



COUNCIL STAFF REPORT

Blue Line Extension Design Update

FROM: John Sutter, Community Development Director

DATE: January 4, 2024

TO: Adam R. Bell, City Manager (for January 11 work session)

SUBJECT: Blue Line Extension design update

BACKGROUND

On March 7, 2023 the Crystal City Council approved a comment letter from the City Manager to the Blue Line Extension (BLX) Corridor Management Committee and project staff. This letter contained specific comments on the conceptual project design and related issues.

On Dec. 14, 2023 BLX staff responded with a letter that responded to the city's design comments to varying degrees.

On Jan. 2, 2024, city staff received an updated roll plot which is a draft form of the municipal consent plans expected to be finalized in July 2024 for city consideration in late summer or early fall.

ATTACHMENTS

- A. Mar. 8, 2023 letter from city to project
- B. Dec. 14, 2023 response letter from project to city
- C. Traffic comparison table
- D. Station boardings and travel time estimate
- E. Bass Lake Road interchange - birds eye view
- F. Project overview (excerpts)
- G. Roll plot of crystal segment (excerpts on 11x17)

STAFF COMMENTS ON CRITICAL ITEMS FROM MARCH LETTER

Several design-related items have not been addressed in the roll plot and/or require additional evaluation and consideration prior to the city considering municipal consent:

1. Traffic (esp. the reduction of through lanes from six to four)

Vehicular traffic volumes on the Crystal segment of Bottineau Blvd. are now back to, or slightly above, 2019 (pre-COVID) levels. In some cases they now exceed Hennepin County's 2040 forecast. While there may be some changes that have reduced peak volumes, it is now clear that the 'new normal' does not mean an overall reduction in volumes for the Crystal segment. City staff remain skeptical but open-minded about whether a four lane roadway would be adequate from Highway 100 to Bass Lake Road.

2. Southbound on-ramp merge lane and lane drop south of Wilshire

The roll plot shows this third southbound lane ending with a forced merge immediately south of Wilshire Blvd. rather than continuing approx. 600' south of Wilshire before merging as the city requested. The city's request was based on the location of the third lane during 2011-2015 which we know did work in that it provided adequate distance after the Wilshire signal for drivers to merge. City staff opinion is that this change is a must-have item for the municipal consent plans.

While the city's March 8 letter also requested a third lane add on northbound Bottineau approaching Wilshire, city staff opinion is that this is less important and is an issue that could be dropped.

3. Shoulders in the 4-lane segment

The Bottineau Blvd. bridge over the CPKC Railway is the only practical route for emergency vehicles, most critically the Crystal Police Dept., to travel to and from the north third of the city. The increasing number and length of freight trains on the CPKC means that this route will become even more essential for emergency response. With traffic volumes on Bottineau already at or above the 2040 forecast, the lack of shoulders to provide space so emergency vehicles can get over the bridge during times of congested traffic is a critical issue for the community. City staff opinion is that shoulders between Corvallis and Wilshire are a must-have item for the municipal consent plans.

While the same traffic concerns exist south of Corvallis, West Broadway provides an alternate route unencumbered by CPKC freight trains, so city staff opinion is that shoulders on Bottineau would not be as important between Corvallis and Hwy. 100.

4. 3-to-4 lane 'gore' at the ramp to southbound Highway 100

Approximately half of the southbound traffic on Bottineau Blvd. exits to southbound Hwy. 100 but the existing lane assignments are imbalanced in that there are two lanes to continue on Bottineau but just one lane to get onto 100.

The roll plot shows a third southbound lane starting at 49th Ave. to provide space for vehicles queuing to go south on 100. This is inadequate given that the queue often extends as far north as 50th Ave. meaning that the third lane would need to start there.

Instead of creating a 2,000 foot long third lane for this purpose, the project should solve the underlying cause of the problem by starting the third lane closer to 47th and allowing the middle lane to choose either Bottineau or 100, leading to two lanes for each option thus matching actual traffic patterns. There is plenty of existing road right-of-way to accommodate this change. City staff opinion is that this is a must-have item for the municipal consent plans.

5. West Broadway jurisdictional transfer

Hennepin County and the cities of Robbinsdale and Crystal all have policies supporting the jurisdictional transfer from the county to each respective city of the segment of West Broadway from 42nd Ave. to Douglas Dr.

The segment from Fairview Ave. south into Robbinsdale has never been constructed by the county to urban standards and is essentially the same rural highway it was 80 years ago. The 2040 “no build” traffic forecast shows an estimated 1,000 vehicle per day diversion from Bottineau Blvd. to this segment of West Broadway. Additional diversion will likely occur due to the project’s proposed lane reduction on Bottineau because West Broadway is the primary alternate route for vehicles avoiding congestion and delay.

Due to the presence of city utilities which will need replacement in the coming years, the most practical approach would be for a jurisdictional transfer agreement to provide for a payment from the county to the cities in lieu of the county reconstructing West Broadway to urban standards. The concurrent utility reconstruction costs and actual construction work would be the responsibility of the cities after jurisdictional transfer.

Staff from the county and both cities met in May to discuss this issue but the cities are still waiting for a proposal from the county. City staff opinion is that a jurisdictional transfer agreement including a binding financial commitment from the county must be in place prior to municipal consent.

STAFF COMMENTS ON OTHER ITEMS

The following comments are based on a cursory review of the latest roll plot which the city just received. These comments are not intended to cover all potential issues as this review will continue in the coming weeks.

1. The roll plots show different speeds (‘Existing’, Design’, and ‘Posted’) and it would be helpful for the project to explain what they mean by these terms in each respective location. For example, south of Wilshire, is the project proposing a posted speed limit of 40 mph despite a design speed of 45 mph?
2. If a Traction Power Substation (TPSS) would be located on city property on the west side of Bottineau near Fairview Ave., screening and buffering from adjacent residential uses will need to be addressed by the project, as it was for the TPSS proposed at 60th &

Elmhurst Ave. in the previous version of the project. The same concerns would need to be addressed for any other TPSS locations to be determined.

3. If proposed stormwater treatment facilities supplant existing landscaping that provides screening and buffering of the roadway, mitigation of this lost screening and buffering will need to be addressed by the project.
4. The proposed access change at Elmhurst Ave. (no left turn from southbound Elmhurst to eastbound Bass Lake Road) would improve safety and provide traffic calming on Bass Lake Road, which has an especially bad speed compliance issue, by reducing the amount of wide-open pavement and eliminating a challenging and dangerous traffic movement at that intersection. However, this change has not been previously discussed with the community or the City Council. City staff opinion is that this change would improve not only traffic safety at the Elmhurst intersection but also pedestrian safety for the new crosswalk.
5. The transition from the proposed path on the south side of Bass Lake Road to the bike lanes which begin at Yates Ave. is shown on the plans with no additional right-of-way acquisition and only a slight westward shift (½ block) of the merge point for eastbound Bass Lake Road. It also incorporates a left turn lane to northbound Zane Ave. which would be a safety improvement compared with existing conditions. City staff support these changes.
6. The Bottineau Blvd. access to and from Airport Road would be removed and supplanted by an exit-only slip ramp from Bottineau to the frontage road just north of Airport Road. Project staff indicated that this change is necessary due to the short distance between the end of the northbound on-ramp from Bass Lake Road to the right turn at Airport Road and the need to provide more distance for weaving movements by vehicles merging onto Bottineau or exiting at Airport Road. City staff is unconvinced that this change improves safety because it provides only a marginal increase in space between the entrance and the exit. The project needs to discuss this change with affected businesses, residents, the Metropolitan Airports Commission and City Council before further pursuing this change.

COUNCIL DISCUSSION REQUESTED

After the project team presents the updated roll plot at the Jan. 11 work session, Council feedback is requested on the critical items from the March 8 letter and other items identified in this report, plus any other items that arise in discussion.

City staff will work with the project team to refine the plans prior to a community open house meeting at the Crystal Community Center on Thursday, Mar. 7 from 5-8 p.m.

The project expects to finalize municipal consent plans in July 2024 for city consideration.



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March 8, 2023

Christine Beckwith
Project Director
METRO Blue Line Extension
6465 Wayzata Blvd #500
St Louis Park MN 55426

Subject: City of Crystal design comments on the METRO Blue Line Extension

Dear Ms. Beckwith:

Thank you for the opportunity to provide comments on the preliminary design concepts for the proposed METRO Blue Line Extension light rail transit project. The city appreciates the work of project staff to prepare these concepts and traffic simulations for review and comment by the city, its residents, businesses and other stakeholders in the community.

The six scenarios are as follows:

1. Existing (no-build) - 6 lanes at grade, no LRT
#1 is the baseline scenario required for the environmental review.
2. LRT with 4 lanes at grade
#2 was the initial concept. Blue Line Extension project staff and city staff would not recommend this scenario due to its impact on vehicular travel.
3. LRT with 4 lanes, interchange at Bass Lake Road and a third southbound lane south of Corvallis
#3 is the concept currently preferred by the Blue Line Extension project staff.
4. LRT with 4 lanes, at-grade with additional lanes at Bass Lake Road and a third southbound lane south of Corvallis
#4 is intended to address the Bass Lake Road intersection capacity issues without constructing an interchange.

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5. LRT with 6 lanes, at grade

#5 would create space for LRT and maintain the same road capacity that exists today.

6. LRT with 6 lanes and an interchange at Bass Lake Road

Blue Line Extension project staff and city staff agree that #6 would be an overdesign and would not recommend this scenario.

Because scenarios #3, 4 and 5 are the most realistic alternatives for construction of LRT in the corridor, the Crystal City Council has directed city staff to provide the following comments on those scenarios. The purpose of these comments is to assist Blue Line Extension project staff with refinements to these scenarios as work continues on the environmental review and municipal consent processes.

A. ALL SCENARIOS

1. Replacement of median landscaping being removed by the project

Replace, in new locations, the recently-installed median treatments and landscaping which will be removed to make way for LRT (Exhibit A-1).

- The county recently installed new landscaping with irrigation in the median of Bottineau Blvd. due to the failure of much of the landscaping installed in the 2011-2012 roadway reconstruction project.
- These recent improvements were essential to achieving the “parkway” vision for the roadway when the reconstruction plans were approved in the late 2000s.
- Because the LRT project will replace this landscaping with ballast rock, track, LRT equipment and hardscape, landscaping of equivalent quality and quantity should be included in the project in areas alongside the roadway.
- Specific locations and designs would be determined later in the project. For example, it may be more beneficial to concentrate the enhanced landscaping near major intersections or adjacent to residential uses rather than in a strictly linear fashion.

2. Wilshire Blvd. intersection

Include two left turn lanes from eastbound Wilshire Blvd. to northbound Bottineau Blvd. (Exhibit A-2).

- Due to traffic generated by vehicles leaving the park and ride facility and limited stacking space between Lakeland Ave. and Bottineau Blvd., two left turn lanes are needed from eastbound Wilshire Blvd. to northbound Bottineau Blvd.
- This was in the 90% plans for the previous alignment

3. 47th Ave. intersection

Optimize intersection performance with minor adjustments to signal and approach lanes (Exhibit A-3).

- For eastbound 47th Ave. turning right to go south on Bottineau Blvd., install a right-turn green arrow to overlap with the left-turn green arrow from northbound Bottineau Blvd. to

ATTACHMENT A

westbound 47th Ave. This will increase the green time for the dominant movement on that approach with no penalty to the other approaches, except that U-turns from northbound Bottineau Boulevard to southbound Bottineau Blvd. / TH100 may need to be prohibited.

- For westbound 47th on the east side of Bottineau Blvd., due to limited stacking space, straighten the north side curb to create two lanes for the full distance between Lakeland Ave. and Bottineau Blvd., designate the right lane for straight movement or right turns, and designate the left lane only for left turns because that is the dominant movement on this approach.

4. Bus shelters and crosswalk at Elmhurst/Bass Lake Road

Add bus shelters on Bass Lake Road at Elmhurst, modify the south curb of Bass Lake Road, and construct an enhanced crosswalk including a median extension with a pedestrian refuge (Exhibit A-4).

- Shelters for east-west buses on Bass Lake Road are needed to improve the rider experience and facilitate transfers to and from LRT.
- Elmhurst is an existing, but unmarked, crosswalk that should become more prominent to discourage mid-block crossing. This should include an activatable beacon to warn drivers of pedestrians crossing so they have time to yield as required by law.
- These elements were in the 90% plans for the previous alignment.
- The city reserved space and aligned its trails/sidewalks to accommodate the planned bus shelters and crosswalk in its 2018 Bass Lake Road Streetscape and 2019-2020 Becker Park projects.

5. West Broadway jurisdictional transfer - 42nd Ave. to Douglas Dr. segment

Complete a jurisdictional transfer agreement with the cities of Robbinsdale and Crystal for the segment of West Broadway (CSAH 8) from 42nd Ave. (CSAH 9) to Douglas Dr. (CSAH 102).

- The county has identified this segment for jurisdictional transfer to the respective cities (Exhibit A-5a).
- The segment from Fairview Ave. south into Robbinsdale has never been constructed to urban standards and is essentially the same rural highway it was 80 years ago (Exhibit A-5b).
- The 2040 “no build” traffic forecast shows an estimated 1,000 vehicle per day diversion from Bottineau Blvd. to this segment of West Broadway (Exhibit A-5c).
- Additional diversion will likely occur due to the project and the lane reduction on Bottineau Blvd. West Broadway is the primary alternate route for vehicles avoiding congestion and delay on Bottineau Blvd.
- Due to the presence of city utilities, the most practical approach would be for the agreement to provide for a jurisdictional transfer payment to the cities in lieu of county reconstruction. The utility reconstruction costs would be the responsibility of the respective cities, and the actual construction work would be completed by the respective cities after jurisdictional transfer.
- Acceptance of this jurisdictional transfer would be consistent with the adopted policy of the city, which states: “The city would accept responsibility for this roadway only after it is

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reconstructed to the city's urban standards with municipal consent or the county provides the city with funds to accomplish same." (Crystal 2040 Comprehensive Plan, p. 31)

6. Maintain and improve bicycle and pedestrian connections and safety in the vicinity of the Bass Lake Road intersection

- Preserve the existing access route for pedestrians and cell tower maintenance vehicles from the southwesterly quadrant of the Bass Lake Road intersection to the proposed park and ride. (Exhibit A-6a.)
- Include at-grade pedestrian enhancements similar to those previously planned by Hennepin County in its 2016 Blue Line Extension Bicycle Study and construction project #1615 which did not proceed. (Exhibit A-6b.)
- Extend the off-street trail on the south side of Bass Lake Road from Bottineau Blvd. east to the vicinity of Xenia Ave. and transition to the existing on-street bike lanes in that area.

7. Replacement of city facilities

To whatever extent the project removes existing city facilities and infrastructure, replacement must be part of the project and not at city expense. Examples include but are not limited to the Welcome to Crystal sign, city-owned roadway lighting, and landscaping installed during reconstruction of Bottineau Blvd. in 2011-2012.

8. Preventing access to the track zones

The track zones north and south of Bass Lake Road may invite unauthorized pedestrian travel or other dangerous activity. This is especially concerning in the interchange scenario due to the confined spaces between the raised roadway embankments north and south of the Bass Lake Road station. The project needs to include fencing and other design elements to make it intuitively clear that these areas are dangerous and access is prohibited. These design elements need to go beyond "keep out" and "danger" signs and need to include physical barriers and design cues wherever practical.

9. Public Safety

The current and ongoing safety issues for patrons and employees on the Metro Transit system have been widely reported and documented. Residents and business owners in Crystal continue to express their concerns. Presuming that these safety issues are successfully addressed by Metro Transit before the Blue Line Extension begins operating, the design of the Bass Lake Road station, park and ride facility and adjacent infrastructure must minimize the opportunity for future public safety problems to develop. For the project to be successful, Metro Transit must include design elements in the area of the station and park and ride that are consistent with the principles of Crime Prevention Through Environmental Design (CPTED). The city's particular concern is that, despite Metro Transit having its own police department, as a practical matter it is the Crystal Police Department that will be the first responder to most calls in and around the Bass Lake Road station.

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10. Bus Service Enhancements

Crystal acknowledges that Metro Transit is already planning to evaluate its bus routes and operations as part of the Blue Line Extension project development. The city requests that this evaluation strengthen suburban bus service, particularly by improving east-west connections to the light rail stations and also complementary north-south routes where applicable.

11. Continue traffic counting through 2023

Conduct traffic counts in spring and fall 2023 using the same locations and methods as in 2022.

- The proposed lane reduction on Bottineau Blvd. is contrary to the traffic forecasts used in the mid-2000s when the county determined that a 6-lane facility was needed.
- While some data show that traffic changes have occurred in recent years, it is unclear whether these are temporary pandemic effects or permanent changes.
- A new set of traffic counts in spring and fall 2023 would help determine whether a 4-lane roadway would be adequate.

B. SCENARIO #3 (4 LANES WITH INTERCHANGE)

1. Southbound on-ramp merge lane

Include a third southbound lane from the terminus of the southbound on-ramp to approximately the same location where the third lane terminated south of Wilshire Blvd. prior to the restriping in summer 2015. (Exhibit B-1.)

2. Northbound auxiliary lane to off-ramp

Include a third northbound lane from approximately the same location where the third lane started south of Wilshire Blvd. prior to the restriping in summer 2015 to the beginning of the northbound off-ramp. (Exhibit B-2.)

3. Double left turn lanes on the northbound off-ramp

Add a second left turn lane from the northbound off-ramp to westbound Bass Lake Road while preserving the right turn lane to eastbound Bass Lake Road. This would improve throughput from the northbound off-ramp and allow less red time or more green time on the other approaches. This is especially important for westbound Bass Lake Road which would experience substantially greater delays with the interchange option as currently proposed.

4. Shoulders in the 4-lane segment

In the segment between Wilshire Blvd. and 47th Ave., include shoulders on the roadway wherever it will be reduced to 2 lanes in one direction. This is necessary to ensure emergency vehicles can pass through the area during periods of heavy traffic. It is especially critical for the segment from Wilshire Blvd. to Corvallis Ave. because Bottineau Blvd. provides the city's only grade-separated crossing of the Canadian Pacific Railway main line which sees 20-25 trains per day, some two miles in length.

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5. 3-to-4 lane “gore” at the ramp to southbound Trunk Highway 100

The project currently proposes to start a third southbound lane just south of Corvallis Ave. to provide space for vehicles queuing in a single lane to go south on TH100. Instead of creating a 2,000-foot-long third lane for this purpose, the project should improve the throughput to TH100 by starting the third southbound lane much closer to 47th Ave. and allowing the middle lane to choose either southbound Bottineau Blvd. or TH100. This change would reflect the fact that approximately half of the southbound traffic during the peak hour exits to southbound TH100 rather than staying on Bottineau Blvd.

C. SCENARIO #4 (4 LANES WITH ADDITIONAL LANES AT BASS LAKE ROAD)

1. Southbound lane drop

Extend the third southbound lane through the Wilshire Blvd. intersection to approximately the same location where the third lane terminated prior to the restriping in summer 2015. (Exhibit C-1.)

2. Shoulders in the 4-lane segment

In the segment between Wilshire Blvd. and 47th Ave., include shoulders on the roadway wherever it will be reduced to 2 lanes in one direction. This is necessary to ensure emergency vehicles can pass through the area during periods of heavy traffic. It is especially critical for the segment from Wilshire Blvd. to Corvallis Ave. because Bottineau Blvd. provides the city’s only grade-separated crossing of the Canadian Pacific Railway main line which sees 20-25 trains per day, some two miles in length.

3. 3-to-4 lane “gore” at the ramp to southbound Trunk Highway 100

The project currently proposes to start a third southbound lane just south of Corvallis Ave. to provide space for vehicles queuing in a single lane to go south on TH100. Instead of creating a 2,000-foot-long third lane for this purpose, the project should improve the throughput to TH100 by starting that third southbound lane much closer to 47th Ave. and allowing the middle lane to choose either southbound Bottineau Blvd. or TH100. This change would reflect the fact that approximately half of the southbound traffic during the peak hour exits to southbound TH100 rather than staying on Bottineau Blvd.

CI. SCENARIO #5 (6 LANES)

1. 3-to-4 lane “gore” at southbound Trunk Highway 100

Rather than force all traffic exiting to southbound TH100 into a single lane, improve the throughput to TH100 by allowing the middle lane to choose either southbound Bottineau Blvd. or TH100. This change would reflect the fact that approximately half of the southbound traffic during the peak hour exits to southbound TH100 rather than staying on Bottineau Blvd.

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The city looks forward to continuing to work with the project staff on this important project. Please feel free to contact me at 763.531.1140 or adam.bell@crystalmn.gov with any questions. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Bell', written in a cursive style.

Adam R. Bell
City Manager

Existing median landscaping



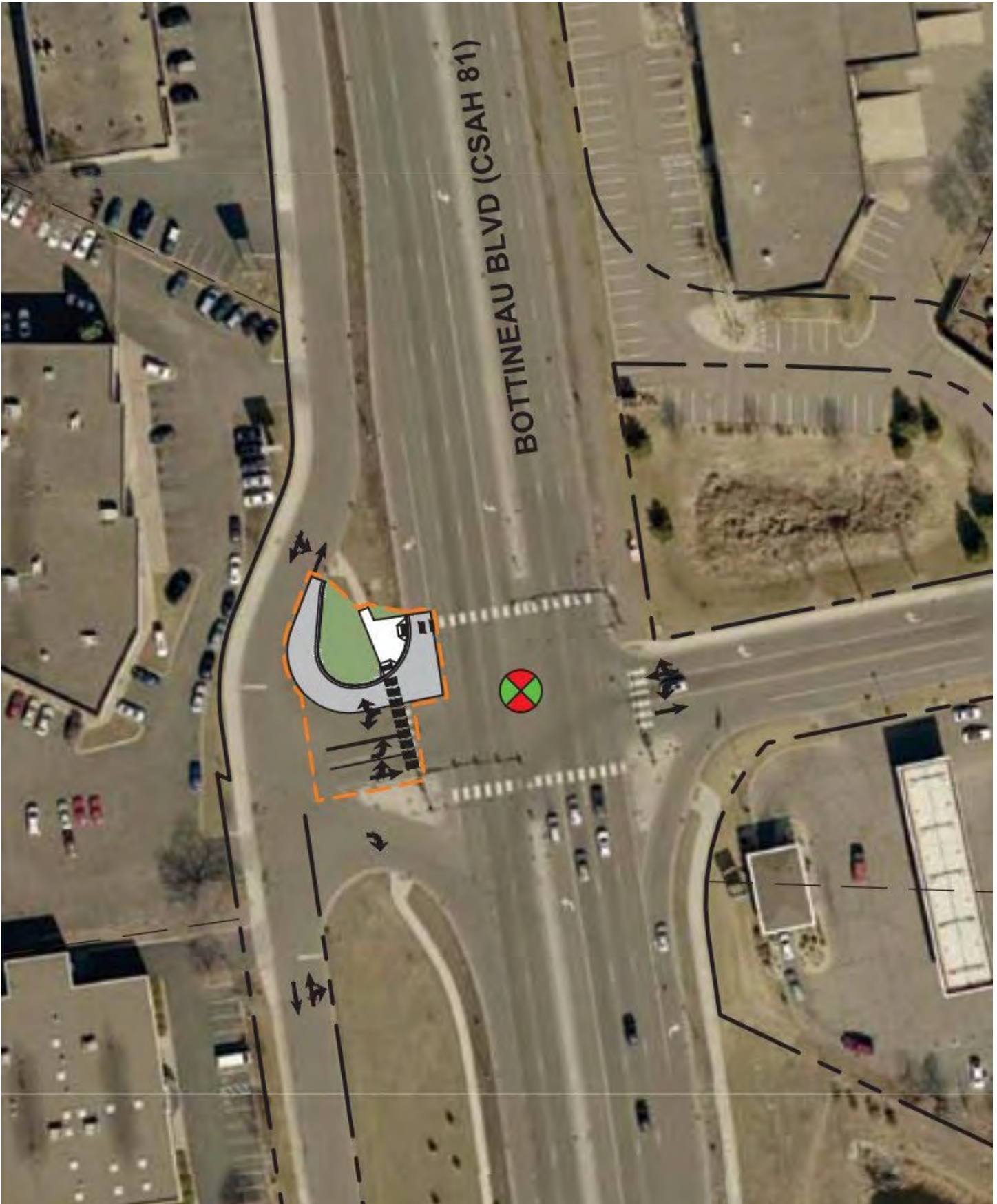
Image capture: Sep 2022



Image capture: Sep 2022

Wilshire Blvd. intersection

Excerpt from 90% plans (previous alignment)



Eastbound 47th Ave. at Bottineau Blvd.



Westbound 47th Ave. at Bottineau Blvd.



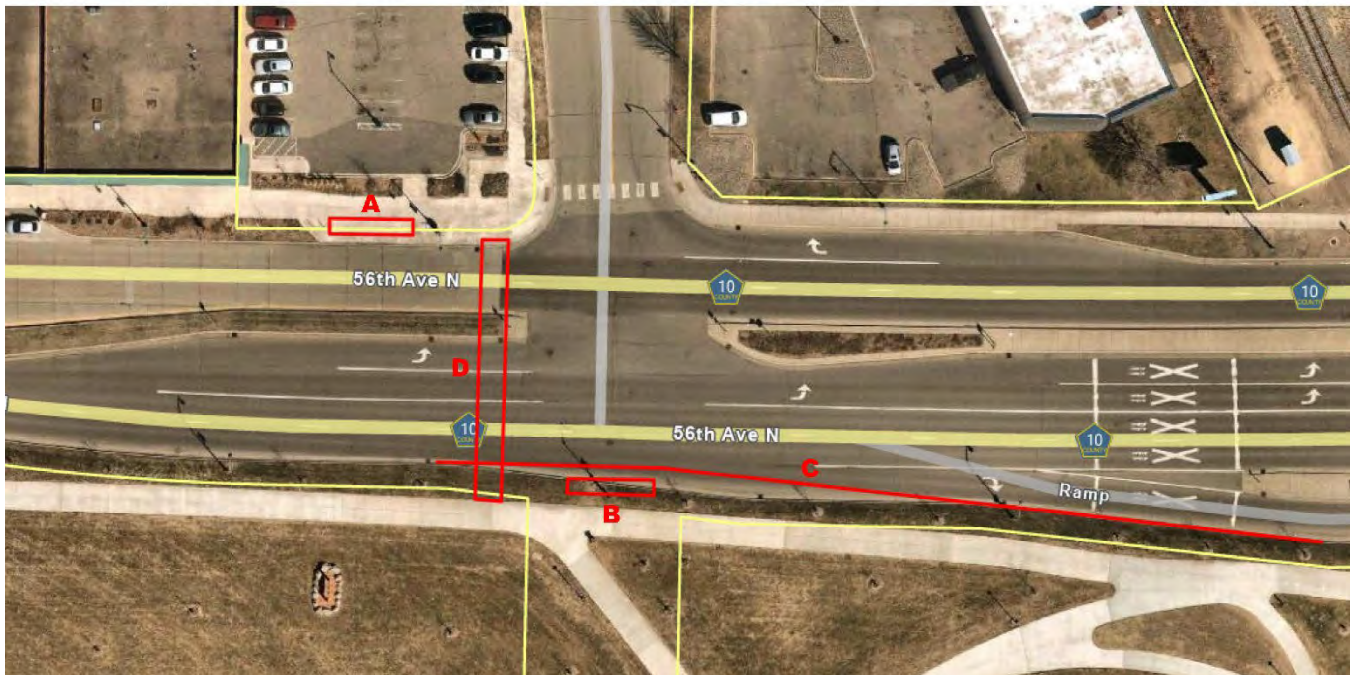
Bus shelters and crosswalk at Elmhurst and Bass Lake Road

Excerpt from 90% plans (previous alignment):



2021 aerial photo with approximate location of previous Blue Line alignment project elements in red:

- A. Westbound bus shelter
- B. Eastbound bus shelter
- C. New curb line
- D. Crosswalk

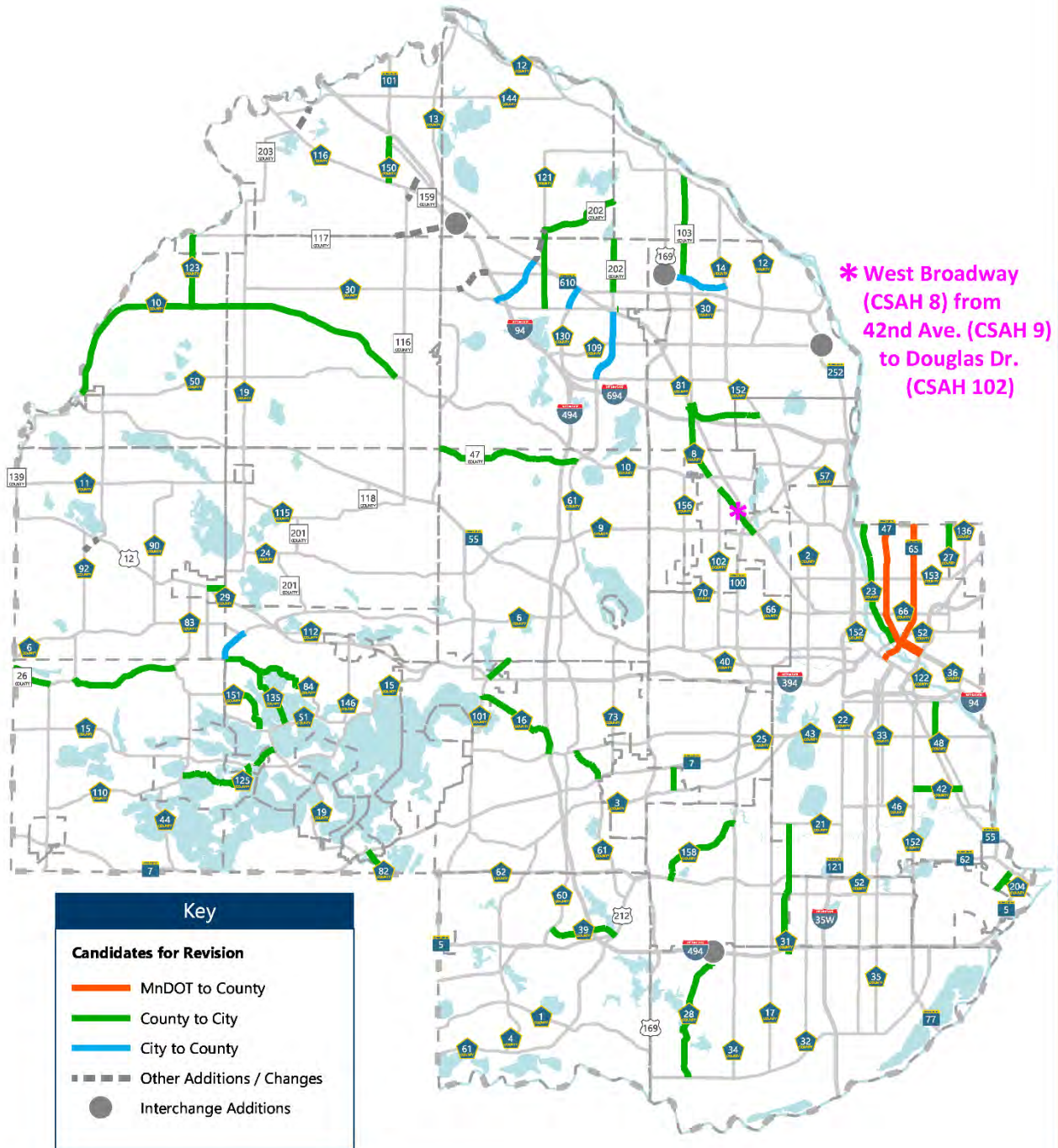


Jurisdiction Transfer Candidates

HENNEPIN COUNTY
MINNESOTA

Figure 4-17 | Public Works

(City note in magenta)



Disclaimer: This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

Publication date: 5/30/2018



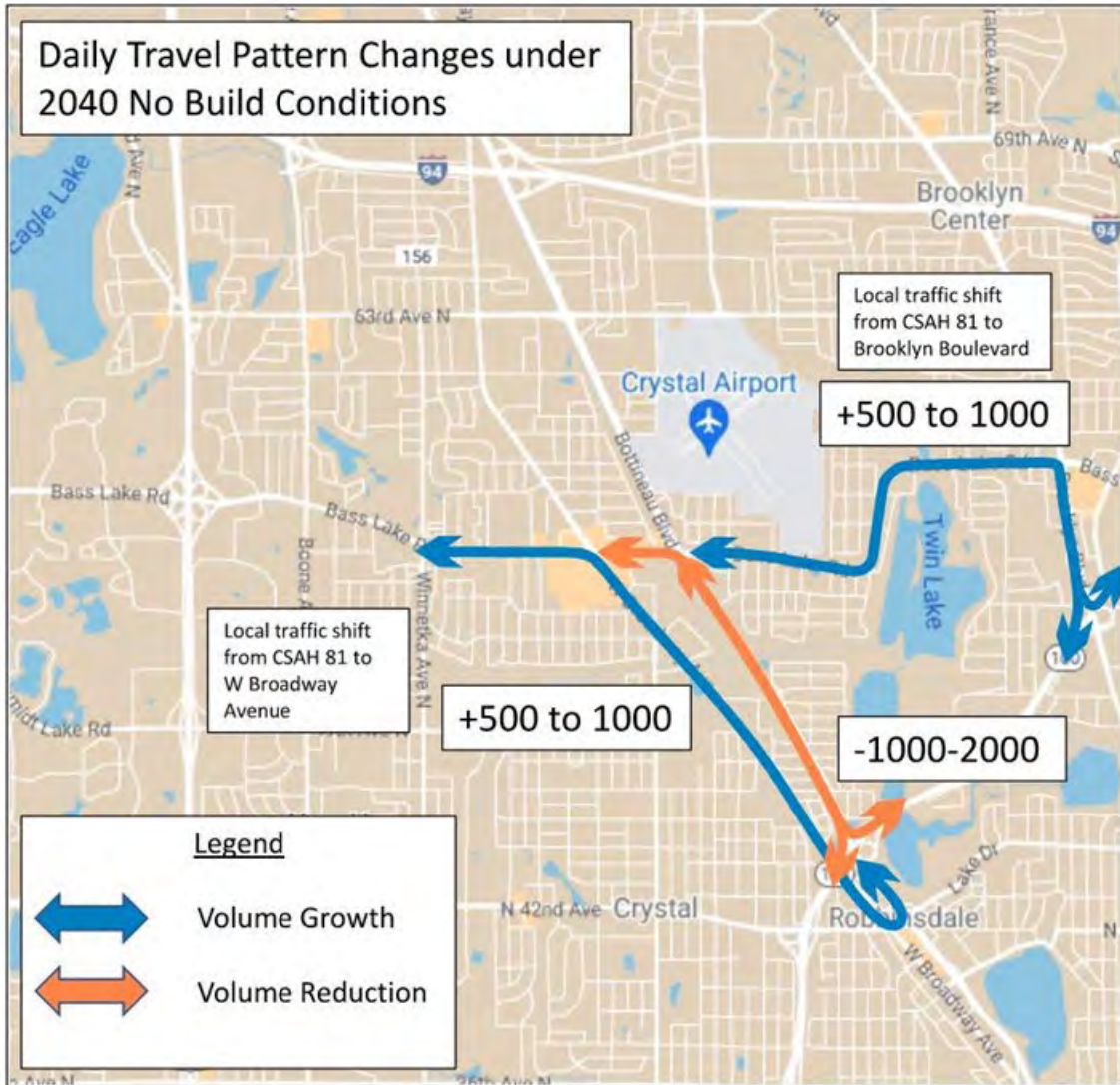
West Broadway looking northwest from 47th



West Broadway looking southeast from Welcome



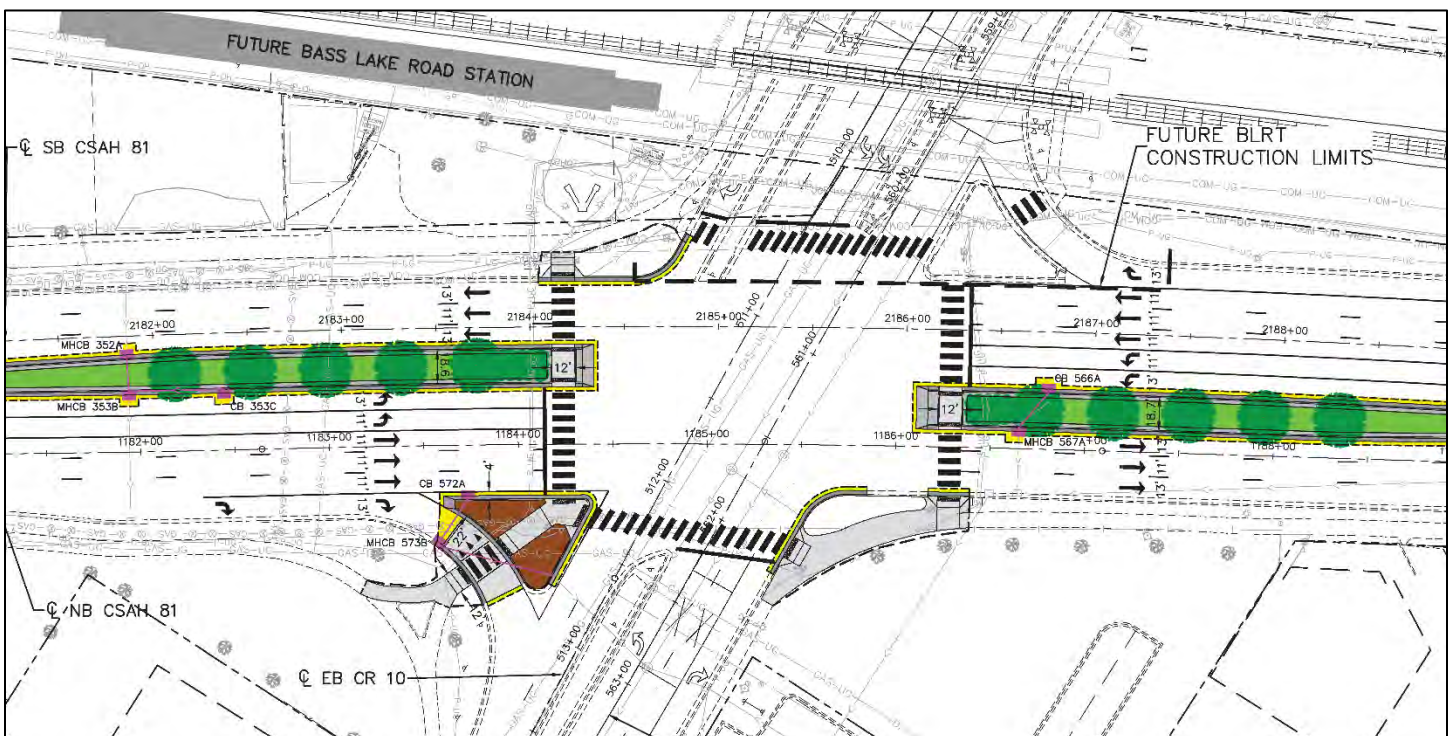
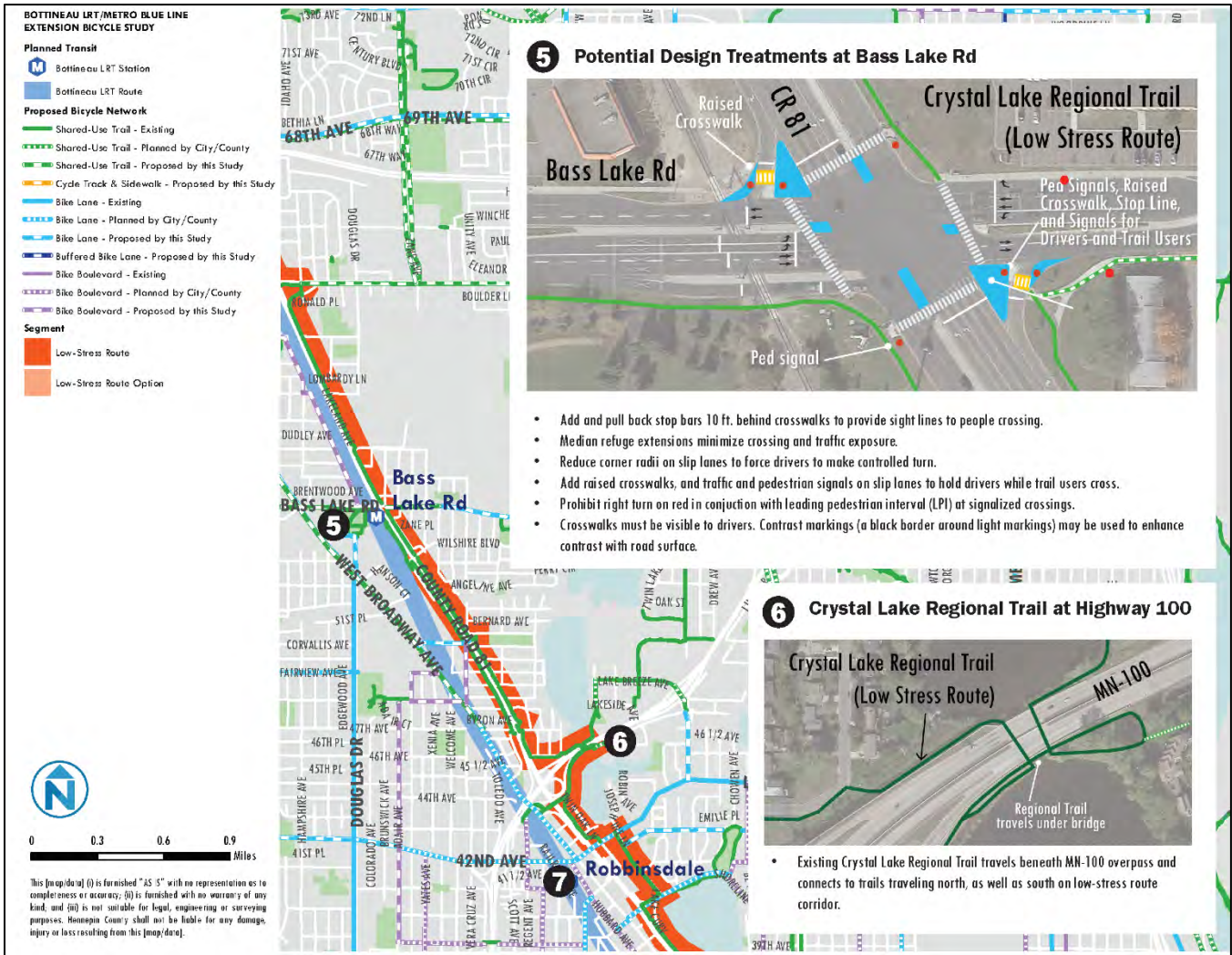
2040 forecast model - shift from Bottineau Blvd. to West Broadway



Existing bike/ped trail and cell tower maintenance access route



Previously planned at-grade pedestrian enhancements



April 2015 aerial photo showing southbound third lane drop



Lane drop taper (before summer 2015 restriping)

April 2015 aerial photo showing northbound third lane add



Lane add taper (before summer 2015 restriping)

April 2015 aerial photo showing southbound third lane drop



Lane drop taper (before summer 2015 restriping)



METRO Blue Line LRT Extension (BLE)

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December 14, 2023

Adam Bell
City Manager, City of Crystal
1010 Douglas Drive North
Crystal, MN 55422-1696

RE: City of Crystal design comments on the METRO Blue Line Extension (BLE)

Dear Mr. Bell,

Thank you for your thoughtful review and comments on the preliminary design concepts for the Blue Line Extension (BLE). Delivering any project of this scale and complexity requires close partnership and local expertise from City leaders. Your input has helped shape design plans as reflected in this letter and your continued partnership will be critical as we refine designs and work through environmental review and municipal consent processes.

This letter aims to directly address comments provided by the City of Crystal (City) in a letter sent March 8, 2023.

The following 6 conceptual design alternatives (“scenarios”) were developed for City review:

1. Existing (no-build) – 6 Lanes at grade, no Light Rail Transit (LRT)
2. LRT with 4 lanes at grade
3. LRT with 4 lanes, interchange at Bass Lake Road (BLR) and a third southbound lane south of Corvallis
4. LRT with 4 lanes, at-grade with additional lanes at BLR and a third southbound lane south of Corvallis
5. LRT with 6 lanes, at-grade
6. LRT with 6 lanes and an interchange at BLR

City comments focused on Scenarios 3, 4, and 5, as they are viewed by the City as the most realistic alternatives for the CR 81 corridor. As design and planning has progressed with City input since March, Scenario 3 is now the project-recommended design concept and is being reflected in the draft 30% Municipal Consent layouts.

The scenarios are high-level design concepts with ample opportunity for refinement as work progresses. The project team is committed to continuing to work alongside the City throughout the process to achieve the best design solutions possible at each stage of project development.

A. All Scenarios



METRO Blue Line LRT Extension (BLE)

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In all scenarios, it is proposed to reconstruct CR 81 to accommodate center-running LRT. As a result, some documented concerns from the City related to all scenarios.

- 1. Replacement of median landscaping being removed by the project**
 - a. Planning for green space and landscaping details will be determined at a future phase of design in coordination with City staff. The project appreciates the “parkway” vision for this roadway and is committed to advancing it as part of the project, including by providing landscaping of equivalent or greater quality and quantity.
- 2. Wilshire Blvd. Intersection**
 - a. Design has been modified to maintain two left turn lanes from EB Wilshire to NB CR81.
- 3. 47th Ave. Intersection**
 - a. Specific operational comments noted by the City, including an eastbound right turn overlap phase, are helpful and have been noted for incorporation in future design phases. Signal design will consider ways to optimize intersection performance at this location and will be closely evaluated at the appropriate design stage.
- 4. Bus Shelters and Crosswalk at Elmhurst/Bass Lake Road**
 - a. Project team has been working with the City to develop a concept to improve the existing bus stop on Bass Lake Road at Elmhurst and a mid-block pedestrian crossing and is committed to incorporating this as part of the BLE project.
- 5. West Broadway Jurisdictional Transfer – 42nd Ave. to Douglas Dr. Segment**
 - a. We recognize this is an important priority for the cities of Crystal and Robbinsdale. While this process will occur outside of the BLE project and will be discussed separately between the County and the impacted municipalities, we understand there is a shared commitment to pursue this in coordination with the project timeline.
- 6. Maintain and Improve Bicycle and Pedestrian Connections and Safety in the Vicinity of the Bass Lake Road Intersection**
 - a. A guiding principle of the BLE project is to provide safe and convenient pedestrian and bicycle access, particularly in station locations. The Bass Lake Road station area and intersection design will continue to be refined in partnership with the City to incorporate pedestrian safety and mobility in this area, including at-grade pedestrian enhancements previously planned by Hennepin County in the 2016 Blue Line Extension Bicycle Study and construction project #1615.
 - b. Cell tower access will be maintained.
 - c. Crystal Lake Regional Trail will be maintained as a low stress route.
 - d. The BLE project will connect the bike lanes on Bass Lake Road between CR10 and Xenia.
- 7. Replacement of City Facilities**
 - a. Any existing City facilities directly impacted by this project will be relocated/replaced in kind at project cost. These impacts will be defined and addressed in future phases of design.
- 8. Preventing Access to the Track Zones**



METRO Blue Line LRT Extension (BLE)

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- a. Specific concerns about safety and pedestrian access to track zones north and south of Bass Lake Road are noted and will be addressed in future design phases in consultation with the City. Metro Transit will define specific treatments to prevent access to track zones in coordination with first responders and staff based on CPTED (Crime Prevention Through Environmental Design) standards. Specific solutions will be defined in future phases of design.

9. Public Safety

- a. Metro Transit continues to enhance programs and policies concerning public safety systemwide and has an established Safety & Security Action Plan that is being implemented. Investments have been made in increased staffing, surveillance and communication tools, and programs like Our Text for Safety. More information can be found at: metrotransit.org/public-safety.
- b. Ensuring all future riders and neighbors of the Blue Line Extension feel safe and welcome is a priority for the project. We agree that station and park and ride design elements must be thoughtful in supporting safety and security through the built environment. The project will be designed in close accordance with CPTED standards, with input from local jurisdictions and stakeholders like the Crystal Police Department.

10. Bus Service Enhancements

- a. Metro Transit service planning is currently engaged in the BLE project and changes to existing routes will continue to be refined as the design progresses. Preliminary modifications to bus routes will be incorporated into ridership models in early 2024 and will have opportunity for modification throughout the design phase.

11. Continue Traffic Counting Through 2023

- a. Traffic counts have been gathered in spring and fall of 2023.

B. Scenario #3 (4-Lanes with Interchange at BLR)

1. Southbound On-Ramp Merge Lane

- a. The project includes a third southbound lane in this location.

2. Northbound Auxiliary Lane to Off-Ramp

- a. Traffic modeling and analysis does not support the need for a northbound auxiliary lane south of Wilshire in the proposed interchange condition.

3. Double Left Turn Lanes on the Northbound Off-Ramp

- a. Traffic modeling and analysis does support dual left turn lanes at the northbound off-ramp. This has been incorporated into the current design.

4. Shoulders in the 4-Lane Segment

- a. In response to City feedback, project staff reevaluated this segment. There is a strong desire to construct the roadway and LRT within the existing curb lines whenever possible. The width between existing curbs in this area is variable. At the narrowest points it is 26 feet wide, which allows for a cross section with two lanes in each direction without shoulders. Where there is more width between existing curbs, including between Wilshire Blvd. and Corvallis Ave., we would maintain this extra width as buffer for emergency vehicles that varies along the segment. We will continue to work with the City to advance an optimal design for this segment.



METRO Blue Line LRT Extension (BLE)

6465 Wayzata Boulevard, Suite 500, St. Louis Park, MN 55426 www.bluelineext.org

- b. Design through the full alignment will include adequate width to allow emergency vehicles to pass during busy periods and be designed to Hennepin County and State Aid standards.
- c. The bridge across CP Rail does include additional shoulder space.
- 5. 3-to-4 Lane "Gore" at the Ramp to Southbound Trunk Highway 100**
 - a. The project team has recently identified design concepts that allow for a 3-to-4 lane "gore" at the southbound ramp onto highway 100. Implementation of these concepts will require review and approval by project partners, including MnDOT. Project staff will convene jurisdictional partners to determine and advance the best solution to ensure efficient traffic flow during peak hours.
- C. Scenario #4 (4-Lanes with Additional Lanes at BLR)**
 - 1. Southbound Lane Drop**
 - a. See #1 in Scenario #3 above.
 - 2. Shoulders in the 4-Lane Segment**
 - a. See #4 in Scenario #3 above.
 - 3. 3-to-4 Lane "Gore" at the Ramp to Southbound Trunk Highway 100**
 - a. See #5 in Scenario #3 above.
- D. Scenario #5 (6 Lanes)**
 - 1. 3-to-4 Lane "Gore" at the Ramp to Southbound Trunk Highway 100**
 - a. See #5 in Scenario #3 above.

Closing

We greatly appreciate your continued partnership and thoughtful engagement with the project. As reflected in this letter, your feedback has substantively helped advance and improve design. Many of your suggestions have been directly incorporated into project plans. While additional coordination and design work is needed to implement others, we are confident your stated priorities and concerns can be adequately addressed. We are committed to full transparency and collaborative problem solving as we continue working together to advance this project and maximize the many benefits of light rail for the residents, business, and visitors of Crystal. We appreciate the opportunity to understand and address your priorities and concerns now and in future phases as we continue to work with you to advance design toward Municipal Consent plans.

Sincerely,

A handwritten signature in blue ink that reads "Christine Beckwith".

Christine Beckwith, P.E.
Project Director
METRO Blue Line Extension
Metro Transit

CR 81 TRAFFIC VOLUMES

Annual average daily traffic (AADT) is the estimated average daily traffic volume experienced in both directions of a roadway segment considering the seasonal variation in traffic in a one-year period.

Segment	2005 AADT ¹ (vehicles/day)	2015 AADT ² (vehicles/day)	2019 AADT ³ (vehicles/day)	2021 AADT ⁴ (vehicles/day)	2022 AADT ⁵ Data Set 1 (vehicles/day)	2022 AADT ⁶ Data Set 2 (vehicles/day)	2023 AADT ⁷ Data Set 1 (vehicles/day)	2023 AADT ⁸ Data Set 2 (vehicles/day)	2040 Forecasts ⁹ (vehicles/day)
A CR 81, 63rd Ave to Bass Lake Road	23,900	26,500	29,500	26,500	28,500	26,500	29,000	30,500	34,000
B CR 81, Bass Lake Rd to Wilshire Blvd.	23,900	27,000	31,500	27,500	30,500	28,000	31,500	33,000	32,000
C CR 81, Wilshire Blvd to Corvallis Ave				29,000	32,500	29,500	34,000	34,500	
D CR 81, Corvallis Ave to 47th Ave				30,500	34,500	31,500	36,000	37,000	
E CR 81, 47th Ave to TH 100 ramps	28,500	32,500	39,000	33,500	37,000	33,500	38,000	39,000	39,000



- Existing volumes during the design phase for the CR 81 reconstruction.
- Volumes after the CR81 reconstruction but before the restriping to 6 lanes between 47th Ave and Wilshire Blvd.
- Volumes after the CR 81 restriping to 6 lanes between 47th Ave and Wilshire Blvd. MnDOT 2022 seasonal adjustment factors applied.
- Volumes collected in October 2021. MnDOT 2022 seasonal adjustment factors applied.
- Intersection turning movement count data collected in April 2022. MnDOT 2022 seasonal adjustment factors applied.
- Intersection turning movement count data collected in September 2022. MnDOT 2022 seasonal adjustment factors applied.
- Intersection turning movement count data collected in May 2023. MnDOT 2022 seasonal adjustment factors applied.
- Intersection turning movement count data collected in September/October 2023. MnDOT 2022 seasonal adjustment factors applied.
- Forecasts in the current Hennepin County Transportation Plan.



Total Daily Trips By Station

- 2019 Pre-Pandemic Estimated Ridership – Sept. 2023

Station	Total Daily Trips* (2040 Horizon Year)
63 rd Avenue Station	400-450
Bass Lake Road Station	350-400
Robbinsdale Station	1,250-1,350
Lowry Avenue Station	1,000-1,100

Travel time
between stations
ranges from 2.5 min
– 4.5 min.

**Estimate developed using FTA STOPS ridership model*



ATTACHMENT E





Blue Line

EXTENSION

- 13.4 miles & 12 new stations
- Connecting Minneapolis, Robbinsdale, Crystal, Brooklyn Park and surrounding communities to fast, frequent, all-day service across the METRO system
- Single seat ride to existing Blue Line stops downtown, MSP Airport and Mall of America
- Focus on building community prosperity through anti-displacement strategies before, during, and after construction



Next steps

- Updated post-COVID ridership – early 2024
- Supplemental Draft Environmental Impact Statement – Spring 2024
- Municipal Consent process to confirm final route - Summer 2024
- Updated cost estimate – 2024
- Final Design – 2024-2025
- Construction starts – 2026-2027
- Anticipated opening – 2030



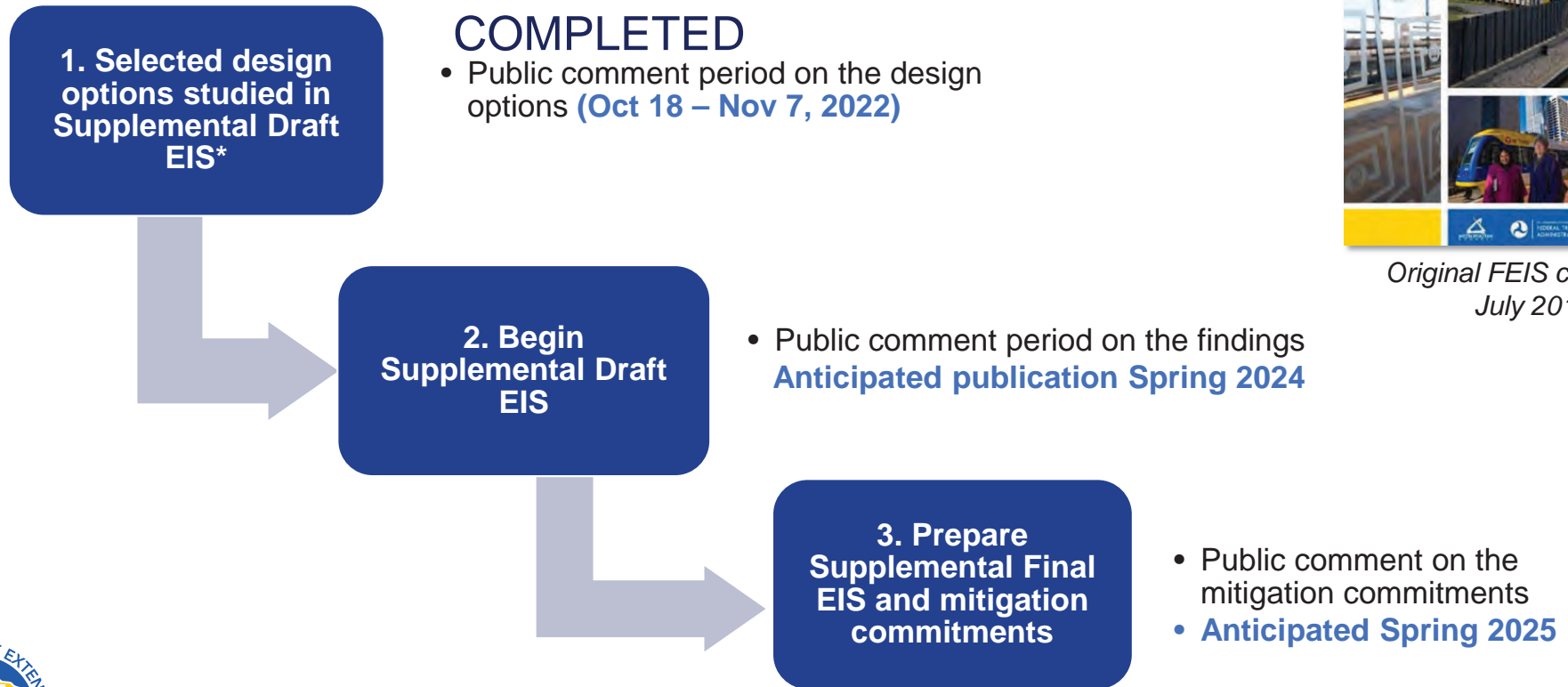
Environmental Update



Environmental Schedule



Original FEIS completed July 2016



*EIS = Environmental Impact Statement

Topics Being Studied in the Environmental Review



Changes to land use, and how the project fits with existing or planned land uses



Effects on the community or communities surrounding the project



What property needs to be purchased and what residences or businesses may need to be relocated



Business impacts – access during construction, relocation, revenue



Impacts to historic properties



Impacts to parks



Visual impacts



Safety



Transportation impacts – bicycle, pedestrian, transit, vehicles (including parking), freight rail, aviation



Water resource impacts – wetlands, floodplains, stormwater, groundwater, water quality



Impacts to soils and geologic resources



Impacts to plants and animals, including threatened and endangered species



Noise impacts, and for transit and rail projects, vibration impacts



Contaminated properties and hazardous materials



Preferred Track Alignments and Stations



Project Design Principles

Maintain BLRT Purpose and Need

Minimize travel time

Maximize ridership

Maximize community and economic development

Maximize Federal Transit Administration New Starts project rating

Pursue opportunities to serve even more people and destinations

Complement existing and planned METRO transitways

Minimize residential, commercial and environmental impacts

Support safety and connections prioritizing people walking, biking, and rolling

Maximize carbon pollution reduction

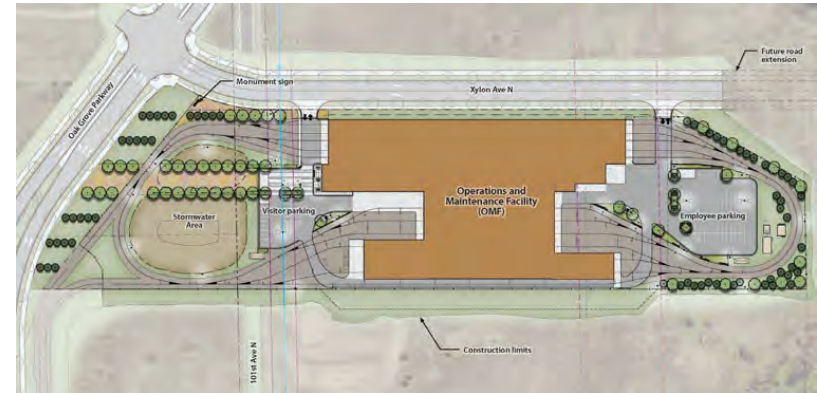




Oak Grove Parkway Station and Park and Ride



View Looking Northwest to Plaza and Park and Ride from Oak Grove Parkway Station



Operations and Maintenance Facility is also located at the northernmost terminus of the



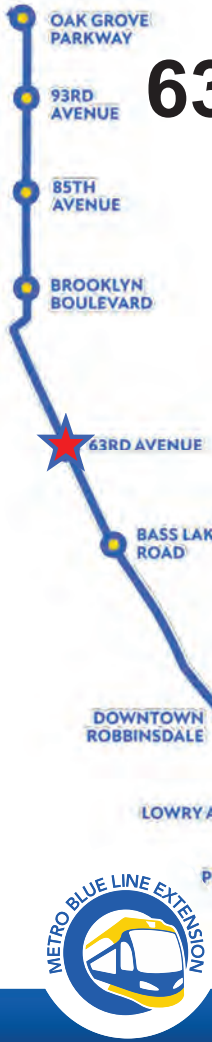


West Broadway Avenue to County Road 81

- Center-running LRT on West Broadway with 4 station locations
- Reconstruction of West Broadway
- Bridge from West Broadway to County Road 81 over northbound direction of traffic



Transition from West Broadway to County Road 81



63rd Avenue Station

- Pedestrian Bridge to connect existing Park and Ride to station and center-running LRT



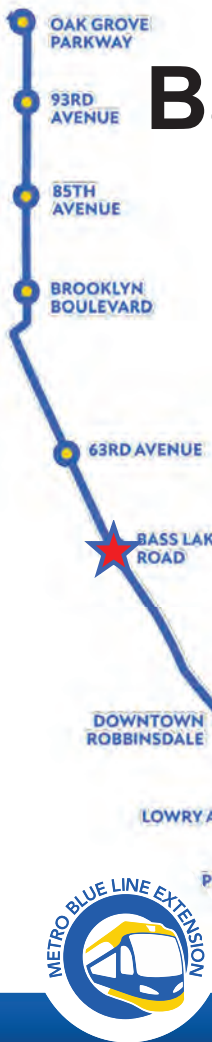
Existing



Proposed Pedestrian Crossing at 63rd Ave Station



Bass Lake Road Station



Existing



Proposed Interchange at Bass Lake Road

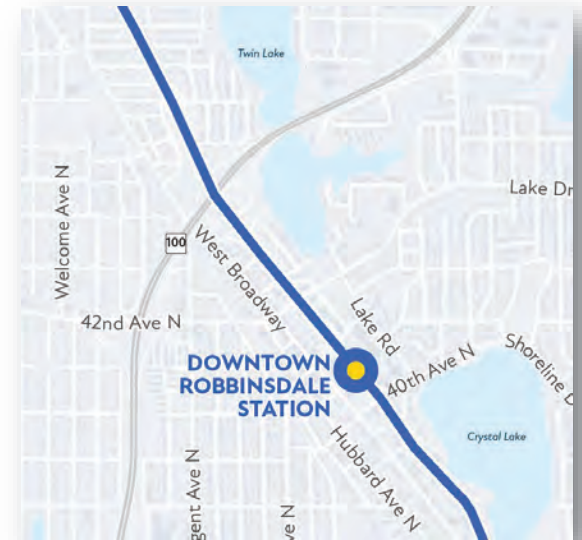


Ground view of station area looking south

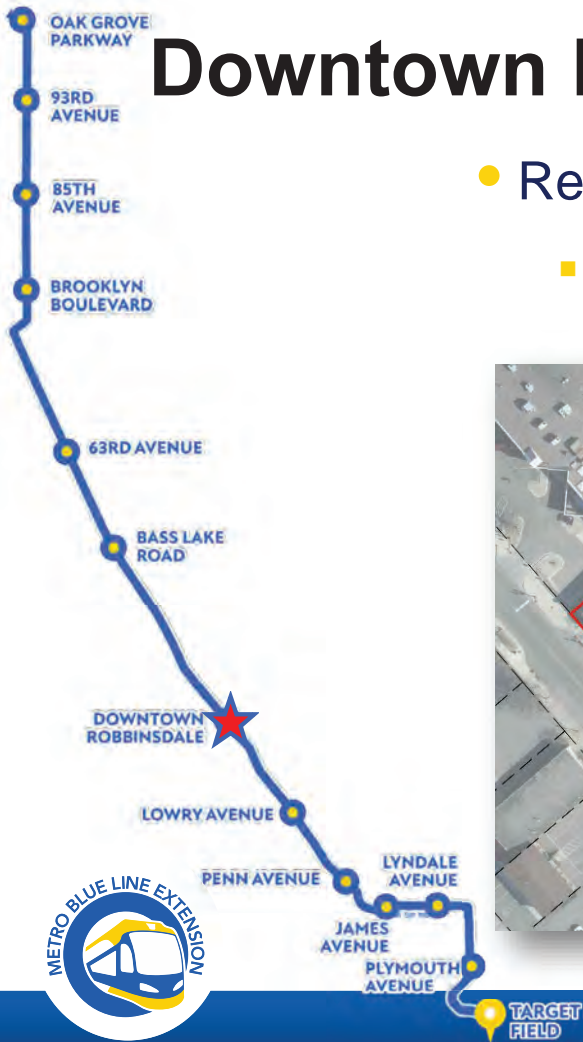


Downtown Robbinsdale Park and Ride

- Redevelop US Bank Site
 - Park and ride, bank branch, and transit-oriented development



- Paired with Station at 40th
- Will incorporate bus transfers
 - 14, 19, 32, 716, 717
 - Plymouth Metrolink Click-and-Ride



Lowry Ave Station

- Provides access to the Grand Rounds trail, Victory Memorial Park, and North Memorial Hospital





Capri Theater



Penn Avenue Station

- METRO C Line connection
- Capri Theater
- NEON food incubator



The Incubator Project*

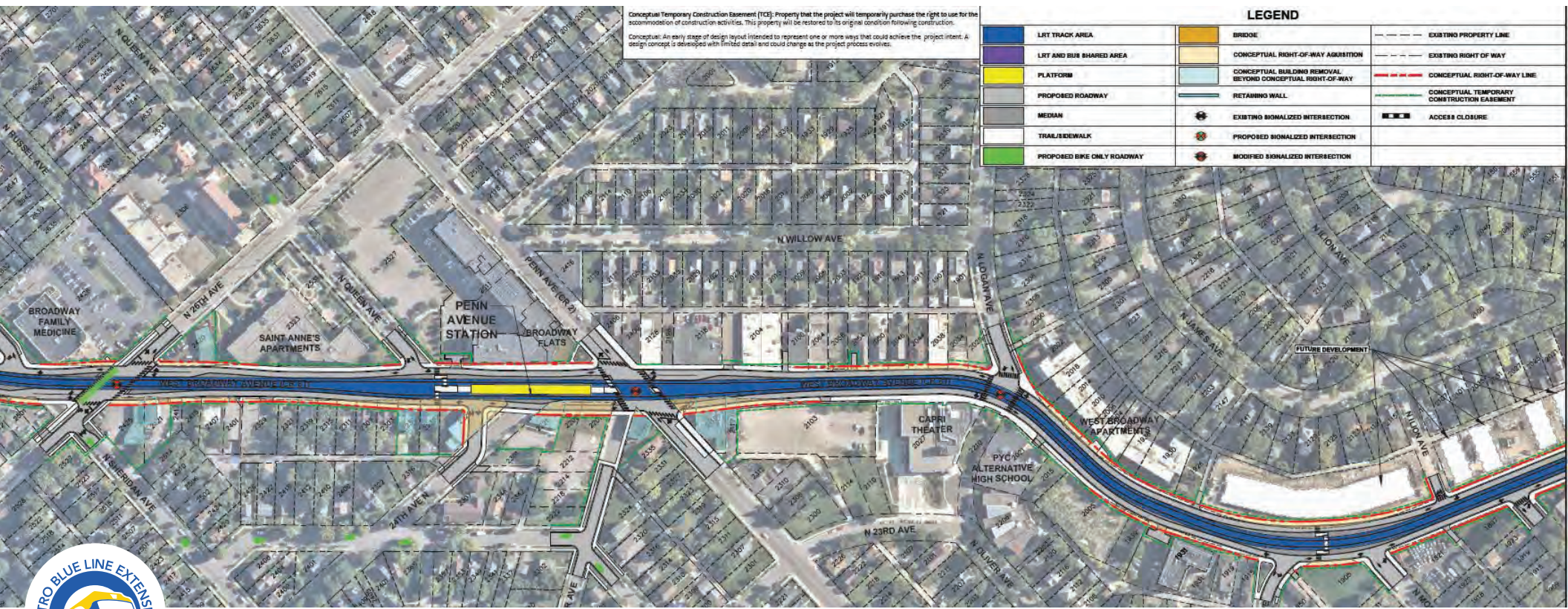


*Photo Source: NEON

NEON | Food Business Incubator & Commercial Kitchen
 West Broadway Avenue | Minneapolis, MN
 Conceptual Imagery

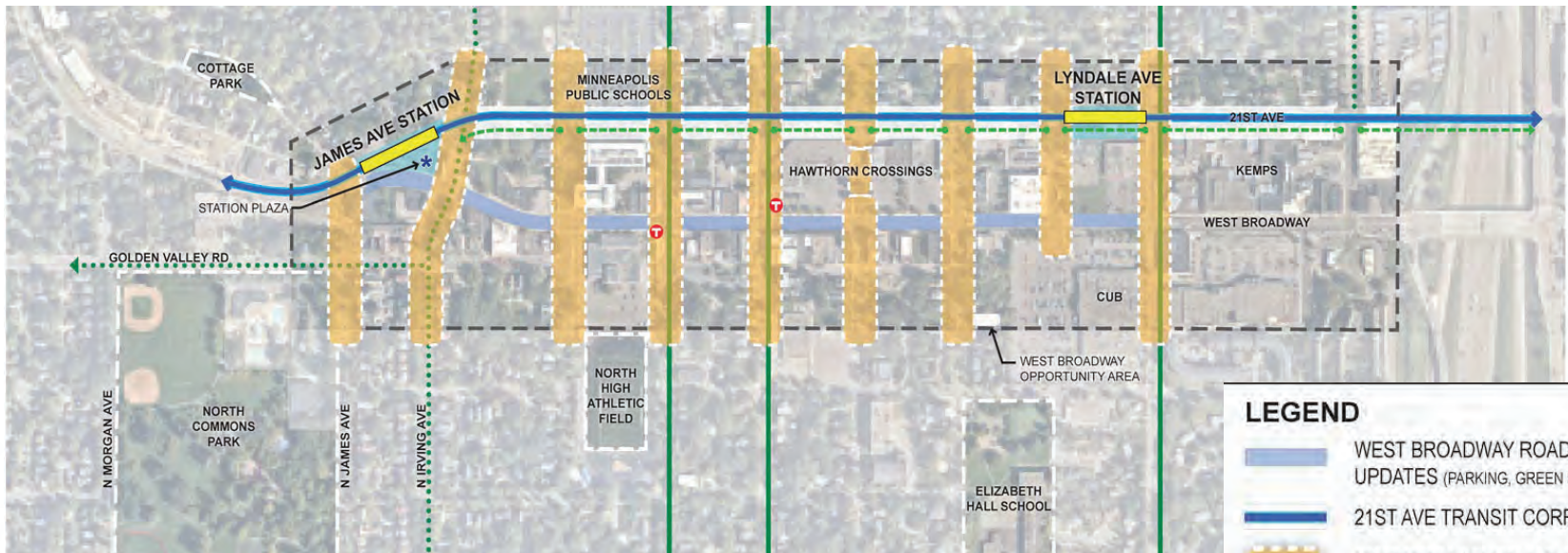
NEON LSE ARCHITECTS

Station at Penn



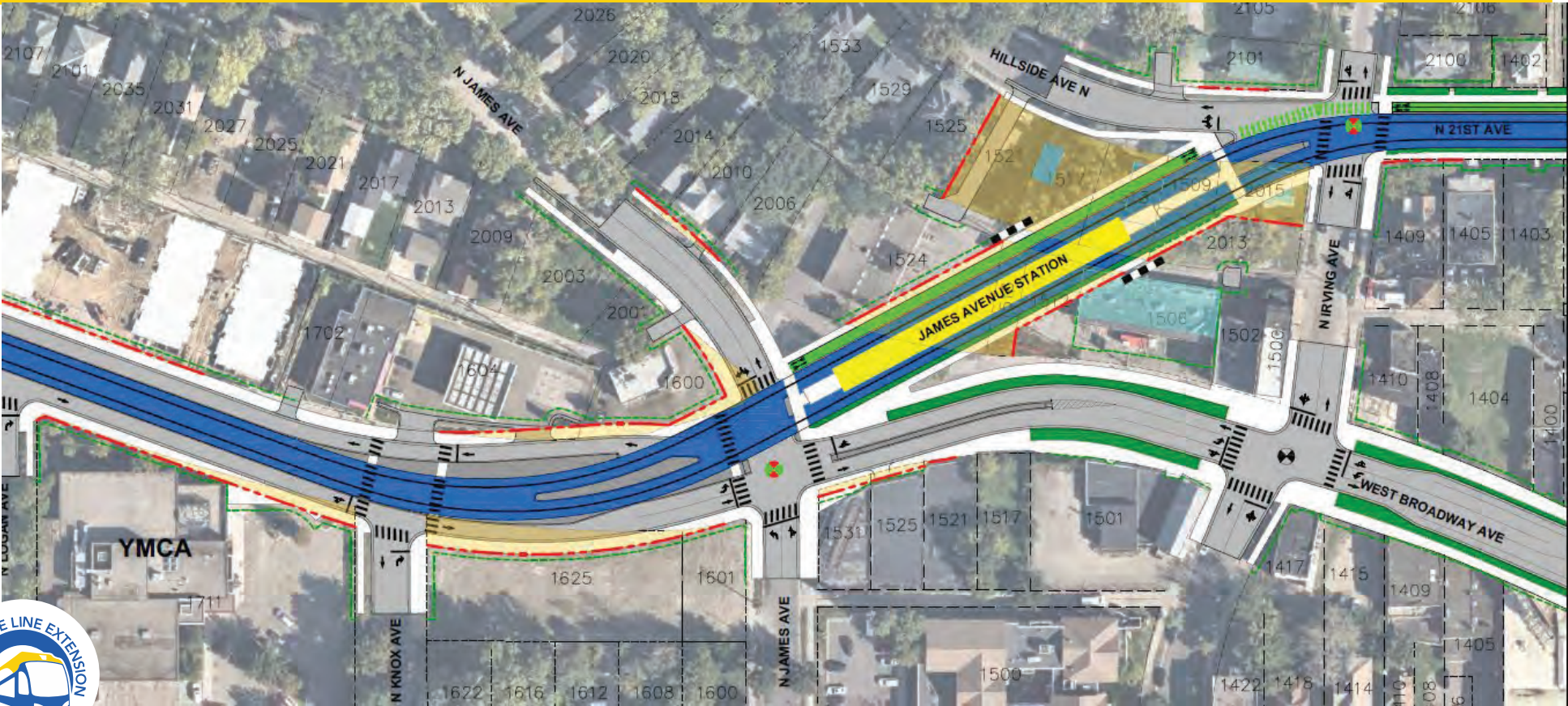


West Broadway and 21st Connections

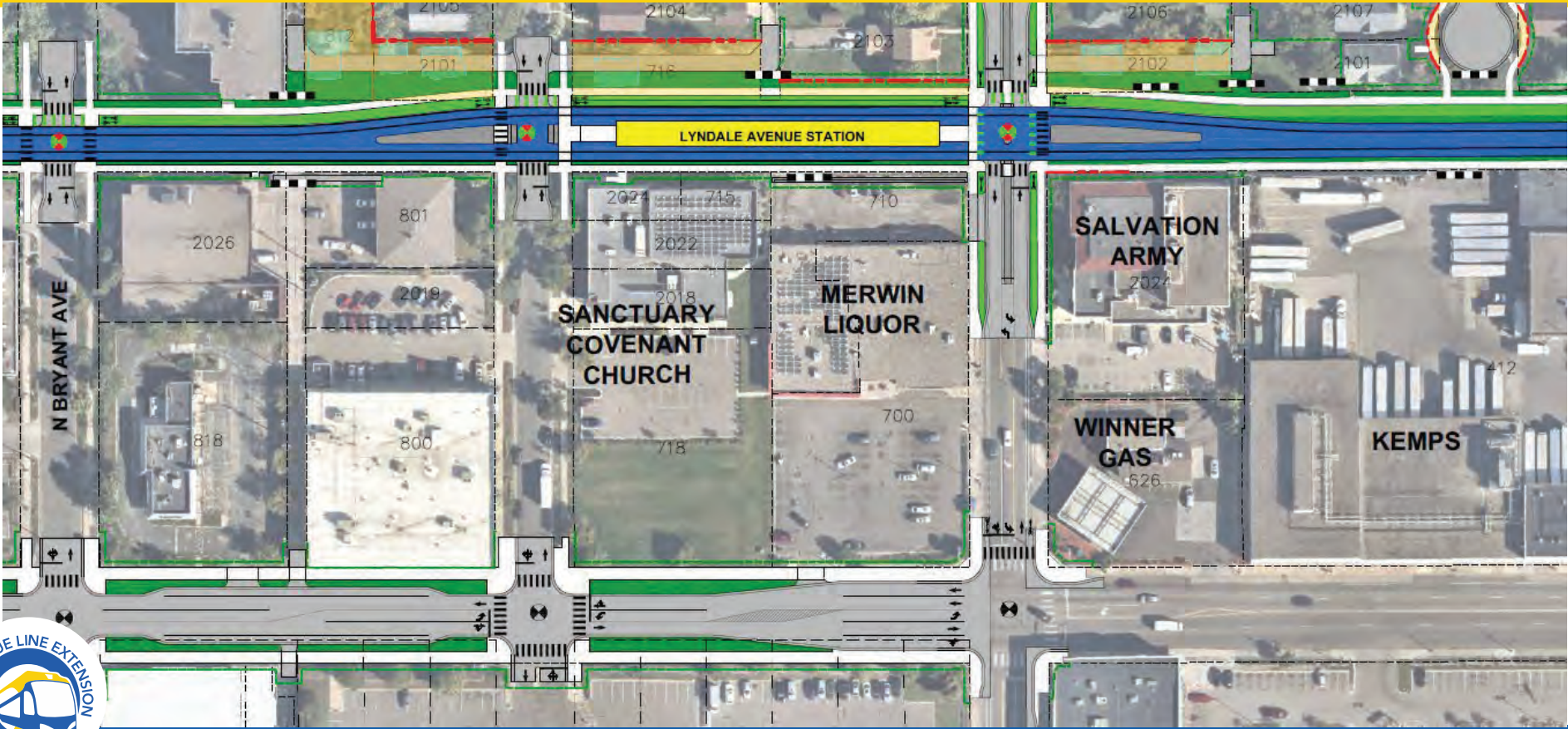


LEGEND	
	WEST BROADWAY ROADWAY UPDATES (PARKING, GREEN SPACES, ETC.)
	21ST AVE TRANSIT CORRIDOR
	COORIDOR STUDY AREA LINK
	PROJECT BICYCLE CONNECTIONS
	EXISTING BIKEWAY CONNECTIONS
	CITY PLANNED BIKEWAY CONNECTIONS
	METRO D LINE BRT

Station at James Avenue



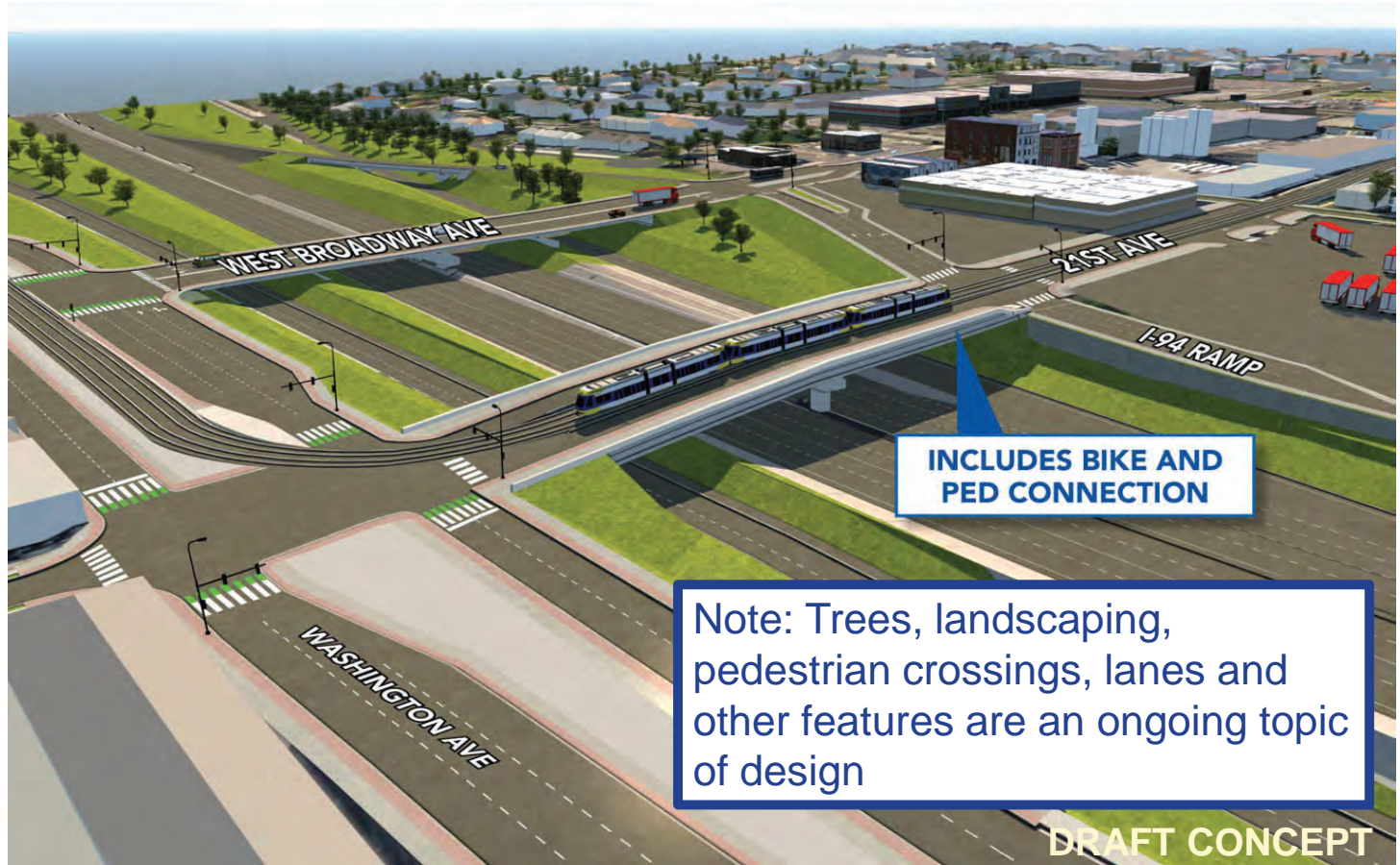
Station at Lyndale Avenue







21st Avenue to Washington Ave Bridge over I-94

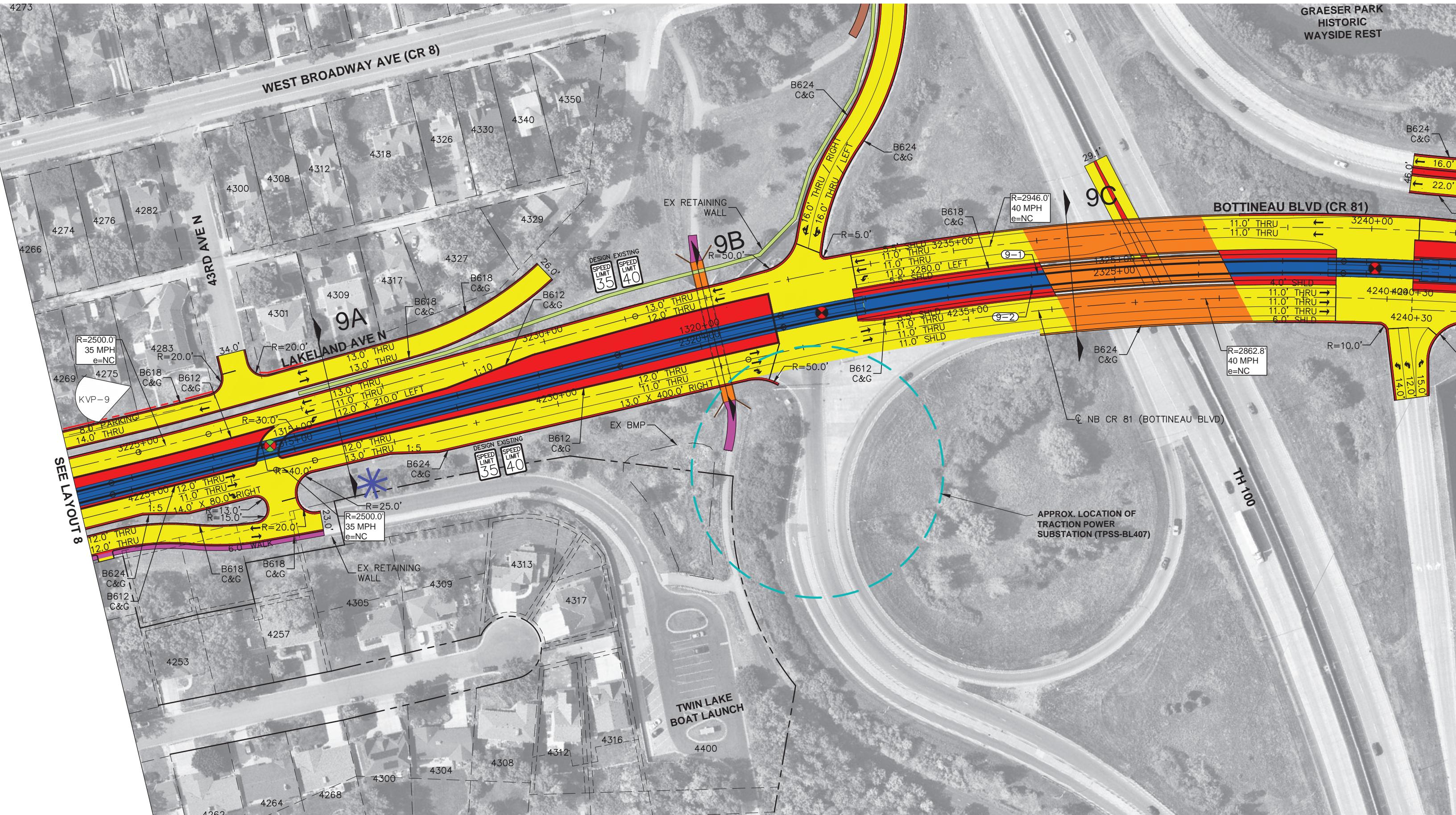




East of I-94 Track Alignment

- Continued outreach to confirm recommended option for East of I-94

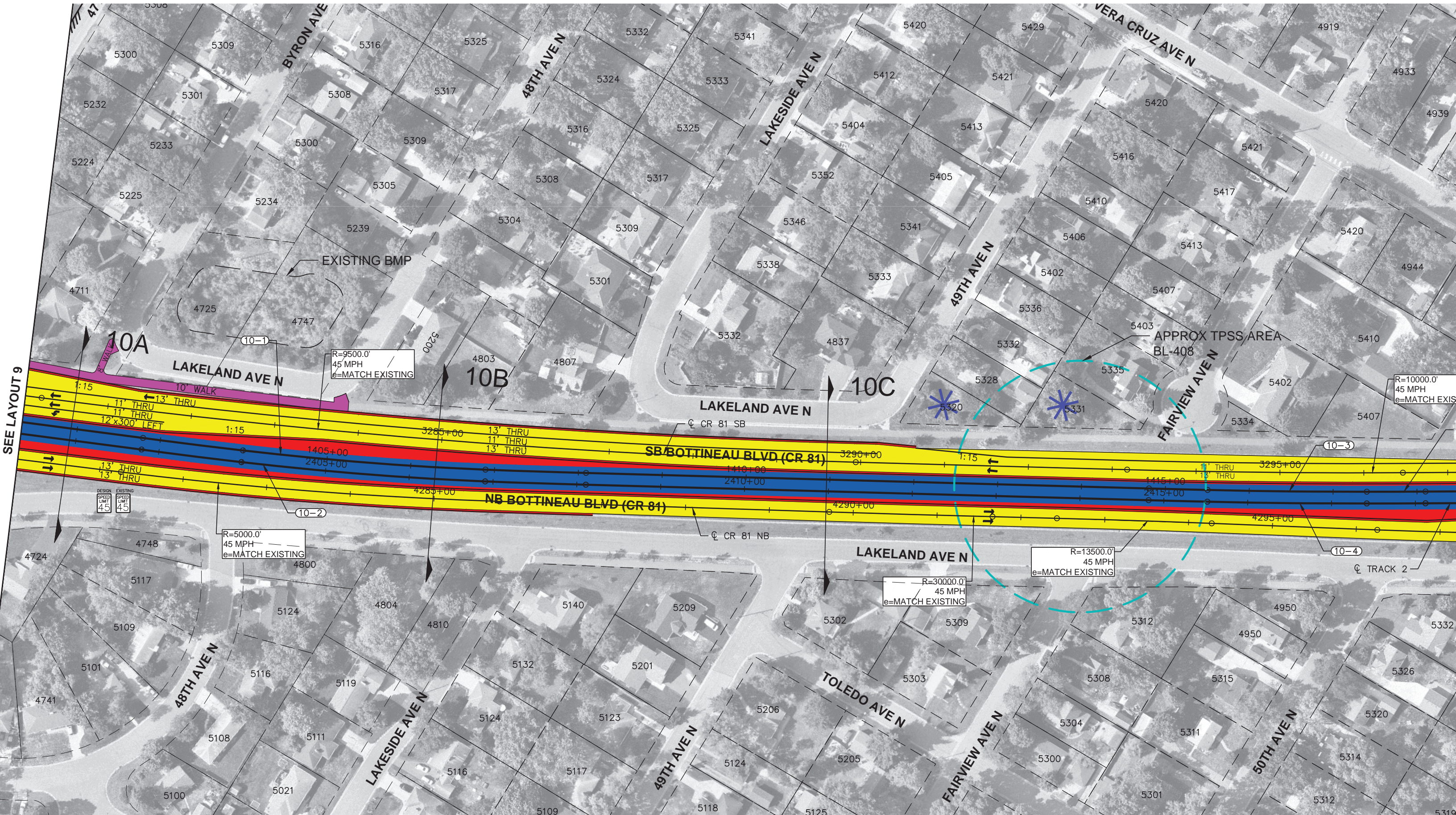






	LRT TRACK AREA		CONCRETE MEDIAN BARRIER		EXISTING SIGNALIZED INTERSECTION		APPROXIMATE KEY VIEW POINT LOCATION
	PLATFORM		BRIDGE		PROPOSED SIGNALIZED INTERSECTION		SEE SEPARATE APPENDIX FOR VIEWS
	PAVED ROADWAY		BUILDING REMOVAL		MODIFIED SIGNALIZED INTERSECTION		EXISTING PROPERTY LINE
	CURB, MEDIAN, & TRUCK APRON		RETAINING WALL		PROPOSED DIRECTIONAL LANE USE		EXISTING RIGHT OF WAY
	SIDEWALK		PROPOSED NOISE WALL		EXISTING BUS STOP		CONCEPTUAL RIGHT OF WAY LINE
	TRAIL		PROPOSED GUARDRAIL		APPROX. LOCATION OF TRACTION POWER SUBSTATION (TPSS)		DRAINAGE AND UTILITY EASEMENT
	STORMWATER TREATMENT LOCATION		CURVE NUMBER		APPROX. SIZE OF TPSS FINAL LOCATION TBD		

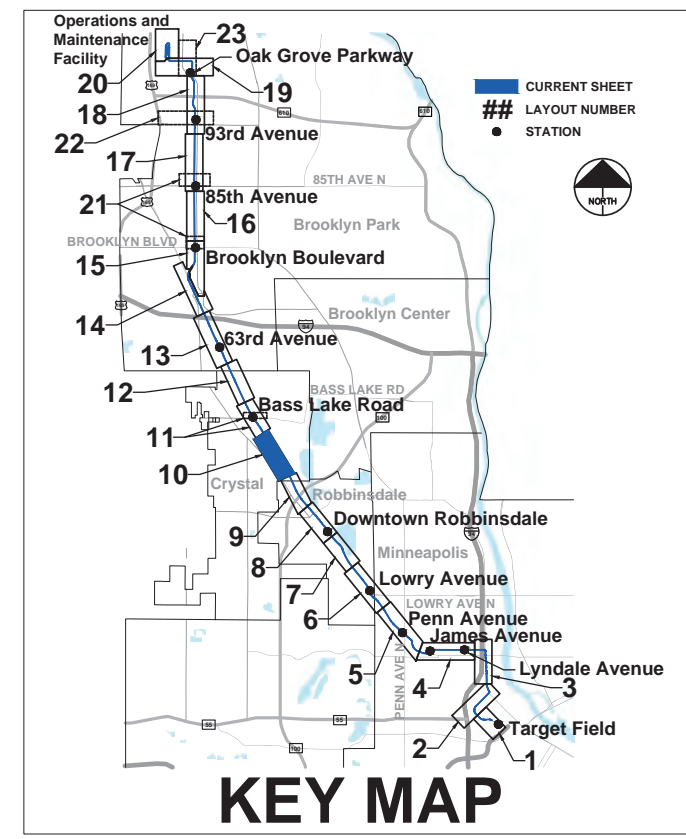
SEE LAYOUT 10





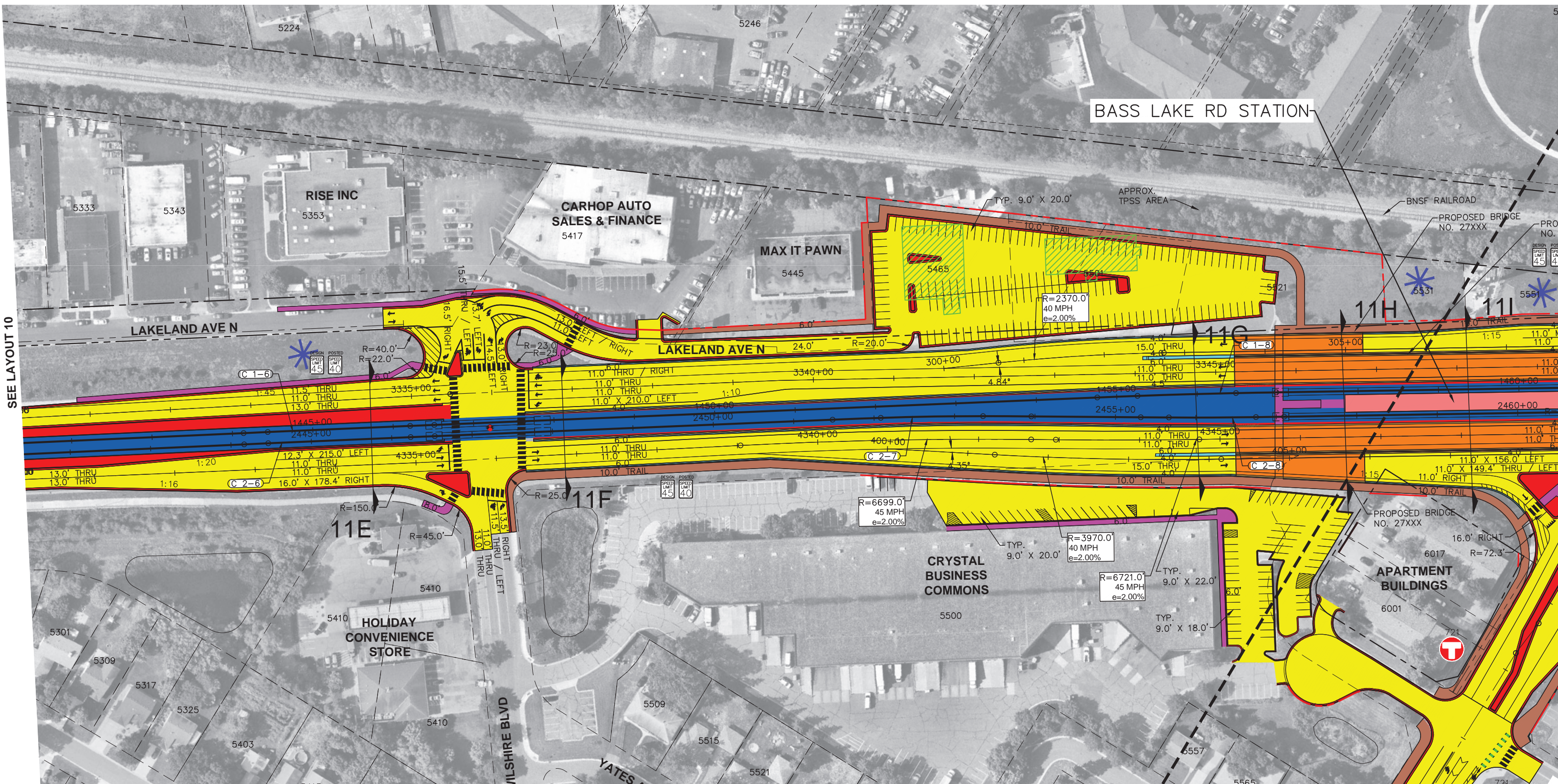


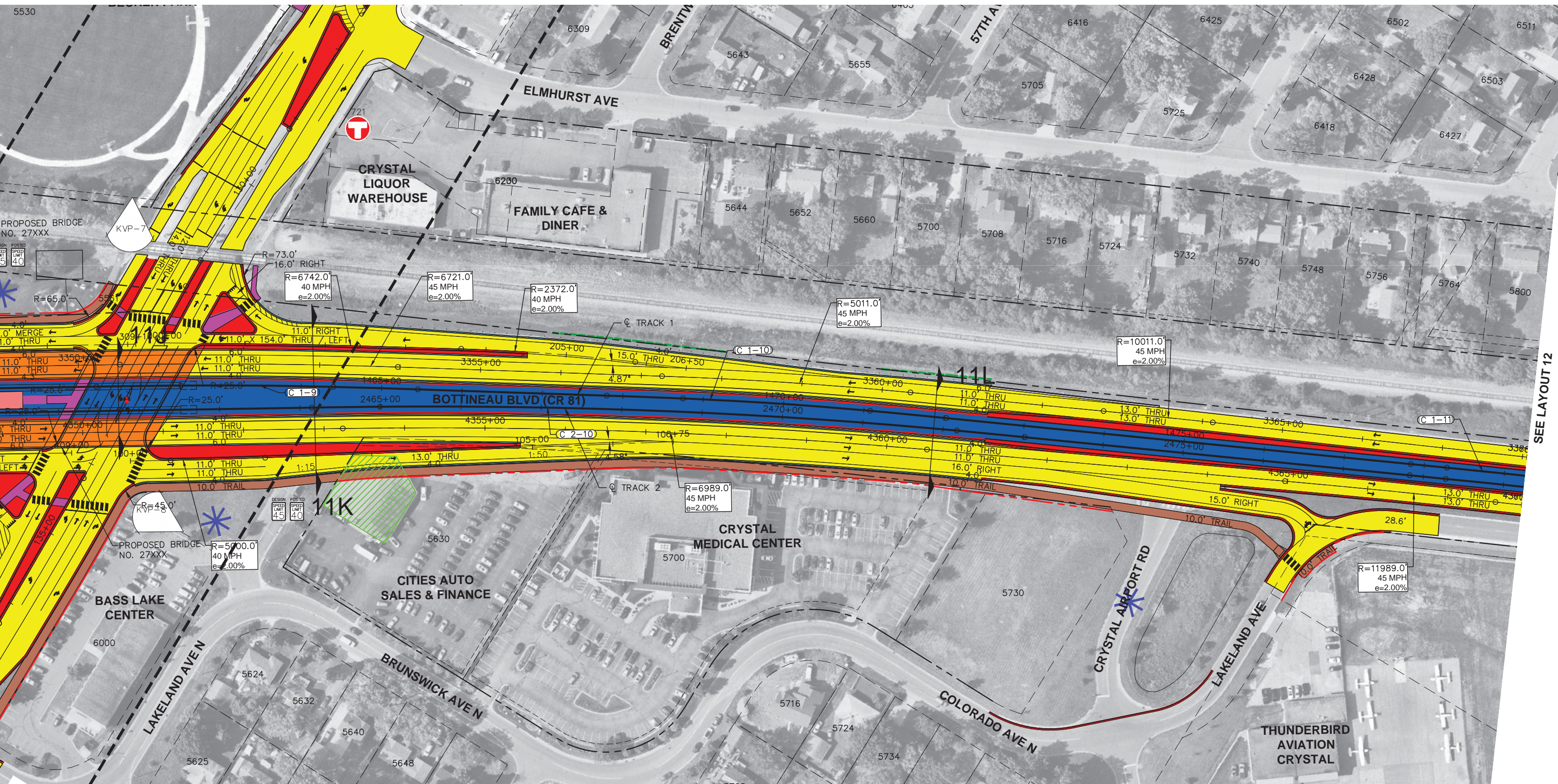
SEE LAYOUT 11



IMPORTANT NOTE

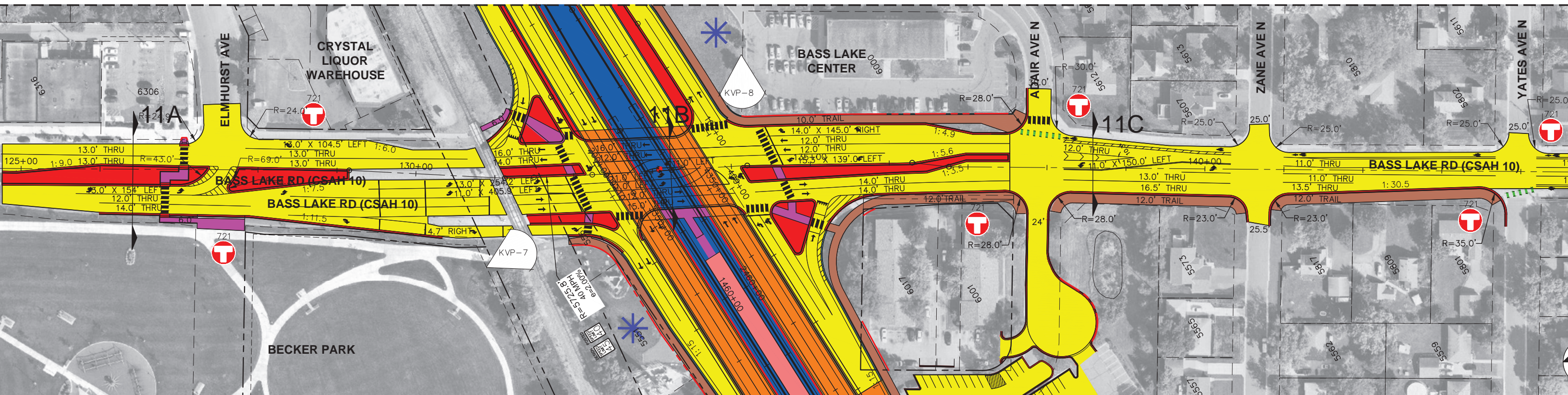
- THIS SHEET IS ONE OF 23 SHEETS REPRESENTING THE MUNICIPAL CONSENT SET OF CONCEPTUAL DESIGN LAYOUT DRAWINGS.
- THIS SET OF LAYOUT DRAWINGS IS THE INITIAL DRAFT SET PREPARED FOR STAFF REVIEW AND COMMENT IN DECEMBER 2023.
- THIS SET OF LAYOUT DRAWINGS REPRESENTS APPROXIMATELY A 30% LEVEL OF DESIGN.
- COMMENTS OR MARKUPS SHOULD BE DISCUSSED WITH THE PROJECT TEAM AT IRT MEETINGS. FORMAL COMMENTS ARE NOT REQUESTED.
- THIS SET WILL BE REVISED, QUALITY REVIEWED AND REPUBLISHED IN EARLY 2024 (WITHOUT A DRAFT DESIGNATION) FOR FORMAL COMMENT.
- AFTER THAT TIME, THESE LAYOUTS WILL ONLY BE REVISED TO REFLECT SIGNIFICANT CHANGES TO THE PROJECT DESIGN INTENT THAT INFLUENCE MUNICIPAL CONSENT.
- A SEPARATE SET OF DESIGN PLANS WILL BE DEVELOPED REPRESENTING THE DESIGN PROGRESSION TOWARD A 60% DESIGN MILESTONE.



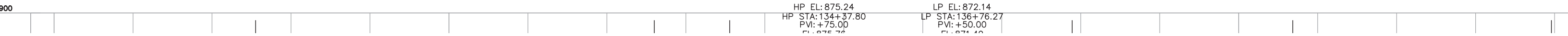


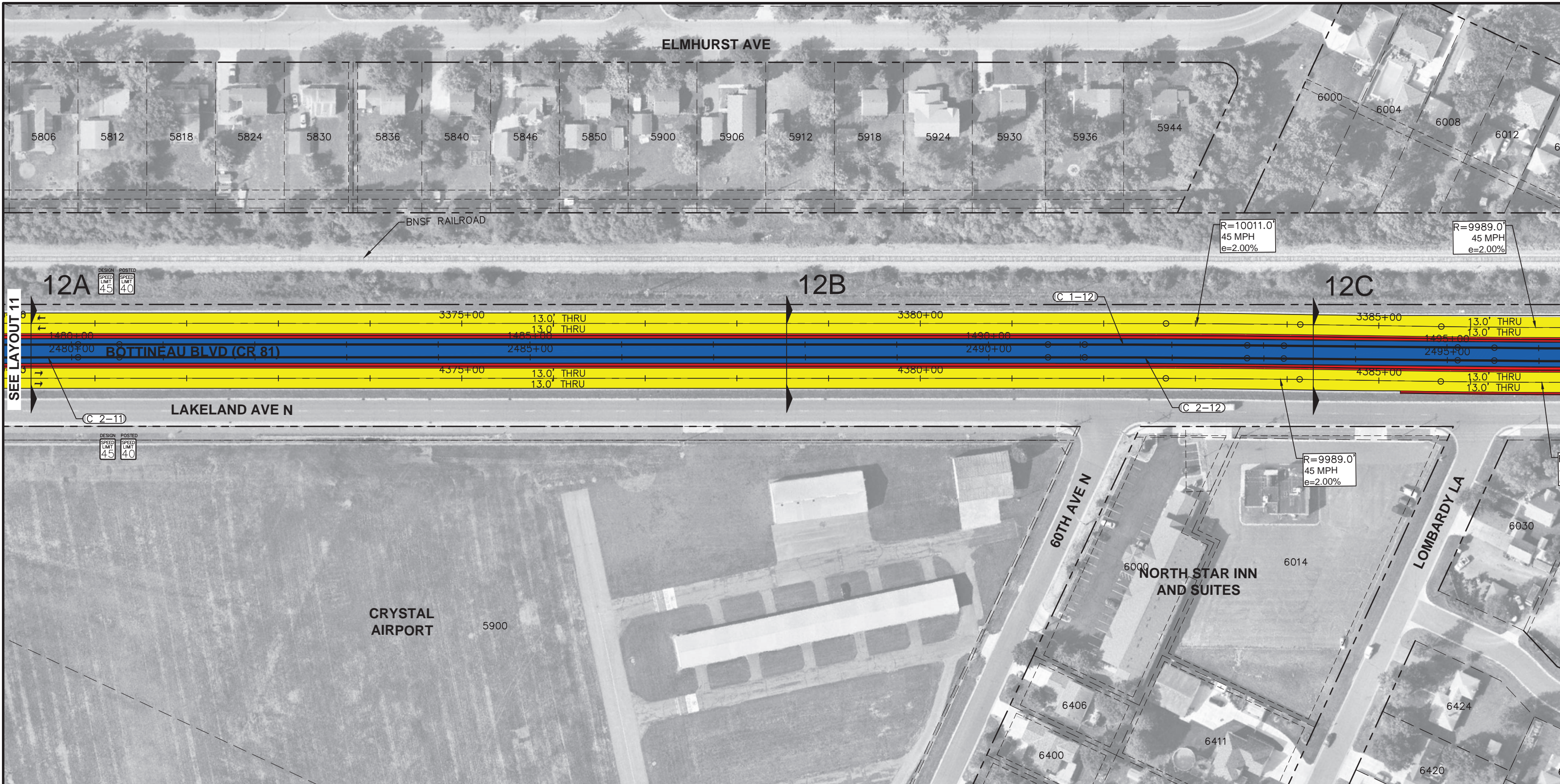
SEE LAYOUT 12

INSET A - BASS LAKE RD (CSAH 10)



BASS LAKE RD (CSAH 10)





TRAFFIC

BOTTINEAU BLVD (CR 81)



SEE LAYOUT 13

LEGEND			
	LRT TRACK AREA		CONCRETE MEDIAN BARRIER
	PLATFORM		BRIDGE
	PAVED ROADWAY		BUILDING REMOVAL
	CURB, MEDIAN, & TRUCK APRON		RETAINING WALL
	SIDEWALK		PROPOSED NOISE WALL
	TRAIL		PROPOSED GUARDRAIL
	STORMWATER TREATMENT LOCATION		CURVE NUMBER
	EXISTING SIGNALIZED INTERSECTION		PROPOSED SIGNALIZED INTERSECTION
	MODIFIED SIGNALIZED INTERSECTION		PROPOSED DIRECTIONAL LANE USE
	EXISTING BUS STOP		APPROX. LOCATION OF TRACTION POWER SUBSTATION (TPSS)
	APPROXIMATE KEY VIEW POINT LOCATION		CONCEPTUAL RIGHT OF WAY LINE
	SEE SEPARATE APPENDIX FOR VIEWS		EXISTING RIGHT OF WAY
	EXISTING PROPERTY LINE		DRAINAGE AND UTILITY EASEMENT
	EXISTING		APPROX. SIZE OF TPSS FINAL LOCATION TBD

TRAFFIC

NEAR BLVD (CD 81) NB CI