Welcome to the
Downtown Brampton Transit Hub
(Bus Terminal)

TPAP, Preliminary Design, and Business Case Study

Public Information Centre (PIC) #1

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Land Acknowledgement

We respectfully acknowledge that the City of Brampton is located on treaty lands and territory of the Mississaugas of the Credit and the traditional territory of the Huron-Wendat and the Haudenosaunee. The City of Brampton is a contemporary home to many First Nations, Inuit and Metis people today. Brampton appreciates and respects the history and diversity of the land and is grateful to have the opportunity to work and meet in this territory. The City of Brampton joins with First Nation groups in partnership, friendship and reconciliation.

Purpose of Consultation

The purpose of this PIC is to introduce the project, present the work completed to date, and receive input on future considerations, such as:

- Why this study is taking place
- Determining optimal configuration and location of the future transit hub
- Balancing the needs of all stakeholders
- Documenting all questions and comments received, and addressing them in the final study report
- Next steps

A comment form is available below for your input:

Share your thoughts

Project Overview and History

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Project Overview

The City is undertaking a study to design a new transit hub in the Downtown Core, to address future transit needs and take advantage of opportunities to better integrate with other initiatives in Downtown Brampton.

- Through this study, the City will:
  - Identify future transit hub requirements
  - Determine the right site for the transit hub
  - Identify the most appropriate delivery model for the hub (stand-alone facility or integrated with new development)
  - Determine the procurement model (traditional vs Public-Private Partnership)

The project team has completed the existing conditions investigation for the study, including background documents review, urban design and land use planning, natural environmental inventory, heritage / archaeology inventory, and traffic analysis.

The project team is currently in the process of establishing the long list of design concepts, and associated evaluation of the options to identify a short-list to carry forward for further design refinement and assessment.

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What is the Transit Project Assessment Process?

Environmental impacts of the proposed Transit Hub are being assessed in accordance with Ontario Regulation 231/08: *Transit Project Assessment Process* (TPAP), under the Environmental Assessment Act. This process involves a pre-planning phase followed by a regulated timeline (up to 120 days) for public consultation, assessing impacts, developing measures to mitigate negative impacts, and documentation.

Field work and information gathering has commenced for preparing studies. Reviewing and examining Project components and activities also includes:

1. Understanding local environmental conditions through desktop reviews and field studies;
2. Assessing and evaluating potential impacts that project components and activities may have on the environment;
3. Proposing mitigation measures to reduce impacts and recommending monitoring activities to verify effectiveness of mitigation measures;
4. Identifying municipal, provincial, federal, or other permits and approvals that may be required to support project planning and implementation; and,
5. Engagement with Agencies, Municipalities, Indigenous Nations, Property owners, and members of the public.

Matters of Provincial Importance

The project is required to consider matters of provincial importance and constitutionally protected Aboriginal or Treaty rights, including:

Indigenous Relations

- Constitutionally protected Aboriginal or Treaty rights and areas of concern.

Natural Heritage

- Park, conservation, or protected area.
- Species at risk or of special concern and their habitat.
- Wetland, woodland, wildlife habitat, or other natural heritage areas.
- Areas of natural or scientific interest.
- Rivers, tributaries, or lakes containing fish and fish habitat.

Hydrology

- Area of surface water or groundwater or other important hydrological feature.
- Areas that may be impacted by a known, suspected, or off-site source of contamination.

Cultural Heritage and Archaeology

- Protected heritage properties and built heritage resources.
- Cultural heritage landscapes.
- Archaeological resources and areas of potential archaeological interest.

Environmental Studies

- Environmental studies document existing conditions, assess potential construction or operations impacts from the project, and identify mitigation measures to reduce or eliminate potential impacts.
- Study recommendations and identified mitigation measures will be used by the design team to improve the design.
- These studies form part of the **EPR** that will be posted for **30-day** public review, during the 120-day TPAP period, and once all studies are complete.

Natural Environment Technical Report

Socio-Economic and Land Use Characteristics Assessment

Multi-Modal Transportation Analysis

Stage 1 Archaeological Assessment

Air Quality Technical Report

Noise & Vibration Technical Report

Cultural Heritage Report

Climate Change and Sustainability

Phase 1 Environmental Site Assessment Report

Stormwater Management

Technical Studies

Study Area Context

- Planned and Approved Developments
- Parks and Open Spaces
- Roads Rights-of-Way
- Parcels
- Cycling Network
- Transit Infrastructure

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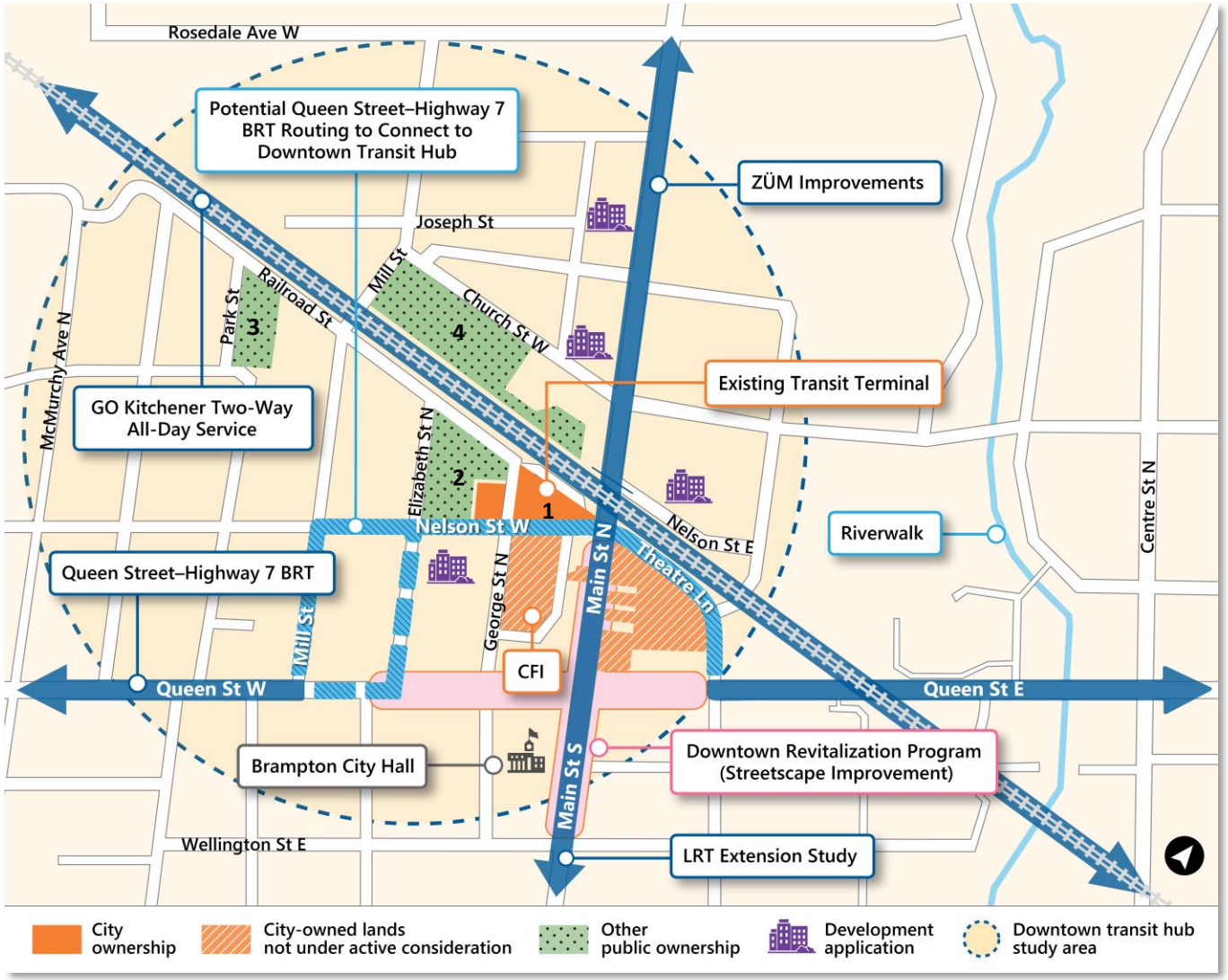
Study Area

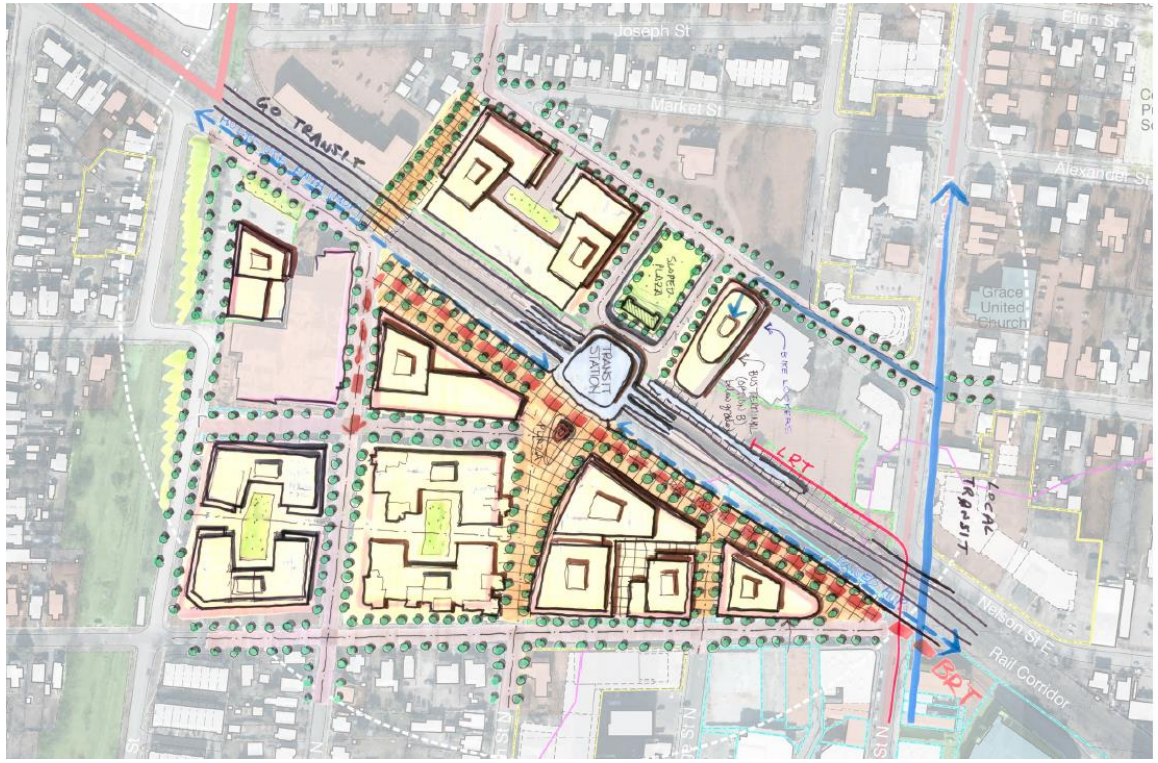
- Potential Sites for Transit Hub
  1. 8 Nelson Street
  2. Elizabeth / George Block
  3. Park Street
  4. Brampton GO Station
- Preliminary screening of sites indicated that Sites 1, 2, and 4 offer sufficient size to accommodate the transit hub.
- Site 3 is too small to accommodate program requirements, is disconnected from the GO Rail and proposed LRT station, and has fewer access/egress routes
- As such, the long-list of transit hub options was developed focusing on Sites 1, 2, and 4 as they are most feasible



Planning Context

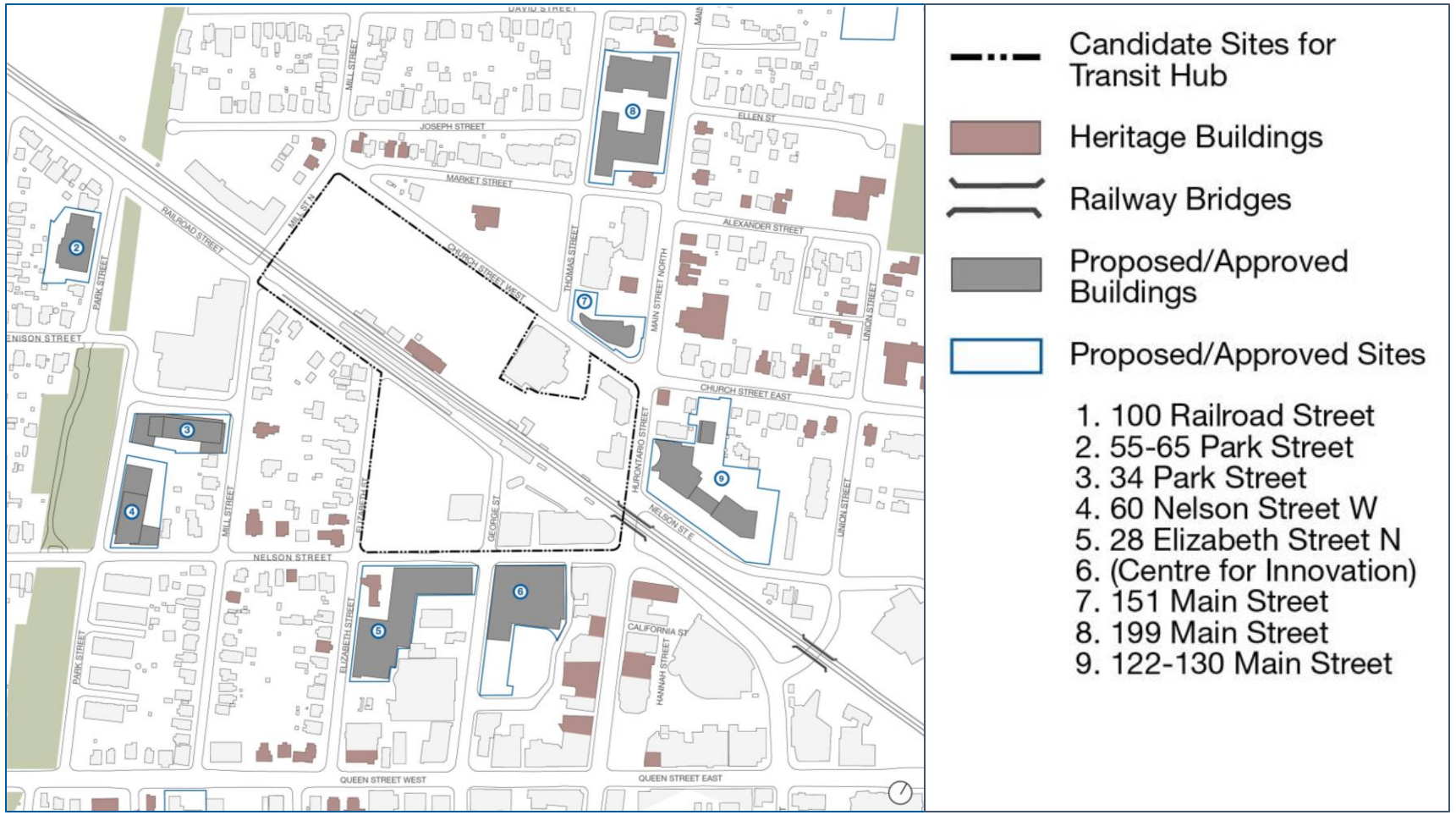
Numerous planning initiatives are ongoing in the area:

- Brampton Major Transit Station Area Study (MTSA) Plans (2023)
- Update to Downtown Secondary Plan (to be initiated 2024)
- Living Mosaic: Brampton 2040 Vision (2018)
- Riverwalk Area Urban Design Master Plan (2022)
- Downtown Brampton Flood Protection Environmental Assessment (2020)
- IDP Workshop Summary (2022)
- Downtown Brampton Streetscape Manual (under development)
- Metrolinx Queen Street – Highway 7 BRT Study (Ongoing)
- City of Brampton: LRT Extension Study (2023)



IDP Workshop Summary Plan (Summer 2022)

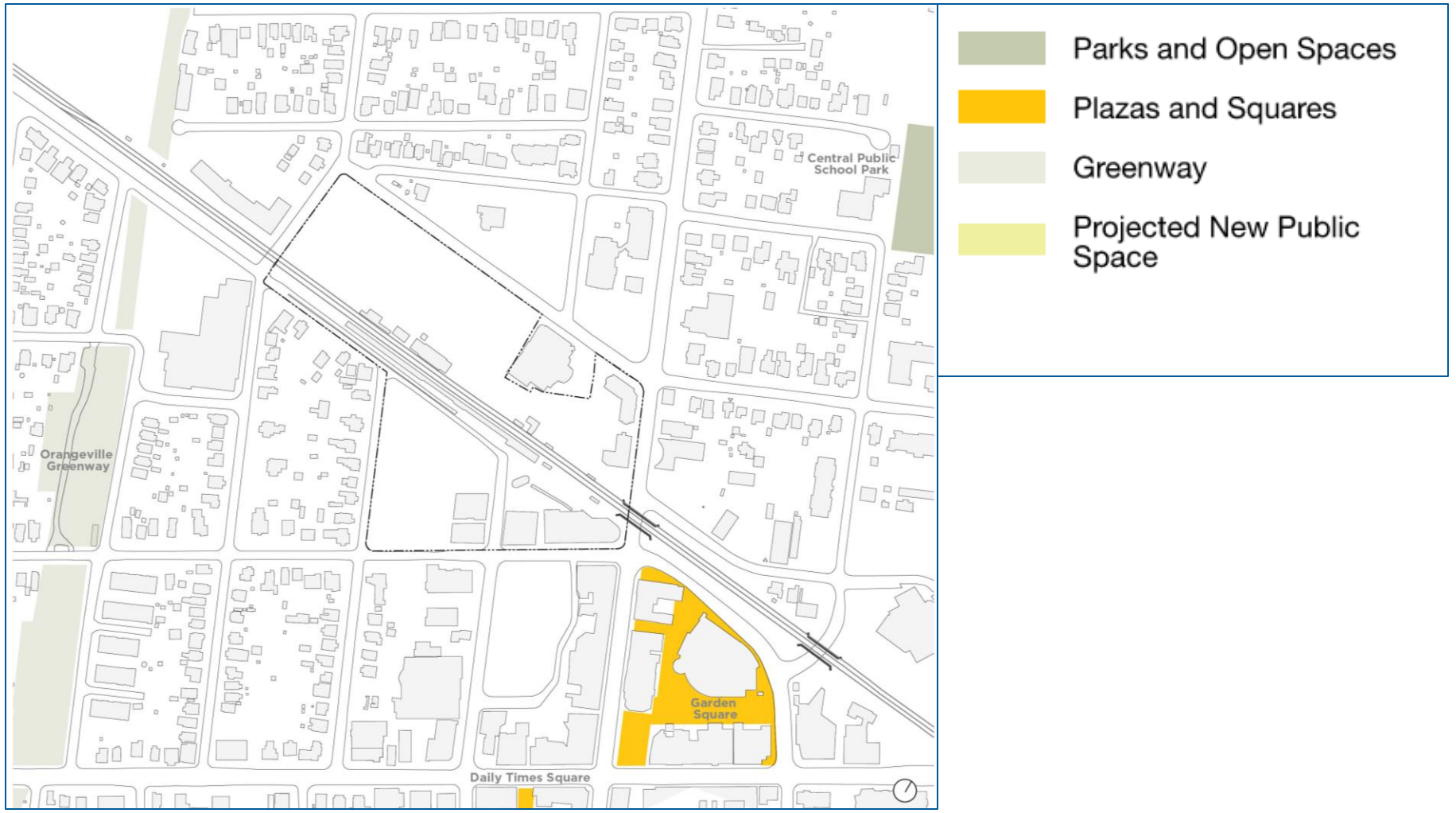
Study Area Context | Planned and Approved Developments



Nearly a dozen development projects have been identified around the study area.

They are mostly high-rise residential buildings that can include commercial ground floors. They range in height from around 25 to 48 storeys. Proposed buildings are mostly towers with 4-8 storey podiums.

Study Area Context | Parks and Open Spaces



The main public space around the study area is the Garden Square.

A few hundred metres further, Central Public School Park offers green space as well as the Orangeville Greenway.

Daily Times Square on Queen Street, a small urban plaza, is also within walking distance from the study area.

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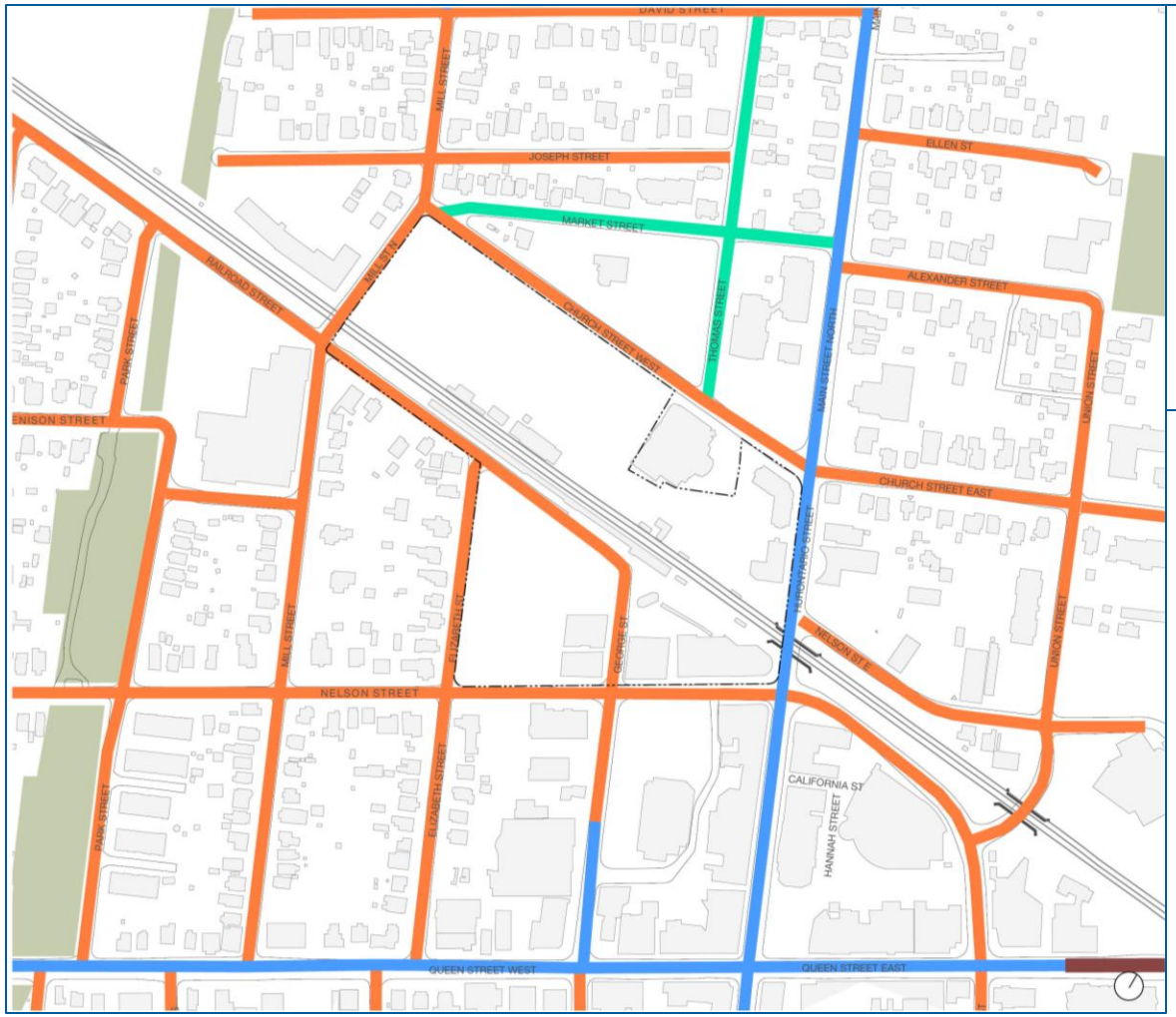
Study Area Context | Roads Rights-of-Way



Existing

- Over 20m wide
- 19-20m wide
- 15-17m wide
- 12-15m wide

Downtown Brampton has the smallest streets in the City. Indeed, many streets around the study area are as narrow as 15-17 m. The Official Plan identifies potential streets to be widened, notably Church West and Mill streets (23-26 m), and Hurontario / Main Street and Queen Street (26-30 m).

Note that many of these suggested widenings are unlikely in their historical urban fabric context and their associated building setbacks.

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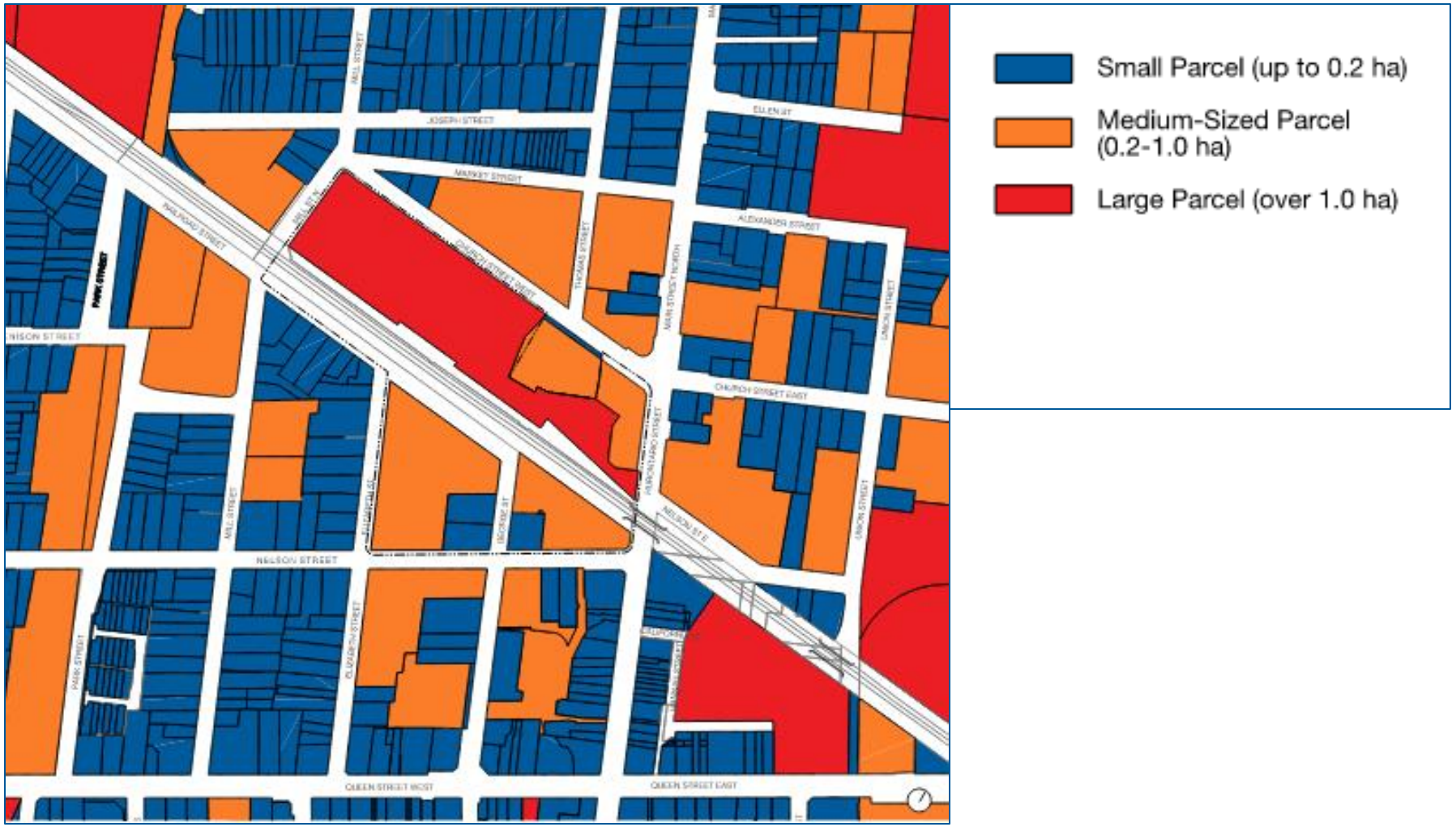
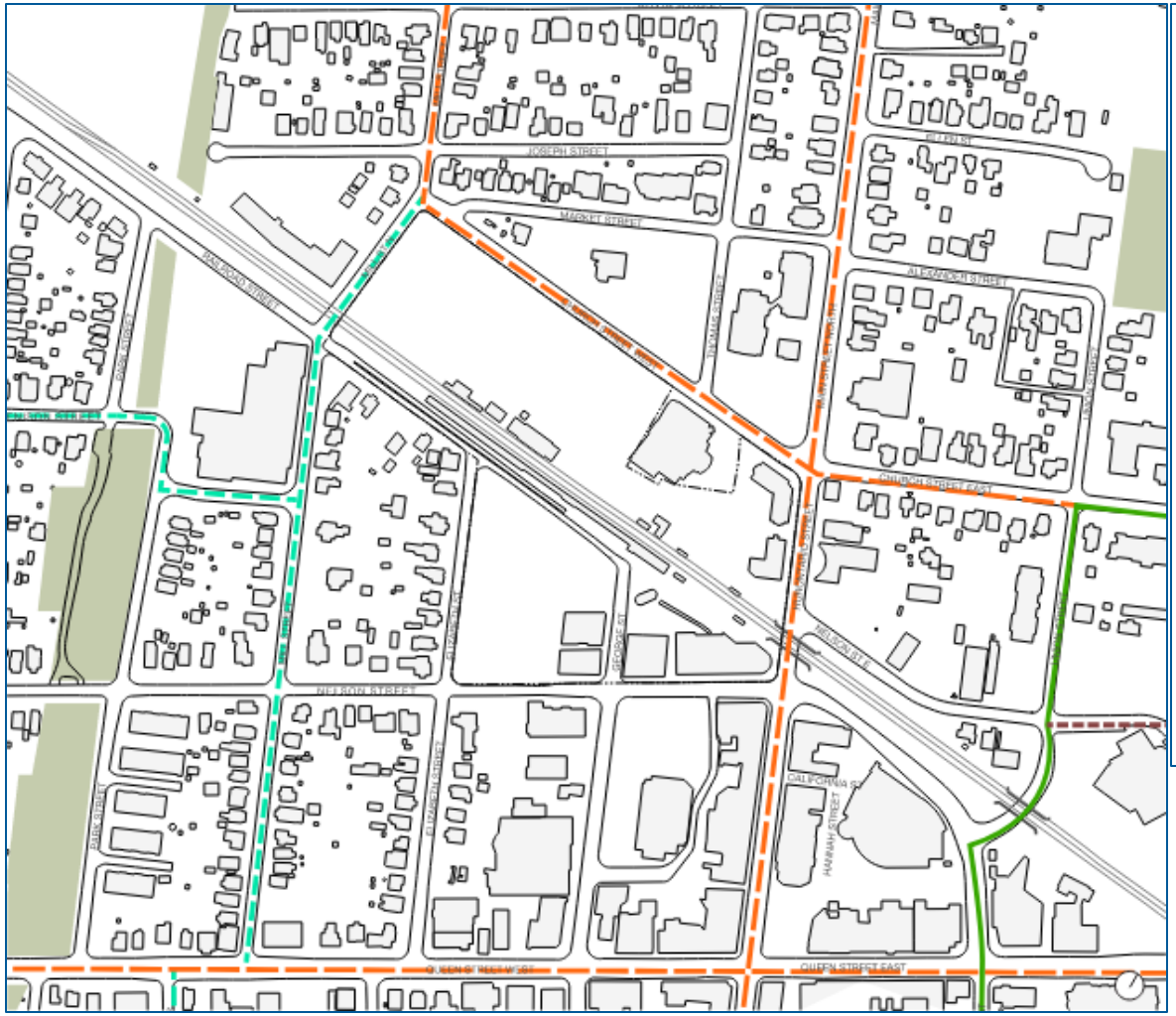
Study Area Context | Parcels



Most of the study area is covered by medium and large lots. Outside the study area, most of the land is subdivided with small lots, associated with the traditional neighbourhood scale.

Some blocks have one or two medium-sized blocks, mostly for higher density housing.

Study Area Context | Cycling Network



The cycling network is relatively scarce around the study area. Only one link exists currently on part of Union and Chapel streets.

New designated bike lanes are projected on Queen Street and Hurontario / Main Street as well as Church Street north of the study area.

Some shared roadways are also projected west of the site on Mills and Denison Streets.

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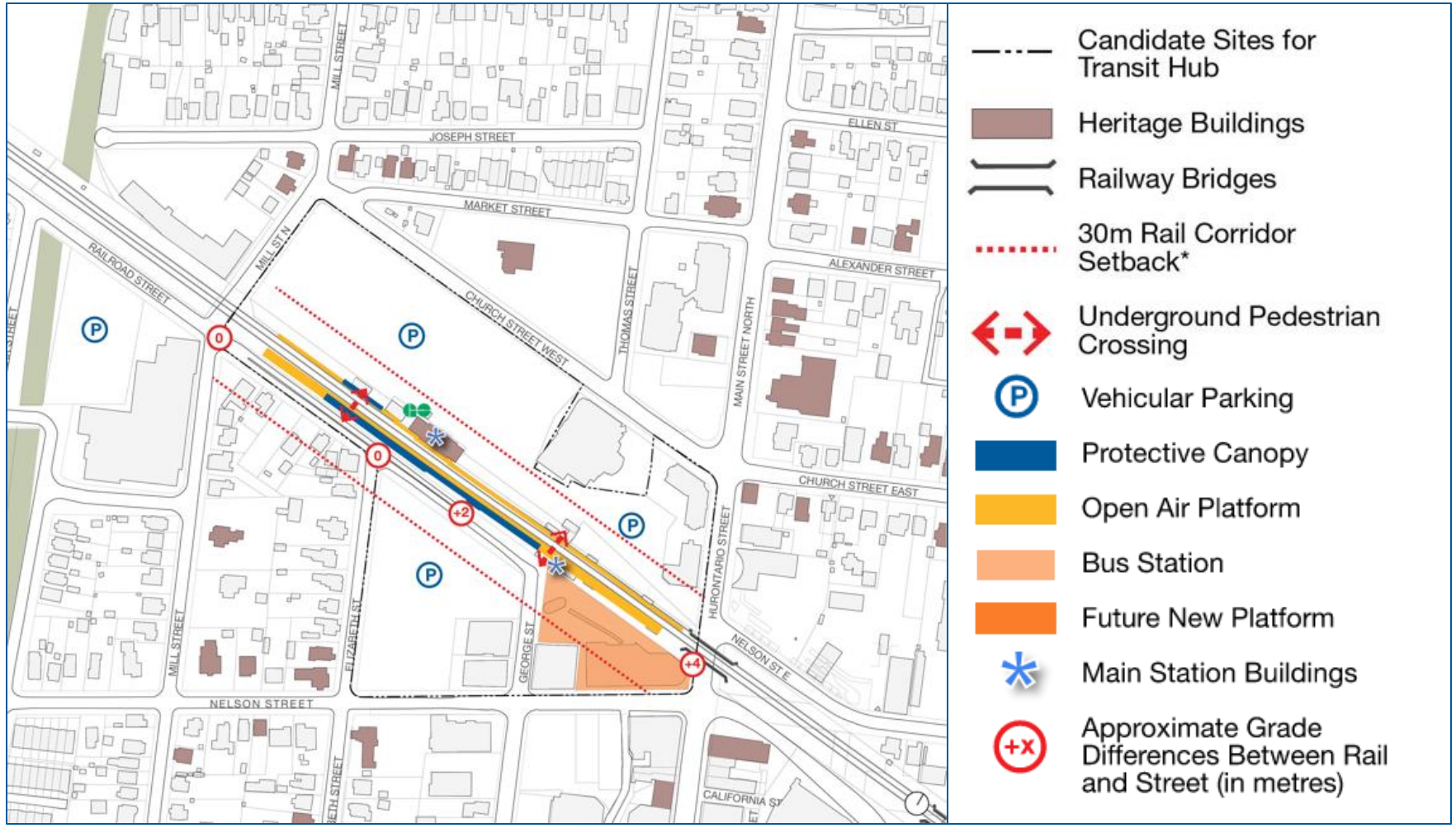
Study Area Context | Transit Infrastructure



The current GO station is centred around vehicular parking. All the land owned by Metrolinx near the station is dedicated to surface parking, including the most recent addition of the block on Elizabeth Street.

Considerable grade changes are present in the study area, increasing in the eastern direction.

** New construction for sensitive land uses (e.g. residential) within set-back requires mitigation measures based on FCM Guidelines (2014) such as crash walls.*

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Study Process

The evaluation of options is a multi-level process that will occur over the course of the study.

Through the three-level process, the long list of Downtown Transit Terminal options will be evaluated and narrowed down to a short list. The long list is presented at Public Information Centre 1 (PIC1)

The Transit Project Assessment Process (TPAP) is a provincial environmental assessment process developed specifically for the approval of public transit projects.

Proponents must complete the prescribed steps of the process within specified time frames.

2022

Determine Goals and Objectives

2023

Long-List Evaluation

- Identify Options
- Sketch Design
- Evaluate Options
- Public Information Centre 1 (November 2023)

2024

Short-List Evaluation

- Conceptual Design
- Evaluate Options through Initial Business Case (IBC)
- Public Information Centre 2

Preferred Option and EPR (TPAP)

- Preliminary 30% Design
- Public Information Centre 3
- Submit Environmental Project Report (EPR)
- Notice of Completion Review Period
- Minister's Decision

Project Completion

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Stage 1 Archaeological Assessment

- Confirmed that portions (~35%) of the Study Area were previously assessed through the City's LRT Extension Study and do not require further assessment.
- Field investigations confirmed that the remainder of the Study Area has witnessed prior disturbance and lacks integrity.
- No further assessment is recommended, and the Study Area should be considered free of archaeological concern.

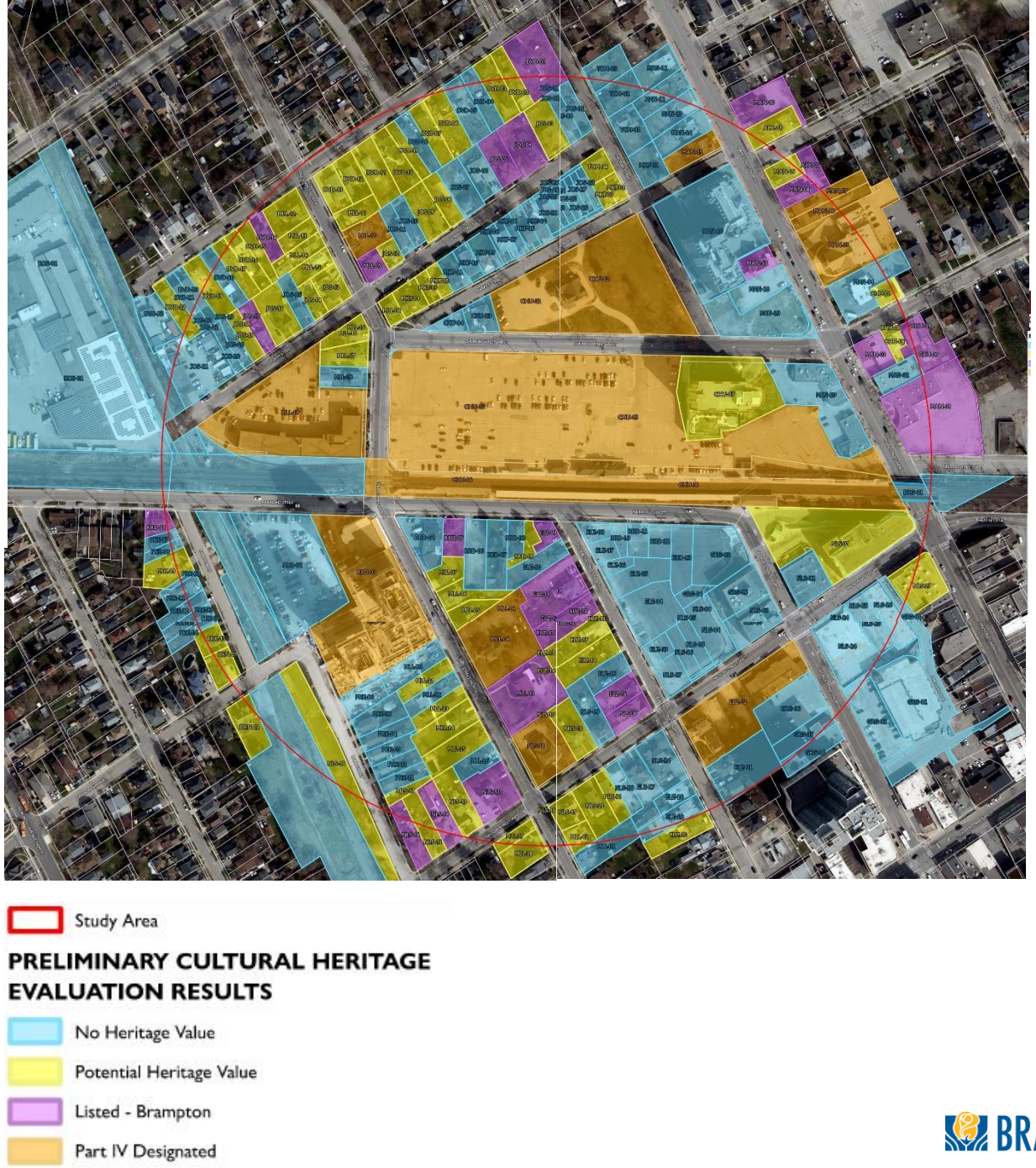
Cultural Heritage Evaluation

Study Area includes:

- 0 Federally Designated Properties
- 11 Part IV OHA Designated Properties
- 0 Part V OHA Designated Properties
- 31 OHA Listed Properties

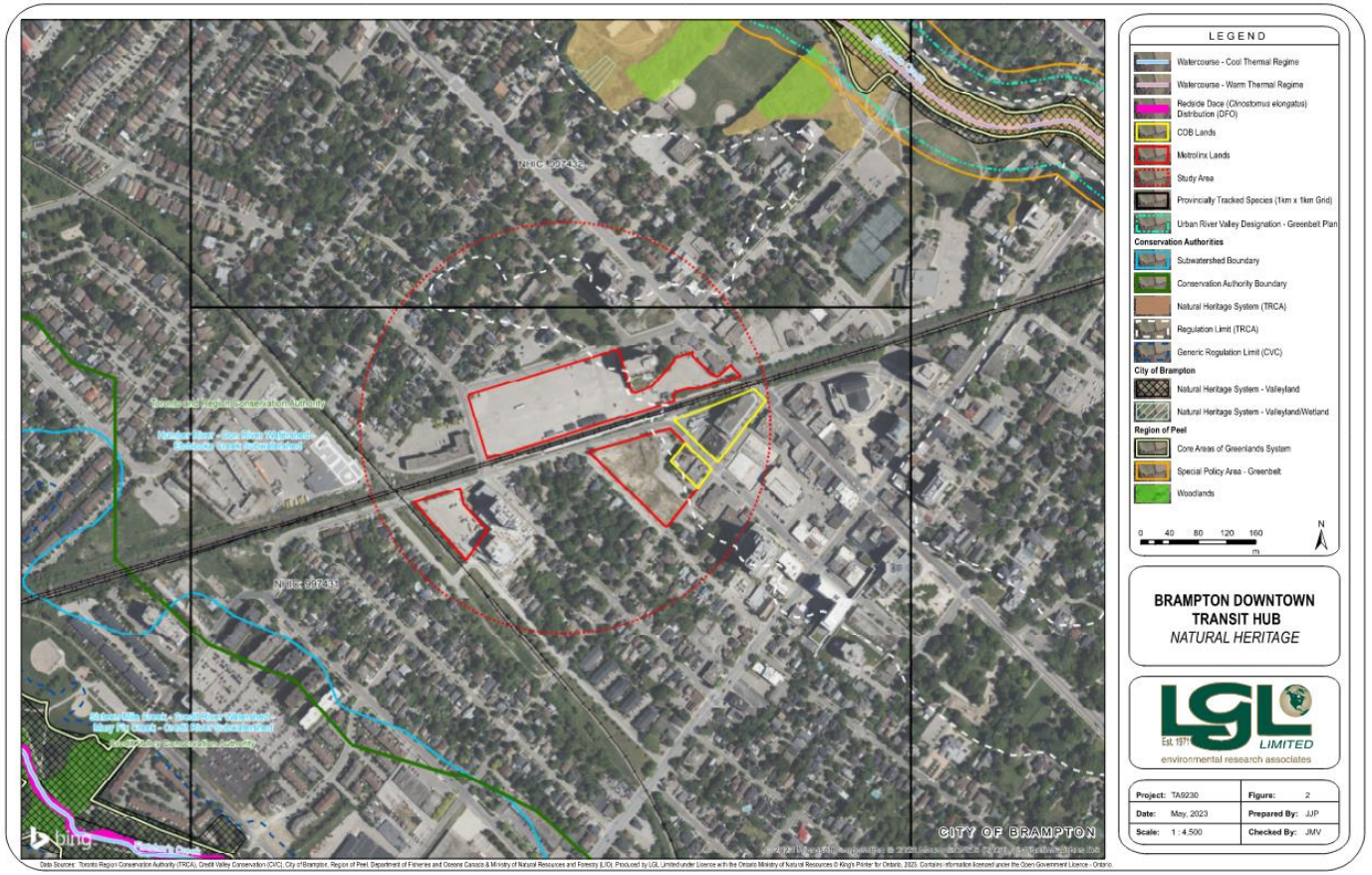
Transit Hub Subject Sites:

- 8 Nelson Street – Identified Cultural Heritage Value or Interest (CHVI)(BHR-85)
- Brampton GO Station – Part IV Designated



Natural Heritage Screening

- No Provincially Significant Wetlands (PSWs), Areas of Natural and Scientific Interest (ANSIs) or Environmentally Significant Areas (ESAs) are located within the study area or within its immediate vicinity;
- A preliminary screening for presence of SAR using MNRF's Natural Heritage Information Centre (NHIC) data indicated records four species at risk, which include:
  - Eastern Meadowlark (Sturnella magna) 'Threatened';
  - Northern Bush Katydid (Scudderia septentrionalis);
  - Redside Dace (Clinostomus elongatus) 'Endangered'; and,
  - Ruddy Dager Moth (Acronicta rubricoma).
- Where SAR and their habitat cannot be avoided, LGL will identify potential impacts associated with the recommended Transit Hub to ensure consideration for mitigation.



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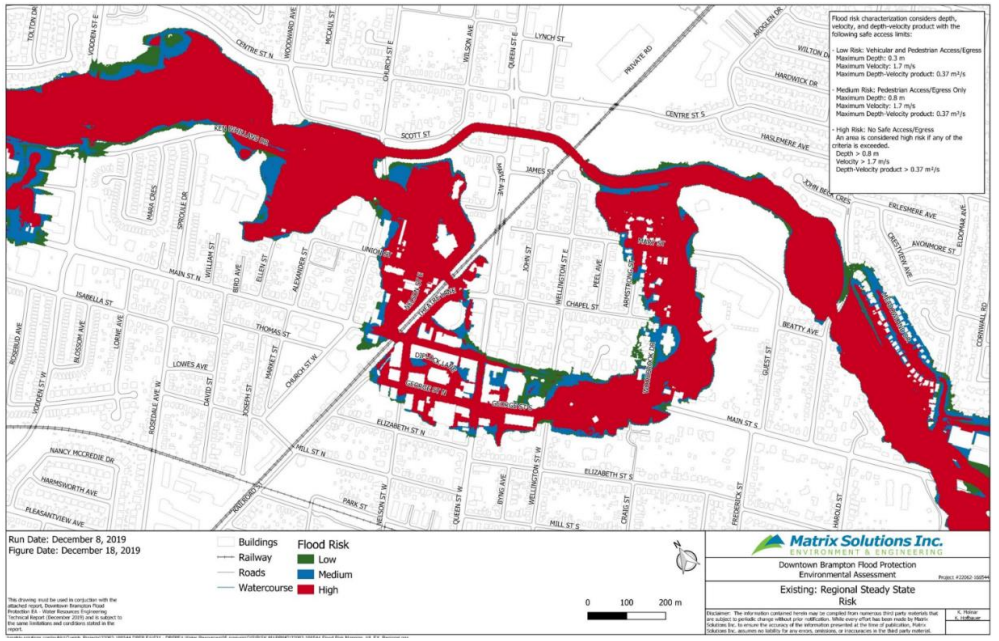
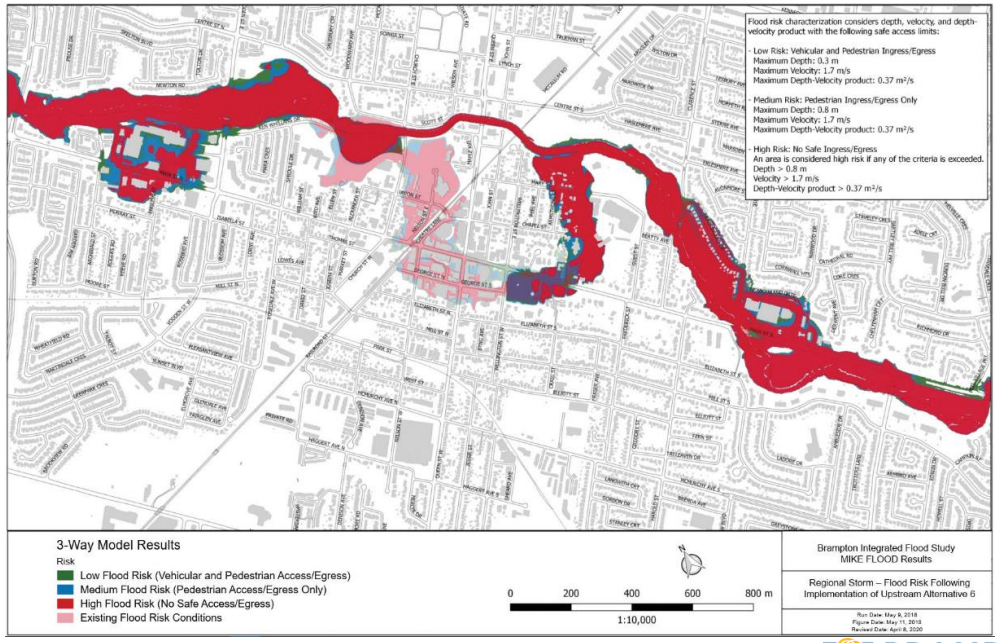
Stormwater Management – Improvements by Others

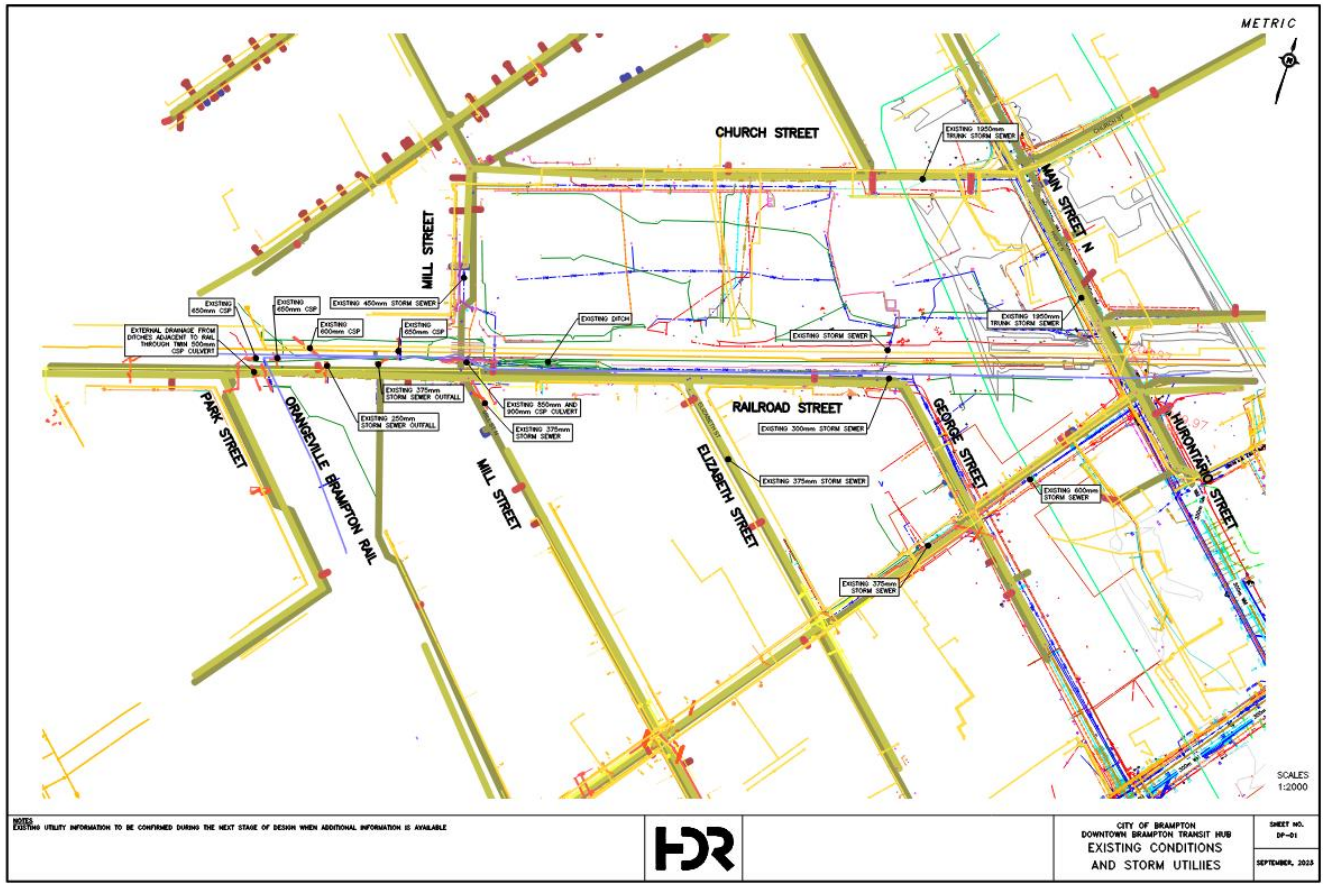
- The Study Area is located within the Etobicoke Creek Subwatershed (TRCA jurisdiction), and within the Special Policy Area (SPA) and Regulatory Floodplain of Etobicoke Creek.
- Flooding areas were identified as part of the TRCA Downtown Brampton Flood Protection EA (AECOM, 2020), which recommended improvements that would mitigate the flooding risks for the study area.
- It is anticipated that the Downtown Brampton Transit Hub study area would be removed from the SPA and Regulatory Floodplain upon implementation of the recommended improvements by TRCA.
- Further discussion and consultation with the TRCA will be required during later phases of design to confirm the status of the Authority's regulation in the area and associated requirements for approval of the development and stormwater management plan.





Stormwater Management – Existing Conditions

- There are currently no watercourse crossings within the study area, and drainage is currently facilitated through municipal storm sewers and ditch drainage.
- Water quality control requirements within the study limits are to provide “Enhanced” water quality treatment, as a minimum, for any increased pavement area.
- Water quantity control criteria is recommended to be post- to pre-development peak flow attenuation for the full range of design storms (2-year to 100-year) to prevent impacts to the receiving systems.
- Stormwater best management practices, including bioretention facilities, infiltration chambers, permeable pavement/pavers, and/or oil-grit separators, will be considered when the location of the future transit hub is selected.



Transportation and Traffic Analysis

Existing Conditions

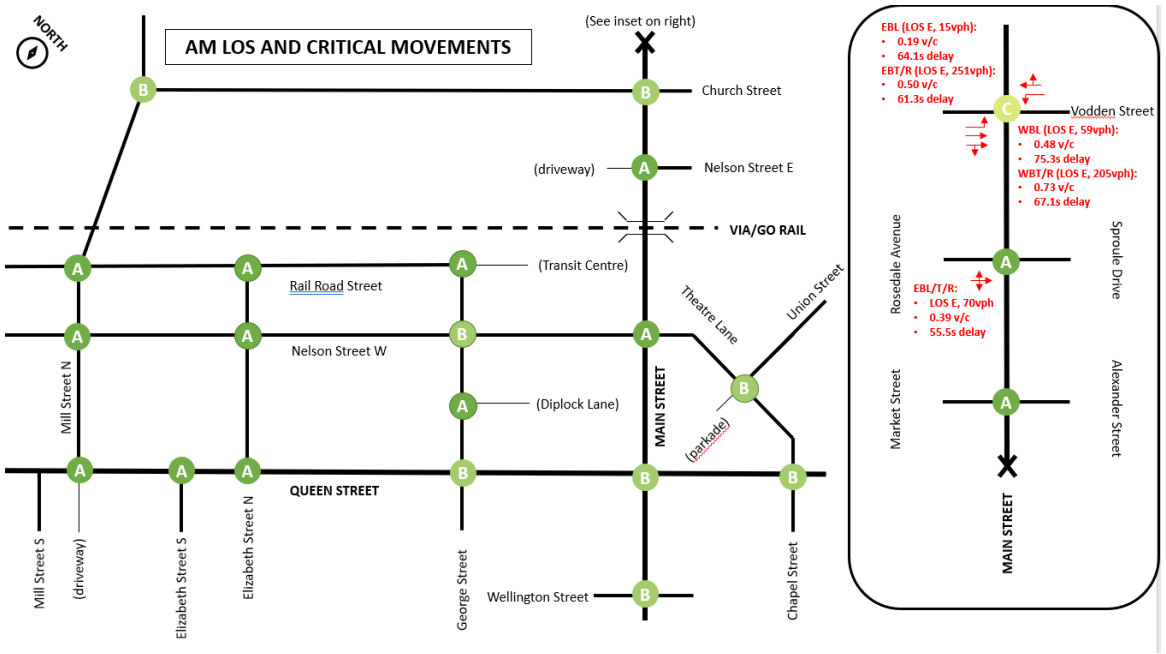
Approach:

- The existing intersections in the study area are generally operating at a Level of Service (LOS), with few movements operating at slightly reduced LOS.
- Overall, the existing conditions analysis does not suggest any issues to be addressed as part of the study.
- Future scenarios will be assessed as part of the short-list design concept evaluation.

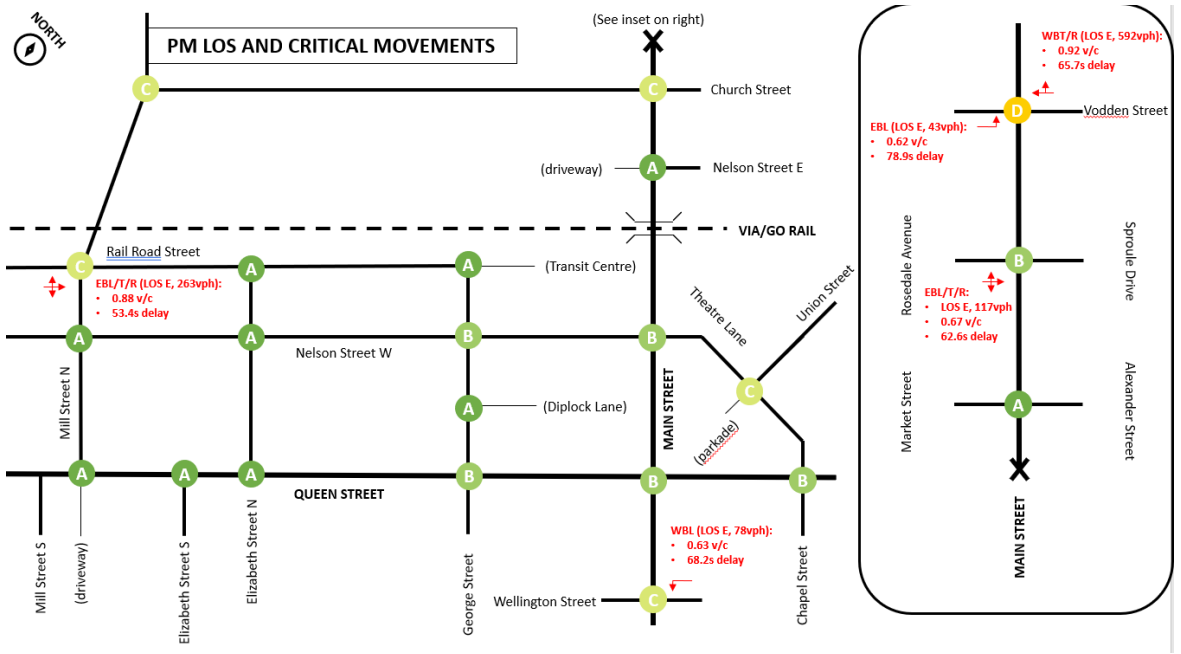
Existing Condition → **Baseline Scenario** 2031 → **Ultimate Condition** 2041

Transportation and Traffic Analysis | Existing Conditions

AM LOS AND CRITICAL MOVEMENTS



PM LOS AND CRITICAL MOVEMENTS



Level of Service (LOS)	Signalized Control Delay per Vehicle (sec)	Unsignalized Control Delay per Vehicle (sec)	Description
A	≤ 10	≤ 10	Ideal
B	> 10 and ≤ 20	> 10 and ≤ 15	Acceptable
C	> 20 and ≤ 35	> 15 and ≤ 25	Acceptable
D	> 35 and ≤ 55	> 25 and ≤ 35	Somewhat undesirable
E	> 55 and ≤ 80	> 35 and ≤ 50	Undesirable
F	> 80	> 50	Unacceptable

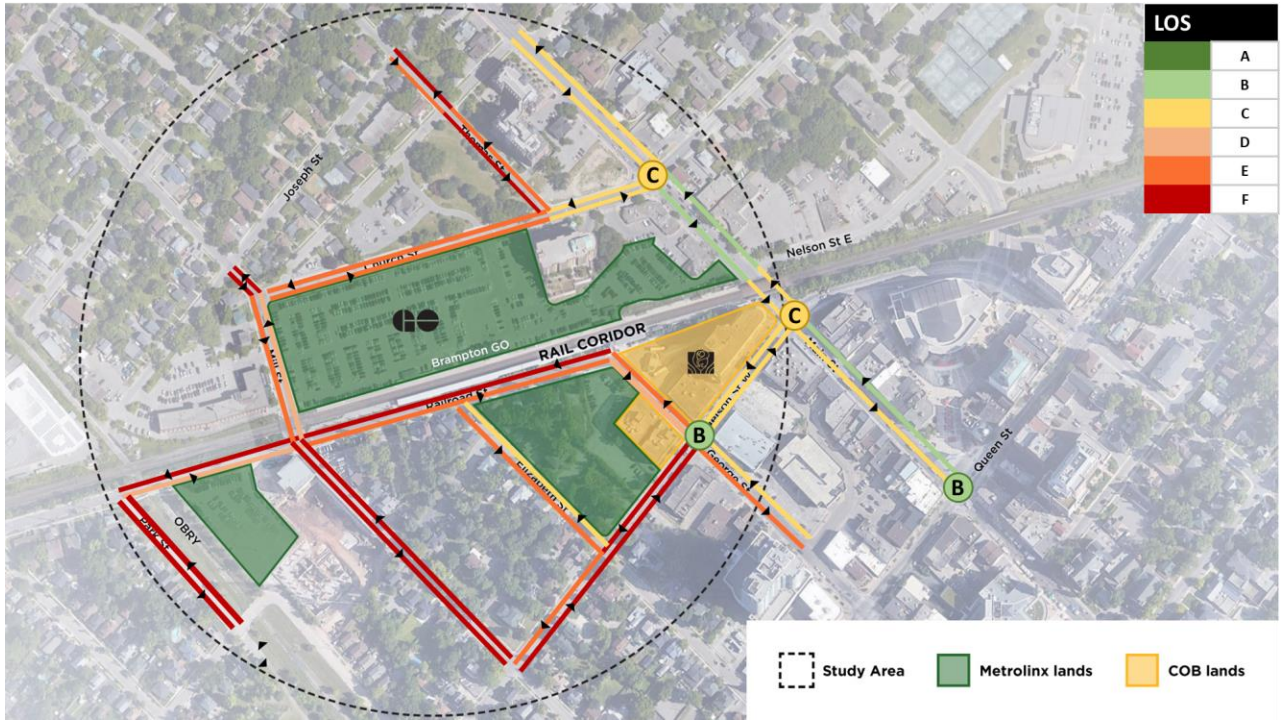
Multi-Modal Level-of-Service

Pedestrian Level-of-Service

- Much of the study area pedestrian infrastructure is operating at a poor LOS.
- Generally, the sidewalks in the study area are narrow and in poor condition, and there is an opportunity to improve this through the implementation of enhanced pedestrian connections as part of the transit hub development.

Cyclist Level-of-Service

- Despite a lack of dedicated cyclist infrastructure, the Cyclist LOS is generally good due to the low traffic volumes on study area roadways.



Railroad Street Treatment Options

- Proposed rail corridor expansion to accommodate two-way all-day rail service is anticipated to encroach on Railroad St and 8 Nelson site.
- A closure or realignment of Railroad Street is likely with associated property impacts.
- Alternative treatments will be developed in conjunction with the transit hub options, including:

Full Realignment

Partial Realignment / Closure

Full Closure

Future Transit Services

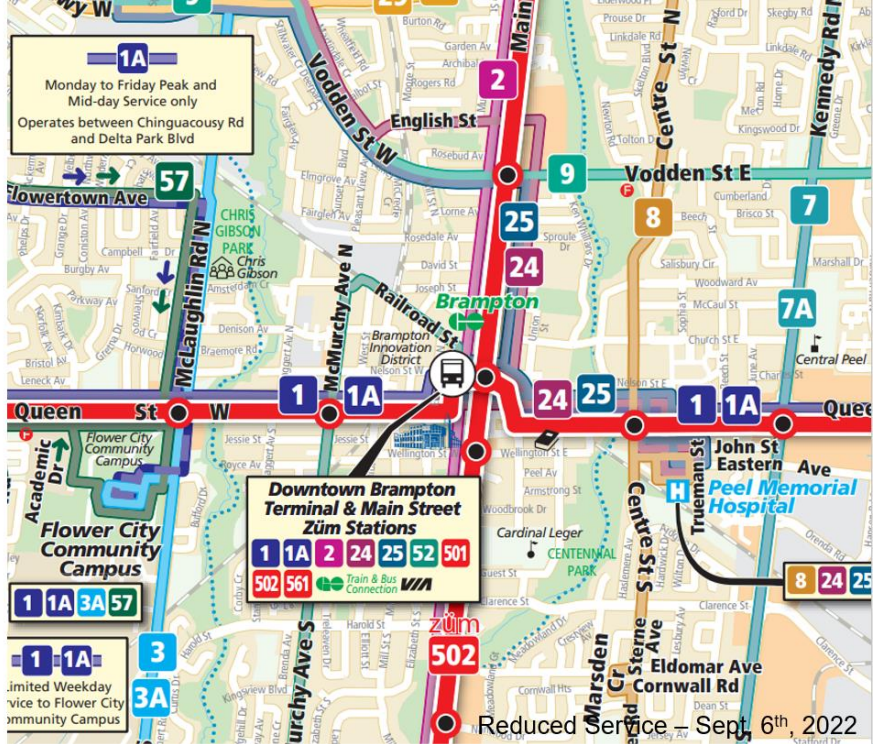
- Number of bus routes will remain the same in the future.
- Anticipate more local routes to loop into the terminal.
- Route 24/25 will be looped in the terminal to pick up more passengers to the Hospital area.
- Route 502 will be shortened to the LRT station in the future scenario.
- GO Bus service is assumed to be decreased down to 2 bus bays.

- **How do you envision future transit services?**

  [Tell us about it]

Existing System Map

- **Downtown Brampton Terminal**
  - 1/1A
  - 52
  - 501
  - 561
  - GO Bus (31, 33, 37)
- **Main St Zum Stations**
  - 2
  - 24
  - 25
  - 502



Downtown Bus Terminal Functional Requirements	Quantity
Estimate of number of bays required for:	
Brampton Transit/Zum - Standard 12m (B-12) buses	6
Brampton Transit/Zum - Articulated 18m (A-BUS) buses	4
Brampton - Accessible Services	All must meet AODA requirements
GO Transit	2
Layover spaces for Brampton Transit/Zum (standard and articulated buses) and GO Transit	3 bays - 1 x 60', 2 x 40' (If no service bays doubled-up)
E-bus charging requirements	Protected for in dedicated layover bays Concrete pad for BEB infrastructure - 5m x 27m footprint
Supervisor vehicles (accommodated in layover area)	1
Staff parking (accommodated in layover area)	2
Maintenance vehicles (accommodated in layover area)	1 Maintenance / Security
Additional Parking (PnR, PPUDO)	*Under consideration*

Problem / Opportunity Statement

- The existing downtown Brampton transit terminal is facing difficulties in accommodating the capacity needed for current and future transit services.
- Specifically, anticipated rapid transit services, including increased service frequency on the GO rail corridor immediately north of the site, the introduction of the Brampton LRT, as well as the Queen St-Highway 7 BRT, will lead to an increase in demand on the local transit network. Furthermore, the existing transit terminal is anticipated to be impacted by the proposed widening of the rail corridor.
- Consequently, the new proposed Transit Hub can address the capacity constraints while also presenting the opportunity to provide improved connection between municipal and interregional transit networks, as well as supporting the intensification and mobility objectives listed in municipal and regional planning policies.
- **Is anything missing from the Problem and Opportunity Statement?** **Share your thoughts.**

Long List Evaluation Methodology & Criteria

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Long List Evaluation Methodology & Criteria

Will generally follow the Metrolinx Business Case structure, which focuses on **four areas** to shape the evaluation criteria:

Strategic Case:

- Support City building and urban planning objectives
- Improving passenger experience

Economic Case:

- Minimizing travel time for buses and passenger transfers

Financial Case:

- Minimizing capital costs

Deliverability and Operations Case:

- Accommodating future functional requirements
- Minimizing property impacts

Initial Business Case Overview

The purpose of this study is to advance the planning of the Downtown Transit Hub through developing, evaluating and comparing options based on detailed analysis. An Initial Business Case (IBC) report will summarize the findings of the study, such as the options considered and the results of the evaluation. It will also be used to advance the project and seek funding.

Problem/Opportunity

Define a problem or opportunity that should be addressed based on policies and plans; articulating the vision, goals, and objectives that investments are evaluated against.

Investment Options

Define a set of options to be tested against the vision, goals, and objectives

Strategic Case

How and why should the investment be pursued; based on goals, plans and policies?

Example Criteria:

- Integrate transit and land-use to form sustainable, transit-oriented communities
- Support the needs of transit-dependent individuals
- Improve quality of life and public health
- Supports transition to more sustainable transit technologies
- Improve energy efficiency and minimal impacts to natural and cultural environment
- Provide safe and efficient access and transfers for transit passengers
- Improve comfort and quality of service
- Reduce transfer times
- Increase hub capacity to support service growth for Brampton
- Support city-building objectives by connecting with future mixed-use development
- Enabling multi-modal access and egress to transit
- Integrating the transit network in downtown Brampton

Economic Case

What is the investment's overall value to society?

Example Criteria:

- Travel Time Savings
- Reliability Benefits
- Travel Time Impacts to Vehicles
- Vehicle Operating Cost Savings
- Decongestion Benefits
- Reduction in Road Accidents
- Reduction in Vehicle Emissions
- Health Benefits
- Capital Construction Costs
- Major Maintenance, Rehabilitation and Renewal Costs
- Annual Operations and Maintenance Costs

Financial Case

What are the financial implications of delivering the investment?

Example Criteria:

- Capital Costs
- Operating and Maintenance Costs

Deliverability and Operations Case

What are the risks and requirement to consider to deliver and operate the investment?

Example Criteria:

- Property Impacts
- Constructability
- Construction Impacts
- Noise
- Traffic Management
- Potential for Future Expansion

Long List Evaluation Methodology & Criteria

Business Case	Objectives	Criteria
Strategic Case	Integrating the transit network in downtown Brampton	Distance from Transit Hub to Brampton LRT station and GO train/bus platforms
	Enabling multi-modal access and egress to transit	Distance to nearby bike lanes, sidewalks, and trails
		Space available for passengers pick up and drop off
		Space available for bike parking
	Support city-building objectives by connecting with future mixed-use development	Supporting the City's Official Plan vision for downtown Brampton
		Supporting the Brampton 2040 Vision
		Supporting the City of Brampton Transportation Master Plan
	Increase hub capacity to support service growth for Brampton	Number of bus bays
		Number of buses per hour
	Reduce transfer times	Platform to platform distance for: • Bus to bus • Bus to Brampton LRT • Bus to GO train
	Improve comfort and quality of service	Provides shelter from poor weather conditions
		Space available for seating
		Space available for washrooms

Long List Evaluation Methodology & Criteria

Business Case	Objectives	Criteria
 **Strategic Case**	Provide safe and efficient access and transfers for transit passengers	The need to cross the street and/or railroad tracks to access platforms
		Provides a sense of safety by being in an enclosed space away from the streets
	Improve energy efficiency and minimal impacts to natural and cultural environment	Size of the Transit Hub
		Impacts to the natural environment
		Impacts to noise and air quality
		Impacts to cultural heritage and archaeology
	Supports transition to more sustainable transit technologies	Enroute charging opportunities
	Improve quality of life and public health	Retail opportunities
		Public space opportunities
	Support the needs of transit-dependent individuals	Integrate feedback from public consultation
	Integrate transit and land-use to form sustainable, transit-oriented communities	Size of developable area

Long List Evaluation Methodology & Criteria

Business Case	Objectives	Criteria
 **Economic Case**	User Benefits	Transfer times: • Bus to bus • Bus to Brampton LRT • Bus to GO train
		Impacts to auto traffic

Business Case	Objectives	Criteria
 **Financial Case**	High Level Cost	Approximation of capital costs
		Approximation of operating and maintenance costs
		Approximation of opportunity cost of land

Long List Evaluation Methodology & Criteria

Business Case	Objectives	Criteria
 **Deliverability & Operations Case**	Design/Operational Tradeoffs	Property impacts
		Ability for future expansions
	Operation	Number of turns to access Transit Hub for buses
		Staff facilities
		Functional requirements
	Construction and Mitigation	Constructability
		Construction traffic management
		Construction impacts to nearby businesses
		Construction impacts to transit operations

Which objectives do you feel are most important? [Share your thoughts]

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Draft Long List Options

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Draft Long List Options

OPTION 1

On-Street Exchanges:

1a: Nelson Street

1b: Railroad Street (Realigned)

OPTION 2

Off-Street Exchanges:

2a: Metrolinx South Park and Ride Lot

2b: Nelson Street Loop

2c: Railroad Street Loop

2d: Railroad Street Through

OPTION 3

Split Exchanges:

3a: Brampton GO Lot / Nelson Street

3b: Brampton GO Lot / Railroad Street (Realigned)

Learn more about draft options on the following slides, and tell us if you prefer one option over the others. Share your thoughts

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Option 1: On-Street Exchanges

(South of Railway Corridor)

1a: Nelson Street

1b: Railroad Street (Realigned)

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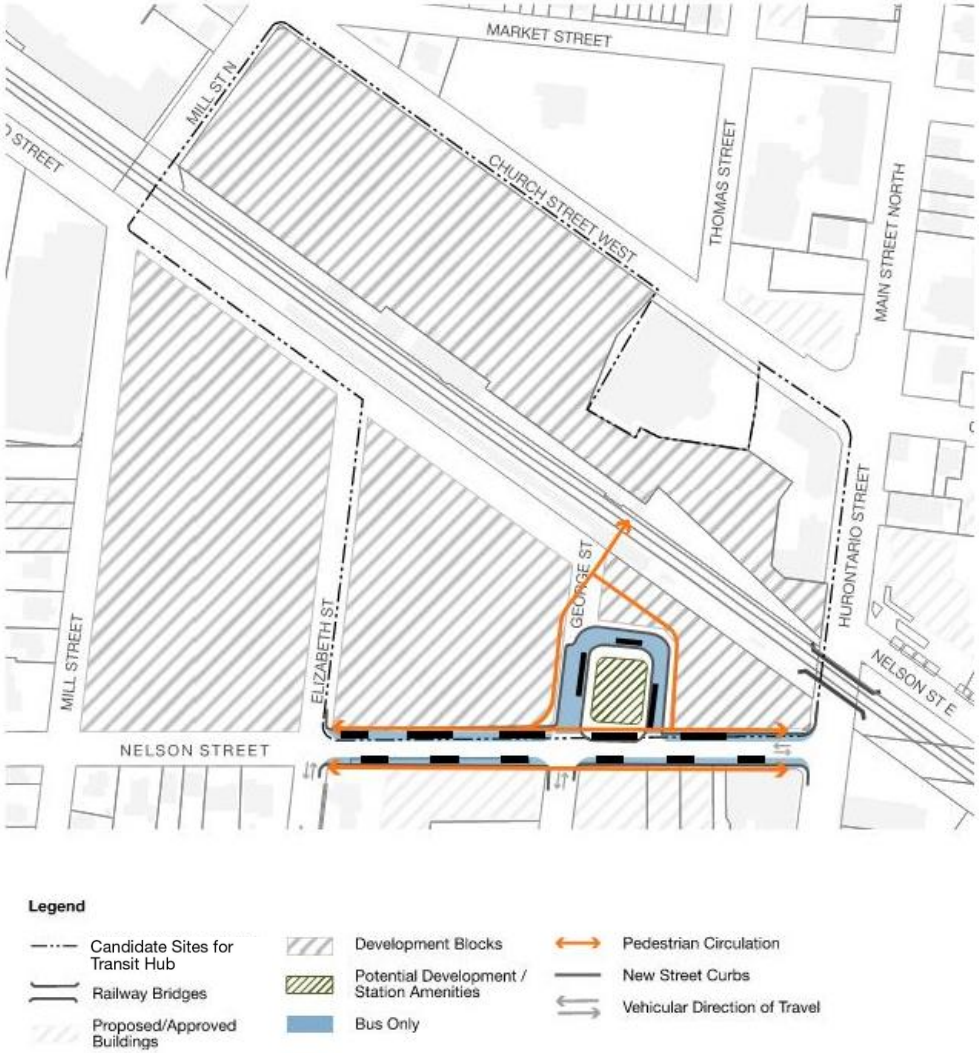
Option 1a

Nelson Street



Key Considerations

Impacts to Property	• Requires widening of Nelson St from Elizabeth St to Main St. Widening could occur on north or south • Bus Layover/Charging and Operator Facility will impact 8 Nelson St
Impacts to Transit Operations	• Main Street ZUM Stop shifted south • Requires some services to turn around on local streets
Impacts to Traffic / Road Network	• Potential to retain George St and realigned Railroad St
Compatibility with Proposed LRT	• Compatible wh underground LRT alignment • Potential to share operator facilities with LRT headhouse
Connectivity	• Increase in passenger walk distance to GO Station and future LRT • Some passengers will have to cross Nelson Street to access GO Rail station
Development Potential	• Retains full Elizabeth-George block for development • Potential for integrated development on 8 Nelson St

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Option 1b

Railroad Street (Realigned)

Key Considerations

Impacts to Property	• Would impact entire 8 Nelson Street site • Would impact approximately 25% of GO Park and Ride Lot (south) site
Impacts to Transit Operations	• Requires a temporary transit terminal during construction
Impacts to Traffic / Road Network	• Close Nelson Street between Main and George • Convert George Street to Transit Only Use north of Nelson Street • Realign Railroad Street, skew at Main Street may necessitate turning restrictions due to limited visibility
Compatibility with Proposed LRT	• Compatible with Surface LRT alignment only
Connectivity	• Bus-to-rail transfers would be comparable to today's operation • Widely-spread stops could increase bus-to-bus transfer distances • Some passengers would have to cross Railroad Street to access other buses or GO Rail platforms
Development Potential	• Retains 75% of GO Park and Ride Lot (South) Site, protects frontage on Nelson Street

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Option 2: Off-Street Exchanges

(South of Railway Corridor)

- 2a: Metrolinx Park and Ride Lot (South)
- 2b: Nelson Street Loop
- 2c: Railroad Street Loop
- 2d: Railroad Street Through (New)

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Option 2a

Metrolinx South Park and Ride Lot

Key Considerations

Impacts to Property	• Bus platforms impact ~50% of existing GO Park and Ride Lot site.
Impacts to Transit Operations	• Slight increase in net mileage due to bus circulation. • Minimizes the need to realign routes through local street network
Impacts to Traffic / Road Network	• Railroad Street converted to bus-only, one-way east of Elizabeth Street • George Street converted to bus-only use north of Nelson Street
Compatibility with Proposed LRT	• Compatible with both surface and below-grade LRT alignments
Connectivity	• All bus-to-bus transfers contained on single island • Bus-to-rail transfers require crossing bus path and rail corridor.
Development Potential	• Retains 50% of Metrolinx South PnR Lot Site • Potential to integrate with overhead development

Option 2a (ALT)

Metrolinx South Park and Ride Lot

Key Considerations

Impacts to Property	• Layover/operator facility impacts entire Nelson 8 Site • Bus platforms impact ~30% of existing GO Park and Ride Lot site.
Impacts to Transit Operations	• No significant change to bus routes from existing
Impacts to Traffic / Road Network	• Railroad Street converted to bus-only, one-way east of Elizabeth Street • George Street converted to bus-only use north of Nelson Street
Compatibility with Proposed LRT	• Compatible with both surface and below-grade LRT alignments
Connectivity	• All bus-to-bus transfers contained on single island • Bus-to-rail transfers require crossing bus path and rail corridor. • Bus to LRT transfers require crossing bus path
Development Potential	• Retains 70% of Metrolinx South PnR Lot Site

Option 2b

Nelson Street Loop

Key Considerations

Impacts to Property	• Impacts 40% of GO Park and Ride Lot (south) site
Impacts to Transit Operations	• No significant change to bus routes from existing • Contains layover and service bays in same site
Impacts to Traffic / Road Network	• Requires closure of George Street and Railroad Street east of Elizabeth Street.
Compatibility with Proposed LRT	• Compatible with both surface and below-grade LRT alignments
Connectivity	• Bus-to-bus transfers are close and convenient • Bus-to-rail transfers require crossing bus path and layover • Substantially increases pedestrian crossings through the terminal area, not just for transit passengers, but pedestrians from developments to the south wanting to access Station
Development Potential	• Retains 60% of GO Park and Ride Lot (south) site • Bus station impacts desirable site frontage on Nelson Street • Potential to integrate with overhead development

Option 2c

Railroad Street Loop

Key Considerations

Impacts to Property	• Impacts 40% of GO Park and Ride Lot (south) site
Impacts to Transit Operations	• No significant change to bus routes from existing
Impacts to Traffic / Road Network	• Requires closure of George Street and Railroad Street east of Elizabeth Street.
Compatibility with Proposed LRT	• Compatible with both surface and below-grade LRT alignments
Connectivity	• Bus-to-bus transfers are close and convenient • Bus-to-rail transfers require crossing bus path and layover • Substantially increases pedestrian crossings through the terminal area, not just for transit passengers, but pedestrians from developments to the south wanting to access Station
Development Potential	• Retains 60% of GO Park and Ride Lot (south) Site • Maintains desirable Nelson Street frontage for development • Potential to integrate with overhead development

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Option 2d

Railroad Street Through

Key Considerations

Impacts to Property	• Impacts 30% of GO Park and Ride Lot (south) site
Impacts to Transit Operations	• Increases circulation required for buses
Impacts to Traffic / Road Network	• Requires closure of George Street and Railroad Street east of Elizabeth Street.
Compatibility with Proposed LRT	• Compatible with both surface and below-grade LRT alignments
Connectivity	• Bus-to-bus transfers are increased over existing condition • Bus to rail transfers and most bus to LRT transfers do not cross bus path
Development Potential	• Retains 70% of GO Park and Ride Lot (south) Site • Maintains desirable Nelson Street frontage for development • Potential to integrate with overhead development (partial)

Option 3: Split Exchange

(North and South of Railway Corridor)

3a: Brampton GO Lot / Nelson Street

3b: Brampton GO Lot / Railroad Street (Realigned)

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Option 3a

Brampton GO Lot / Nelson Street

Key Considerations

Impacts to Property	• Bus station impacts ~30% of existing GO Parking Lot • Realigned Railroad Street impacts Metrolinx South Park and Ride Lot
Impacts to Transit Operations	• Requires some routes to cross rail corridor to serve terminal – additional travel time • Queen BRT Services could be accommodated south of rail corridor
Impacts to Traffic / Road Network	• Railroad Street could be reinstated in full.
Compatibility with Proposed LRT	• Compatible with underground LRT alignment only.
Connectivity	• Separation of bus services would impact bus-to-bus transfers, requiring crossing of rail corridor • Increased walking distance for bus-to-LRT passengers
Development Potential	• Maintains ~70% of GO Park and Ride Lot for development • Potential to integrate with new development over station.

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Option 3b

GO Lot / Railroad Street

Key Considerations

Impacts to Property	• Bus station impacts ~30% of existing GO Parking Lot • Realigned Railroad Street impacts 15% of GO Park and Ride Lot (south) site
Impacts to Transit Operations	• Requires some routes to cross rail corridor to serve terminal – additional travel time • Queen BRT Services could be accommodated south of rail corridor
Impacts to Traffic / Road Network	• Railroad Street converted to one-way (or transit only)
Compatibility with Proposed LRT	• Compatible with underground LRT alignment only
Connectivity	• Improves connectivity between buses and GO Rail (both North and South) • Separation of bus services would impact bus-to-bus transfers, requiring crossing of rail corridor • Increased walking distance for bus-to-LRT passengers
Development Potential	• Maintains ~70% of GO Park and Ride Lot site for development • Potential to integrate with new development over station.

Preliminary Evaluation of Long-List Options

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Evaluation Summary

Least Preferred → Most Preferred

Business Case	Key Themes	Do Nothing	On-Street Exchanges		Off-Street Exchanges				Split Exchanges	
			Option 1a: Nelson Street	**Option 1b:** Railroad Street (Realigned)	**Option 2a:** Metrolinx S Park'n'Ride Lot	**Option 2b:** Nelson Street Loop	**Option 2c:** Railroad Street Loop	**Option 2d:** Railroad Street Through	**Option 3a: GO** Lot/Nelson Street	**Option 3b: GO** Lot/Railroad Street
Strategic Case	Support City building and urban planning objectives	Does not address study problem/ opportunity	Impacts desirable active frontage on Nelson Street, limits development potential between George and Main	Has significant impacts to road network and precludes development between George and Main	Minimal impacts to active frontages and offers development opportunity on the area between Elizabeth Street and George Street, aligns with Brampton 2040 Vision to densify downtown.	Limits the frontage potential of Nelson Street. Limits development potential of the area between Elizabeth Street and Main Street and does not support Brampton 2040 Vision for a mixed-use downtown with increased density.	Prohibits development potential of the area between George Street and Main Street, and limits development potential between Elizabeth and George Streets.	Closure of Railroad Street and George Street limits network connectivity, and limits development potential of the area between George Street and Main Street.	Minimal impacts to developable lands. Bus bays on Nelson Street partially limits active frontage on Nelson Street.	Minimal impacts to active frontages and offers development opportunity on the area between Mill Street and Main Street, aligns with Brampton 2040 Vision to densify downtown
	Improving passenger experience		Good passenger access and fair inter-modal connectivity, but bus stops are widely-spaced and some require crossing Nelson Street to access.	Bus platforms split across realigned Railroad Street, requiring some passengers to cross realigned Railroad Street to access bus or GO Rail platforms	Most bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO Rail platforms require crossing bus-only roadway.	Bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO Rail platforms require crossing bus-only roadway.	Bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO platforms require crossing bus-only roadway.	Access to bus platforms and transfers to GO Rail platforms can be achieved without crossing bus-only roadways.	Transfers from bus-to-bus or to GO Rail platforms will likely require crossing bus-only path (north) or Nelson Street (south)	Transfers from bus-to-bus or to GO Rail platforms will likely require crossing bus-only path (north). South side bus platforms can access GO Rail platforms directly.

Evaluation Summary

Least Preferred → Most Preferred

Business Case	Key Themes	Do Nothing	On-Street Exchanges		Off-Street Exchanges				Split Exchanges	
			Option 1a: Nelson Street	**Option 1b:** Railroad Street (Realigned)	**Option 2a:** Metrolinx S Park'n'Ride Lot	**Option 2b:** Nelson Street Loop	**Option 2c:** Railroad Street Loop	**Option 2d:** Railroad Street Through	**Option 3a: GO** Lot/Nelson Street	**Option 3b: GO** Lot/Railroad Street
Economic Case	**Minimizing travel time for buses and passenger transfers**	Does not address study problem/ opportunity	Good BRT access travel times and Bus-LRT transfer and, but poor bus-bus and bus-train transfers.	Fair BRT access travel times and Bus-LRT transfer and, but poor bus-bus and bus-train transfers.	Fair BRT access travel times, good bus-bus transfer times but poor bus-LRT and bus-train transfers.	Good BRT access travel time, best bus-bus transfers, but poot bus-LRT and bus-train transfers.	Best bus-bus and good bus-train transfers, but poor bus-LRT transfers.	Good BRT access travel times, best bus-bus and bus-rail transfers, but poor bus-LRT transfers.	Best BRT access travel times, but poor bus-bus, bus-LRT, and bus-train transfers.	Poor BRT access travel times, poor bus-bus, bus-LRT, and bus-train transfers.
Financial Case	**Minimizing capital costs**	Does not address study problem/ opportunity	Lowest anticipated capital cost	Moderate anticipated capital costs	Moderate anticipated capital costs	Highest anticipated capital cost	Highest anticipated capital cost	Moderate anticipated capital costs	Highest anticipated capital cost	Highest anticipated capital cost

Evaluation Summary

Least Preferred → Most Preferred

Business Case	Key Themes	Do Nothing	On-Street Exchanges		Off-Street Exchanges				Split Exchanges	
			Option 1a: Nelson Street	**Option 1b:** Railroad Street (Realigned)	**Option 2a:** Metrolinx S Park'n'Ride Lot	**Option 2b:** Nelson Street Loop	**Option 2c:** Railroad Street Loop	**Option 2d:** Railroad Street Through	**Option 3a: GO** Lot/Nelson Street	**Option 3b: GO** Lot/Railroad Street
Deliverability and Operations	**Accommodating future functional requirements**	Does not address study problem/ opportunity	All options can accommodate future functional requirements							
	Minimizing Property Impacts		Medium in size as compared to other options. Station Area = approx. 8,150m2 (incl. Nelson Street)	Medium in size as compared to other options. Station Area = approx. 7,350m^2 (incl Railroad Street)	Smaller than most options. Station Area = approx. 6,300m^2	Medium in size as compared to other options. Station Area = approx. 7,900m^2	Largest of all options. Station Area = approx. 9,000m^2	Smallest of all options. Station Area = approx. 5,750m^2	Medium in size as compared to other options. Station Area = approx. 5,900 (North) + 2,500 (south) = 8,400m^2	Medium in size as compared to other options. Station Area = approx. 5,900 (North) + 2,550 (South) = 8,450m^2

Strategic Case

Least Preferred → Most Preferred

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
STRATEGIC CASE	Integrating the transit network in downtown Brampton	Access to Brampton LRT station and GO train/bus platforms.	No change	Able to provide direct access to both Brampton LRT station and GO platforms.	Able to provide direct access to both Brampton LRT station and GO platforms	Able to maintain direct access to GO platforms, but bus terminal site is offset from Brampton LRT station.	Able to provide direct access to both Brampton LRT station and GO platforms. Farther walk to GO platforms than other options.	Able to provide direct access to both Brampton LRT station and GO platforms. Farther walk to Brampton LRT station than other options	Able to provide direct access to both Brampton LRT station and GO platforms	Able to provide direct access to both Brampton LRT station and GO platforms, but farther transfer distance to both	Able to maintain direct access to GO platforms but not to Brampton LRT station.
		Distance from Transit Hub to Brampton LRT	Average passenger transfer distance to LRT is approximately 170m.	Average passenger transfer distance to LRT is approximately 86m.	Average passenger transfer distance to LRT is approximately 70m.	Average passenger transfer distance to LRT is approximately 180m.	Average passenger transfer distance to LRT is approximately 80m.	Average passenger transfer distance to LRT is approximately 160m.	Average passenger transfer distance to LRT is approximately 170m.	Average passenger transfer distance to LRT is approximately 20m from Nelson St, and 305m from north of the railroad tracks.	Average passenger transfer distance to LRT is approximately 320m from Railroad St, and 305m from north of the railroad tracks.
		Distance from Transit Hub to GO train/bus platforms[1]	Average passenger transfer distance to GO Rail is approximately 90m.	Average passenger transfer distance to GO Rail is approximately 150m.	Average passenger transfer distance to GO Rail is approximately 60m.	Average passenger transfer distance to GO Rail is approximately 95m.	Average passenger transfer distance to GO Rail is approximately 130m.	Average passenger transfer distance to GO Rail is approximately 70m.	Average passenger transfer distance to GO Rail is approximately 90m.	Average passenger transfer distance to GO Rail is approximately 165m.	Average passenger transfer distance to GO Rail is approximately 120m.
		Distance from Queen BRT platforms to GO train		Average passenger transfer distance to GO Rail is approximately 150m.	Average passenger transfer distance to GO Rail is approximately 120m.	Average passenger transfer distance to GO Rail is approximately 90m.	Average passenger transfer distance to GO Rail is approximately 130m.	Average passenger transfer distance to GO Rail is approximately 90m.	Average passenger transfer distance to GO Rail is approximately 100m.	Average passenger transfer distance to GO Rail is approximately 165m.	Average passenger transfer distance to GO Rail is approximately 120m.
		Distance from Queen BRT platforms to LRT		Average passenger transfer distance to LRT is approximately 86m.	Average passenger transfer distance to LRT is approximately 60m.	Average passenger transfer distance to LRT is approximately 85m.	Average passenger transfer distance to LRT is approximately 110m.	Average passenger transfer distance to LRT is approximately 45m.	Average passenger transfer distance to LRT is approximately 30m.	Average passenger transfer distance to LRT is approximately 20m.	Average passenger transfer distance to LRT is approximately 320m.

[1] Assuming that the new Brampton LRT station would be underground at the intersection of Nelson Street W and Main Street N.

Strategic Case

Least Preferred → Most Preferred

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
	Enabling multi-modal access and egress to transit	Distance to nearby bike lanes, sidewalks, and trails	No change	Average distance to proposed bike lanes on Main St ~100 m	Average distance to proposed bike lanes on Main St~125 m	Does not connect to proposed bike lanes	Does not connect to proposed bike lanes	Does not connect to proposed bike lanes	Average distance to proposed bike lanes on Main St ~155m	Average distance to proposed bike lanes on Main St and Church St ~220m	Average distance to proposed bike lanes on Mill St and Church St ~250m
		Space available for passengers pick up and drop off	No change	No immediately-adjacent off-street area available for passenger pick up and drop off. Pick-up/drop-off activity would occur curbside on side-streets.	No immediately-adjacent off-street area available for passenger pick up and drop off. Pick-up/drop-off activity would occur curbside on side-streets.	No immediately-adjacent off-street area available for passenger pick up and drop off. Pick-up/drop-off activity would occur curbside on side-streets.	No immediately-adjacent off-street area available for passenger pick up and drop off. Pick-up/drop-off activity would occur curbside on side-streets.	No immediately-adjacent off-street area available for passenger pick up and drop off. Pick-up/drop-off activity would occur curbside on side-streets.	Ample space available for off-street pick up and drop off on immediately adjacent streets.	Ample space available for off-street pick up and drop off on immediately adjacent streets.	Ample space available for off-street pick up and drop off on immediately adjacent streets.
		Space available for bike parking	No change	Bike parking could be accommodated in all options. To be detailed during the short-list station development process.							
	Support city-building objectives by connecting with future mixed-use development	Supporting the City's Official Plan vision for downtown Brampton	Does not support city-building objectives of connecting with mixed-use development	Bus loop removes some active frontages along Nelson Street, and limits potential development between George Street and Main Street	Precludes development potential between George Street and Main Street	Impacts portion of surface lands between George and Elizabeth. Potential for overbuild above bus terminal (Bus Loop variation only).	Limits the frontage potential of Nelson St. Closure of George Street limits network connectivity.	Closure of Railroad Street and George Street limits network connectivity.	Closure of Railroad Street and George Street limits network connectivity	Majority of property impacts contained within GO Rail site. Bus bays on Nelson Street partially limits active frontage on Nelson Street.	Majority of property impacts contained within GO Rail site. Active frontages and street network are protected
		Supporting the Brampton 2040 Vision		Removal of active frontages on Nelson Street does not support Brampton 2040 Vision for a mixed-use downtown with increased density.	Precludes development potential of the area between George Street and Main Street.	Minimal impacts to active frontages and offers development opportunity on the area between Elizabeth Street and George Street, aligns with Brampton 2040 Vision to densify downtown.	Limits the frontage potential of Nelson Street. Limits development potential of the area between Elizabeth Street and Main Street and does not support Brampton 2040 Vision for a mixed-use downtown with increased density.	Prohibits development potential of the area between George Street and Main Street.	Closure of Railroad Street and George Street limits network connectivity, and Prohibits development potential of the area between George Street and Main Street.	Minimal impacts to developable lands. Bus bays on Nelson Street partially limits active frontage on Nelson Street.	Minimal impacts to active frontages and offers development opportunity on the area between Mill Street and Main Street, aligns with Brampton 2040 Vision to densify downtown

Strategic Case

Least Preferred → Most Preferred

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
		Supporting the City of Brampton Transportation Master Plan		Minimal benefits to multi-modal connection, and does not support mixed-use objectives	Offers reduced mixed-use opportunities, and impacts access to George Street and Railroad Street	Offers space for multi-modal connection (i.e., bike parking and passenger pickup and drop off), and offers mixed use opportunities	Offers reduced mixed-use opportunities, and impacts access to George Street and Railroad Street	Offers reduced mixed-use opportunities, and impacts access to George Street and Railroad Street	Offers space for multi-modal connection (i.e., bike parking and passenger pickup and drop off), and offers mixed use opportunities	Offers space for multi-modal connection (i.e., bike parking and passenger pickup and drop off), and offers mixed use opportunities	Offers space for multi-modal connection (i.e., bike parking and passenger pickup and drop off), and offers mixed use opportunities, with minimal impacts to active frontage and street network
	Increase hub capacity to support service growth for Brampton	Number of bus bays[2]	7 existing bus bays. No change, will not be able to accommodate future service capacity	15	15	15[3]	15	15	16	16	14
		Number of buses per hour	No change	All options appear to provide sufficient capacity to accommodate the long-term bus capacity needs of the terminal.							
	Reduce transfer times	Platform to platform distance for: - Bus to bus - Bus to Brampton LRT - Bus to GO train	No change	Potentially long walking distance from platform to platform, and potentially long walking distance to the Brampton LRT station	Good walking distance from platform to platform, to the GO station, and to the Brampton LRT station	Good walking distance from platform to platform, and to the GO station. Potentially long walking distance to the Brampton LRT station	Good walking distance from platform to platform, to the GO station, and to the Brampton LRT station	Good walking distance from platform to platform, to the GO station, and to the Brampton LRT station	Good walking distance from platform to platform, to the GO station, and to the Brampton LRT station	Potentially long walking distance from platform to platform, and potentially long walking distance to the Brampton LRT station	Potentially long walking distance from platform to platform, and long walking distance to the Brampton LRT station
	Improve comfort and quality of service	Provides shelter from poor weather conditions	No change	All options have potential to accommodate some form of passenger shelter. Passenger amenities to be detailed in preliminary design of short-list options.							
		Space available for seating	No change	All options have potential to accommodate passenger seatings. Passenger amenities to be detailed in preliminary design of short-list options.							
		Space available for washrooms	No change	Passenger amenities to be detailed in preliminary design of short-list options.							

[2] Number of bus bays for each alternative is preliminary and subject to change.
[3] 15 bus bays for the split-site variant, and 12 bus bays for the wrap-around variant

Strategic Case

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
	Provide safe and efficient access and transfers for transit passengers	The need to cross the street and/or railroad tracks to access platforms	No change	Bus platforms split across Nelson Street, requiring some passengers to cross Nelson Street to access bus platforms or access GO Rail platforms.	Bus platforms split across realigned Railroad Street, requiring some passengers to cross realigned Railroad Street to access bus or GO Rail platforms	Most bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO Rail platforms require crossing bus-only roadway.	Bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO platforms require crossing bus-only roadway.	Bus-to-bus transfers do not require roadway crossing. Access to the bus terminal or transfers to GO platforms require crossing bus-only roadway.	Access to bus platforms and transfers to GO Rail platforms can be achieved without crossing bus-only roadways.	Transfers from bus-to-bus or to GO Rail platforms will likely require crossing bus-only path (north) or Nelson Street (south)	Transfers from bus-to-bus or to GO Rail platforms will likely require crossing bus-only path (north). South side bus platforms can access GO Rail platforms directly.
		Provides a sense of safety from traffic by being in an enclosed space away from the streets	No change	Does not offer enclosed space away from the streets	Does not offer enclosed space away from the streets	Passenger platforms separated from general traffic and street activity, providing a greater sense of separation and safety.	Passenger platforms separated from general traffic and street activity, providing a greater sense of separation and safety.	Passenger platforms separated from general traffic and street activity, providing a greater sense of separation and safety.	Passenger platforms separated from general traffic and street activity, providing a greater sense of separation and safety.	Ample opportunities to incorporate an enclosed space north of the railroad tracks, but limited space available on Nelson Street.	Passenger platforms separated from general traffic and street activity, providing a greater sense of separation and safety.
	Improve energy efficiency and minimal impacts to natural and cultural environment	Size of the Transit Hub	No change	Medium in size as compared to other options. Station Area = approx. 8,150m² (incl. Nelson Street)	Medium in size as compared to other options. Station Area = approx. 7,350m² (incl Railroad Street)	Smaller than most options Station Area = approx. 6,300m²	Medium in size as compared to other options. Station Area = approx. 7,900m²	Largest of all options. Station Area = approx. 9,000m²	Smallest of all options. Station Area = approx. 5,750m²	Medium in size as compared to other options. Station Area = approx. 5,900 (North) + 2,500 (south) = 8,400m²	Medium in size as compared to other options. Station Area = approx. 5,900 (North) + 2,550 (South) = 8,450m²
		Impacts to the natural environment	No change	Minimal impacts to the natural environment anticipated.	Minimal impacts to the natural environment anticipated.	May require removal of vegetation of the area between Elizabeth Street and George Street	May require removal of vegetation of the area between Elizabeth Street and George Street	Minimal impacts to the natural environment anticipated	May require removal of vegetation of the area between Elizabeth St and George St	Minimal impacts to the natural environment anticipated	May require removal of vegetation of the area between Mill St and Elizabeth St
		Impacts to noise and air quality	No change	Potential for noise impacts on businesses along Nelson Street.	Minimal noise impacts anticipated.	Potential for noise and air quality impacts on residents along Elizabeth Street	Minimal noise impacts anticipated	Minimal noise impacts anticipated.	Minimal noise impacts anticipated.	Potential for noise impacts on businesses along Nelson St between George Street and Main Street.	Potential noise and air quality impacts on residents Railroad Street between Mill Street and Elizabeth Street

Strategic Case

Least Preferred → Most Preferred

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
		Impacts to cultural heritage and archaeology	No change	No impacts to cultural heritage and archaeological features anticipated[4].							
	Supports transition to more sustainable transit technologies	Enroute charging opportunities	Does not offer any enroute charging opportunities	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.	En-route charging infrastructure can be incorporated into layover spaces.
	Improve quality of life and public health	Retail opportunities	No change	Retail opportunities partially preserved on development parcel, but bus platforms impact active frontage on Nelson Street	Retail opportunities partially preserved on development parcel, but bus platforms impact active frontage on George Street	Potential to fully preserve retail opportunities on development parcel, partial loss of active frontage on Elizabeth St and loss of active frontage on George Street	Retail opportunities partially preserved on development parcel	Retail opportunities partially preserved on development parcel	Retail opportunities partially preserved on development parcel	Retail opportunities mostly preserved on development parcel, but active frontage on Nelson St between George Street and Main Street may be impacted	Retail opportunities fully preserved on development parcel
		Public space opportunities	No change	Limited to no public space opportunities	Limited to no public space opportunities	Ample opportunities to incorporate public space	Ample opportunities to incorporate public space	Ample opportunities to incorporate public space	Ample opportunities to incorporate public space	Ample opportunities to incorporate public space north of the railroad tracks but limited space available on Nelson Street	Ample opportunities to incorporate public space north of the railroad tracks but limited space available on Railroad Street
	Support the needs of transit-dependent individuals	Integrate feedback from public consultation	N/A	Pending public consultation							

Strategic Case

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
	Integrate transit and land-use to form sustainable, transit-oriented communities	Size of developable area	No change	Metrolinx development parcel fully preserved, City of Brampton development parcel cannot be preserved. Loss of active frontages on Nelson St and George St 10,900m² of developable land remaining between George Street and Elizabeth Street.	Metrolinx development parcel mostly preserved, City of Brampton development parcel cannot be preserved. Loss of active frontages on the east side of George St 8,875m² of developable land remaining between George Street and Elizabeth Street.	Potential to fully preserve both Metrolinx and City of Brampton development parcels. Loss of active frontages on George St 8,000m² of developable land remaining between George Street and Elizabeth Street	Metrolinx development parcel partially preserved, City of Brampton development parcel cannot be preserved. Loss of active frontages on George St 6,650m² of developable land remaining between George Street and Elizabeth Street.	Metrolinx development parcel mostly preserved, City of Brampton development parcel cannot be preserved. Loss of active frontages on George St 7,150m² of developable land remaining between George Street and Elizabeth Street.	Metrolinx development parcel mostly preserved, City of Brampton development parcel cannot be preserved. Loss of active frontages on George St 9,500m2 of developable land remaining between George Street and Elizabeth Street.	Development parcels fully preserved. Partial loss of active frontages on Nelson St 10,900m² of developable land remaining between George Street and Elizabeth Street.	Development parcels fully preserved. 9,500m² of developable land remaining between George Street and Elizabeth Street (*after realignment of Railroad Street*)

Economic Case & Financial Case

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
Economic Case	User Benefits	Pedestrian transfer times: - Bus to bus	No change	Longer transfer times anticipated than most options	Longer transfer times anticipated than most options	Shortest transfer time of all options	Shorter transfer times anticipated than most options	Shorter transfer times anticipated than most options	Shorter transfer times anticipated than most options	Potentially longer transfer times than most options, from Nelson St bus bays to north of the railroad tracks	Potentially longer transfer times than most options, from Railroad St bus bays to north of the railroad tracks
		- Bus to Brampton LRT	2 min, 22 s	1 min, 12 s	58 s	2 min, 30 s	1 min, 7 s	min, 13 s	2 min, 22 s	2 min, 19 s	4 min, 24 s
		- Bus to GO train	1 min, 23 s	2 min, 13 s	58 s	1 min, 27 s	1 min, 56 s	1 min, 6 s	1 min, 23 s	3min, 24 s	3 min, 5 s
		- Q7BRT to Brampton LRT	N/A	52 s	50 s	1 min, 11 s	1 min, 32 s	38 s	25 s		4 min, 27 s
		- Q7BRT to GO Trains	N/A	2 min, 13 s	1 min, 48 s	1 min, 23 s	1 min, 56 s	1 min, 13 s	1 min, 13 s	1 min, 31 s	1 min, 48 s
		Additional bus travel time	1 min, 17 s	1 min, 10 s	1 min, 26 s	1 min, 37 s	1 min, 5 s	1 min, 36 s	1 min, 17 s	53 s	1 minute, 58 s
		Impacts to auto traffic	No change	Requires closure of George St and added traffic on Nelson S.	Requires closure of George St, Railroad St, and partial closure of Nelson S	Requires closure of George Street and part of Railroad Street	Requires closure of George Street and part of Railroad Street	Requires closure of George Street and Railroad Street	Requires closure of George Street	Minimal impact, may cause narrower lanes on Nelson Street between George Street and Main Street, street network is maintained	No impact, street network is maintained

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Railroad Street Through	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
Financial Case	High Level Cost	Approximation of capital costs	N/A	Low anticipated capital cost.	Moderate anticipated capital cost.	Moderate anticipated capital cost	High anticipated capital cost	High anticipated capital cost	Moderate anticipated capital cost	High anticipated capital cost	High anticipated capital cost
		Approximation of operating and maintenance costs	N/A	Low anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.	Moderate anticipated operating and maintenance cost.
		Approximation of opportunity cost of land	N/A	To be determined							

Deliverability & Operations Case

Business Case	Objectives	Criteria	Do Nothing	Option 1a: Nelson Street	Option 1b: Railroad Street (Realigned)	Option 2a: Metrolinx S Park'n'Ride Lot	Option 2b: Nelson Street Loop	Option 2c: Railroad Street Loop	Option 2d: Re-Use of Existing Terminal	Option 3a: GO Lot/Nelson Street	Option 3b: GO Lot/Railroad Street
Deliverability and Operations Case	Design/ Operational Tradeoffs	Property impacts	None	Approx. 8,150m² (incl. Nelson Street)	Approx. 7,350m² (incl Railroad Street)	Approx. 6,300m²	Approx. 7,900m²	Approx. 9,000m²	Approx. 5,750m²	Approx. 5,900m² (North) + 2,500 (south) = 8,400m²	Approx. 5,900m² (North) + 2,550 (South) = 8,450m²
		Ability for future expansions	N/A	Limited to no expansion opportunities	Limited to no expansion opportunities	Opportunity to expand south on Elizabeth St	Limited to no expansion opportunities	Limited to no expansion opportunities	Opportunity to expand south on George St	Limited to no expansion opportunities	Opportunity to expand along Railroad St
	Operation	Staff facilities	No change	All options provide potential to incorporate staff facilities. To be detailed in the design phase for short-listed options.							
		Functional requirements	No change	All options will meet applicable functional requirements. All options currently offer 3 layover bays. To be detailed in the design phase for short-listed options.							
	Construction and Mitigation	Constructability	N/A	Low construction complexity anticipated	Moderate construction complexity anticipated	Moderate construction complexity anticipated	High construction complexity anticipated	High construction complexity anticipated	High construction complexity anticipated	High construction complexity anticipated	High construction complexity anticipated
		Construction traffic management	N/A	Extensive traffic management anticipated	Extensive traffic management anticipated	Extensive traffic management anticipated	Extensive traffic management anticipated	Extensive traffic management anticipated	Extensive traffic management anticipated	Moderate traffic management anticipated	Minimal traffic management anticipated
		Construction impacts to nearby businesses	N/A	Extensive impact anticipated to businesses along Nelson St and George St	Extensive impact anticipated to businesses along Nelson St and George St	Moderate impact anticipated to businesses along George St	Moderate impact anticipated to businesses along Nelson St and George St	Moderate impact anticipated to businesses along George St	Moderate impact anticipated to businesses along Nelson St and George St	Moderate impact anticipated to businesses along Nelson St and George St	Minimal impact anticipated
		Construction impacts to transit operations	N/A	Extensive impact anticipated due to construction on Nelson St and George St	Extensive impact anticipated due to construction on Nelson St and George St	Moderate impact anticipated due to construction on George St and Elizabeth St	Moderate impact anticipated due to construction on George St	Moderate impact anticipated due to construction on George St	Moderate impact anticipated due to construction on George St	Moderate impact anticipated due to construction on Nelson St	Minimal impact to transit operations

Next Steps

Summarize how feedback provided during this phase of consultation will help to shape the transit hub study

Explain whether there will be subsequent PICs, other ways for the public to get involved, and whether any reports/decks will be available online and/or submitted to City Council

Example next steps can include:

- Review and respond to comments received from stakeholders and public
- Confirm preferred alternative solutions
- Develop and evaluate the design alternatives
- Identify a recommended approach for the study corridor
- PIC #2 – Anticipated for Spring 2024

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Thank you for attending this PIC

We want to hear from you.
Please take a few minutes to answer our **short questionnaire** or share your input through our **comment form**.

Alternatively, you can e-mail your comment to the project team at the addresses below:

kumar.ranjan@brampton.ca

andrew.shea@hdrinc.com

Next Steps

- All information from today's meeting is available on the **project webpage**.
- The next round of public meetings are planned for Spring 2024.

Stay up to date by

- Visiting the **project webpage**.

Comments and information regarding this study are being collected to assist the study team in meeting the requirements of the Environmental Assessment Act. Information collected will be used in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

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Thank You

Downtown Brampton Transit Hub

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