

WELCOME

## Circle Drive

Clancy Drive to Laurier Drive  
Functional Plan

## Open House #3

October 21, 2021

7:00pm – 8:30pm

Virtual Event



Laurier Dr. 1.0 Km  
22nd St. 1.6 Km  
Clancy Dr. 2.5 km

# Open House Format

- ❖ Part 1: Presentation by the study team
  - Henry Devos, Lead Presenter, CIMA+
- ❖ Part 2: Response to written questions
  - Chelsea Lanning, Moderator, City of Saskatoon
  - Please submit questions during the presentation





Study Area





# Open House Purpose

- ❖ To present the Recommended Plan
- ❖ To share the changes that were made following Open House #2
- ❖ To respond to final questions and gather comments





# Study Goals

- ❖ Improve safety and achieve free-flow travel along Circle Drive West
  - By removing the left-hand exits and entries at the Clancy and Laurier Drive intersections
- ❖ Retain the current turning movements at both intersections
- ❖ Maintain or improve the Multi-Use Trail Pathways through the study area



## Study Scope: Development of the Long-Term Plan Included

- ❖ Freeway plan along Circle Drive West
- ❖ Upgrading the Circle Drive / 22<sup>nd</sup> Street Interchange
- ❖ Upgrading the 22<sup>nd</sup> Street / Confederation Drive Intersection
- ❖ Preserving/improving the Multi-Use Trail Pathway network in study area
- ❖ New: Interim change to 11<sup>th</sup> Street interchange to restore sbd access from Circle Drive





# Study Scope: Work Not Included

- ❖ Ultimate Circle Drive / 11<sup>th</sup> Street interchange configuration
  - Options have been considered by a separate city undertaking
- ❖ Railway grade separations
- ❖ 22<sup>nd</sup> Street / Diefenbaker Drive intersection upgrading



# Study Process and Timeline

- ❖ Open House #1 – June 2019
  - Gather existing conditions
  - Consult with the community
- ❖ Open House #2 – January 2020
  - Present the Preferred Plan
  - Invite public input
- ❖ COVID 19 – March 2020 to September 2021
  - Public engagement process was paused
  - Preferred plan was modified in response to public input
- ❖ Open House #3 – October 2021
  - Present the Recommended Plan
  - To respond to final questions and gather comments
- ❖ City Council Approval – Spring 2022





# Study Background: 1. Circle Drive's Overall Role

- ❖ A core route (urban ring road) in the City of Saskatoon's road network
- ❖ Supports travel within and through the City
- ❖ Will serve as the southwest leg of the proposed Saskatoon Freeway
- ❖ As a ring road and freeway facility:
  - It is intended to serve longer trip lengths; and
  - Ideally Circle Drive would only connect with key network roads, e.g., 11<sup>th</sup> Street, 22<sup>nd</sup> Street, 33<sup>rd</sup> Street

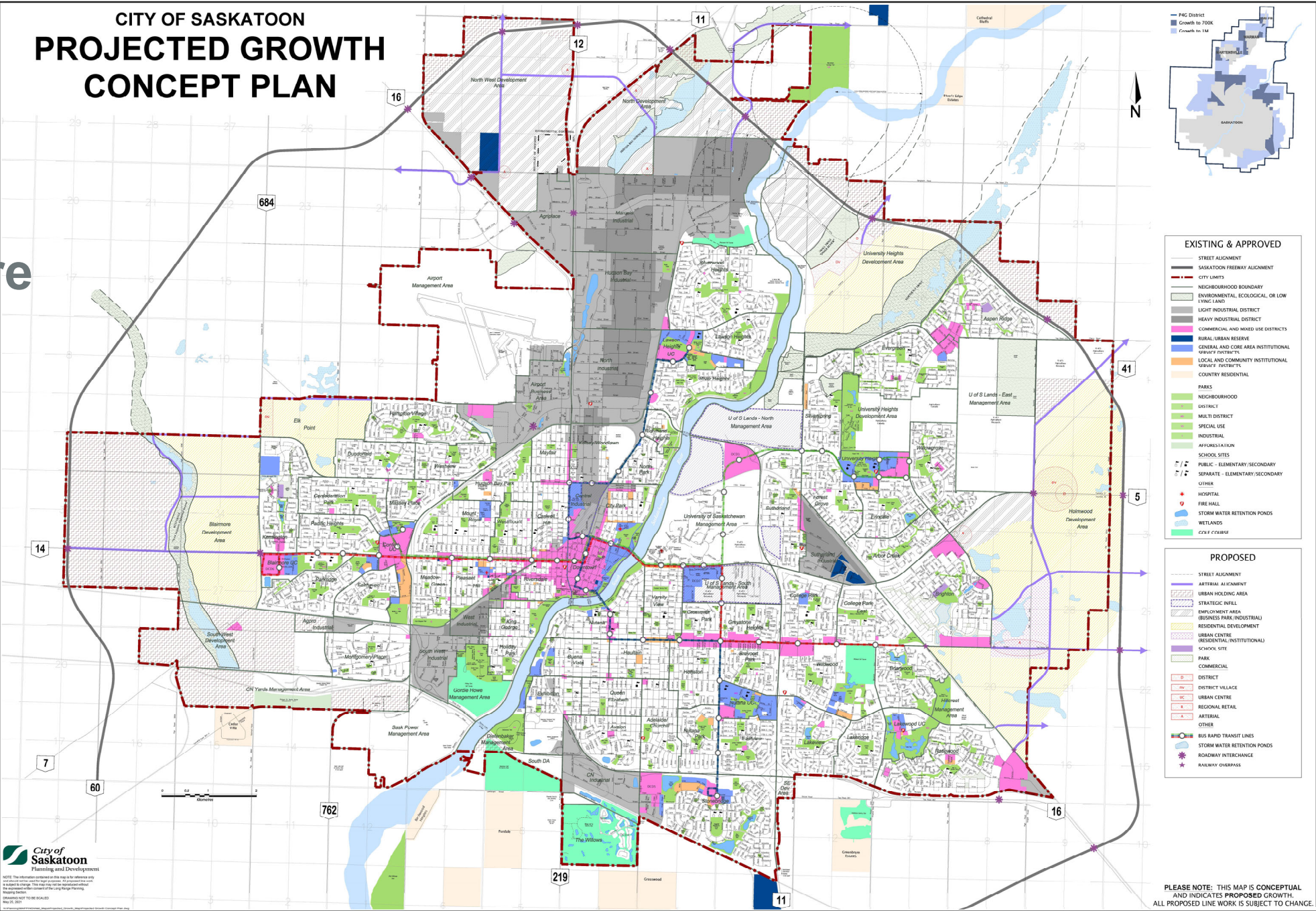




# Study Background

## 2. Potential Future Growth Areas

Considered in  
developing long-  
term system  
requirements





# 3. Major Street Network

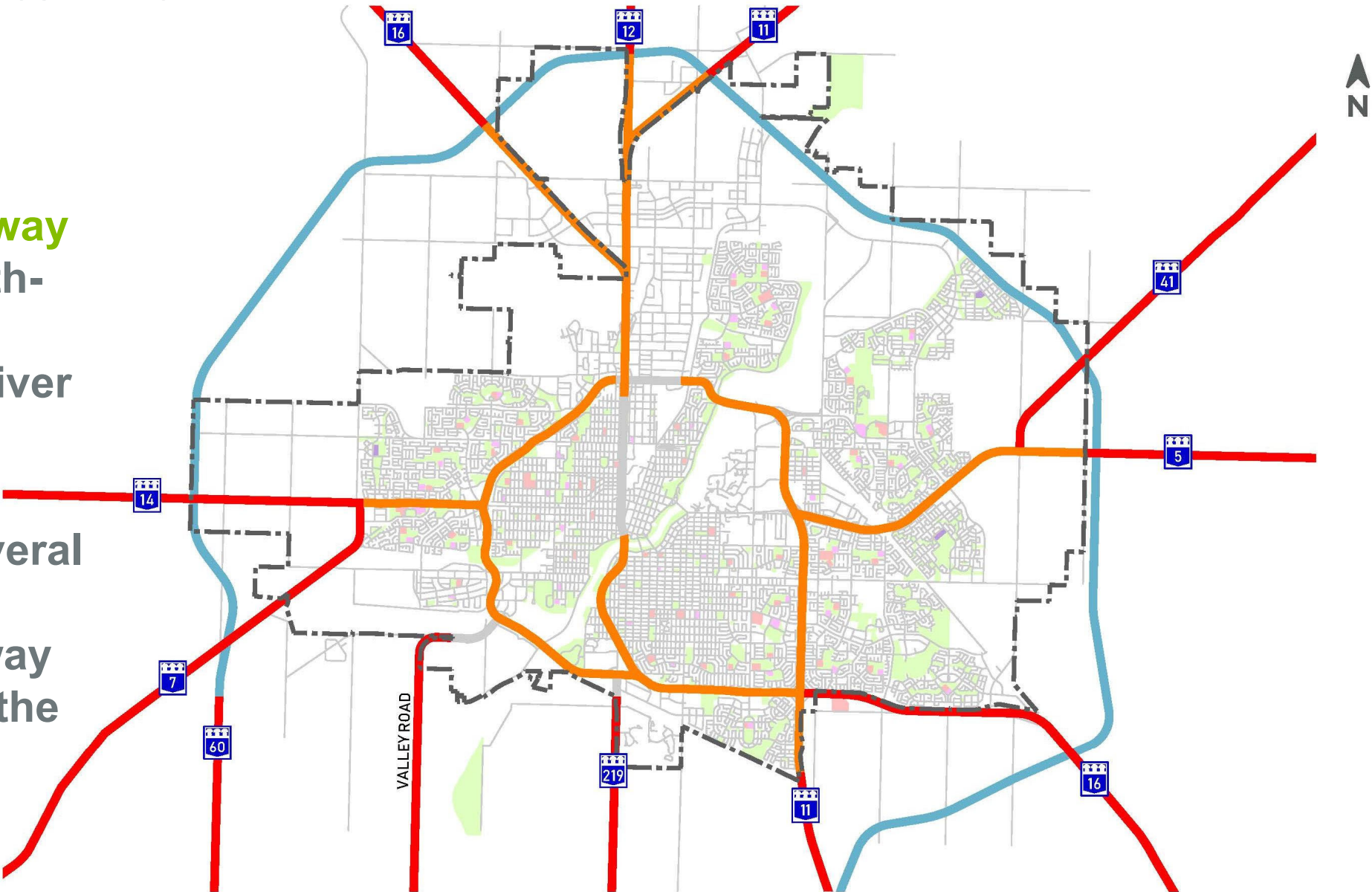
## Transportation Master Plan

### City of Saskatoon

# Study Background

Future **Saskatoon Freeway** does not include a south-west leg, crossing the South Saskatchewan River

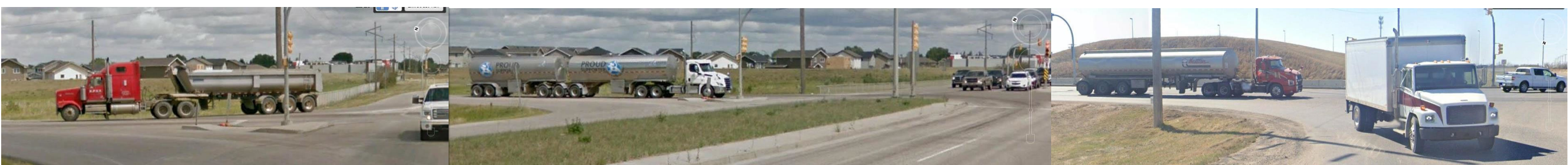
**22<sup>nd</sup> Street** is one of several spokes connecting the future Saskatoon Freeway (and Hwys 7 & 14) with the Circle Drive Ring Road





# Problem Statement: 1. Highway Network

- ❖ Existing Circle Drive connects Highways 7/14/60 West with Highways 11 & 12 North
  - Neault Road connects Highway 7/14/60 West with Highway 16 North (avoiding the city)
  - Neault Road / 22<sup>nd</sup> Street / Circle Drive connect Highway 16 North with Highways 11, 16 & 219 South
  - Neault Road serves as a Northwest Bypass to Circle Drive West / Southwest
- ❖ Following completion of the Saskatoon Freeway (no southwest leg):
  - Circle Drive West / Southwest will connect the south end of the future Saskatoon Freeway (and Highways 7, 14 & 60) with Highways 11, 16 & 219 South
  - The future Saskatoon Freeway will connect Highways 7/14/60 west with Hwys 11/12/60 North, relieving Circle Drive northwest and Neault Road.
- ❖ In response, the City plans to upgrade Circle Drive West to freeway standards





# Problem Statement: 2. Southwest Circle Drive

- ❖ Completion of the last gap in Circle Drive, connecting 22<sup>nd</sup> Street and Idylwyld Drive
  - Redistributed traffic flows in the city's road network, including Circle Drive West
- ❖ Increasing congestion levels and safety concerns
  - The left-on and left-off turning movements are inconsistent with good freeway design
  - In response, the City plans to upgrade Circle Drive West to freeway standards





# Problem Statement: 3. Design Consistency

- ❖ Mix of right-hand (freeway) and left-hand (expressway) exits challenges driver behaviour and leads to poor safety outcomes (and truck traffic in both lanes)
  - This condition is exacerbated by the curvilinear design along Circle Drive West
  - The collision potential increases with traffic volumes

Circle Drive Segment			Design Standard	Length (km)
Circle Drive East (Highway 11 South)	to	11 <sup>th</sup> Street	Freeway	10
11 <sup>th</sup> Street	to	22 <sup>nd</sup> Street	Signalized: Clancy	1
Crossing 22 <sup>nd</sup> Street			Interchange	1
22 <sup>nd</sup> Street	to	33 <sup>rd</sup> Street	Signalized: Laurier	1
Crossing 33 <sup>rd</sup> Street			Interchange	2
33 <sup>rd</sup> Street	to	Idylwyld Drive (Highway 11 North)	Signalized: Airport & Avenue C	1



Circle Drive  
Clancy Drive to Laurier Drive - Functional Plan





# Problem Statement: 4. Circle Drive West

## Upgrading Circle Drive West to Freeway Standards is Constrained by Three Conditions:

- 1. Interchange Spacing: Best Practices Range Between 1500m and 2000m**
  - Existing Interchange / Intersection spacing ranges between 600m and 900m (11<sup>th</sup> St. to Laurier Dr.)
  - Cost effective freeway design would simply remove the signals and access points
  
- 2. Existing Circle Drive / 22<sup>nd</sup> Street Interchange Configuration is Unusual**
  - Designed to emphasize traffic flows between Highway 7/14 west and Circle Drive North (there was no Circle Drive Southwest)
  - To achieve the most practical, effective, solution the existing interchange must be replaced
  
- 3. Confederation Drive / 22<sup>nd</sup> Street Intersection is Less than 100m from Circle Drive**
  - Adjacent Confederation Drive intersection mixes local access with interchange operations
  - Serving two roles, the intersection performance is generally poor
  - Residents west of Circle Drive have come to rely on the two existing signalized intersections at Clancy and Laurier Drives for travel in/out of the neighbourhoods



# Planning and Design Context

- ❖ Design of high-speed roadways requires baseline geometric and safety standards
  - These standards must be applied consistently
- ❖ Circle Drive’s design parameters are defined by its role in the City’s overall network
  - Circle Drive must achieve the corresponding design consistency to be a safe facility
- ❖ To achieve freeway standards and retain all current movements along Circle Drive:
  - Would require highly complex and costly measures; and
  - Would impact right-of-way requirements and the power transmission and CNR lines
  - This impacts the study goals



# What We Heard - 1

## At and Following Open House #2

### 1. Neighbourhood Access / Egress and Business Access

- Concern: Reduced access at Laurier and Clancy Drives increases travel times
  - Concern: Revised business access to the west side of Circle Drive
  - Response: Upgrading from expressway to freeway standards commonly results in changes in travel patterns
- Note: Project website will show before & after travel paths affected by the Recommended Plan

### 2. 22<sup>nd</sup> Street and Local Road Network

- Concern: Additional traffic will divert to an already congested 22<sup>nd</sup> Street
  - Response: Recommended Plan improves performance along 22<sup>nd</sup> Street crossing Confederation & Circle Drives
- The City plans to conduct a future study of the 22<sup>nd</sup> Street / Diefenbaker Drive intersection

### 3. 11<sup>th</sup> Street Interchange and Rail Crossings

- Concern: At-grade rail crossings will continue to delay drivers in/out of Montgomery Place
- Response: City is examining railway solutions that may ultimately alleviate rail traffic impacting 11<sup>th</sup> Street



# What We Heard - 2

## At and Following Open House #2

### 4. Noise Attenuation

- Concern: Improved attenuation for Meadowgreen and Montgomery Place (possibly others)
- Response: City has asked CIMA+ to undertake noise analysis to identify locations warranting additional mitigation  
The noise study findings will be posted on the project website

### 5. Safety

- Concern: Opinions for and against removing the two traffic signals
- Concern: Will diverted traffic result in potentially busier school zones?
- Response: City will monitor traffic flows to ensure that the appropriate traffic control measures are in place

### 6. Free-Flow Circle Drive

- Concern: Opinions for and against removing the two traffic signals
- Concern: Opinions for and against continuing to upgrade Circle Drive, with challenges along Circle Drive North
- Response: City will conduct future studies to assess Circle Drive North  
The need to improve performance of Circle Drive West does not hinge on Circle Drive North

# What We Heard - 3

## At and Following Open House #2

### 7. Emergency Access

- Concern: Will emergency access to area neighbourhoods be affected?
- Response: EMS input has been sought to ensure suitable access is maintained

### 8. CNR Pedestrian Underpasses

- Concern: The existing pedestrian underpasses are considered unsafe, often unclean, unsanitary
- Response: The existing pedestrian tunnels will be removed from under Circle Drive  
The City will improve the existing rail underpasses subject to discussion with CN Rail





# Previously Preferred Plan: Areas Modified by Recommended Plan





# Changes to Previously Preferred Plan: Following Open House #2

1. Added ramp from 22<sup>nd</sup> Street Ebd to Circle Drive Sbd using existing structures. Ramp avoids the Confederation and Circle Drive signals, heavy truck movement.
2. Revised connections to Fairmont Drive from 22<sup>nd</sup> Street Ebd. Right-out from Fairmont Crescent (moved south); Right-off of 22<sup>nd</sup> to Fairmont Drive (replaces exit at Confed.). Facilitates trips from south mall to north mall.
3. Added connection from southbound Circle Drive to Clancy Drive. Utilizes the proposed shared exit to 22<sup>nd</sup> Street and Fairmont Drive.
4. Added connection from Clancy Drive Ebd to 22<sup>nd</sup> Street and Circle Drive Nbd via reconfigured ramp network.
5. Revised access strategy for parcels north of Laurier Drive, west of Circle Drive.
6. Revised Clancy Drive to Sbd Circle Drive ramp alignment to meet maximum grades. Additional trail realignment required.
7. Added dual left turn from Ebd 22<sup>nd</sup> Street to Nbd Confederation Drive.



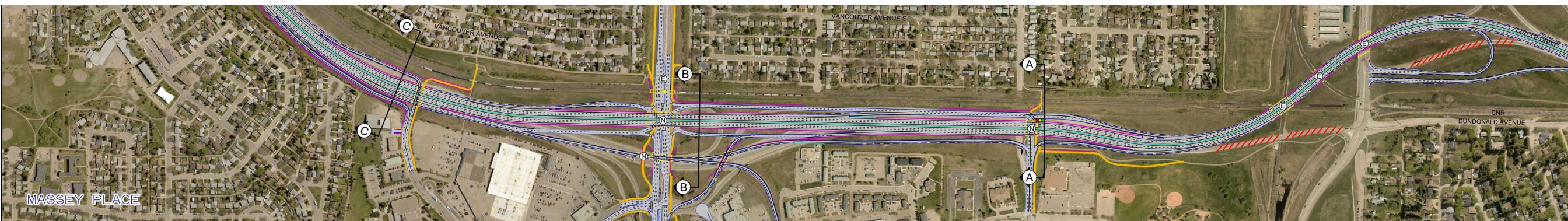
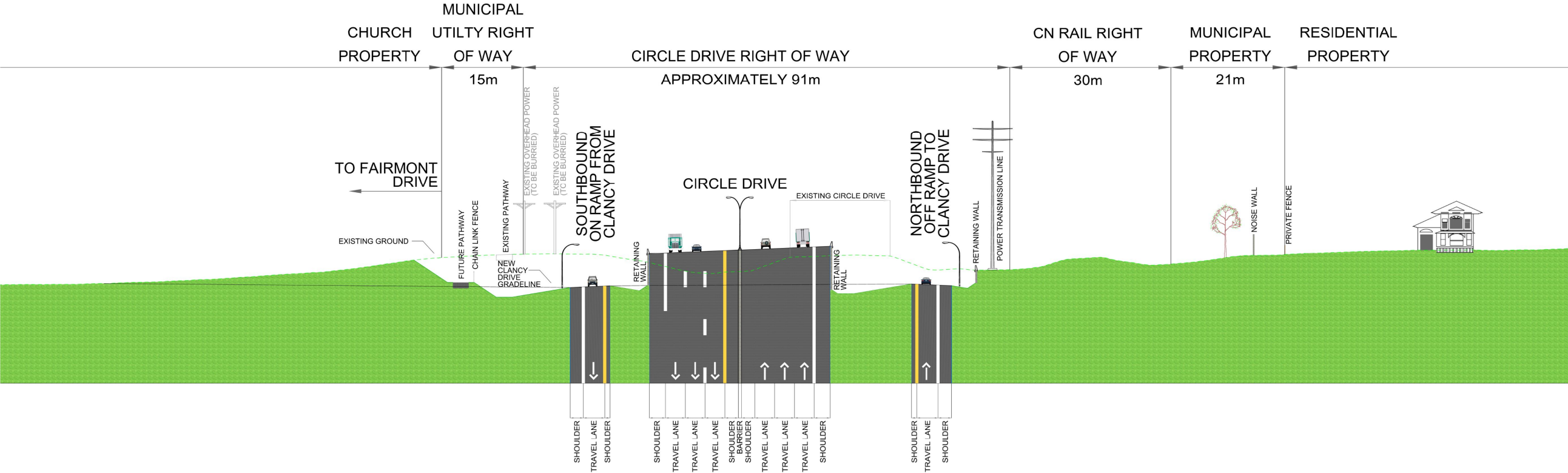
# Recommended Plan: 1. Road Network





# Recommended Plan

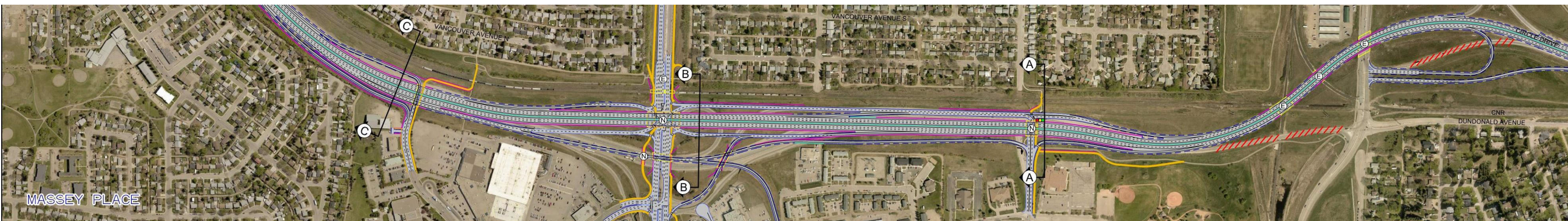
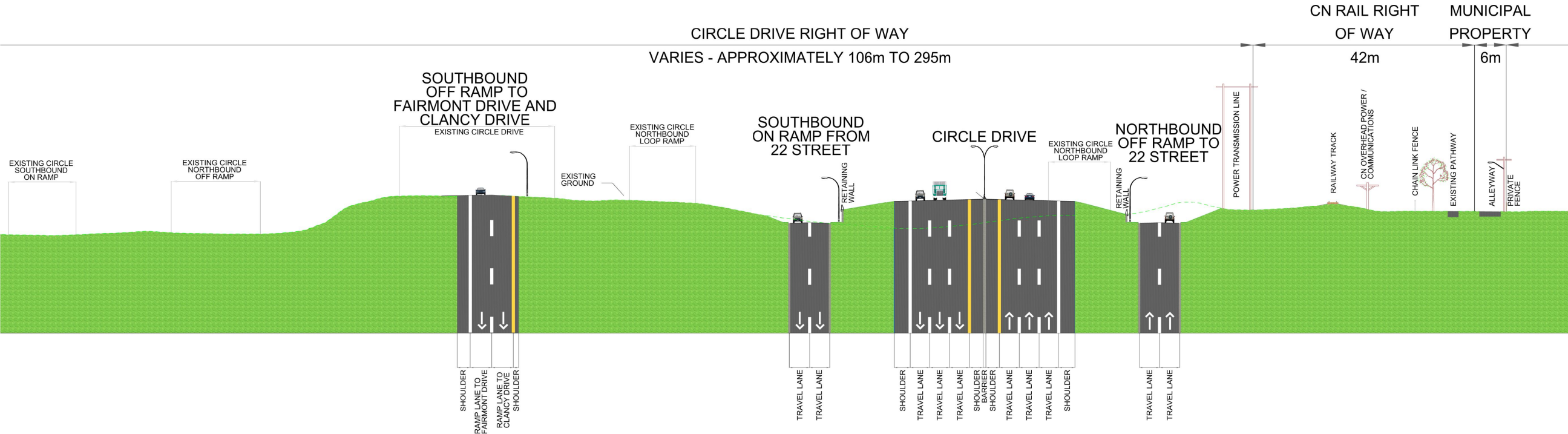
## 2a. Typical Cross-Sections – Looking North – 25m South of Clancy Drive





# Recommended Plan

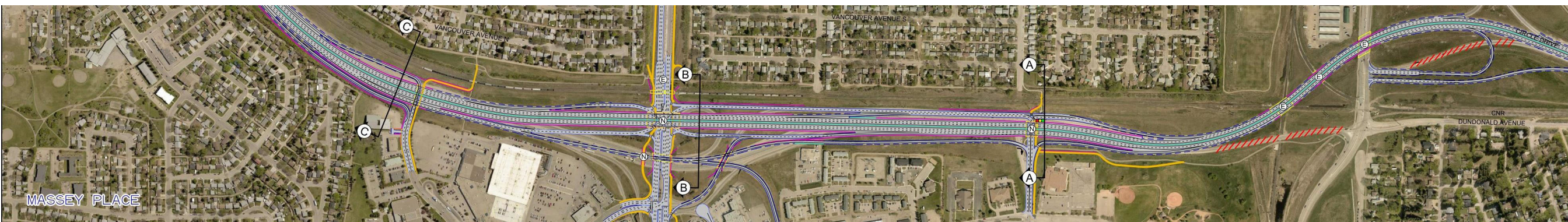
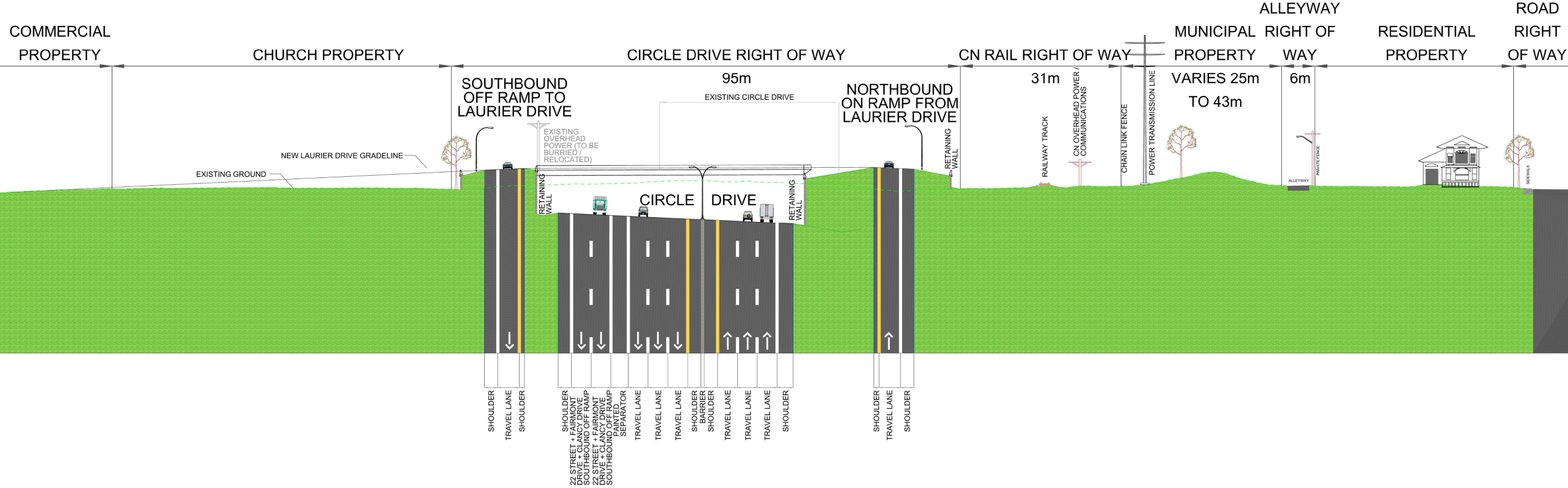
## 2b. Typical Cross-Sections – Looking North – 120m South of 22<sup>nd</sup> Street





# Recommended Plan

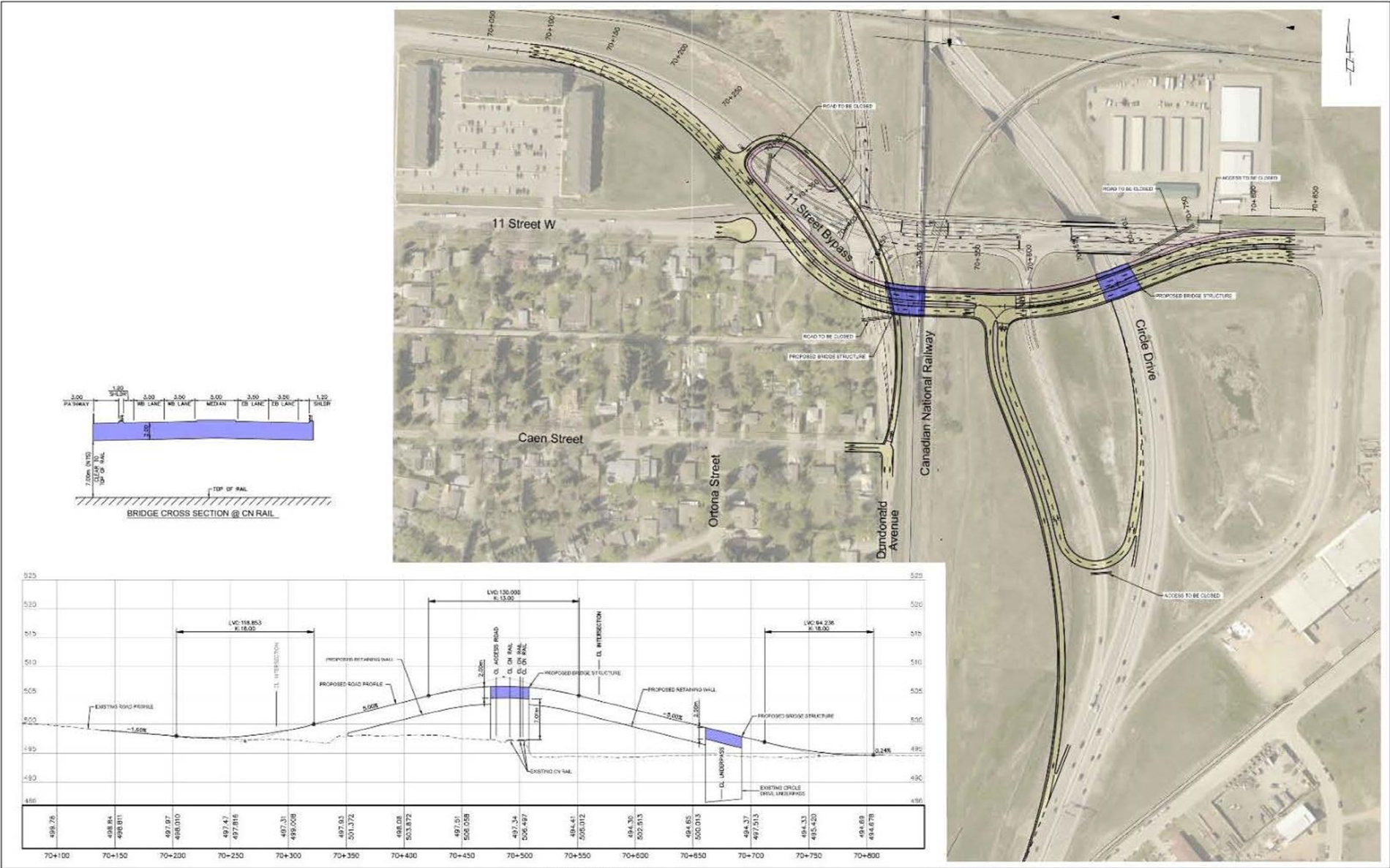
## 2c. Typical Cross-Sections – Looking North – 50m North of Laurier Drive





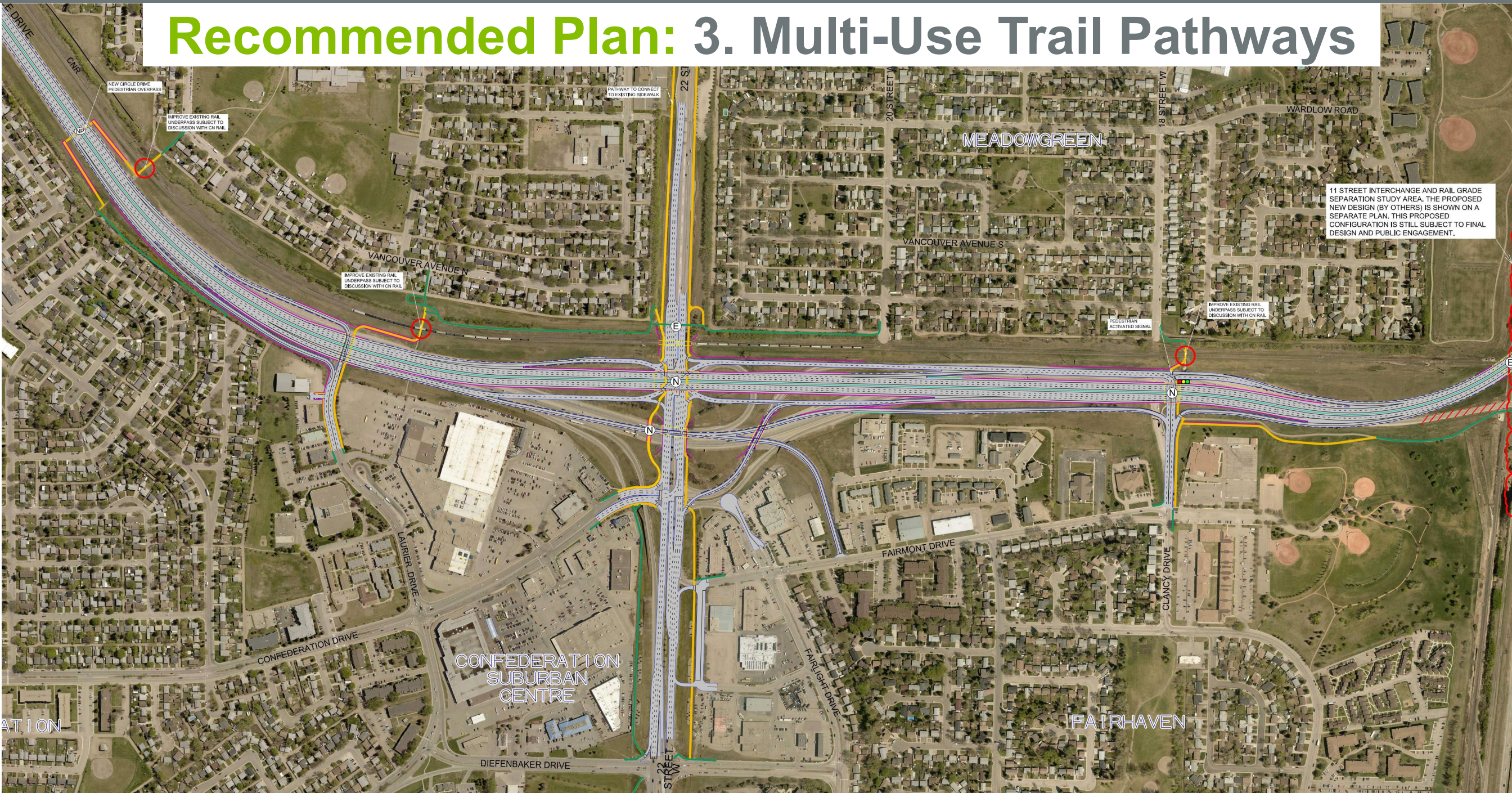
# 11<sup>th</sup> Street Interchange

# Future Railway Grade Separation Concept by Others





# Recommended Plan: 3. Multi-Use Trail Pathways



11 STREET INTERCHANGE AND RAIL GRADE SEPARATION STUDY AREA, THE PROPOSED NEW DESIGN (BY OTHERS) IS SHOWN ON A SEPARATE PLAN. THIS PROPOSED CONFIGURATION IS STILL SUBJECT TO FINAL DESIGN AND PUBLIC ENGAGEMENT.



# Summary: 1. Circle Drive Changes

## 1. Circle Drive West Achieves consistent 90 km/h Speed Limit

- Circle Drive is expanded to six core lanes
- Two traffic signals, and associated left-hand turning movements, are removed; and
- Two substandard low-speed curves crossing 22<sup>nd</sup> Street removed

## 2. Compact All-Movement Circle Drive / 22<sup>nd</sup> Street Interchange

- Existing unconventional and expansive interchange configuration is replaced
- New configuration accommodates long-term emphasis between Highway 7/14 / 22<sup>nd</sup> Street West and Circle Drive South

## 3. Southbound Exit to Fairmont Drive is Retained

- From new Collector/Distributor road

## 4. Laurier Drive Overpasses Circle Drive

- Access on/off Circle Drive to/from the north

# Summary: 2. Circle Drive Changes

## 5. Clancy Drive Underpasses Circle Drive

- All movements on/off Circle Drive
- New access provided from eastbound Clancy Drive to 22<sup>nd</sup> Street eastbound via C/D road

## 6. Southbound Exit to 11<sup>th</sup> Street Relocated

- Existing exit conflicts with southbound on-ramp from Clancy Drive
- Becomes loop ramp south of 11<sup>th</sup> Street

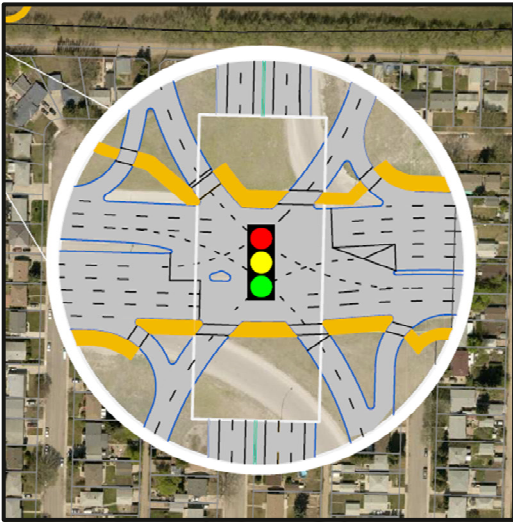
## 7. New Direct Ramp from Southbound Circle Drive to Eastbound 22<sup>nd</sup> Street

- Existing turning movement exits Circle Drive to Fairmont Drive (known as Jughandle design using local streets)

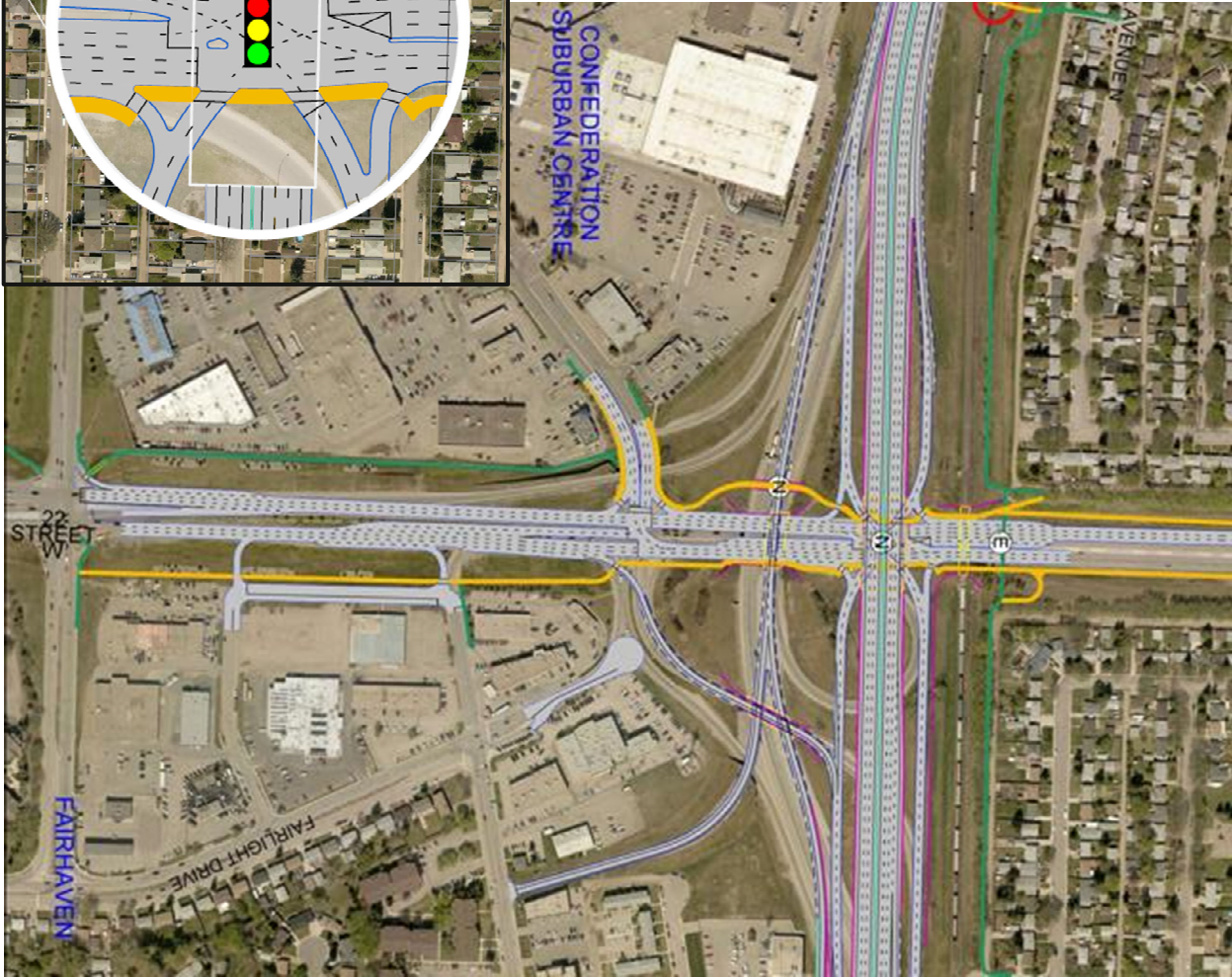


# Summary: 1. 22<sup>nd</sup> Street

## Existing Conditions



## Recommended Plan





# Summary: 2. 22<sup>nd</sup> Street Changes

- 1. 22<sup>nd</sup> Street is Expanded to 6 Core Lanes
- 2. 'T' intersection with only Confederation Drive, more efficient design
  - 200m separation from Circle Drive
- 3. Single Signalized Intersection with Circle Drive ramps, an efficient design
  - Free-flow southbound right turn into North Mall using dedicated auxiliary lane
- 4. New Ramp from Eastbound 22<sup>nd</sup> Street to Southbound Circle Drive
  - Ramp exits 22<sup>nd</sup> Street before Confederation Drive traffic signal
  - Better accommodates regional travel and intra-city truck traffic
- 5. New Exit from Eastbound 22<sup>nd</sup> Street to Fairmont Drive
  - The right-on movement from Fairmont Drive moved west closer to Diefenbaker Drive
  - Change accommodates traffic crossing 22<sup>nd</sup> Street from south mall to north mall
- 6. Access from Westbound 22<sup>nd</sup> Street to Southwest Quadrant is via Diefenbaker Drive
  - New return movement from Clancy Drive eastbound to 22<sup>nd</sup> Street eastbound
  - City to conduct future study to improve 22<sup>nd</sup> Street / Diefenbaker Drive intersection



# Summary: Objectives

## The Recommended Plan Balanced Two Objectives:

### 1. Achieving Free-Flow Standards

- Uniform 90 km/h design speed along Circle Drive
- Design consistency improves safety by removing left-hand turning movements

### 2. Retaining Turning Movements

- All turning movements off/on Circle Drive retained at Clancy Drive
- New access provided from eastbound Clancy Drive to eastbound 22<sup>nd</sup> Street via C/D road
- Access from Laurier Drive to/from the north on Circle Drive
- Access from Circle Drive southbound to Fairmont Drive is retained
- New access provided from southbound Circle Drive to eastbound 22<sup>nd</sup> Street
- New access provided from eastbound 22<sup>nd</sup> Street to Fairmont Drive
- Changes better accommodate traffic crossing 22<sup>nd</sup> Street from south mall to north mall



# Summary: Benefits

## The Recommended Plan Achieves:

1. Improved 22<sup>nd</sup> Street roadway performance and safety
2. Improved Circle Drive West performance and safety
3. Improved capacity and cross-city travel times
4. Consistent facility design better meeting driver expectations
5. Improved multi-use trail pathway network and pedestrian safety
6. New configuration better supports Circle Drive's long-term role in the provincial highway network



# Summary: Chief Concern

The Recommended Plan did not Resolve all Stakeholder Concerns.

One Concern Stands Out:

- ❖ The two traffic signals at Clancy and Laurier Drives were retained by Circle Drive’s original Stage 1 design to accommodate convenient local access.
- ❖ If the traffic signals continue to be retained, it would lead to increased traffic congestion and safety concerns as traffic in the city and surrounding region grows.  
This will include traffic diverted through the city from the south end of the future Saskatoon Freeway’s west leg and the regional highways.
- ❖ Circle Drive’s Stage 1 design unfortunately resulted in area residents and business owners relying on now long-established, but interim, travel patterns.



# Summary: Chief Concern

## The Recommended Plan is Long-Term:

- ❖ Removing the signals after these many years will change the routes in/out of some neighbourhoods and business areas and is disruptive to affected drivers.
- ❖ Upgrading Circle Drive West to free-flow standards is considered a long-term project. The City hopes that preparing the plan at this still early stage will give area residents and business owners time to adjust their plans (where possible) before the changes are implemented.
- ❖ Major transportation projects with potential to affect large areas and/or existing development are commonly planned long in advance of anticipated construction timelines. The original plans for Circle Drive West did not foresee the Saskatoon Freeway and the absence of a southwest leg. The City has revisited its plans for Circle Drive West to reflect these changing circumstances.



# Summary: City Commitments

## Future City Actions to Consolidate the Long-Term Plan:

- ❖ Noise assessment along Circle Drive West
- ❖ 11<sup>th</sup> Street interchange upgrading and associated railway grade separations
- ❖ 22<sup>nd</sup> Street / Diefenbaker Drive intersection upgrading
- ❖ Improvement of the railway pedestrian underpasses subject to discussion with CN Rail





## Circle Drive Clancy Drive to Laurier Drive Functional Plan

Thank you  
for  
Listening!





# Circle Drive

Clancy Drive to Laurier Drive  
Functional Plan

QUESTION  
PERIOD!





## Circle Drive

Clancy Drive to Laurier Drive  
Functional Plan

Thank you  
for  
Attending!

The Information Shown  
Today Will Be Posted on  
the Project Website!



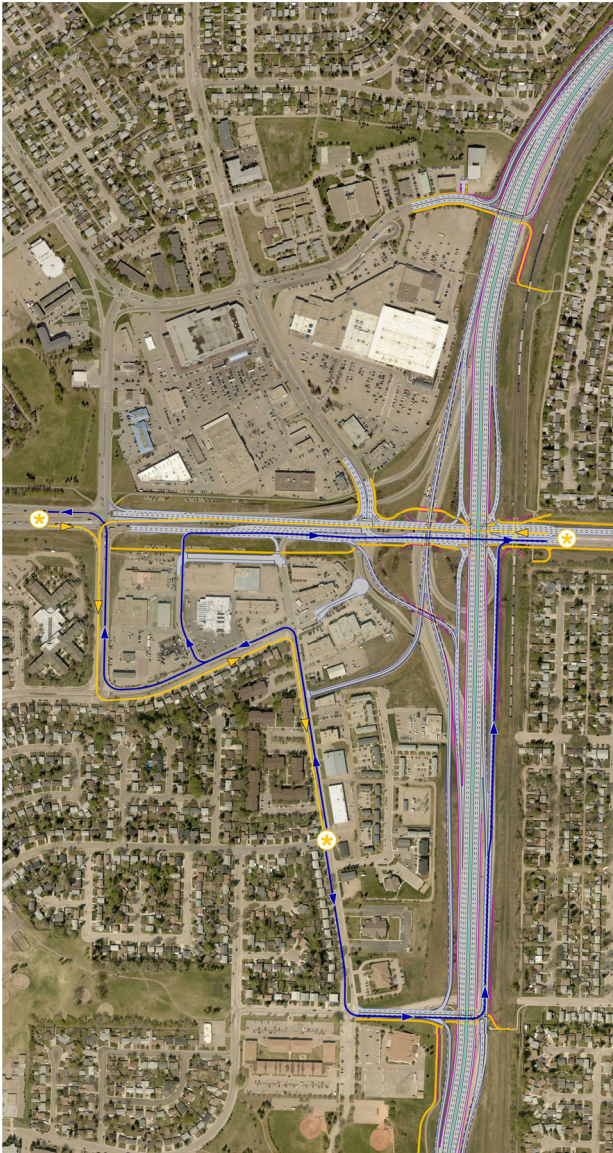


How Do I Get There?

Today



Future



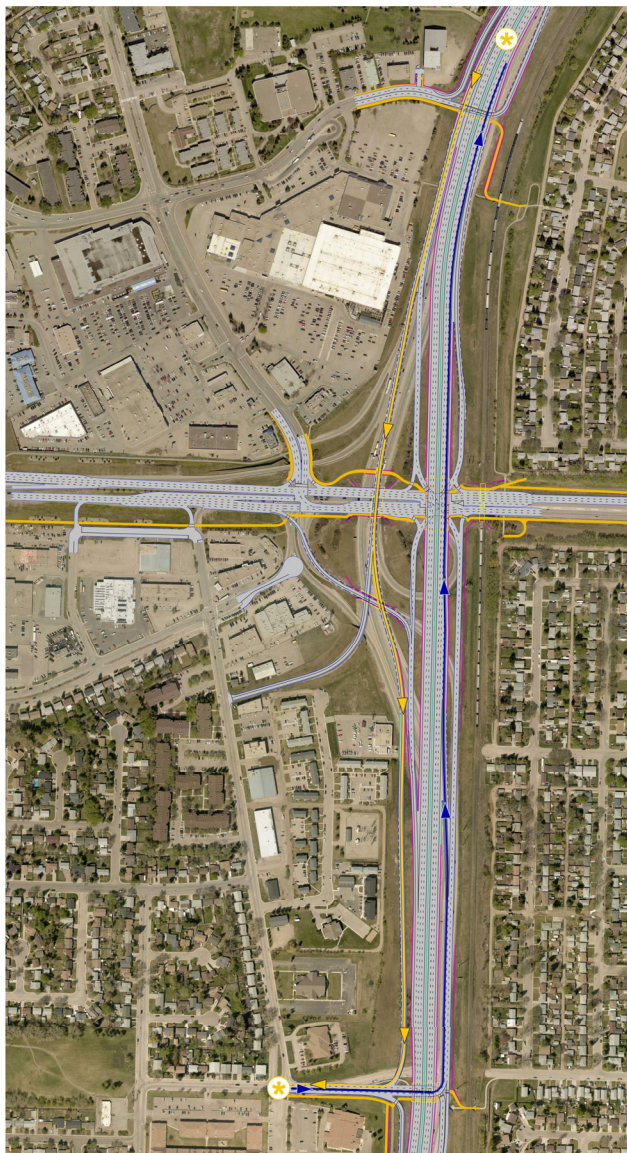
Clancy Drive to/from 22<sup>nd</sup> Street

- Start / End
- Travel Path One Direction
- Travel Path Return Direction

Today



Future



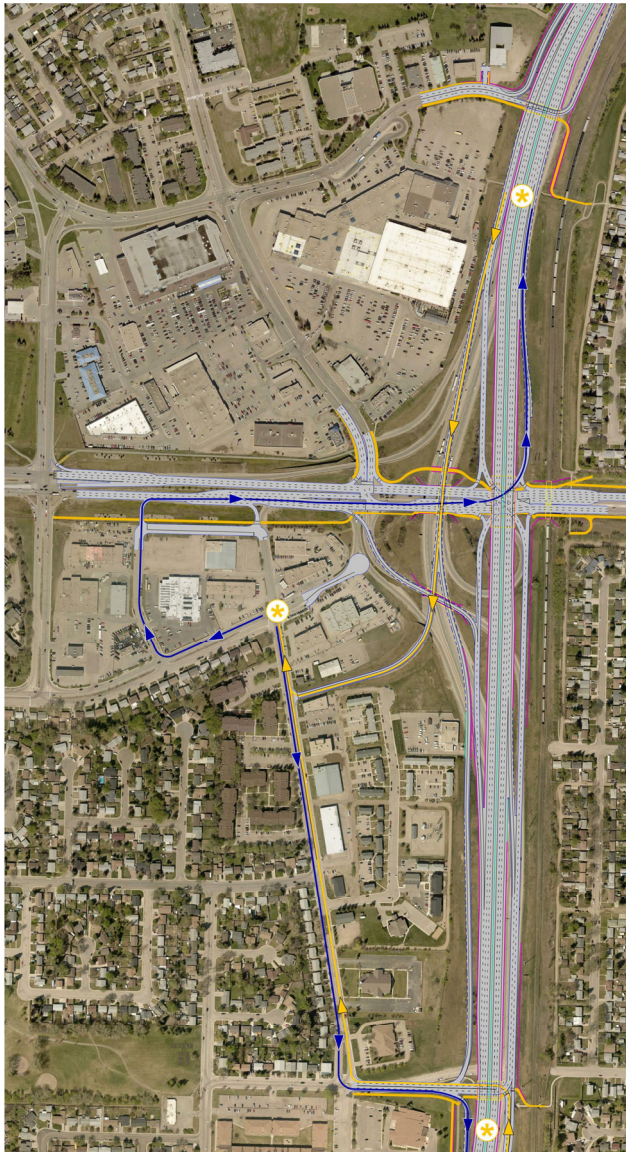
Clancy Drive to/from Circle Drive North



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Future

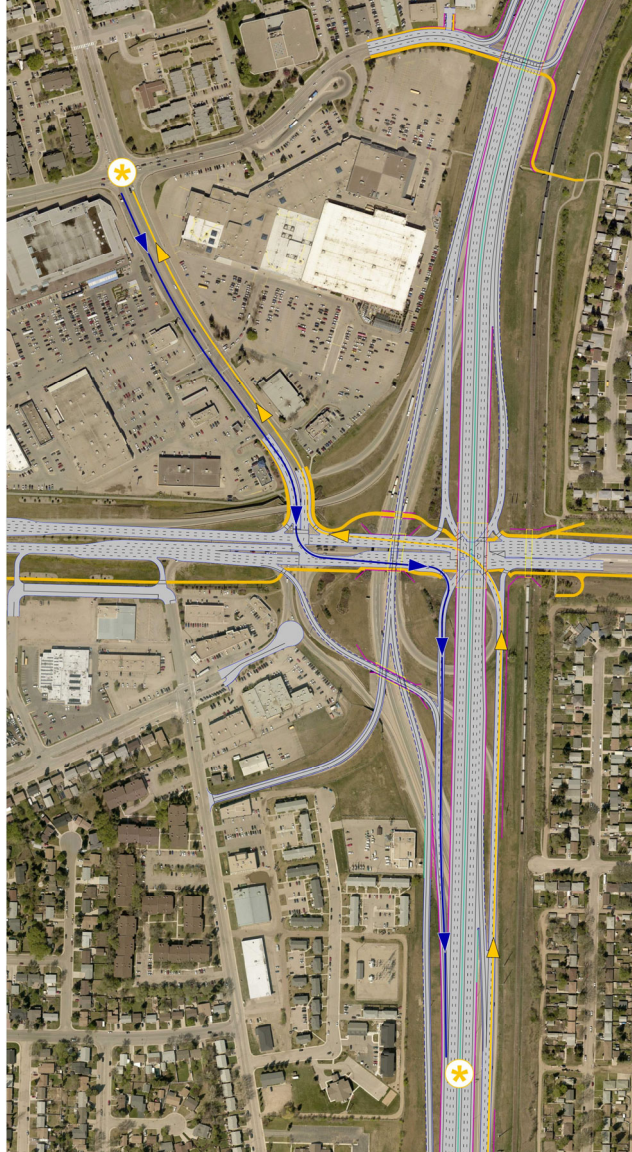


Fairlight Drive to/from Circle Drive

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Future



Laurier Drive to/from Circle Drive South



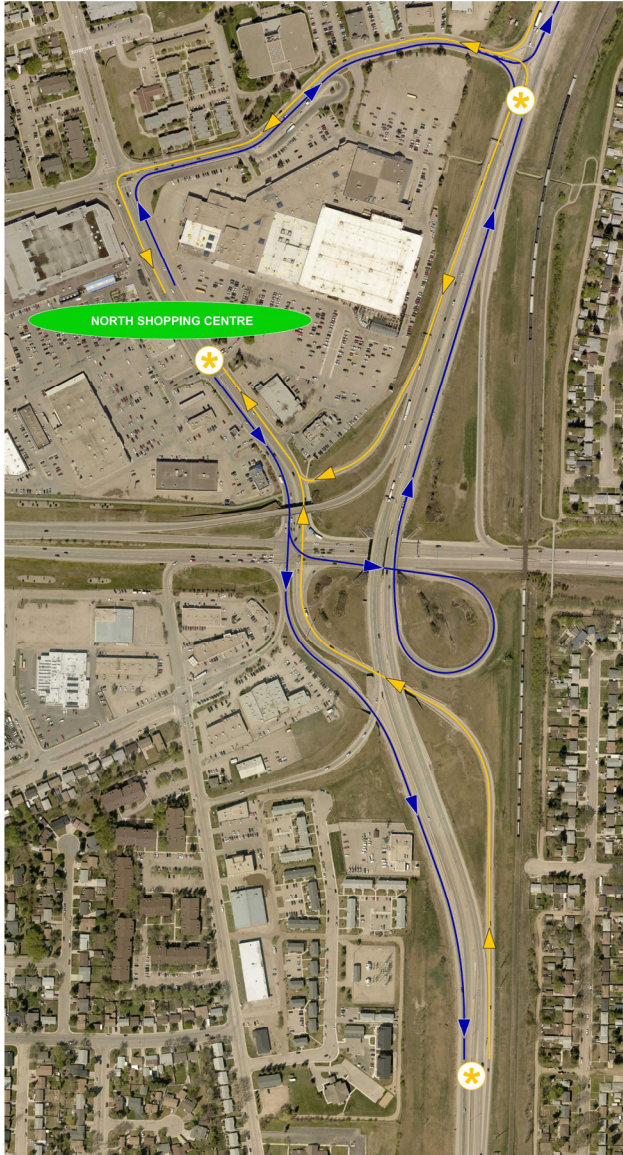
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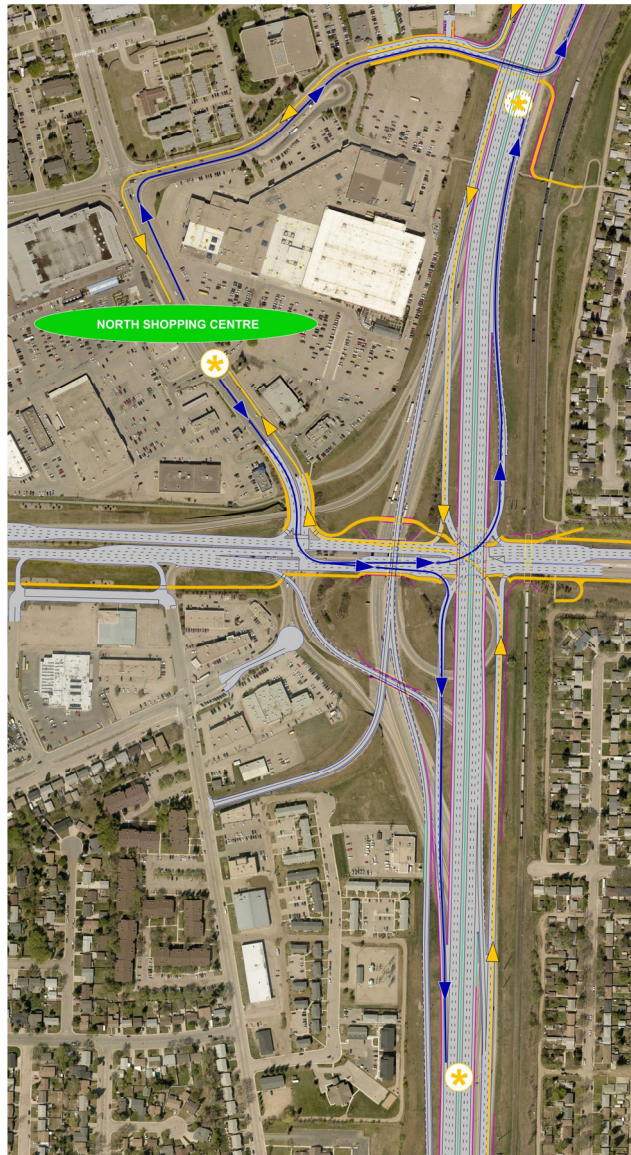
Future



Today



Future



Approaches into Confederation Shopping Area

Confederation Shopping Area to Circle Drive



How Do I Get There?

Today

Future



- \* Start / End
- ▶ Travel Path One Direction
- ▶ Travel Path Return Direction

Approaches into Fairhaven Shopping Area