

Agenda

Rapid Transit Implementation Working Group

3rd Meeting of the Rapid Transit Implementation Working Group

March 8, 2018, 4:30 PM

Council Chambers

	Pages
1. Call to Order	
1.1 Disclosures of Pecuniary Interest	
2. Scheduled Items	
2.1 4:30 PM DELEGATION	
a. J. Ramsay, Project Director - Public Open House Materials and Design Renderings - Preferred Design Options for the Bus Rapid Transit Corridors	2
3. Consent	
3.1 2nd Report of the Rapid Transit Implementation Working Group	63
4. Items for Discussion	
5. Deferred Matters/Additional Business	
6. Adjournment	

Next Meeting April 12, 2018

Join us...

OPEN HOUSE

FEBRUARY 28 TO MARCH 3

View the latest plans for how Bus Rapid Transit (BRT) may fit within our neighbourhoods.

The City of London will present technically preferred options for the BRT network.

5 opportunities to explore and ask questions – pick the one that works for you!

● **February 28:**

11 a.m. - 2 p.m.

Central Library, 251 Dundas St.
Presentation at 12 p.m.

● **February 28:**

5:30 p.m. - 8:30 p.m.

Oakridge Secondary School
1040 Oxford St. W.
Presentation at 6:30 p.m.

● **March 1:**

5 p.m. - 8 p.m.

Western University, London Hall
1140 Western Rd.
Presentation at 6 p.m.

● **March 3:**

9 a.m. - 12 p.m.

Redeemer Evangelical Lutheran Church,
1 Frank Pl.
Presentation at 10 a.m.

● **March 3:**

3 p.m. - 6 p.m.

Fanshawe College, H1013 Cafeteria
1001 Fanshawe College Blvd.
Presentation at 4 p.m.

These are family-friendly events – feel free to bring your kids! If you require any special accommodation, please contact the Rapid Transit Office at shift@london.ca or 519-930-3518.

Visit shiftlondon.ca for full event details.



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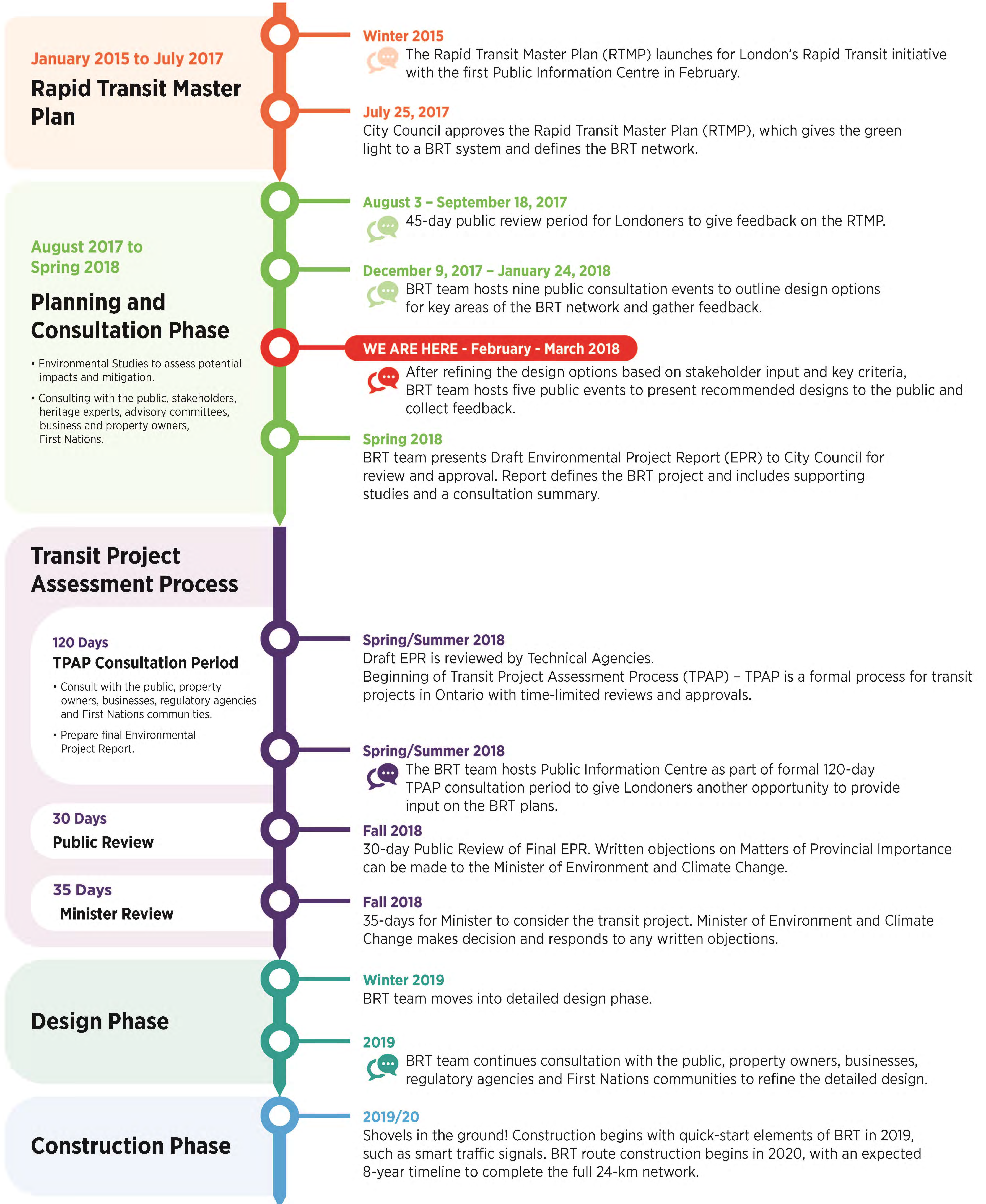


Purpose of Open House

- To show the public the preferred design options for the BRT network and gather feedback to help refine the designs.
 - The Rapid Transit project team will bring these recommended designs forward to Council in the form of a Draft Environmental Project Report (EPR) on April 9.
 - Comments and feedback collected at the open house events will be included in the Draft EPR for Council and will be considered by the Project Team during the Transit Project Assessment Process (TPAP), which includes a formal consultation process.
- To share the preliminary design concepts for BRT stops.



Rapid Transit Timeline



Why BRT for London?

Within the next two decades, London will grow by 84,000 people – which could mean more road congestion, greater urban sprawl, and increased expense to support our growing city.



35% increase in transit service hours means less waiting for the bus.



230,000 tonnes less green house gas emissions with BRT.



Reduced road widening requirements along parallel corridors.



40% of Londoners will have a BRT stop within walking distance of their home.



60% of Londoners will be able to walk to work from new BRT stops and stations.

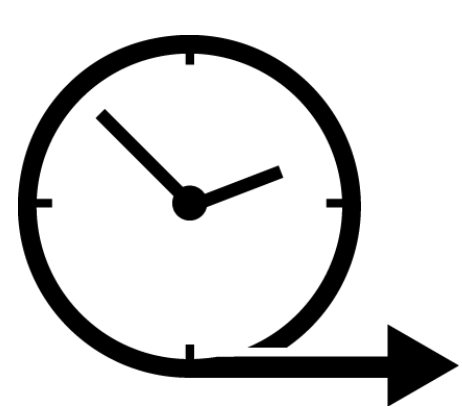


Revitalize 24 kms of main arterials that serve as gateways into our City.

What is Bus Rapid Transit?



Dedicated lanes – lanes that only buses can travel on – for more reliable service.



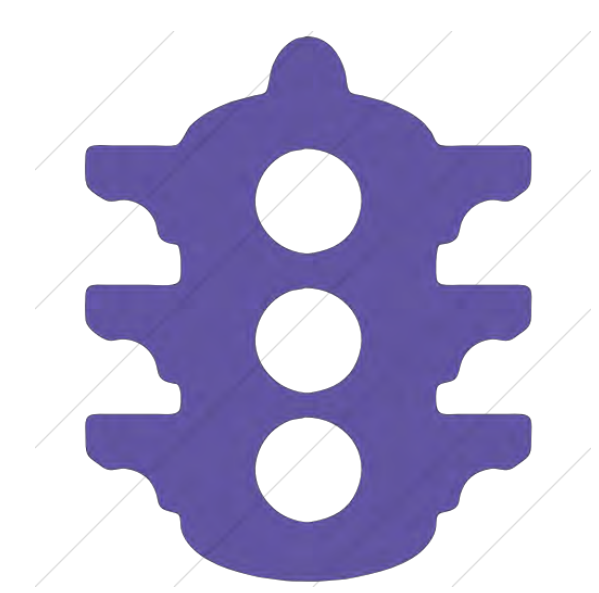
Frequent service, with a bus every 5 to 10 minutes during rush hours.



Better connections to local transit, with connecting service provided every 10 – 20 minutes.



Service is rapid and reliable because buses aren't stuck in congestion with regular traffic.



Smart signals implemented city-wide will support smoother traffic flow for all commuters – on buses, in personal vehicles, and on bicycles.

What is Bus Rapid Transit?

Modern design features

- Accessible
- Real-time scheduling information
- Attractive shelters
- Pedestrian and cycling connections
- Integrated design with surrounding community

Frequent service

- North and East corridors: every 5 minutes
- South and West corridors: every 10 minutes

Integration with local services

- Rapid Transit does not replace the current LTC bus system – it strengthens local service.
- Combined transit service will increase by 35% between 2015 and 2035.

Spacing of stops

- Average spacing is 705 metres (walking half-way will take 5 to 7 minutes)



BRT vehicle specifications

- Vehicles are high capacity, accessible and offer comfortable seating.
- Vehicles run primarily in dedicated lanes, but also have the flexibility to operate in mixed traffic
- A bus running every 5 minutes per direction on the north corridor can move up to 1,320 people per direction per hour.



Mercedes-Benz Smart Bus



Geneva



Cologne



Los Angeles

Recent Public Consultation

To gather public feedback on the BRT route design options, nine public information sessions were held between Dec. 9, 2017 and Jan. 24, 2018.



9 consultation events
between Dec. 9, 2017 –
Jan. 24, 2018



789 attendees



267 comments
received at the event



88 comments
received via email



325 Londoners told us
what features they'd
like to see at BRT stops



Arriving at recommended design options

- Recommended designs are rooted in the following guiding principles for BRT, as laid out in the Rapid Transit Master Plan (RTMP):



- More than 25 criteria – ranging from natural and built heritage to safety and ease of construction – were considered during evaluation of the design options.
- Public and stakeholder input gathered during public information sessions, meetings, emails and discussions was critical to the determination of recommended design options.
- Many examples where public/stakeholder input has influenced the recommended designs.

Designs presented

The Public Information Centres hosted in December 2017 and January 2018 brought forward design options across the BRT network. The Open House events from February 28 to March 3 will bring forward recommended designs for the following key areas:

- Richmond Street North
- Richmond Row
- Dundas Street
- Wellington Road south
- Wellington Curve
- Oxford Street West
- Downtown Couplet
- Turnarounds:
 - North
 - South
 - East
 - West

PLUS:

- Early concepts for BRT stops



Rapid Transit stop design

Along with public input, the project team considered the following elements in development of stop design concepts



Protection from the weather.



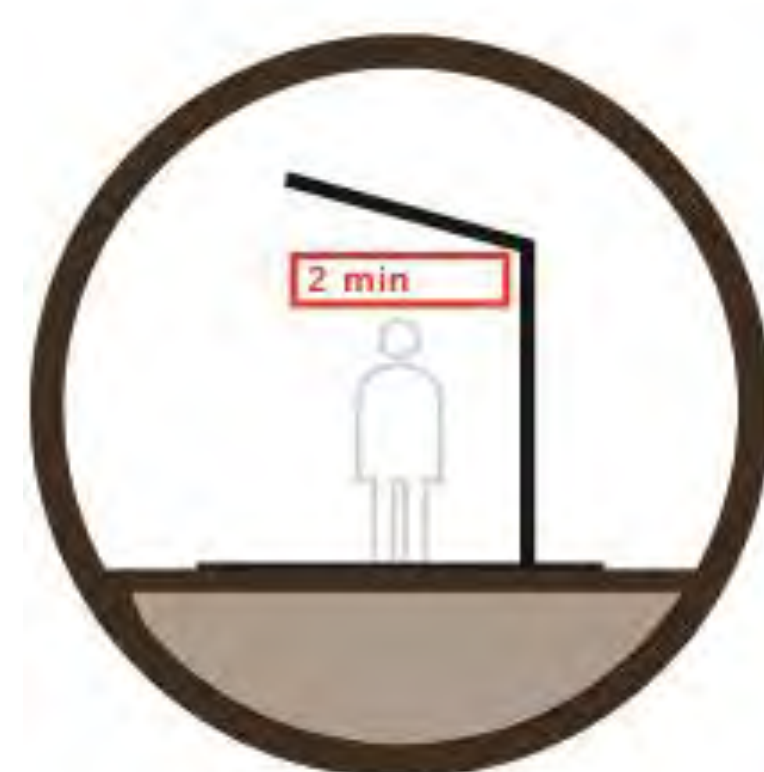
Adequate lighting.



Provide map information.



Protection from road splashes.



Next bus information panel



Resilient, high quality materials.



Area for public art or heritage.



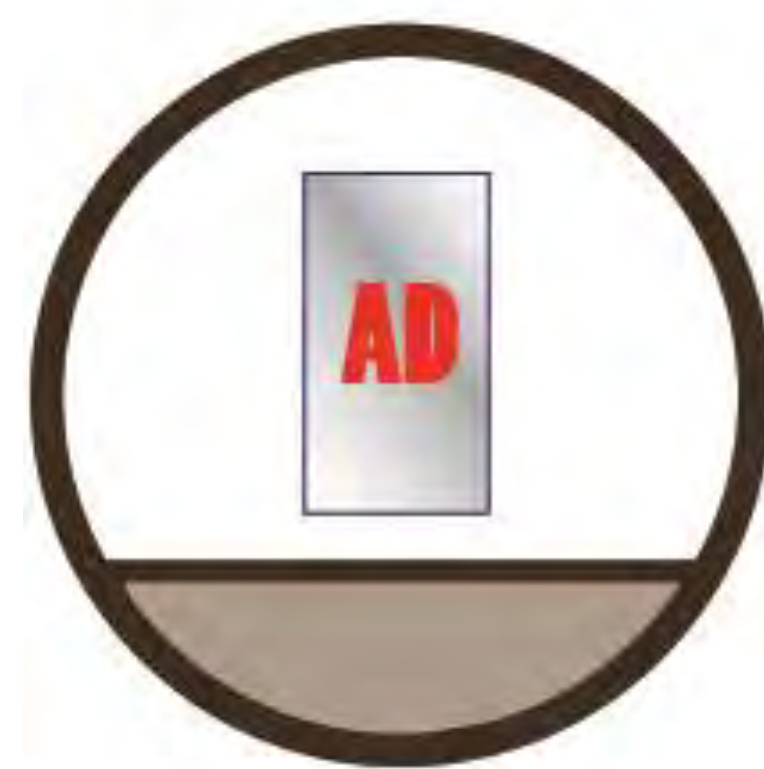
Provide seating.



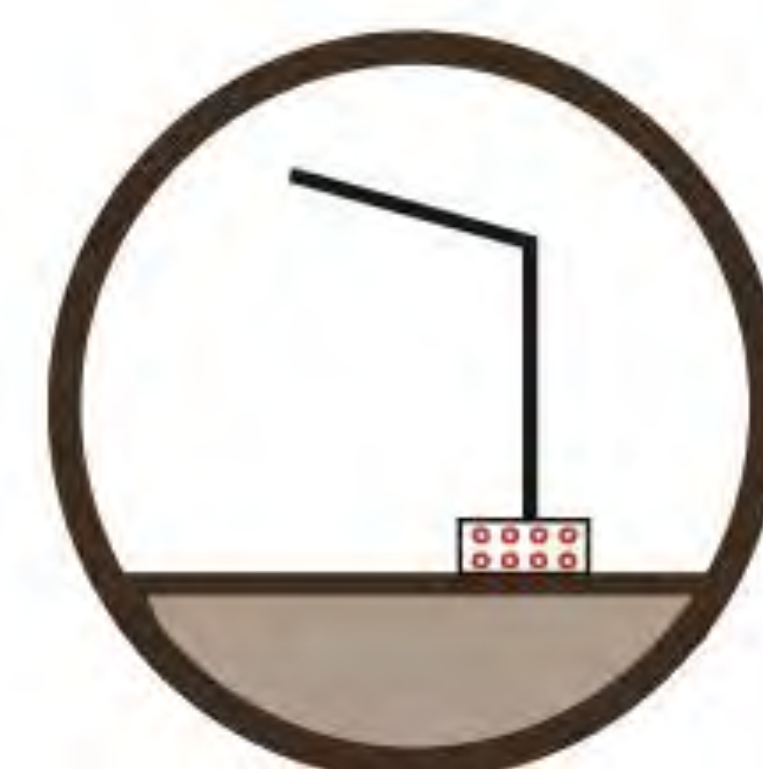
Ease of maintenance from platform side.



Canopy design that is contemporary and unique.



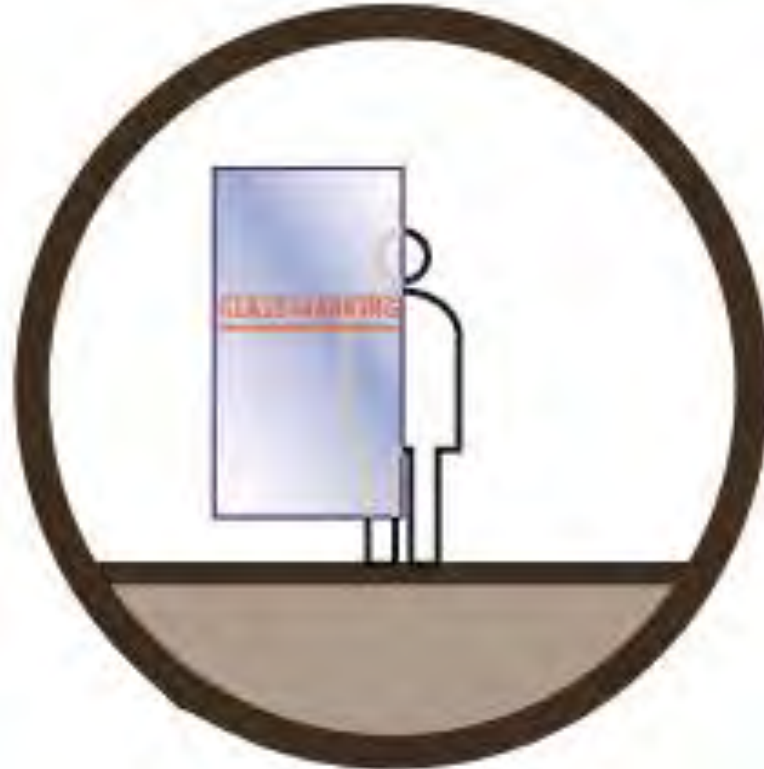
Advertising panels for additional revenue.



Provide space for conduits.



Supportive of all types of mobility.



Panel separations to be transparent with a distraction pattern.



Designated areas with adequate corridor widths for accessibility.



Enclosed heated area.



Early concept for BRT stops

Public feedback helped shape design

- Over 325 surveys were received from Nov. 2017 to Jan. 2018, highlighting these elements as most important:
 - 1) Real-time bus information
 - 2) Fully enclosed shelter
 - 3) Benches
 - 4) Partially enclosed shelter
 - 5) Area maps with landmarks

Key considerations for stop design

- Sustainability, safety, accessibility, and design excellence.
- Stops will build on a neighbourhood's assets and potential to make spaces that promote people's health, happiness, and well being.

Evolving design

- Preliminary design concepts for BRT stops have been developed, but these designs are not final – design will evolve based on public input and other technical criteria.

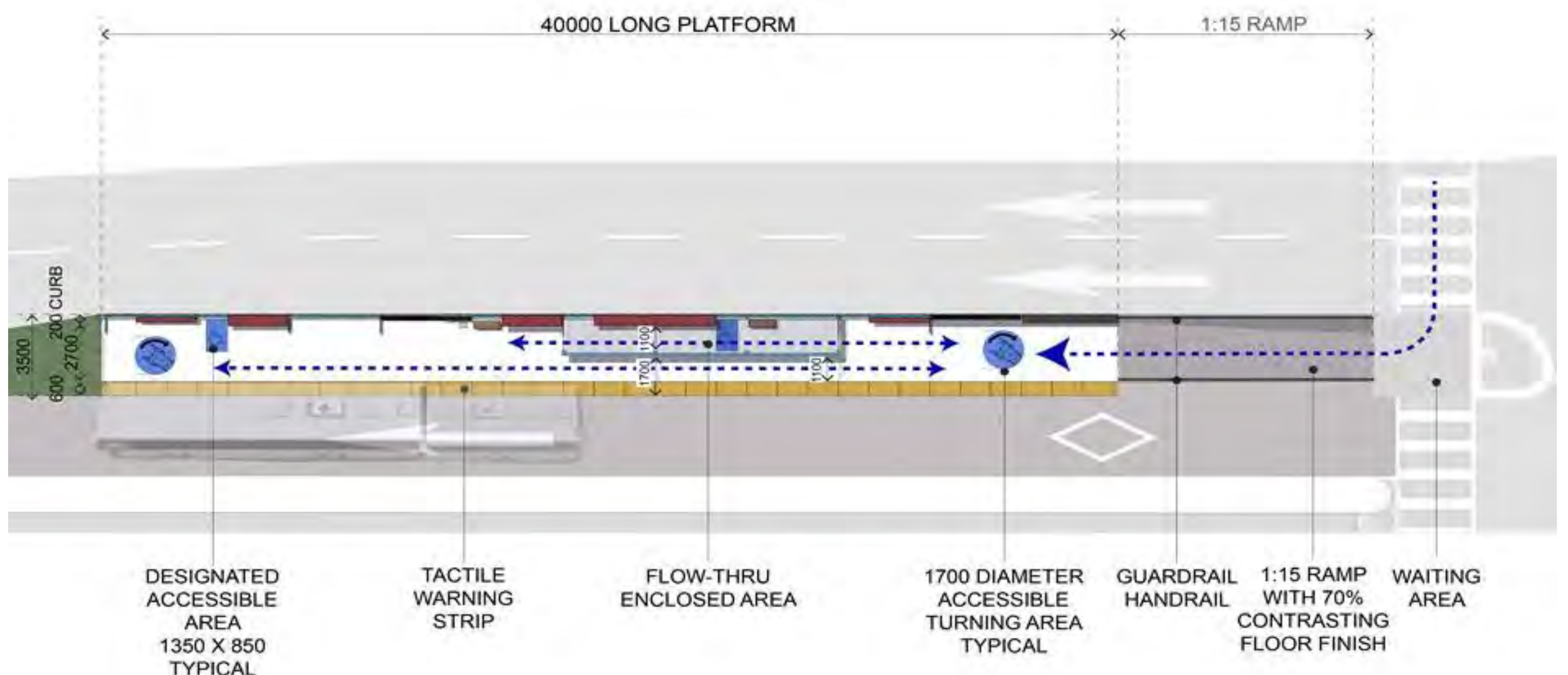


Early concept for BRT stops



This concept illustrates what shelters and platforms could look like, and confirms:

- Width of the sheltered area and platform width
- Passenger information, call buttons and other elements will always be located in the centre of the platform
- Access ramp and railings
- Location of stop name signage, lighting level (intensity of lighting), presence and location of tactile strips



Stop design will evolve



Design must be consistent across the City to make stops easy to find, but certain aspects can be customized:

- Materials, colours and finishes of platform surface and/or wall panels
- Art, neighbourhood maps or information and cultural heritage
- Canopy length, size of heated/enclosed area
- Placement and amount of benches and seating
- Height and length of panels at the back of the platform. Curbside platforms will have some panels removed so pedestrians can access the platform at multiple locations
- Amount of bicycle parking and on which sidewalk
- Curbside platforms can be narrower or integrated with sidewalk

RECOMMENDED DESIGNS FOR NORTH CORRIDOR



RICHMOND STREET

Oxford St. to University Dr.

Recommended Design:

2 centre-running BRT lanes, 2 general traffic lanes

Feedback from stakeholders and the public:

- Minimize impacts to trees, driveways and properties
- Opinions differ regarding centre-running vs. curbside BRT
- Concerns about traffic conditions on Richmond and infiltration into surrounding neighbourhoods

Why is this design being recommended over the others?

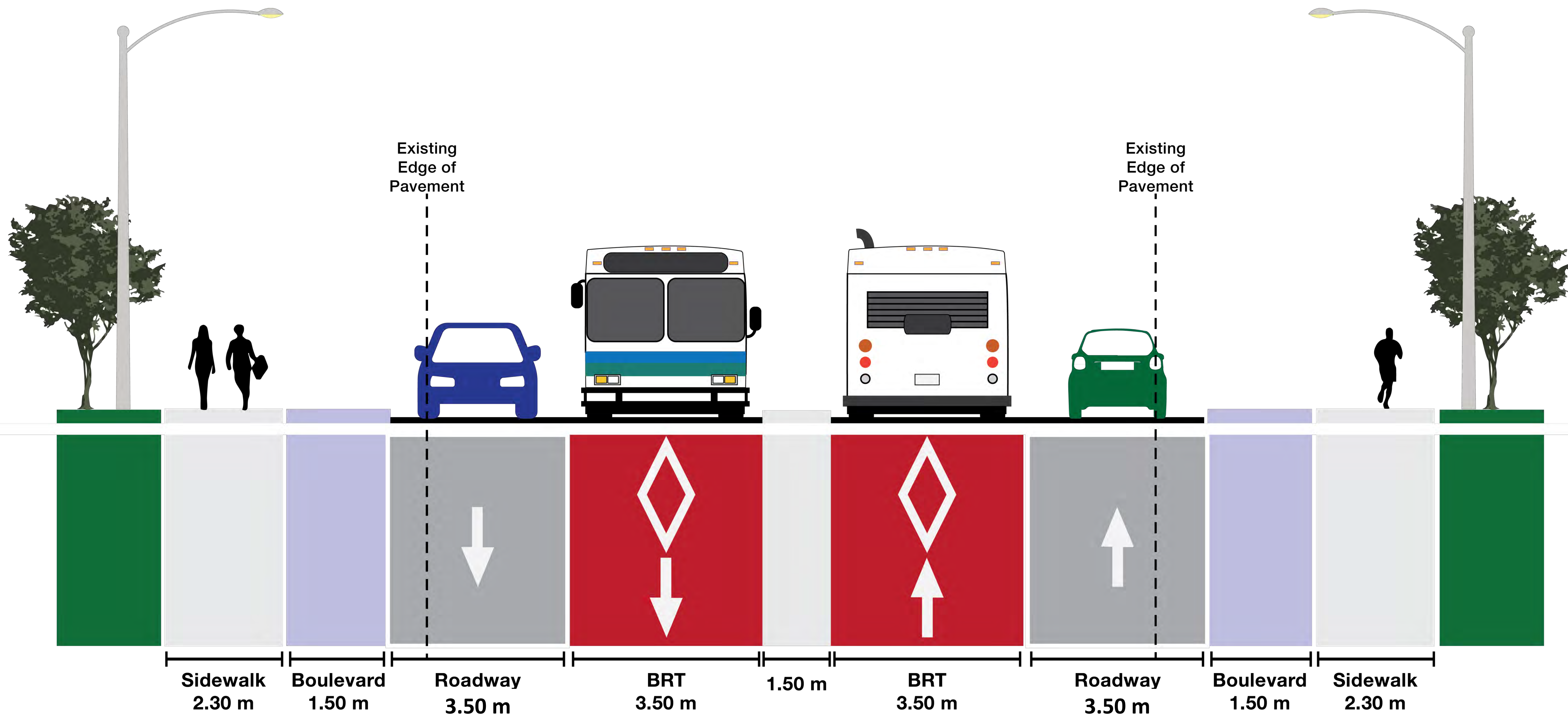
- Offers the most reliable BRT service
- Fewer impacts to trees
- Less impacts to property than 4 general purpose lanes. Similar impact to property as curbside
- Safer due to protected left turns
- Lower cost
- Traffic can be accommodated by adding turn lanes to Richmond Street, and improvements to parallel corridors (e.g., Adelaide, Wharncliffe/Western Rd.)
- Most efficient option for winter maintenance and waste removal



RICHMOND STREET

Oxford St. to University Dr.

Recommended Design



2 centre-running BRT lanes, 2 general traffic lanes
(1 northbound, 1 southbound)



RICHMOND STREET: Traffic Impacts

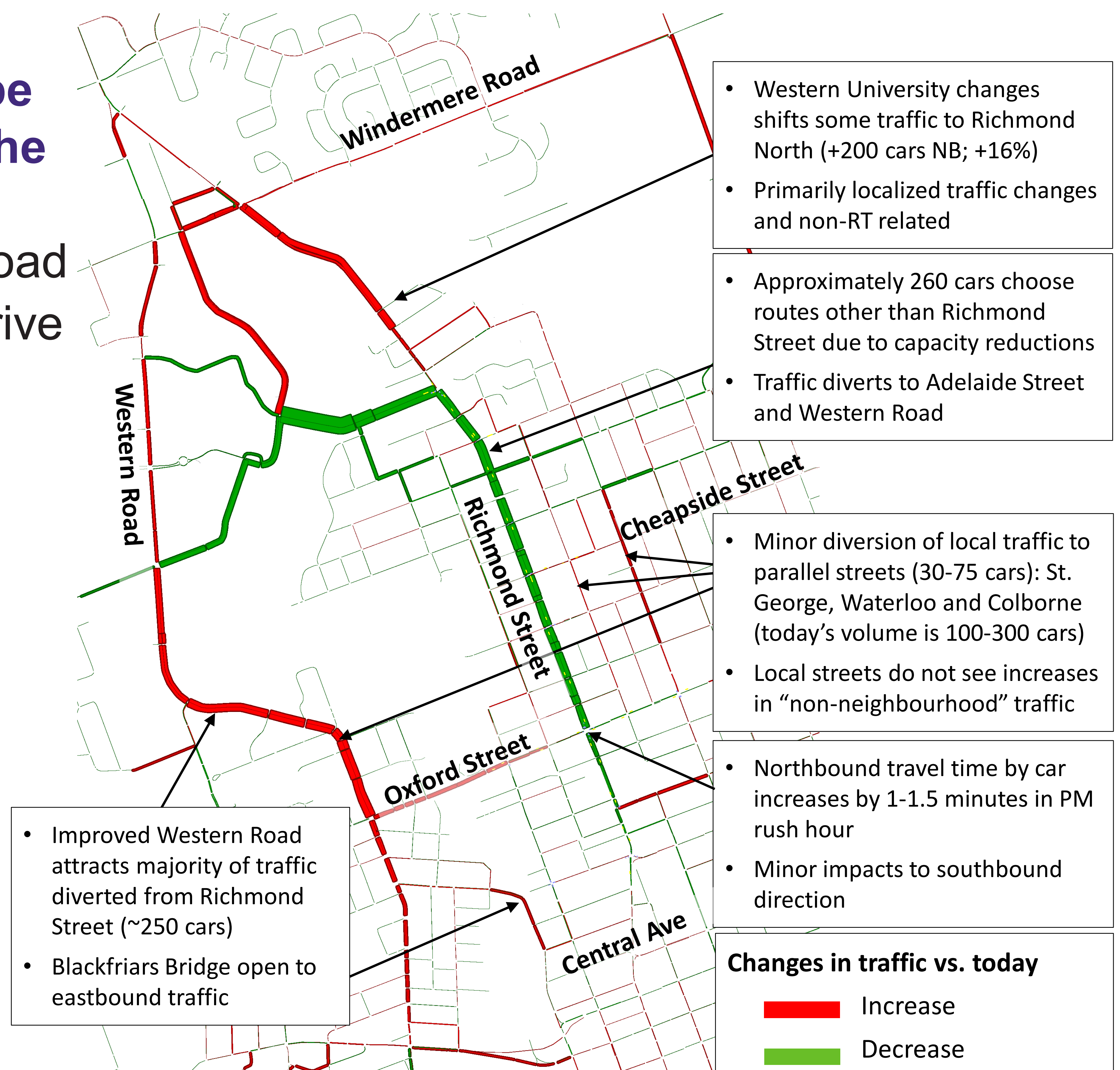
Oxford St. to University Dr.

What will happen to traffic With 2 general traffic lanes?

A detailed traffic analysis was undertaken using a large area to assess trip diversions to other corridors, and a more focused assessment of the specific operations of Richmond Street.

Future traffic flows will be affected by changes to the road network:

- Widening of Western Road
- Closure of University Drive Bridge
- Opening of one lane on Blackfriars Bridge eastbound
- Grade separation of railway crossing at Adelaide Street
- Changes to traffic lanes resulting from Rapid Transit



Assessment of Impacts:

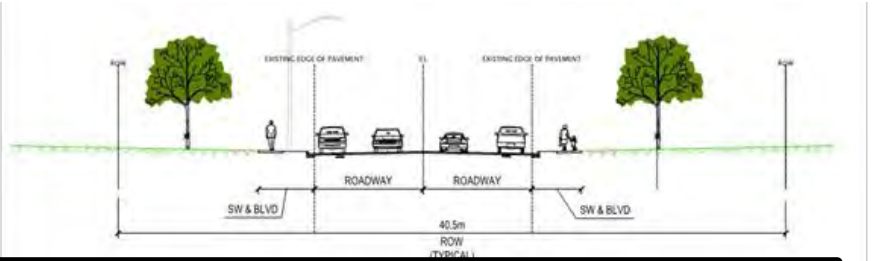
- Western Road and Adelaide Street accommodate traffic diversions
- Minimal through traffic from outside Old North diverted to local streets
- Reduced traffic capacity on Richmond Street, compared to today, induces minimal traffic diversion on parallel streets
- Travel time by car on Richmond Street increases by 1-1.5 minutes in peak hour with minimal impacts outside of rush hour
- Traffic impacts for centre vs. curbside transit lanes are similar



Richmond Street Options: Oxford Street to University Drive

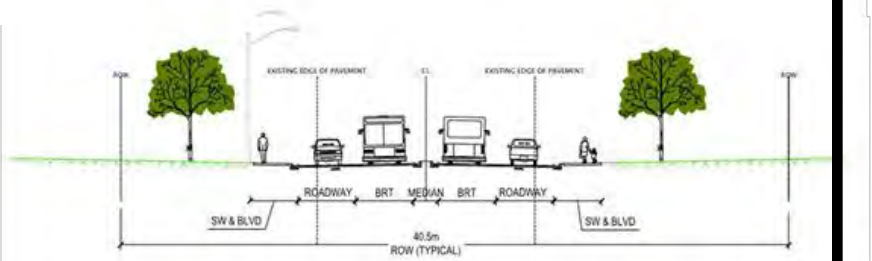
Existing Conditions:

- No right-turn lanes
- Left-turn lanes only at Grosvenor and University



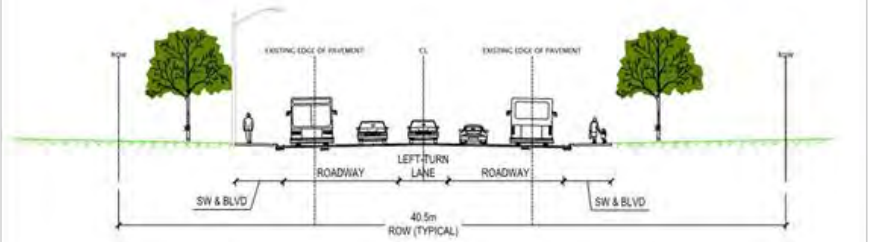
RECOMMENDED: Option 1:

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 2 general traffic lanes (1 north, 1 south)



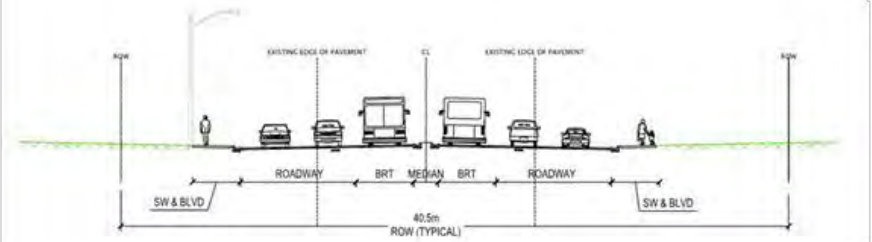
Option 2:

- 2 curb-side BRT lanes (1 north, 1 south)
- 2 general traffic lanes (1 north, 1 south)
- 1 centre left-turn lane



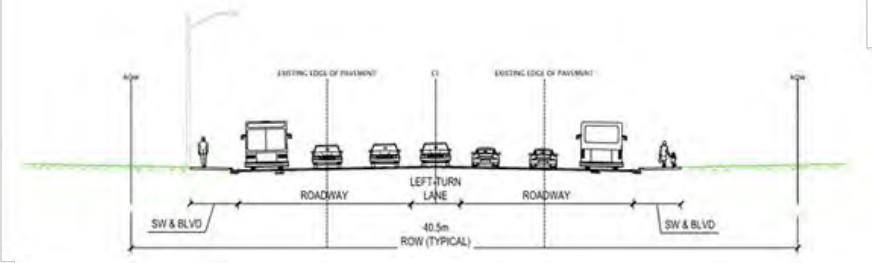
Option 3:

- 2 centre running BRT lanes (1 north, 1 south)
- Raised median
- 4 general traffic lanes (2 north, 2 south)



Option 4:

- 2 curb-side BRT lanes (1 north, 1 south)
- 4 general traffic lanes (2 north, 2 south)
- 1 centre left-turn lane



See over for comparison of these options.

Comparison of Richmond Street Options: Oxford Street to University Drive

	RECOMMENDED Option 1: 2 Centre BRT 2 general traffic lanes	Option 2: 2 Curb BRT 2 general traffic lanes	Option 3: 2 Centre BRT 4 general traffic lanes	Option 4: 2 Curb BRT 4 general traffic lanes
Least Property Impacts		✓		
	Requires frontage from 25 properties, and 5 full properties	Requires frontage from 18 properties, and 5 full properties	Requires frontage from 21 properties, and 9 full properties	Requires frontage from 18 properties, and 7 full properties
Least Tree Impacts	✓	✓		
	Impacts 90-100 trees (estimated)	Impacts 70-80 trees (estimated)	Impacts 170-180 trees (estimated)	Impacts 170-180 trees (estimated)
Least Cultural/Built Heritage Impacts	✓	✓		
	Potential for impacts 3 heritage properties	Potential for impacts 3 heritage properties	Potential for impacts 3 heritage properties	Potential for impacts 3 heritage properties
Safer Left-turns	✓		✓	
	Options 1 and 3 have fewer conflicts between left-turning and through vehicles, meaning safer left-turns.			
More Reliable Rapid Transit	✓		✓	
	Options 1 and 3 have more reliable rapid transit service with less interaction between buses and turning / stopping cars and trucks.			
Easier Mid-block Access		✓		✓
	Options 2 and 4 have easier access to unsignalized side streets and driveways from the centre two-way left-turn lane.			
Efficient Winter Maintenance	✓		✓	
	Options 1 and 3 have more efficient winter maintenance with transit lanes in the centre maintained first.			
Efficient Local Transit Operations	✓		✓	
	Options 1 and 3 have more efficient local transit			
Efficient Waste Removal	✓		✓	
	Options 1 and 3 have more efficient waste removal with transit in the centre and waste removal at the curb.			
Relative Cost to Construct	\$	\$	\$\$	\$\$
Project Team Assessment of Public Feedback	✓	✓		

NOTE: Placement of transit lanes must match Richmond Street south of Oxford Street.

See over for details on each option.

RICHMOND STREET

Central Ave. to Oxford St. W.

Recommended Design:

2 centre-running BRT lanes, 2 general traffic lanes

Feedback from stakeholders and the public:

- Pedestrian and cycling safety is important
- Traffic capacity reduction is a concern
- On-street parking and loading is needed
- Need to address business impacts during construction
- Questions about walking distance to Rapid Transit stops and removal of existing local transit stops
- Potential transit delays at CP Rail crossing

Why is this design being recommended over the others?

- Offers most reliable BRT service because BRT is separated from curbside activities
- Potential to accommodate some on-street parking and loading in the form of bays
- Consistent with transit lane configuration north of Oxford Street
- Traffic can be accommodated on parallel corridors
- Most efficient option for winter maintenance and waste removal

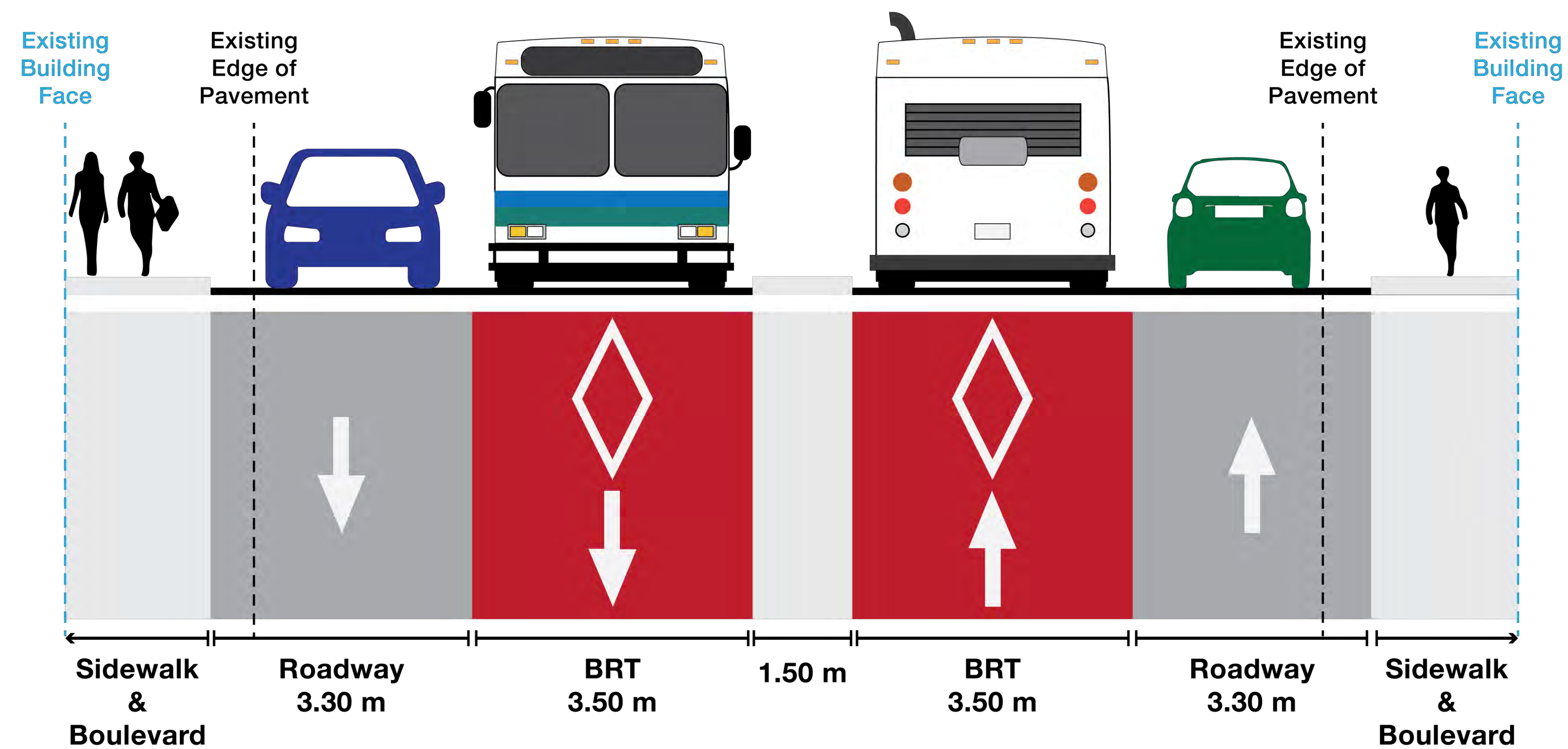
The City will continue to work with business owners throughout the process to help mitigate impacts during construction.



RICHMOND STREET

Central Ave. to Oxford St. W.

Recommended Design



2 centre-running BRT lanes, 2 general traffic lanes
(1 northbound, 1 southbound)



Comparison of Richmond Street Options: Central Avenue to Oxford Street

	RECOMMENDED Option 1: 2 Centre BRT 2 general traffic lanes	Option 2: 2 Curb BRT 2 general traffic lanes
Least Property Impacts	✓	✓
	Both options result in comparable impacts to adjacent properties.	
Least Tree Impacts	✓	✓
	Neither option results in significant impacts to trees in the corridor.	
Least Cultural/Built Heritage Impacts	✓	✓
	Both options result in comparable impacts to cultural and built heritage resources in the corridor.	
Safer Left-turns	✓	
	Option 1 has fewer conflicts between left-turning and through vehicles, meaning safer left-turns.	
More Reliable Rapid Transit	✓	
	Option 1 has more reliable rapid transit service with less interaction between buses and turning / stopping cars and trucks.	
Easier Mid-block Access		✓
	Option 2 has easier access to unsignalized side streets and driveways from the centre two-way left-turn lane.	
Efficient Winter Maintenance	✓	
	Option 1 has more efficient winter maintenance with transit lanes in the centre maintained first.	
Efficient Local Transit Operations	✓	
	Option 1 has more efficient local transit	
Efficient Waste Removal	✓	
	Option 1 has more efficient waste removal with transit in the centre and waste removal at the curb.	
Relative Cost to Construct	\$	\$
Project Team Assessment of Public Feedback	✓	✓

NOTE: Placement of transit lanes must match Richmond Street north of Oxford Street.

See over for details on each option.

NORTH TURNAROUND

Recommended Design:

Expand the existing transit terminal

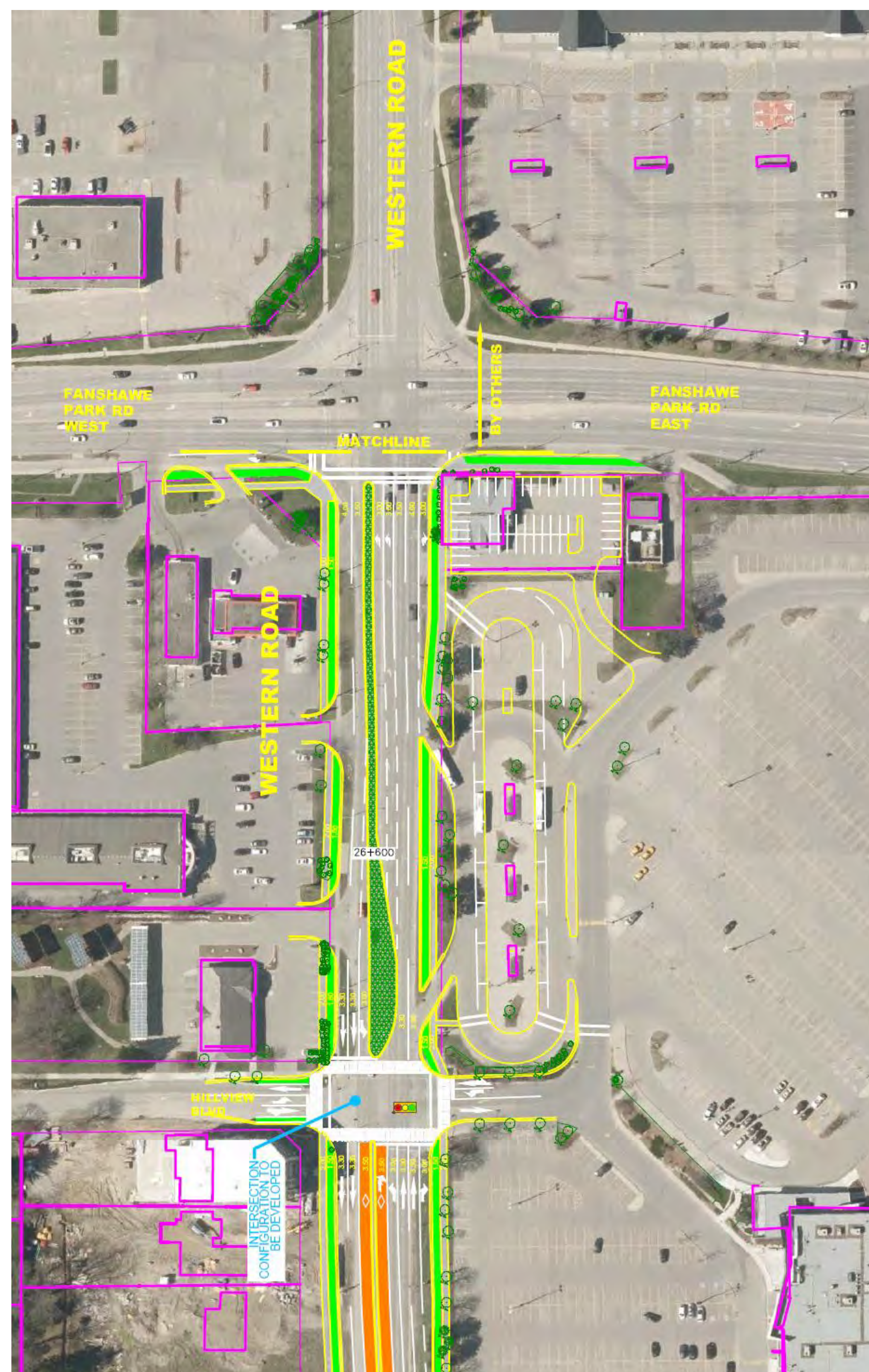
Feedback from stakeholders and the public:

- Make it easy to transfer between local and Rapid Transit service

Why is this design being recommended over the others?

- Offers the most reliable BRT service
- Most balanced walking distance to existing and future developments
- Easy transfers from local to Rapid Transit service
- Lower cost than new terminal; reduces throw away costs
- Easiest to implement for opening day
- Allows for integration of Rapid Transit with future Transit Village development

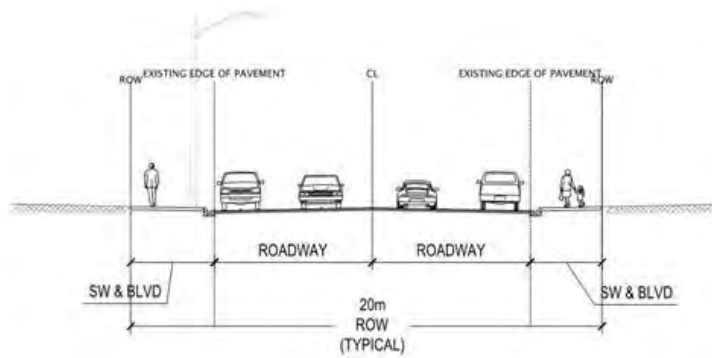
This design is being developed in consultation with Masonville Place.



Richmond Street Options: Central Avenue to Oxford Street

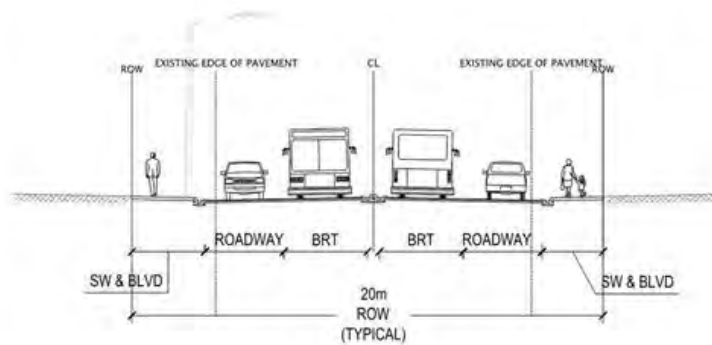
Existing Conditions:

- No right-turn lanes
- Left-turn lanes at Oxford Street West, Pall Mall Street and Central Avenue



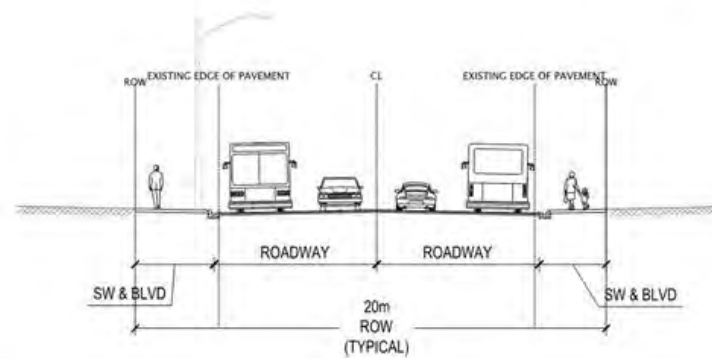
RECOMMENDED: Option 1:

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 2 general traffic lanes (1 north, 1 south)



Option 2:

- 2 curb-side BRT lanes (1 north, 1 south)
- 2 general traffic lanes (1 north, 1 south)
- 1 centre left-turn lanes



See over for comparison of these options.

RECOMMENDED DESIGNS FOR SOUTH CORRIDOR



WELLINGTON ROAD

Base Line Rd. to Bradley Ave.

Recommended Design:

2 centre-running BRT lanes, 4 general traffic lanes

Feedback from stakeholders and the public:

- Questions about left turn operation
- Opinions differ regarding centre-running vs. curbside BRT
- Cycling facilities would be appreciated

Why is this design being recommended over the others?

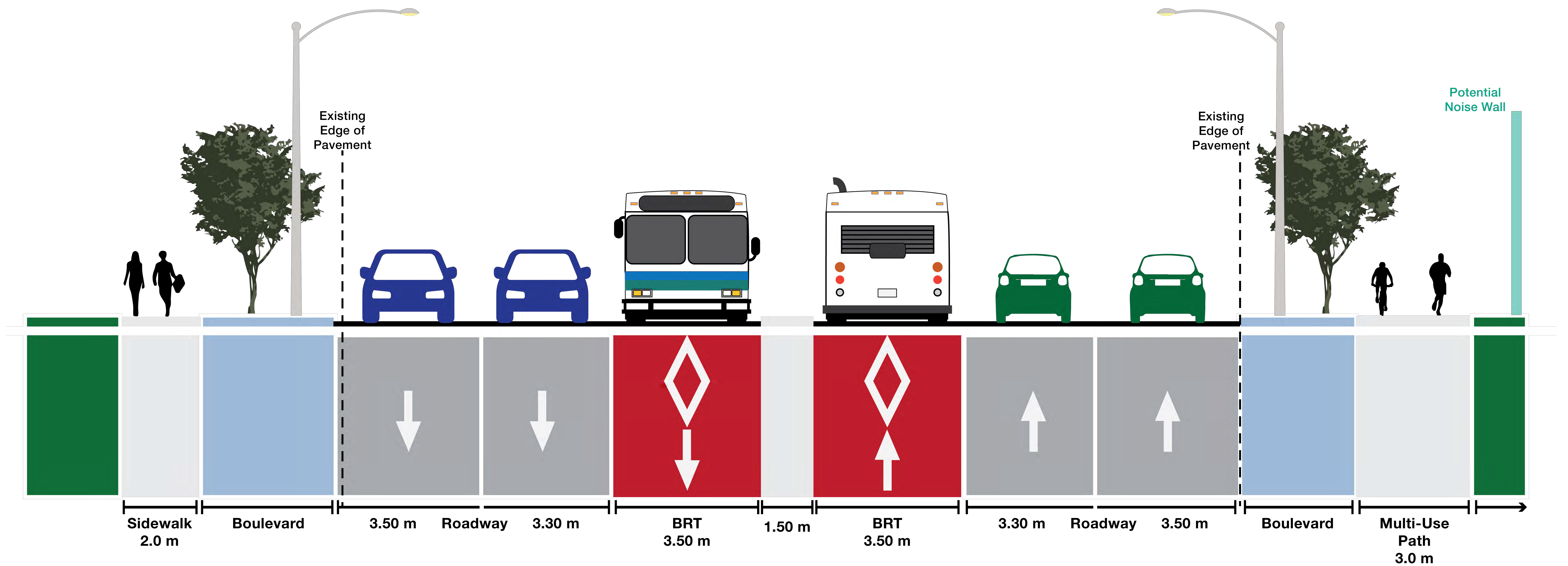
- Offers more reliable BRT service
- Consistent with vision for Wellington Road as a “major gateway street”
- Fewer property impacts
- Safer due to protected left turns
- More efficient winter maintenance
- Increased transit reliability
- Lower cost
- Comparable tree impacts



WELLINGTON ROAD

Base Line Rd. to Bradley Ave.

Recommended Design



2 centre-running BRT lanes, 4 general traffic lanes
(2 northbound, 2 southbound)



Wellington Road south of Bradley Avenue, looking south

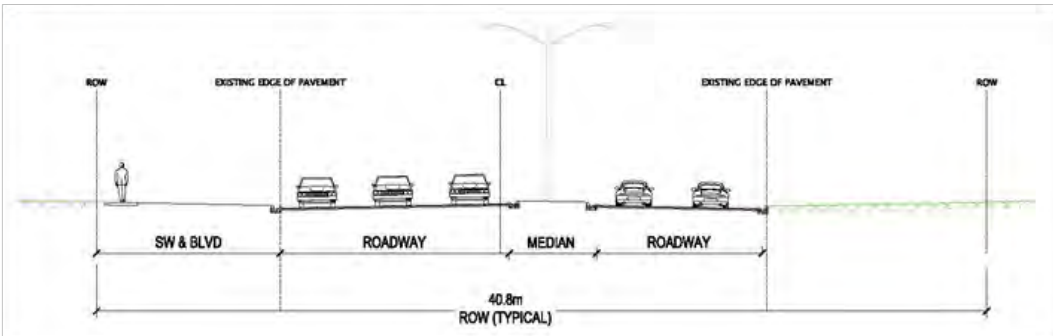


Rendering may not represent final design.

Wellington Road Options: Base Line Road to Bradley Avenue

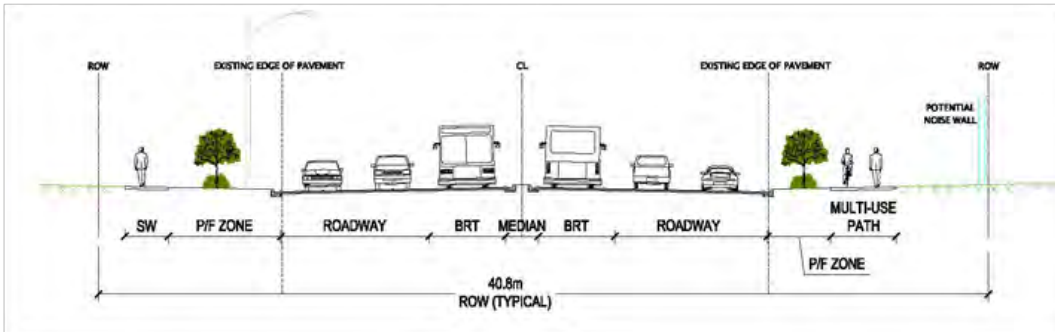
Existing Conditions:

- 4 to 6 general traffic lanes (2 or 3 lanes per direction)
- Turn lanes at intersections and some driveways
- Raised median in some sections, centre left-turn lane in other sections
- Left-turn and right-turn lanes at intersections and some driveways
- Bus bays for some transit stops



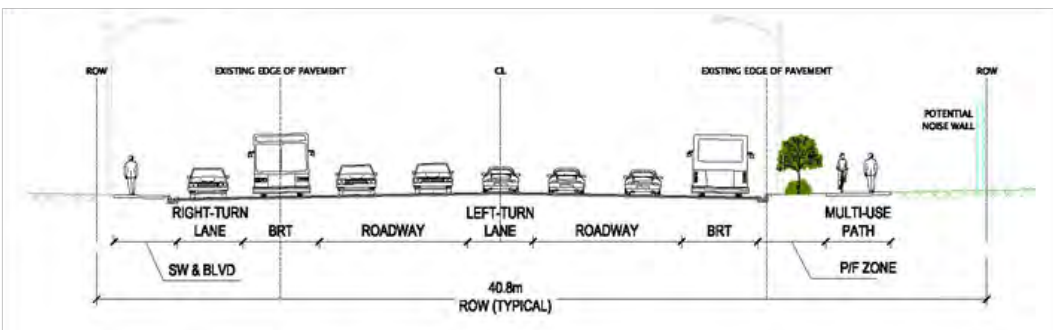
RECOMMENDED: Option 1:

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 4 general traffic lanes (2 north, 2 south)



Option 2: Curb BRT

- 2 curb-side running BRT lanes (1 north, 1 south)
- 4 general traffic lanes (2 north, 2 south)
- 1 centre left-turn lane



See over for comparison of these options.

Comparison of Wellington Road Options: Base Line Road to Bradley Avenue

	RECOMMENDED Option 1: 2 Centre BRT 4 general traffic lanes	Option 2: 2 Curb BRT 4 general traffic lanes
Least Property Impacts	✓	
	Requires frontage from 4 properties.	Requires frontage from 7 properties.
Least Tree Impacts	✓	✓
	Impacts less than 5 trees (estimated)	Impacts less than 5 trees (estimated)
Safer Left-turns	✓	
	Option 1 has fewer conflicts between left-turning and through vehicles, meaning safer left-turns.	
More Reliable Rapid Transit	✓	
	Option 1 has more reliable rapid transit service with less interaction between buses and turning / stopping cars and trucks.	
Easier Mid-block Access		✓
	Option 2 has easier access to unsignalized side streets and driveways from the centre two-way left-turn lane.	
Efficient Winter Maintenance	✓	
	Option 1 has more efficient winter maintenance with transit lanes in the centre maintained first.	
Efficient Local Transit Operations	✓	
	Option 1 has more efficient local transit.	
Distinguishes Wellington Road as a Gateway	✓	
	Centre BRT lanes provides more distinction to Wellington Road as a Major Gateway Street.	
Easier access for Emergency Vehicles		✓
	Option 2 has easier access to properties from the centre two-way left-turn lane.	
Relative Cost to Construct	\$	\$
Project Team Assessment of Public Feedback	No clear preference.	

See over for details on each option.

WELLINGTON CURVE

South of the Thames River to Base Line Rd.

Recommended Design:

Lengthen the curve by strategically widening to balance impacts on both sides

Feedback from stakeholders and the public:

- Minimize impacts to St. Andrew Memorial Church
- Questions about City's process for addressing property impacts
- Differing opinions on which side should be widened
- The existing curve needs improvement

Why is this design being recommended over the others?

- Safer movement of all vehicles due to longer horizontal curves and protected left turns
- Fewer impacts to trees
- Most efficient option for winter maintenance and waste removal
- Reduces impact to Lutheran Church

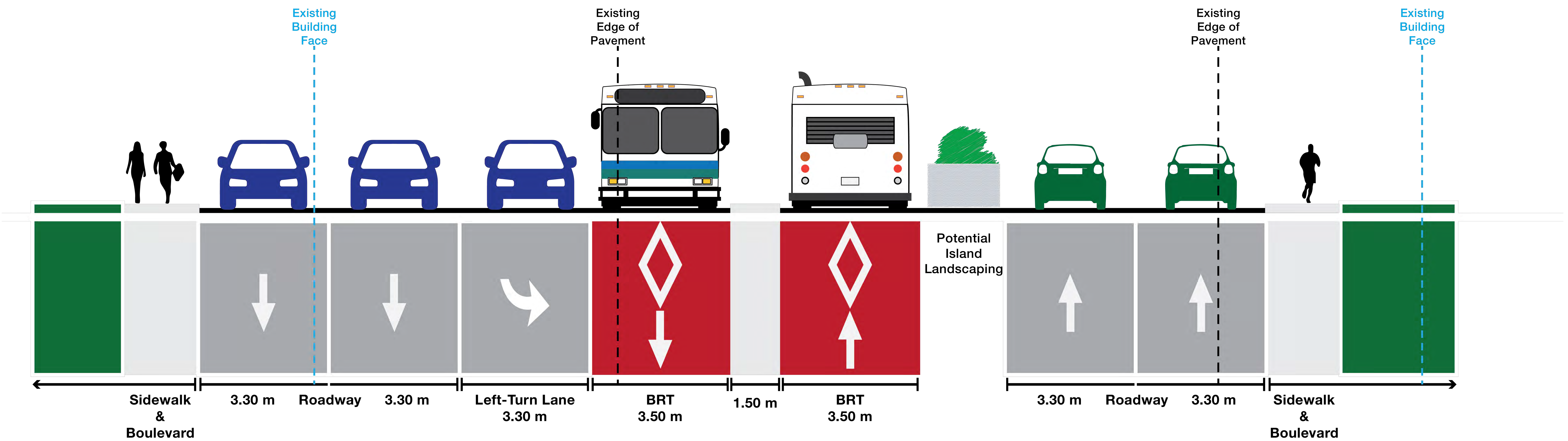
All options for this focus area have significant property impacts. The City will continue to work with property owners throughout the process.



WELLINGTON CURVE

South of the Thames River to Base Line Rd.

Recommended Design



2 centre-running BRT lanes, 4 general traffic lanes
(2 northbound, 2 southbound)



Wellington Road at Commissioners Road, looking north

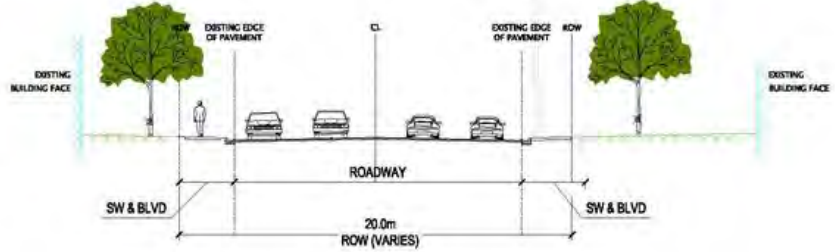


Rendering may not represent final design.

Wellington Curve Options: South of the Thames River to Base Line Road

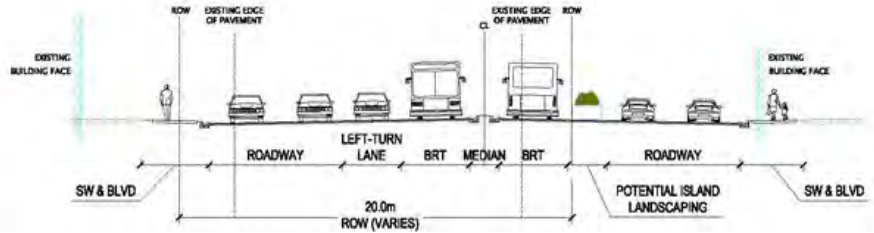
Existing Conditions:

- 4 general traffic lanes (2 north, 2 south)
- No right-turn lanes
- Left-turn lanes only at Base Line and Grand Ave



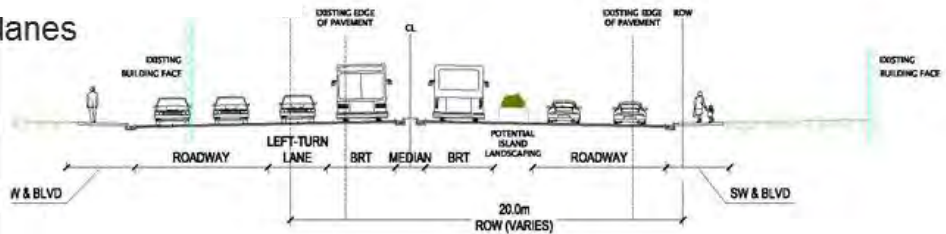
Option 1: Widen to the east

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 4 general traffic lanes (2 north, 2 south)



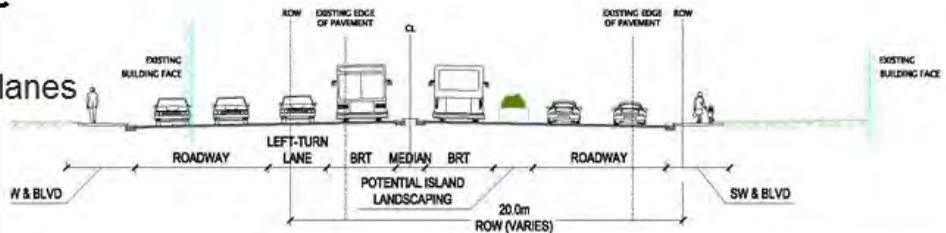
RECOMMENDED: Option 2: Lengthen the curve

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 4 general traffic lanes (2 north, 2 south)



Option 3: Widen to the west

- 2 centre-running BRT lanes (1 north, 1 south)
- Raised median
- 4 general traffic lanes (2 north, 2 south)



See over for comparison of these options.

Comparison of Wellington Curve Options: South of the Thames River to Base Line Road

	Option 1: Widen to the east	RECOMMENDED Option 2: Lengthen the curve	Option 3: Widen to the west
Least Property Impacts			✓
	Requires 41 full properties	Requires 38 full properties	Requires 35 full properties
Least Tree Impacts		✓	
	Impacts to 70-80 trees (estimated)	Impacts to 60-70 trees (estimated)	Impacts to 70-80 trees (estimated)
Least Cultural/Built Heritage Impacts		✓	✓
	Potential for impacts to 1 heritage property	No impacts identified	No impacts identified
Optimized Horizontal Alignment		✓	
	Option 2 has the longest horizontal curves, which will help all vehicles move through this area, including buses and trucks.		
More Reliable Rapid Transit	✓	✓	✓
	All options support reliable rapid transit with less interaction between buses and turning / stopping cars and trucks.		
Supports Appropriate Growth	✓	✓	✓
	All options support appropriate growth along the Rapid Transit corridor.		
Least Grading Impacts or Retaining Walls	✓	✓	
	New retaining wall near to existing wall at Lutheran Church	Maintains existing retaining wall location at Lutheran Church	Requires new tall retaining wall at Lutheran Church
Relative Cost to Construct	\$	\$	\$
Project Team Assessment of Public Feedback	No clear preference.		

See over for details on each option.

South Turnaround

Recommended Design:

Combined platforms for Rapid Transit and local transit on Wellington Road at White Oaks signalized intersection

Feedback from stakeholders and the public:

- Need to make transfers easy between local and Rapid Transit
- Concerns over pedestrian safety across parking lots



Potential Park-and-Ride

- City is working with MTO to develop a Park-and-Ride on Exeter Road.
- Considerations include: traffic, flood areas, available property and transit operations.

Why is this design being recommended over the others?

- Best facilitates transfers from local to Rapid Transit service
- Simple operation for up to 6 local routes and BRT service to turn around using Holiday Avenue and existing signalized access
- Consistent with Transit Village in The London Plan
- Can provide driver facility at this end-of-route



RECOMMENDED DESIGNS FOR WEST CORRIDOR



OXFORD STREET WEST

Platt's Lane to Wharncliffe Road

Recommended Design:

2 centre-running BRT lanes, 4 general traffic lanes

Feedback from stakeholders and the public:

- Minimize impacts to trees and properties, including heritage properties
- Questions about today's high traffic volumes and neighbourhood infiltration
- Questions about left turn operation

Why is this design being recommended over the others?

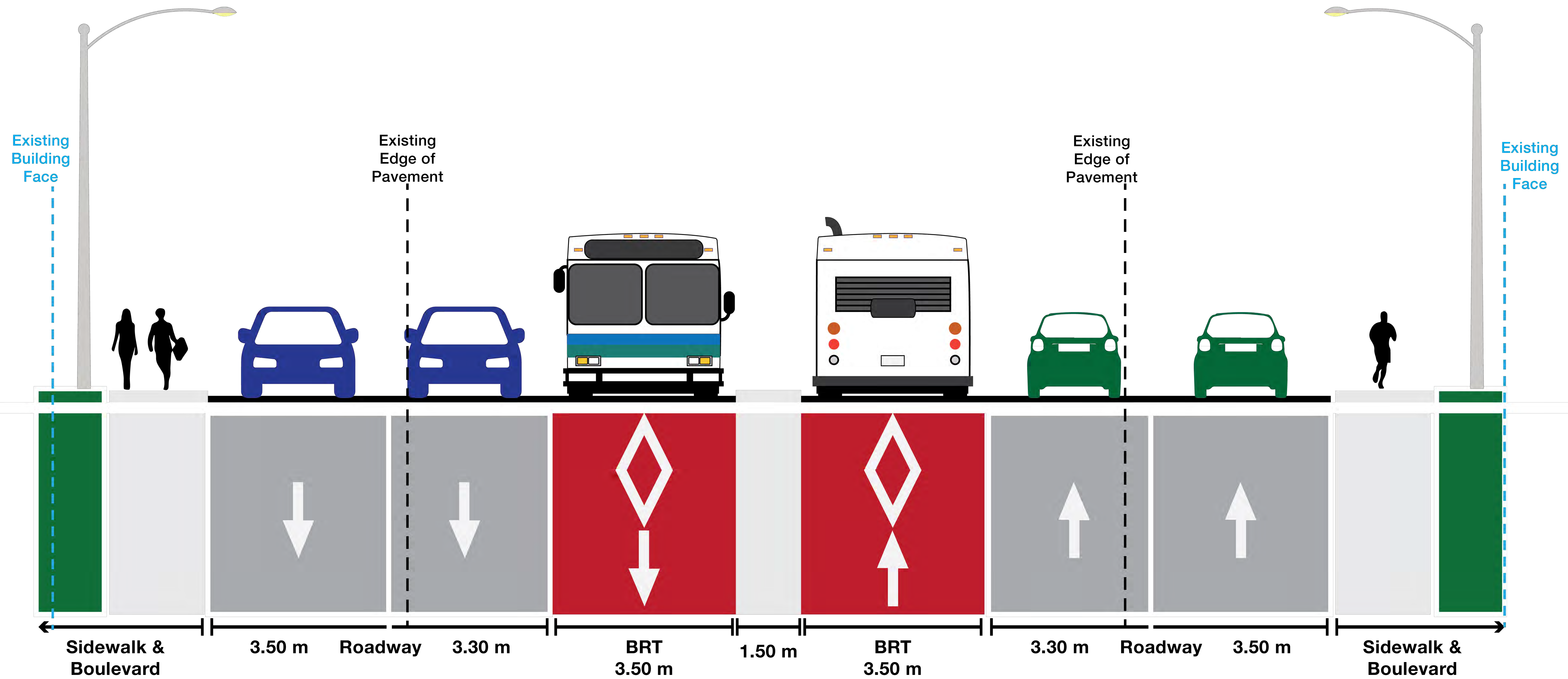
- Offers the most reliable BRT service
- Most efficient option for winter maintenance and waste removal
- Curbside has similar impacts to property, utilities and trees, and similar cost, but less reliable transit service
- All options have similar impacts to listed and designated heritage properties



OXFORD STREET WEST

Platt's Lane to Wharncliffe Road

Recommended Design



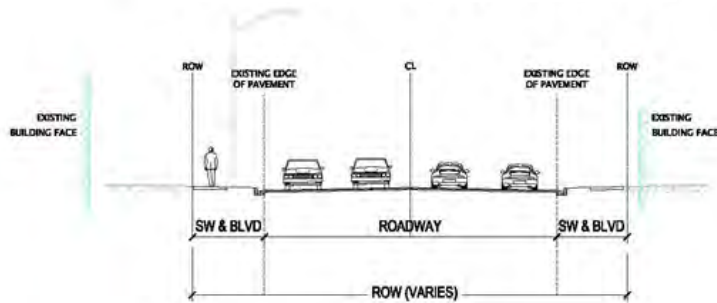
2 centre-running BRT lanes, 4 general traffic lanes
(2 eastbound, 2 westbound)



Oxford Street West Options: Platt's Lane to Wharncliffe Road

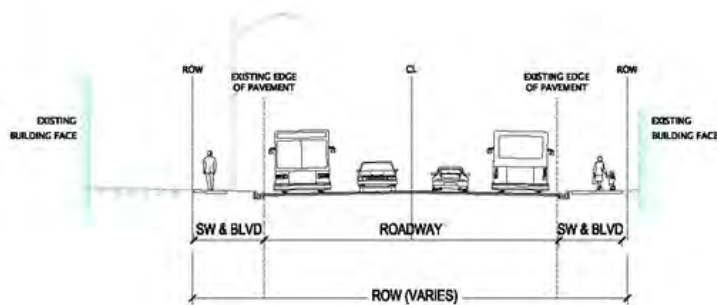
Existing Conditions:

- 4 general traffic lanes (2 east, 2 west)
- Left-turn lane at Summit Avenue and Fernley Avenue



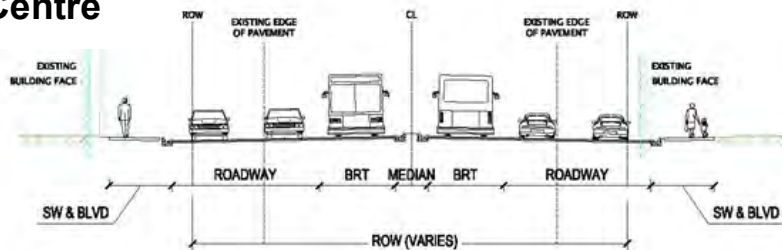
Option 1: Mixed Use

- 4 general traffic lanes (2 east, 2 west)
- Raised median
- Transit operates in general traffic lanes



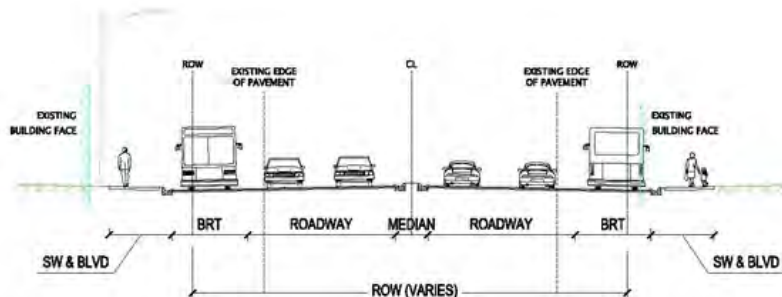
RECOMMENDED: Option 2: Centre

- 2 centre-running BRT lanes (1 east, 1 west) from Platt's Lane to Gower Street
- 4 general traffic lanes (2 east, 2 west)
- Raised median



Option 3: Curb BRT

- 2 curb-side BRT lanes (1 east, 1 west) from Summit Avenue to Rathnally Street
- 4 general traffic lanes (2 east, 2 west)
- Raised median



Comparison of Oxford Street West Options: Platt's Lane to Wharncliffe Road

	Option 1: Mixed Use of 4 general traffic lanes	RECOMMENDED Option 2: 2 Centre BRT 4 general traffic lanes	Option 3: 2 Curb BRT 4 general traffic lanes
Least Property Impacts	✓ Requires 6 full properties.		
		Requires 10 full properties.	Requires 10 full properties.
Least Tree Impacts	✓ Impacts 5 to 15 trees (estimated)		
		Impacts 20 to 30 trees (estimated)	Impacts 20 to 30 trees (estimated)
Least Cultural/Built Heritage Impacts	✓	✓	✓
	All options impact 7 listed properties and 1 designated property.		
Safer Left- and Right-turns		✓	
	Option 2 has fewer conflicts between turning and through vehicles, meaning safer left- and right-turns.		
More Reliable Rapid Transit		✓	
	Option 2 has more reliable rapid transit service with less interaction between buses and turning / stopping cars and trucks.		
Easier Mid-block Access	✓		
	Option 1 has easier access to unsignalized side streets and driveways.		
Efficient Winter Maintenance		✓	
	Option 2 has more efficient winter maintenance with transit lanes in the centre maintained first.		
Efficient Waste Removal		✓	
	Option 2 has more efficient waste removal with transit in the centre and waste removal at the curb.		
Relative Cost to Construct	\$	\$\$	\$\$
Project Team Assessment of Public Feedback	✓		

West Turnaround

Recommended Design:

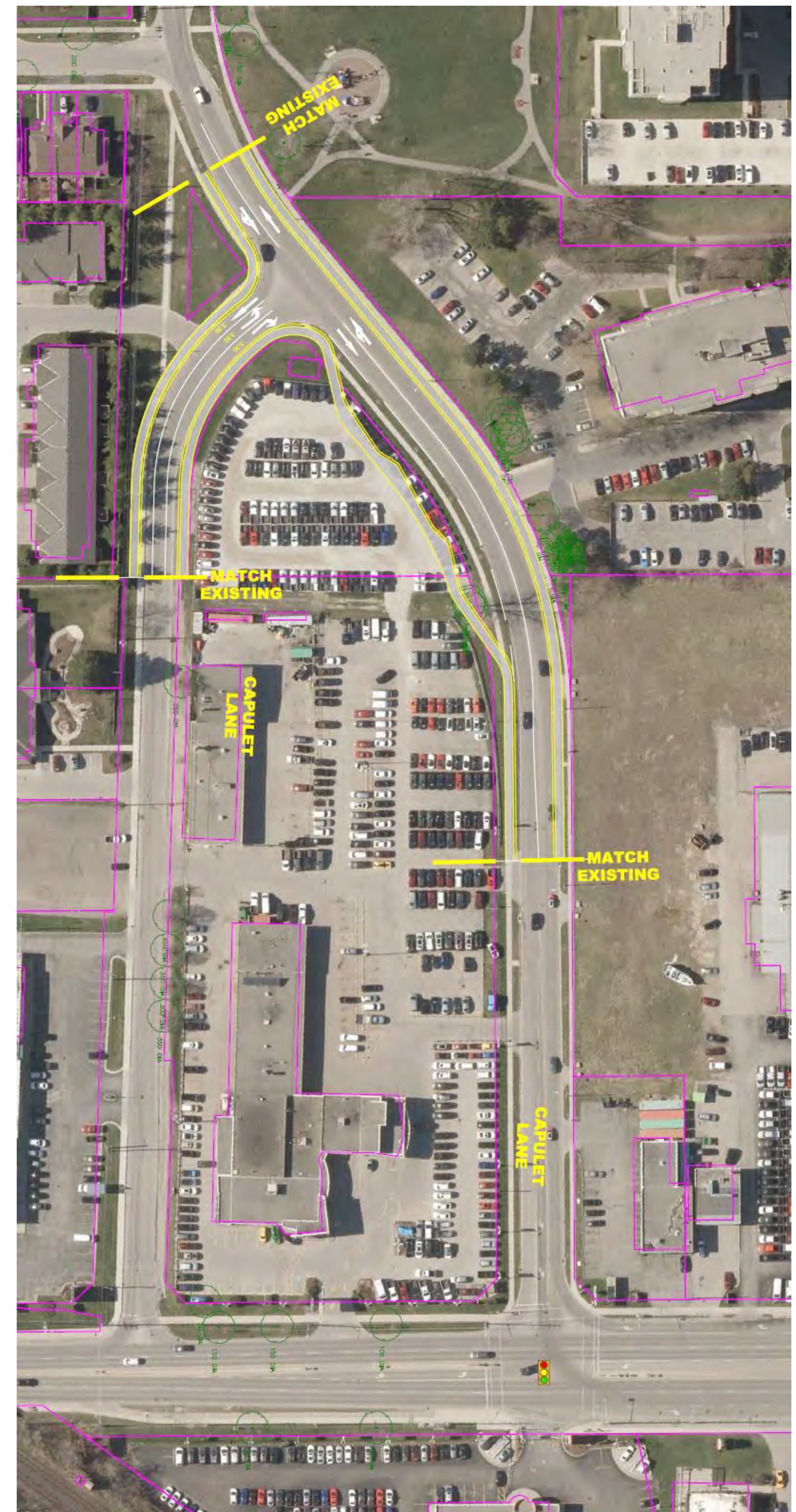
Combined Rapid Transit and local transit stop on Capulet Lane with on-street Rapid Transit platforms at Wonderland

Feedback from stakeholders and the public:

- Concerns over noise and air quality from buses
- Need to make transfers easy between local and Rapid Transit

Why is this design being recommended over the others?

- Additional Rapid Transit stop shortens the walking distance to existing high density residential area
- Easy transfers from local to Rapid Transit service
- Simple operation for both Oxford Express and BRT service to turn using Capulet Walk & Capulet Lane
- Consistent with Transit Village in The London Plan
- Can provide driver facility at this end-of-route



Oxford Street West at Wonderland Road, looking west



Rendering may not represent final design.

RECOMMENDED DESIGNS FOR EAST CORRIDOR AND COUPLET



Dundas Street

Dundas Street is a critical link in the City's proposed Rapid Transit Network, connecting downtown London and Old East Village with employment lands to the east and Fanshawe College.



The project team considered options for both centre-running and curbside BRT in the East Corridor.



An assessment of the benefits and drawbacks of each option indicated that the curbside BRT option would result in significant conflicts with the underground hydro facilities, resulting in considerable costs and delays. This option was thus eliminated from further consideration.



The project is therefore proceeding with a centre-running BRT configuration on Dundas Street.

East Turnaround

Recommended Design:

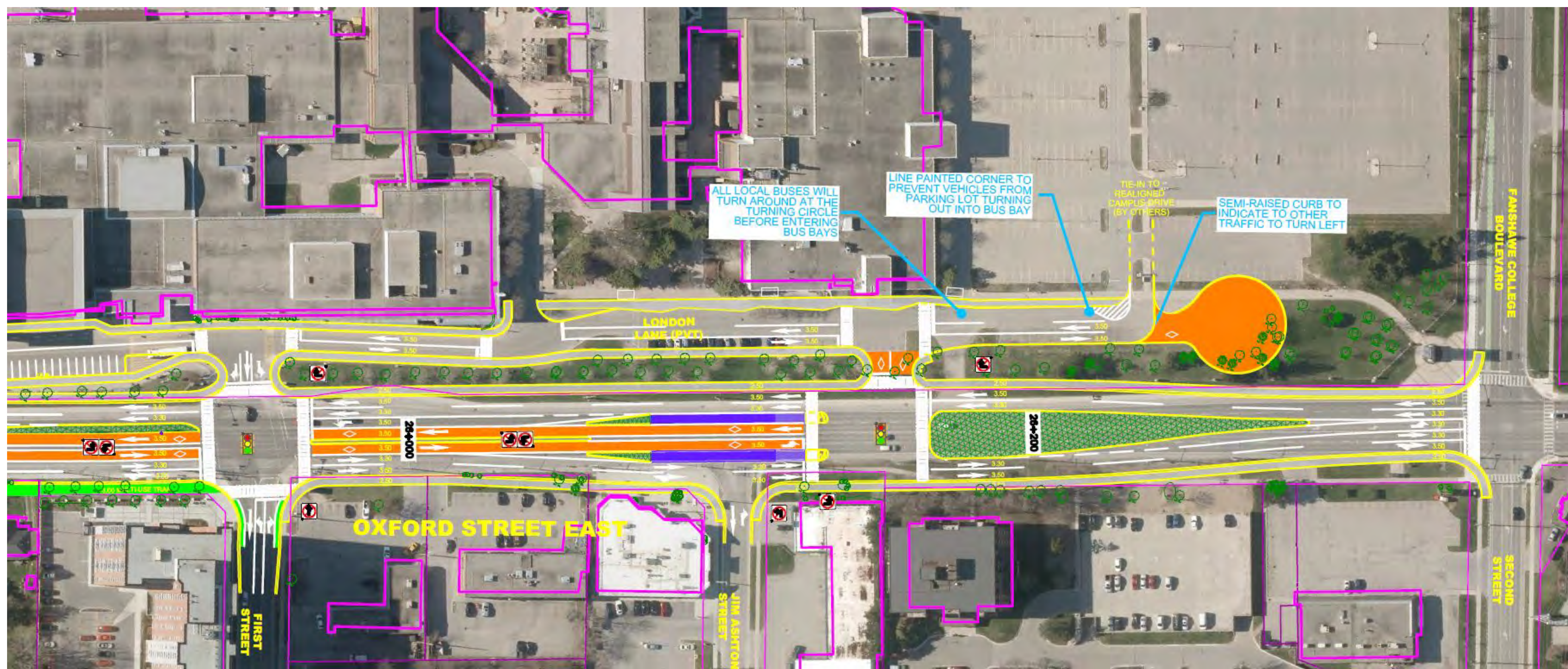
Expand the existing transit terminal

Feedback from stakeholders and the public:

- Pedestrian safety is important
- Design needs to accommodate campus development
- Transit service to airport should remain and be improved

Why is this design being recommended over the others?

- Easy transfers from local to Rapid Transit service
- Reduces pedestrian crossings of Oxford Street West
- Local transit service to the airport can be maintained and expanded in future

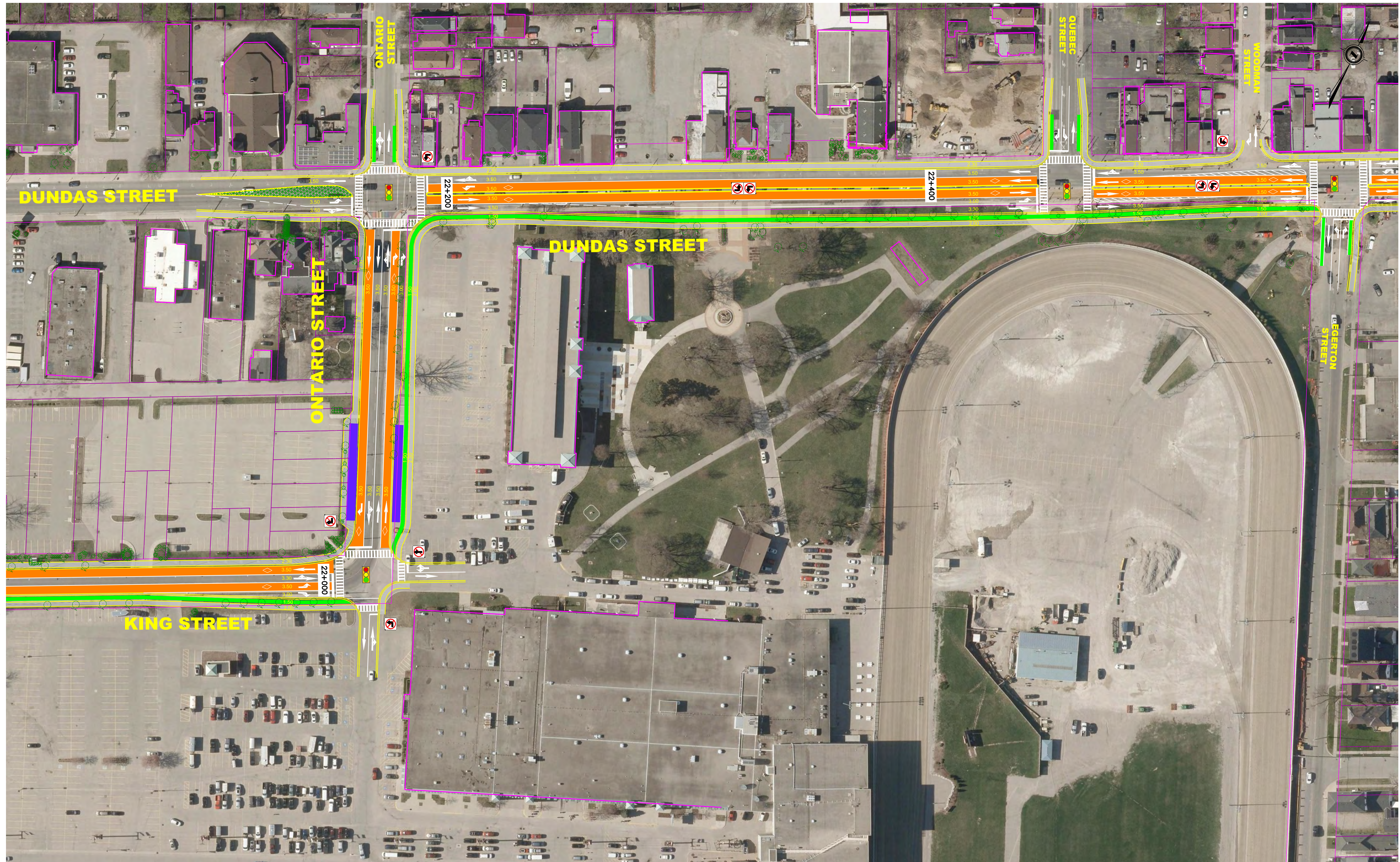


Note: Access to Ayreswood Avenue will be restricted to right-in/right-out movements. This design is being developed in consultation with Fanshawe College.

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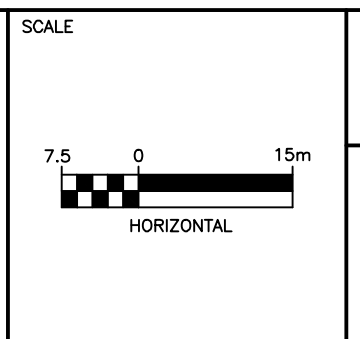
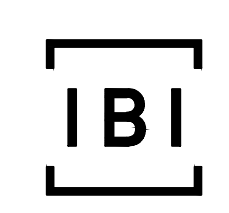
MATCH LINE NE03

MATCH LINE NE05



LEGEND:

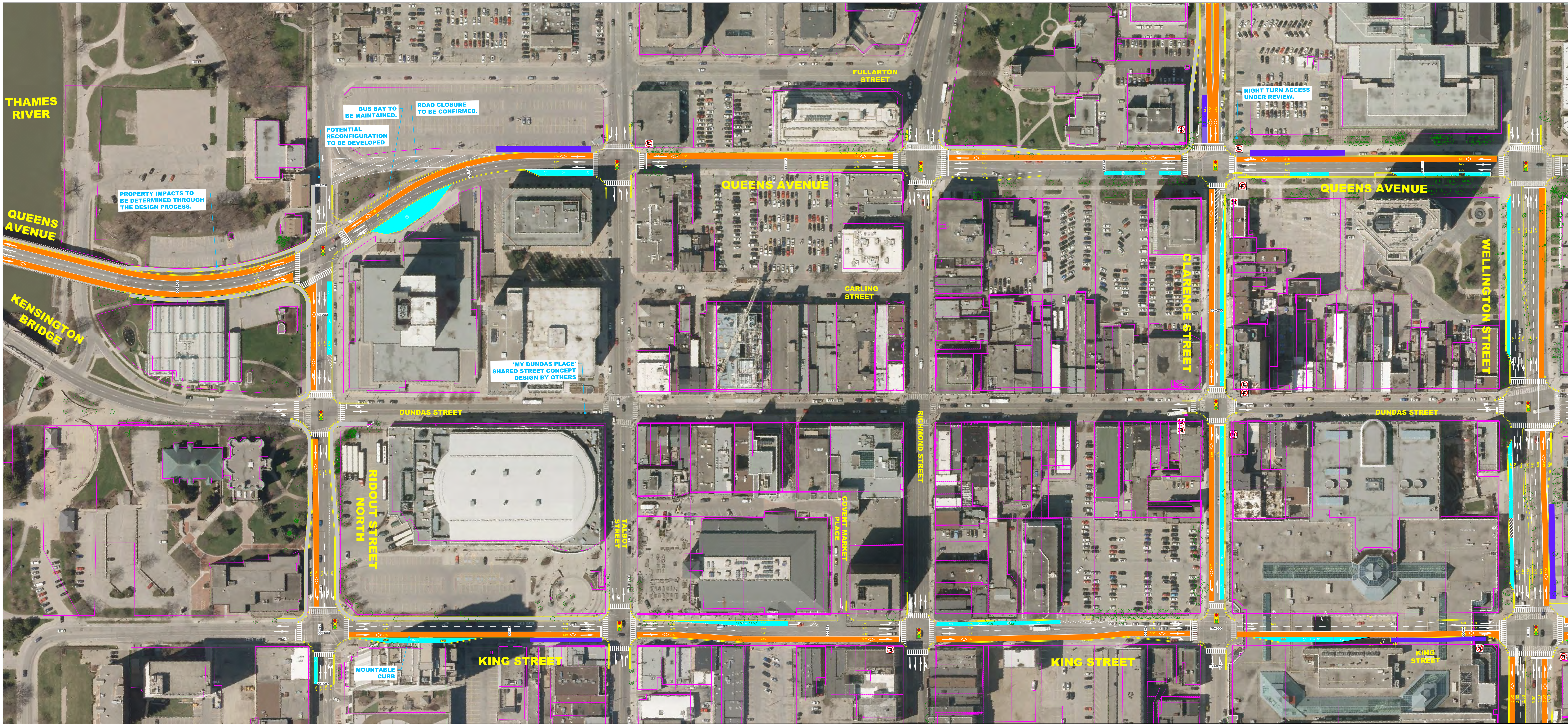
STATION/RAMP		BIKE LANE/ MULTI-USE PATH		EX RIGHT OF WAY		EX TREES	
RAPIDWAY		PARKING LANE		POTENTIAL ISLAND LANDSCAPING		RETAINING WALL GREATER THAN 1.2m	
TRAFFIC LANES		CURB, SIDEWALK		TOE OF SLOPE REQUIREMENT		RETAINING WALL LESS THAN 1.2m	
		CROSS WALK				NOISE WALL	



CONCEPTUAL DESIGN	PROJECT No. 37176
LONDON'S BUS RAPID TRANSIT SYSTEM	SHEET No. NE04
	PLAN FILE No. 37176



Downtown Couplet



LEGEND:

STATION/RAMP		CROSS WALK		PROPERTY REQUIREMENTS EX RETAINING WALL		BIKE LANE/MULTI-USE PATH	
RAPIDWAY		POTENTIAL ISLAND LANDSCAPING		EX TREES		PARKING LANE	
CURB, SIDEWALK		EX RIGHT OF WAY				LOADING ZONE	



Riverside Drive, looking east across Thames River to Downtown



Rendering may not represent final design.

King Street at Talbot Street, looking east



King Street and Wellington Street, looking northwest

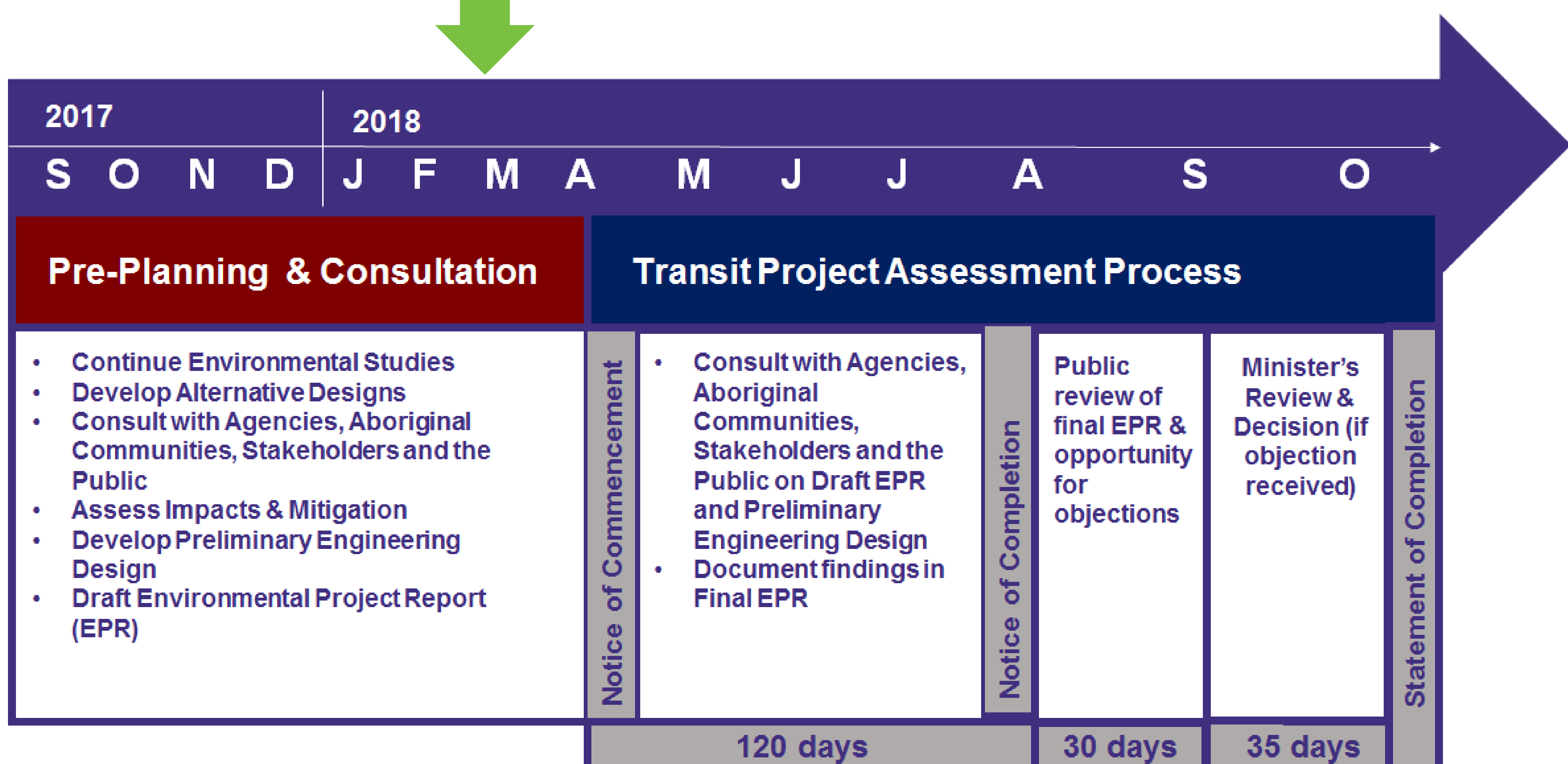
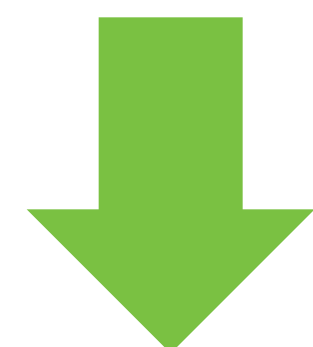


Rendering may not represent final design.

Next steps in the process

- Compile feedback from public engagement events.
- Present the draft Environmental Project Report to Council.
- Initiate the 6-month Transit Project Assessment Process (TPAP) with additional consultation and opportunities for your input.
- Publish the final Environmental Project Report and start the 30-day public review period. Written objections on matters of Provincial importance can be made to the Minister of Environment and Climate Change during this period.

We Are Here



King Street and Wellington Street, looking northwest



Rendering may not represent final design.

Richmond Street and Grosvenor Street, looking north



Rendering may not represent final design.

Oxford Street West at Wonderland Road, looking west



Rendering may not represent final design.

King Street at Talbot Street, looking east



Rendering may not represent final design.

Wellington Road south of Bradley Avenue, looking south



Rendering may not represent final design.

Wellington Road at Commissioners Road, looking north



Rendering may not represent final design.

Riverside Drive, looking east across Thames River to Downtown



Rendering may not represent final design.

2ND REPORT OF THE
RAPID TRANSIT IMPLEMENTATION WORKING GROUP

Meeting held on February 8, 2018, commencing at 4:30 PM, in Council Chambers, Second Floor, London City Hall.

PRESENT: S. Rooth (Chair), Mayor M. Brown, Councillors J. Helmer, P. Hubert, T. Park, P. Squire, H.L. Usher and M. van Holst; D. Sheppard and E. Southern, and B. Westlake-Power (Acting Secretary).

ABSENT: Councillors P. Hubert and H. Usher.

ALSO PRESENT: A. Dunbar, H. Beecroft, K. Burns, B. Hollingworth (IBI), C. James, A. Kemick, K. Paleczny, J. Ramsay, A. Rosebrugh, K. Scherr, S. Spring and E. Soldo.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. SCHEDULED ITEMS

2. Brief Project Status presentation covering RTIO Team changes, PIC#5 Outcomes, and TPAP Next Steps.

That it BE NOTED that the Rapid Transit Implementation Working Group received a presentation from J. Ramsay, Project Director Rapid Transit, as included in the February 8, 2018 agenda.

III. CONSENT ITEMS

3. 1st Report of the Rapid Transit Implementation Working Group

That it BE NOTED that the 1st Report of the Rapid Transit Implementation Working Group, from its meeting held on December 6, 2017, was received.

4. Municipal Council resolution from its meeting held on January 16, 2018 - 1st Report of the Rapid Transit Implementation Working Group

That it BE NOTED that a Municipal Council resolution, from its meeting held on January 16, 2018, with respect to the 1st Report of the Rapid Transit Implementation Working Group, was received.

IV. ITEMS FOR DISCUSSION

5. Brief to Rapid Transit Implementation Working Group - B. Brock

That the communication dated January 25, 2018, from B. Brock, with respect to a brief to the Rapid Transit Implementation Working Group on various matters, BE RECEIVED.

6. Expert Peer Review Panel

That it BE NOTED that the Rapid Transit Implementation Working Group (RTIWG) held a general rapid transit implementation discussion with the Peer Review Panel consisting of: P. May, Vice-President, Project Implementation, York Region Rapid Transit Corporation, W. Taveira, Project Manager, York Region, J. Gonsalves, BRT National Practice Leader, Parsons Brinckerhoff and B. Radstrom, Manager of Service Development, Winnipeg Transit; it being noted that the ~~attached~~ backgrounder and presentation, was provided to the RTIWG members with respect to this matter.

7. Pilot High Occupancy Vehicle Lanes

That it BE NOTED that the proposal submitted by Councillor M. van Holst, with respect to a pilot project for high occupancy vehicle lanes, as a test of bus rapid transit traffic modelling, was received.

8. Proactive Planting of Replacement Trees

That it BE NOTED that the proposal submitted by Councillor M. van Holst, with respect to proactively planting replacement trees for use along the rapid transit route, was received.

V. DEFERRED MATTERS/ADDITIONAL BUSINESS

9. Resignation of Councillor Armstrong

That it BE NOTED that a Municipal Council Resolution, from its meeting held on January 30, 2018, regarding Councillor Armstrong's resignation from the Rapid Transit Implementation Working Group, was received.

VI. ADJOURNMENT

The meeting adjourned at 6:35 PM.

NEXT MEETING DATE: April 12, 2018.