



TRANSIT SYSTEM PLAN

BUS RAPID TRANSIT (BRT) PLAN &
TRANSIT NETWORK PLAN

February 2018

WELCOME!

The purpose of today's engagement is to share new information and get your feedback on:

1. BRT Route Options & Recommendations
2. BRT Runningway Options & Recommendations
3. BRT Station Platform Locations
4. BRT Station Shelter Design
5. Transit Network Reconfiguration Concept
6. Park and Ride Concept

BRT ROUTES

Recommended changes based on feedback and technical analysis:

— RED LINE ROUTE

Terminates at:

- Betts Avenue (West)
- Boychuck Drive (East)

— GREEN LINE ROUTE *NEW LINE

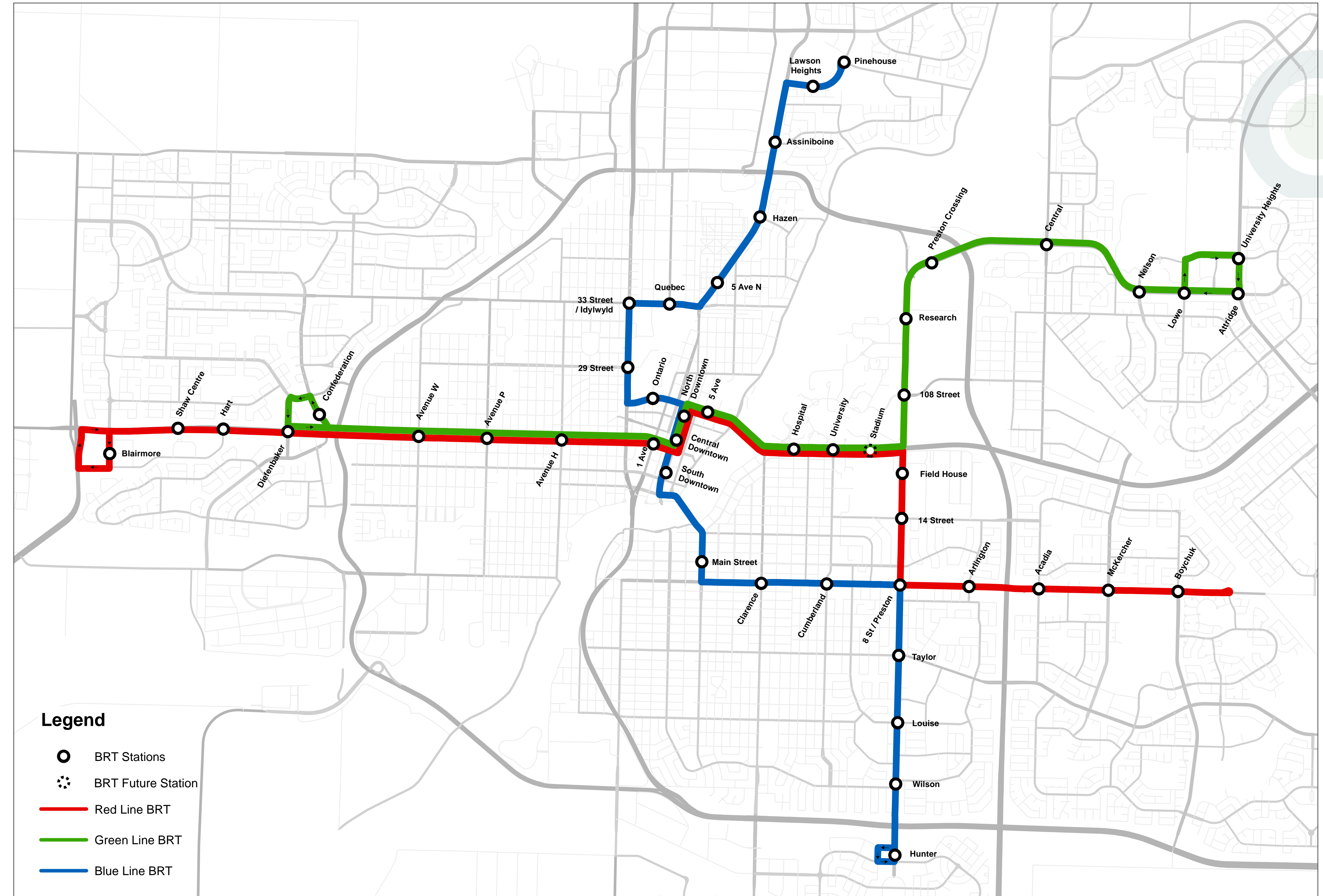
Terminates at:

- Confederation Mall (West)
- University Heights Square (East)

— BLUE LINE ROUTE

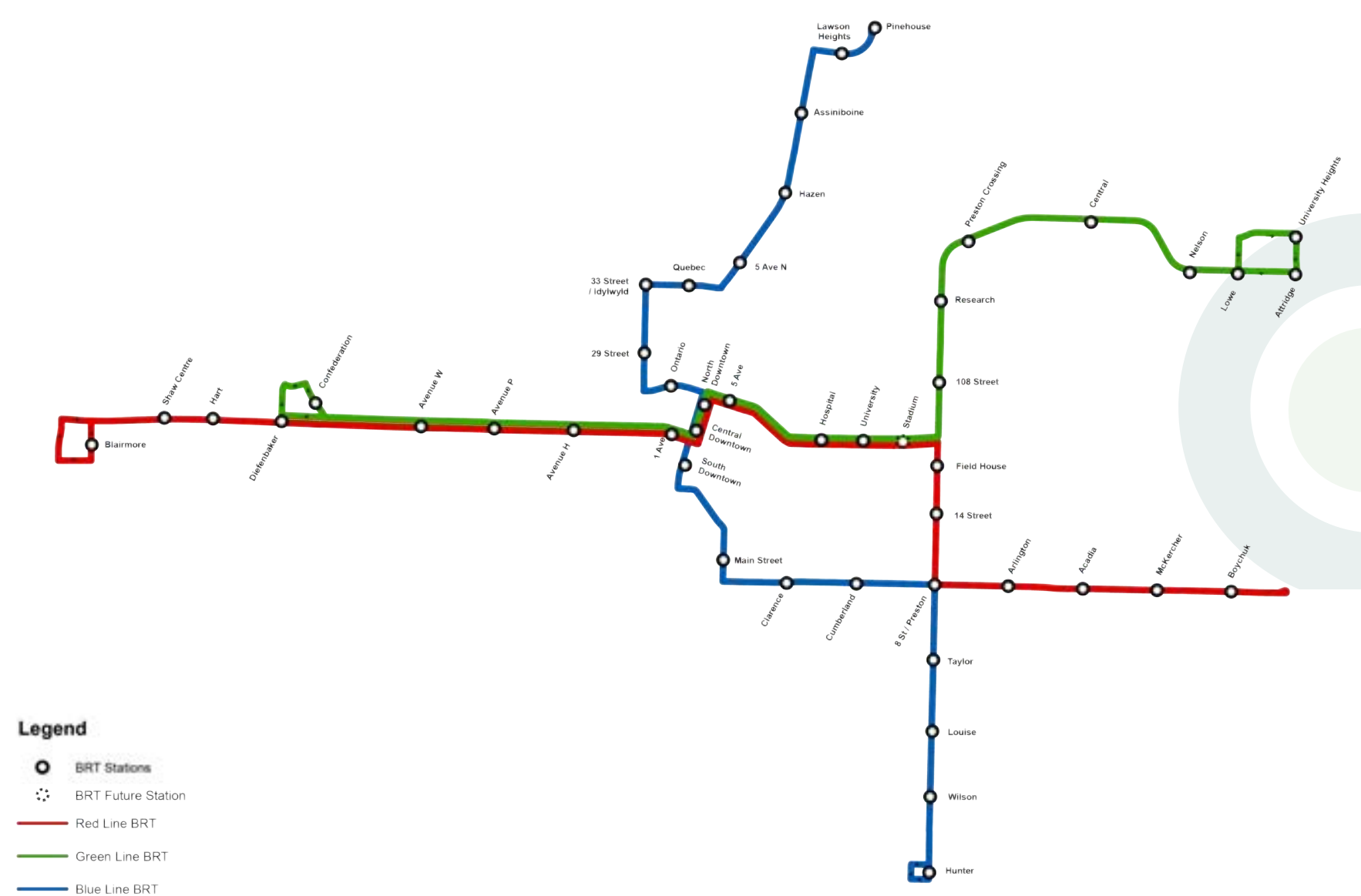
Terminates at:

- Pinehouse Drive (North)
- Stonebridge Mall (South)



Based on our analysis, we recommend the addition of the Green Line instead of a split Red Line:

- Green Line increases frequency along high ridership areas such as College Drive and 22nd Street W.
- Green Line will also make the system easier to navigate for customers and operate by Saskatoon Transit.



What Do You Think?

Is this a positive change to the Transit Plan? Place a dot along the scale below:



Help us understand why or why not:

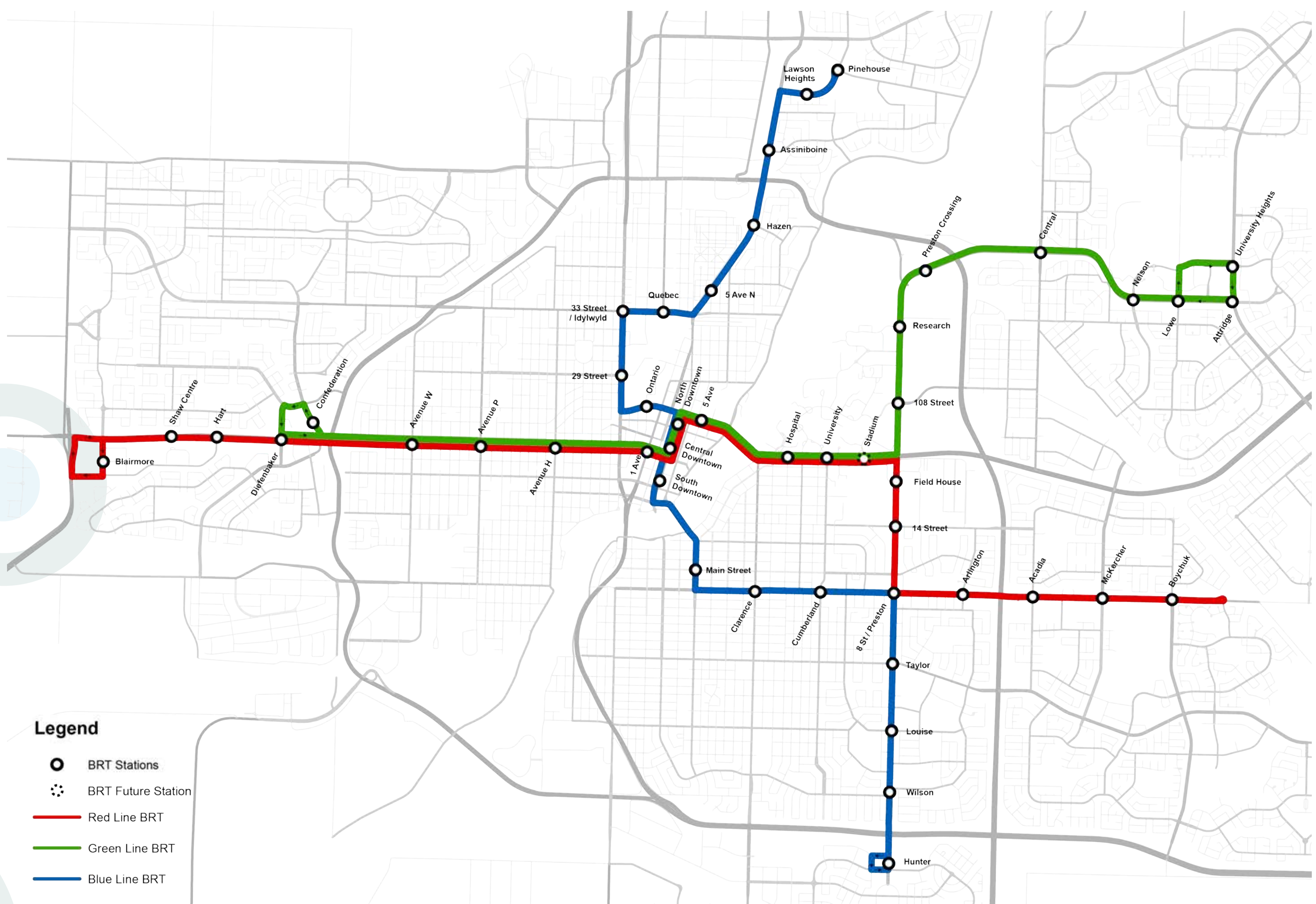
Based on our analysis, we've recommended a number of start and end points for the BRT Lines.

What Do You Think?

Do you think we have the right start and end points for each of the lines?



If not, help us identify some other options:

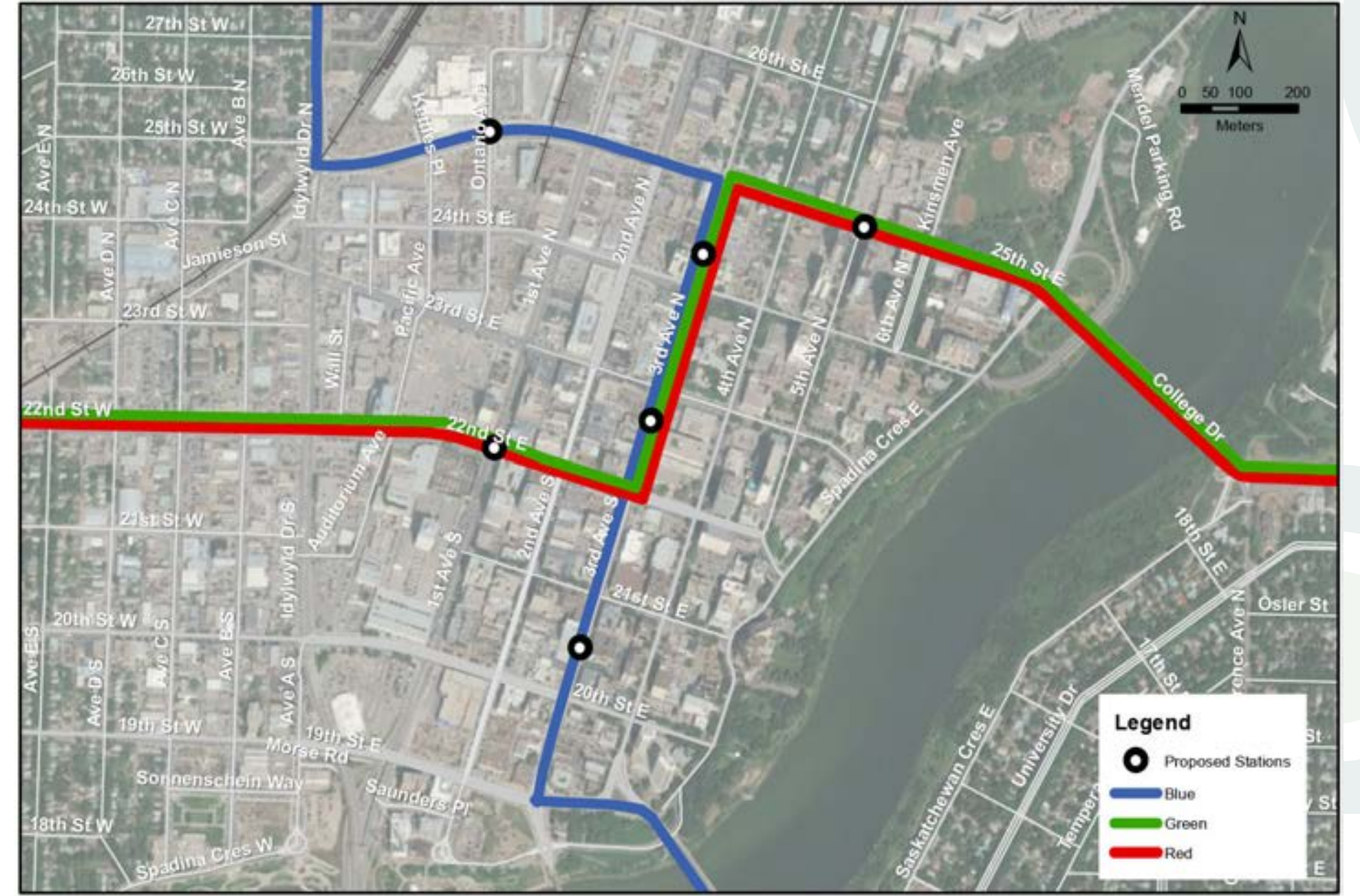


DOWNTOWN ROUTE OPTIONS & RECOMMENDATION

In December we were asked to confirm the suitable routing through Downtown:

	1 st Avenue	2 nd Avenue	3 rd Avenue	4 th Avenue
Map				
Roadway	✓ Wide enough to accommodate transit	× Narrow north of 23rd Street	✓ Wide enough to accommodate transit	× Already accommodates bike lanes
Transit reach	× 600m from eastern portion of downtown	✓ Covers the majority of downtown	✓ Covers the majority of downtown	× 600m from western portion of downtown
Existing Transit	~ Few transit routes along corridor	× No transit routes along corridor	✓ Highest number of transit routes along corridor	× No transit routes along corridor
Transit Operations	✓ No restrictions	× High pedestrian activity and angled parking	✓ No restrictions	× Buses cannot turn safely turn onto 4th Ave from 25th St
Traffic Volumes	× High	× Highest among options south of 23rd Street	✓ Lowest among four options	~ Moderate
Recommendation	Not recommended	Not recommended	Recommended	Not recommended

Based on our analysis, 3rd Avenue remains the recommended BRT corridor for the through Downtown.

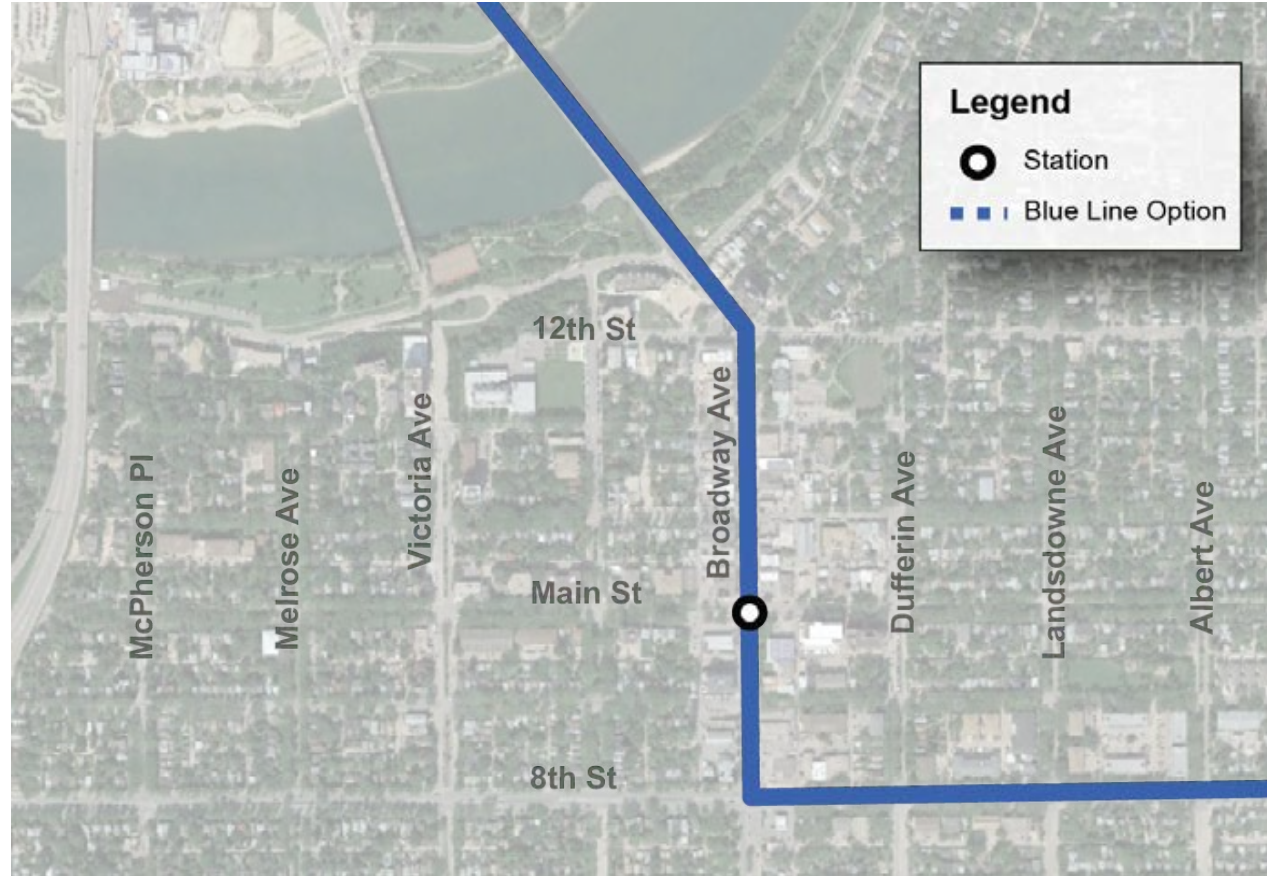
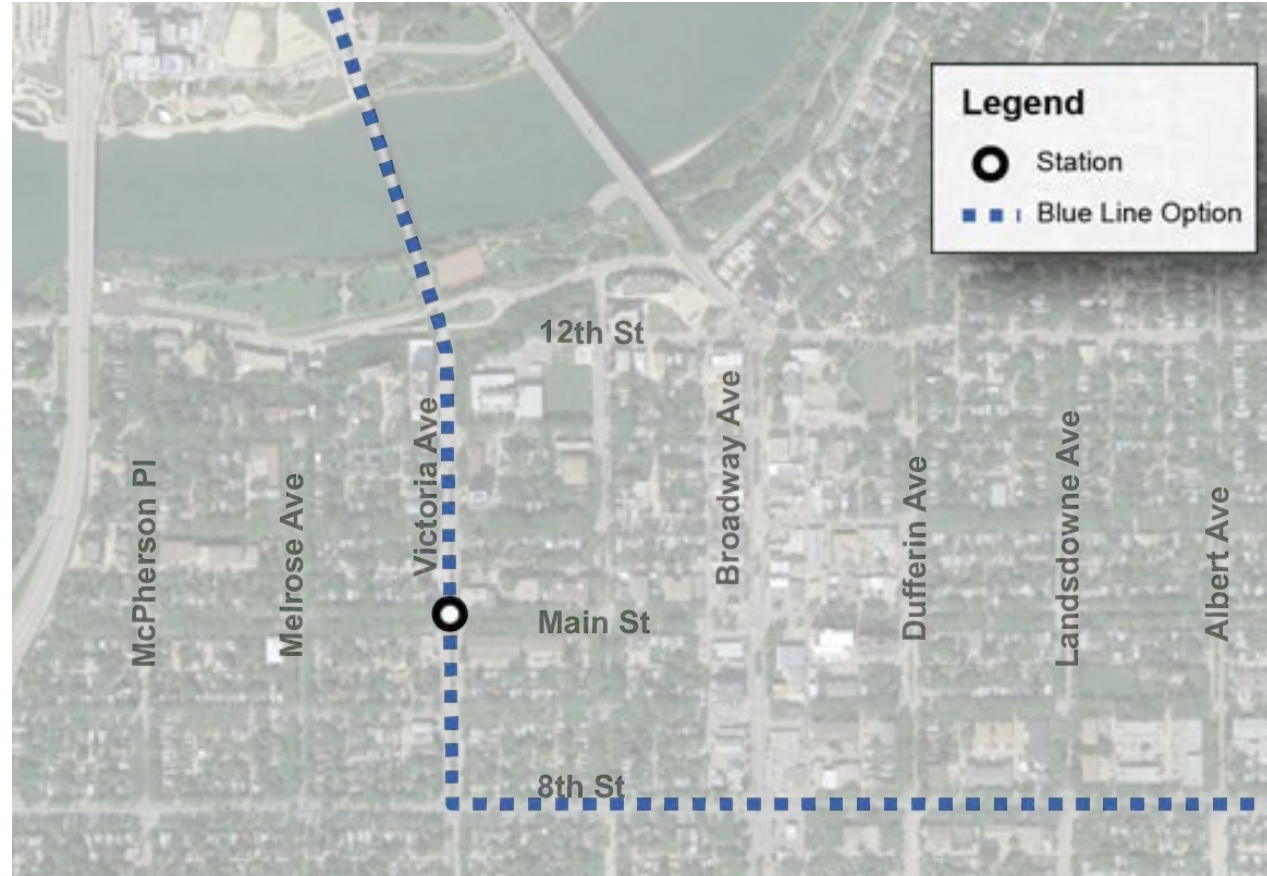
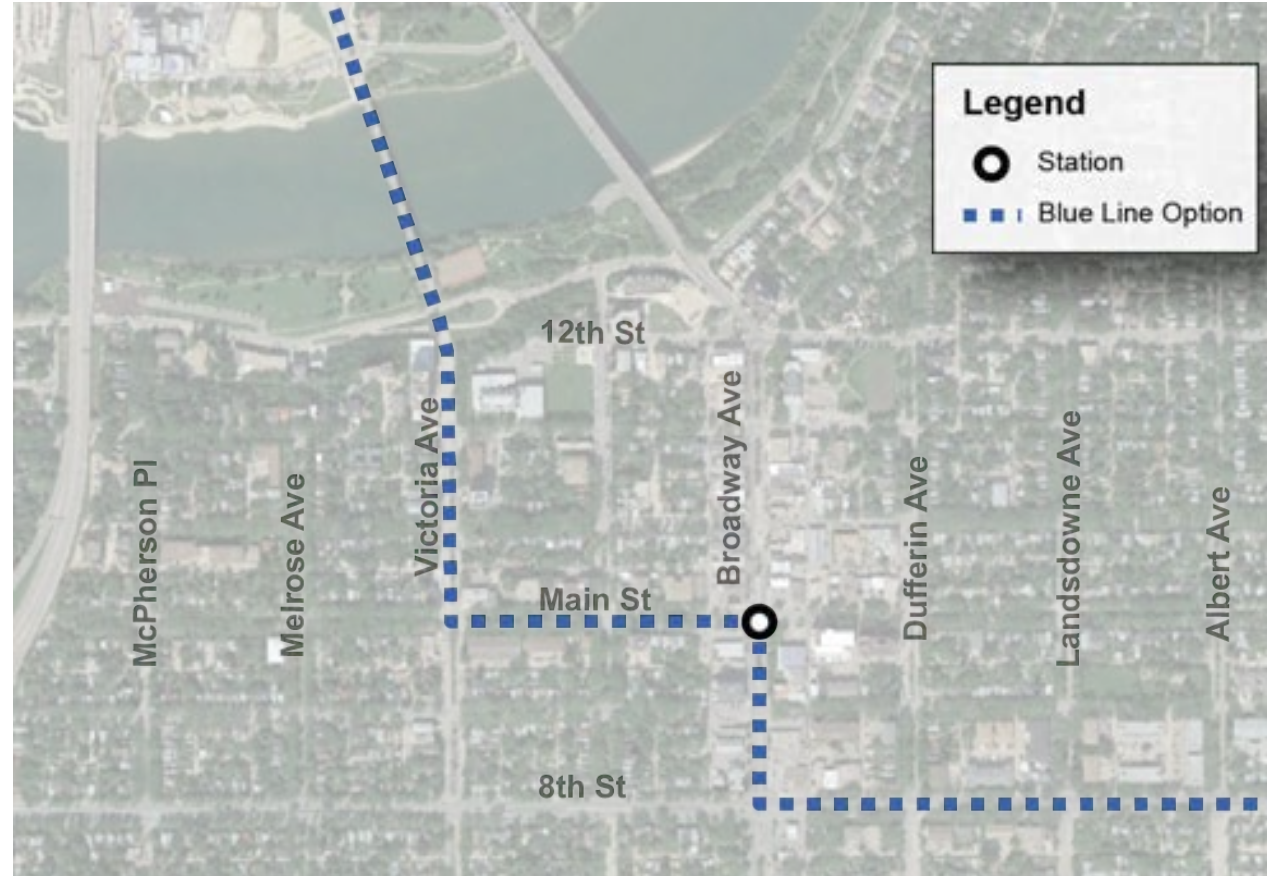


What Do You Think?

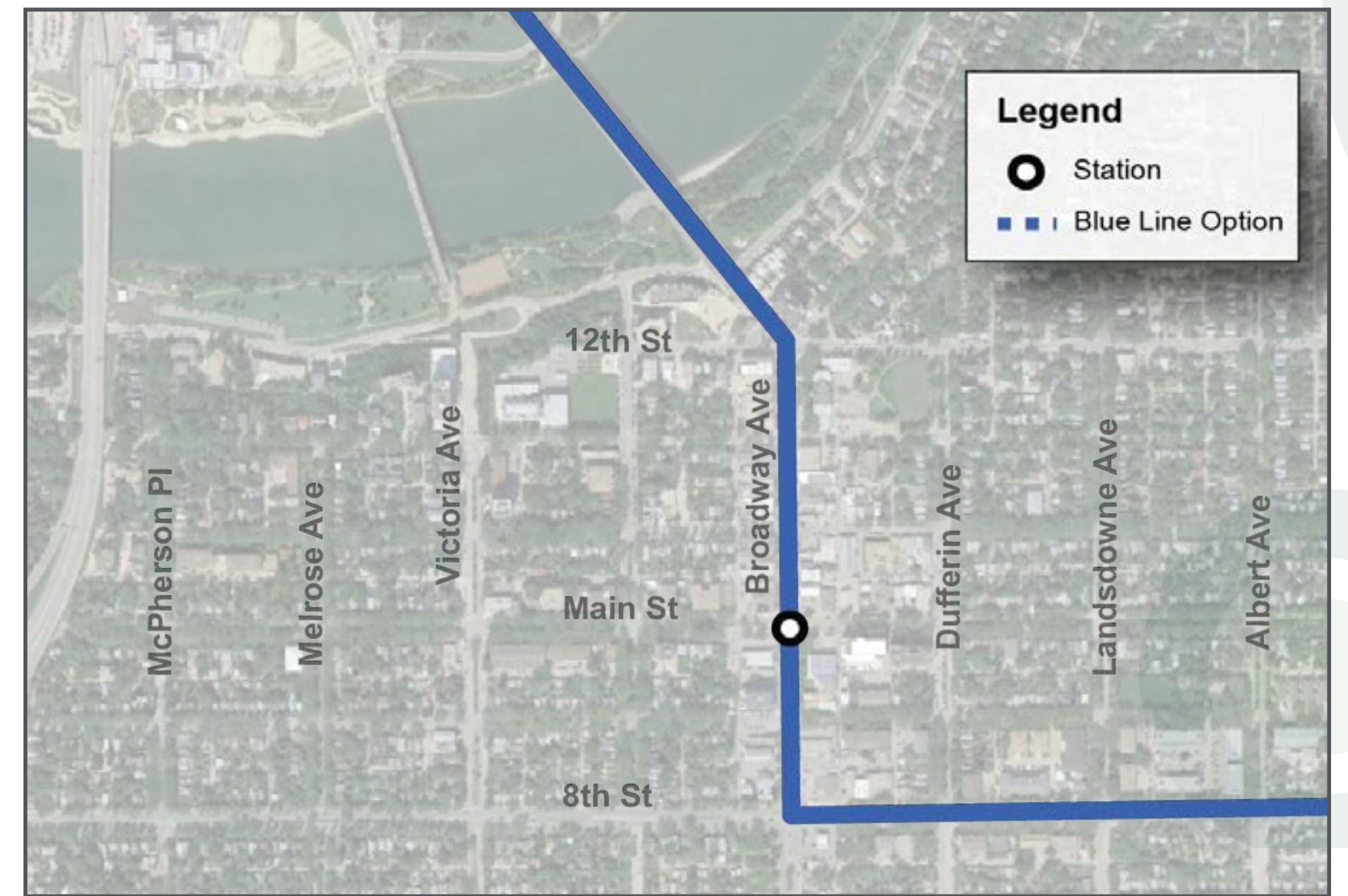
What key issues still need to be addressed?

NUTANA ROUTE OPTIONS & RECOMMENDATION

In December we were asked to confirm the suitable routing through Nutana:

	Broadway Avenue	Victoria Avenue	Victoria Avenue to Broadway Avenue
Map			
Lanes	✓ Two lanes per direction plus parking	× One lanes per direction plus parking	× One lane per direction plus parking along Victoria and Main Street
Traffic Volumes	× Higher	✓ Lower	~ Moderate
Corridor Land Use	✓ Commercial high street and schools	× Almost exclusively low to med. density residential	~ Mostly low to med. density residential
Transit Reach	✓ Direct access to Broadway	× Minimum 400m walk to Broadway	✓ Direct access to Broadway
Existing Transit	✓ Several transit routes along corridor	× No existing transit routes along corridor	~ Only transit routes along Broadway section
Signals	✓ Many opportunities for transit signal priority	× Limited opportunities for transit signal priority	× Limited opportunities for transit signal priority
Event Closures	× Approximately 10 days per year	✓ None	~ Only along Broadway
Recommendation	Recommended	Not recommended	Not recommended

**Based on our analysis,
Broadway Avenue remains
the recommended BRT
corridor through Nutana.**

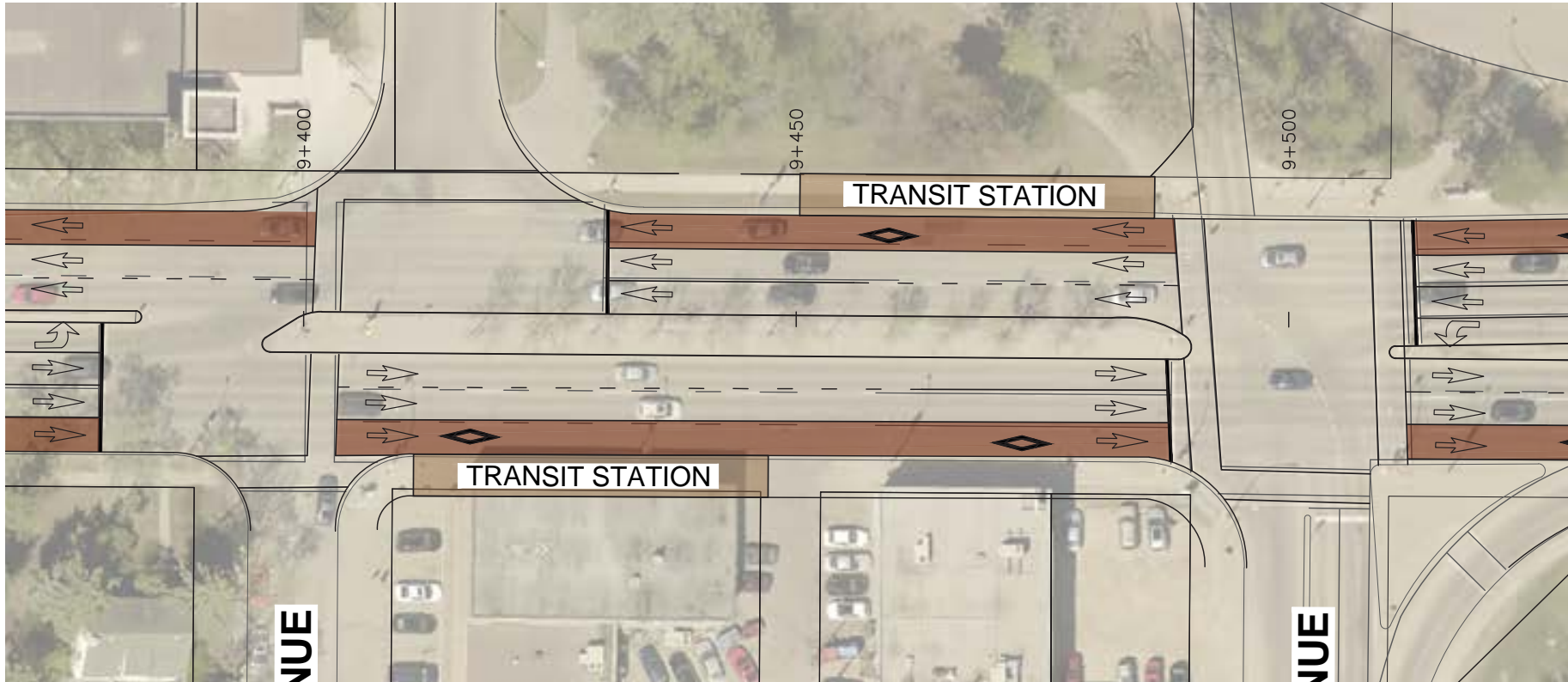
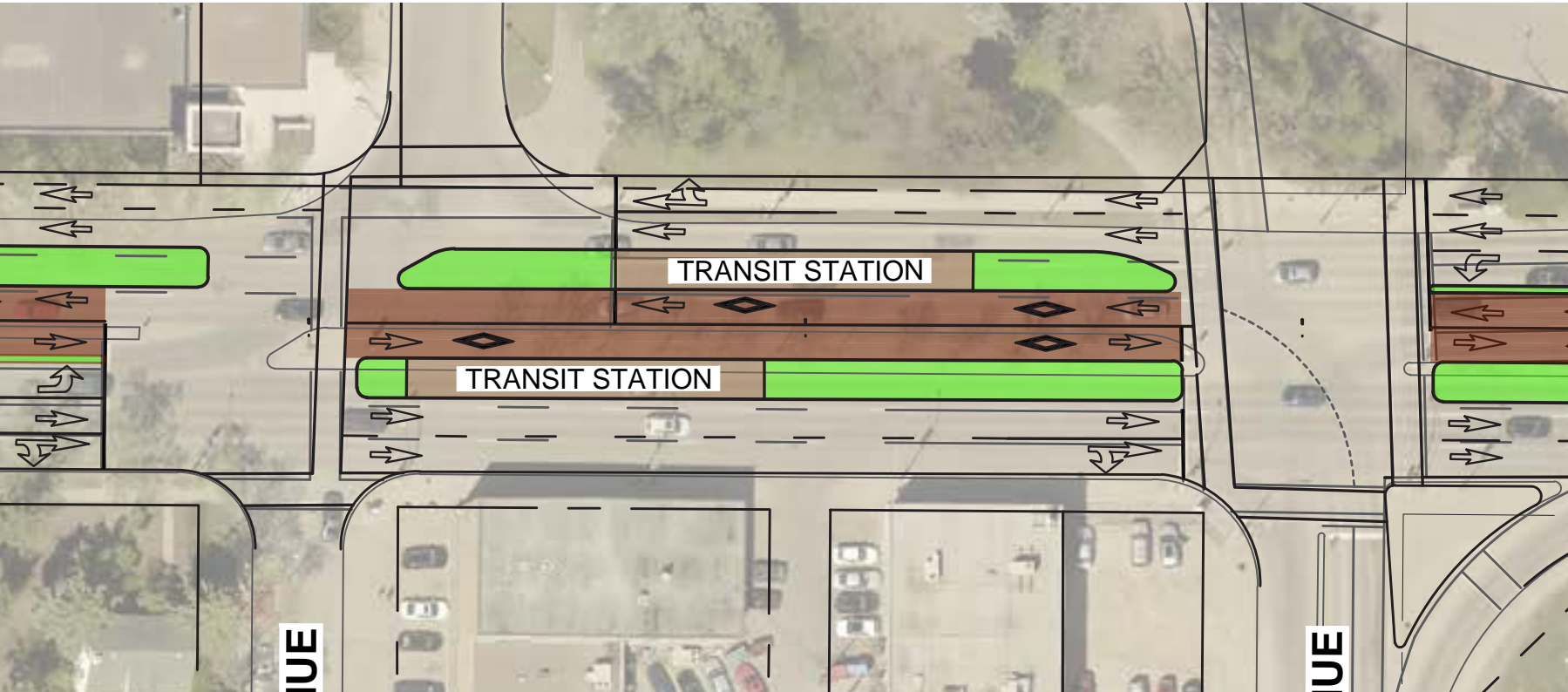
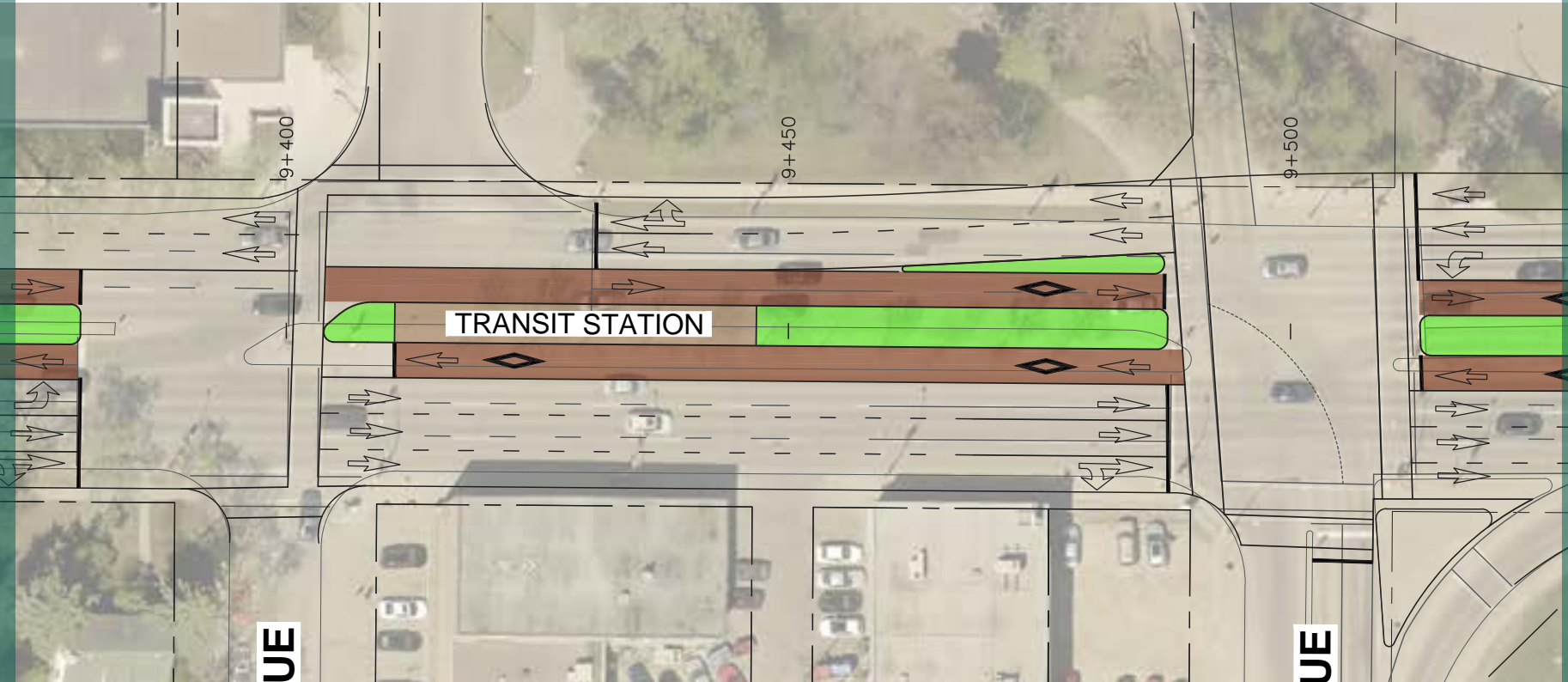


What Do You Think?

What key issues still need to be addressed?

BRT EXCLUSIVE RUNNINGWAYS

Exclusive runningways provide a greater degree of traffic separation between BRT and general traffic, improving transit travel time and reliability. In December, exclusive runningways were recommended for 3rd Avenue, College Drive and Broadway Avenue. Several exclusive runningway designs were considered:

	Curb Running	Centre Running With Flow	Centre Running Contraflow
Illustration			
Transit Operations	× Buses may experience delays from cars entering/exiting driveways or turning across runningway	✓ Buses will experience less delays than curb running option, contributing to faster transit speeds and reliability	✓ Buses will experience less delays than curb running option, contributing to faster transit speeds and reliability
Interaction with Traffic	× Cars may enter the transit-only lanes at any point between intersections	✓ Greater separation means that buses only interact with general traffic at intersections	✓ Greater separation means that buses only interact with general traffic at intersections
Familiarity	✓ Similar to existing transit operations	~ Somewhat familiar	× Least familiar
Parking Impacts	× On-street parking eliminated	✓ Some on-street parking can be maintained	✓ Some on-street parking can be maintained
Roadway Required	✓ One curb lane/parking lane per direction required	~ Median and centre lanes required	~ Median and centre lanes required
Cost	✓ Lowest	× Moderate to high	× Moderate to high
Recommendation	Not recommended	Recommended for all three segments	Recommended for a small section of College Dr to accommodate future development

Based on our analysis we are recommending a centre-running with-flow exclusive runningway for 3rd Avenue, Broadway Avenue and most of College Drive.



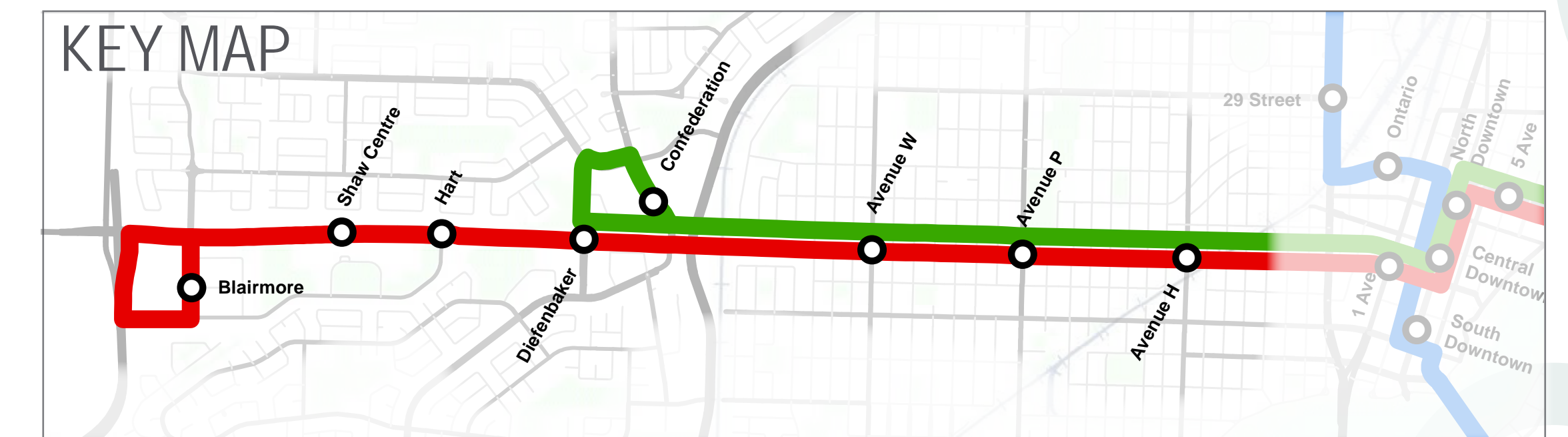
What Do You Think?

What key issues still need to be addressed?

3 rd Avenue	Broadway Avenue	College Drive

STATION PLATFORMS

Red / Green Line West: 22nd Street W from Betts Avenue to Avenue H



Red Line: Blairmore (Betts Avenue)



Red Line: Shaw Centre



Red Line: Hart Road



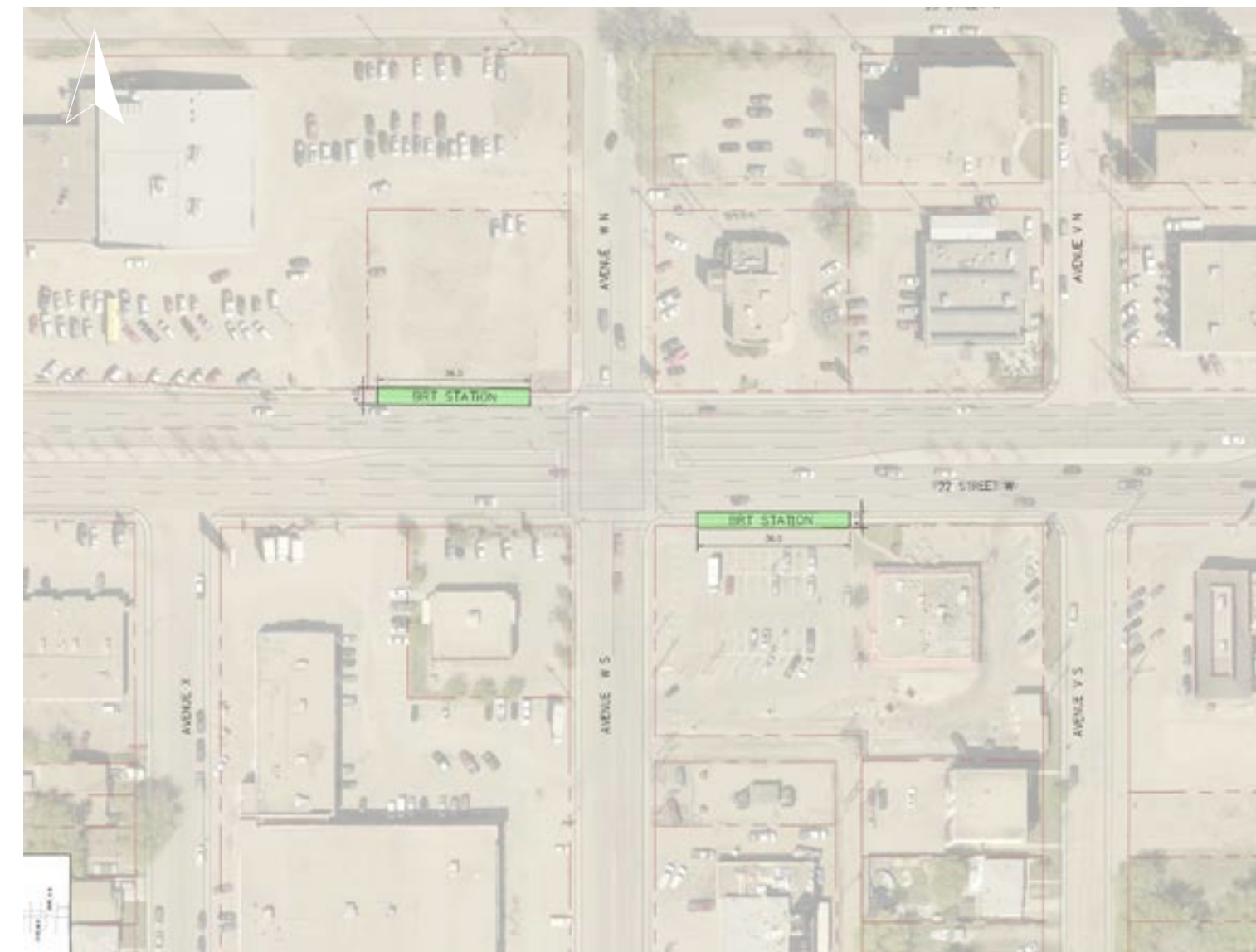
Red /Green Line: Diefenbaker Drive



Green Line: Confederation Mall



Red/Green Line: Avenue W



Red/Green Line: Avenue P



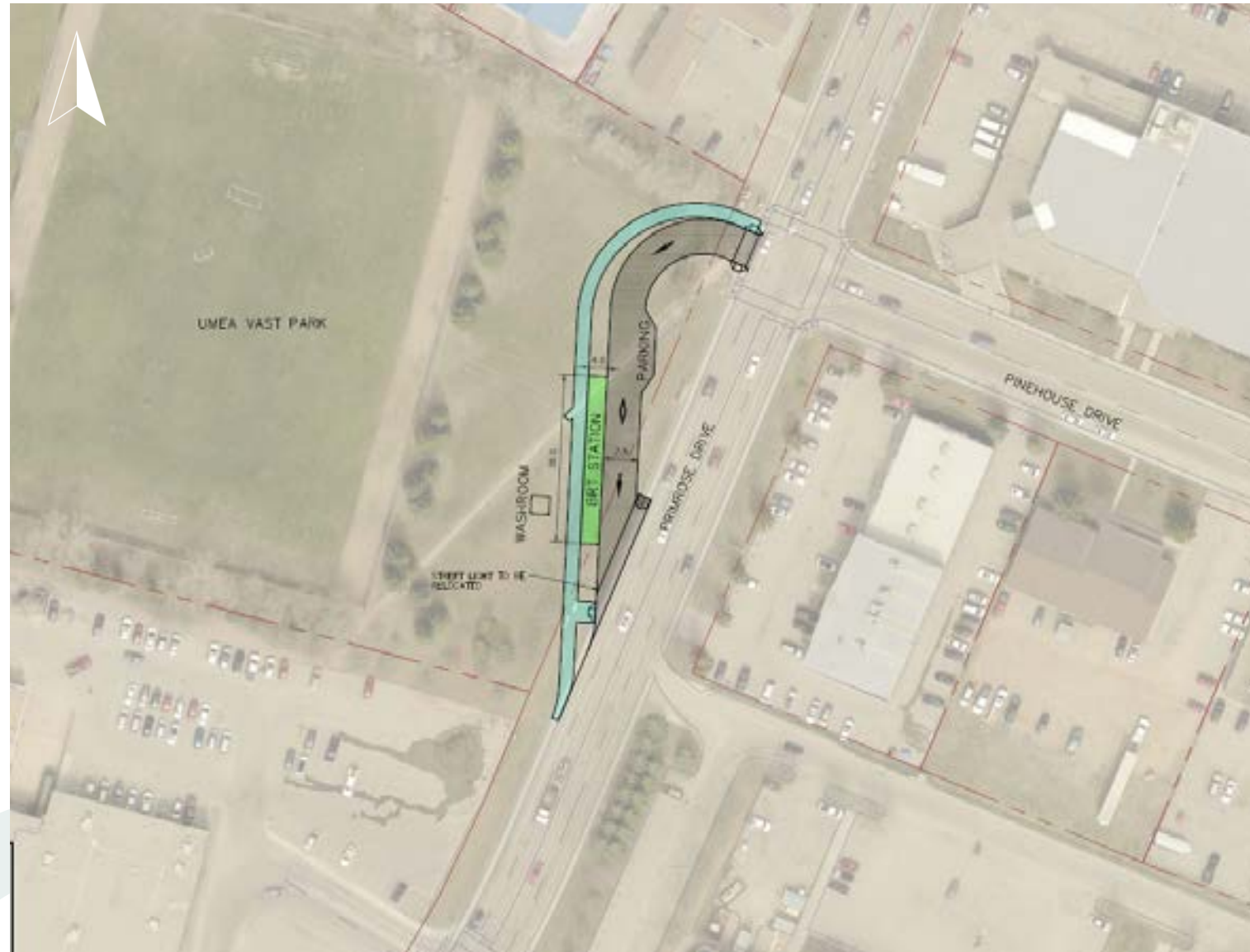
Red/Green Line: Avenue H



STATION PLATFORMS

Blue Line North: Pinehouse Drive to Idylwyld Drive

Blue Line: Pinehouse Drive



Blue Line: Lawson Heights Mall



Blue Line: Assiniboine Drive



Blue Line: Hazen Street



Blue Line: 5th Ave N



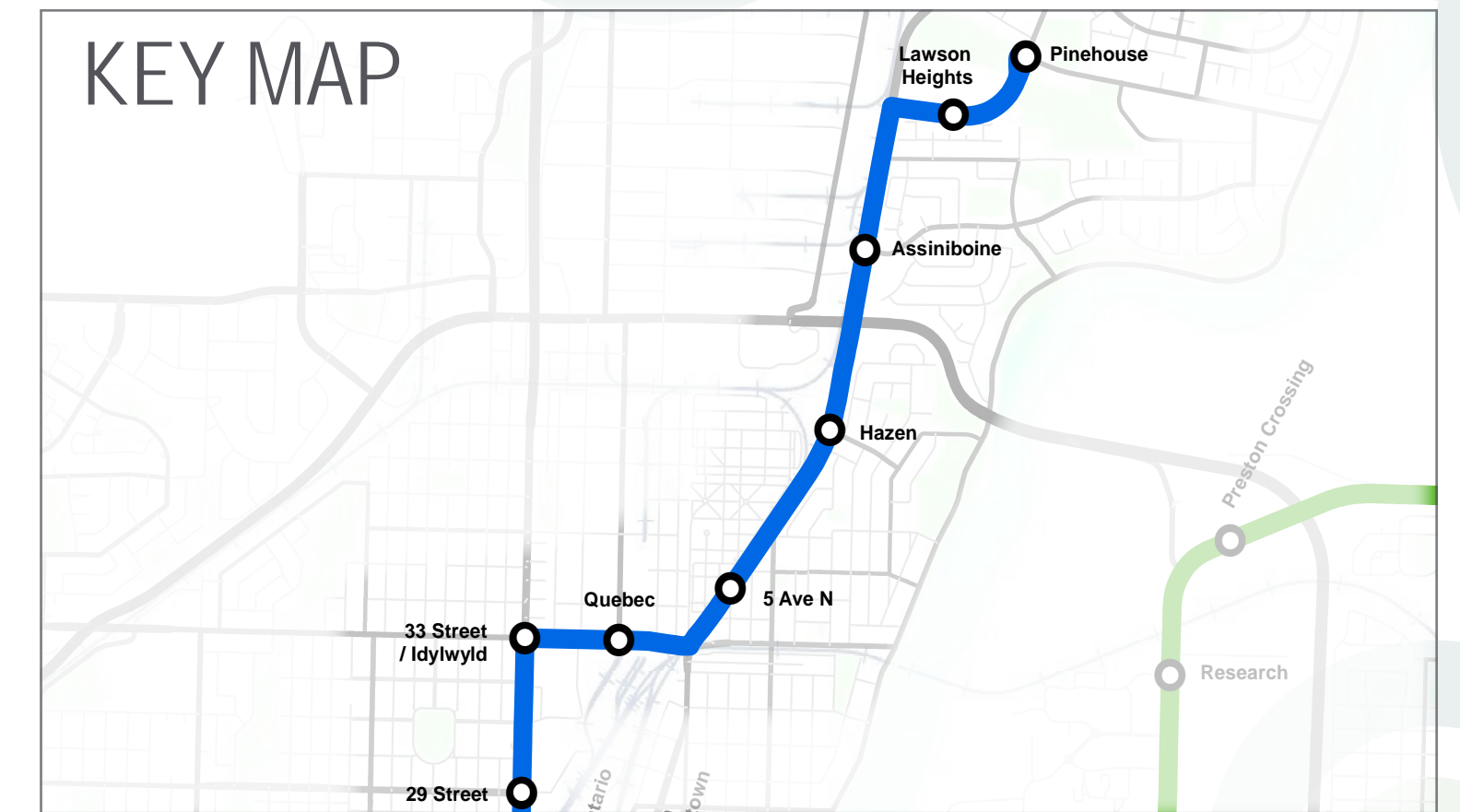
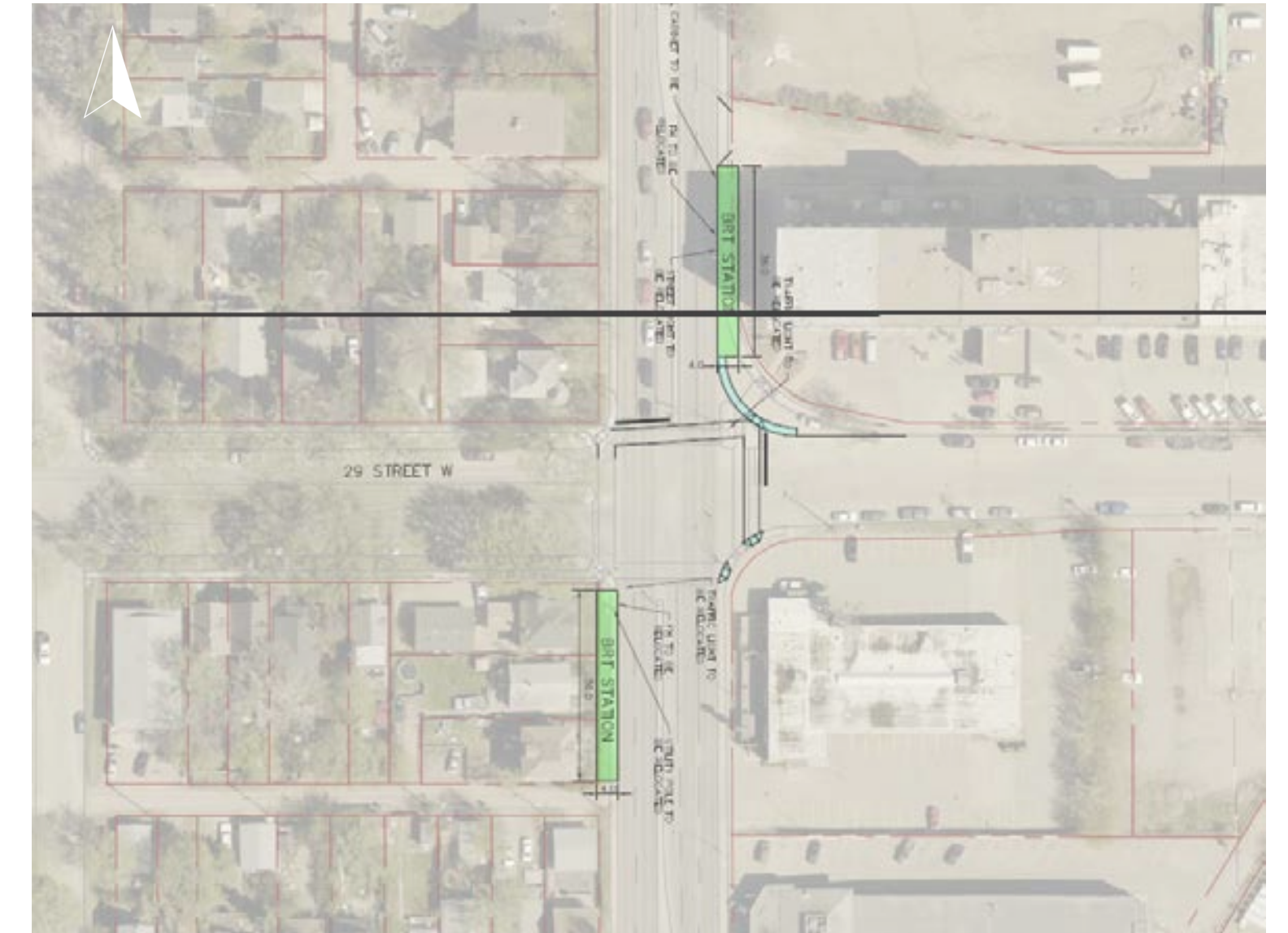
Blue Line: Quebec Avenue



Blue Line: 33rd Street & Idylwyld Drive

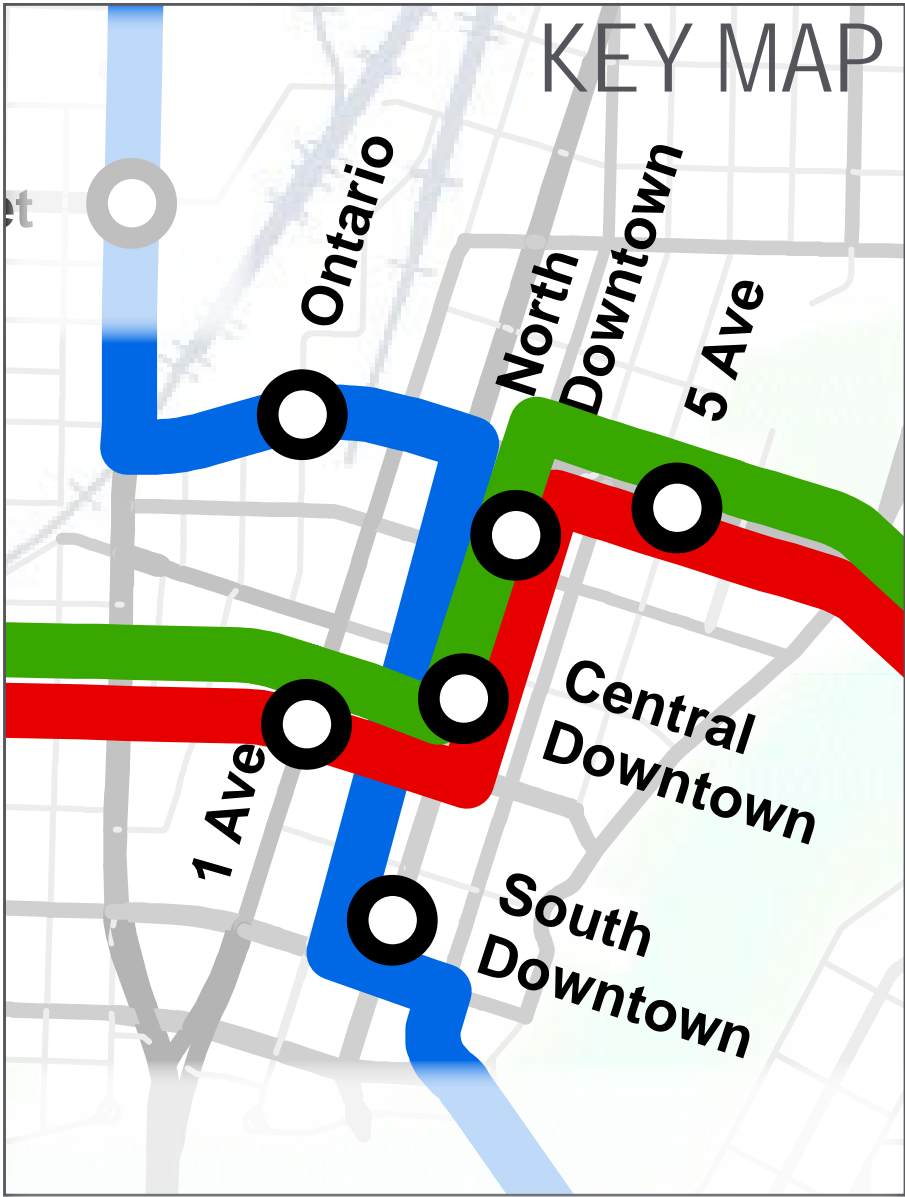


Blue Line: 29th Street

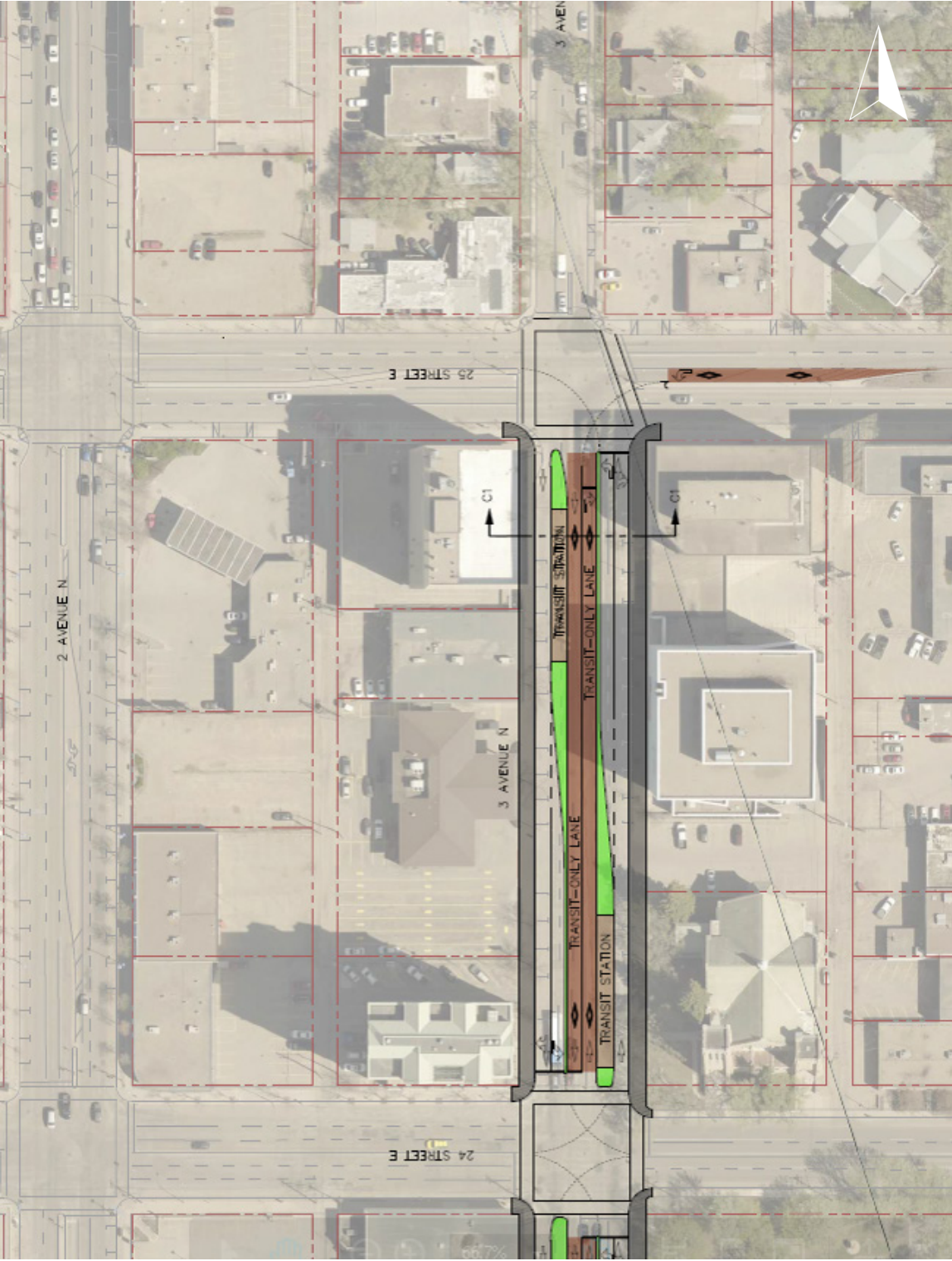


BRT STATION PLATFORMS

Red / Green / Blue Lines: Downtown



Red/Green/Blue Line: North Downtown



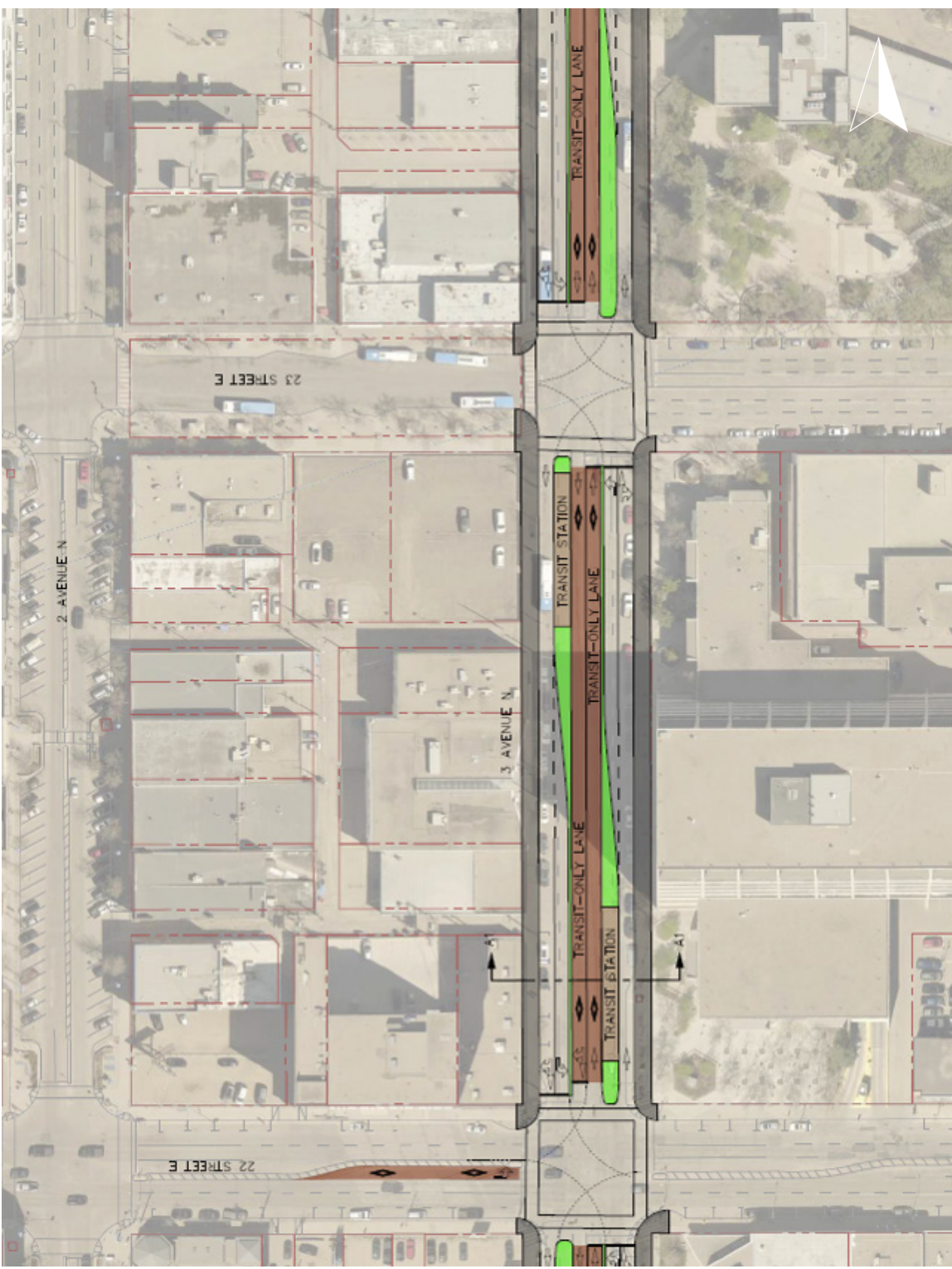
Red/Green Line: 5th Avenue



Blue Line: Ontario Avenue



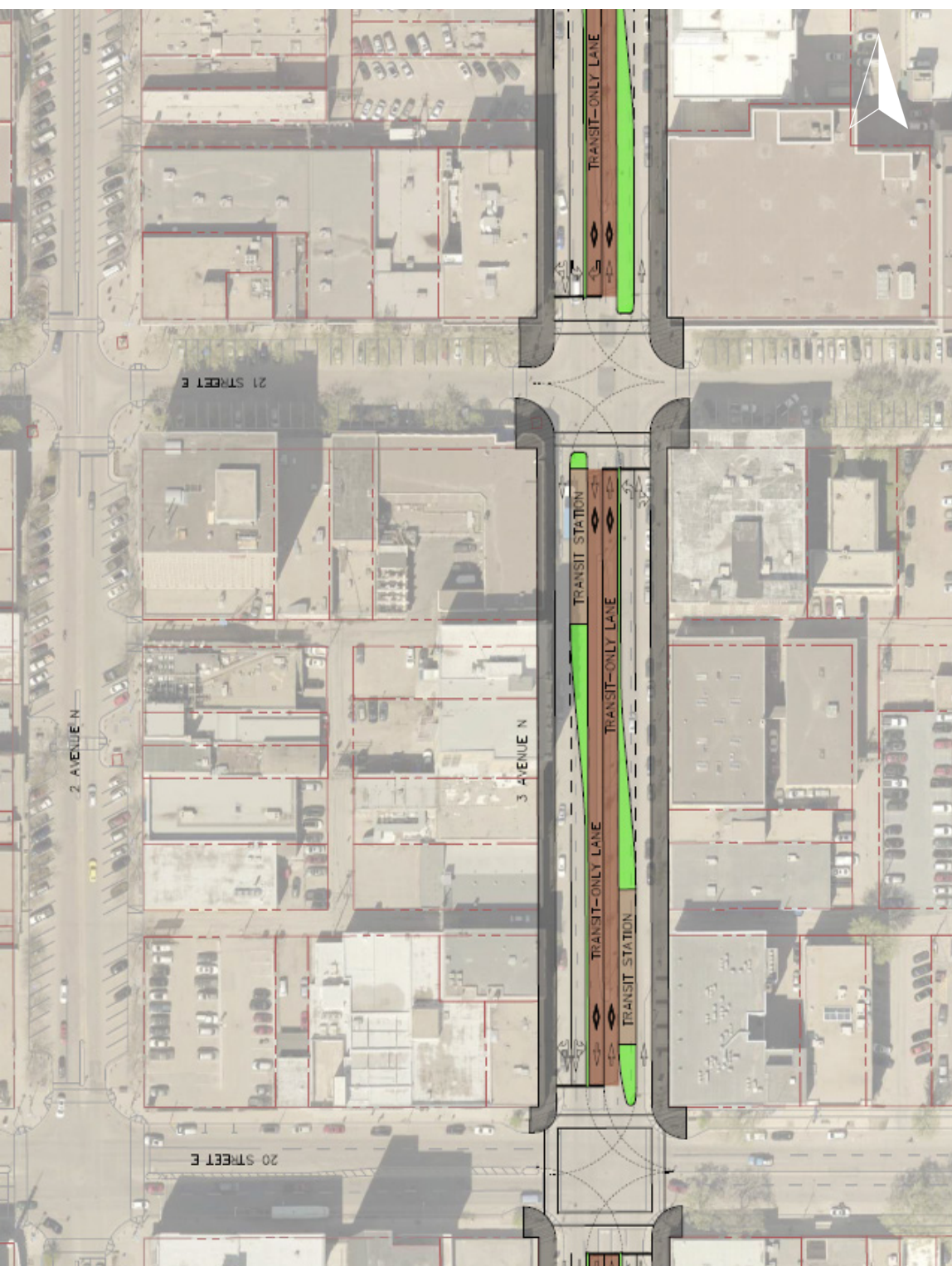
Red/Green/Blue Line: Central Downtown



Red/Green Line: 1st Avenue



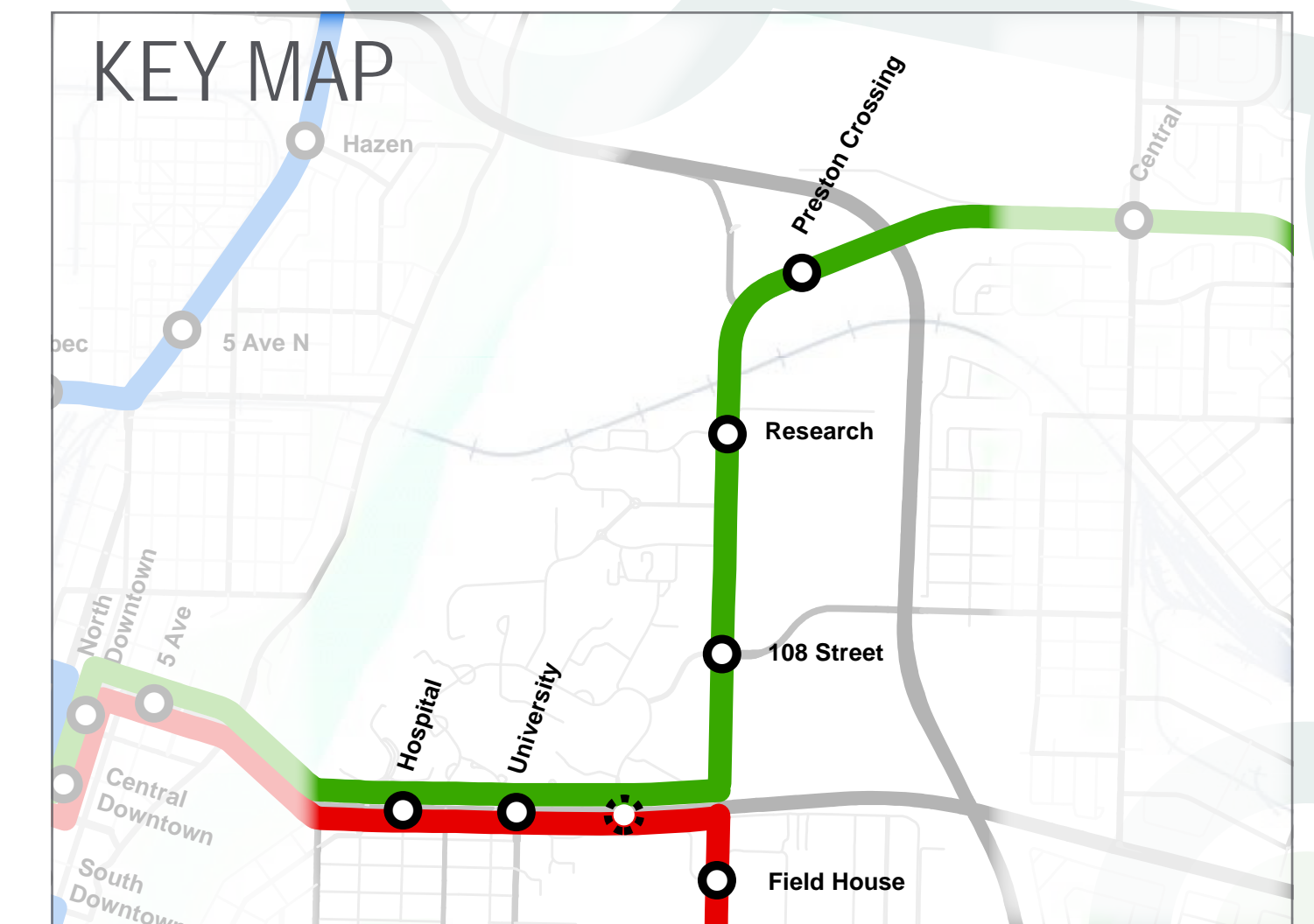
Red/Green/Blue South Downtown



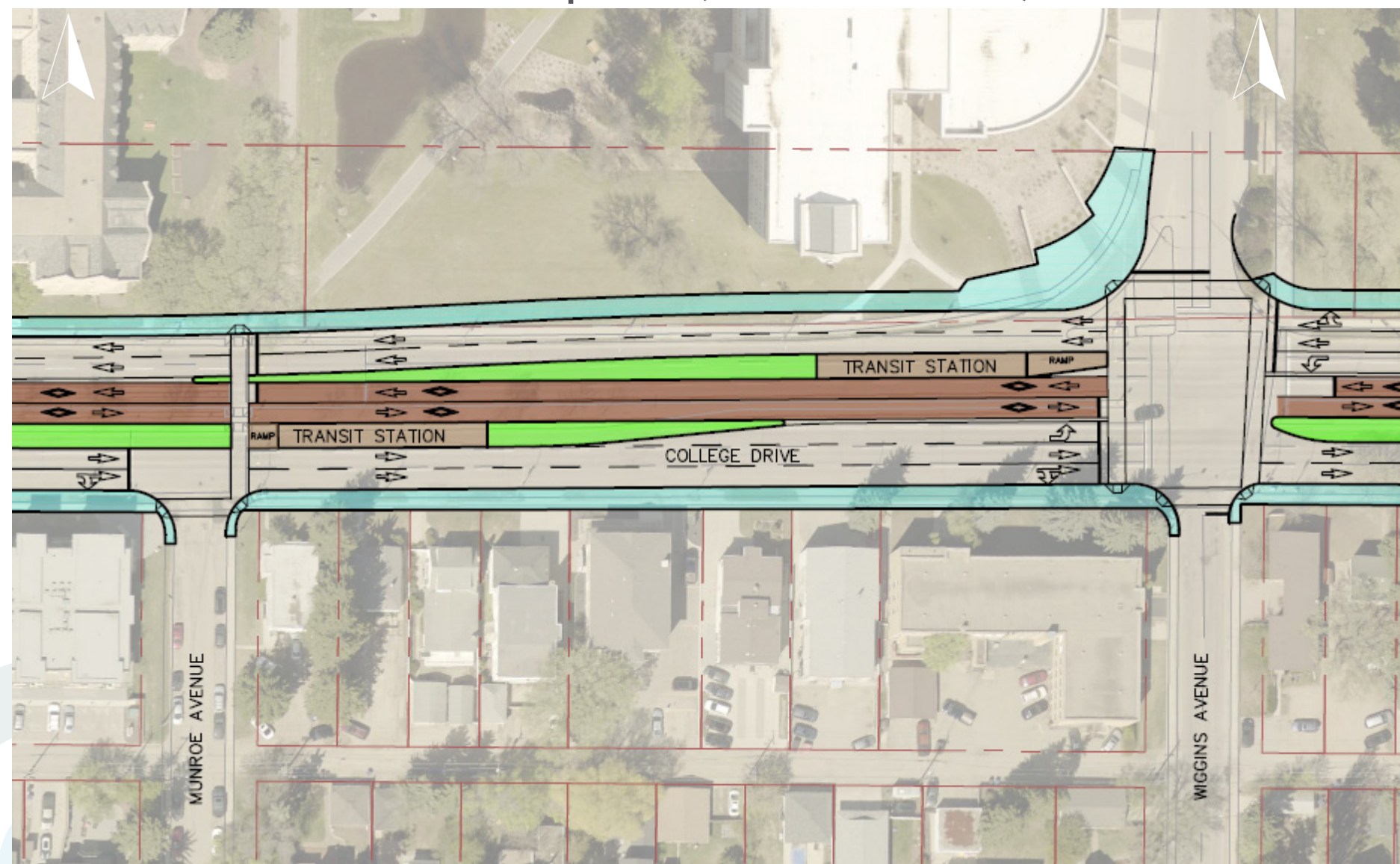
Let us know what you like or what we can improve about these platform locations at the table.

STATION PLATFORMS

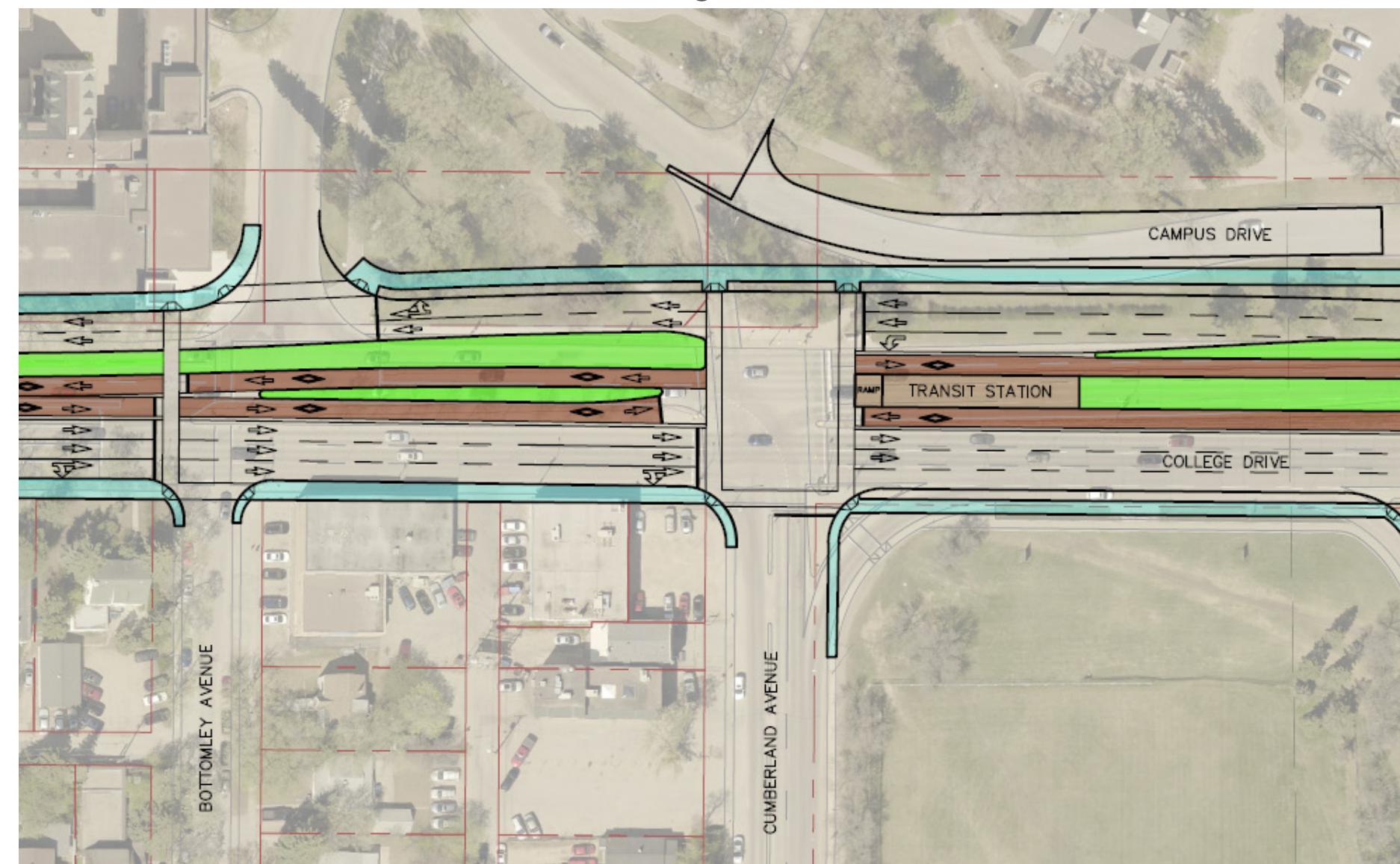
Red / Green Line East: College Drive from Munroe to Preston Avenue



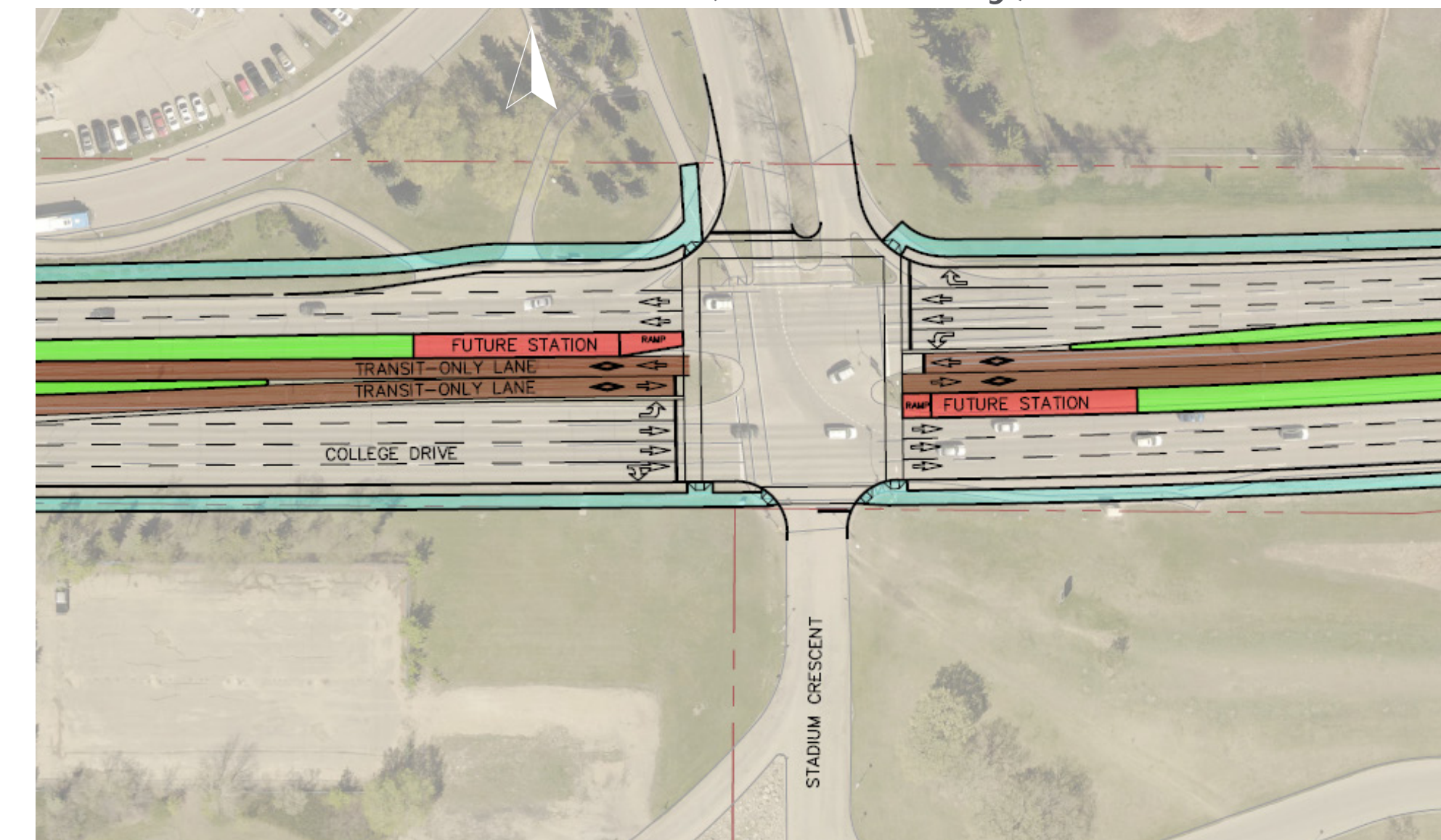
Red/Green Line: Hospital (Munroe Ave)



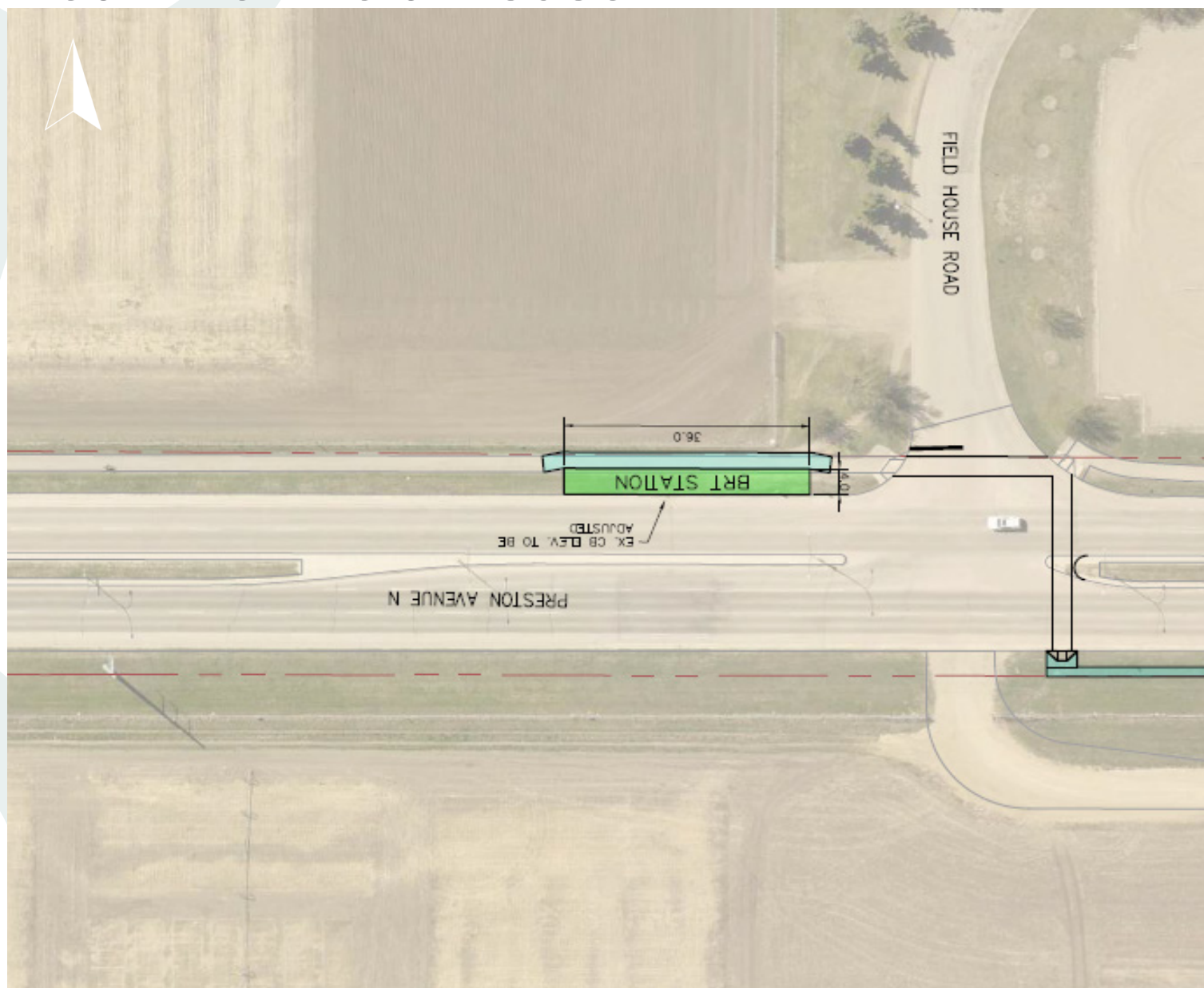
Red/Green Line: University (Cumberland)



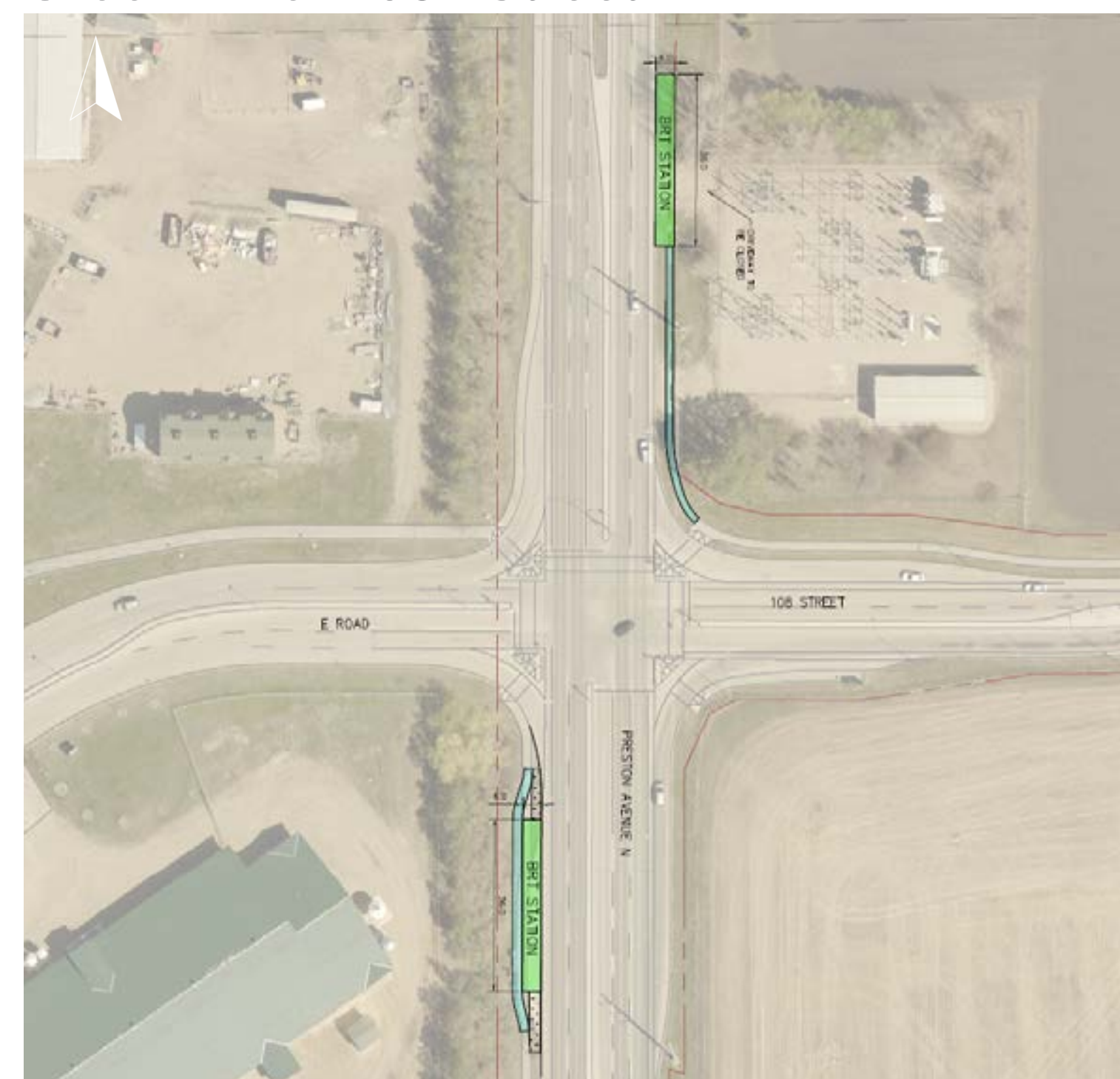
Red/Green Line: Stadium (Future Only)



Red Line: Field House



Green Line: 108th Street



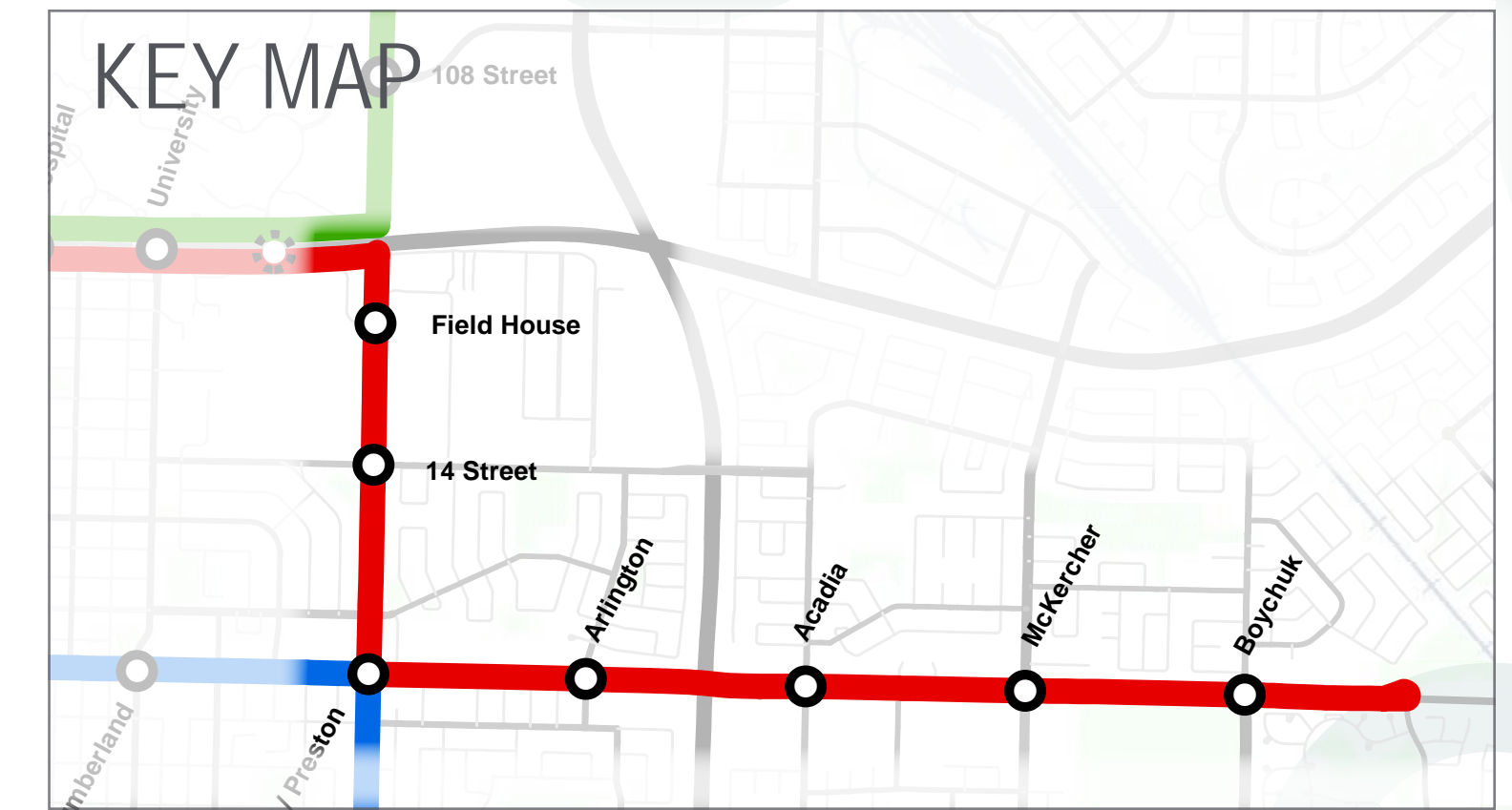
Green Line: Research Drive



Let us know what
you like or what we
can improve about
these platform
locations at the table.

STATION PLATFORMS

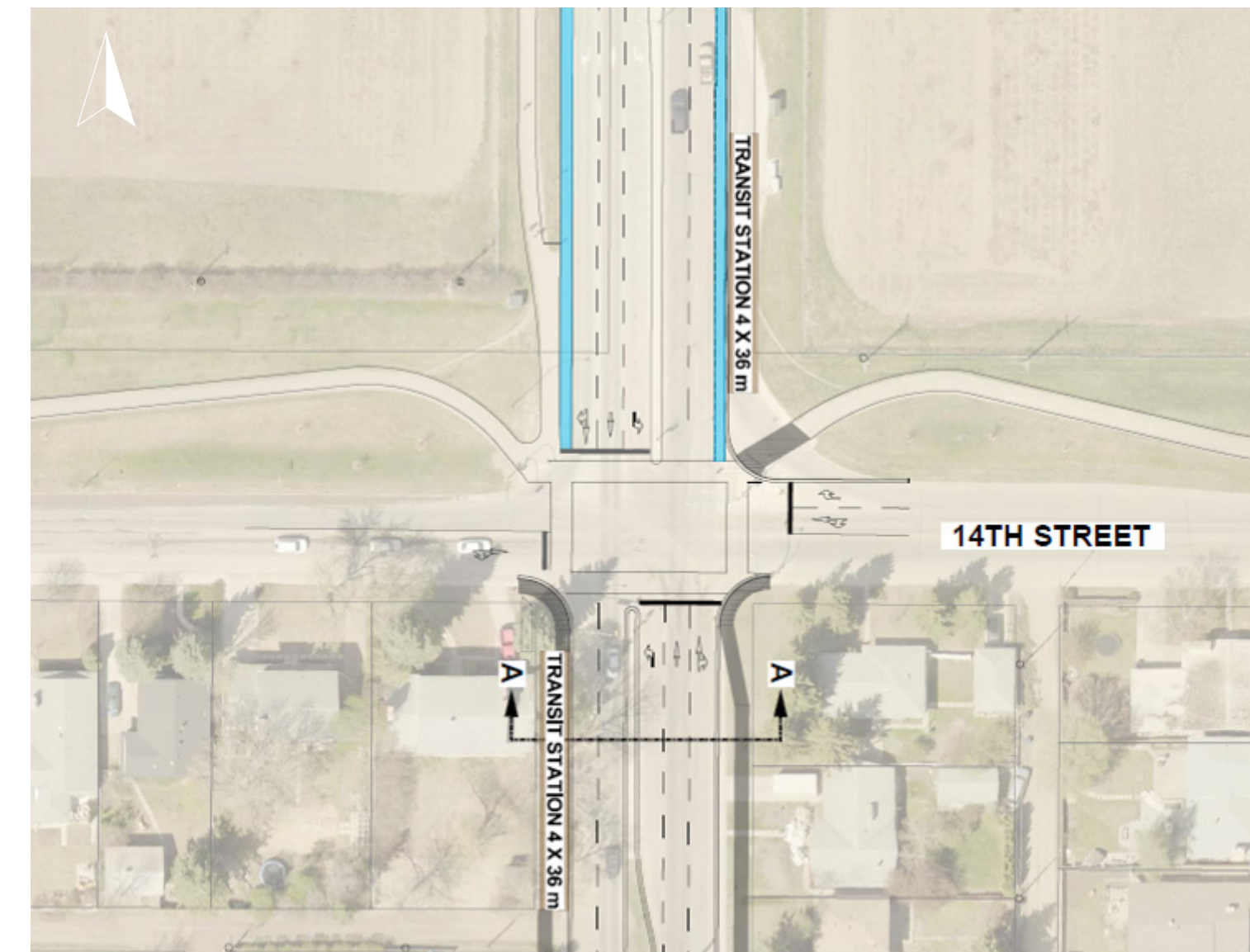
Red Line East: Preston Avenue S and 8th Street E



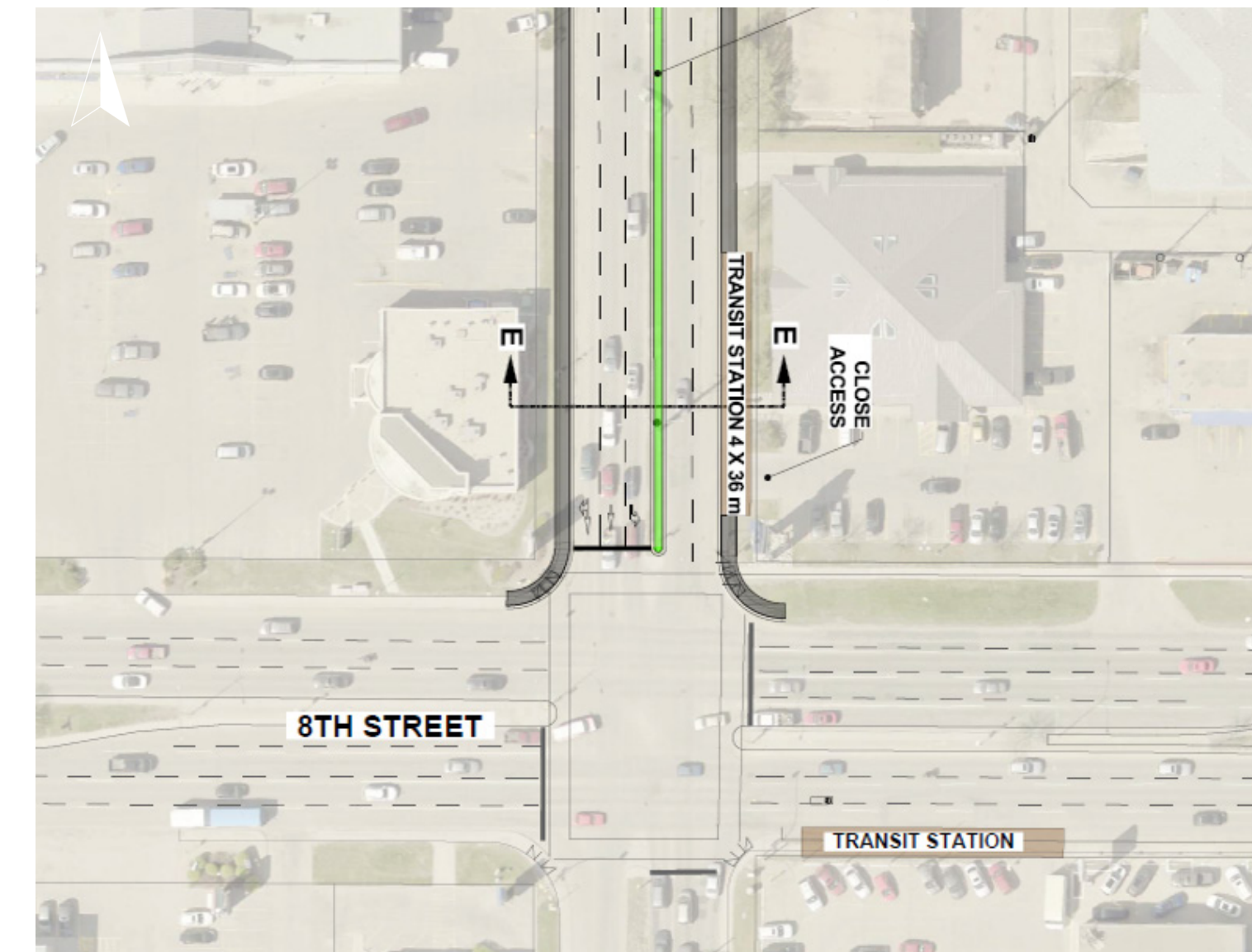
Red Line: Field House



Red Line: 14th Street



Red Line: Preston Avenue & 8th Street



Red Line: Arlington Avenue



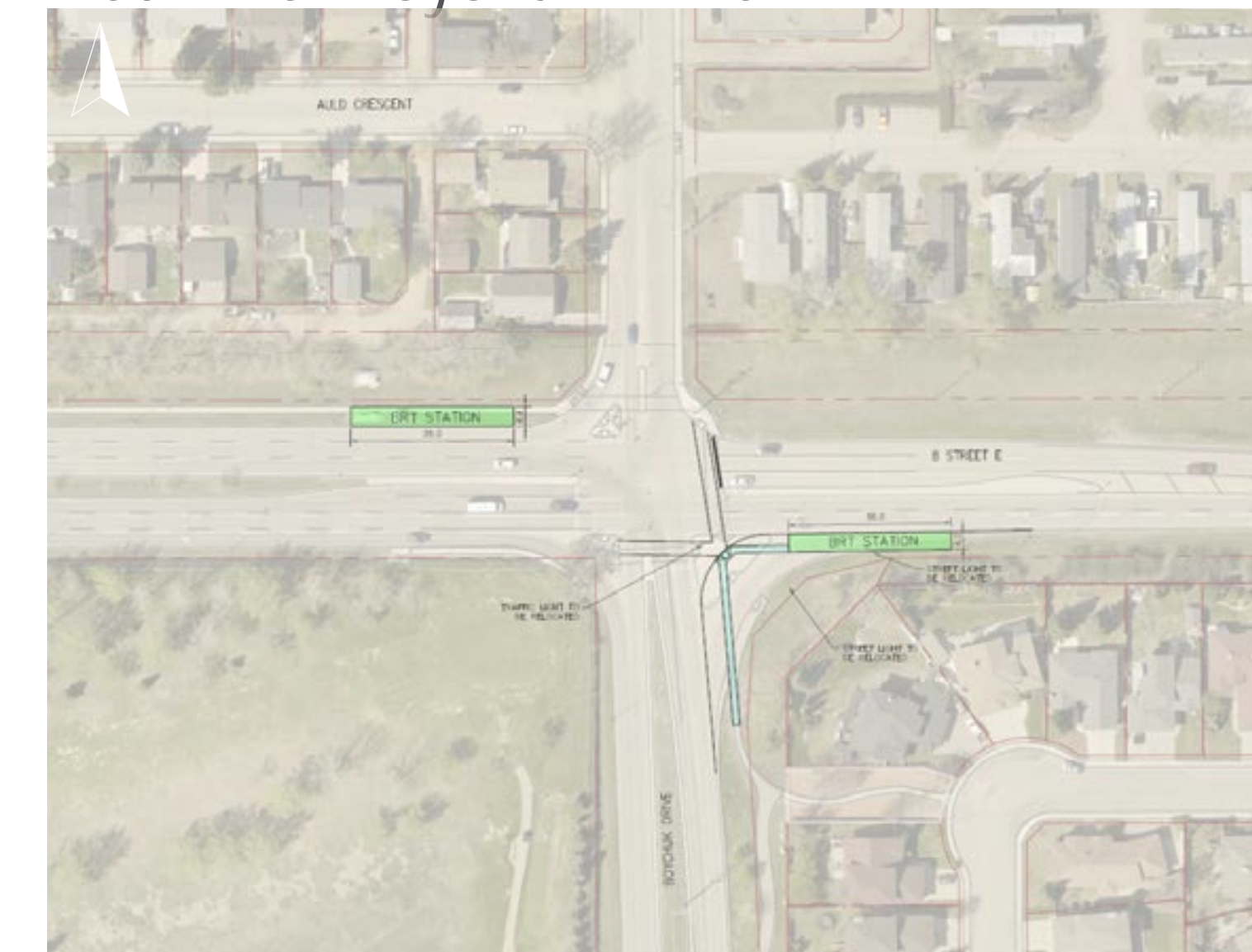
Red Line: Acadia Drive



Red Line: McKercher Drive



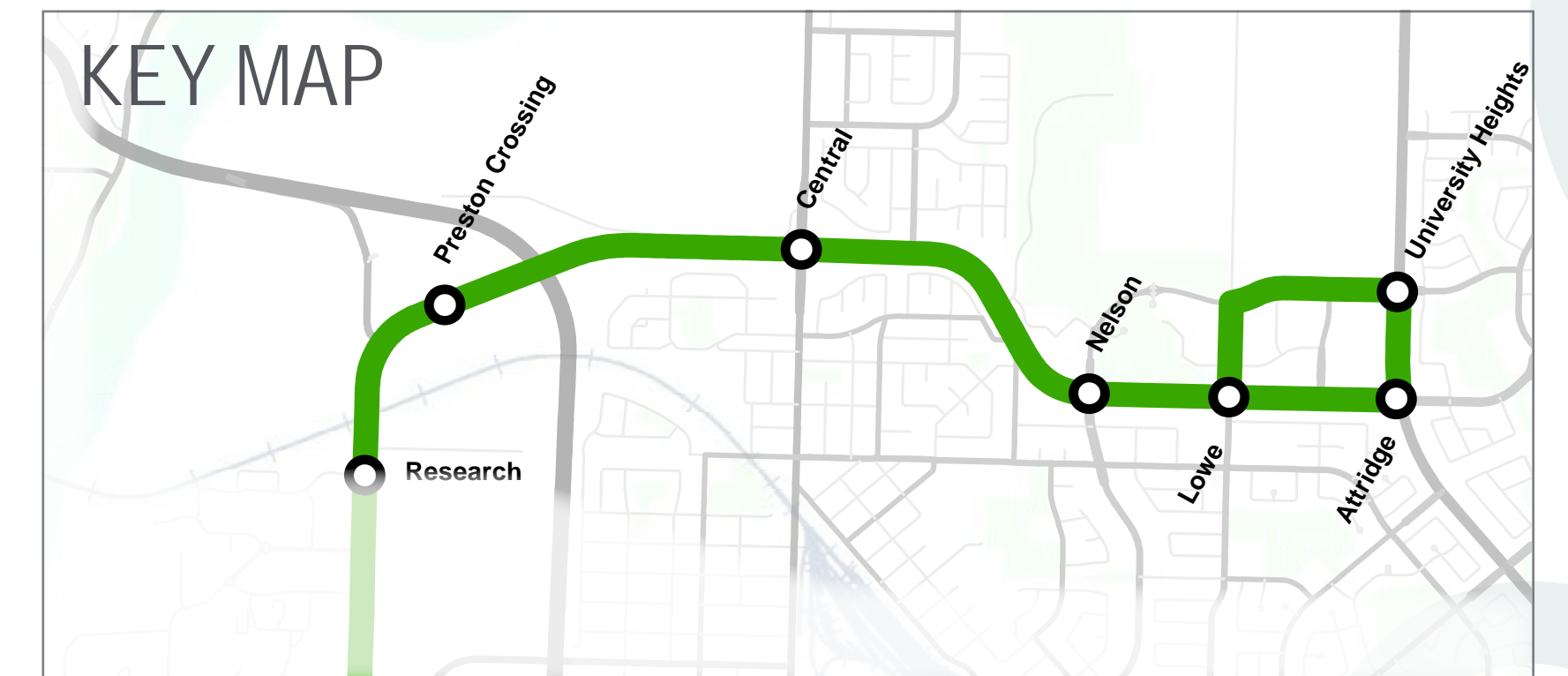
Red Line: Boychuk Drive



Let us know what you like or what we can improve about these platform locations at the table.

STATION PLATFORMS

Green Line East: Preston Avenue N to University Heights Square



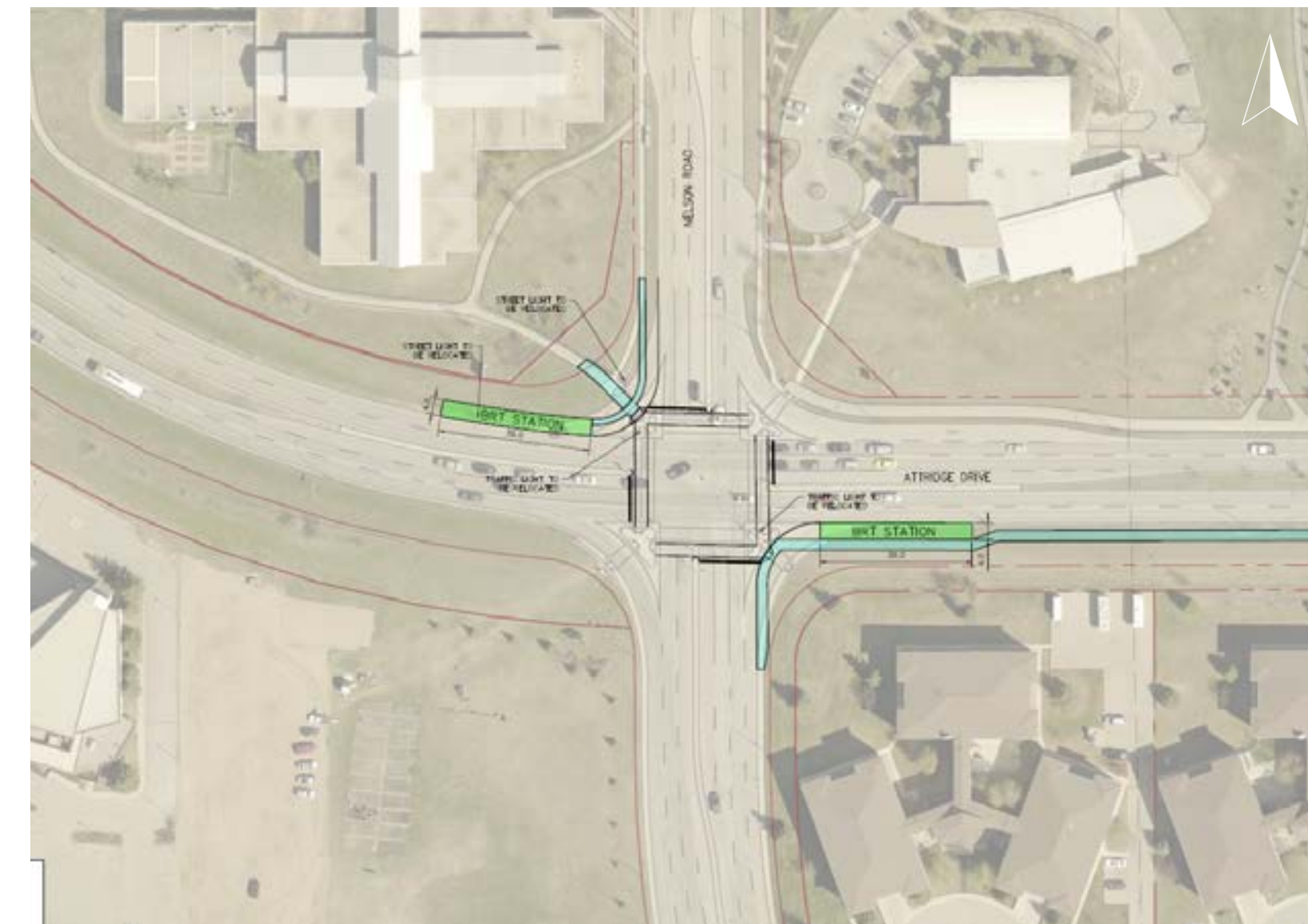
Green Line: Preston Crossing



Green Line: Central Avenue



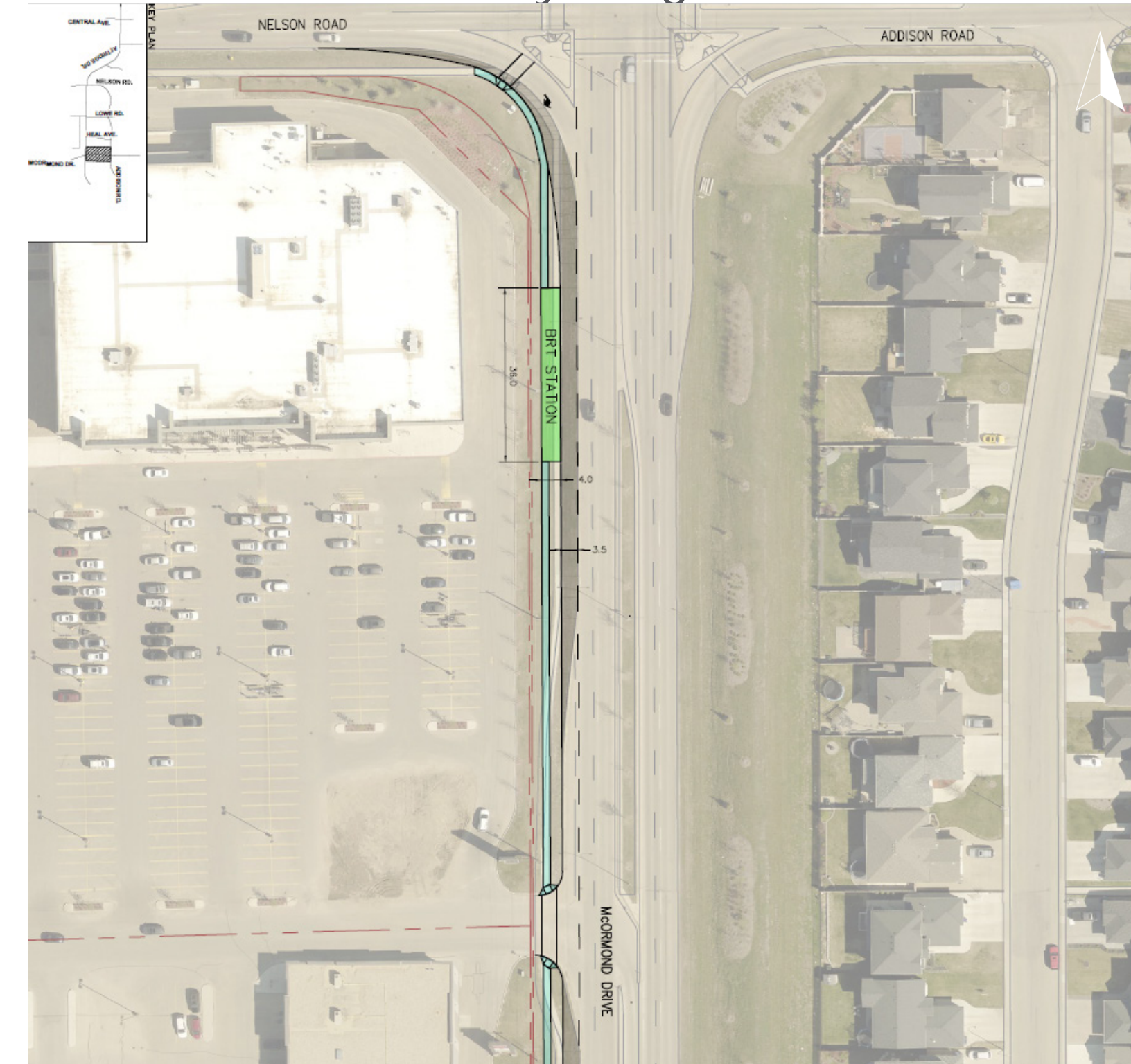
Green Line: Nelson Road



Green Line: Lowe Road



Green Line: University Heights



Red Line: Attridge Drive

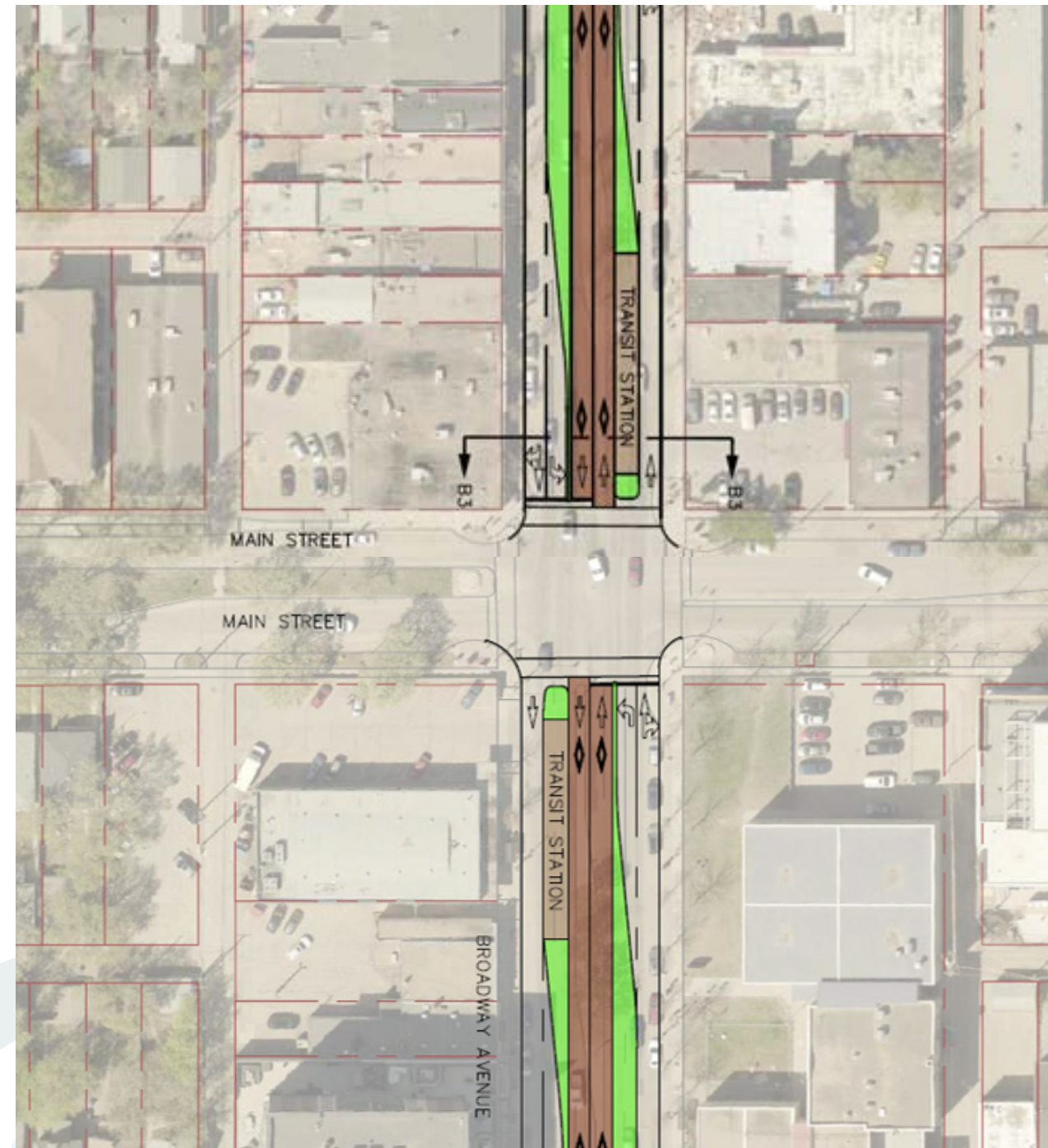


Let us know
what you like
or what we can
improve about
these platform
locations at the
table.

STATION PLATFORMS

Blue Line South: Broadway Avenue to 8th Street to Preston Avenue S

Blue Line: Main Street



Blue Line: Taylor Street



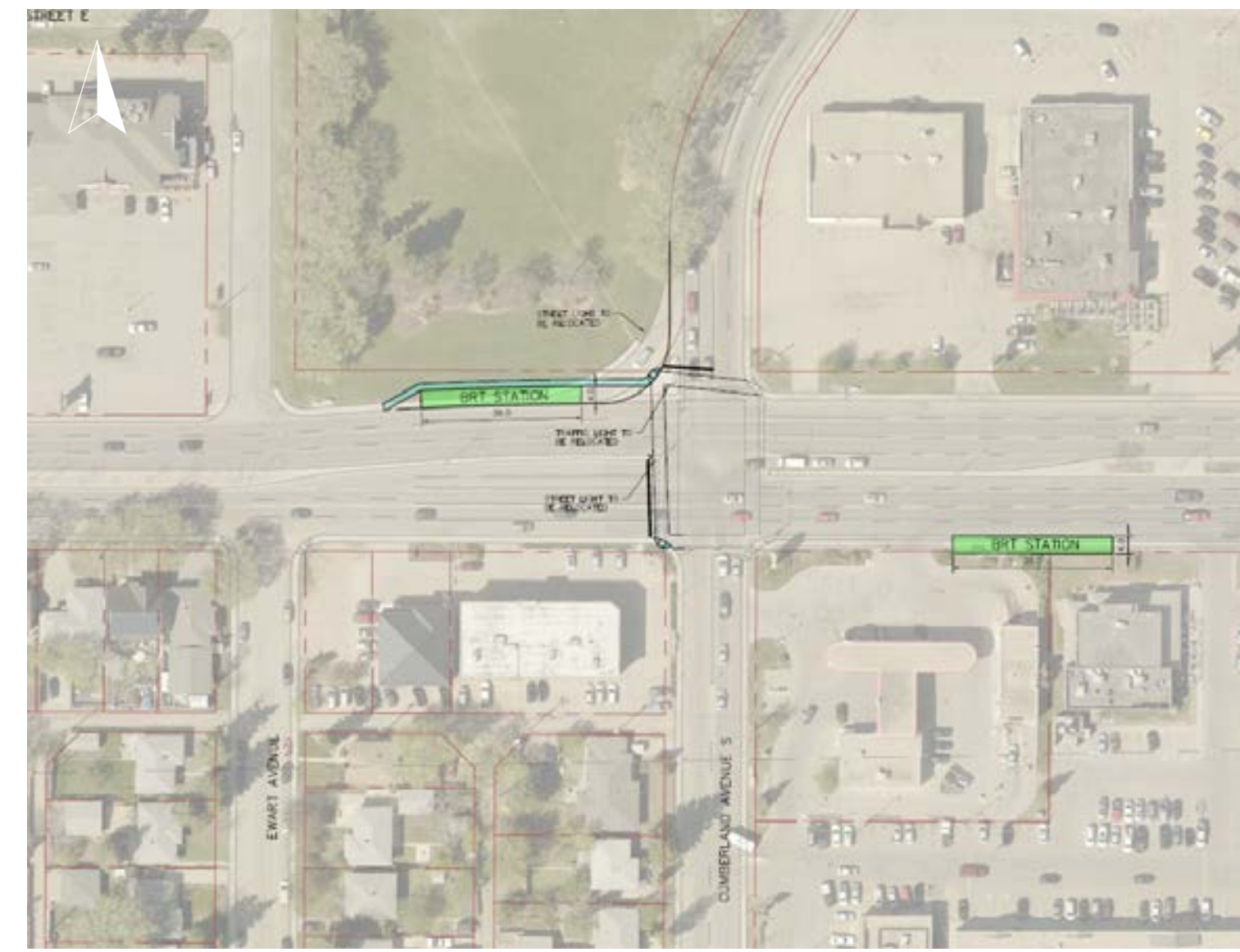
Blue Line: Clarence Avenue



Blue Line: Louise Avenue



Blue Line: Cumberland Avenue



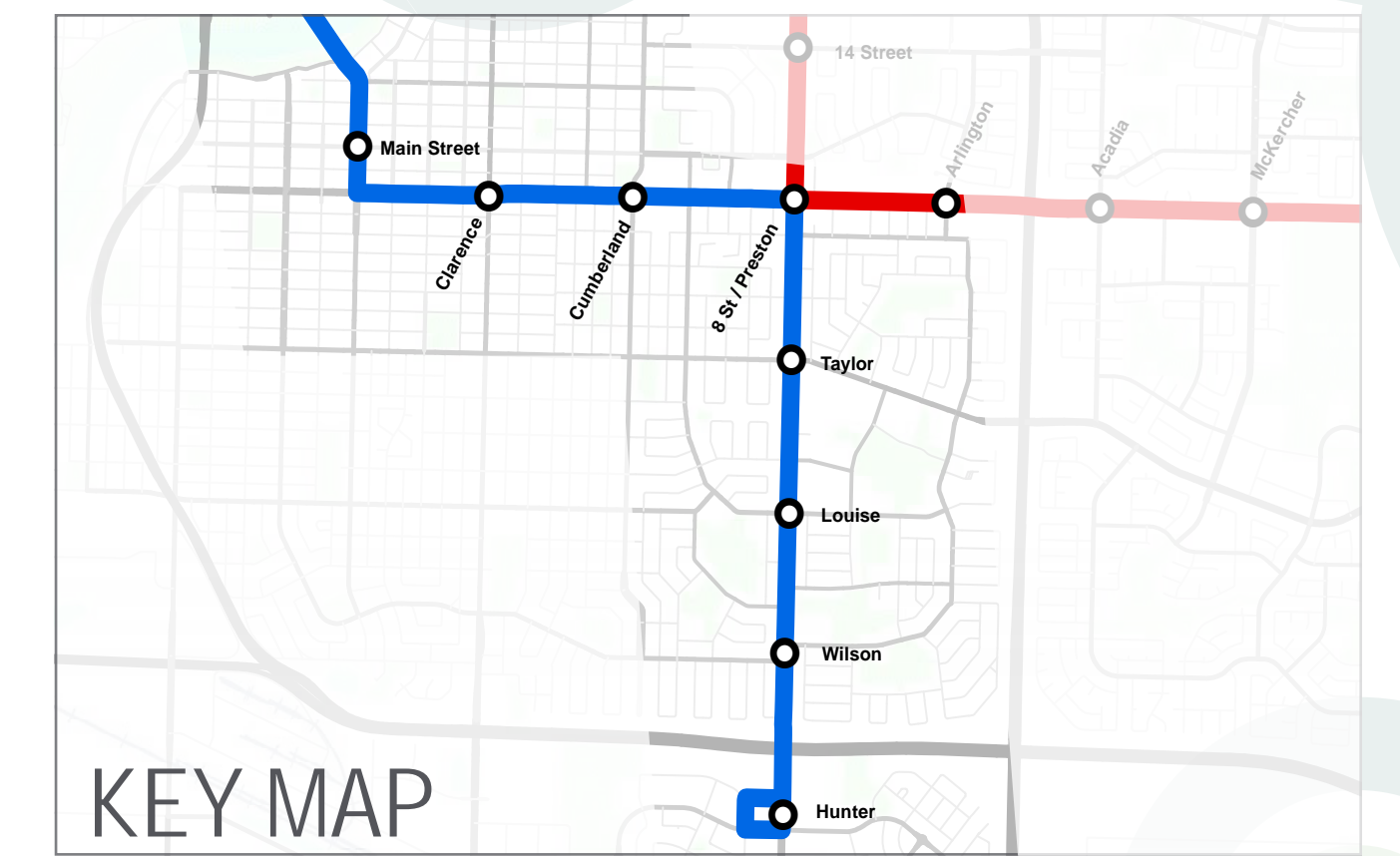
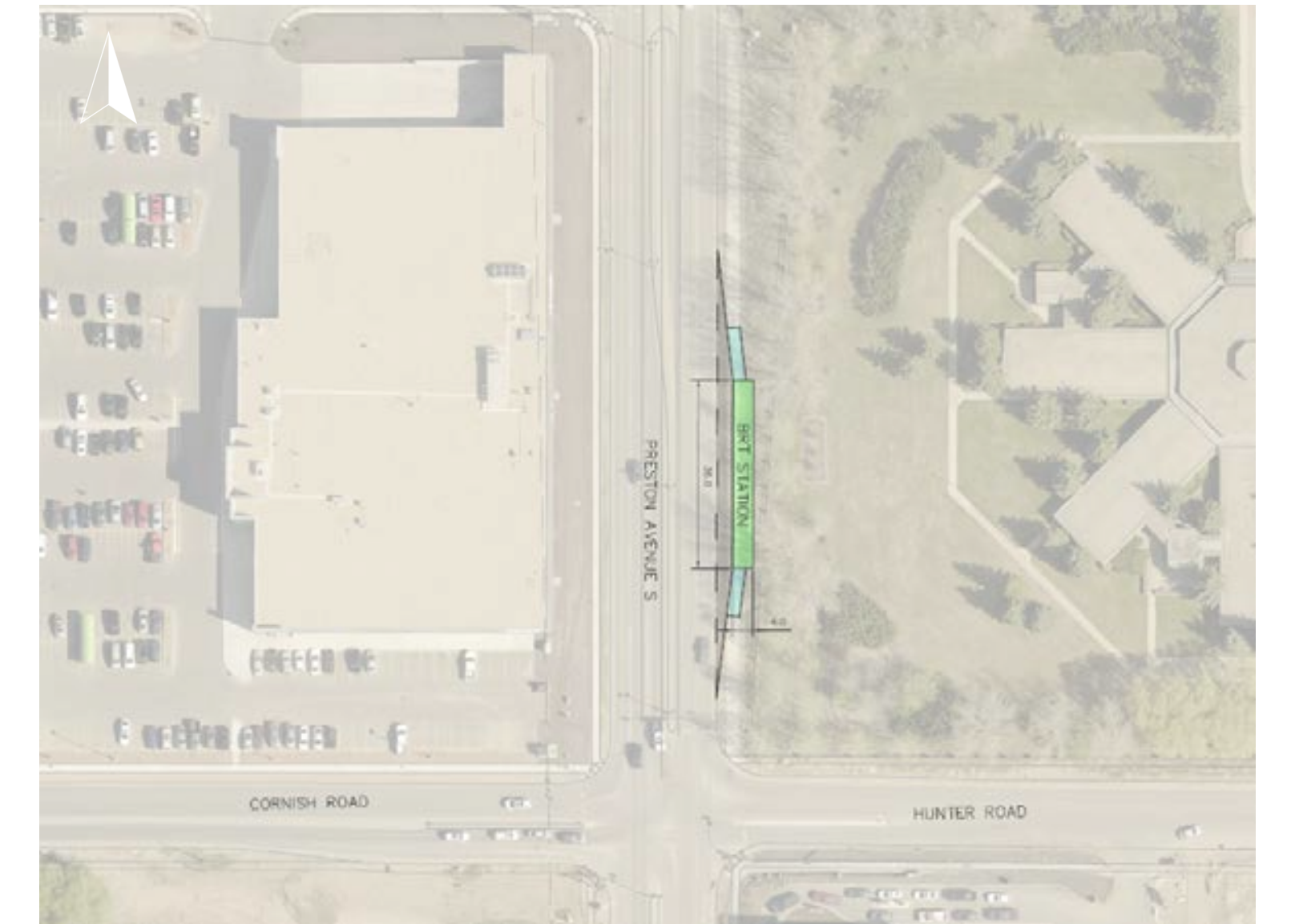
Blue Line: Wilson Avenue



Blue Line: 8th Street/Preston Avenue



Blue Line: Hunter Road

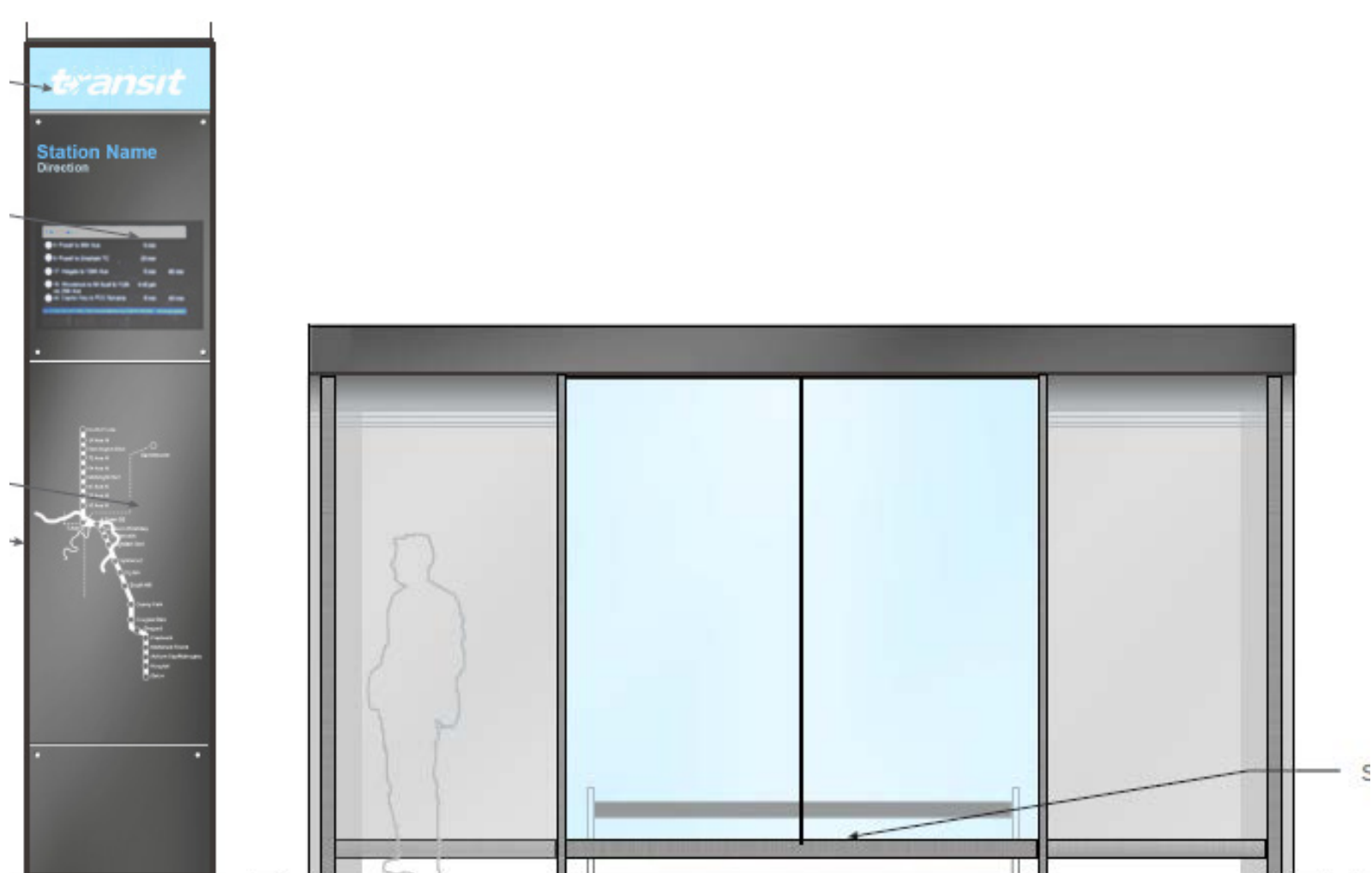


BRT STATION SHELTER DESIGN

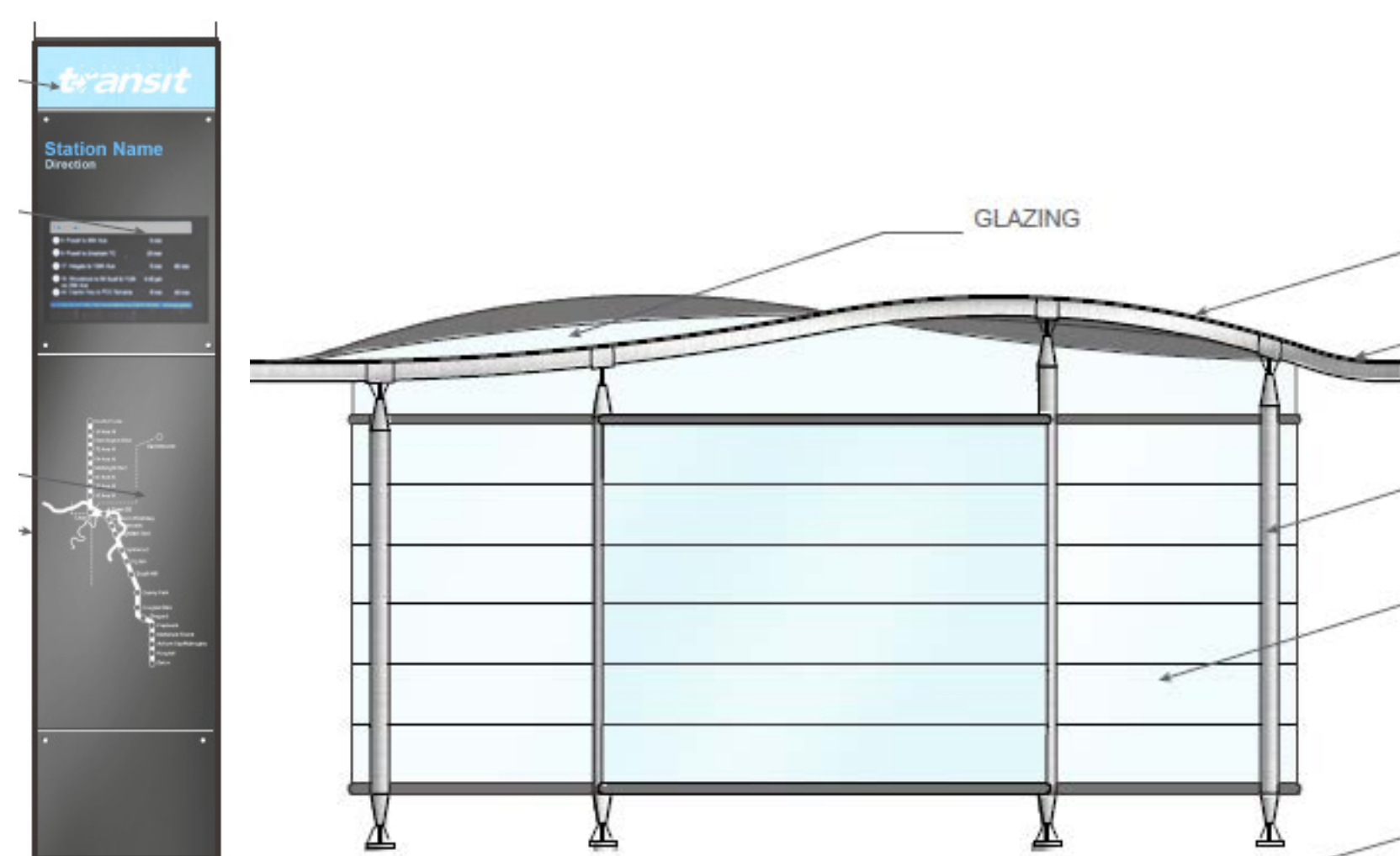
Here are two shelter design options for your consideration. Shelters will include radiant heat, waste receptacles and will be modular so that the design can be scaled by station.

Which option do you prefer? Please place a dot under one of the images.

Option A



Option B



Example of Option A along 3rd Avenue



Example of Option B along 3rd Avenue

BRT STATION SHELTER DESIGN

What can we improve about the shelter design?
Please include any comments below:



Example of Option A along 22nd Street W



Example of Option B along 22nd Street W

TRANSIT NETWORK RECONFIGURATION PLAN

What we heard in December

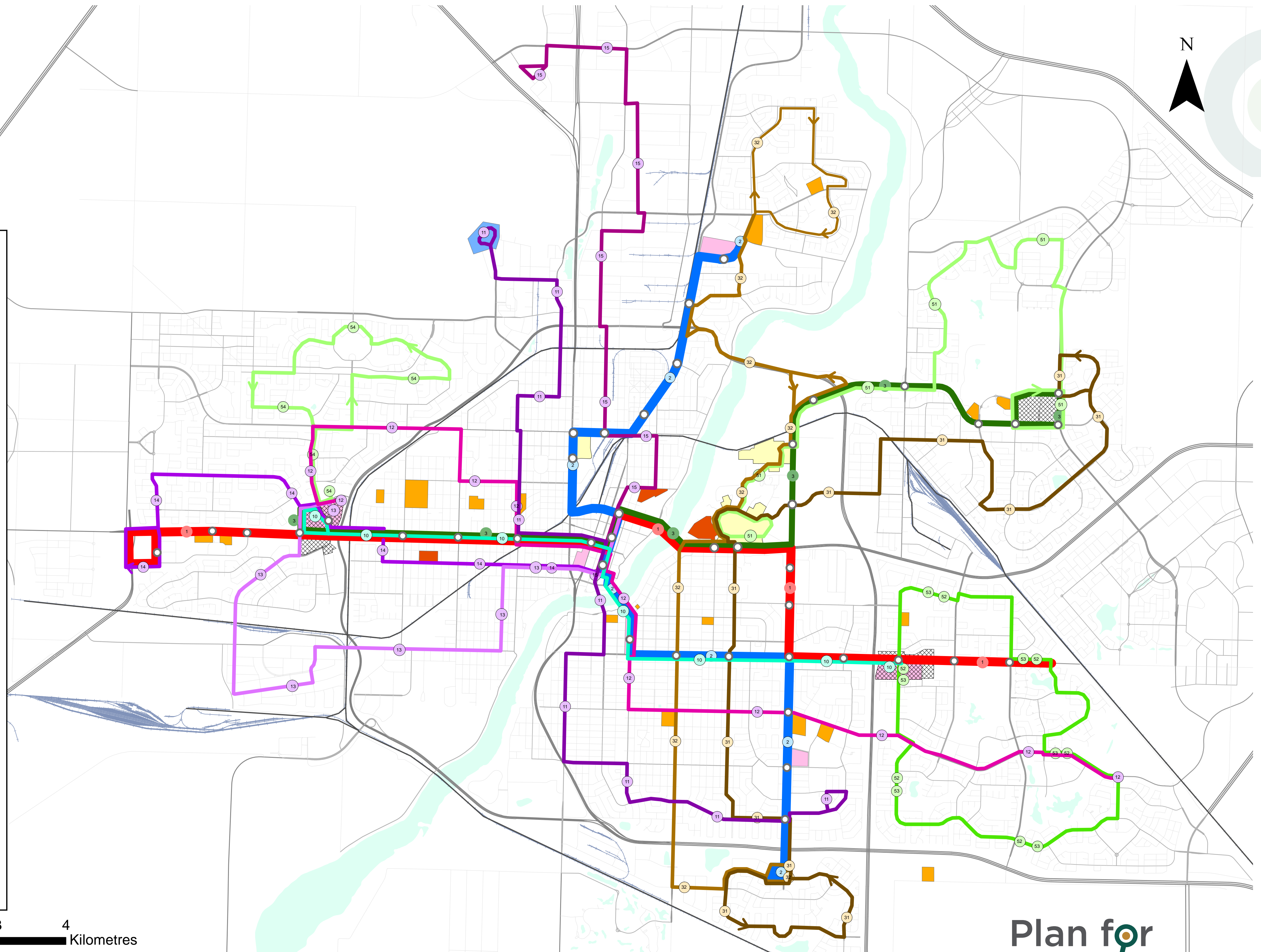
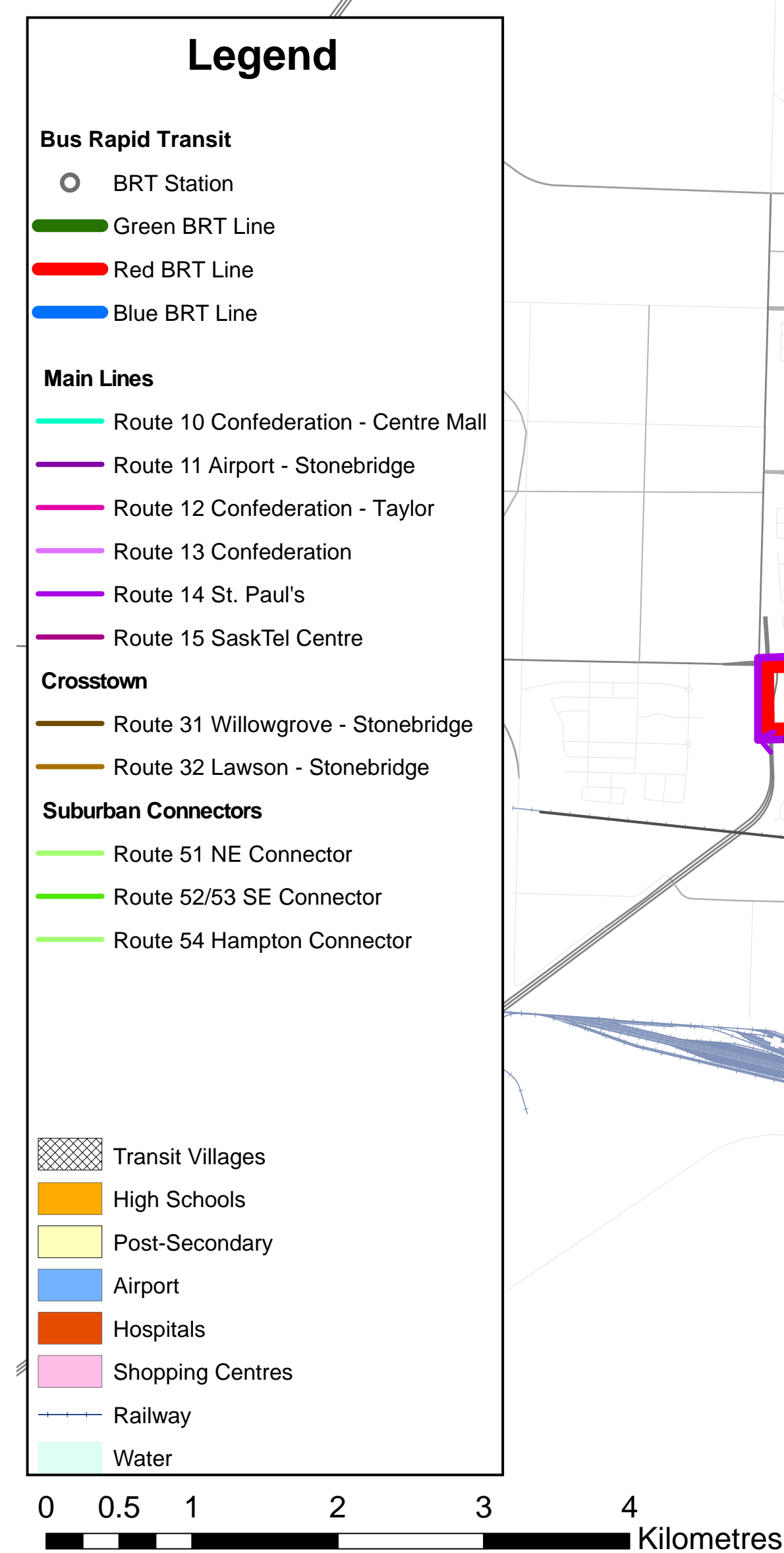
How the Route Reconfiguration Plan Addresses these Issues

Buses are not frequent	BRT and many conventional routes will be more frequent. During peak periods, BRT buses will run every 10 minutes.
Transit is not reliable	Regular Saskatoon Transit routes will be able to take advantage of many BRT features: transit signal priority, geometric improvements, exclusive runningways and stations. These features can reduce congestion impacts to transit.
Transit is not direct	The new routes provide more direct travel by eliminating many looped routes and replacing them with more direct two-way service.
Improve customer service	Customer service will improve through increased frequency and reliability. Customers can also access BRT station amenities (shelters with radiant heat and real-time information displays) which will improve the waiting experience.

CONCEPTUAL TRANSIT NETWORK RECONFIGURATION

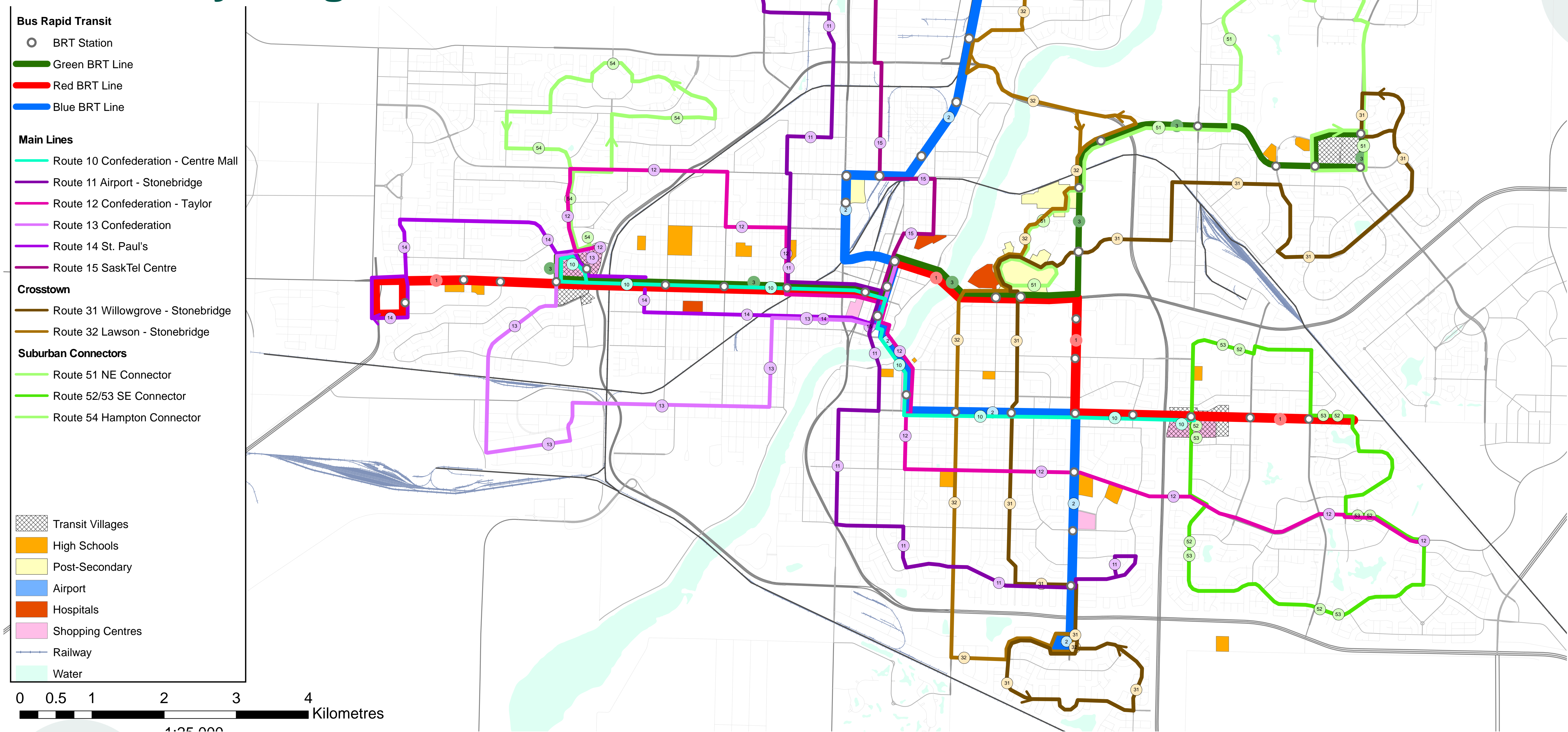
About the concept:

- BRT forms the core services around which the new transit system is developed.
- The reconfiguration shows more of a grid network with direct two-way routes serving major corridors, destinations and development nodes.



What Do You Think?

- What do you like about the proposed network?
- What could we improve?
- Did we miss anything?



PARK & RIDE STRATEGY

Purpose:

- Intercept auto trips coming from outer communities
- Reduce traffic flows by shifting part of a trip to transit
- Reduce parking demand downstream
- Develop concepts for potential sites

