Welcome

Hewitt’s Secondary Plan
Class Environmental Assessment Study

Public Information Centre
September 22, 2016

Members of the Project Team are available to discuss and answer any questions you may have
Hewitt’s Secondary Plan

- The Study Area encompasses the Hewitt’s Secondary Plan Study Area, including the following:
  - Lockhart Road from Huronia Road to Collector 11
  - Mapleview Drive from Huronia Road to 200m west of 20th Sideroad
  - Big Bay Point Road from 900m east of Prince Edward Way to 200m west of 20th Sideroad
  - Yonge Street from Lockhart Road to Mapleview Drive
  - Railway Crossing at Lockhart Drive
  - Railway Crossing at Mapleview Drive East
  - Conceptual design for trunk watermain on Mapleview Drive East and Big Bay Point Road, as well as sanitary sewer on Mapleview Drive East
Problem and Opportunity

- The City of Barrie population is expected to reach 210,000 and employment for 101,000 people by 2031, making it one of the fastest growing cities in Canada.
- To support this growth, the City of Barrie annexed land from the Town of Innisfil, expanding the City limits to the south and east.
- The anticipated population and employment increase will create additional demand on the City’s transportation network that cannot be accommodated by the existing infrastructure.
- To align with pertinent policies, there is an opportunity to improve the existing transportation network and incorporate multi-modal transportation opportunities for existing and future populations.
Ongoing Studies

The following studies were conducted to identify constraints and opportunities to improvements within the Study Area:

- Traffic and Transportation
- Drainage & Stormwater Management
- Noise Impact
- Natural Environment – Terrestrial & Aquatic
- Cultural Heritage Assessment
- Geotechnical
- Railway Crossing Assessment
- Geomorphology
- Structural Assessment
- Stage 1 and 2 Archaeological Assessment

The City of Barrie
Natural Environment

**Terrestrial:**

- Mapleview Drive East: majority of corridor consists of residential (51%) and agricultural (25%) communities
- Lockhart Road: majority of corridor consists of agricultural (49%) and residential (25%) communities
- Yonge Street: majority of corridor consists of agricultural (64%) and residential (30%) communities
- Big Bay Point Road: majority of corridor consists of cultural woodland (28%), residential (25%) and hedgerow (18%) communities
Natural Environment

Aquatic Environment:
• There are three documented sensitive species within the Study Area including: Brook Trout, Darter Species and Sculpin Species
• One location within Lover’s Creek and two locations within Hewitt’s Creek have active spawning Brook Trout

Wildlife:
• Only wildlife observed were Squirrels
• Two amphibians were documented: Spring Peeper and Green Frog
• 28 different species of breeding birds were visually or vocally observed
  • Most are common to southern Ontario
  • Four species that have regional conservation status include: Eastern Wood Pewee, Eastern Kingbird, Savannah Sparrow and Hooded Warbler
  • Eastern Wood Pewee is also listed as Special Concern
Natural Environment

Reptiles:
- Snapping Turtles have been documented within St. Paul’s Swamp
- Eastern Garter Snake was identified along Lockhart Road

Species-at-Risk (SAR):
- A total of three SAR were identified by the Ministry of Natural Resources and Forestry, including:
  - Butternut (Endangered). No Butternut documented during field investigations
  - Snapping Turtle (Special Concern). No designated surveys were required, and no evidence observed along the roadway corridors
  - Hine’s Emerald Dragonfly (Endangered). No targeted surveys were required and no observations were made, however habitat is present within the Study Area
  - Eastern Wood-Pewee (Special Concern). Suitable habitat exists within the Study Area, and the species was heard during breeding bird surveys
Natural Environment

Natural Heritage Features:

• Two Provincially Significant Wetlands are located within the Study Area including:
  • St. Paul’s Swamp (along Lockhart Road)
  • Lover’s Creek Swamp (along Mapleview Dr East)

• There are 7 watercourse crossings within the Study Area - known to provide habitat for Brook Trout and Mottled Sculpin, both of which are coldwater fish – typically associated with springs and/or groundwater upwellings
Natural Environment

Woodlands:

• Woodlands include treed areas, woodlots or forested areas
• Located along the north and south sides of Big Bay Point Road, Mapleview Drive East and Lockhart Road

Significant Valleylands:

• Two are located along the south side of Lockhart Road associated with Hewitt’s Creek and Hewitt’s Creek tributary
• One is part of Lover’s Creek tributary on the north side of Lockhart Road

Wildlife Movement Corridors:

• Habitats that link two or more wildlife habitats that are critical for the maintenance of a population of a particular species or group of species
• Deer wintering habitat is located along Mapleview Drive East
• Amphibians were documented within wooded areas in proximity to those inundated with water during certain times of the year
Geomorphology

Three crossings of Lover’s Creek and four crossings of Hewitt’s Creek were assessed for channel characterization, stream and meander belt assessment.
## Geomorphology

<table>
<thead>
<tr>
<th>Crossing</th>
<th>Channel Characterization</th>
<th>Creek Stability</th>
<th>Impact of Urbanization on Watercourse</th>
<th>Final Meander Belt Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material. Some sections have moderate to high width to depth, and moderate to high sinuosity. Realignment proposed as part of previous study to facilitate construction of new bridge.</td>
<td>Transitional/Stressed</td>
<td>Fair</td>
<td>30m</td>
</tr>
<tr>
<td>2</td>
<td>Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.</td>
<td>Transitional/Stressed</td>
<td>Good</td>
<td>29m</td>
</tr>
<tr>
<td>3</td>
<td>Channel regularly cleaned as part of road drainage or farm drainage. Banks steep and high which constrain channel and restrict meandering. Not sinuous but well vegetated with grasses. Typical sands and small gravels.</td>
<td>Transitional/Stressed</td>
<td>Poor</td>
<td>21m</td>
</tr>
<tr>
<td>4</td>
<td>Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.</td>
<td>Transitional/Stressed</td>
<td>Good</td>
<td>39m</td>
</tr>
<tr>
<td>5</td>
<td>Single-thread channel, moderately entrenched with moderate sinuosity and gravel channel material.</td>
<td>Transitional/Stressed</td>
<td>Poor</td>
<td>18m</td>
</tr>
<tr>
<td>6</td>
<td>Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material.</td>
<td>Transitional/Stressed</td>
<td>Good</td>
<td>52m</td>
</tr>
<tr>
<td>7</td>
<td>Single-thread channel, slightly entrenched with very low width-depth ratio; high sinuosity, gravel channel material. Some sections have moderate to high width to depth, and moderate to high sinuosity.</td>
<td>Transitional/Stressed</td>
<td>Fair</td>
<td>36m</td>
</tr>
</tbody>
</table>
Archaeology

• There are 17 previously registered archaeological sites within one kilometre of the Study Area, four of which are within 50m

• The McDonald site is located in the Study Area
  • Archaeological resource of high heritage value
  • May provide significant insight into pre-contact Indigenous occupation in Study Area
  • Stage 3 Archaeological Assessment required to fully identify character, extent and significance of deposits

• A historical cemetery is located adjacent to the Study Area

• The majority of the Study Area has been previously disturbed by residential developments, recent grading and a gravel pit (impacted by deep and extensive land disturbance)

• Remaining area is subject to a Stage 2 Archaeological Assessment to confirm archaeological potential
Cultural Heritage

- There are 32 Cultural Heritage Resources (CHR) within the Study Area, including:
  - Nine farmscapes
  - Ten residences
  - Four remnant farmscapes
  - One historic settlement area
  - One church with cemetery
  - One former school
  - One watercourse
  - Four roadscapes; and
  - One rail line

- Two Cultural Heritage Resources were formerly listed by the Town of Innisfil, however were not transferred to the City of Barrie during the annexation of the land.

- Proposed improvements should be planned to avoid impacts on Cultural Heritage Resources.
Noise

- The maximum noise level for any Outdoor Living Area (OLA) is 55 dBA
- Six OLA’s were selected to determine existing and future noise levels at a height of 1.5m, 3m from the ‘most exposed side’
- Five of the OLA’s existing condition exceed the limits identified by the Ministry of Environment and Climate Change (MOECC)
- The roadway expansions are predicted to produce marginal increase in current noise levels
- Noise levels currently exceed the limits and will continue without mitigation following construction
- City of Barrie to consider reducing noise levels to MOECC limits through noise controls
Seven culverts were assessed for their structural integrity. The following provides details of the culverts and recommendations for improvements:

<table>
<thead>
<tr>
<th>Crossing</th>
<th>Type</th>
<th>Span</th>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concrete, rigid frame</td>
<td>6.3m</td>
<td>Fair</td>
<td>Rehabilitate and extend</td>
</tr>
<tr>
<td>2</td>
<td>Concrete, rigid frame</td>
<td>6.1m</td>
<td>Fair</td>
<td>Rehabilitate and extend</td>
</tr>
<tr>
<td>3</td>
<td>CSP, round</td>
<td>0.9m</td>
<td>Fair</td>
<td>Replace</td>
</tr>
<tr>
<td>4</td>
<td>Concrete, rigid frame</td>
<td>4.3m</td>
<td>Good</td>
<td>Repair and extend</td>
</tr>
<tr>
<td>5</td>
<td>CSP, round</td>
<td>0.9m</td>
<td>Good</td>
<td>Extend</td>
</tr>
<tr>
<td>6</td>
<td>HDPE, round</td>
<td>0.9m</td>
<td>Good</td>
<td>Extend</td>
</tr>
<tr>
<td>7</td>
<td>Steel plate corrugated round pipe</td>
<td>3.6m</td>
<td>Fair</td>
<td>Replace</td>
</tr>
</tbody>
</table>
Geotechnical

• A Geotechnical Assessment was completed which included the following findings and recommendations:

• **Groundwater:**
  • Found to vary between 1.6m and 4.7m below ground surface
  • Higher groundwater levels were typically at watercourse crossings
  • Seasonal fluctuations are anticipated
  • Dewatering may be required to lower the groundwater level in areas of deep excavation

• **Structure Foundations:**
  • For Lockhart Road Grade Separation, footings should be at least 2.5m below existing surface if overpass recommended design concept
  • For Mapleview Road, footings should be 4.0 to 5.0m below existing ground if overpass recommended design concept
Geotechnical

- **Earth Embankments:**
  - Free draining granular fill to be used (Granular A or Granular B Type II)
  - Longitudinal drains or weep holes should be provided to ensure positive drainage behind retaining walls
  - Consideration should be given to preloading the base surface to reduce settlement

- **Pavement Design:**
  - HL1 Surface Asphalt: 40mm
  - HL4 or HL8 Binder Asphalt: 100mm
  - Granular A: 150mm
  - Granular B: 500mm to 600mm
Drainage/ SWM
Drainage/ SWM

- Drainage and Stormwater Management (SWM) designs were developed and evaluated for:
  - Existing drainage features within the Study Area:
    - Main storm sewer network along Mapleview Drive East
    - Conveyance ditching along Lockhart Road, Yonge Street, Big Bay Point Road and portions of Mapleview Drive East
    - Four (4) major culvert watercourse crossings along Mapleview Drive and Lockhart Road at Lover’s Creek and Hewitt’s Creek
  
  - Existing and future proposed development drainage design can be divided into:
    - Right-of-Way (ROW) drainage catchments looking at drainage conveyance and SWM opportunities
    - External drainage catchments modeled on an approved hydrologic/hydraulic modeling basis for major culvert crossings

- SWM Water Quantity and Quality control considered where feasible for post-development ROW conditions.
Drainage/SWM - LID

- Stormwater Management in the form of linear Low Impact Development (LID) and centralized peak flow quantity control facilities.

- LID concepts and target treatment volumes developed in consideration of the Lake Simcoe and Region Conservation Authority 2016 Guidelines (LSRCA, 2016).

- Recommended options for linear LID in the form of Underground Detention Chamber or Bioretention Facilities to treat required runoff where feasible.
Constraints: Mapleview Drive East

Figure 1b Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key
- Railroad
- Wetland
- Waterbody
- Deer Wintering Area
- Archaeological Potential
- Culture Heritage Landscape
- Built Heritage Resources
- Community Boundary (ELC)

Study Limit - 25 Metre Buffer

Wooded Area

Watercourse

*The information displayed is derived from sources with varying accuracies and all boundaries should therefore be considered approximate.
Constraints: Mapleview Drive East (2)

Figure 1c Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key
- Railroad
- Wetland
- Waterbody
- Community Boundary (ELC)
- Archaeological Potential
- Wooded Area
- Watercourse
- Culture Heritage Landscape
- Built Heritage Resources

Study Limit- 25 Metre Buffer

*The information displayed is derived from sources with varying accuracies and all boundaries should therefore be considered approximate.*

Communities along the road:
- Agricultural (LMA)
- Hedgerow (HR)
- Residential (CRY)
- Greenlands (CGL-1)
- Dry-Moist Old Field Meadow (CUM-1)
- Mineral Cultural Meadow (CUM)
- Mineral Cultural Woodland (CWW)
- Freshwater White Cedar Coniferous Forest Type (FCC-1)
- White Cedar – Hardwood Mineral Mixed Swamp Type (SMST-1)
- Dry-Fresh Sugar Maple Deciduous Forest Type (DFD-1)
- Sumac Cultural Thicket (CUT-1)
- Mineral Cultural Thicket (CUT)
- Mineral Cultural Savannah (CUS)
- Reed Canary Grass Mineral Meadow Marsh Type (MAM-2)
- Cattail Mineral Shallow Marsh Type (MAS-2)
Constraints: Lockhart Road

Figure 1d Hewitts Infrastructure Improvements Class Environmental Assessment: Existing Natural, Cultural and Archaeology

Key

- Railroad
- Wetland
- Community Boundary (ELC)
- Waterbody
- Archaeological Potential
- Wooded Area
- Watercourse
- Study Limit - 25 Metre Buffer
- Culture Heritage Landscape

*The information displayed is derived from sources with varying accuracies and all boundaries should therefore be considered approximate.

Coordinate System: NAD 1983 UTM Zone 17N

Communities along the road:
- Agricultural (OAG)
- Hedgerow (HR)
- Residential (CVR)
- Dry-Moist Old Field Meadow (CUM1-1)
- White Cedar – Hardwood
- Mineral Mixed Swamp Type (SWM1-1)
- Dry-Fresh Sugar Maple
- Deciduous Forest Type (FODS-1)
- Mixed Forest (FM)
- Mineral Cultural Thicket (CUTT)
- Coniferous Plantation Type (CUP3)
- Naturalized Coniferous Hedgerow Ecosite (FOCM5)
- Reed Canary Grass Mineral Meadow Marsh Type (MAM2-2)
- Mineral Shallow Marsh Ecosite (MAS2)
- Coniferous Swamp (SWC)
- Common Reed Grassland Mineral Meadow Marsh Type (MAMM1-12)
Constraints: Lockhart Road (2)
Constraints: Big Bay Point Road
Constraints: Yonge Street
Traffic Analysis – Existing 2016 Conditions

Midblock Operations and Symbols Legend:

- Operating at an acceptable Level of Service and within capacity limits. Minimal to no congestion.  
- Operating at an acceptable Level of Service and within capacity limits. Moderate levels of congestion.  
- Operating at an unacceptable Level of Service at near capacity limits. Heavy congestion to be expected.

20th Sideroad
Big Bay Point Rd
Prince William Way
The Queenway
Yonge St
Huronia Rd
Stenden Ln/Country Ln
Madeline Dr
Dean Ave
Royal Jubilee Drive
Prince William Way
Mapleview Dr
Saunders Rd
Lockhart Rd

Barrie South GO Station
Traffic Analysis – 2016 Conditions (With Improvements)

Midblock Operations and Symbols Legend:

- Operating at an acceptable Level of Service and within capacity limits. Minimal to no congestion.
- Operating at an acceptable Level of Service and within capacity limits. Moderate levels of congestion.
- Operating at an unacceptable Level of Service at or near capacity limits. Heavy congestion to be expected.

This section of Mapleview Drive East has been identified for widening from a two-lane to a four-lane cross section.
Traffic Analysis – 2021 Horizon (No Network Improvements)
Traffic Analysis – 2021 Horizon (With Improvements)

**Midblock Operations and Symbols Legend:**

- **Operating at an acceptable Level of Service and within capacity limits. Minimal to no congestion.** (Green)
- **Operating at an acceptable Level of Service and within capacity limits. Moderate levels of congestion.** (Yellow)
- **Operating at an unacceptable Level of Service at or near capacity limits. Heavy congestion to be expected.** (Red)

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The diagram shows the traffic analysis with different levels of congestion marked by different colors. Key roads include Yonge St, 20th Sideroad, Barrie South GO Station, and others. The traffic conditions are indicated by the colors according to the legend provided.
Alternative Design Concepts

- Road improvements are recommended on the following roadways and crossings:
  - Lockhart Road from Huronia Road to Collector 11
  - Mapleview Drive East from Huronia Road to 200m west of 20th Sideroad
  - Big Bay Point Road from 900m east of Prince Edward Way to 200m west of 20th Sideroad
  - Yonge Street (between Lockhart Road and Mapleview Drive)
  - Railway Crossing at Lockhart Drive
  - Railway Crossing at Mapleview Drive East
Figure 1  Hewitts Infrastructure Improvements Class Environmental Assessment: Natural Heritage Features

Key:
- Municipal_Boundary
- Railroad
- Wetland
- Waterbody
- 41m ROW
- 27m ROW
- Railway Crossing
- Wooded Area
- Watercourse
- 34m ROW

*The information displayed is derived from sources with varying accuracies and all boundaries should therefore be considered approximate.*

Coordinate System: NAD 1983 UTM Zone 17N
Alternatives for Mapleview Drive East

Mapleview Drive East was divided into 5 segments detailed as follows:

<table>
<thead>
<tr>
<th>Route Section</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huronia Road to Country Lane</td>
<td>7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 41m ROW</td>
<td>7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>7 lanes, 4.2m median, MUT, 41m ROW</td>
</tr>
<tr>
<td>Country Lane to Madelaine Drive</td>
<td>7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 41m ROW</td>
<td>7 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID feature (per side)</td>
<td>7 lanes, 4.2m median, 3m MUT, 1.6m sidewalk, boulevard for snow removal, 41m ROW</td>
</tr>
<tr>
<td>Madelaine Drive to Yonge Street</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>5 lanes, 4m centre-left, 3m MUT, 1.6m sidewalk, boulevard for snow storage, 34m ROW</td>
</tr>
<tr>
<td>500m East of railway to Prince William Way</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>4 lanes, MUT, 1.6m sidewalk, turning lanes at intersections, 34m ROW</td>
</tr>
<tr>
<td>Prince William Way to 20th Sideroad</td>
<td>3 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 27m ROW</td>
<td>3 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>3 lanes, MUT, 1.6m sidewalk, 4m centre-left, 27m ROW</td>
</tr>
</tbody>
</table>
Alternatives for Lockhart Drive

• Lockhart Drive was divided into 4 segments as detailed below:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huronia Road to 600m East</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>4 lanes, MUT, south side ditch, turning lanes at intersections, 34m ROW</td>
</tr>
<tr>
<td>600m East of Huronia Road to Yonge Street</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2 median, 2m LID features</td>
<td>4 lanes, MUT, south ditch, turning lanes at intersection, 34m ROW</td>
</tr>
<tr>
<td>500m East of railway to Prince William Way</td>
<td>5 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>4 lanes, MUT, no sidewalk south side, south ditch, turning lanes at intersection, 34m ROW</td>
</tr>
<tr>
<td>Prince William Way to just east of Collector 11</td>
<td>3 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 27m ROW</td>
<td>3 lanes, 2m bike lane, 2m sidewalks, 4.2m median, 2m LID features</td>
<td>3 lanes, MUT south side, 1.6m sidewalk, 4m centre-left, 27m ROW</td>
</tr>
</tbody>
</table>
Alternatives for Yonge Street and Big Bay Point Road

- Yonge Street alternatives extend between Lockhart Road and Mapleview Drive East

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 2m LID features</td>
</tr>
</tbody>
</table>

- Big Bay Point Road alternatives were divided into two segments:

<table>
<thead>
<tr>
<th></th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Boundary to Collector 11</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, 34m ROW</td>
<td>5 lanes, 2m bike lanes, 2m sidewalks, 4.2m median, with 2m LID features</td>
<td>5 lanes, MUT, no sidewalk on north, 4m centre-left, north fixed</td>
</tr>
<tr>
<td>Collector 11 to 200m west of 20th Sideroad</td>
<td>3 lanes, 2m bike lane, 2m sidewalks, 4.2m centre left, 27m ROW</td>
<td>3 lanes, 2m bike lane, 2m sidewalks, 4.2m centre left, with 2m LID features</td>
<td>3 lanes, MUT south side, no sidewalk north side, 4m centre-left, north fixed, 27m ROW</td>
</tr>
</tbody>
</table>
Alternatives for Rail Crossings

• Mapleview Drive Rail Crossing:

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overpass with 5 lanes, centre median, 2.5m sidewalks, 2m side clearance and 2m bike lanes</td>
<td>Underpass with 4 lanes, centre pier, 2.5m sidewalks, 2m side clearance and 2m bike lanes</td>
</tr>
</tbody>
</table>

• Lockhart Road Rail Crossing:

<table>
<thead>
<tr>
<th>Alternative 1</th>
<th>Alternative 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overpass including 5 lanes, centre median, 2.5m sidewalks, 2m side clearance and 2m bike lanes</td>
<td>Underpass including 4 lanes, centre pier, 2.5m sidewalks, 2m side clearance and 2m bike lanes</td>
</tr>
</tbody>
</table>