

# Welcome

## Stage 2 ION: Light Rail Transit (LRT) from Kitchener to Cambridge Public Consultation Centre (PCC) 4b

Please Sign-in

Preston Memorial Auditorium March 20, 2019 – 4:00 to 8:00 pm



## What is the purpose of today?

- Hear your feedback
- Provide an overview of comments received at PCC 4 related to the North Cambridge (Preston) area
- Explain how the route refinements were evaluated in North Cambridge area
- Present the Project Team Preferred Refinement to the Preferred Route

**The study has not yet advanced to the stage where individual property impacts are known.**

**Further details will be available at a future public meeting in 2019.**

## How will my input be used?

Your comments are important and will be used to:

- Identify issues that need further consideration during the preliminary design stage
- Verify study area conditions and as input to reduce impacts

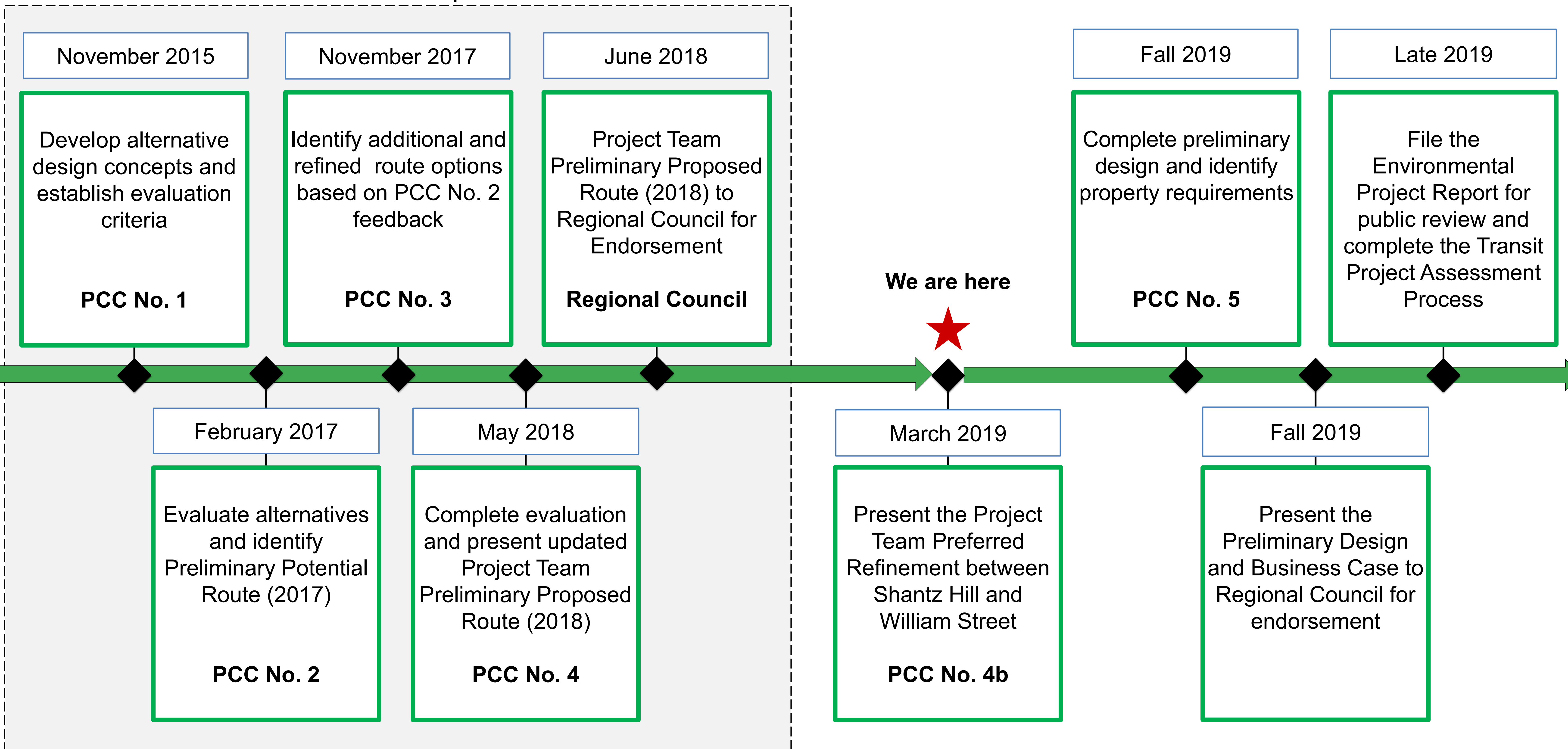
Please provide feedback by:

- Speaking with a project team member
- Submitting your comments at this PCC
- Sending an email to [ION@regionofwaterloo.ca](mailto:ION@regionofwaterloo.ca)
- Completing our online survey at [engagewr.ca/stage2ION](http://engagewr.ca/stage2ION)

Feedback must be received by **April 3, 2019**

# Study Timeline

## Activities Completed



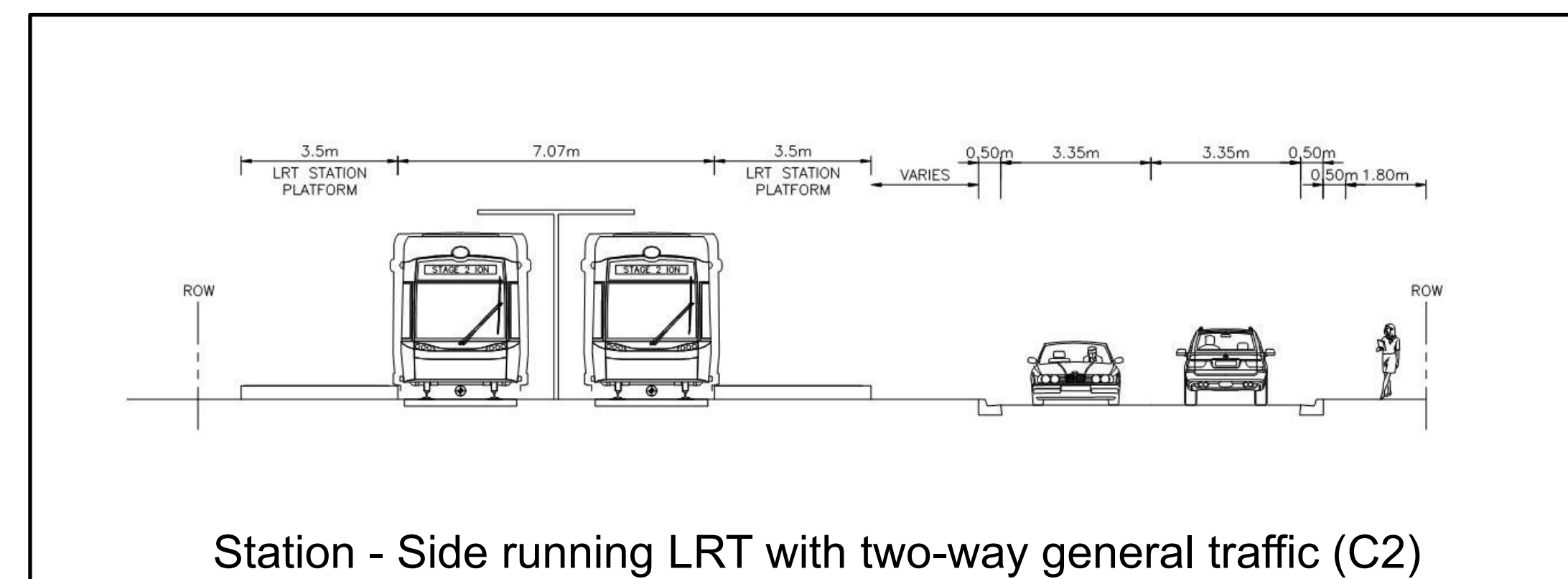
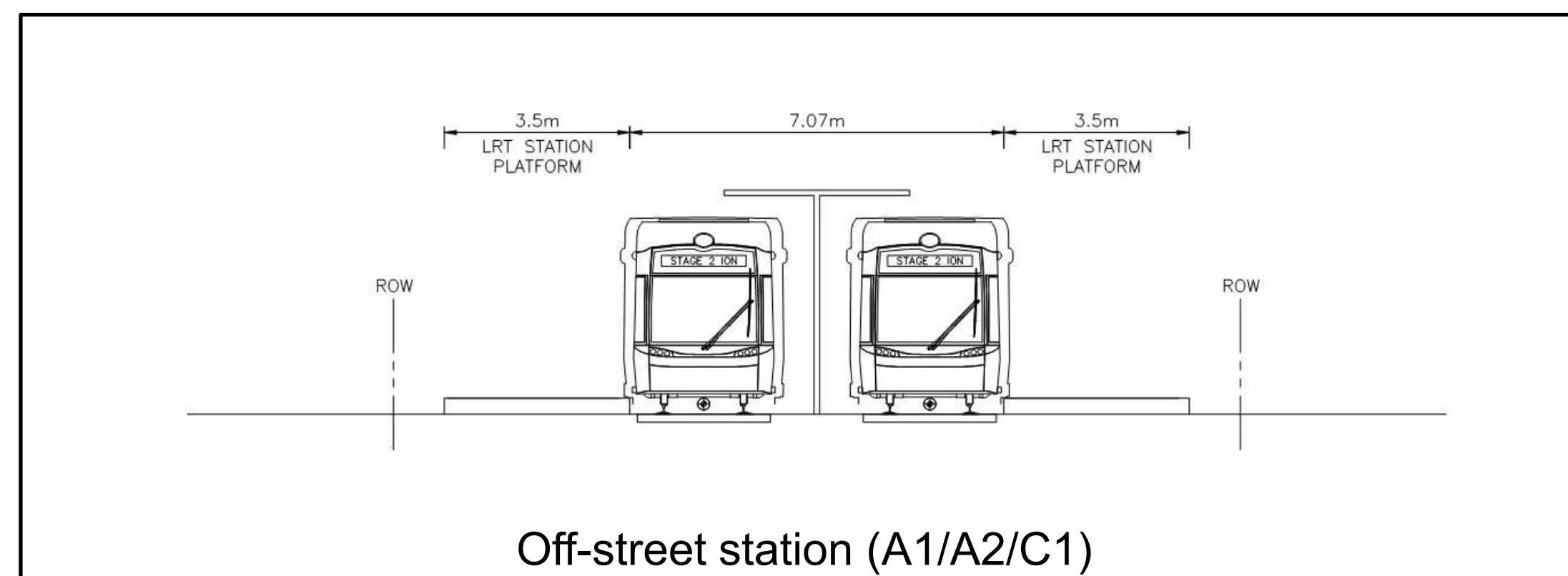
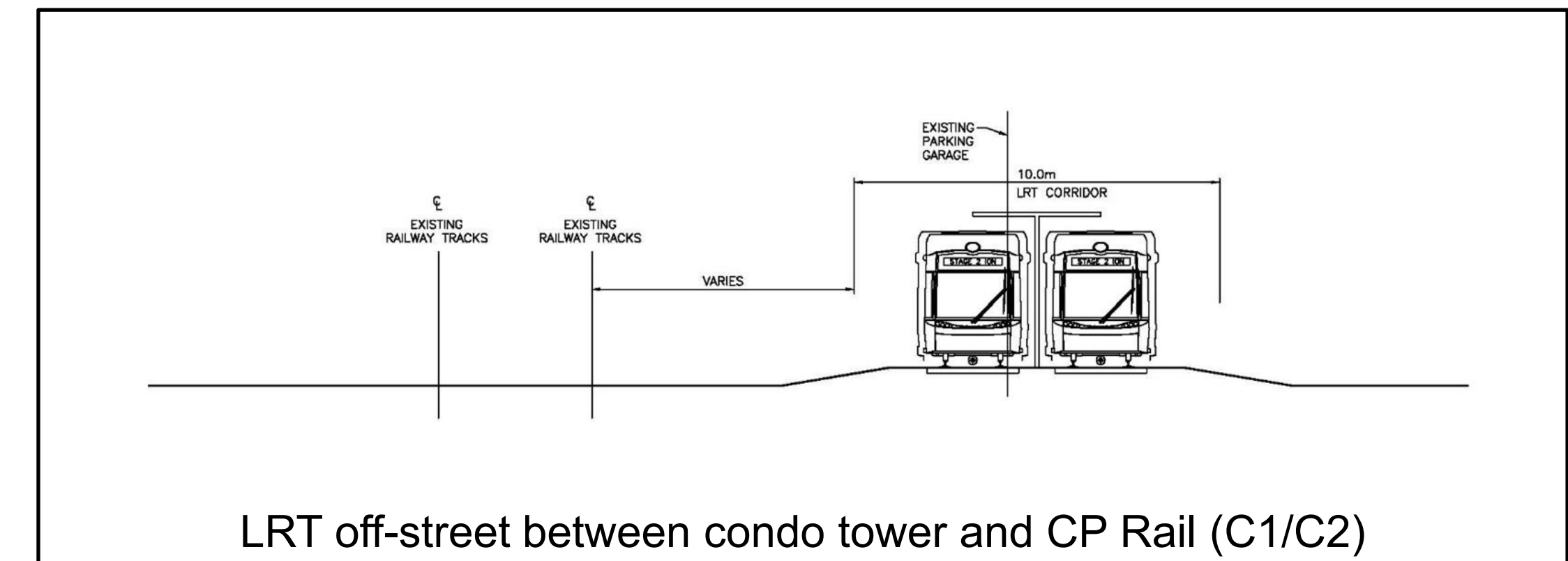
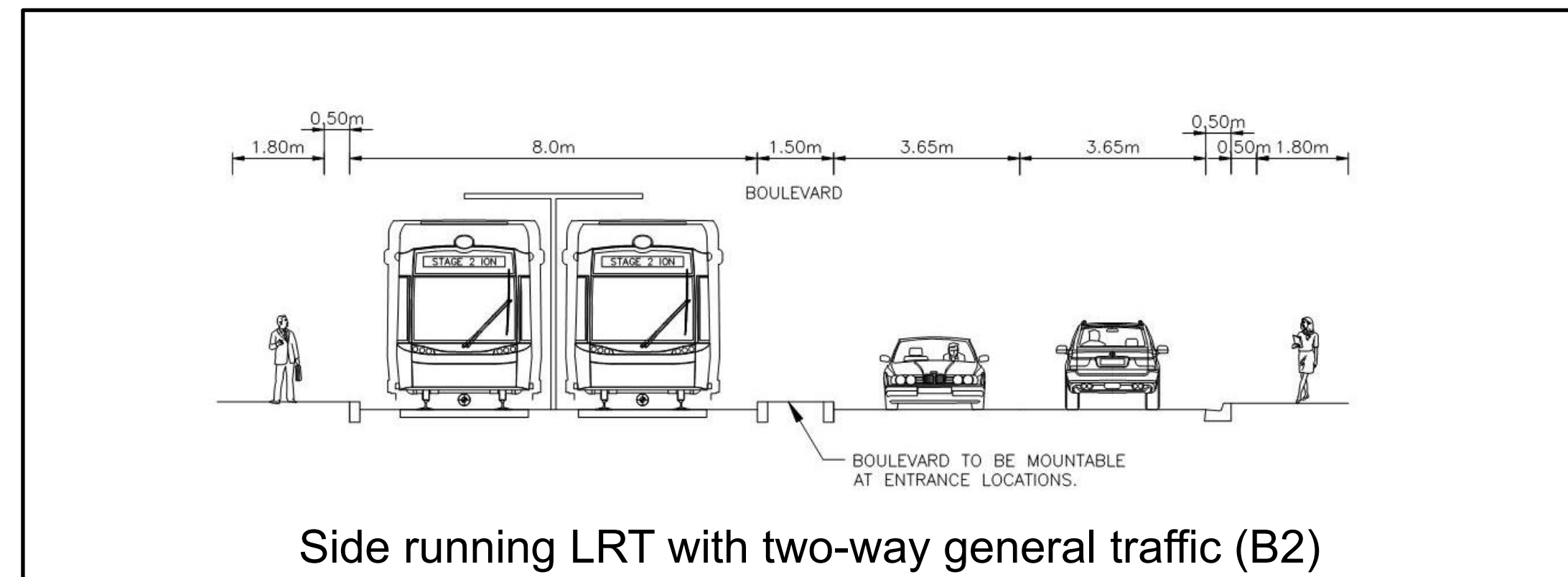
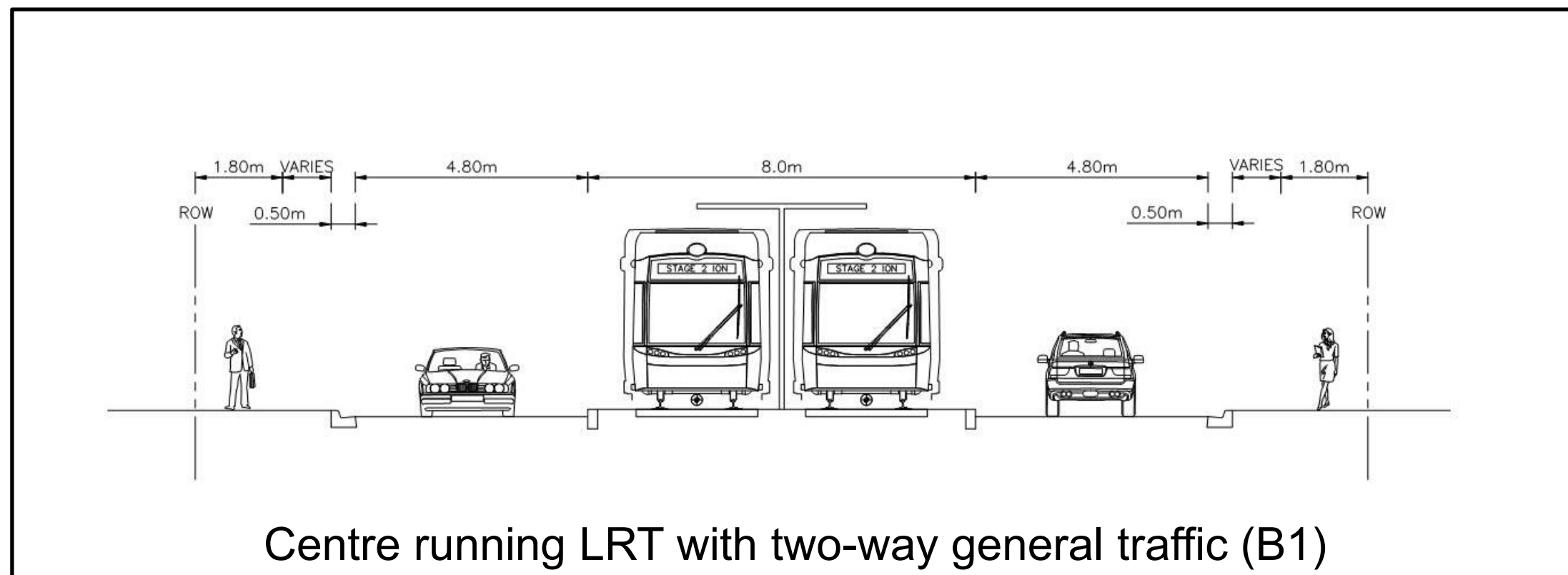
# What was used to compare refinements?

A consistent set of evaluation criteria have been used to evaluate and compare route refinements. These criteria provide a structure of measures to allow direct comparison of refinements. For the evaluation of the route refinements, some of the criteria were not applicable to the analysis.

The following table shows the criteria used for the evaluation.

| CATEGORY                    | CRITERIA  |
|-----------------------------|---|
| Transportation              | <ul style="list-style-type: none"><li>• Impact on traffic</li></ul>   |
| Social/cultural environment | <ul style="list-style-type: none"><li>• Properties impacted</li><li>• Cultural heritage impacts</li></ul>                     |
| Natural environment         | <ul style="list-style-type: none"><li>• Impact on floodplains</li></ul>   |
| Economic environment        | <ul style="list-style-type: none"><li>• Opportunity for intensification and revitalization</li><li>• Cost (capital)</li></ul> |

# What would light rail look like at street level?



Final cross-sections and dimensions will be confirmed during the design process.  
 Not all roadway elements are shown here (e.g. utilities, landscaping, bus shelters).

# Route Refinements



For previous route alternatives in this area please refer to Public Consultation Centre 3 materials and Public Consultation Centre 4 materials.

The B1 (centre-running) alignment requires an overpass for both the LRT and Eagle Street at the CP Rail crossing, B2 (side-running) only requires an overpass for LRT

C1 and C2 require major reconstruction of the parking garage and are in close proximity to lower floor units at Rivers Edge apartments

The B2 (side-running) alignment along Eagle Street requires relocation of the access to the Rivers Edge Apartment complex

C1 and C2 cross King Street at-grade with bells, lights and gates, requiring traffic to stop when LRT trains cross

All A and B refinements cross King/Eagle at the intersection, during the signal phase

Both A1 and A2 station refinements can be paired with either centre (B1) or side (B2) running refinements

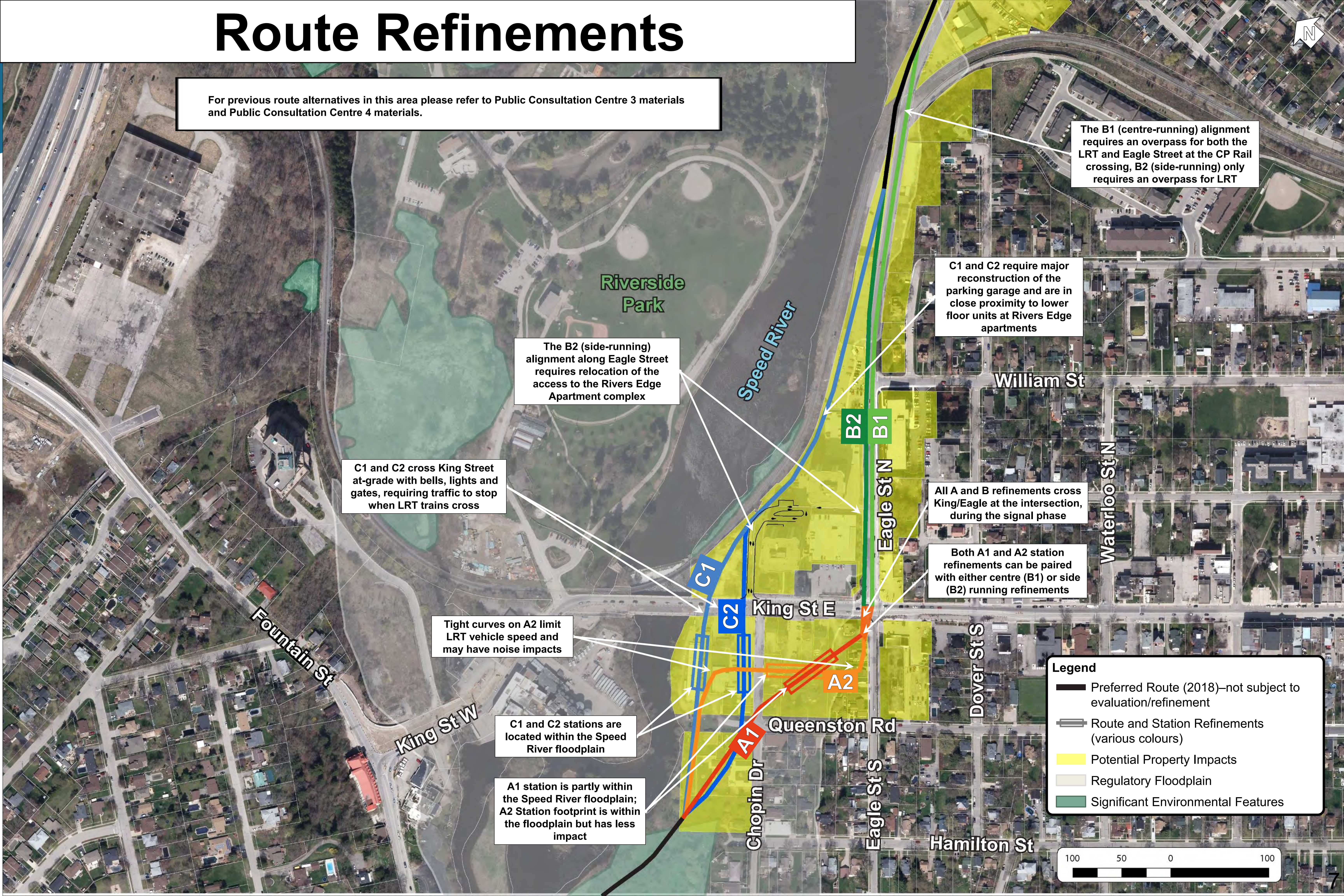
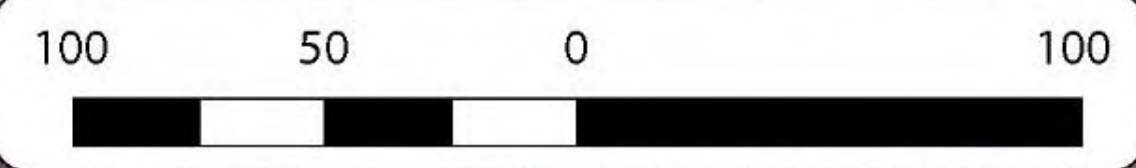
Tight curves on A2 limit LRT vehicle speed and may have noise impacts

C1 and C2 stations are located within the Speed River floodplain

A1 station is partly within the Speed River floodplain; A2 Station footprint is within the floodplain but has less impact

**Legend**

- Preferred Route (2018)—not subject to evaluation/refinement
- Route and Station Refinements (various colours)
- Potential Property Impacts
- Regulatory Floodplain
- Significant Environmental Features



# Evaluation Results – Refinements

Is a diagonal station (A1) or a parallel station (A2) preferred in the “Queenston block”?



**A1: Diagonal station in Queenston block**

**PREFERRED**

- Better pedestrian and cyclist connection to King Street/Eagle Street
- Better track geometry – less track noise on corners
- Less expensive to build
- Higher number of properties impacted and more full buyouts
- Higher number of cultural heritage resources impacted

**A2: Parallel station in Queenston block**

**NOT PREFERRED**

- Fewer residential properties directly impacted
- Fewer cultural heritage resources impacted overall
- More expensive to build
- Tighter curves resulting in more track noise

Is centre-running (B1) or side-running (B2) preferred on Eagle Street?



**B1: Centre-running on Eagle Street**

**NOT PREFERRED**

- Less traffic impacts
- Better property access
- More properties impacted
- More expensive to build
- More complicated bridge over CP/Eagle St

**B2: Side-running on Eagle Street**

**PREFERRED**

- Fewer properties impacted
- Less expensive to build
- Simpler bridge over just CP
- More traffic impacts
- Greater impact to property accesses

# Evaluation Results – Refinements

Which is preferred: a station along the Speed River (C1) or along Chopin Drive (C2)?



**C1: Station beside the Speed River**

**NOT PREFERRED**

- Less property impacts
- Less accessible to pedestrians and cyclists
- Further into the floodplain
- More impacts to natural habitat
- Crossing of King Street impacts bridge

**C2: Station beside Chopin Drive**

**PREFERRED**

- More accessible to pedestrians and cyclists
- Avoids King Street bridge
- More property impacts
- Greater impact to property accesses

Is Eagle Street (A1+B2) or around the apartment towers (C2) preferred?



**A1+B2: Diagonal station in Queenston block, side running on Eagle Street**

**PREFERRED**

- More land use benefits (redevelopment)
- Fewer engineering and construction challenges
- Less overall impacts to buildings
- More properties impacted
- More cultural heritage resources impacted
- More impact to traffic operations and property accesses

**C2: Station beside Speed River, track between apartment towers and Speed River**

**NOT PREFERRED**

- Fewer residential properties impacted, fewer full buy-outs
- Fewer cultural heritage resources impacted
- Less impact to traffic and property accesses
- Less opportunity for revitalization and intensification
- More overall impacts to buildings
- More difficult to construct, (won't fit between the CP Rail property and parking garage, would need to be substantially or completely re-built)

# Project Team Preferred Refinement to the Preferred Route

At this stage the project team cannot confirm the extent to which properties in this area will be impacted. This information will be available at PCC No. 5 when the Preliminary Design and identification of the associated property requirements are completed.

Sidewalks continue to be provided on both sides of Eagle Street

The access to Rivers Edge apartments is relocated to King Street

**Evaluation Area**

Preferred station orientation A1 is more direct and provides better pedestrian and cyclist connections than other refinements

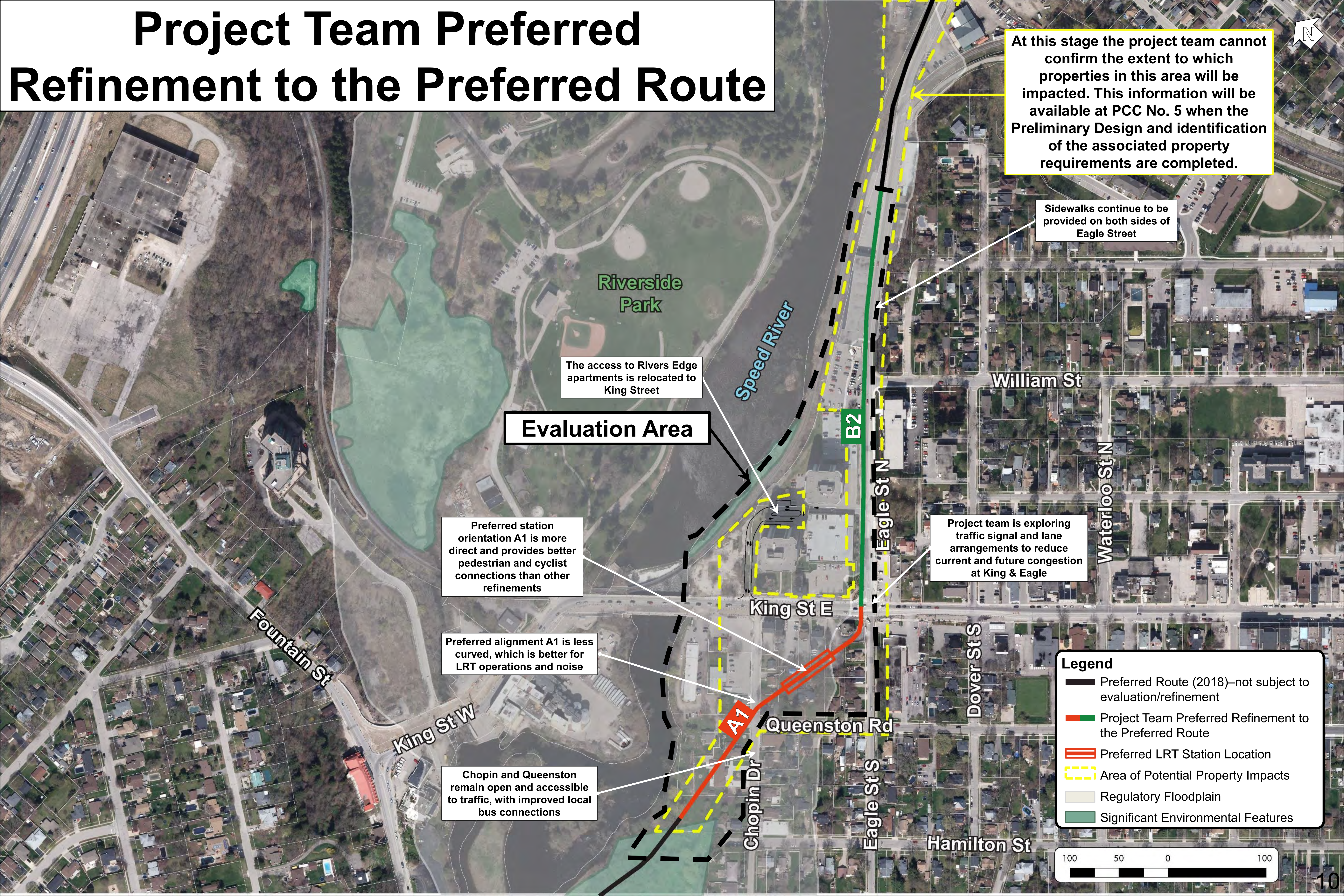
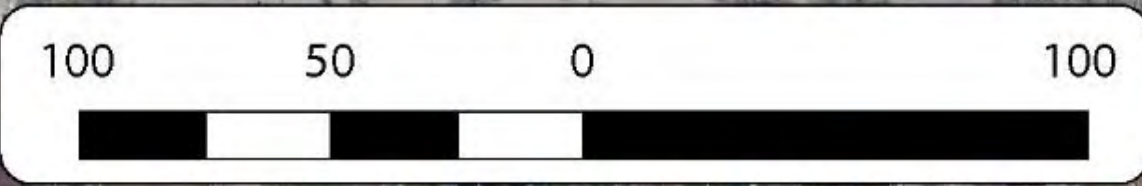
Project team is exploring traffic signal and lane arrangements to reduce current and future congestion at King & Eagle

Preferred alignment A1 is less curved, which is better for LRT operations and noise

Chopin and Queenston remain open and accessible to traffic, with improved local bus connections

**Legend**

- Preferred Route (2018)—not subject to evaluation/refinement
- Project Team Preferred Refinement to the Preferred Route
- Preferred LRT Station Location
- Area of Potential Property Impacts
- Regulatory Floodplain
- Significant Environmental Features



## What happens next?

- Project Team will review all public feedback and incorporate any new information
- Comment sheets and the online survey can be submitted until April 3, 2019
- Present the Project Team Preferred Refinement to the Preferred Route to Planning and Works Committee for consideration

Pending Council endorsement of the preferred refinement:

- Complete preliminary design and identification of the associated property requirements
- Prepare the business case for the project
- Finalize station locations/names

## Future steps

- Host PCC No. 5 to present the preliminary design and associated property requirements in Fall 2019
- Determine location of maintenance and storage facility
- Present preliminary design (including business case) to Regional Council for endorsement and final authority to initiate the formal Transit Project Assessment Process (Late 2019)
- Address any comments submitted during the public review period or Minister of Environment, Conservation and Parks review period
- File the Environmental Project Report for public review and complete the Transit Project Assessment process
- Submit Provincial and Federal funding applications

# Thank You for Attending

Your opinion matters!

Please provide feedback by **April 3, 2019**

**E-mail:** [ION@regionofwaterloo.ca](mailto:ION@regionofwaterloo.ca)

**Website:** [stage2ION.ca](http://stage2ION.ca)

**Survey:** [engagewr.ca/stage2ION](http://engagewr.ca/stage2ION)

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