407 TRANSITWAY HURONTARIO STREET TO HIGHWAY 400 PUBLIC INFORMATION CENTRE #2

GREENBRIAR RECREATION CENTRE

Date:Tuesday January 23rd, 2018Time:4:00 p.m. to 8:00 p.m.Location:1100 Central Park DriveBrampton, Ontario
L6S 2C9

PROJECT WEBSITE: 407Transitway.com

WOODBRIDGE POOL AND MEMORIAL ARENA

Date:Thursday January 25th, 2018Time:4:00 p.m. to 8:00 p.m.Location:5020 Highway 7Woodbridge, OntarioL4L 1T1





Purpose of Public Information Centre #2

The first Public Information Centre (PIC #1) was held in December 2016 to introduce the study and present the results of the Planning Phase, the initially preferred alignment and station locations.

Since PIC #1, comments from the public were considered, detailed field investigations and technical studies were conducted, and consultation with Regulatory Agencies, Property Owners and Métis and Indigenous Communities was carried out to develop the 407 Transitway Design.

The purpose of this PIC (PIC #2) is to present and receive input on:

- The 407 Transitway Design of the technically preferred stations and alignment.
- Potential environmental impacts and mitigation measures.
- The Transit Project Assessment Process including major milestones, next steps and study schedule.

You may also visit us at **407Transitway.com**

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.





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: Friday February 23rd, 2018









What is the 407 Transitway?

- Exclusive corridor, fully grade separated (no intersections) bus rapid transit facility with potential conversion to light rail transit, parallel to 407 ETR.
- The 407 Transitway will extend from Burlington to Highway 35/115 (150 km) with up to 50 surface stations.
- Study limits for this Section: west of Hurontario Street to east of Highway 400.
 - 24-km exclusive runningway with 7 surface stations.

















OTTAWA BRT

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 407 ETR corridor.
- It will improve accessibility to existing/planned major urban centres/nodes, post secondary educational \bullet 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. \bullet
- *It will* alleviate congestion on 407 ETR.
- The project builds on extensive work completed to date and will define the Transitway footprint and \bullet property requirements, address environmental impacts and receive TPAP approval.











POntario Ministry of Infrastructure



Schedule & Process





Step 2



Transit Project Assessment Process (TPAP)

Corridor Growth

- Corridor is largely industrial / commercial in nature, though catchment area in Peel and York Region will experience substantial growth.
- Approximately 57% employment growth in the 407 Transitway corridor 2011 to 2041.
- 53% population growth in corridor, 2011 to 2041.
- Significant increase in road congestion throughout Peel Region and York Region, despite notable increase in transit ridership.









Service Concept

Extend the 407 Transitway operating concept:

- Spine services: Services that operate exclusively on the 407 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.
 - Bramalea City Centre.
 - Bramalea GO.
 - Pearson Airport to 407 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

2041 Ridership Forecast

2041 AM Peak Hour Ridership on 407 Transitway, from Hurontario to Highway 400:

- Peak load is 5,500 eastbound entering Jane Station.
- Forecast ridership is within range warranting a dedicated bus facility.

4,000

What does 5,500 riders mean?



Bus Mixed Traffic







407 TRANSITWAY



Dual Bus Lanes

Grade Separated Busway









Light Rail Transit



407 Transitway Infrastructure Characteristics

- The design will protect for BRT or LRT operation.
- pick-up/drop-off and transit interface facilities).
- Runningway BRT cross-section:
 - Between Stations 12 m $(2 \times 3.75 \text{m lanes} + 2 \times 2.25 \text{m shoulders})$
 - Through Stations 14 m (2 x 3.75m lanes + 2 x 3m stopping lanes)
- 14 overpasses & 27 underpasses



Example of a BRT System

Infrastructure includes runningway (accommodating both BRT & LRT standards) and stations (park and ride, passenger

Between Stations





Through Stations





12.00

Preferred Alignment and Station Configuration







Station Design Principles

Component	Station I
Daccandar	Short and
rassenger	Universal
Active Transportation	Convenie Transitwa
	Prioritized
Vabiaular	Carpoolin
Facilities	Lay-by ar
	Bus stops facility.



Functional Requirements and Design Principles

- d convenient transfers.
- lly accessible.
- ent, comfortable, direct and safe pedestrian linkages to, from and within ay facility.
- d PPUDO location.
- ng and alternate fuel vehicle parking close to platforms.
- nd looping bus facilities for local and regional buses entering the station.
- s at the crossing arterial road will also be provided for buses not entering the





Preferred Alignment Alternative Segment A: West of Hurontario Street to East of Kennedy Road



LEGEND

ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM

SEGMENT A









Alignment provides optimum connection to HuLRT stop.

 \checkmark

No impact to current design of HuLRT facilities including mainline tracks, maintenance and storage yard and maintenance road.



Alignment crosses the Hydro Corridor not impacting Hydro One's tower/conductor requirements or electromagnetic restrictions.



Alignment crosses under Hurontario Street and under Kennedy Road.



Preferred Station Alternative Hurontario Street Station









Optimum Connection with HuLRT

Access for All Modes and Active Transportation from Hurontario Street and from Vicksburgh Drive

597 Parking Spaces

10 Accessible Parking Spaces

3 Bus Bays

PPUDO 30 Spaces

Bicycle Shelters

Preferred Alignment Alternative Segment B: East of Kennedy Road to West of Tomken Road



LEGEND

ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM

HURONTARIO ST.

SEGMENT B







- Alignment tunnels under Highway 410 Interchange.
- Existing cul-de sac at Farmhouse Court access will be re-aligned.



Preferred Alignment Alternative Segment C.1: West of Tomken Road to East of Dixie Road



LEGEND



ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM

HURONTARIO ST.

SEGMENT C.1





Alignment bridges over Etobicoke Creek West, crosses under Tomken Road, under Dixie Road and traverses east between soccer fields and Utility Corridor.



Design and relocation of displaced soccer fields will be completed prior to construction of Dixie Road Station.



Preferred Station Alternative Dixie Road Station







Connects with Brampton and Mississauga Transit Services

Cricket Fields not Impacted Soccer Fields partially Impacted

Access for All Modes and Active Transportation from Dixie Road

780 Parking Spaces

12 Accessible Parking Spaces

3 Bus Bays

PPUDO 40 Spaces

Bicycle Shelters

Preferred Alignment Alternative Segment C.2: East of Dixie Road to East of Torbram Road



LEGEND

AL AL

ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM

HURONTARIO ST.

SEGMENT C.2





Alignment traverses south of the Emerald Energy Plant, bridges over Bramalea Road, the CN railway and 3 creeks, then crosses under Torbram Road.

Interlining Configuration represents a direct and efficient connection to the 407 Transitway for local buses.

The Hydro Corridor is not the
preferred alignment through this area
due to impacts to Hydro One
clearances requirements of existing
towers.



Preferred Alignment Alternative Segment D: East of Torbram Road to East of Goreway Drive



SEGMENT D

LEGEND



ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM







Alignment crosses under Steeles Avenue, over Airport Road, under the CN track and under Goreway Drive.

Alignment crosses the Hydro Corridor not impacting Hydro One's tower/conductor requirements or their electromagnetic restrictions.



Preferred Station Alternative Airport Road Station











Connects with Brampton and Mississauga **Transit Services**

Access for All Modes and Active Transportation from Airport Road and from Steeles Avenue

560 Parking Spaces

10 Accessible Parking Spaces

3 Bus Bays

PPUDO 39 Spaces

Bicycle Shelters

Preferred Station Alternative Goreway Drive Station











Connects with Brampton and Mississauga **Transit Services**

Access for All Modes and Active Transportation from Goreway Drive Road and from Steeles Avenue

795 Parking Spaces

12 Accessible Parking Spaces

3 Bus Bays

PPUDO 39 Spaces

Bicycle Shelters

Preferred Alignment Alternative Segment E: East of Goreway Drive to East of Highway 427



LEGEND

ALIGNMENT AT-GRADE
ALIGNMENT ABOVE-GRADE
ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM







East of Goreway Drive, the alignment is parallel to 407 ETR affecting some private properties, bridging over Gorewood Drive, and tunneling under the Highway 427 Interchange.

HIGHWAY

Preferred Station Alternative Highway 50 Station







Station Integrated with Future 427 Transitway **Approved Station Site**

Connects to TTC, ZUM and Brampton Transit Services

Access for All Modes and Active **Transportation from Steeles Avenue**

Connects to Highway 427 Southbound Ramp to allow Transit Connection to Pearson Airport

645 Parking Spaces

10 Accessible Parking Spaces

5 Bus Bays

PPUDO 36 Spaces

Bicycle Shelters

Preferred Alignment Alternative Segment F: East of Highway 427 to East of Martin Grove Road



LEGEND

ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM









Alignment is parallel to the ETR ramp to Highway 27, thorough the north side of the 407 ETR Head Office and Yard property.

Alignment bridges over Highway 27 and crosses under Martin Grove Road.



Preferred Station Alternative Highway 27 Station







Access for All Modes and Active Transportation from Steeles Avenue



845 Parking Spaces



14 Accessible Parking Spaces









Preferred Alignment Alternative Segment G: East of Martin Grove Road to West of Islington Avenue



LEGEND

ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE



PROPERTY BOUNDARY STATION AREA STATION PLATFORM





Alignment traverses very close to 407 ETR to minimize impact on Rainbow Creek/Lower Humber River Valleys.



 \checkmark

Alignment bridges over Rainbow Creek/Lower Humber River watercourses, crosses under CP track and under Islington Avenue.



SEGMENT G

Preferred Alignment Alternative Segment H: West of Islington Avenue to East of Highway 400



LEGEND



ALIGNMENT AT-GRADE ALIGNMENT ABOVE-GRADE ALIGNMENT BELOW-GRADE PROPERTY BOUNDARY
STATION AREA
STATION PLATFORM





Alignment is in a trench through the Pine Valley Drive Station.



Alignment crosses under Pine Valley Drive.



Alignment crosses the Hydro Corridor not impacting Hydro One's towers/conductor requirements or electromagnetic restrictions.



Alignment traverses along south edge of the Hydro Corridor crossing under Weston Road and tunneling under Highway 400 Interchange.



Preferred Station Alternative Pine Valley Drive Station













Potential Environmental Impacts and Mitigation Measures

	IMPACTS	
Soils, Contaminated Property and Waste	 Disturbance of soil and utilization and disposal of excess soils/materials. Potential impacts to contaminated property. 	 Utilization and disposal of excess regulatory requirements. Properties of concern will be the s prior to construction.
Surface Water, Drainage and Stormwater	 Possible impacts on drainage patterns along 407 ETR. Water quality degradation. Increase in runoff volumes due to increase in impervious areas. Climate change impacts including increased flooding/extreme weather events. 	 Erosion and sedimentation contromigration of sediments off site. A drainage and stormwater manages impacts. Additional capacity incomposition of sediments. Climate change adaptation considered. Minor watercourse realignment/restafely conveyed through the properties.
Groundwater	 Reduced groundwater recharge/discharge as a result of construction and the expansion of impermeable pavement surfaces. Potential impacts associated with excavation/construction below the water table and de-watering. 	 Reduction in discharge functions of Mitigate recharge reduction by implete development infiltration technique Further hydrogeological studies w Environmental Activity and Sector MOECC will be secured prior to complete









MITIGATION

soils/materials will be managed in accordance with

subject of further assessment on a case by case basis

measures will be implemented to prevent the potential

gement plan has been prepared to address potential porated to increase resilience against extreme weather ns (i.e., green technologies, permeable pavement) to be

grading is expected at most crossings to ensure flow is osed structures.

during bridge construction is temporary.

plementing permeable pavements and other low impact s where possible.

ill be conducted prior to construction.

Registration or a Permit to Take Water from the onstruction as required.

Potential Environmental Impacts and Mitigation Measures

	IMPACTS
	 Potential impacts to fish and fish habitat.
Habitat	 There are 24 watercourse crossings located within additional watercourse feature located just beyon
d Fish	 Twenty of these watercourses, where work is pro support fish and fish habitat.
Fish an	 Contributing habitat for Redside Dace (an 'Endan the Ontario Endangered Species Act and the Car found at one watercourse feature just beyond pro
ems	 Overall, approximately 107 ha of vegetation/vege removed. The vegetation communities are consid common in Ontario and secure globally.
syst	Minor displacement of/disturbance to wildlife and
errestrial Eco	 Thirteen wildlife species at risk have been recorder area, and two wildlife species at risk have potenti study area. Two wildlife species at risk (Eastern V Swallow) were confirmed during field investigation
Ĕ	 Woodbridge Cut Environmentally Sensitive Area a Scientific Interest have been avoided.



- in the project limits and one nd the project limits.
- posed, directly/indirectly
- gered' species listed under nada Species at Risk Act) is ject limits.
- station communities will be dered widespread and
- wildlife habitat.
- led in the vicinity of the study ial to be found within the Nood Pewee and Barn NS.
- and Area of Natural and

- Any required in-water work will take place within the warmwater timing window (July 1 to March 31) and coldwater/Redside Dace timing window (July 1 to September 15), and during periods of low flow/precipitation.
- All required permits/authorizations (i.e., species at risk permits, Fisheries Act Authorization) will be secured prior to construction.
- Best management/construction practices will be implemented including erosion and sedimentation control measures, equipment maintenance, maintenance of riparian vegetation, stormwater management, and stabilization and restoration of watercourse banks.
- Forest edge, riparian and valleyland management shall take place as required. A detailed landscape/planting plan will be developed prior to construction.
- Further field investigations/consultation with MNRF will take place prior to construction to confirm the presence/absence of species at risk.
- Requirements under the Species at Risk Act, 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/disturbance will occur during the nesting season (April 1 to August 31).
- Transitway structures will be designed to maintain wildlife passage.









MITIGATION

Potential Environmental Impacts and Mitigation Measures

	IMPACTS	MITIGAT
Archaeology	 The Stage 1 Archaeological Assessment identified lands retaining archaeological potential and one previously registered site. Stage 2 Archaeological Assessment is taking place for lands retaining archaeological potential within 300 m of watercourses. 	 Any remaining Stage 2 Archaeological Assessed 4 archaeological work will take place prior to control The project will be cleared of all archaeological
Cultural Heritage	 Cultural heritage resources will be affected through demolition or alteration to their setting. One of these resources (farmscape) is listed under the City of Brampton's Heritage Listing. 	 Cultural Heritage Evaluation Reports are being will be conducted as required for those resource The Transitway design will preserve the resource preservation/retention or relocation will be constructed
Land Use/Property	 Potential impacts to designated land use and existing/planned land use. Much of the property required for the 407 Transitway is provincially owned land and is designated for infrastructure purposes. 	 Efforts have been made to ensure that the 407 compatible with current municipal land use des Private property requirements have been minin will continue with the affected parties. Property will be acquired through negotiation or the second s
Air Quality and Noise/Vibration	 The project's contribution to the cumulative concentrations of all pollutants of concern was found to be insignificant. Increase in gaseous air pollutants and change in particulate matter was found to be insignificant. No significant increases in sound of 5 dBA, or more, were predicted for any of the noise sensitive areas; however, many have background sound levels of 65 dBA, or more. 	 Best management practices will be implemented dust/particulates during construction. Alternative fuel/technology pathways can be contract the greenhouse gas intensity of the buses. Construction activities will adhere to local noise obtained from the municipalities as necessary. A Complaints Protocol will be developed prior to noise and vibration complaints from the public.









MITIGATION

- gical Assessment, and any required Stage 3 and Stage ace prior to construction.
- rchaeological concerns prior to construction.
- orts are being prepared. Heritage Impact Assessments hose resources that retain heritage value.
- ve the resources to the extent possible. If not feasible, n will be considered.
- that the 407 Transitway is located in lands that are land use designations.
- ve been minimized to the extent possible. Consultation les.
- negotiation or expropriation.
- e implemented to reduce/prevent the release of on.
- ays can be considered prior to construction to reduce e buses.
- to local noise by-law regulations. Exemptions will be s necessary.
- eloped prior to construction to address construction

- persons.
- request additional studies.
- construction of the 407 Transitway, subject to funding and provincial priorities.

Input received at this PIC will be reviewed and incorporated into the study, as appropriate.

The project is currently in the pre-Transit Project Assessment Process (TPAP) phase prior to initiating the formal 120-day consultation and documentation period as prescribed in Ontario Regulation 231/08, Transit Projects and Metrolinx Undertakings.

Once the Notice of Commencement of TPAP has been published, MTO has 120 days to prepare the Environmental Project Report (EPR) and to consult with the public, regulatory agencies, Indigenous and Métis Communities, landowners and other interested

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

MTO will submit a Statement of Completion and then proceed to the 407 Transitway pre-construction phase, implementation, and



Freedom of Information and Protection of Privacy and Team Contacts

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.

Graham DeRose

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

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Thank you for your participation in this project. Website: 407Transitway.com

