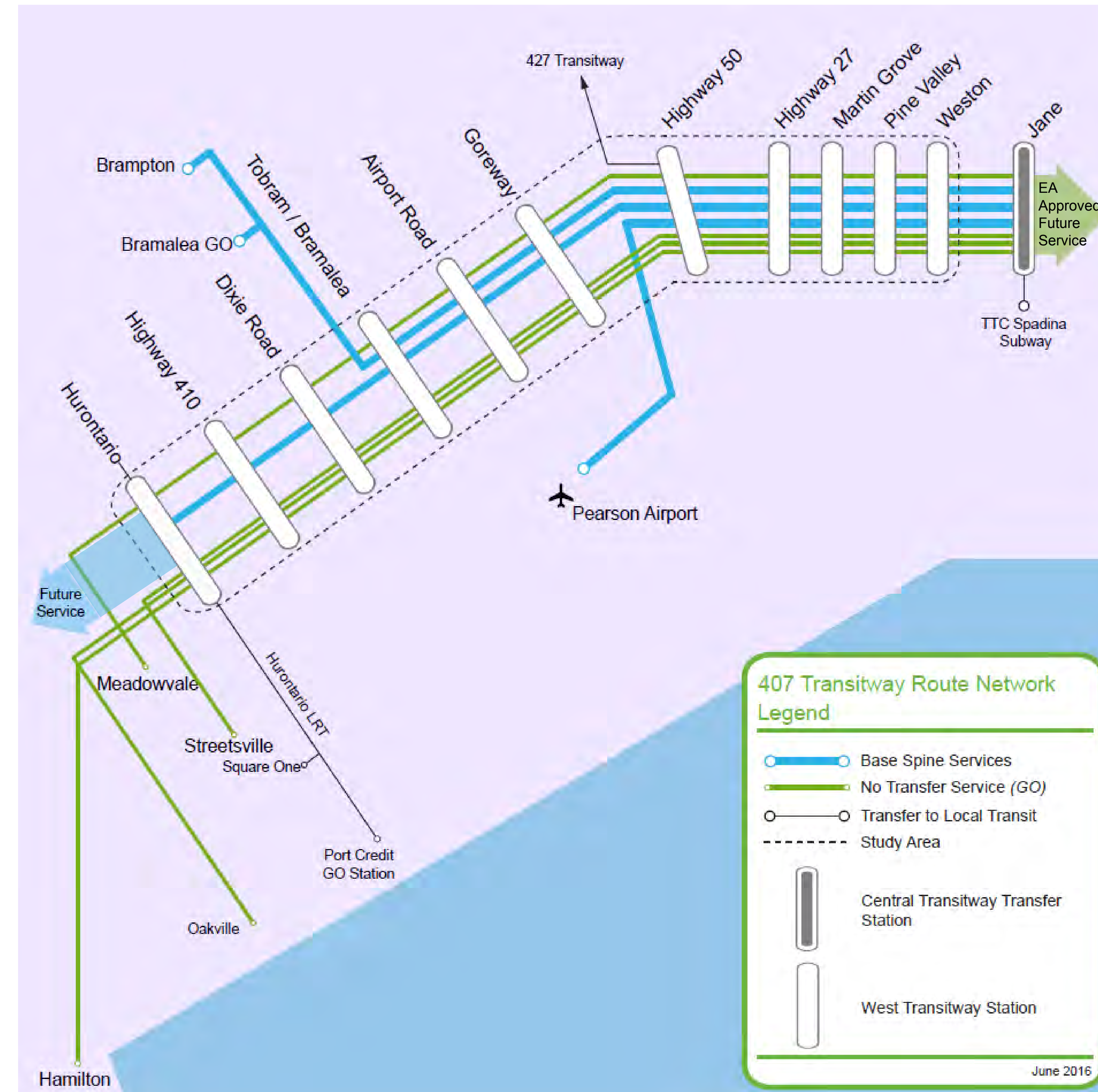


Extend the 407 Transitway operating concept:

- **Spine services:** Services that operate exclusively on the Transitway including some express routes.
- **No-transfer services (Interlining):** Designed to provide one-seat rides between major nodes and residential areas. Routes include portions both on and off the Transitway.
- Transitway operating speed is 100km/h between stations.

Nodes served by Transitway:

- Urban Growth Centres (Brampton, Vaughan, Richmond Hill, Markham, Downtown Oshawa, and Pickering).
- Post Secondary Institutions (York University, UOIT, Durham College, York University Keele Campus, York University Markham Campus).
- Transit Connections (Bramalea GO, MiWay, Brampton Züm, YRT, VIVA, TTC, HuLRT).



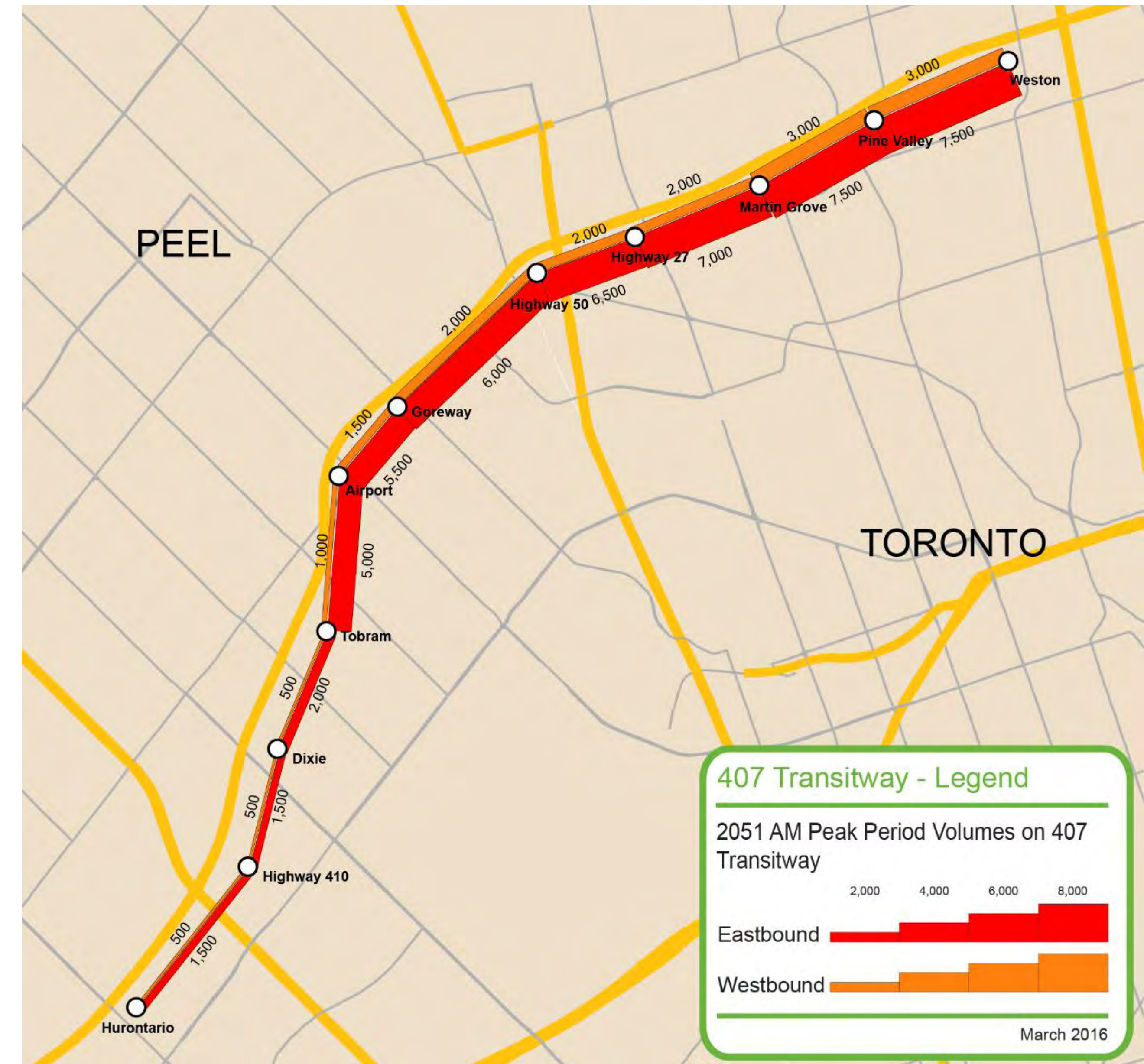
Schematic Transit Service Diagram for 407 Transitway

2051 AM Projected Peak Period Ridership



2051* AM Peak Hour Ridership on 407 Transitway, from Hurontario to Highway 400:

- AM Peak ridership projection of 7,500 riders.
 - Supports Bus Rapid Transit (in North America, BRT is typically used when ridership is 2,500 to 10,000)
 - Protect for long-term LRT (beyond 2051, to be considered when ridership exceeds 10,000).
- 80% of passengers traveling eastbound during morning commute hours.
- This section of the Transitway supports park-and-ride and interlining (no-transfer) services.



*2051 ridership forecast figures used are a projection of the official 2041 forecast population growth figures.

What does 7,500 Riders mean?



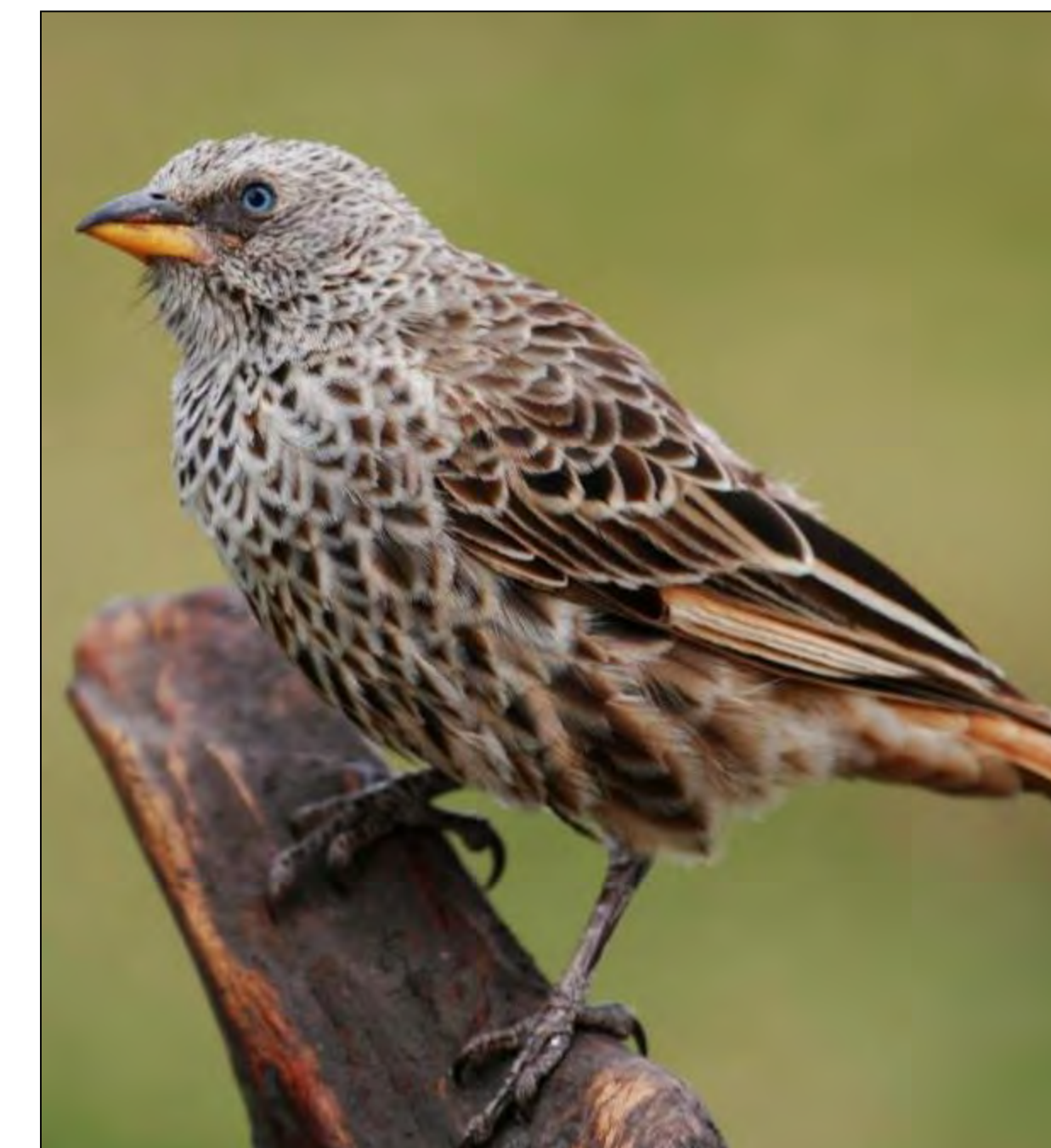
Existing Conditions:

4 main watersheds – Credit River, Etobicoke Creek, Mimico Creek and Humber River.

- 23 watercourse crossings potentially impacted.
- Species at risk - two wildlife species at risk observed during field investigations including Eastern Wood Peewee and Barn Swallow.
- Potential wildlife habitat exists to support a number of wildlife species at risk.
- One *Area of Natural and Scientific Interest* (Woodbridge Pleistocene Cut Earth Science ANSI) and one *Environmentally Significant/Sensitive Area* (Woodbridge Cut ESA).
- Presence of previously registered archaeological sites and cultural heritage sites.

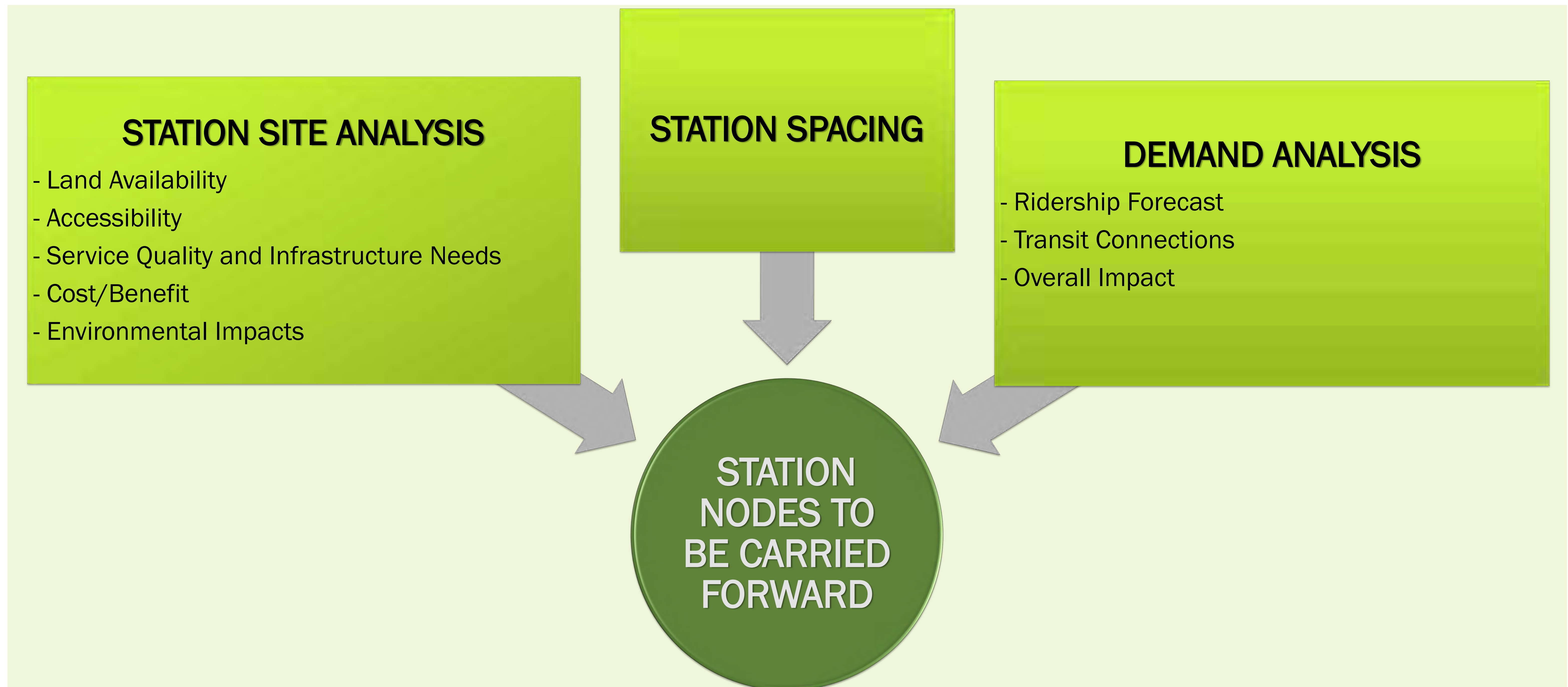
Environmental Field Investigations, Impact Assessment and Development of Protection/Mitigation Measures to Occur in 2016 and 2017:

- Natural Sciences (fisheries and terrestrial ecosystems)
- Landscape Composition
- Archaeology
- Cultural Heritage
- Noise
- Air Quality
- Groundwater
- Contaminated Property and Waste
- Land Use/Socio-Economics
- Hydrology

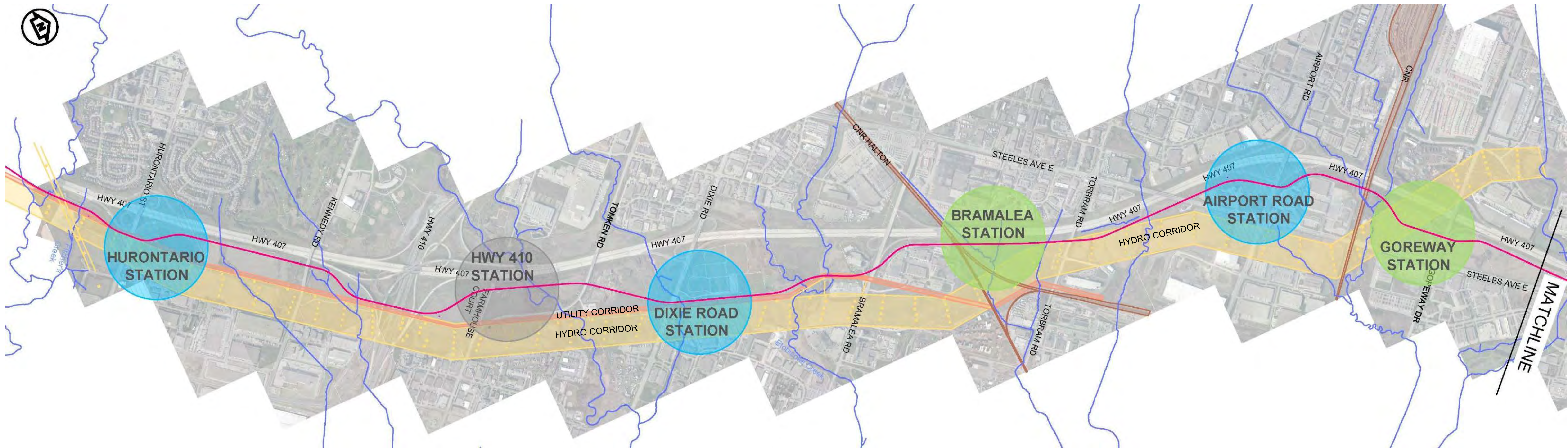


STEP 1: Start with Stations at all important arterial road crossings with 407 ETR.

STEP 2: Screen stations based on ridership, land availability, environmental impacts, accessibility and proximity to adjacent stations.



Transitway Corridor and Candidate Station Nodes



Hurontario Station *Selected*

- Highest demand of all stations
- Connects to future Hurontario LRT

Hwy 410 Station *Not Selected*

- Low demand
- Limited land availability
- Limited access opportunities

Dixie Road Station *Selected*

- High future demand potential
- Feasible accessibility

Bramalea Station *Conditionally Selected*

- Most demand from interlining
- Low demand for local access

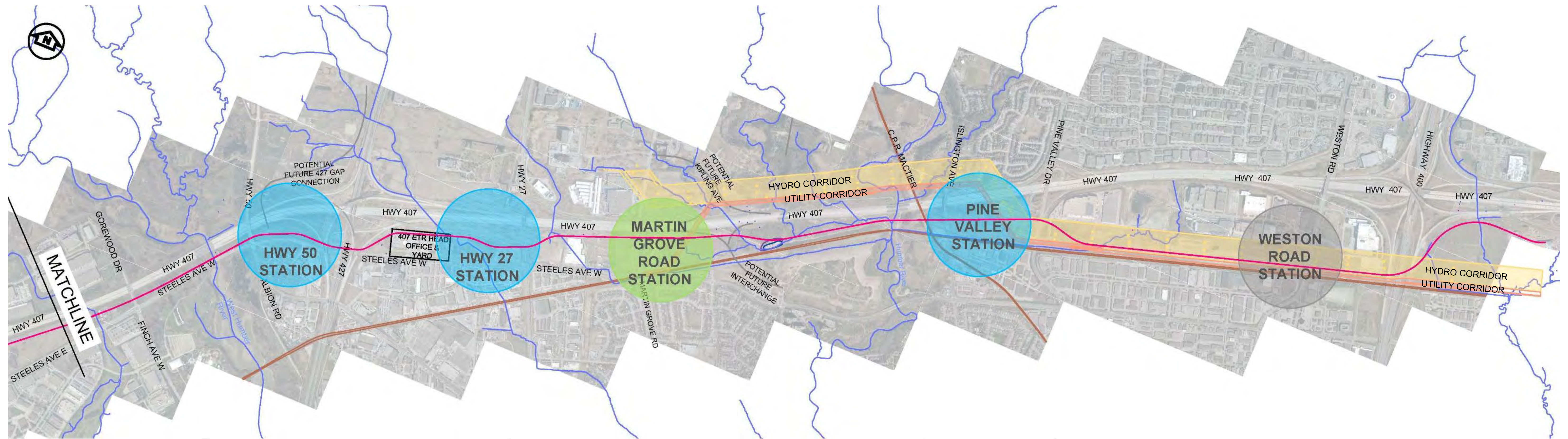
Airport Road Station *Selected*

- High demand
- Limited land availability

Goreway Station *Conditionally Selected*

- Moderate demand
- Very close to Airport Road Station
- May relieve high demand at Airport Road Station

Transitway Corridor and Candidate Station Nodes



Hwy 50 Station *Selected*

- High demand
- Connects to future 427 Transitway

Hwy 27 Station *Selected*

- High demand

Martin Grove Road Station *Conditionally Selected*

- Moderate demand
- May relieve high demand at Hwy 27 Station

Pine Valley Station *Selected*

- Moderate demand
- Long distance to next station (6 km to Jane Station)

Weston Road Station *Not Selected*

- Low demand
- No right of way availability for stop platforms
- Limited space for station facilities
- Limited access opportunities
- Close proximity to Jane Station

Evaluate Planning Alignment and Station Site Alternatives



STEP 1: Identify all possible station sites in the areas of the selected nodes, and alignments linking the station site alternatives.

STEP 2: Evaluate all planning alternatives based on Service Quality and Infrastructure Considerations and on Environmental Impacts.

ENVIRONMENT

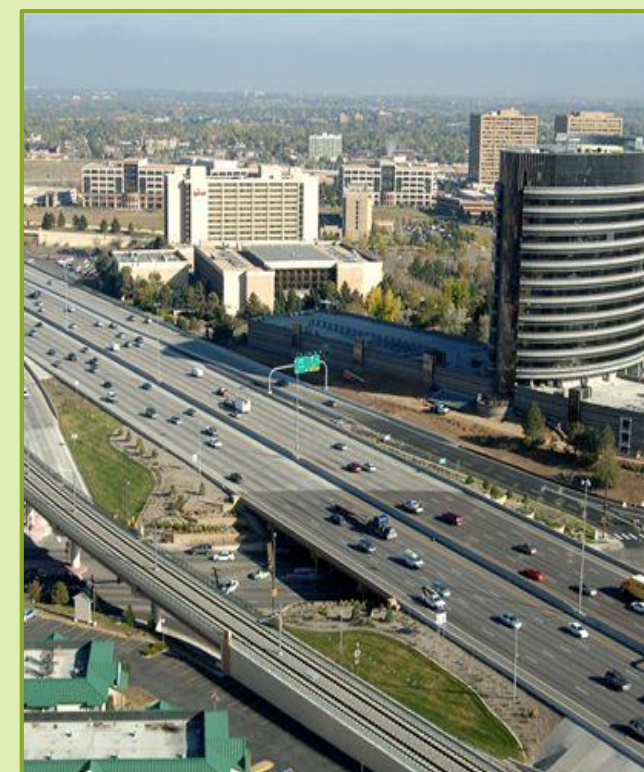
Natural

- Landform/ Features
- Hydrology, Geology and Hydrogeology
- Species/ Habitat at Risk
- Natural heritage resources



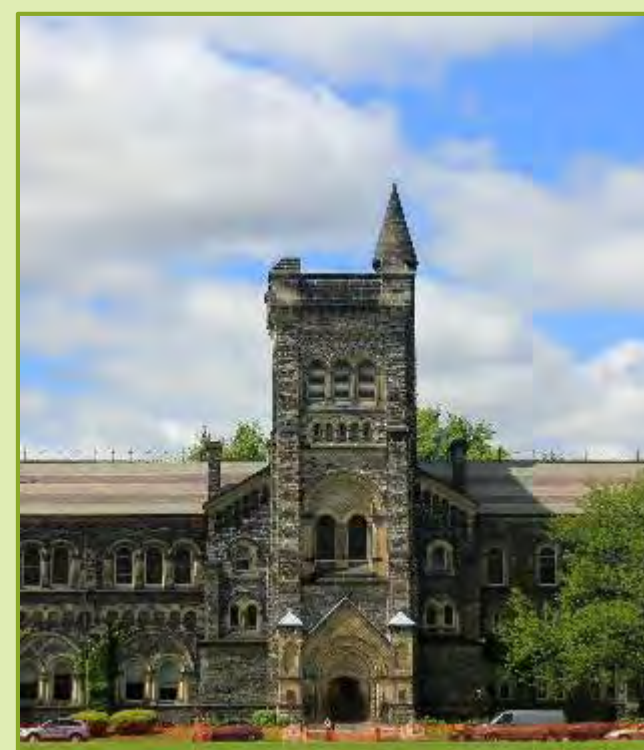
Social

- Property
- Noise and Air Quality Impacts
- Construction Staging Impacts
- Land Use Compatibility with Provincial and Municipal Plans and Policies



Cultural

- Archeological Potential Effects
- First Nation Lands



SERVICE QUALITY AND INFRASTRUCTURE

Transitway Operation

- Transitway Alignment (Safety, Ride Comfort, Travel Time)
- Suitability for Staged Implementation



Accessibility & Connectivity

- Pedestrian Accessibility and Connectivity
- Vehicular Accessibility
- Transit Connectivity



Site Area

- Size and Shape
- Optimize Station Facility Layout and Functionality
- Area for Surface Expansion



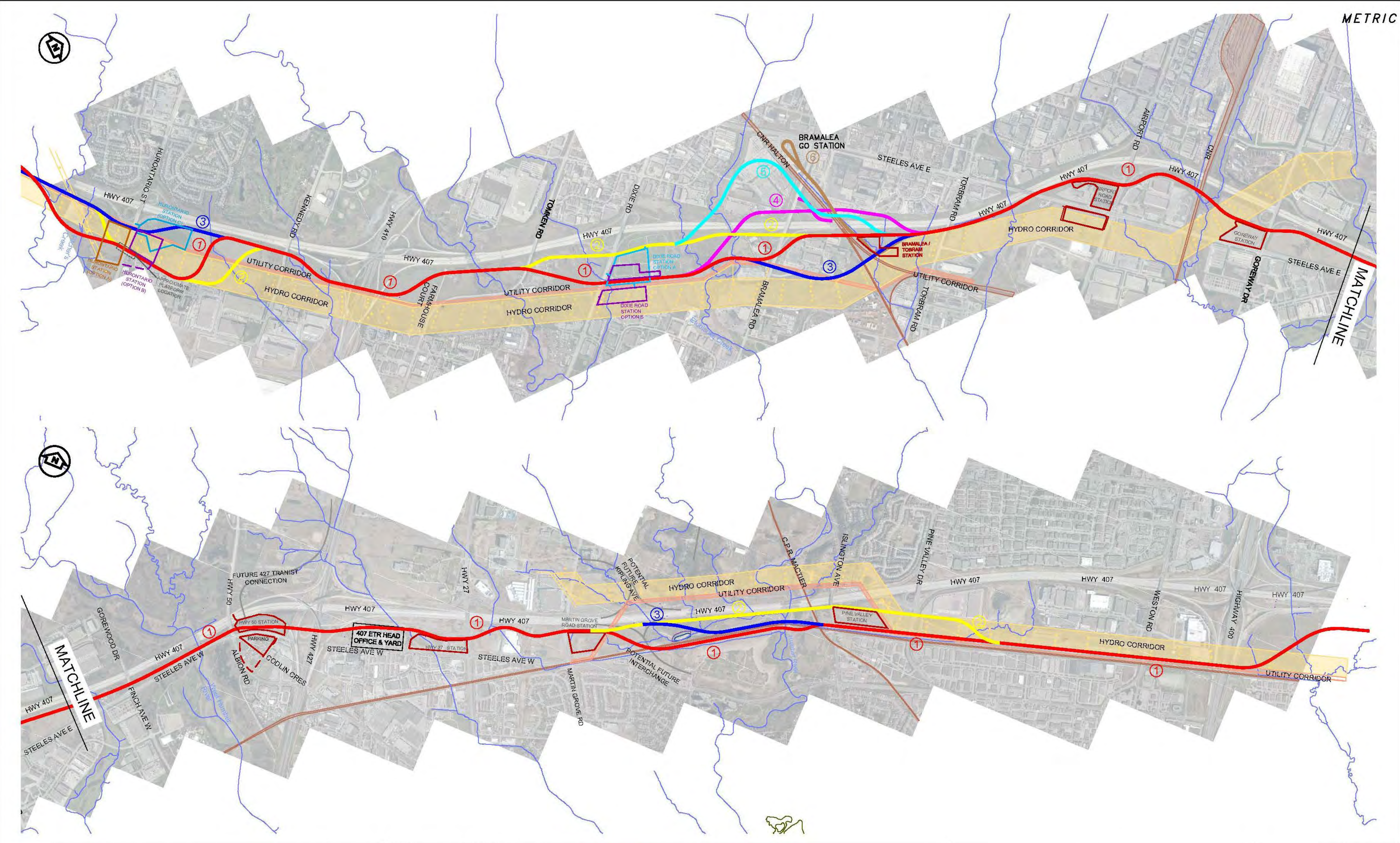
Constructability and Cost

- Disruption to Traffic
- Major Utility Relocation
- Cost Range



STEP 3: Select recommended station and alignment alternatives.

Alignment and Station Site Alternatives



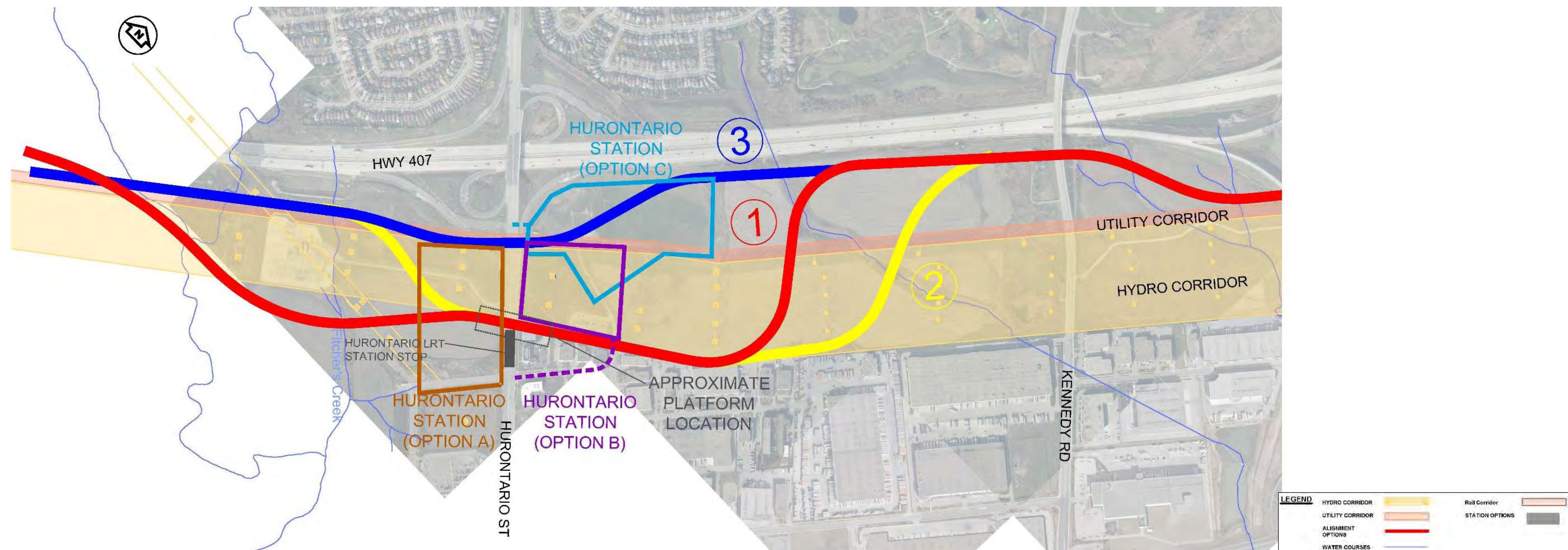
SCALE
NOT TO SCALE

LEGEND	
HYDRO CORRIDOR	
UTILITY CORRIDOR	
ALIGNMENT OPTIONS	
WATER COURSES	
Rail Corridor	
STATION OPTIONS	

407 TRANSITWAY
WEST OF HURONTARIO TO EAST OF HWY 400

ALIGNMENT OPTIONS KEY MAP	PLATE
	DATE

Alignment and Station Site Alternatives Huronario Street Area



Alignment Alternatives

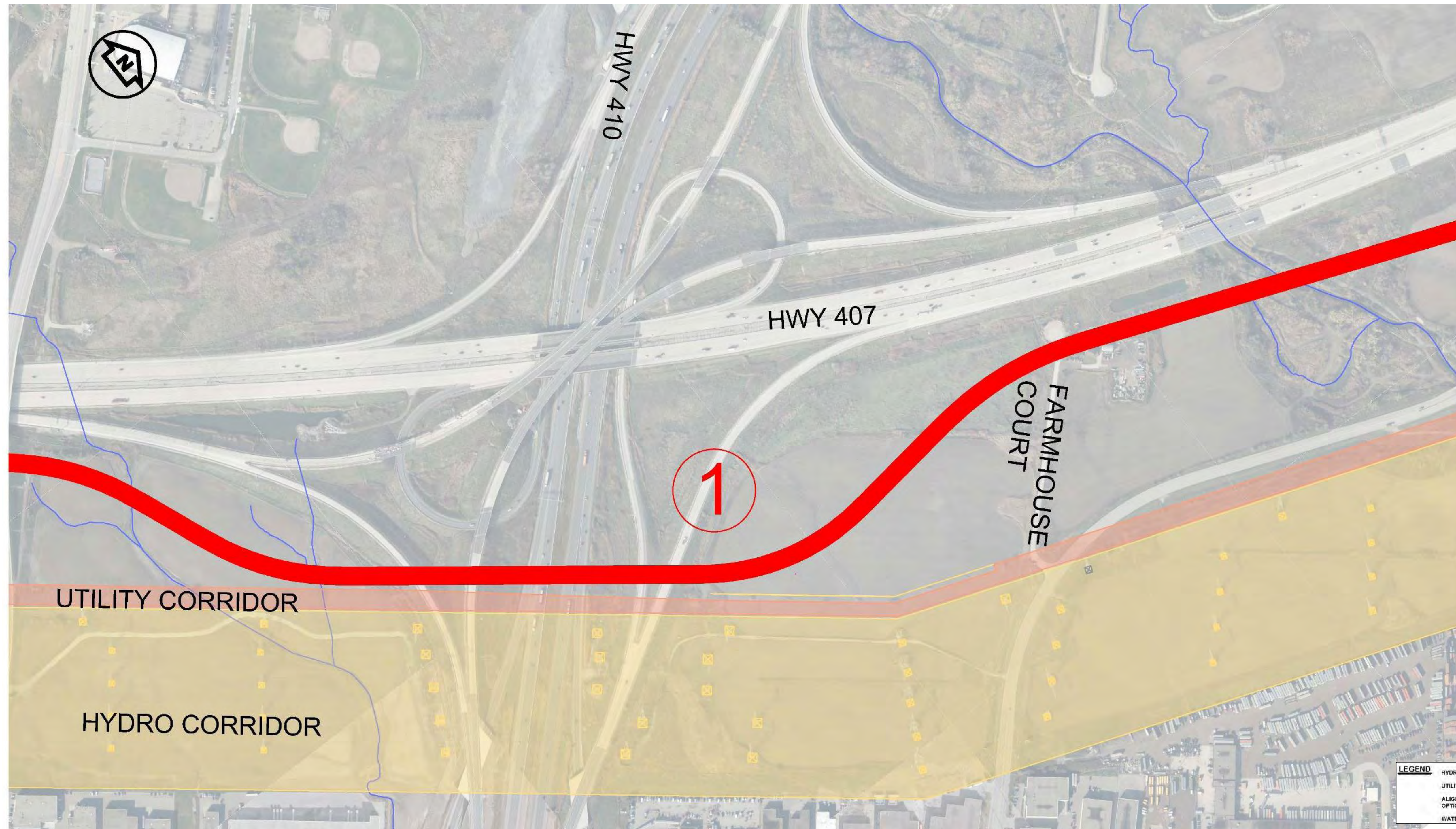
- **Alignment Alternative 1:** Connects with the Huronario LRT (HuLRT) stop; no impact to HuLRT approved Operations, Maintenance and Storage Facilities (OMSF); no impacts to hydro towers; restrained speed; impacts private property.
- **Alignment Alternative 2:** Connects with HuLRT stop; alternative only feasible if HuLRT relocates OMSF to initial site just east of interchange; impacts private property.
- **Alignment Alternative 3:** No private property impacts; no connection with HuLRT Stop.

Station Options

- **Station Option A (Alignments 1, 2):** Would affect private property.
- **Station Option B (Alignments 1, 2):** May have minor private property impact.
- **Station Option C (Alignment 3):** Only feasible for Alignment 3. No private property impacts.

Initial Recommendation: All alignment alternatives and station options being carried forward for further analysis.

Alignment and Station Site Alternatives Hwy 410 Area



Alignment Alternatives

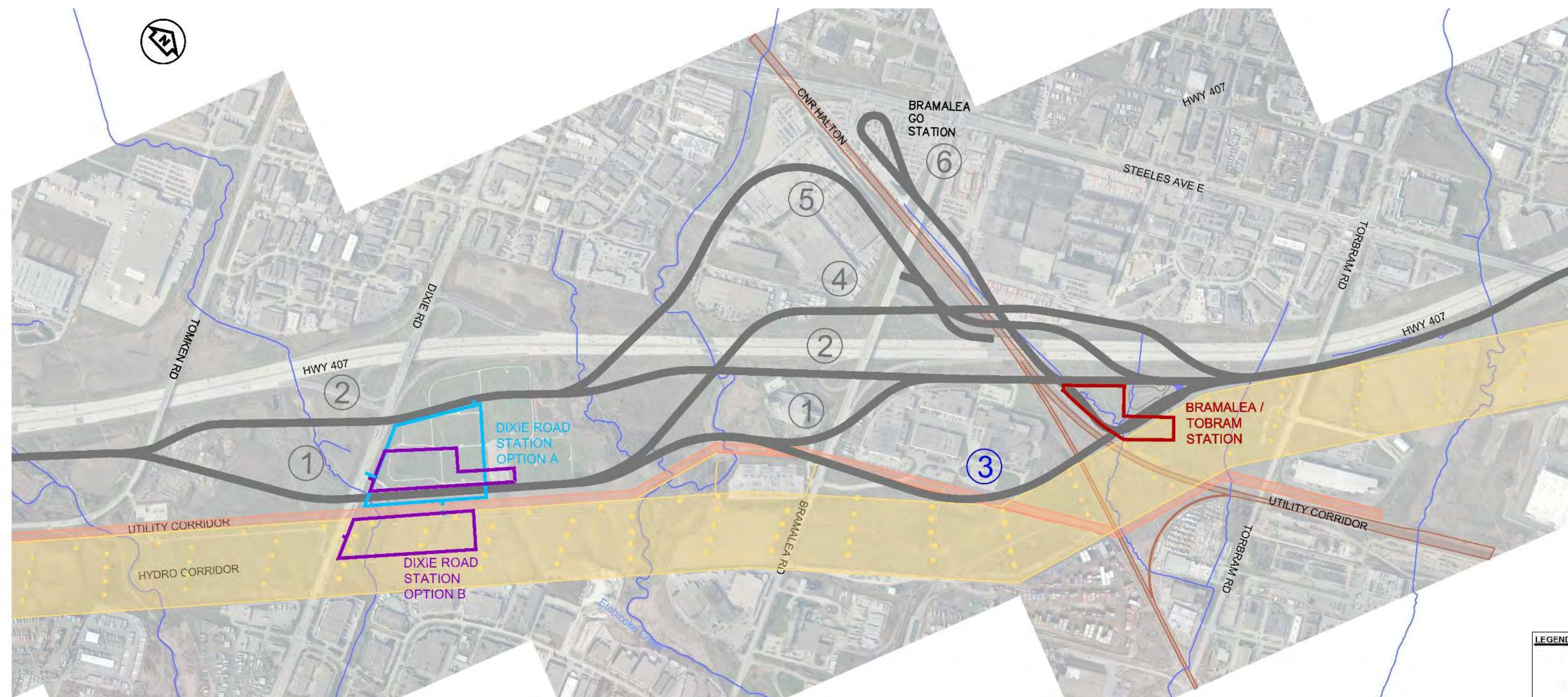
- **Alignment 1:** Alignment across Hwy 410 may be adjusted based on constructability assessment of the interchange tunnel.

Station Options

- **No station** at this location.

Initial Recommendation: Alignment carried forward.

Alignment and Station Site Alternatives Dixie and Bramalea Station Options



Dixie Station Option

- Good access to/from Highway 407.
- Signalized access from Dixie Road.
- Goal to minimize impacts to soccer fields.
- **Option A (Alignments 1, 2):** Provides for all parking north of Utility/ Hydro Corridor; impacts soccer fields.
- **Option B (Alignment 1):** Minimizes impact to soccer fields by providing split parking lot configuration utilizing lands within Hydro Corridor.

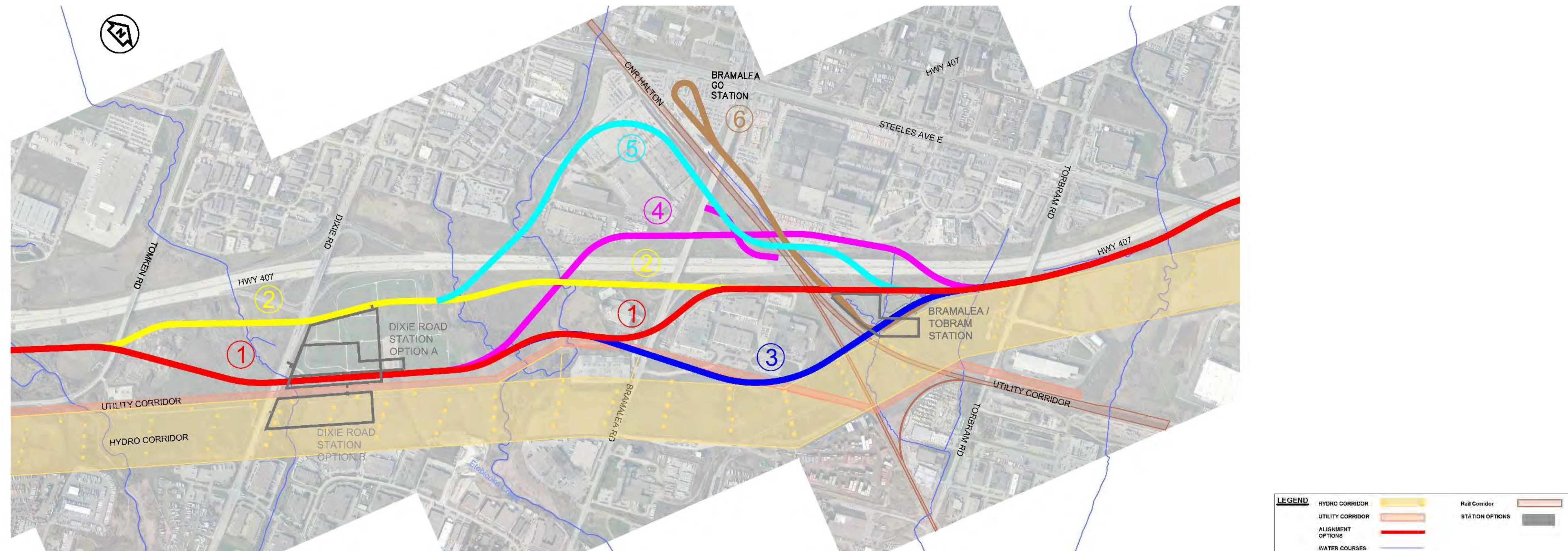
Bramalea Station Option

- Isolated from local road and poor pedestrian access.
- Poor access to/from Highway 407.
- Low park and ride demand.
- Limited opportunity to connect to Bramalea GO Station.

Initial Recommendation: Eliminate Bramalea Station option. Carry forward both options A and B for Dixie Road Station for further investigation and analysis..

Alignment and Station Site Alternatives

Dixie and Bramalea Alignment Alternatives

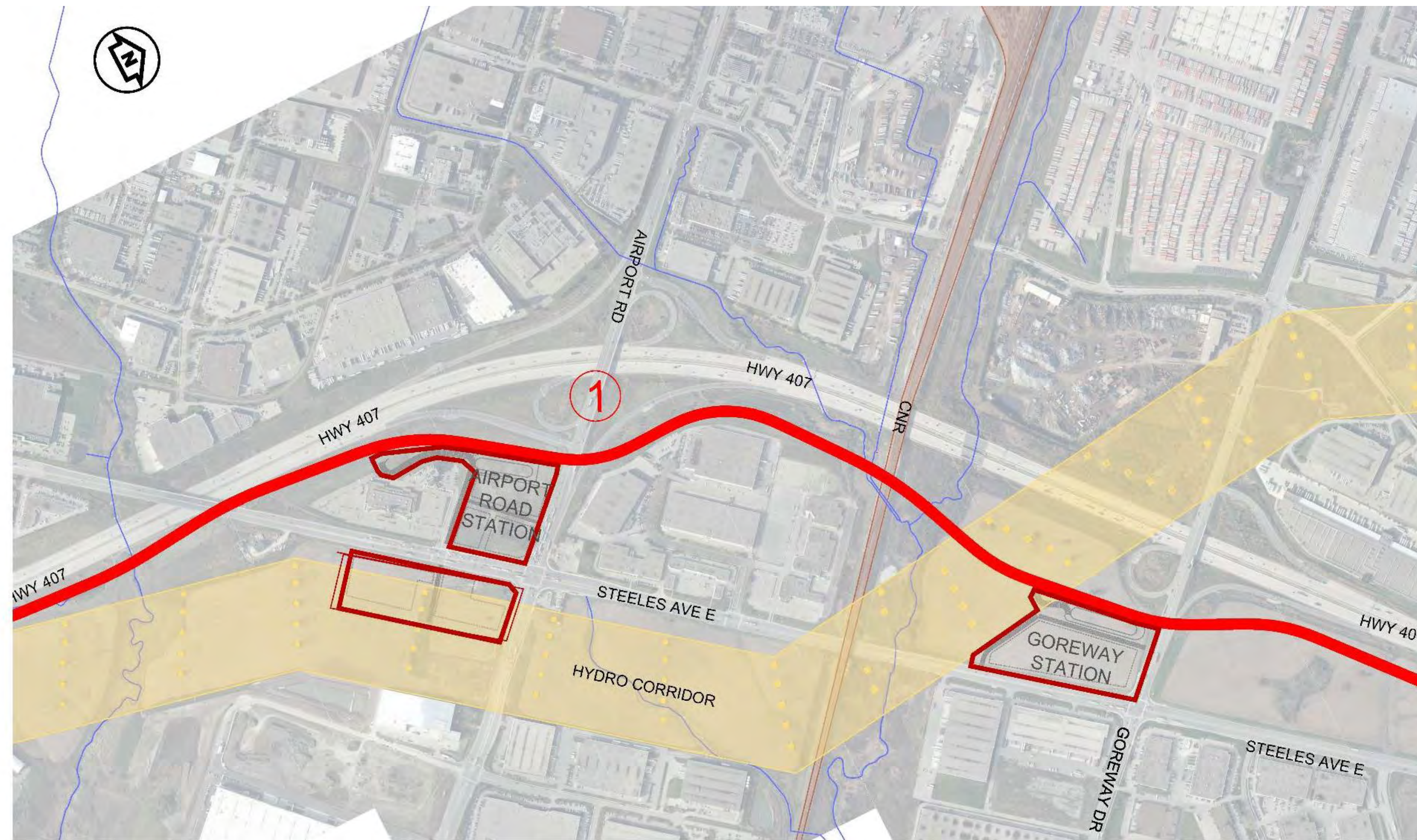


Alignment Alternatives

- **Alignment Alternatives 1-3 (south of Highway 407):**
 - **Alternative 1:** Alignment follows protected corridor; it crosses over Dixie Road and under Bramalea Road; parallel access road required to accommodate interlining connection.
 - **Alternative 2:** Major property impacts; complex crossing under Highway 407 Interchange; and under Dixie Road and Bramalea Road.
 - **Alternative 3:** Alignment crosses over Dixie Road and over Bramalea Road along north limit of Utility/Hydro Corridor. Well suited to interlining correction at Bramalea Road.
- **Alignment Alternatives 4-5 (north of Highway 407):** Excessive construction cost; significant property impacts.
- **Alignment Alternative 6 (spur connection to Bramalea GO Station):** Insufficient right of way available to accommodate connection.

Initial Recommendation: Carry forward alignment alternatives 1 and 3, in conjunction with need for interlining to serve demands from Bramalea GO Station and Bramalea City Centre.

Alignment and Station Site Alternatives Airport Road Area



Alignment Alternatives

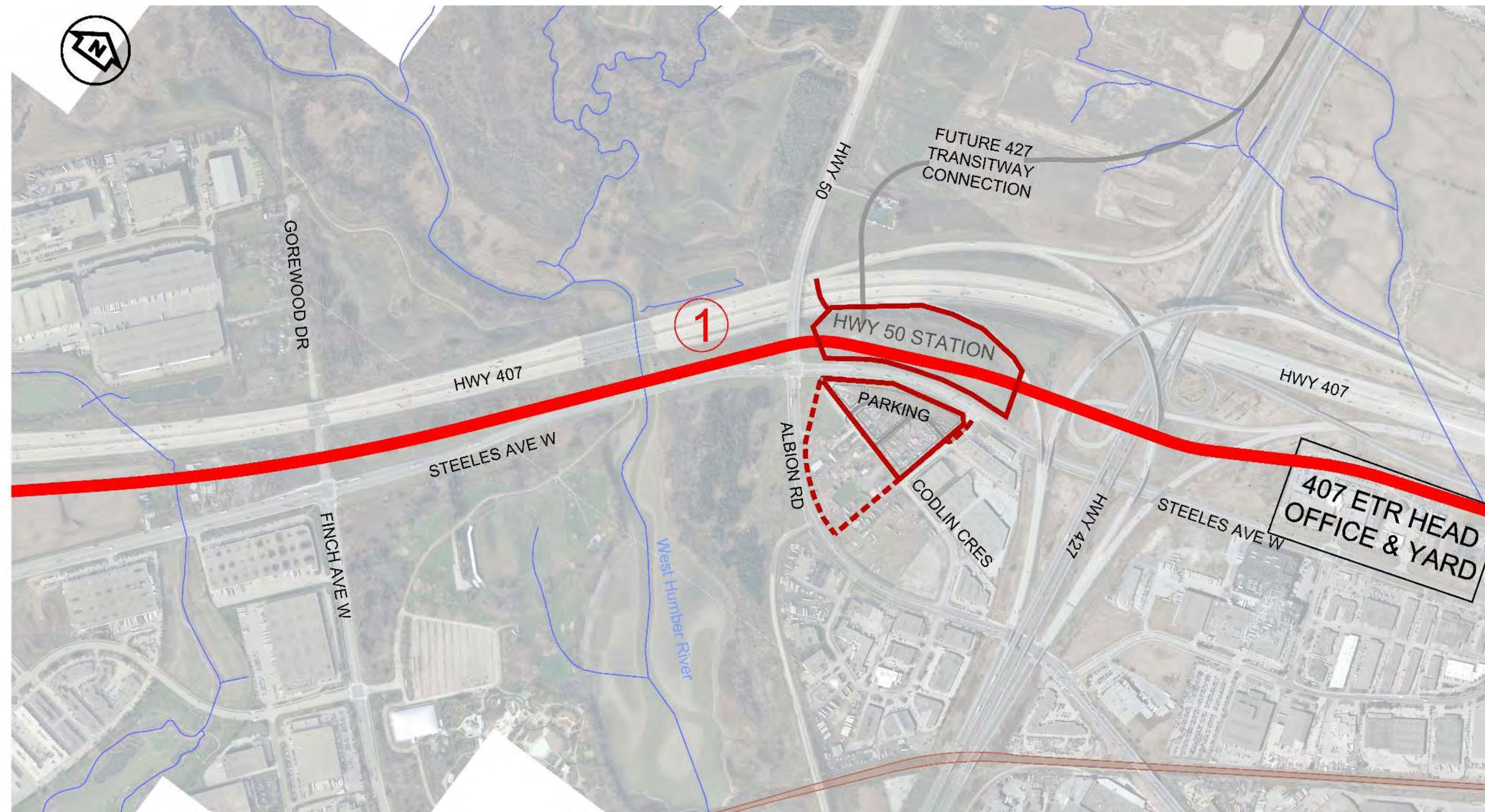
- Only one feasible alignment.
- Vertical alignment crosses under Airport Road and Goreway Drive.
- Stations separated by 1.5 kilometres.

Station Options

- **Airport Road Station Option:** Good access from Highway 407; signalized access from Steeles Avenue; expansion opportunity within Hydro Corridor south of Steeles Avenue.
- **Goreway Station Option:** Limited access from Highway 407 (partial interchange to/from east); signalized access from Steeles Avenue. Not appropriate as stand alone option; consider this station in conjunction with Airport Road Station.

Initial Recommendation: Carry alignment alternative and both Station options forward with priority to Airport Road Station (including expansion potential).

Alignment and Station Site Alternatives Highway 50 Area



Alignment Alternatives

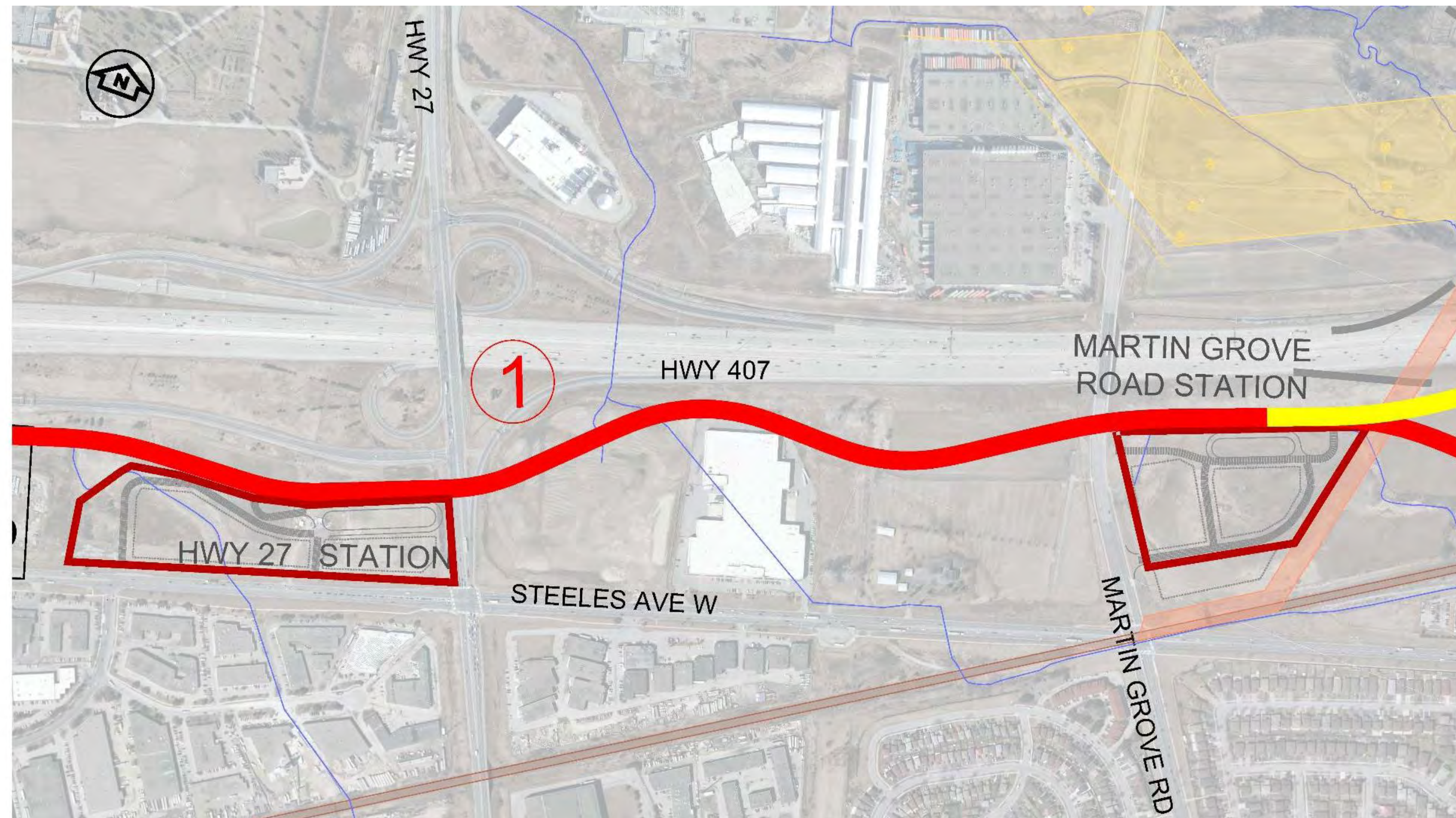
- Only one feasible Alignment (tunnel under Hwy 50 and Hwy 427).

Station Options

- **Highway 50/ 427 Station Option:**
 - Integrates with Hwy 427 BRT/LRT.
 - Poor access to/from Highway 407.
 - Signalized access from Steeles Avenue, with grade separated pedestrian crossing of Steeles Avenue.
 - May require expansion south of Codlin Crescent.

Initial Recommendation: Carry alignment alternative and station option forward.

Alignment and Station Site Alternatives Highway 27 / Martin Grove Area



Alignment Alternatives

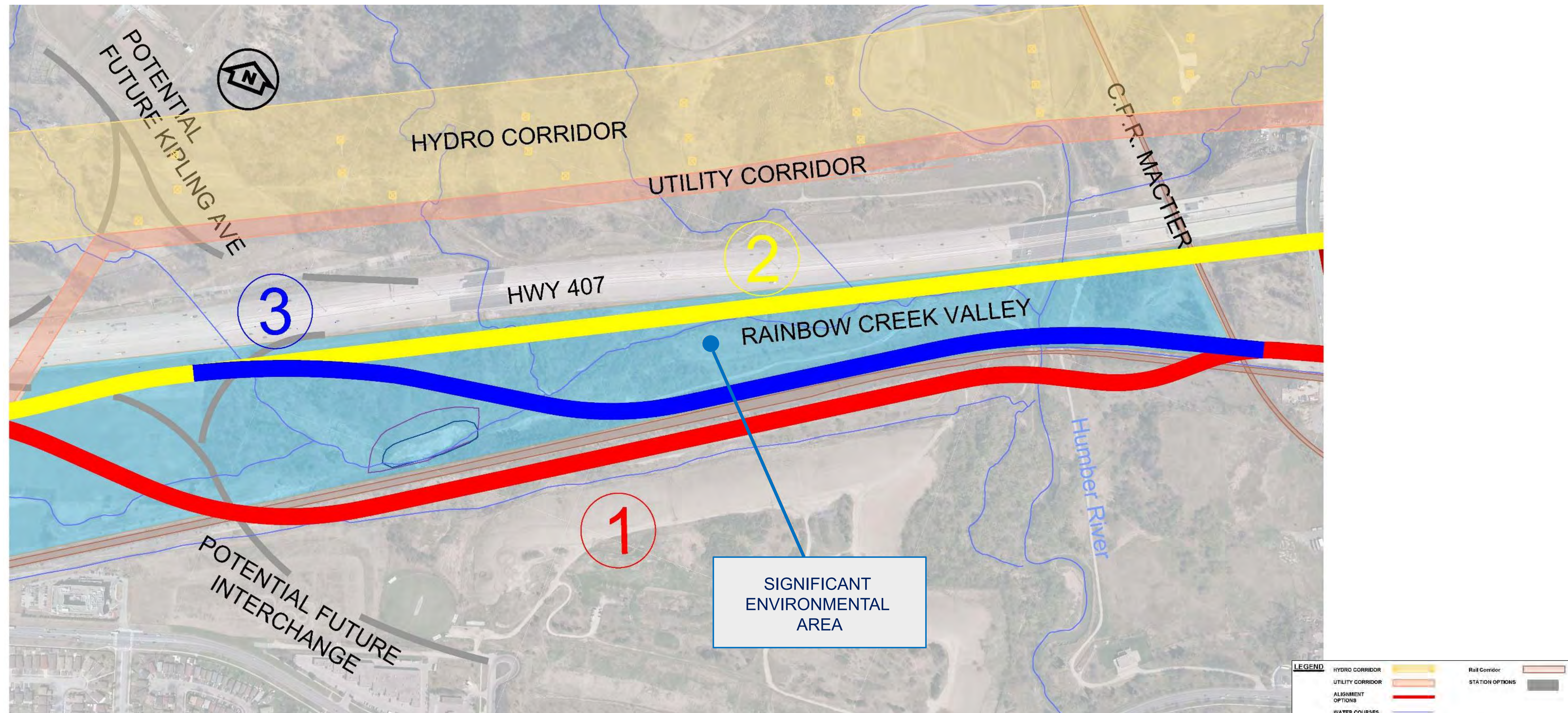
- Only feasible alignment (under Hwy 27 and Martin Grove Road).
- Stations separated by 1.2 kilometres.

Station Options

- **Highway 27 Station Option:** Good access to/from Highway 407; signaled access from Steeles Avenue. Area demands expected to exceed capacity as standalone station.
- **Martin Grove Station Option:** No access to/from Highway 407 (no interchange). Signaled access from Martin Grove. Not appropriate as stand alone option; potential future station; will be considered in conjunction with Highway 27 Station.

Initial Recommendation: Carry alignment alternative and both station options forward with priority given to Highway 27 Station.

Alignment and Station Site Alternatives Humber River/Rainbow Creek Area

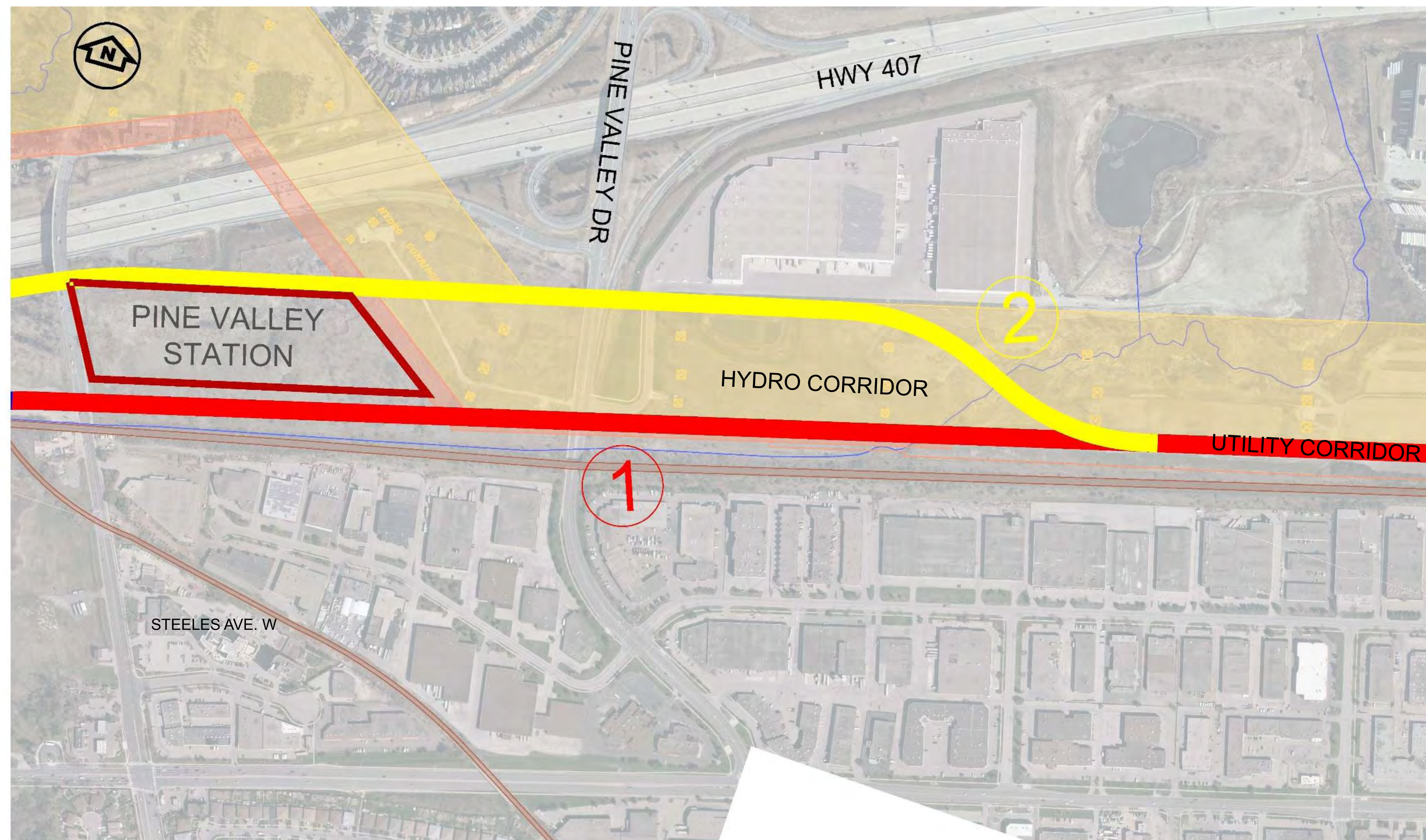


Alignment Alternatives

- **Alignment Alternative 1:** 30 metres south of CN track (within CN property).
- **Alignment Alternative 2:** Impacts Humber River/Rainbow Creek Valley.
- **Alignment Alternative 3:** Just north of CN right of way. Most impacts to Humber River/Rainbow Creek Valley.

Initial Recommendation: Carry all alignment alternatives forward until final results of field investigations and public and stakeholder consultation has occurred.

Alignment and Station Site Alternatives Pine Valley Area



Alignment Alternatives

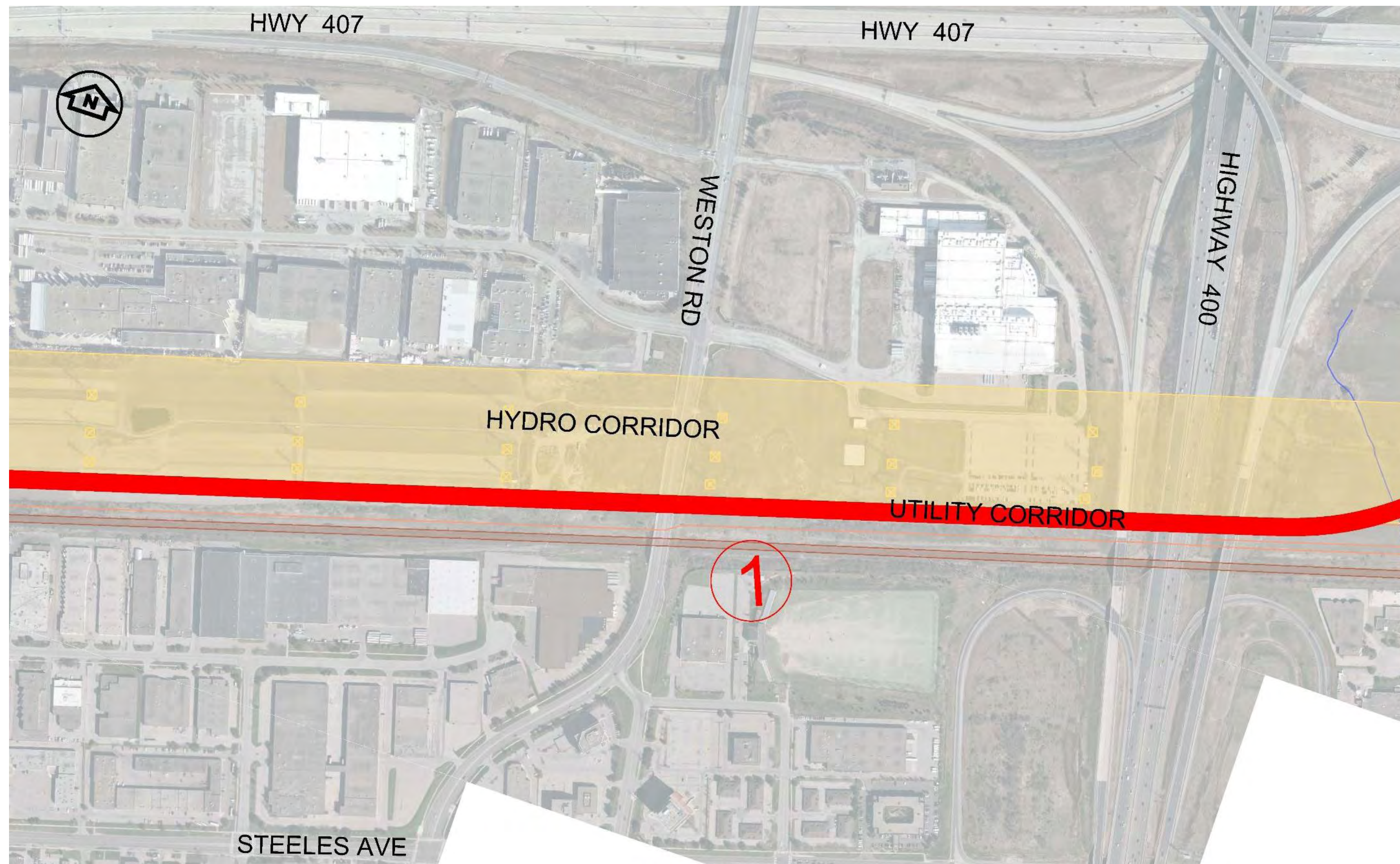
- **Alignment Alternative 1:** Between Utility Corridor and setback from hydro towers, affects Utility Corridor at Pine Valley Road.
- **Alignment Alternative 2:** Crosses to north side of Hydro Corridor; S-E Highway 407 on-ramp impacted during construction.

Station Options

- **Pine Valley Station Option:** Only site available for a station. Same site for either alignment alternative.

Initial Recommendation: Carry both alignment alternatives forward until preferred alignment is confirmed through Humber River/Rainbow Creek Valley and impact to existing utilities are confirmed.

Alignment and Station Site Alternatives Weston Road Area



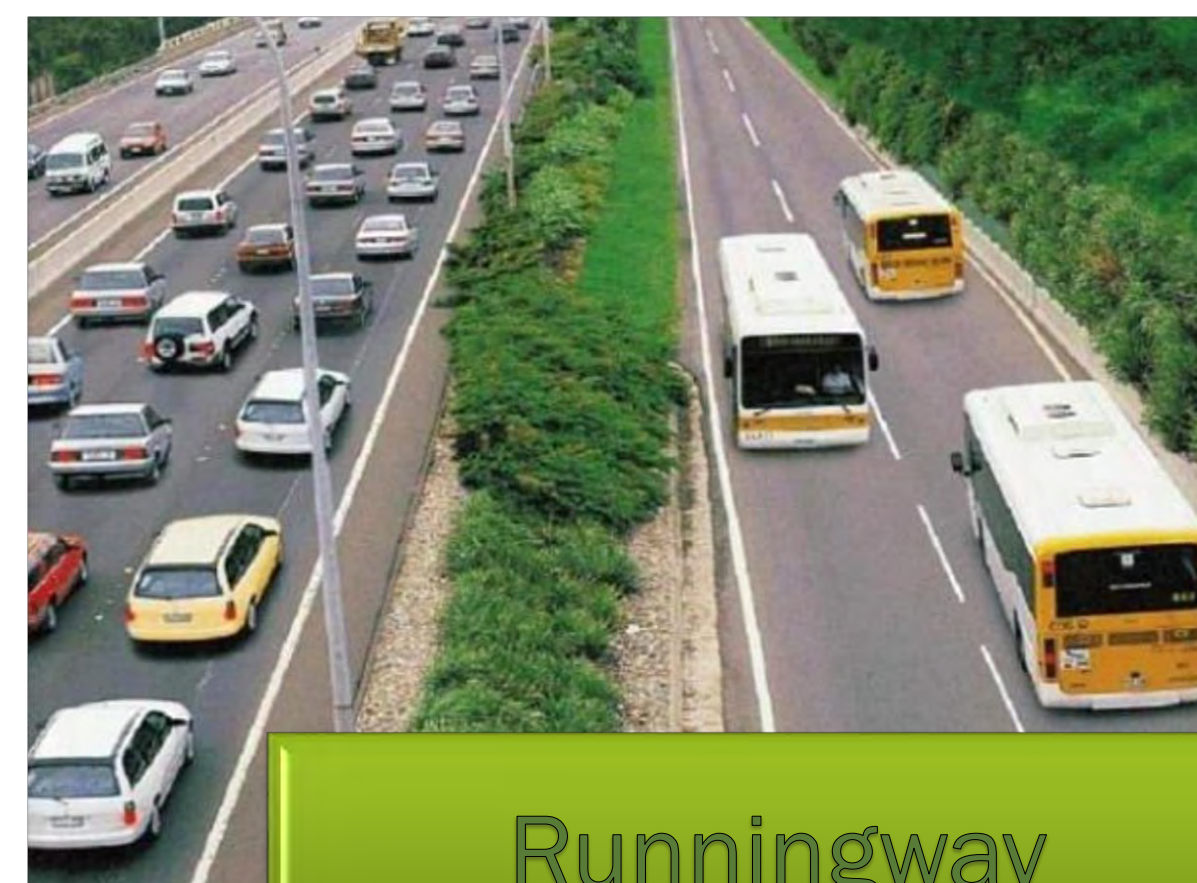
Alignment Alternatives

- Alignment between Utility Corridor and hydro towers set-back.
- Alignment matches Central Section EA approved alignment.
- No initially proposed station at this location.

Initial Recommendation: Alignment carried forward.

Confirm preferred alignment and station alternatives based on the following:

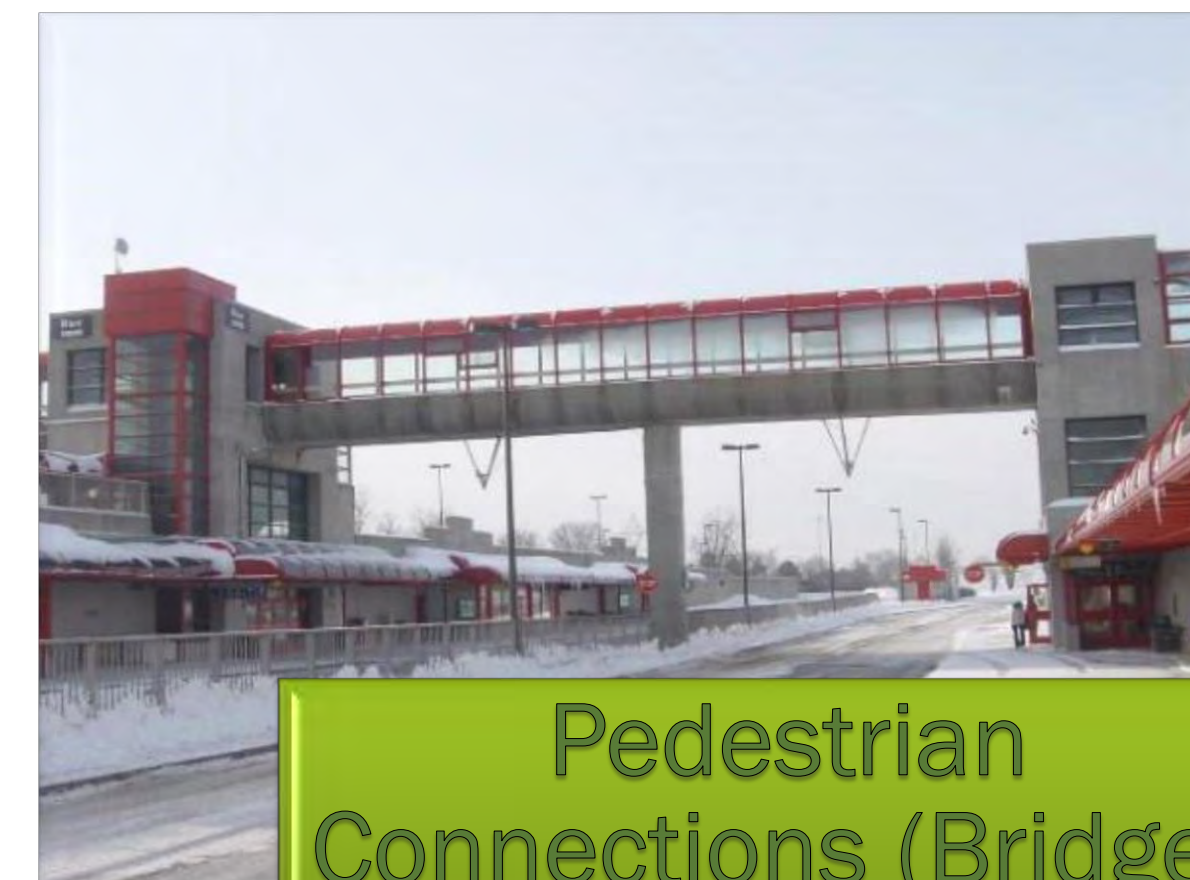
- Consultation with Stakeholders and the Public.
- Detailed Field Investigations.
- Traffic Impact Study.
- Station Functionality and Design Elements.
- Constructability Assessment.



Runningway



Platforms



Pedestrian
Connections (Bridges
& Walkways)



Bus Loop and
Transfer Area



Bicycle Parking



Field Investigations



Public Consultation



Constructability
Assessment

Freedom of Information and Protection of Privacy and Team Contacts



Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*.

Comments and information regarding this study are being collected to assist the MTO in carrying out the study and meeting the requirements of *Ontario Regulation 231/08 Transit Project & Metrolinx Undertakings*. This material will be maintained on file for use during the project and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.

You are encouraged to contact the project team if you have questions or concerns regarding this study.

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Thank you for your participation in this project.