



# Downtown LRT Connector:

## Draft Concept Plan

November 2010

## We're moving forward. Get involved.

On June 21, 2010, City Council approved a street-level downtown LRT route, including a connector for the future West and Southeast LRT lines.

The project team has initiated work to define where the LRT would fit within the approved LRT Connector. Following consultation with a broad range of key stakeholders this fall, a proposed Concept Plan has been developed.

This Open House offers the opportunity for the general public to learn more and share feedback about the proposed plan. Feedback from this consultation will be used in our presentation to Council on December 8, 2010, following a public hearing.

### Highlights:

- **A new street-level LRT** that will connect the future West and Southeast LRT lines, with opportunities for transfers to the existing LRT system in the downtown core
- **Length of line:** 2.1 km
- **Number of stops:** 5

No funding is currently in place to construct the Downtown LRT Connector. Given the cost of the line, funding support is required from other orders of government.



# Capital City Downtown Plan

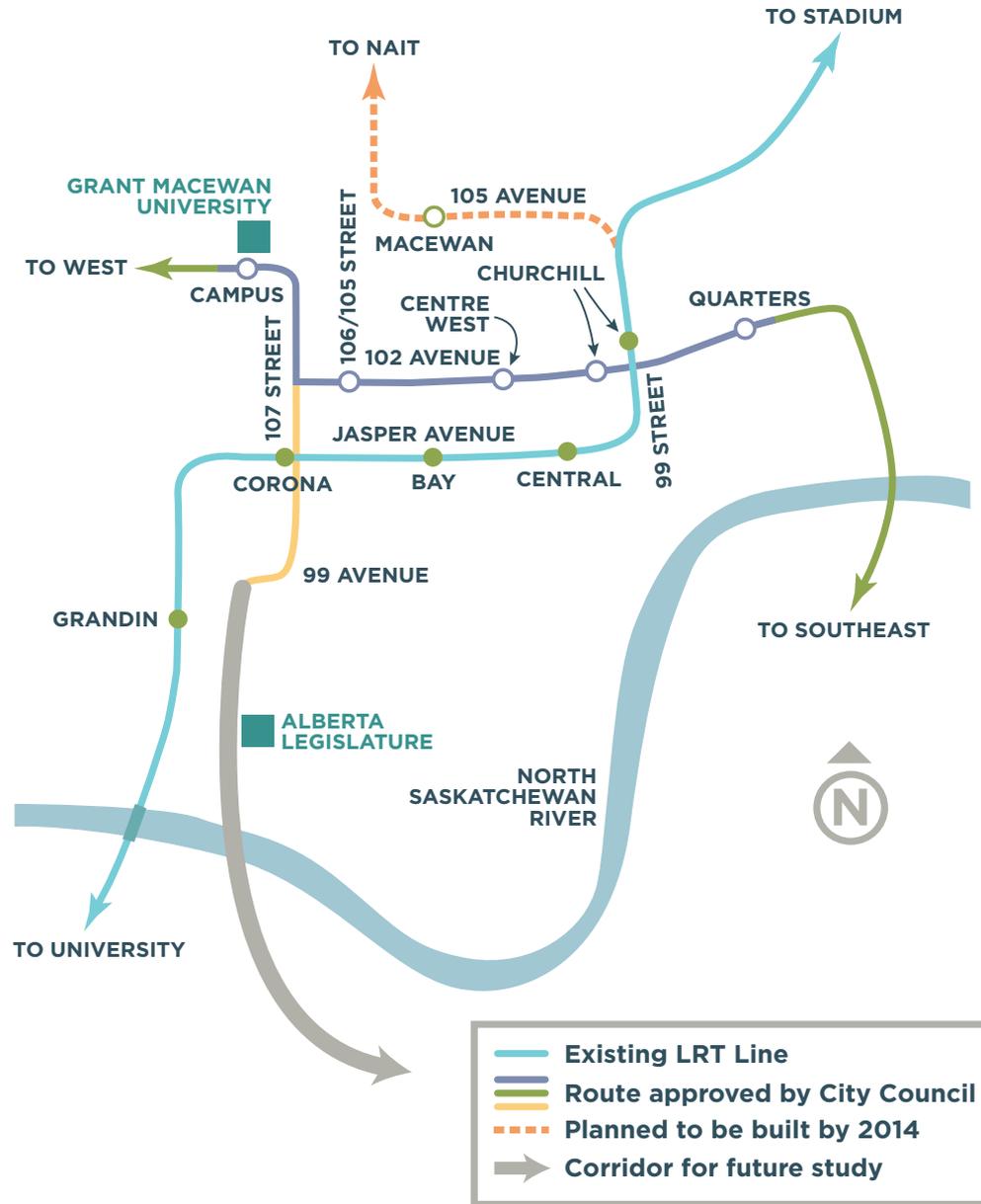
City Council recently approved the Capital City Downtown Plan, which will guide the development of the downtown into a more vibrant, attractive, higher-density, mixed-use and walkable area. In particular, the Plan supports the integration of at-grade LRT as a catalyst to encourage mixed-use downtown development and create enhanced pedestrian-oriented public spaces.

## Downtown LRT Connector

At a public hearing held on June 21, 2010, City Council approved the surface downtown section of LRT. The Downtown LRT Connector will use a combination of 107 Street and 102 Avenue. This route meets the objectives for future LRT expansion and supports the Downtown Plan.

It also has important attributes for integrated LRT/land use planning:

- Short walking distance to existing developed areas of Downtown;
- Potential to support development in the Downtown, including increasing residential development;
- Integration with bus service on 101 Street;
- Great potential for integrated urban realm improvements and creating more active streets.



	Existing LRT Line
	Route approved by City Council
	Planned to be built by 2014
	Corridor for future study

# LRT Network Plan

In June 2009, City Council adopted a long-term LRT Network Plan that defines the future size, scale, and operation of the regional LRT system. Eventually, the LRT network will have six lines extending to the Northwest, Northeast, East, Southeast, South, and West. The LRT Network Plan supports overarching policy direction by making downtown Edmonton the focal point of the LRT system. In reviewing the overall system operation, it was determined that a street-level LRT line would be needed in the downtown core to serve future expansions separate from the existing LRT system in the downtown tunnel.

As part of the LRT Network Plan, a vehicle technology review was completed to help choose the style of LRT vehicles most appropriate to meet long-term transportation objectives. The review recommended new, low-floor LRT vehicles be used for new lines that do not connect to the existing line. The Downtown Connector will be part of the new low-floor LRT network that will connect the other future low-floor LRT lines such as West and Southeast.



## Low-Floor LRT

Low-floor LRT vehicles were first introduced in the late 1980s and have since evolved to become the industry standard for new LRT systems in Europe and North America. Most of the mechanical equipment on a low-floor LRT vehicle is located on the roof which means doors can be provided at street-level for step-free boarding onto the vehicle.

The biggest advantage to a low-floor LRT system is that the stops can be smaller and require less infrastructure – a stop can be as simple as a raised curb and sidewalk. This makes it easier to integrate stops into their local surroundings with a more urban feel. Since ramps and steps are not needed, low-floor LRT stops also provide better pedestrian connections and fewer barriers to people with mobility difficulties.

Minneapolis



Amsterdam



Amsterdam



# Public Involvement

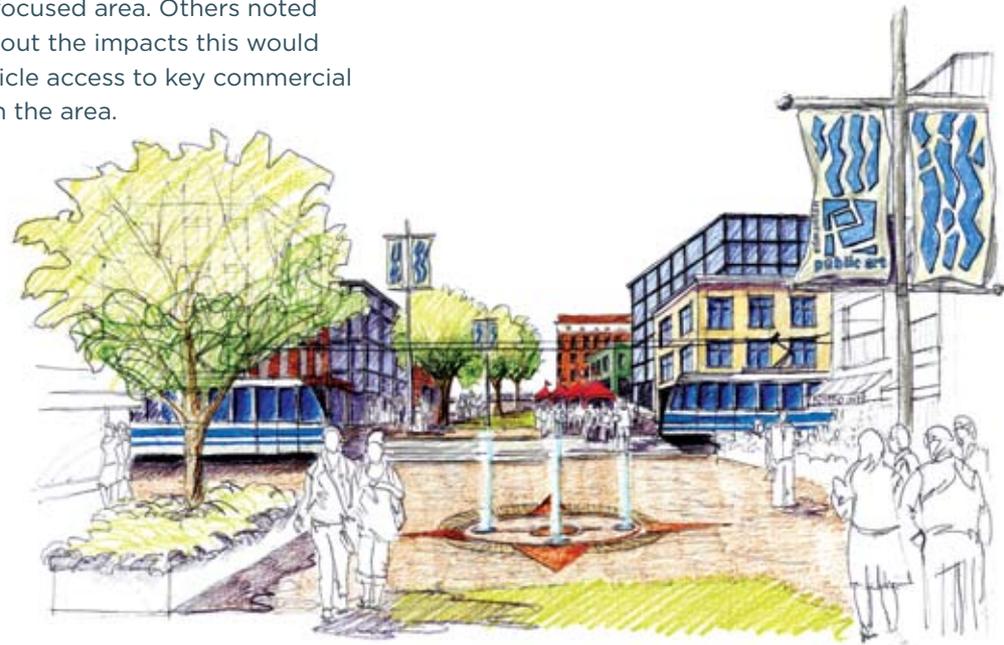
Working with key stakeholders has been a key component of the study. Following the June 2010 approval of the corridor, a stakeholder consultation process was initiated to review several options for the LRT alignment, stop locations, pedestrian and cyclist connections, and vehicle access changes. The information was also posted online at [www.edmonton.ca/LRTprojects](http://www.edmonton.ca/LRTprojects).

Over 120 people representing a broad range of community, commercial groups businesses, active transportation, transit user and institutional groups attended presentations and participated through interviews or small group meetings. Participants were asked to provide the local knowledge and perspective on how to address impacts on the people and businesses that use the corridor every day.

## Common themes:

- Participants were very positive about the potential for expanding LRT and saw benefits to the community, businesses and institutions. There is a great deal of interest in seeing downtown as a connection point for all LRT lines within the city.
- There was interest and support for options that increased pedestrian and cyclist connectivity to the LRT and within the downtown as a whole.

- The importance of ensuring safe and secure LRT stops was also raised. As the LRT planning process moves forward, there is a need to provide safety and security features at stops and in the adjacent areas.
- There is a desire to preserve vehicle access to Jasper Avenue and to parkades along the corridor. Participants noted concerns about specific pedestrian and shipping access impacts when reviewing the alignment options.
- A mixture of views was heard on the potential to decrease capacity or close sections of 102 Avenue to vehicle traffic. Some participants noted a great potential to transform the area as a transit and pedestrian-focused area. Others noted concerns about the impacts this would have on vehicle access to key commercial properties in the area.
- Stakeholders noted the identified stop locations were connected with the right destinations and activity centres. However, throughout the process, a need to balance the different interests to determine the best stop locations was reinforced.
- With the potential development of a new arena district in the downtown, it was reinforced that planning for LRT needs to consider the possible impacts.



# Campus Stop

## Description

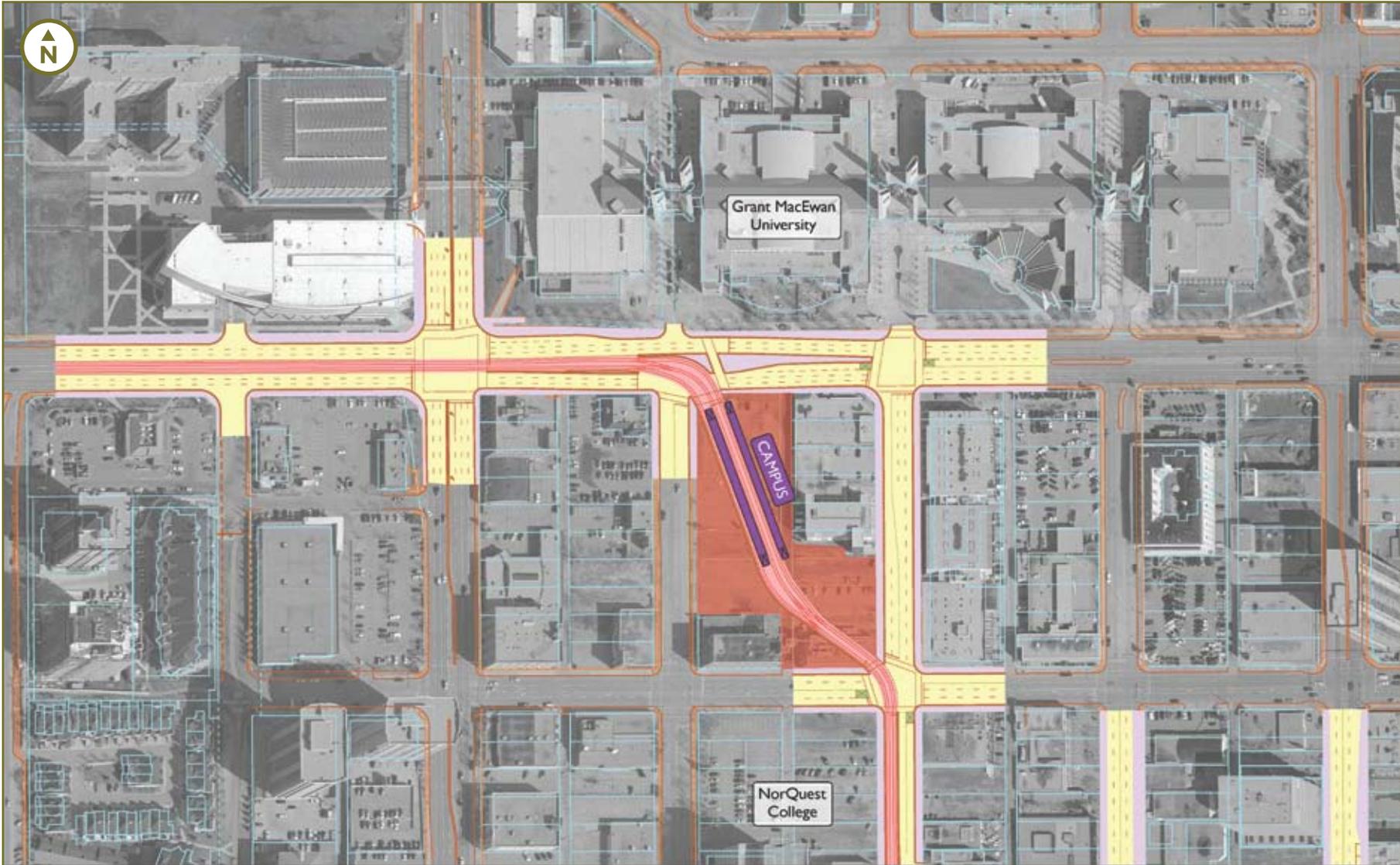
The LRT would cross the 109 Street intersection in the centre of the road, before turning south at the intersection with 108 Street. The LRT then crosses through the surface parking lot between 108 Street and 107 Street to the proposed Campus LRT stop. As the tracks reach 107 Street, the route continues south on the west side of the street.

The Campus stop is located on the south side of 104 Avenue between 108 Street and 107 Street. The location uses the existing surface car parking lot to provide an “off street” stop convenient for both Grant MacEwan University and NorQuest College. Property purchase would be required, including the AADAC building at 103 Avenue at 107 Street. The remaining land would provide an opportunity to create development around the stop.

## Features

- Serves both Grant MacEwan and NorQuest campuses
- Minimizes LRT impact on 109 Street intersection
- Encourages new development on a currently underutilized site





**EDMONTON LRT EXPANSION**

Downtown LRT Alignment  
 CAMPUS Stop location

- Potential LRT at Grade
- Potential LRT stop platform
- Potential Property requirement
- Potential Roadworks
- Potential cycle facilities
- Potential sidewalk

Drawing Not to Scale

Drawing No. 222005-03-CON

# 105/106 Street Stop

## Description

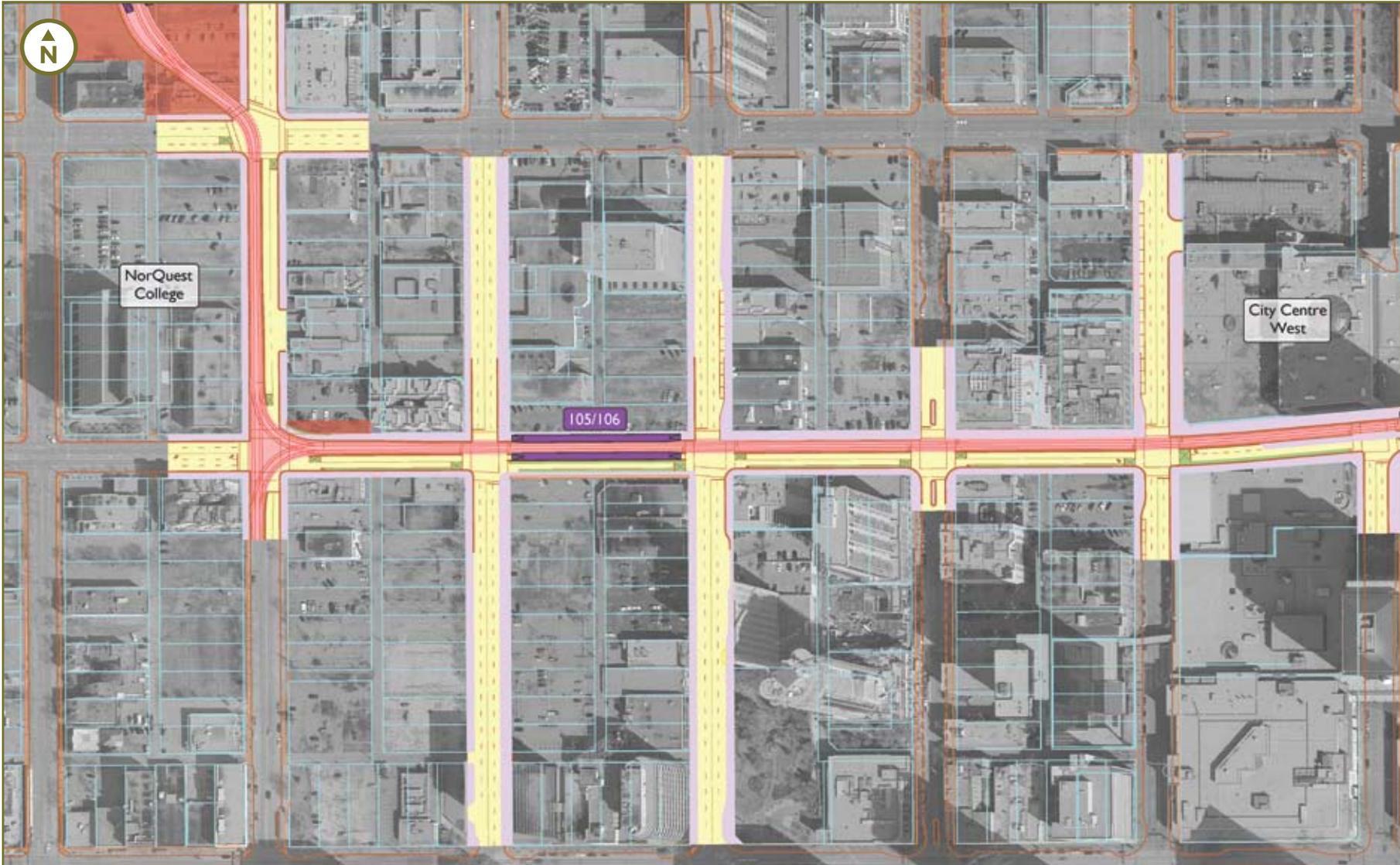
The LRT would turn from 107 Street onto the north side of 102 Avenue. The 105/106 Street stop is on the north side of 102 Avenue, with a low level stop platform occupying much of the block between 105 Street and 106 Street. The alignment would continue from this stop along the north side of 102 Avenue to the Centre West stop.

The stop platform on the north side of the street is integrated with the existing sidewalk and bicycle lanes are provided. One lane of traffic would be provided along 102 Avenue (eastbound) for local traffic access. Property purchase would be required; this could include a small amount of land from the surface parking lot on the northeast corner of 107 Street and 102 Avenue and a small strip of land currently used as parking and frontage on the south side of 102 Avenue between 106 Street and 105 Street.

## Features

- Passenger and pedestrian focused stop
- Dedicated bicycle lanes provided in both directions
- Wide sidewalks and a safe pedestrian-friendly environment
- Local vehicle access maintained





**EDMONTON LRT EXPANSION**

Downtown LRT Alignment  
 105/106 STREET Stop location

- Potential LRT at Grade
- Potential LRT stop platform
- Potential Property requirement
- Potential Roadworks
- Potential cycle facilities
- Potential sidewalk

Drawing Not to Scale

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# Centre West Stop

## Description

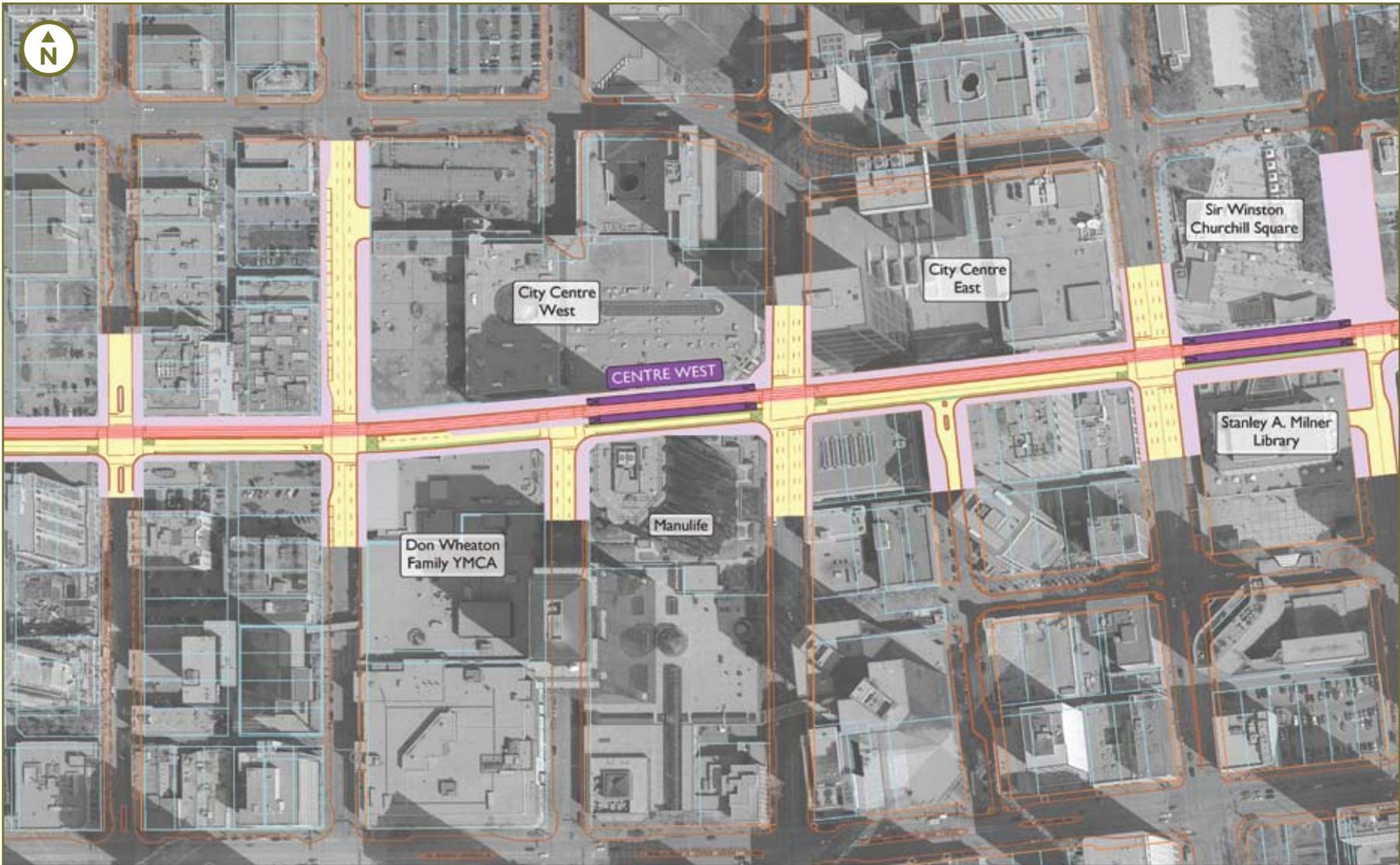
The LRT would continue along the north side of 102 Avenue. The Centre West LRT stop would be located on the north side of 102 Avenue, with the stop platform located between 102 Street and 101 Street.

The stop platform would be integrated with the existing sidewalk. Bicycle lanes would be provided. One eastbound vehicle lane would be provided from 102 Street through to 101 Street. Between 102 Street and 103 Street, a single westbound traffic lane with a dedicated right turn lane would be provided.

## Features

- Serves the central Business District and Centre West Shopping Centre
- Requires no land acquisition
- Dedicated bicycle lanes in both directions
- Local vehicle access maintained
- Wide sidewalks and a safe pedestrian-friendly environment





**EDMONTON LRT EXPANSION**

Downtown LRT Alignment  
CENTRE WEST Stop location

- Potential LRT at Grade
- Potential LRT stop platform
- Potential Property requirement
- Potential Roadworks
- Potential cycle facilities
- Potential sidewalk

Drawing Not to Scale

Drawing No. 222005-03-CON

# Churchill Square Stop

## Description

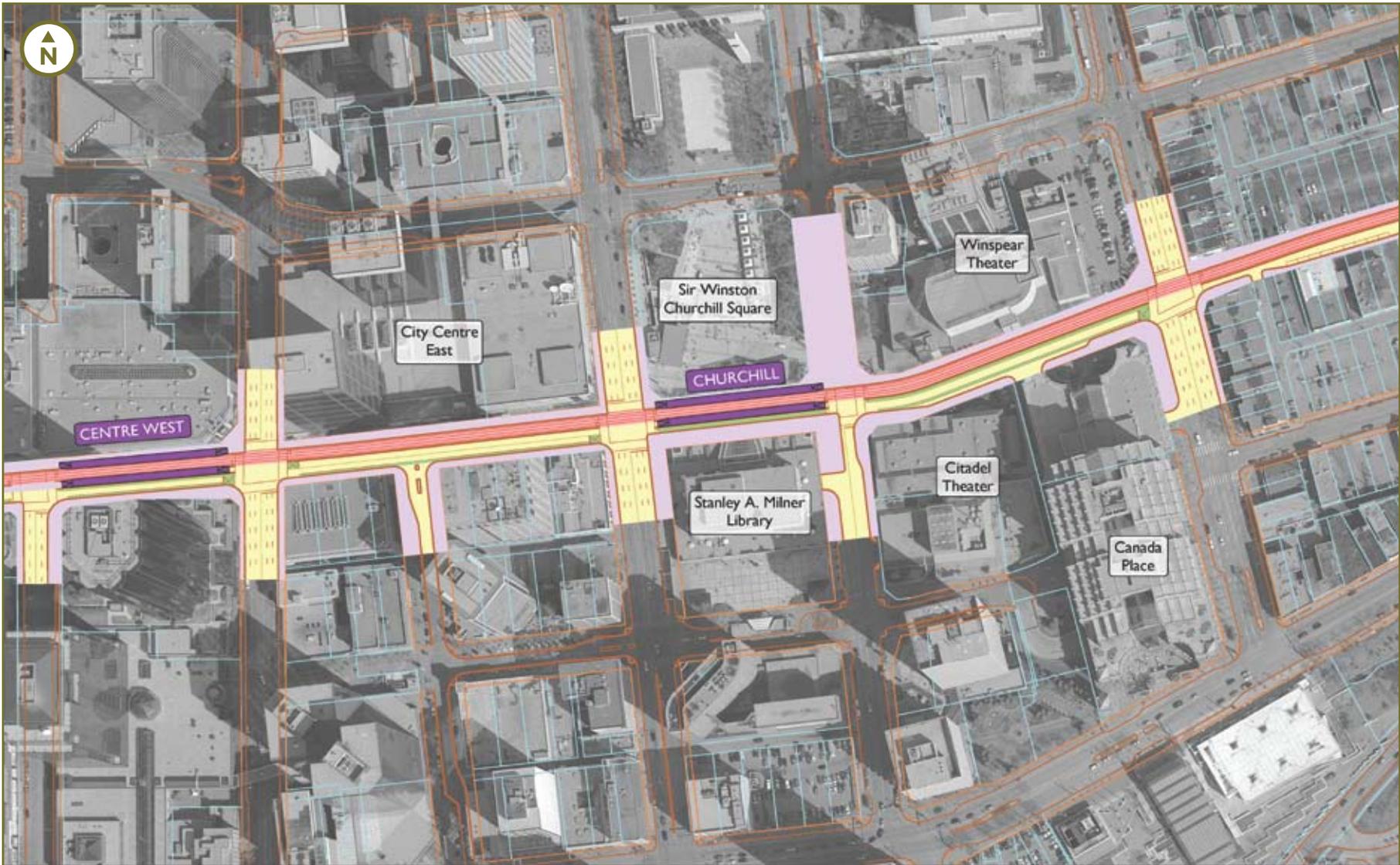
The LRT would continue on the north side of 102 Avenue through this section. Special design provisions would be incorporated to minimize noise and vibration impacts on the Winspear Theatre.

The Churchill Square stop is located on the north side of 102 Avenue between 100 Street and 99 Street. Traffic is removed between 100 Street and 99 Street and reduced to a single eastbound lane between 99 Street and 97 Street. This allows for wider stop platforms, an enhanced pedestrian environment, dedicated bicycles lanes in both directions, and increased distance between the LRT tracks and the Winspear Theatre. A new connection to the Churchill LRT stop would be built at the northwest corner of the 99 Street/102 Avenue intersection. 99 Street between 102 Avenue and 102A Avenue would also be closed to traffic, providing seamless connectivity from Churchill Square to the buildings to the east, which include the Winspear Theatre.

## Features

- Provides maximum space for LRT platforms and passenger waiting areas
- Requires no land acquisition
- Links directly to Churchill Square plaza
- Direct and enhanced connections to underground LRT at Churchill Square for easy transfer
- Dedicated bicycle lanes in both directions
- Wide sidewalks and a safe pedestrian-friendly environment





**EDMONTON LRT EXPANSION**  
 Downtown LRT Alignment  
 CHURCHILL SQUARE Stop location

- Potential LRT at Grade
- Potential Roadworks
- Potential LRT stop platform
- Potential cycle facilities
- Potential Property requirement
- Potential sidewalk

Drawing Not to Scale  
 Drawing No. 222005-03-CON

# Quarters Stop

## Description

The LRT would continue on the north side of 102 Avenue up to 96 Street and the Quarters stop, from where it crosses over to the south side of the street and continues into the tunnel portal to connect with the Southeast LRT. The route then continues over a river crossing to the Muttart stop.

The location of this stop provides the greatest opportunity for the LRT to act as a stimulus for future mixed-use development to revitalize the area.

To address space constraints, 102 Avenue is closed to through traffic at 96 Street, and a single eastbound traffic lane would be provided from 97 Street to the lane just west of 96 Street. This will provide local access and maintain street parking for the businesses along the block.

## Features

- LRT as a stimulus to encourage future development and revitalization
- Pedestrian plaza adjacent to stop platforms
- Requires no land acquisition
- Wide sidewalks and a safe pedestrian-friendly environment
- Maintains local vehicle access and on-street parking for local businesses





**EDMONTON LRT EXPANSION**

Downtown LRT Alignment  
 QUARTERS Stop location

- Potential LRT at Grade
- Potential LRT stop platform
- Potential Property requirement
- Potential Roadworks
- Potential cycle facilities
- Potential sidewalk

Drawing Not to Scale

Drawing No. 222005-03-CON



Strategy

Where we are today  
**CONCEPT**  
PHASE

Design

Build

Operate

## What Happens Next?

City Council will decide whether to approve the recommended Downtown Connector Concept Plan along with the West and Southeast LRT plans. The three Concept Plans will be presented to a non-statutory public hearing at the Transportation and Public Works Committee on December 8, 2010.

Following the non-statutory public hearing, the LRT Concept Plan recommendation will be forwarded to City Council for review and consideration in January 2011.

### Public Hearing

Wednesday, December 8, 2010

Transportation and Public Works Committee  
Council Chambers  
2<sup>nd</sup> Floor, City Hall  
1 Sir Winston Churchill Square

Register to speak on [www.edmonton.ca/meetings](http://www.edmonton.ca/meetings), or call the City Clerk's office at **780-496-8178**.

### To find more about the Downtown Connector project

**Visit** [www.edmonton.ca/LRTprojects](http://www.edmonton.ca/LRTprojects)

**Call** the LRT projects info line at 780-496-4874

**E-mail** [LRTprojects@edmonton.ca](mailto:LRTprojects@edmonton.ca)

**Join our e-mail update list!** E-mail [LRTprojects@edmonton.ca](mailto:LRTprojects@edmonton.ca) and type "subscribe to Downtown LRT" in the subject box.