

407 TRANSITWAY

EAST OF KENNEDY ROAD TO BROCK ROAD

PUBLIC INFORMATION CENTRE #2



MARKHAM PUBLIC INFORMATION CENTRE

Date: June 23, 2016
Time: 4:00 p.m. to 8:00 p.m.
Location: Markham Museum
Main Building
9350 Markham Rd
Markham, Ontario L3P 3J3

PICKERING PUBLIC INFORMATION CENTRE

Date: June 22, 2016
Time: 4:00 p.m. to 8:00 p.m.
Location: Claremont Community Centre
Lions Room
4941 Old Brock Road
Pickering, Ontario L1V 7E2

PROJECT WEBSITE: 407Transitway.com



- The first Public Information Centre (PIC #1) was held in April 2015 to introduce the study and to present the results of the Planning Phase, including the technically preferred station sites and route.
- Since PIC #1, comments from the public were considered, detailed field investigations and technical studies were conducted and consultation with regulatory agencies was carried out to develop the preliminary design of the 407 Transitway.
- The purpose of this PIC (PIC #2) is to present and receive input on:
 - The preliminary design of the technically preferred stations and alignment;
 - Potential environmental impacts and mitigation measures; and,
 - The Transit Project Assessment Process including major milestones, next steps and study schedule.
- Members of the Study Team are available to discuss the project with you. Please feel free to ask questions and fill out a comment sheet.
- You may also visit us at **407Transitway.com**

What is the 407 Transitway?



- Exclusive corridor, fully grade separated rapid transit (Bus Rapid Transit or Light Rail Transit) parallel to Highway 407.
- The 407 Transitway will connect Burlington to Oshawa, a length of 150 km, with up to 50 surface stations.
- Project limits are East of Kennedy Road to Brock Road spanning a total distance 18 km with 4 to 8 stations.
- The 407 Transitway Environmental Assessment (to Preliminary Design) Highway 400 to East of Kennedy Road (Central Section) has received environmental approvals.
- The 407 Transitway Brock Road to Highway 35/115 has received Environmental Assessment Route Planning acceptance.



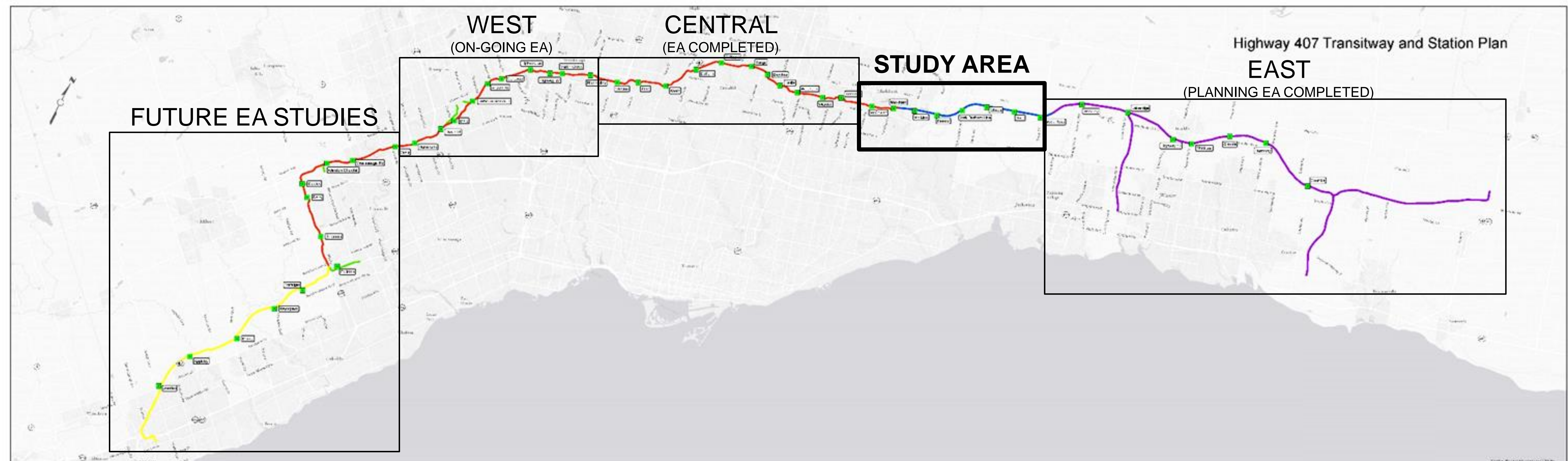
Ottawa BRT



Brisbane BRT

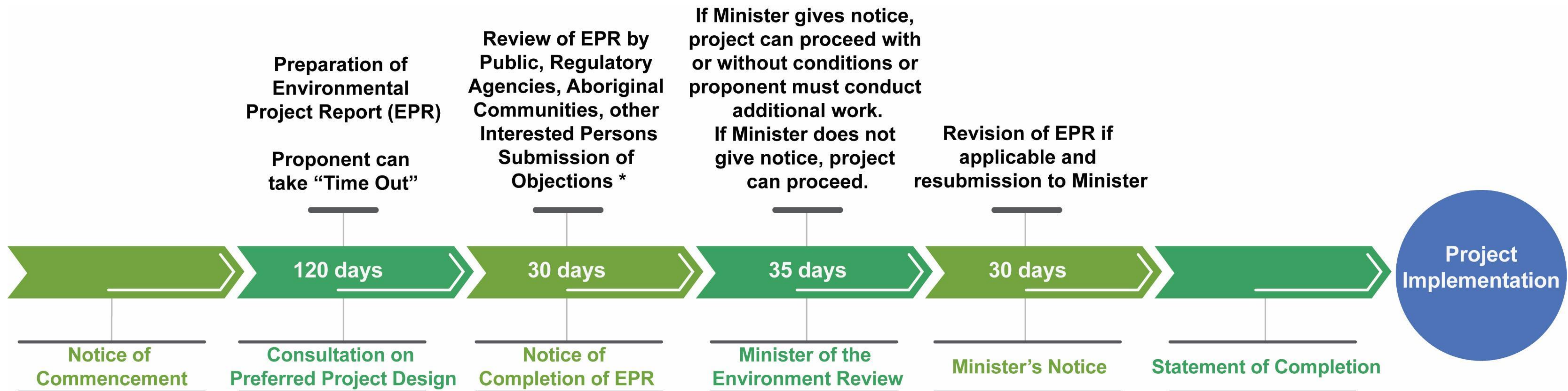
Examples of BRT Systems

- Enhance east-west cross-regional mobility and increase transit capacity to meet forecasted travel demand.
- Offer a viable, cost-effective way of moving people in the Highway 407 corridor.
- Improve accessibility to existing/planned major urban centres/nodes, post secondary educational institutions, and other nodes of high demand, such as: Vaughan City Centre, Richmond Hill Centre and Markham Centre, future Seaton Development, York University, Humber College, University of Ontario Institute of Technology, Durham College, Pearson International Airport, potential future Pickering Airport.
- Improve integration with regional transportation network – connection to Spadina Subway, future Yonge Subway, GO Milton; Barrie, Richmond Hill and Stouffville rail lines; TTC, Peel, York and Durham Transit.
- Reduce automobile dependence and green house gas emissions.
- Identify land protection requirements for Transitway infrastructure.



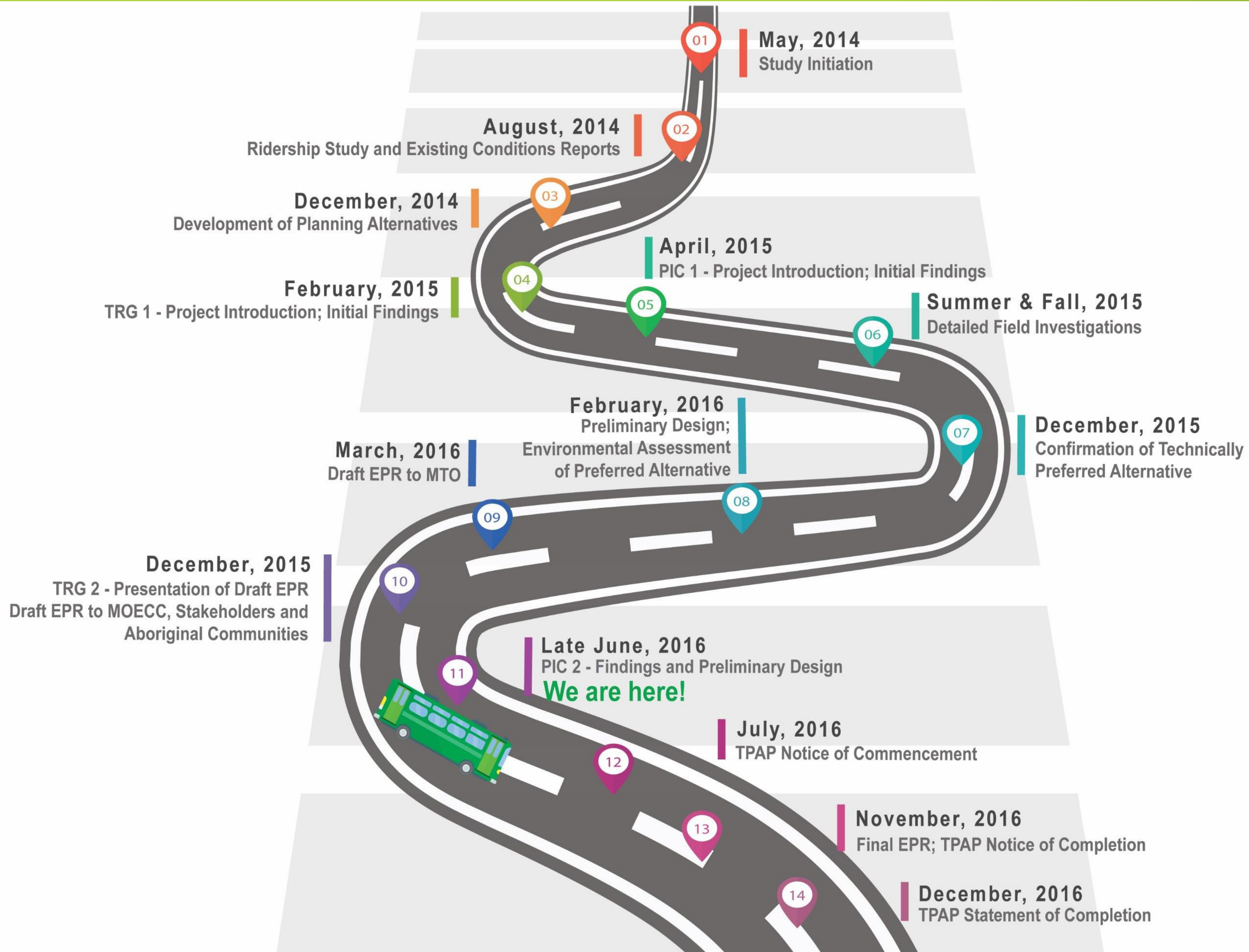
407 Transitway Complete Configuration

The 407 Transitway study was developed in accordance with Ontario Regulation 231/08 (Transit Projects and Metrolinx Undertakings – Transit Project Regulation) under the *Environmental Assessment Act*. The outline of the Transit Projects Assessment Process is presented below:



* If an objection is made, the Minister of the Environment and Climate Change (MEOCC) can only act if there is a potential negative impact on a matter of provincial importance relating to the natural environment, or cultural heritage value or interest, or a constitutionally protected Aboriginal or treaty right.

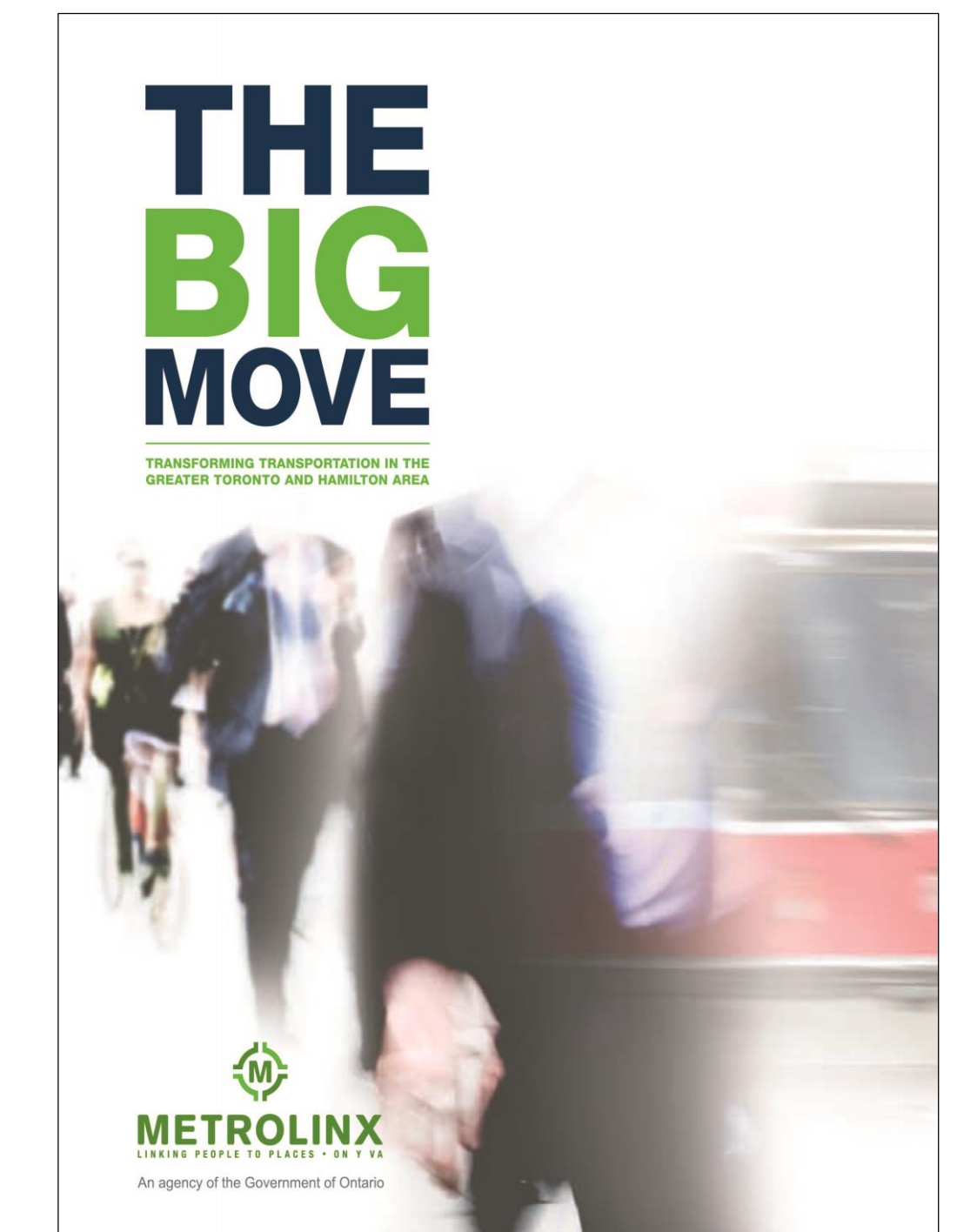
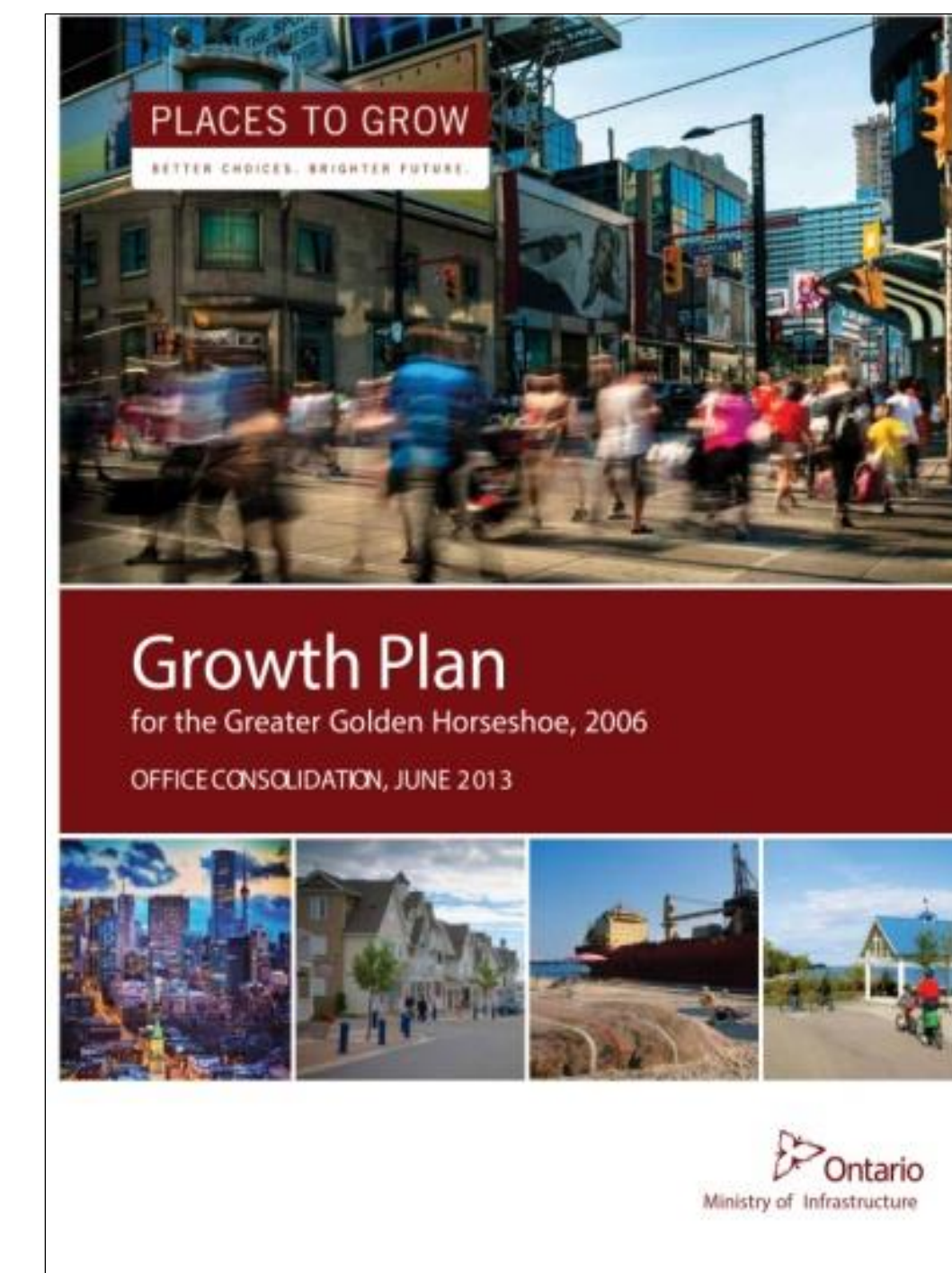
Schedule



What is Driving This Study?



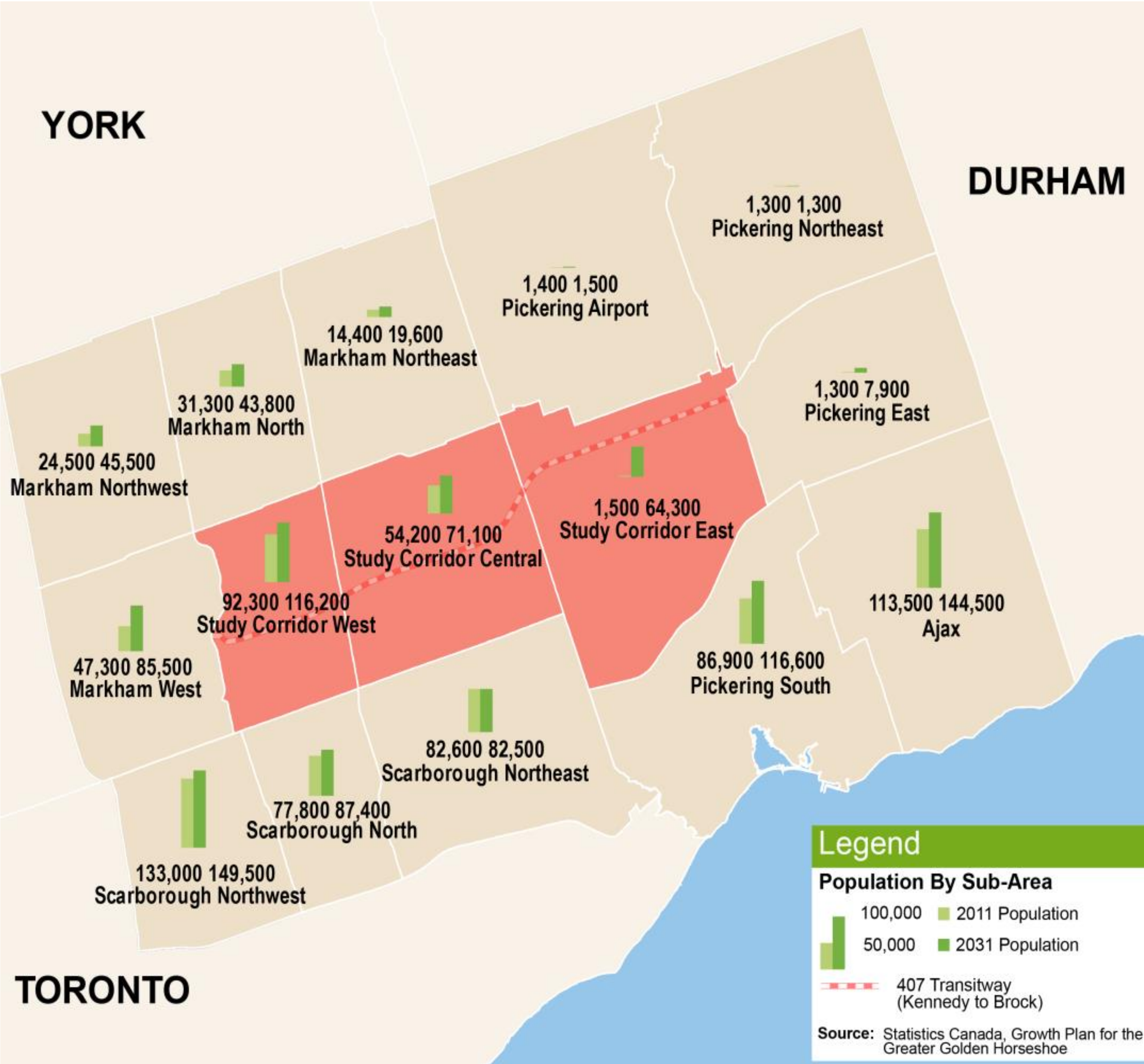
- Rapid transit on the 407 Transitway will support Growth Plan for the Greater Golden Horseshoe (*Growth Plan*) policies
- The 407 Transitway was identified in *The Metrolinx Big Move Plan* as a critical component of the regional transportation network connecting Durham, York, Peel and Halton Regions
- A number of emerging developments in Durham and York Region will support base ridership and benefit from rapid transit service including:
 - The Seaton Community in Northern Pickering which is anticipated to add 30,000 jobs and 70,000 residents
 - A future York University campus in Markham with projected enrollment of 10,000-20,000 students
 - The proposed Pickering Airport which is directly adjacent to the 407 Transitway
 - Residential and employment development that will occur along the future Highway 407 East from Brock Road to Highway 35/115



Corridor Growth

- Net out-commuting in Durham Region will drive demand on the 407 Transitway.
- From 2011 to 2031, Durham Region will grow by 339,000 people and 114,000 jobs.
- By 2031, 52,000 new Durham workers will commute to jobs outside of Durham Region, largely in York and Toronto.
- Congestion is projected to increase significantly in the 407 corridor.

Study Area Totals:
 2011: 148,000
 2031: 251,600
 11-31 Growth: 70%



Source: Provincial Growth Plan

Service Concept

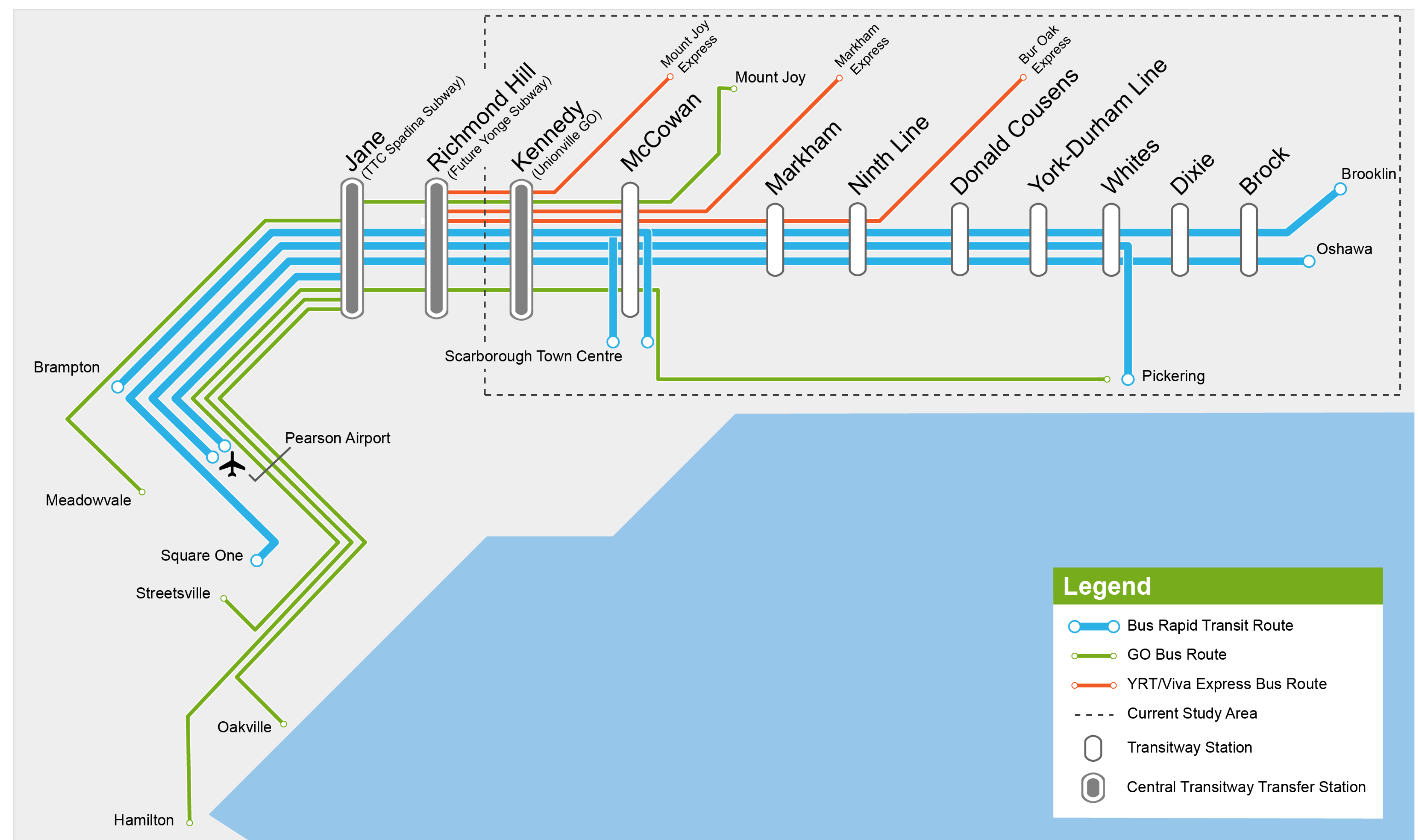
- **Spine services** – line haul services that operate exclusively on the Transitway including some express services
- **No-transfer services** –rides between major nodes and residential areas. Routes include portions both on and off the Transitway (interlining)

Durham nodes served by Transitway

- Urban Growth Centres (Pickering, Downtown Oshawa)
- Post Secondary Institutions (UOIT, Durham College)
- Residential and employment areas in North Durham (Seaton, Brooklin)
- Pickering Airport

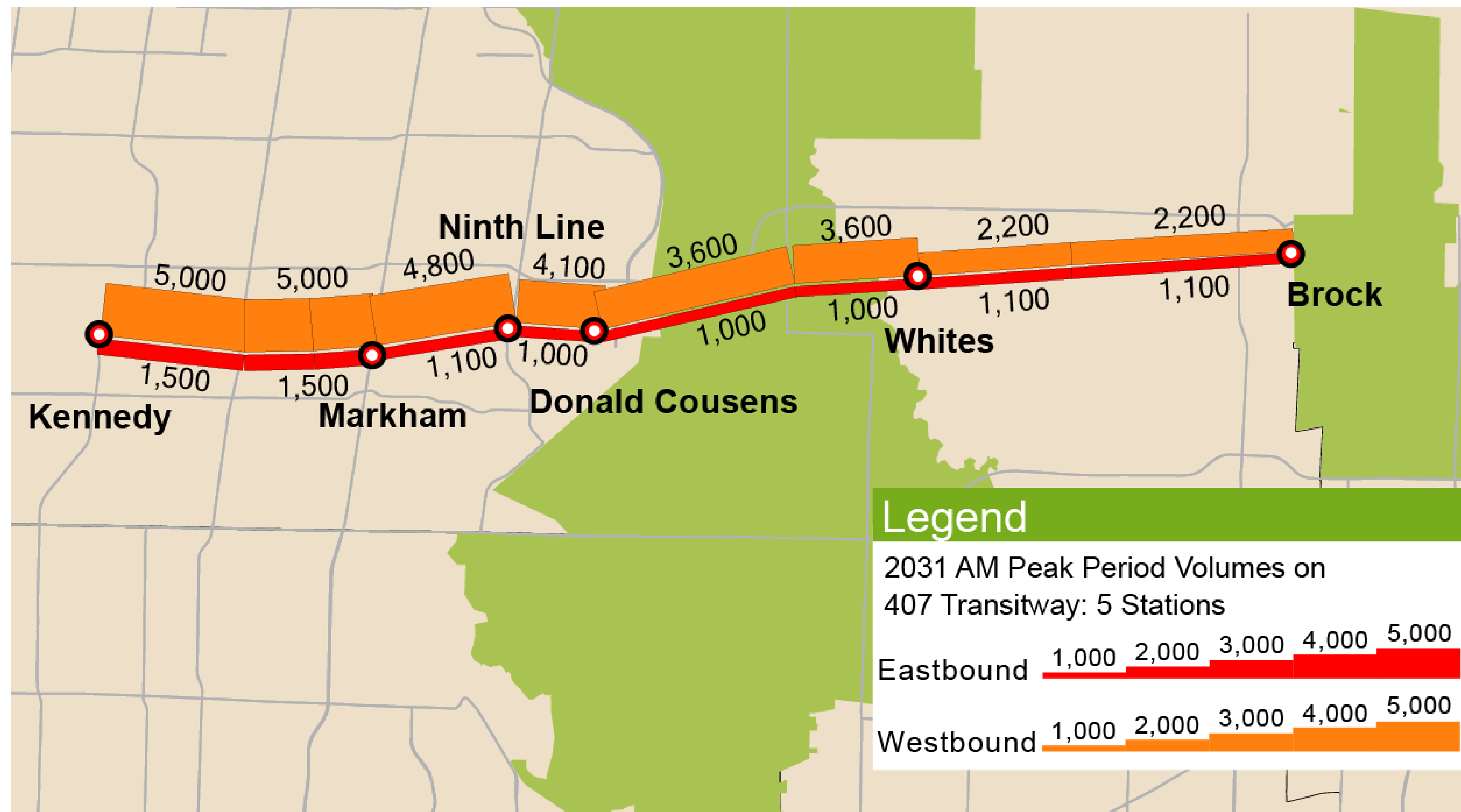
York nodes served by Transitway

- Urban Growth Centre (Markham)
- Employment Centres (Markham Centre, Main Street Markham BIA, south of the 407 in Scarborough)
- Residential Areas of Markham (Mount Joy, Quantztown, Unionville, Milliken)

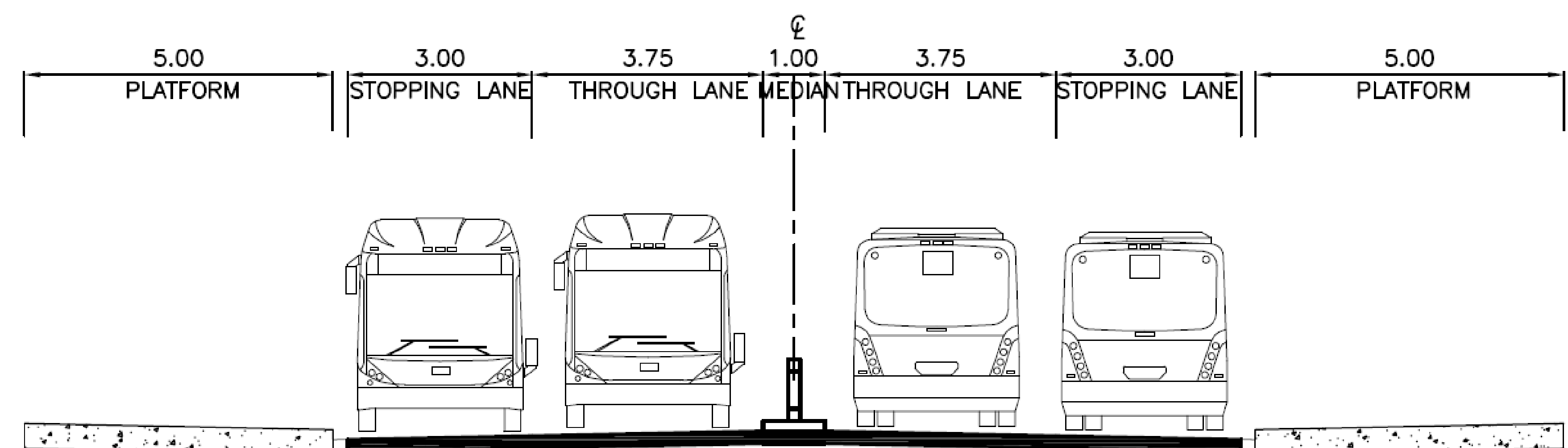
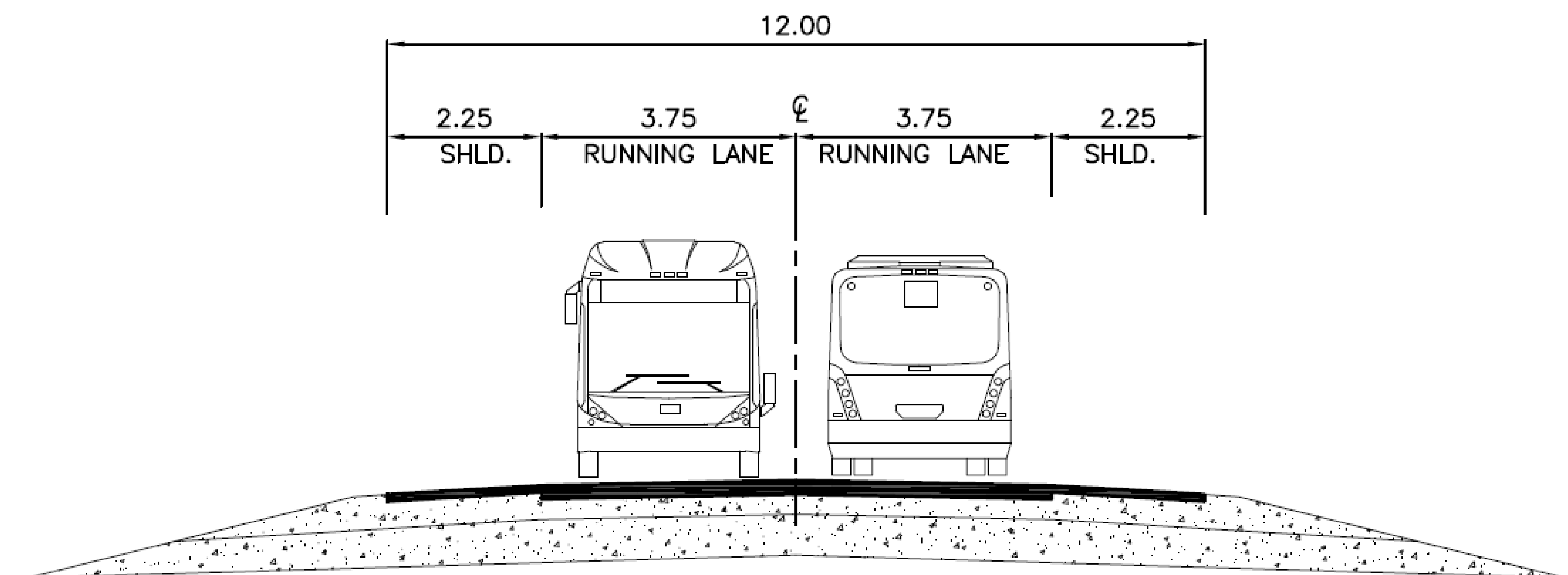


Ridership Forecasts (excluding Kennedy Station)

- 7,100 peak period riders (7:00 to 9:00 a.m.)
- Approximately 60 buses per hour in peak direction
- Ridership similar to other priority bus corridors (e.g. Viva Blue on Yonge Street)

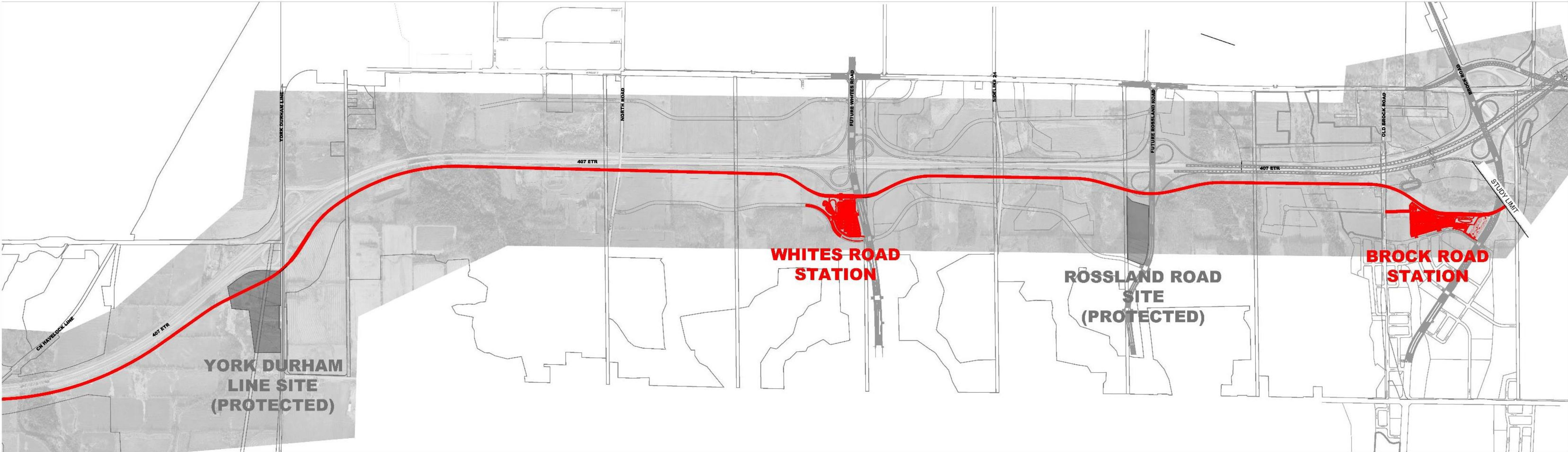
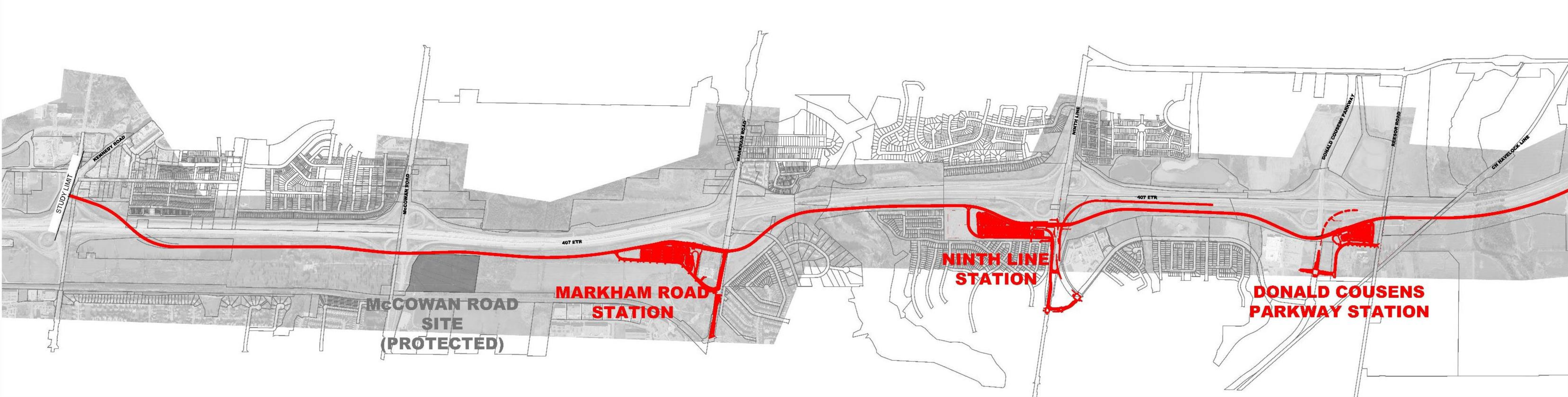


- The design will protect for BRT or LRT operation.
- Infrastructure includes runningway (accommodating both BRT & LRT standards), and stations (park and ride, passenger pick-up/drop-off and transit interface facilities).
- Runningway BRT cross-section
 - Between Stations – 12 m
(2 x 3.75m lanes + 2 x 2.25m shoulders)
 - Through Stations – 14 m
(2 x 3.75m lanes + 2 x 3m stopping lanes)
- 11 Overpasses & 6 Underpasses

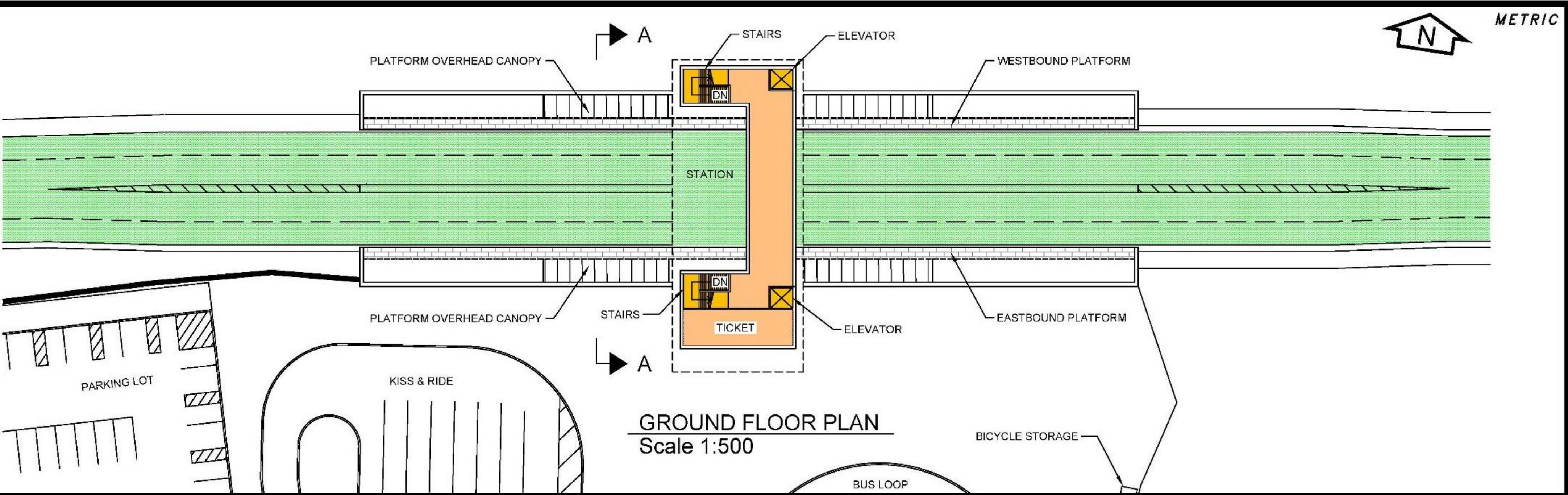
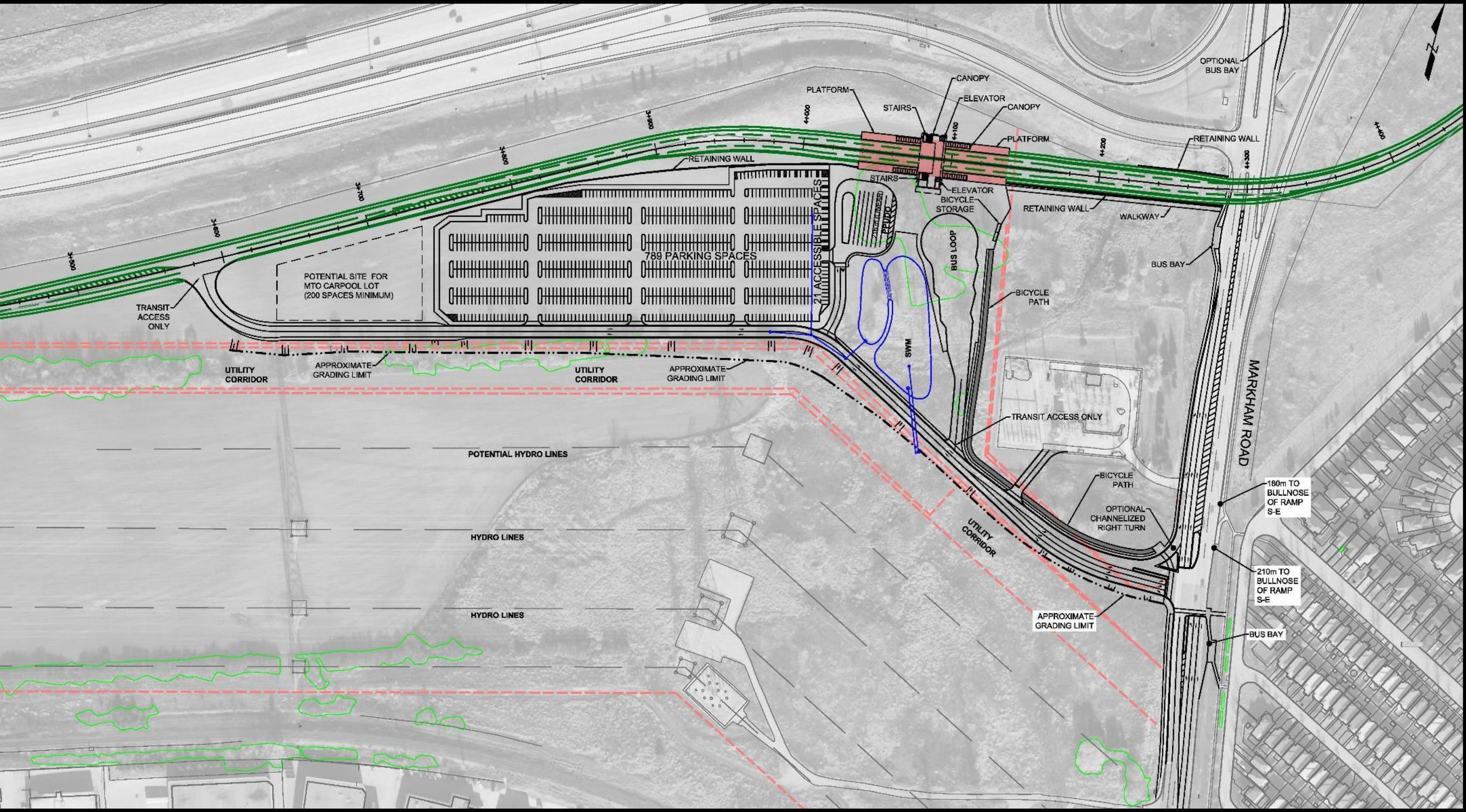


Example of a BRT System

Preferred Alignment and Station Configuration



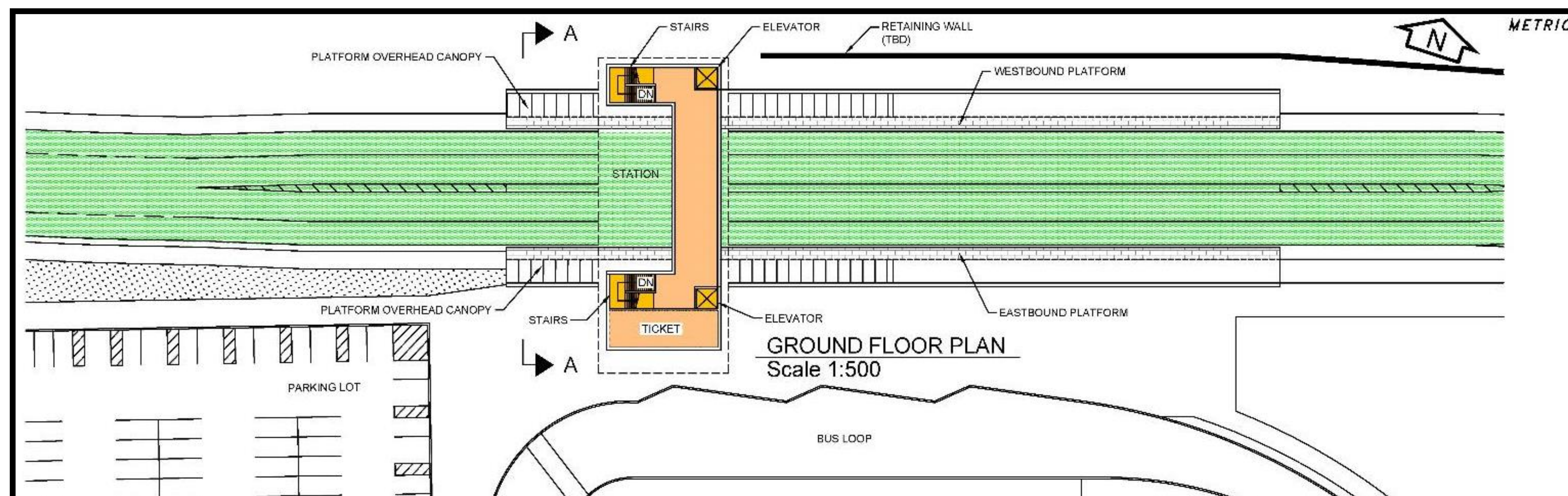
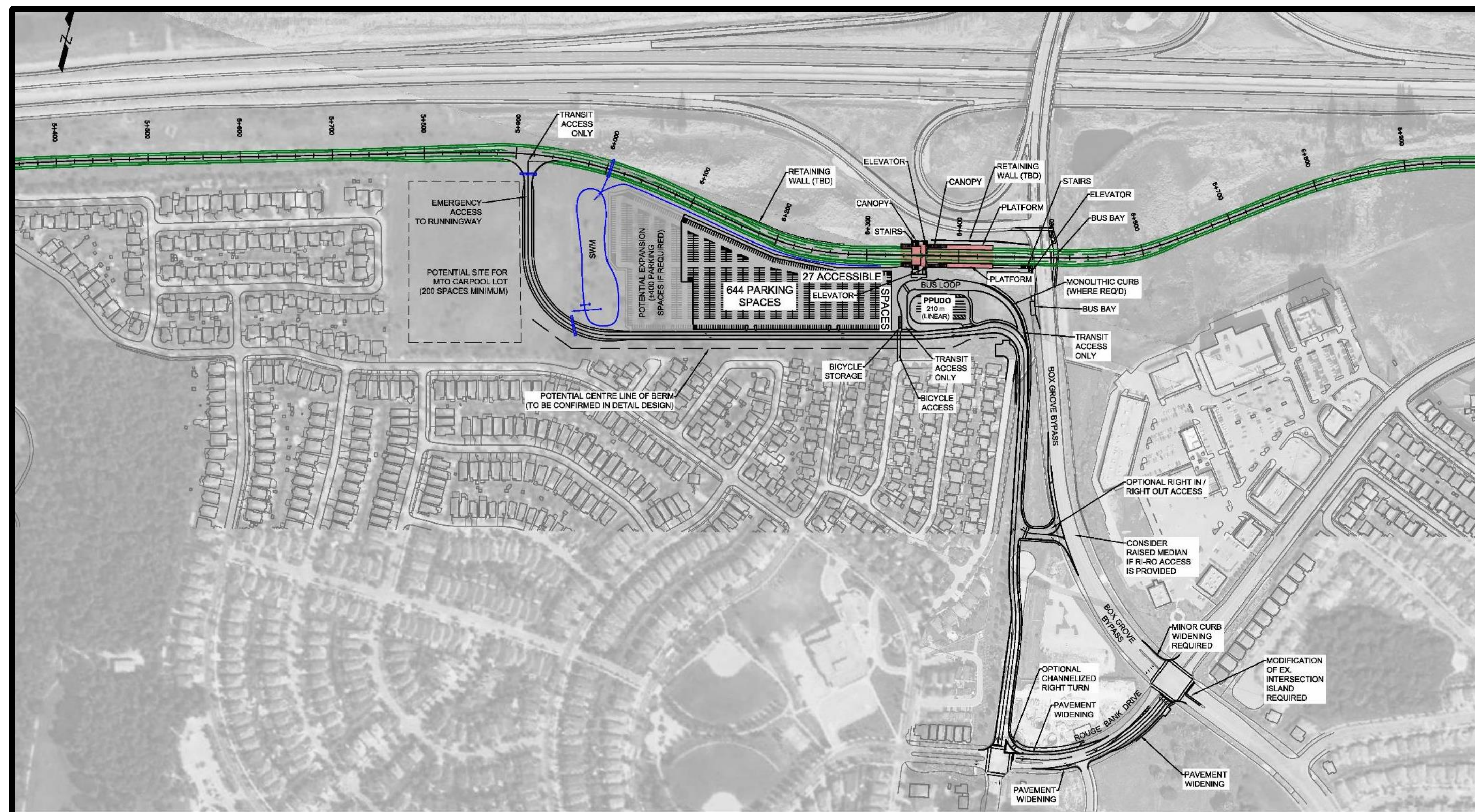
Preferred Alternatives Markham Road Station



Station Characteristics

- Station on Provincial lands designated for transportation and utility purposes.
- Station platform located within 150m of Markham Road.
- Bus loop and street bus stops included in preliminary design.
- Bus and emergency vehicle only access to Transitway provided at this station.
- Environmental Mitigation will be provided for the following environmental impacts: cultural meadow and agricultural meadows.

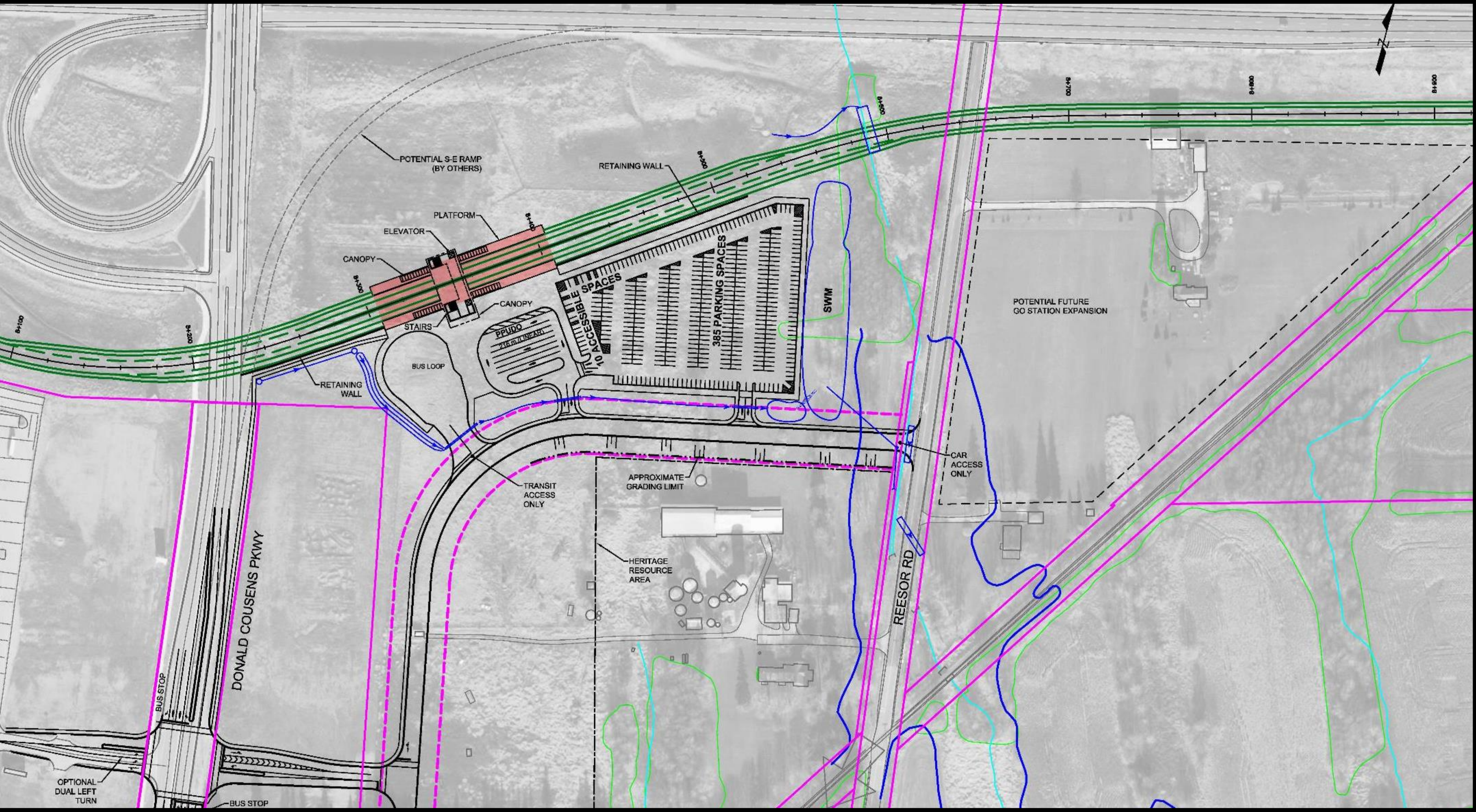
Preferred Alternatives Ninth Line Station



Station Characteristics

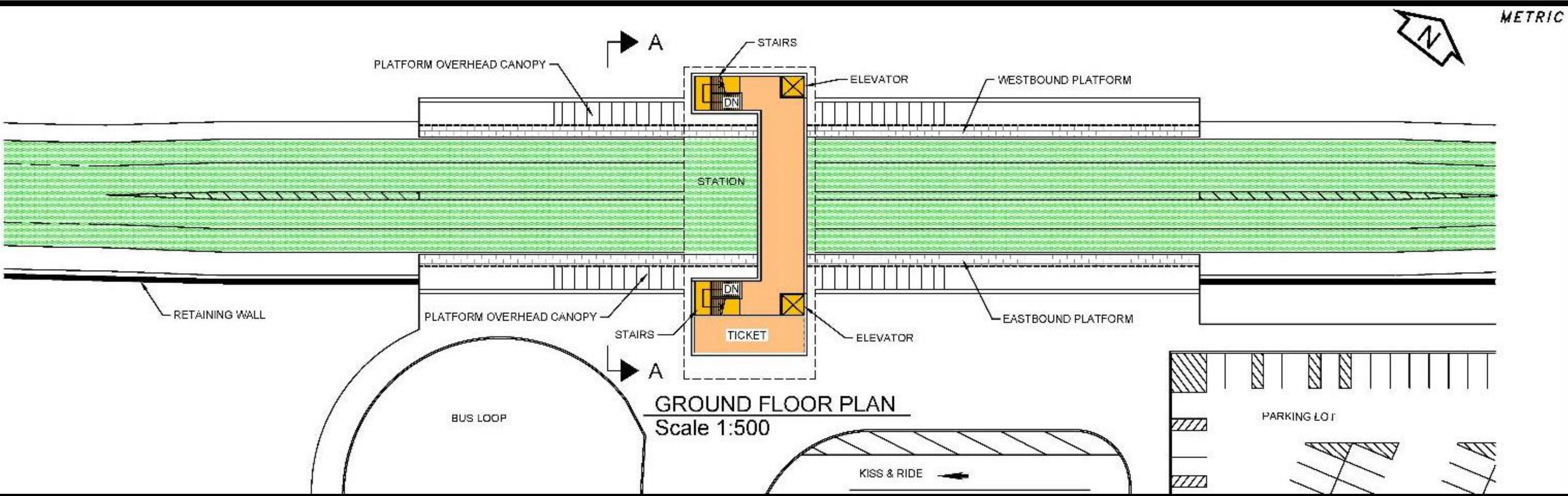
- Station on Provincial lands designated for transportation purposes.
- Transitway and station plans predate Legacy Subdivision approval.
- Station platform located within 80m of Box Grove Bypass.
- Bus loop and street bus stops included in preliminary design.
- Bus and emergency vehicle only access to Transitway provided at this station.
- Station at Donald Cousens Pkwy will relieve approx. 30% of parking demand.
- The existing and new traffic signals on Rouge Bank Dr. will be coordinated to optimize traffic flow.
- Minor road improvements on Rouge Bank Dr. between Old Ninth Line and Box Grove.
- Landscaped/fenced berm proposed south of station .
- Environmental Mitigation will be provided for the following environmental impacts: shallow marsh.

Preferred Alternatives Donald Cousens Station

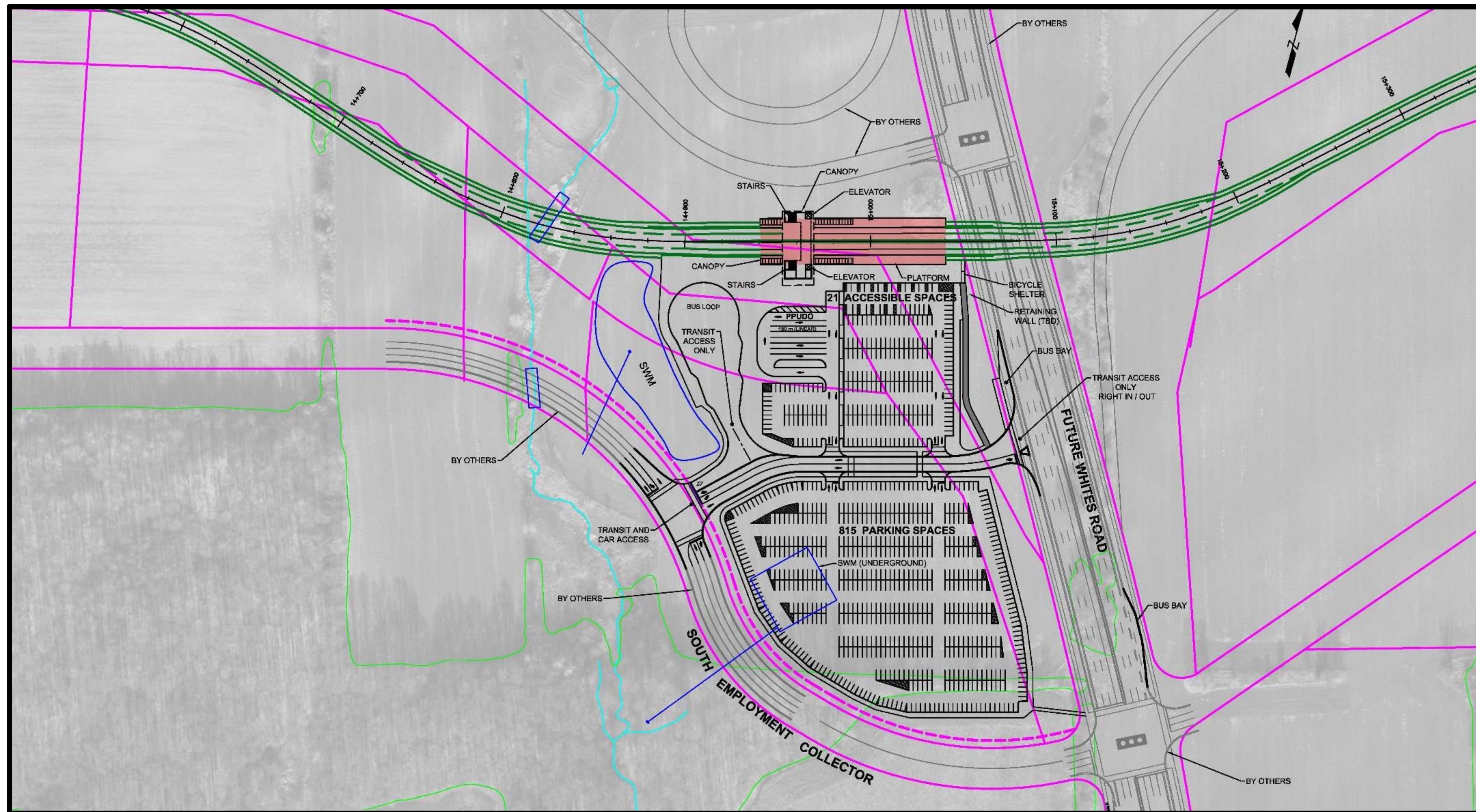


Station Characteristics

- Station on Provincial lands designated for transportation.
- Station platform located within 100m of Donald Cousens Parkway.
- Bus loop and street bus stops included in preliminary design.
- Site east of Reesor Road being protected for station expansion If GO operates on CP rail line.
- Environmental Mitigation will be provided for the following environmental impacts: cultural meadow and cultural thicket.
- Site is located adjacent to cultural heritage resources.

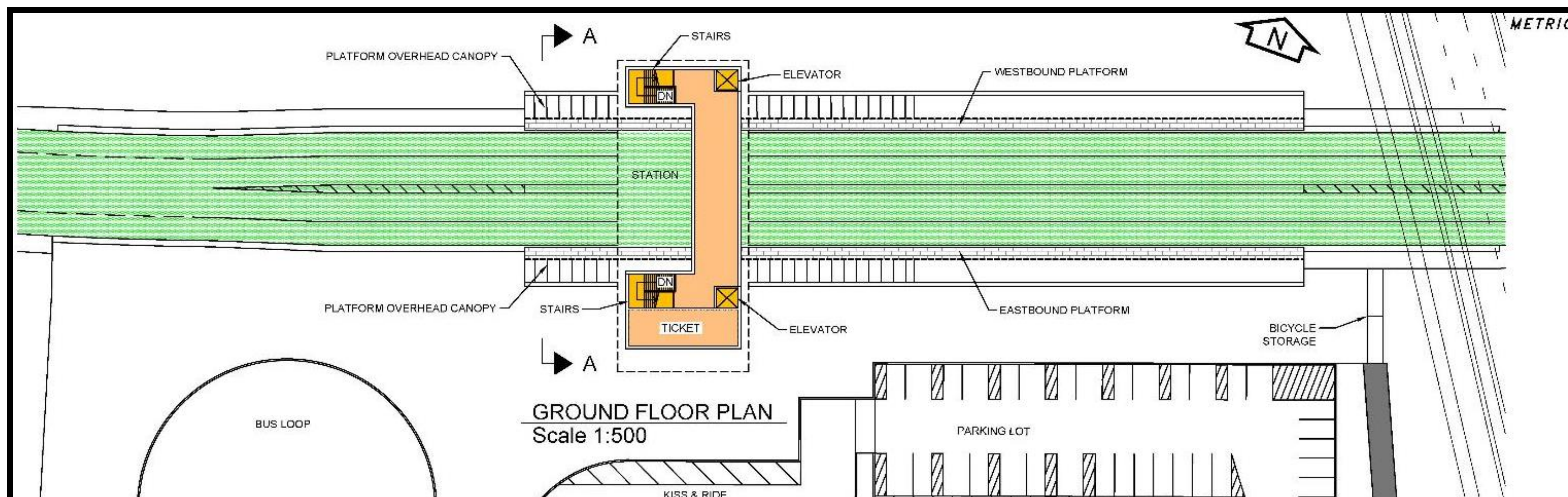


Preferred Alternatives Whites Road Station



Station Characteristics

- Station on Provincial lands designated for transportation.
- Station platform located within 30m of future Whites Road.
- Bus loop and street bus stops included in preliminary design.
- Bus and emergency vehicle only access to Transitway provided at this station.
- Potential impacts to Whitevale Creek are avoided.
- Environmental Mitigation will be provided for the following environmental impacts: cultural meadow, agricultural lands and hedgerow.

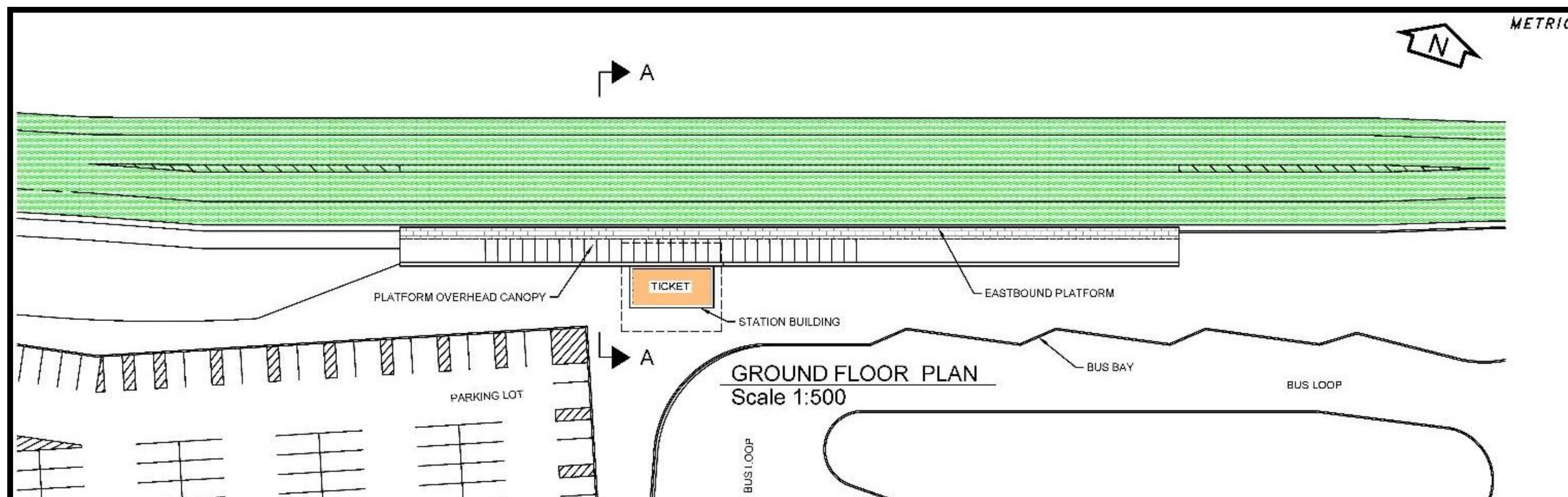


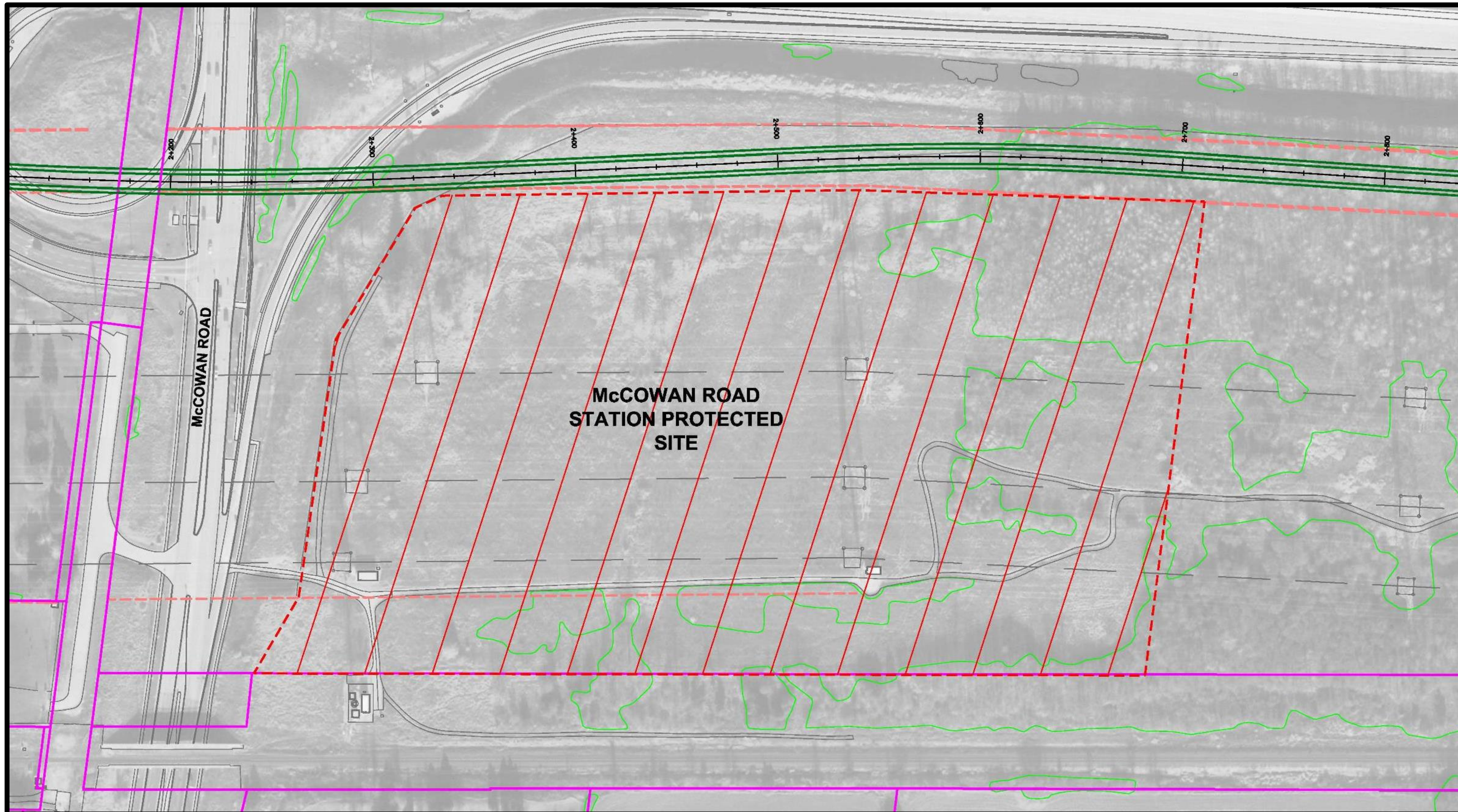
Preferred Alternatives Brock Road Station



Station Characteristics

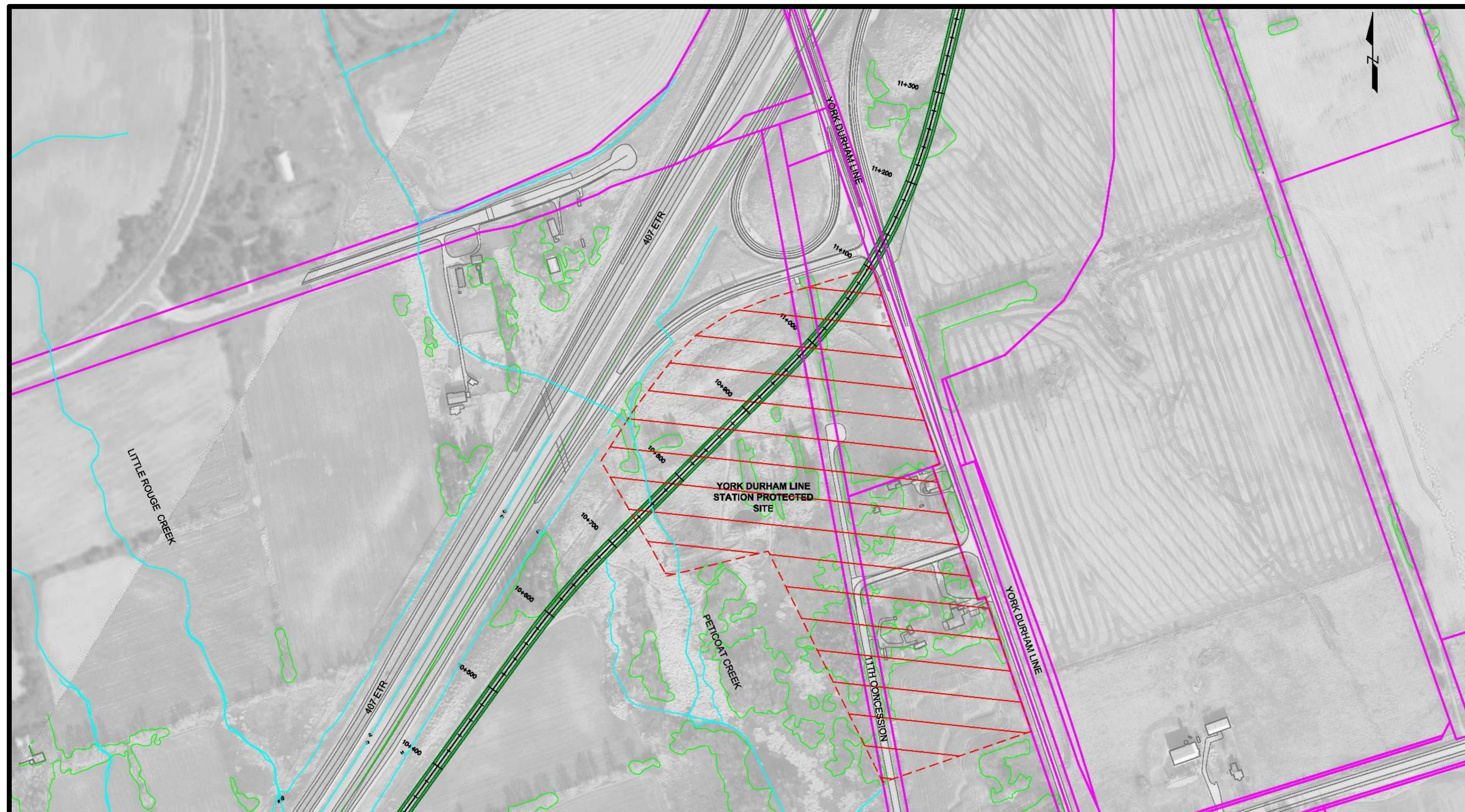
- Station on Provincial lands designated for transportation.
- Station will be an extension of the car-pool lot to be built in 2016-2017
- Station will operate as an interim Terminus Transit Station.
- Station platform located within 200m of Brock Road.
- Bus loop being included in preliminary design.
- Bus only and emergency vehicle only access to Transitway provided at this station.
- Environmental Mitigation will be provided for the following environmental impacts: agricultural lands and hedgerow.





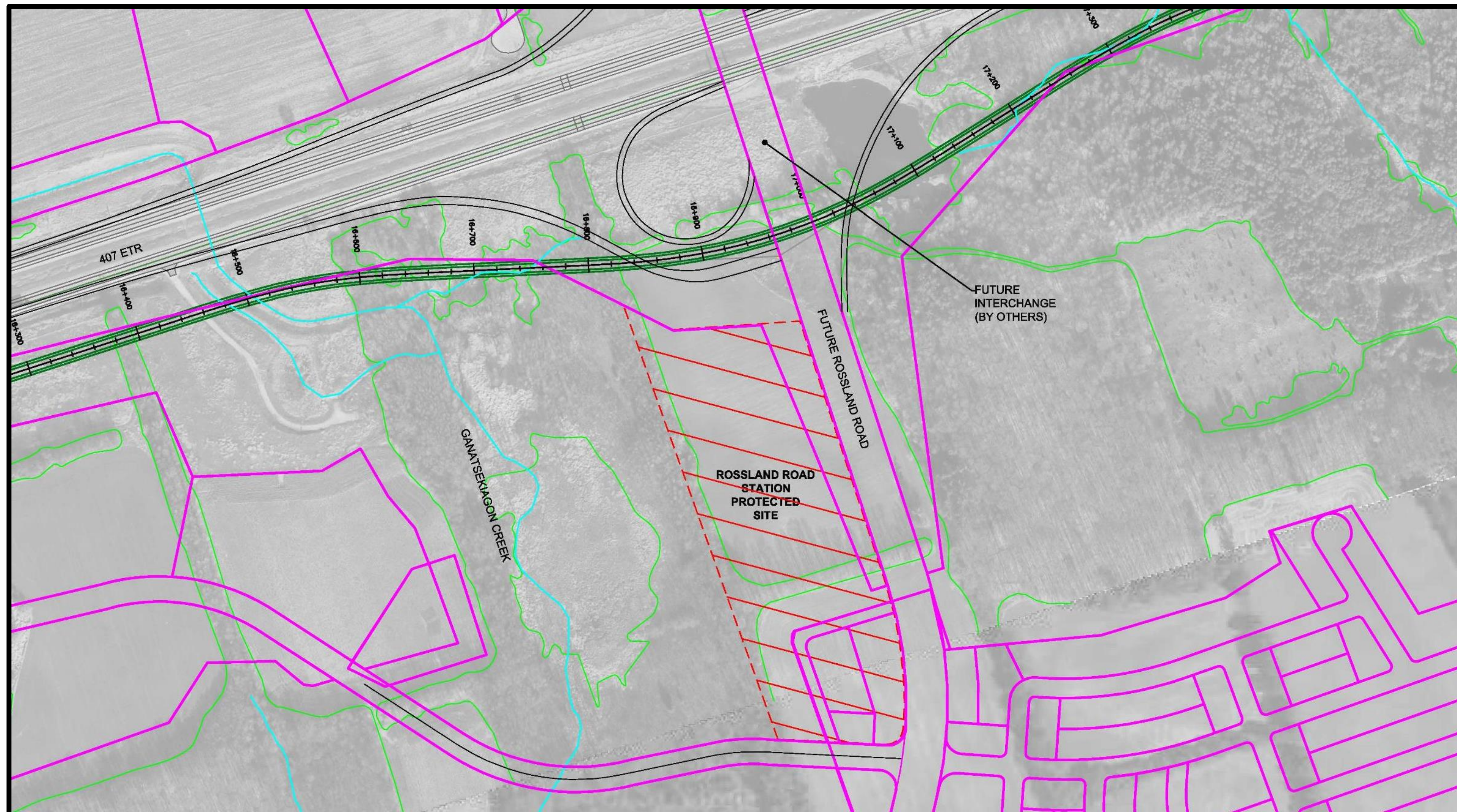
Protected Site Rationale

- Location not selected as an initial Transitway station.
- West site not feasible due to presence of cemetery.
- Bus operations restricted under high voltage Hydro lines
- Severe sight distance issues at intersection of McCowan Road and potential access road.
- Safety issues for pedestrian transit transfers at ETR Interchange.
- Excessive cost for station access road.
- Site protected for future station if demand exceeds capacity at adjacent stations.
- Future McCowan Station design will be completed as part of a future study.



Protected Site Rationale

- Site not selected for a station due to insignificant forecast ridership demand.
- Site protected for potential environmental compensation or possible future transit supported Rouge National Park access.



Protected Site Rationale

- Site not selected for a station due to low forecast ridership demand; uncertainty of ETR Interchange implementation; available land limited by environmental restrictions.
- Site protected for potential environmental compensation or temporary Transitway bus garage.

Potential Environmental Impacts and Mitigation Measures

Impacts

Soils, Contaminated Property and Waste

- Disturbance of soil, and utilization and disposal of excess materials.
- Potential impacts on contaminated property.

Surface Water, Drainage and Stormwater

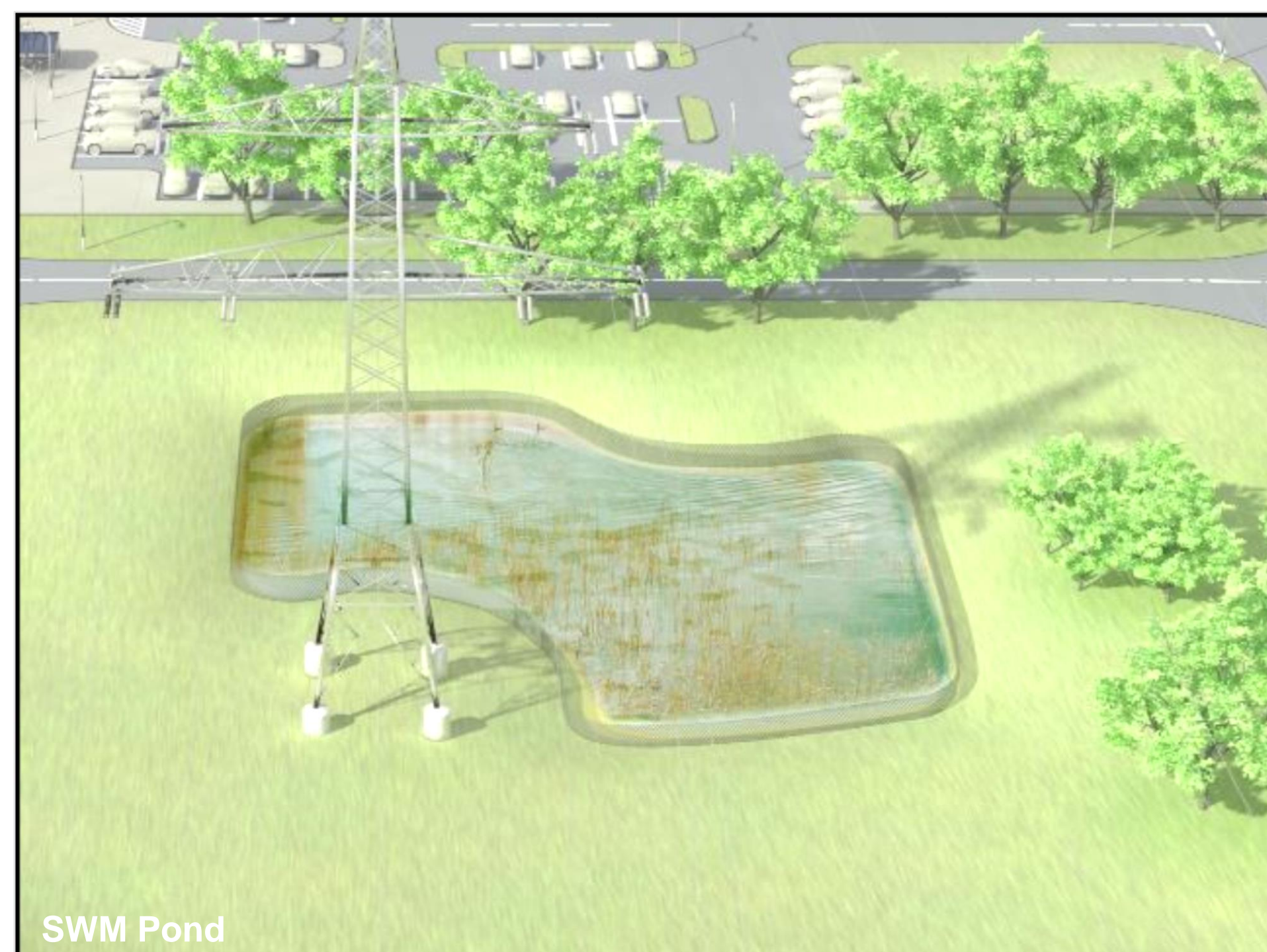
- Possible impacts on existing drainage patterns along 407ETR. Water quality degradation.
- Increase runoff due to increase in impervious areas.

Groundwater

- Reduced-groundwater recharge as a result of the expansion of impermeable pavement surfaces
- Potential for well interference associated with deep excavations and/or construction dewatering.

Mitigation

- Utilization and disposal of excess materials will be managed in accordance with regulatory requirements.
- Properties of concern will be the subject of further assessment during Detail Design.
- Erosion and sedimentation control measures to prevent the potential migration of sediments off site.
- A drainage and stormwater management plan has been prepared to address potential impacts.
- Minor creek realignment/regrading is expected at most crossings to ensure flow is safely conveyed through the proposed structures.
- Impacts are temporary. Further hydrogeology studies will be conducted prior to construction at locations where dewatering is required.



Impacts

Fish and Fish Habitat

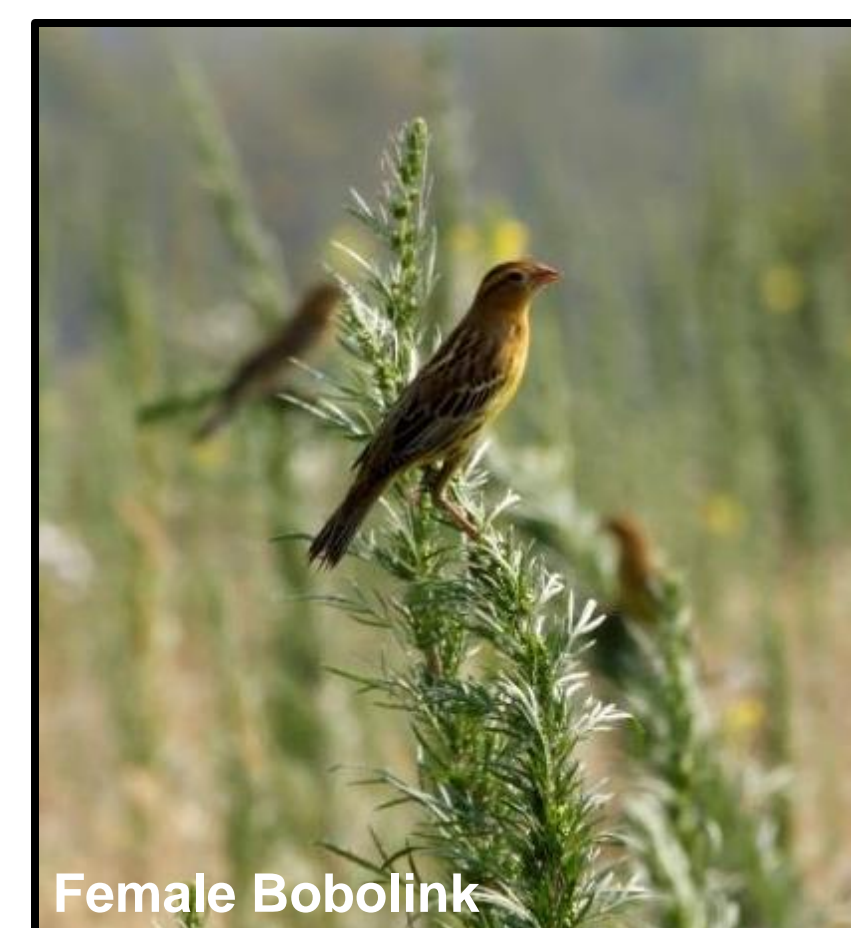
- Potential impacts to fish and fish habitat.
- There are 31 watercourse crossings: 16 directly supporting fishery, 9 indirectly supporting fishery and 6 not supporting fishery.
- Redside Dace an 'Endangered' species listed under the *Endangered Species Act* and the *Species At Risk Act* is found in nine of the watercourses within the study area

Flora and Fauna

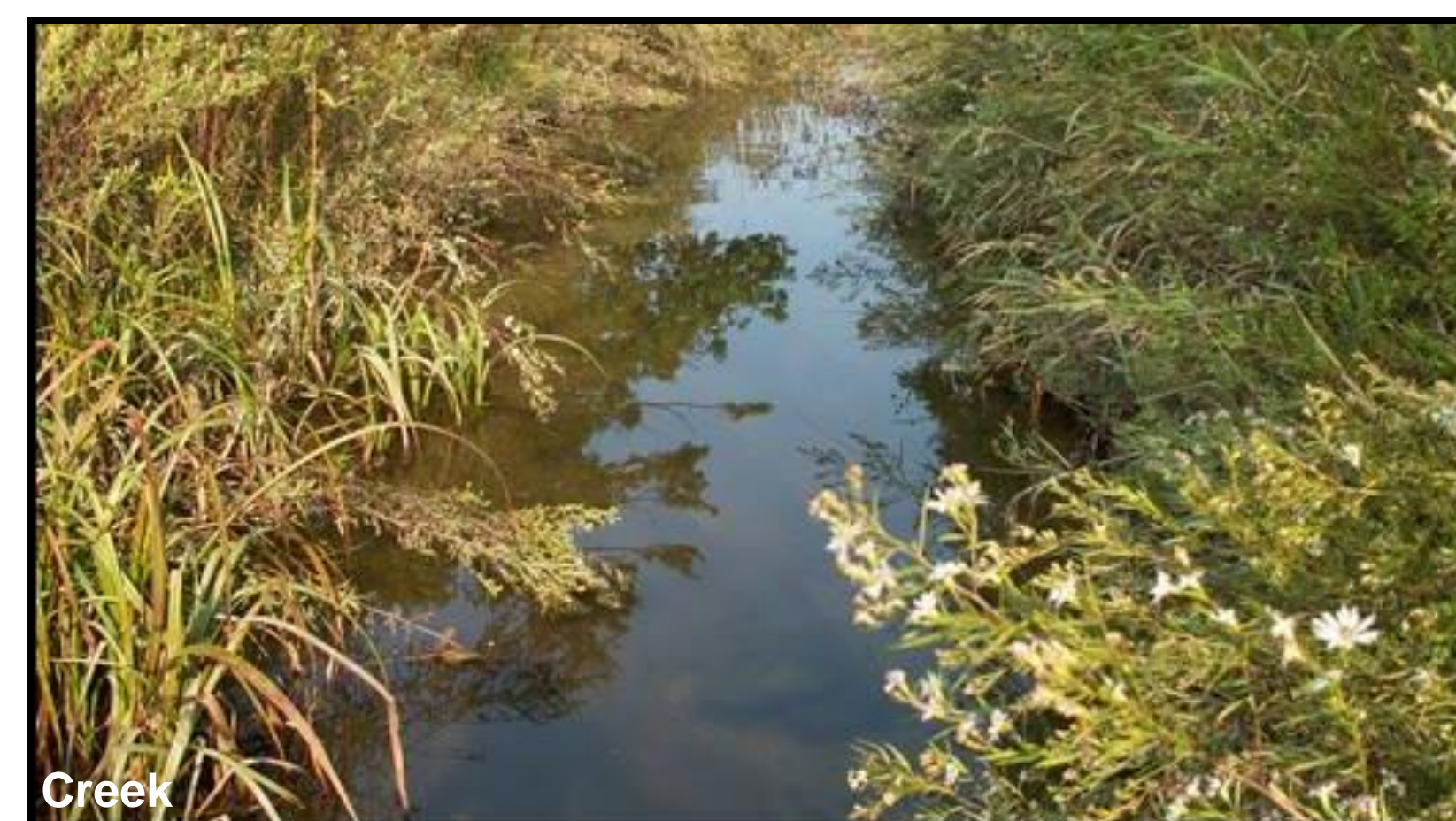
- Overall, approximately 107.6 ha of vegetation communities will be removed. The majority of the vegetation communities are considered widespread and common in Ontario and secure globally.
- A small portion of the Locust Hill Wetland, located west of York-Durham Line, will be removed.
- A small portion of the Cedar Grove Provincially Significant Wetland Complex will be impacted as a result of the runningway.
- Minor displacement and disturbance of wildlife habitat.
- Eastern Meadowlark, Bobolink and Barn Swallow are regulated under the *Endangered Species Act* as 'Threatened' species have potential to be present within the study area.

Mitigation

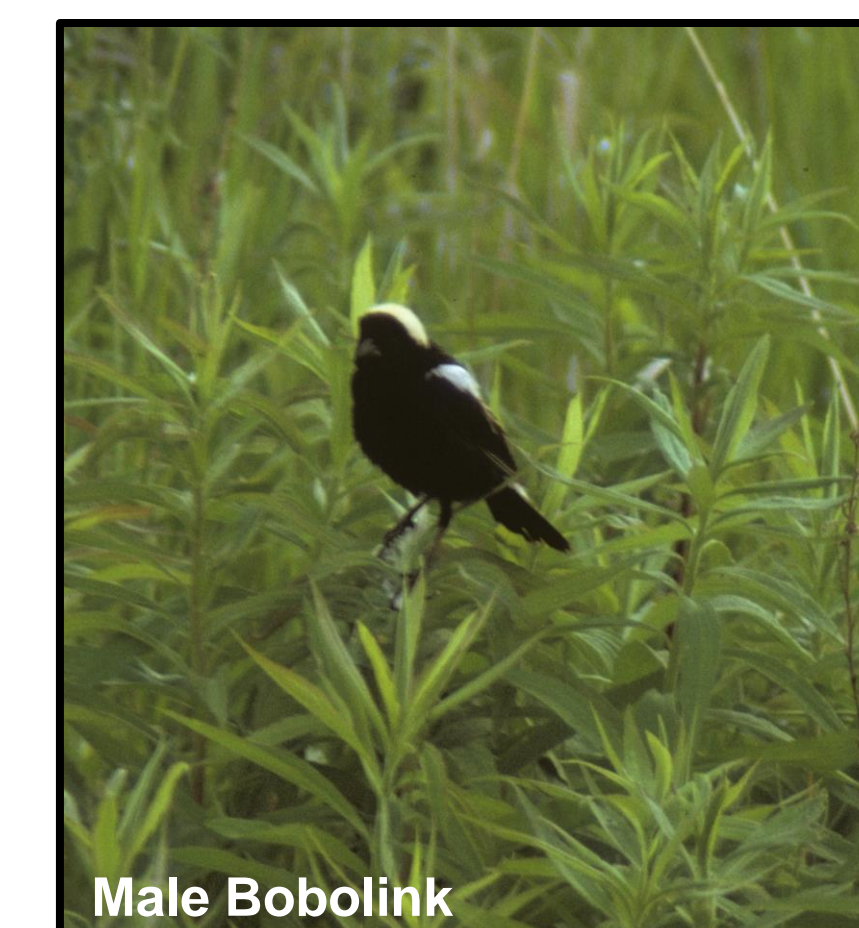
- In-water works, if required, will be conducted within the Redside Dace timing window (July 1- September 15). A 17 (2) (c) overall benefit permit under the *Endangered Species Act* may be required.
- A *Fisheries Act* authorization may be required depending on the type of structures and work proposed.
- Best construction practices will be implemented including erosion and sediment control measures, equipment maintenance, minimize impacts to riparian vegetation, stabilization and restoration of watercourse bank, etc.
- A landscape plan will be developed during the Detail Design
- Requirements under the *Species at Risk Act*, Ontario's *Endangered Species Act*, *Migratory Birds Convention Act*, and *Fish and Wildlife Conservation Act* will be met to mitigate any adverse effects on wildlife species.
- No vegetation removal will occur during the nesting season. The nesting season of the majority of the species is from April 1 to August 15.
- During Detail Design, further field investigation will be undertaken to survey the presence of the three 'Threatened' species.
- Transitway structures will be designed to maintain wildlife passage.



Female Bobolink



Creek



Male Bobolink

Potential Environmental Impacts and Mitigation Measures



Impacts

Mitigation

Archaeology

- A Stage 1 Archaeological Assessment identified areas of archaeological potential requiring Stage 2 Archaeological Assessment as well as sites required Stage 3 and 4 Archaeological Assessment.

- Further Archaeological Assessments will be conducted in areas of archaeological potential during Detail Design. Any impacts will be mitigated through avoidance or salvage.

Cultural Heritage

- Three Cultural Heritage resources will be affected as a result of removal of buildings, barns and/or landscape features. Two are designated under Part IV of the *Ontario Heritage Act*.

- Heritage Impact Assessments are being conducted for the three Cultural Heritage properties. Design will preserve the resources as much as possible. If not feasible, preservation/retention in situ will be considered. If unavoidable, relocation to a new location will be considered.

Property

- Most of the property required for the 407 Transitway is provincially owned land and designated for infrastructure purposes.

- Minimum private property will be acquired through negotiation or expropriation if required and confirmed during Detail Design. Discussion will continue with the affected parties.
- Landscape plans will be prepared and implemented to mitigate any visual or lost vegetation impacts.

Air and Noise

- There is a minor net increase in emissions for all air quality pollutants except carbon monoxide in the local study area. However, across a broader area, there will likely be an overall improvement with travelers switching from auto to transit use.
- The projected increases in sound are within Ministry of the Environment guidelines of less than 5 dB except for two areas (Ninth Line and Brock Road).

- Best management practices will be implemented to prevent the potential release of dust and other airborne pollutants during construction.
- Construction activities will adhere to local noise by-law regulations. Exemptions will be obtained from the municipality as necessary.
- Noise mitigation measures will be applied at the two identified locations.



- Input received at this PIC will be reviewed and incorporated into the study, as appropriate.
- The Transit Project Assessment Process (TPAP) will be initiated shortly with the publication and distribution of the Notice of Commencement (NOC).
- Once the Notice of Commencement is issued, MTO has 120 days to prepare the Environmental Project Report (EPR) and to consult with the public, regulatory agencies, aboriginal communities, landowners and other interested persons.
- The Notice of Completion of the EPR will be published and distributed concurrently with the release of the EPR for a 30-day final review. Objections on matters of provincial importance or aboriginal or treaty rights are submitted to the Minister at this time.
- The Minister has an additional 35 days to review the project before giving notice to proceed, proceed subject to conditions or request additional studies.
- MTO will submit a Statement of Completion and then proceed to detail design, implementation and construction of the 407 Transitway, subject to funding and provincial priorities.

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 the *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.

Website: 407Transitway.com