

# **Corridor Management Committee**

June 12, 2013



EDEN PRAIRIE | MINNETONKA | EDINA | HOPKINS | ST. LOUIS PARK | MINNEAPOLIS



# **Today's Topics**

- Project Development Technical Issues (TI)
  - Freight Rail: Co-location / Relocation Options
  - SWLRT Stations: Louisiana, Beltline, West lake, and 21<sup>st</sup> Street
  - TH 100 and Cedar Lake Parkway
- Communications and Outreach Update
  - Joint BAC / CAC Report



# SWLRT Project Development Technical Issues

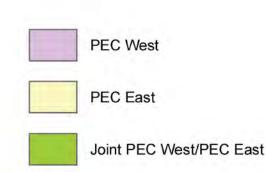
Revision 04: 28 May 2013

#### **Technical Issues:**

- 1. Eden Prairie Alignment
- 2. Nine Mile Creek Crossing
- 3. Golden Triangle Station
- 4. Shady Oak Road & TH 212 Crossing
- 5. City West Station & TH 62 Crossing
- 6. Opus Station
- 7. Opus Hill/Minnetonka-Hopkins Bridge
- 8. Shady Oak Station

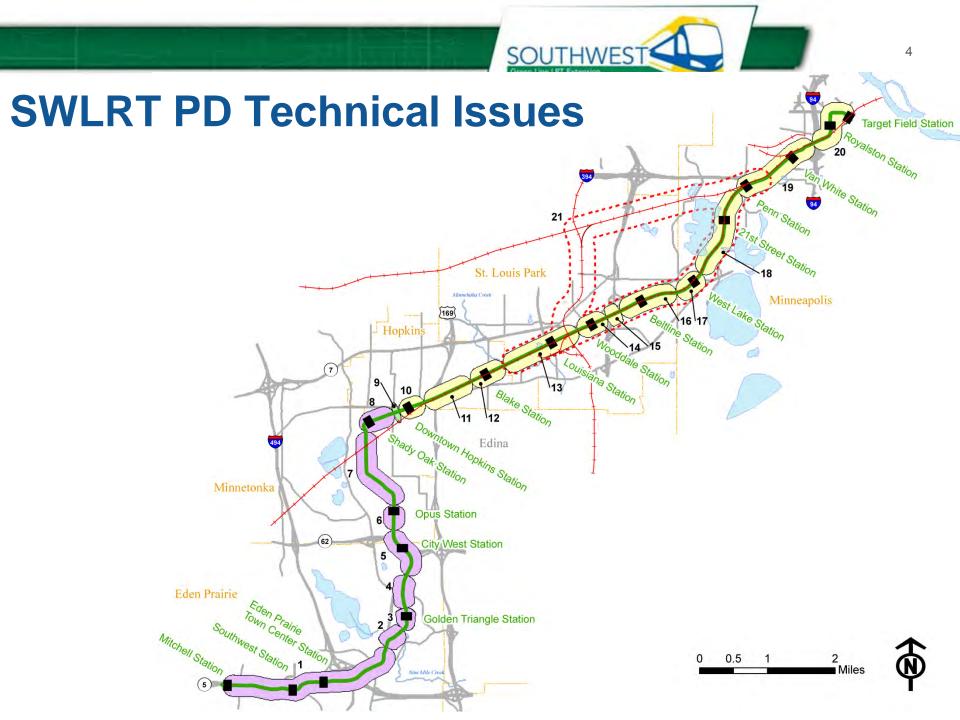
#### 9. PEC West/PEC East Interface Point

- 10. Downtown Hopkins Station
- 11. Excelsior Blvd. Crossing
- 12. Blake Station
- 13. Louisiana Station
- 14. Wooddale Station
- 15. TH 100
- 16. Beltline Station
- 17. West Lake Station
- 18. Kenilworth Corridor
- 19. Bassett Creek Valley Corridor
- 20. Royalston Station/Interchange Project Coordination
- 21. Freight Rail Co-location/Relocation Alternatives



#### System-wide Technical Issues (not shown):

- 22. Traction Power Substation and Signal Bungalow Locations
- 23. Operation & Maintenance Facility (OMF) Location
- 24. Park & Ride, Kiss & Ride and Bus Layover Locations
- 25. Trails and LRT Interface Coordination





# **SWLRT PD Technical Issues**

Freight Rail: Co-location / Relocation Options SWLRT Stations: Louisiana, Beltline, West Lake, and 21<sup>st</sup> Street TH 100 and Cedar Lake Parkway





# Technical Issue #21: Freight Rail Co-location / Relocation



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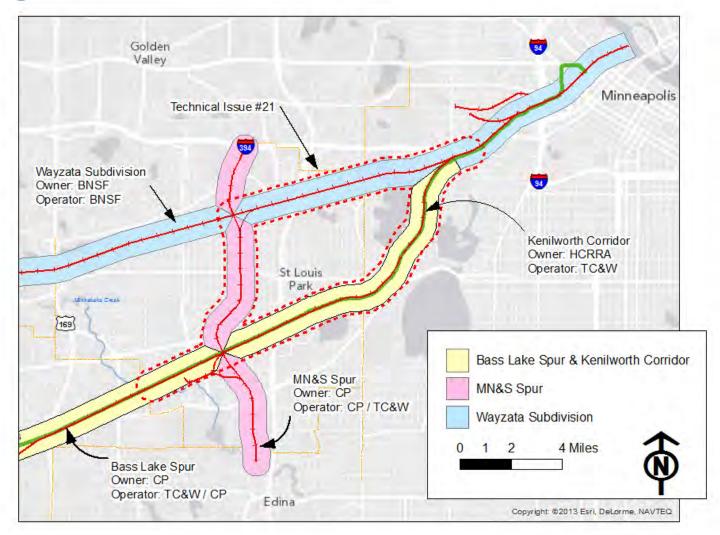


- Background:
  - Co-location and relocation analysis required by FTA as a condition to enter PE
  - Part of the Metropolitan Council's due diligence and responsibility as project sponsor



- Review existing information
  - Freight Rail lines
  - Train volumes
- Technical Issue overview
- Freight Rail co-location design options
- Freight Rail relocation design options





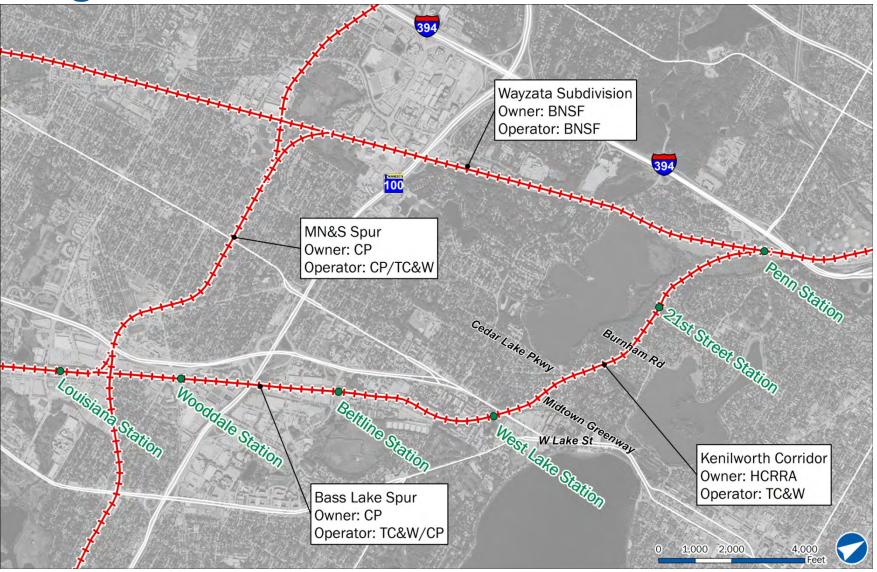


# Freight Rail Technical Issue #21 Existing Train Volumes

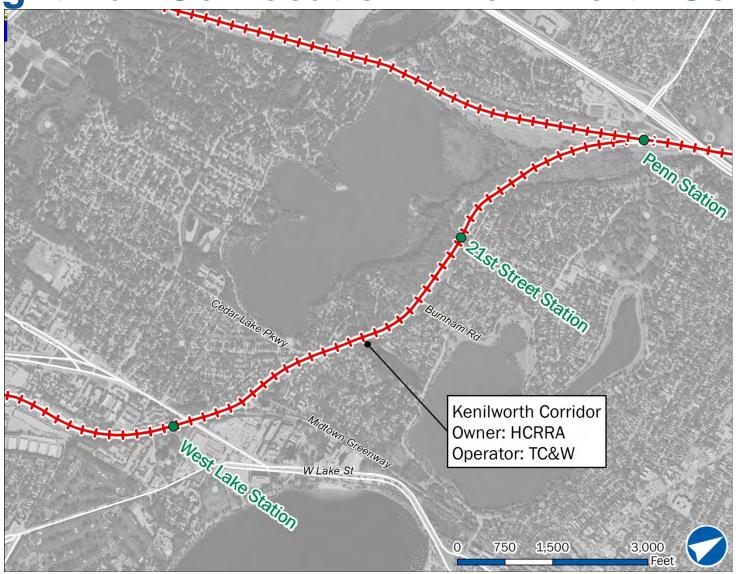
Railroad and Route	Avg. Weekly Trains	Avg. Number of Cars Per Train	Typical Commodities
TC&W/ Bass Lake and Kenilworth	14	65 – 75	Agri-goods
	5 – 6	80 – 125	Ethanol, Grain, Coal
CP/ MN&S	10	10 – 25	Local Services
BNSF/ Wayzata Subdivision	91	80 – 125	Wide Variety



#### Freight Rail Technical Issue #21 - Overview

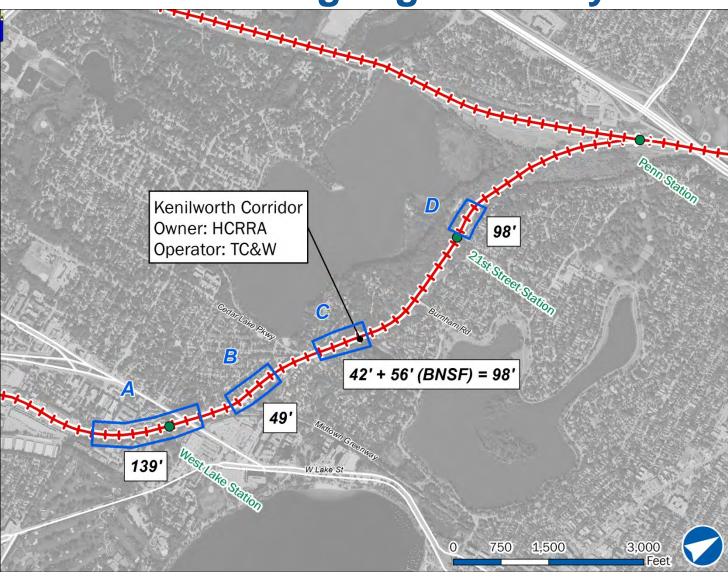








# Kenilworth – Existing Right-of-Way Widths

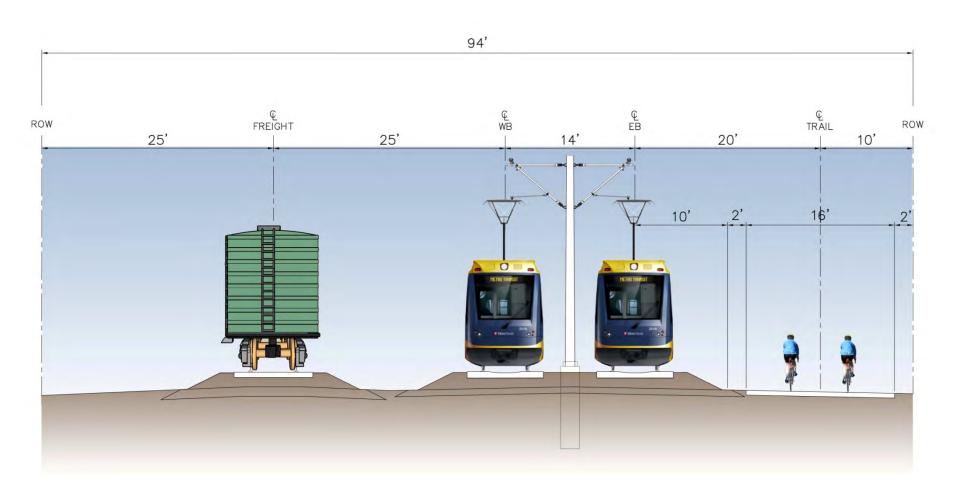




- Freight Rail Co-location Design Options
  - All modes at-grade
  - Trail relocated
  - Trail elevated
  - LRT elevated
  - LRT in tunnel
    - Shallow tunnel
    - Deep bored tunnels

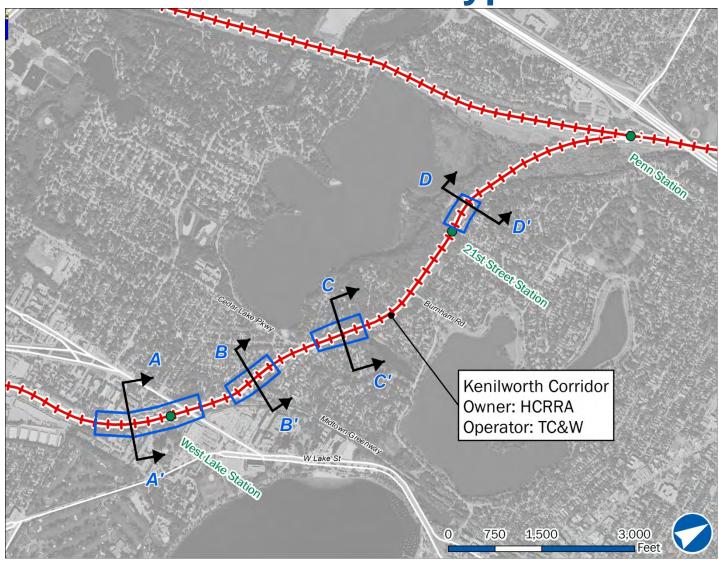


### All Modes At-Grade - 94 ft Section



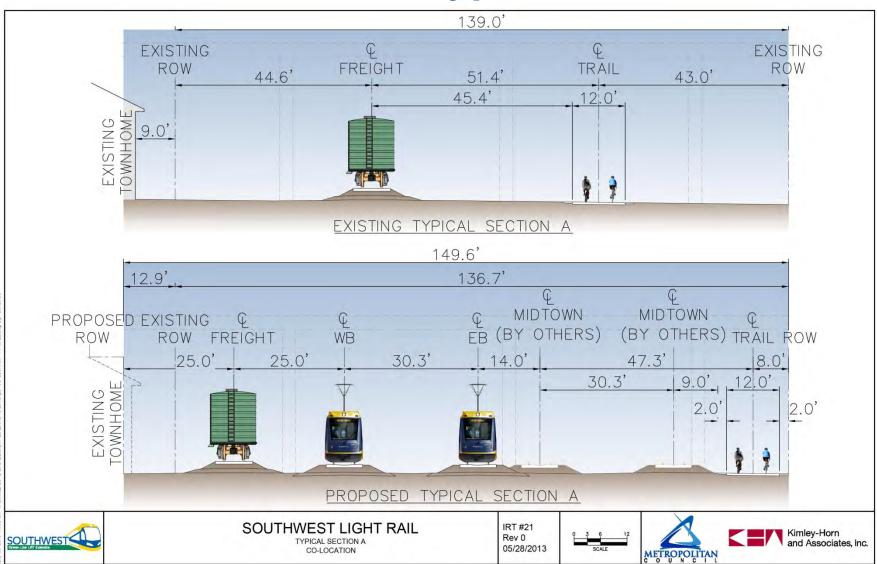


#### All Modes At-Grade – 94 ft Typical Sections



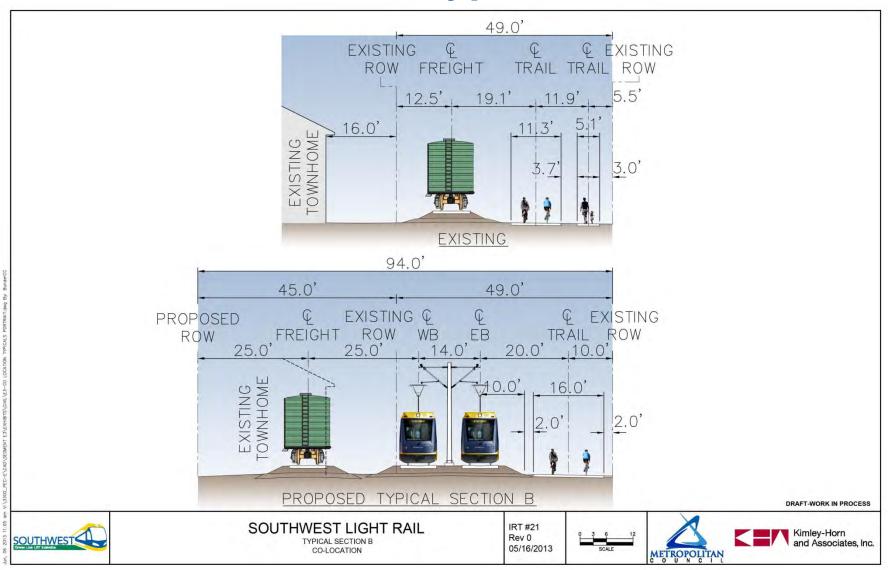


#### **All Modes At-Grade - Typical Section A-A'**



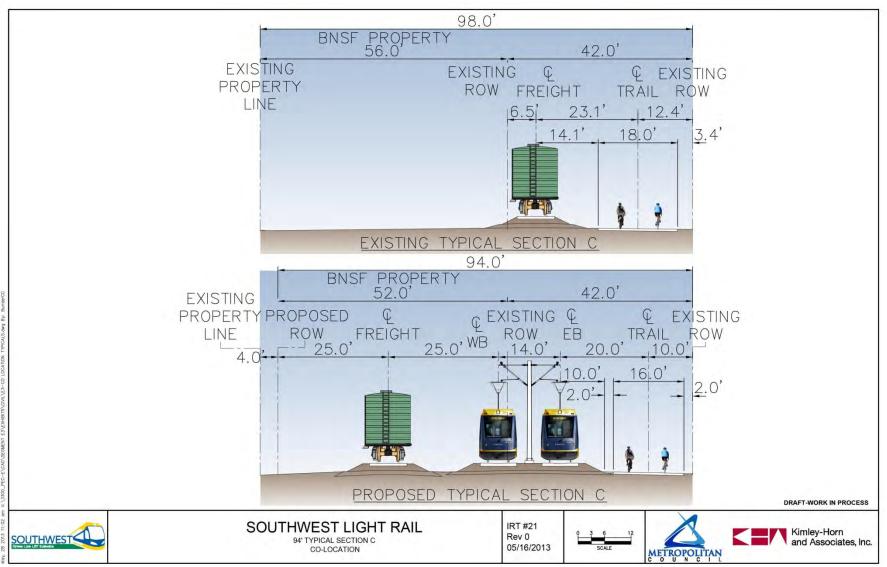


#### All Modes At-Grade - Typical Section B-B'



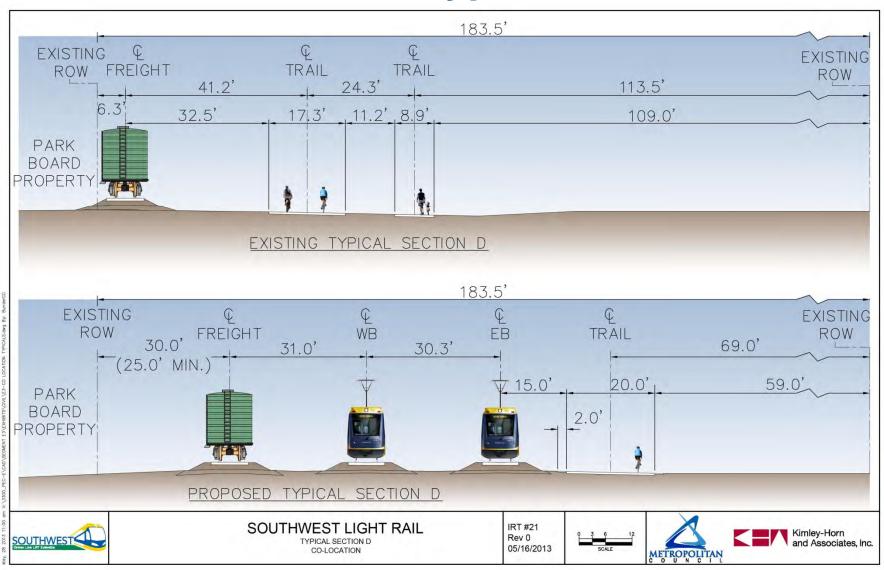


### All Modes At-Grade - Typical Section C-C'





#### **All Modes At-Grade - Typical Section D-D'**

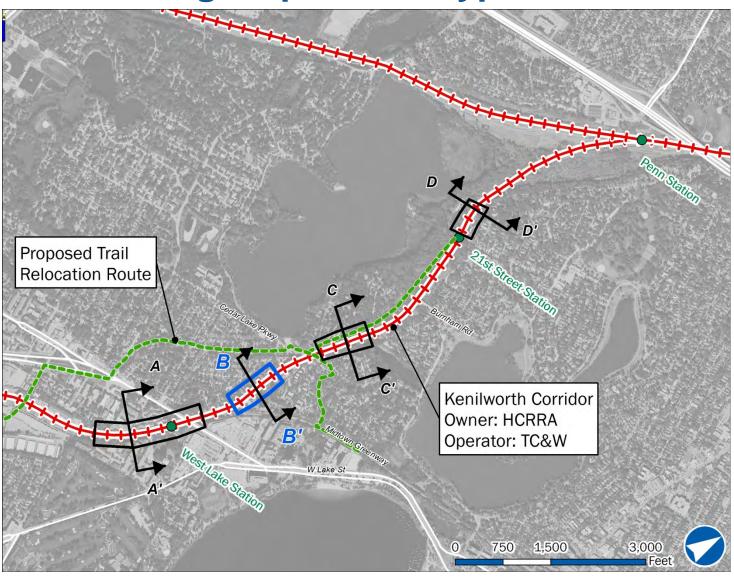




- Freight Rail Co-location Design Options
  - All modes at-grade
  - Trail relocated Midtown Greenway to Cedar Lake Pkwy.
  - Trail elevated West Lake Station to North side of Burnham Bridge
  - LRT elevated Lake Street Bridge to North side of Burnham Bridge
  - LRT in tunnel
    - Shallow tunnel: Lake Street Bridge to North of Cedar Lake Pkwy.
    - Deep twin bored tunnels: West of West Lake Station to South of 21<sup>st</sup> Street Station

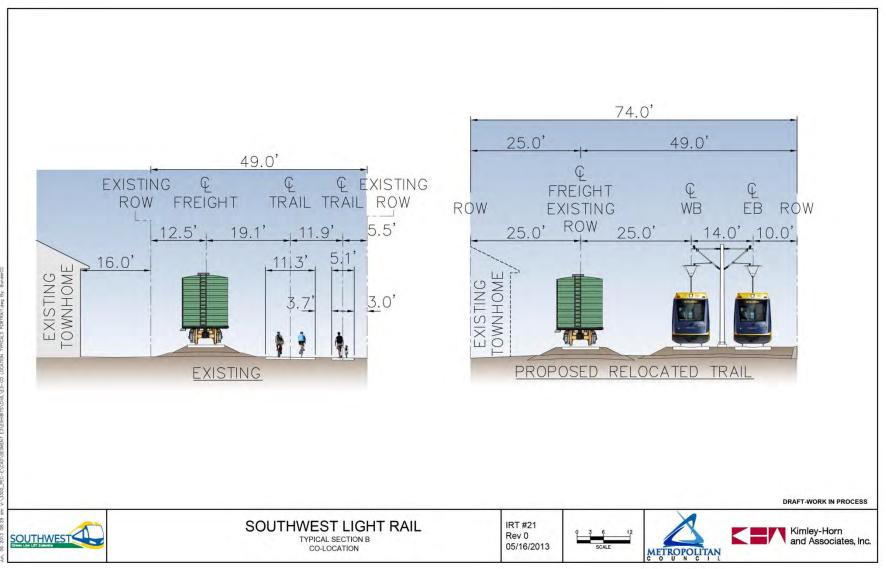


#### **Additional Design Options – Typical Section B-B'**



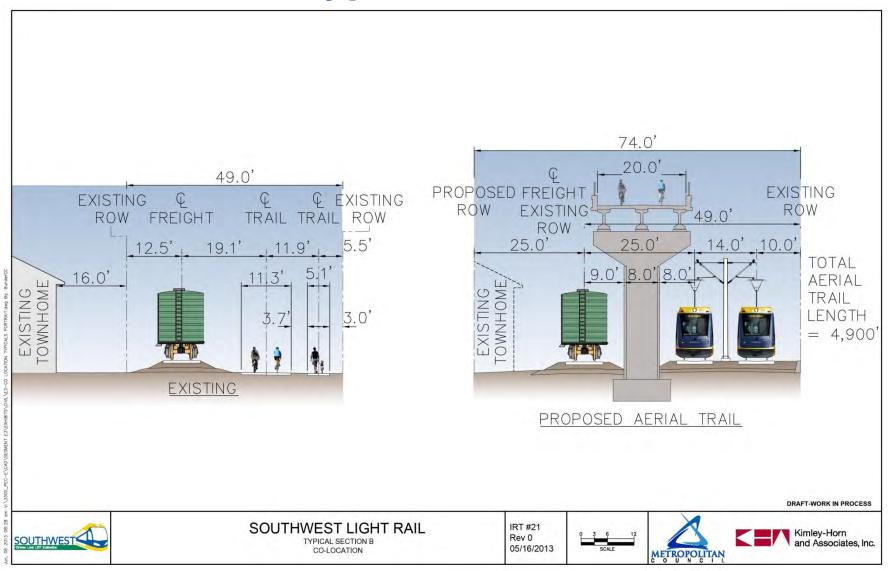


### **Trail Relocated - Typical Section B-B'**



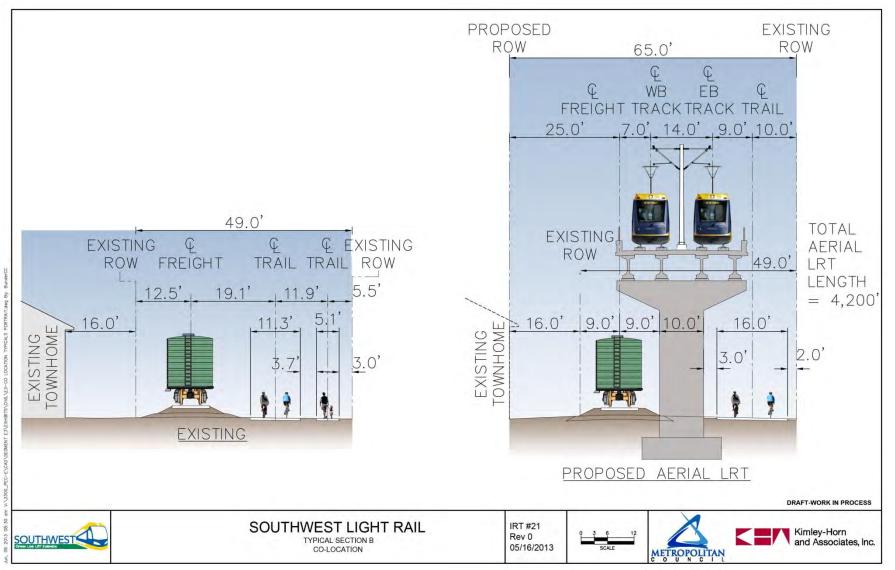


### **Trail Elevated - Typical Section B-B'**



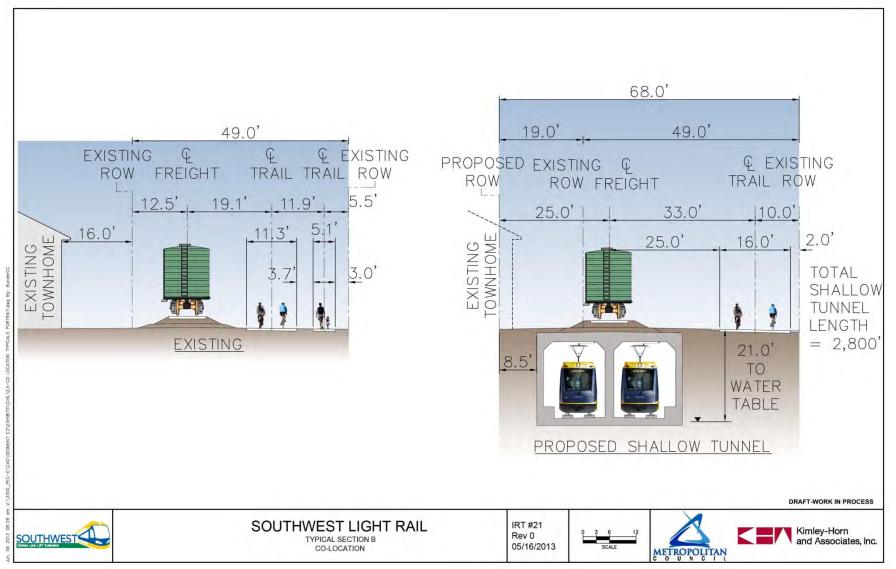


### **LRT Elevated - Typical Section B-B'**



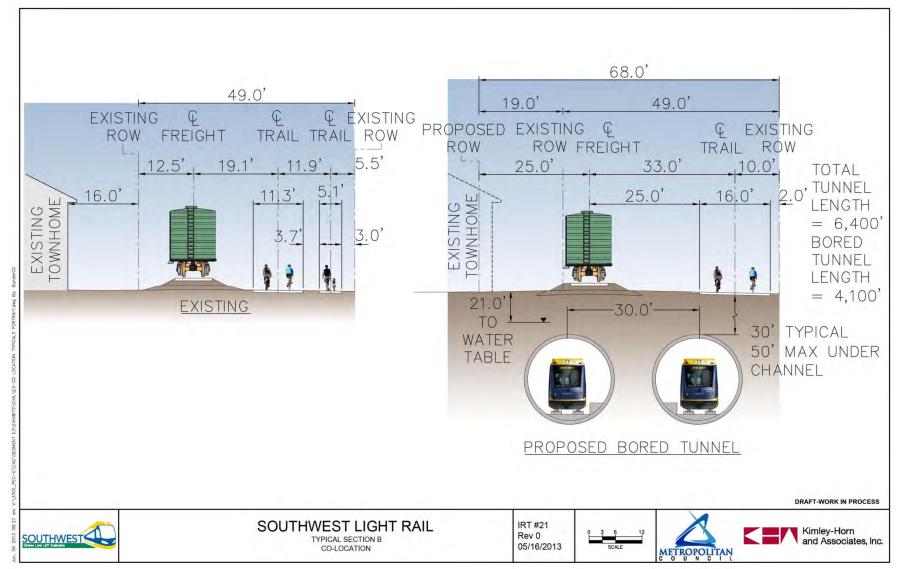


### LRT in Shallow Tunnel - Typical Section B-B'

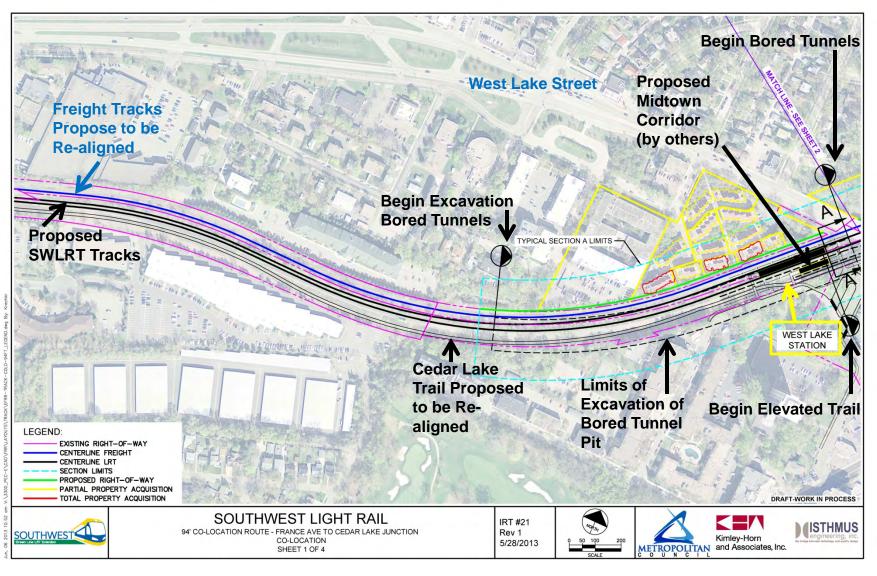




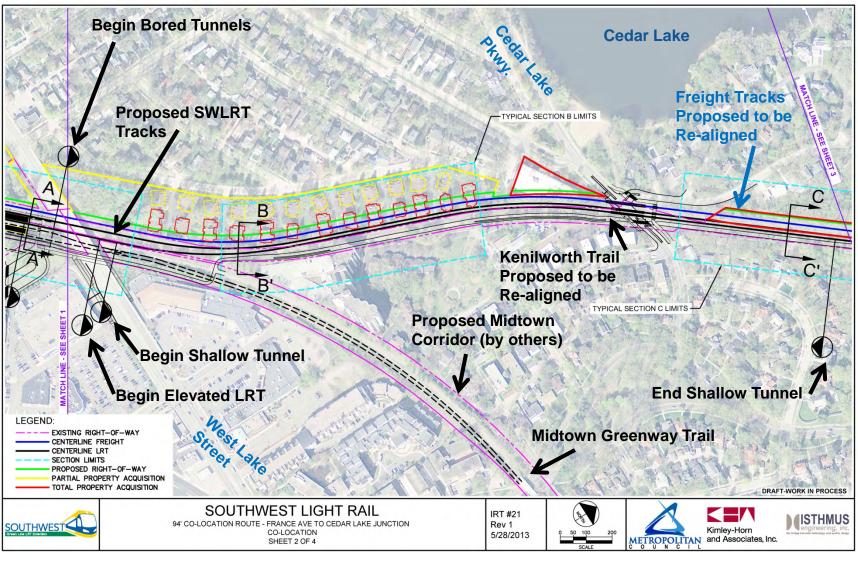
# LRT in Deep Twin Tunnels-Typical Section B-B'



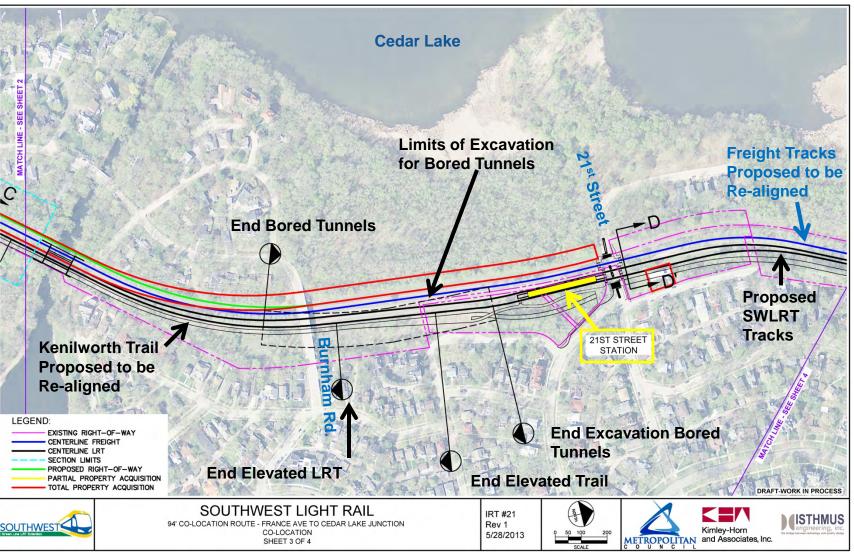




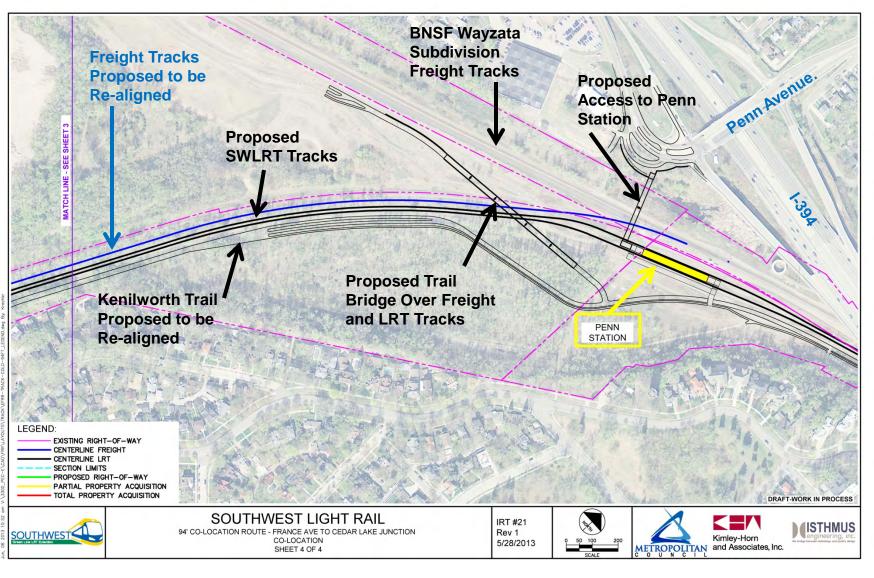










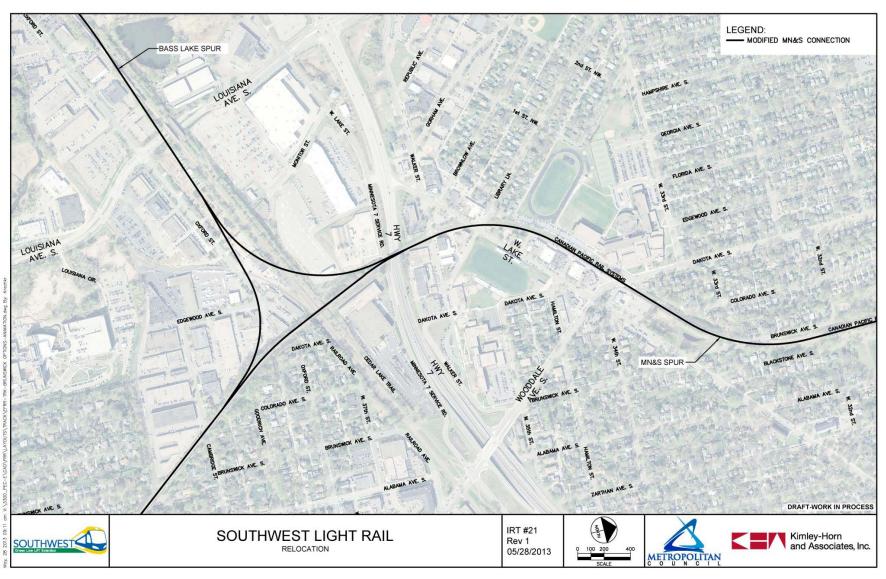




- Freight Rail Relocation Design Options
  - Modified MN&S connection
  - Brunswick West
  - Brunswick Central

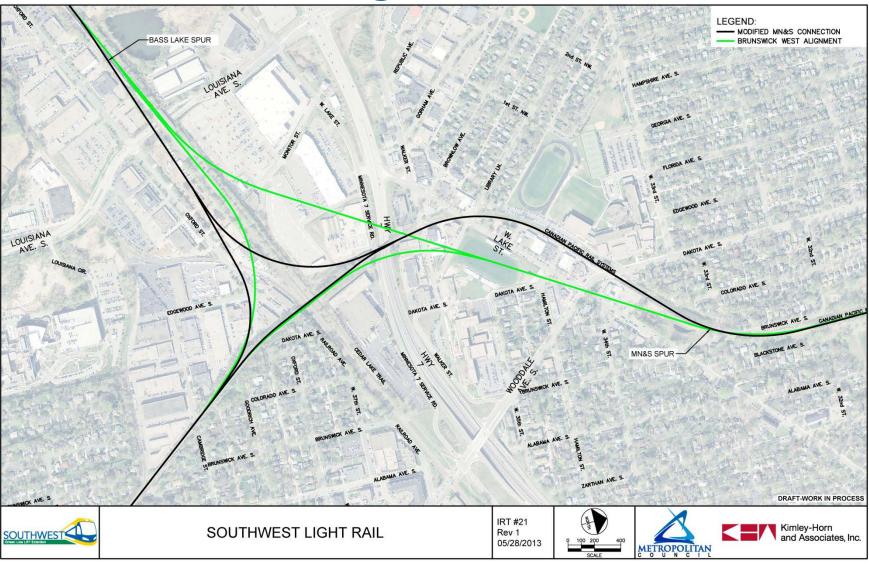


#### **Modified MN&S Connection**



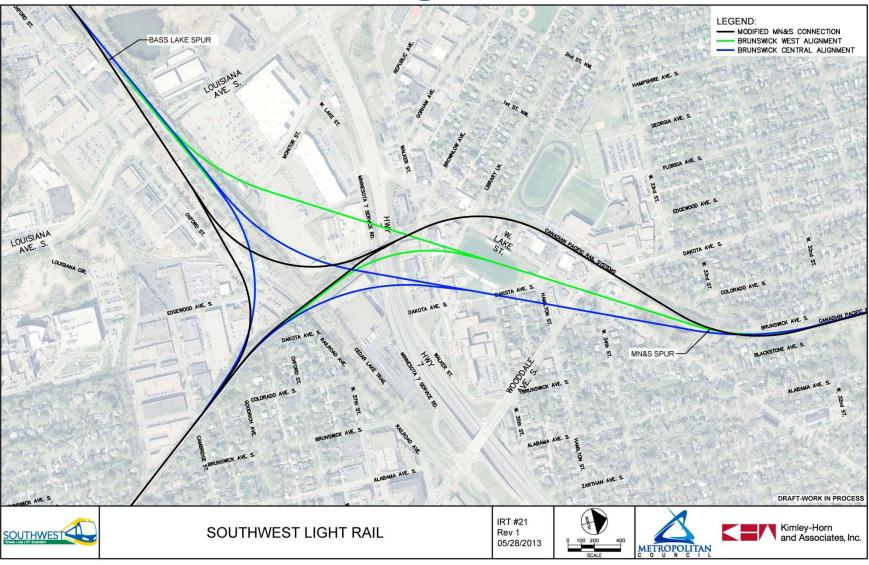


#### **Brunswick West Alignment**



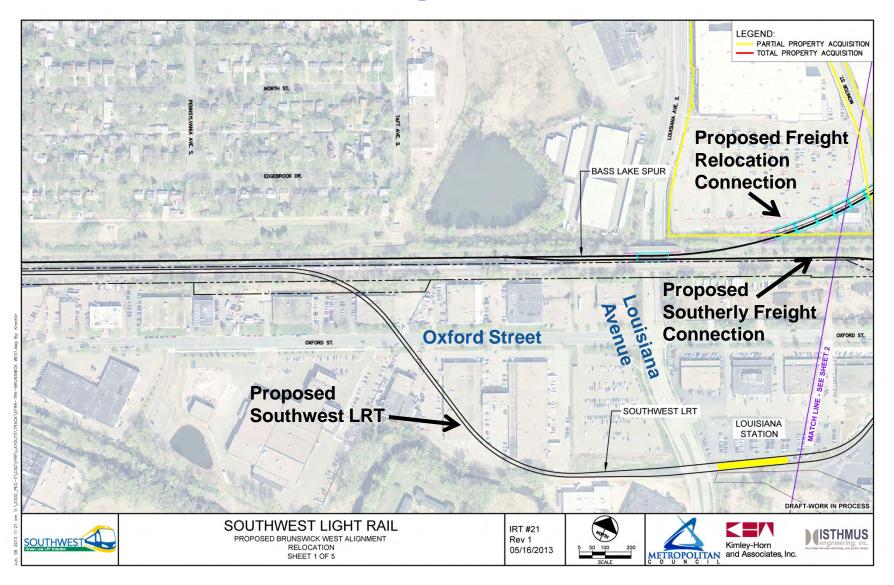


#### **Brunswick Central Alignment**



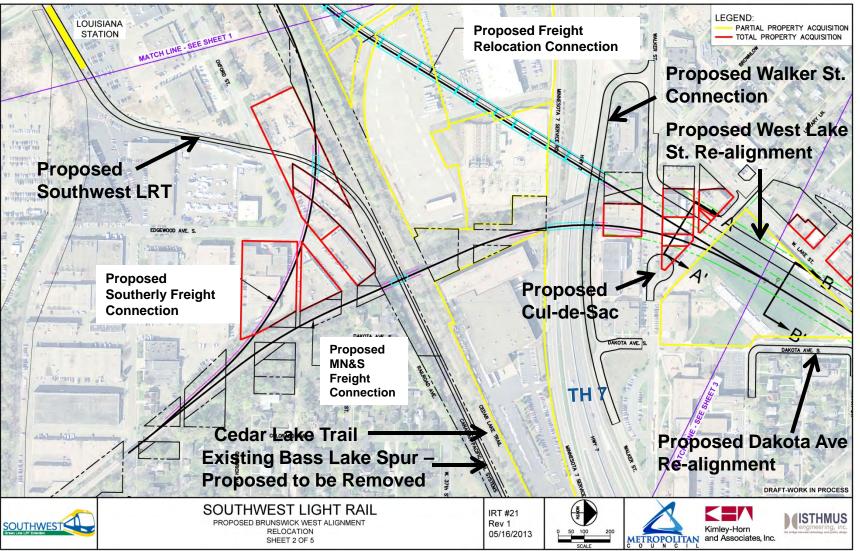


### **Brunswick West Alignment**



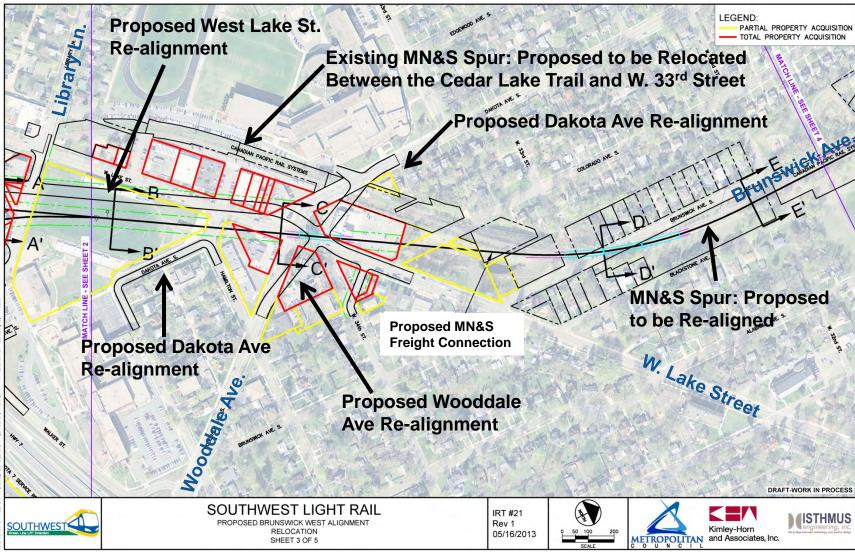


### **Brunswick West Alignment**



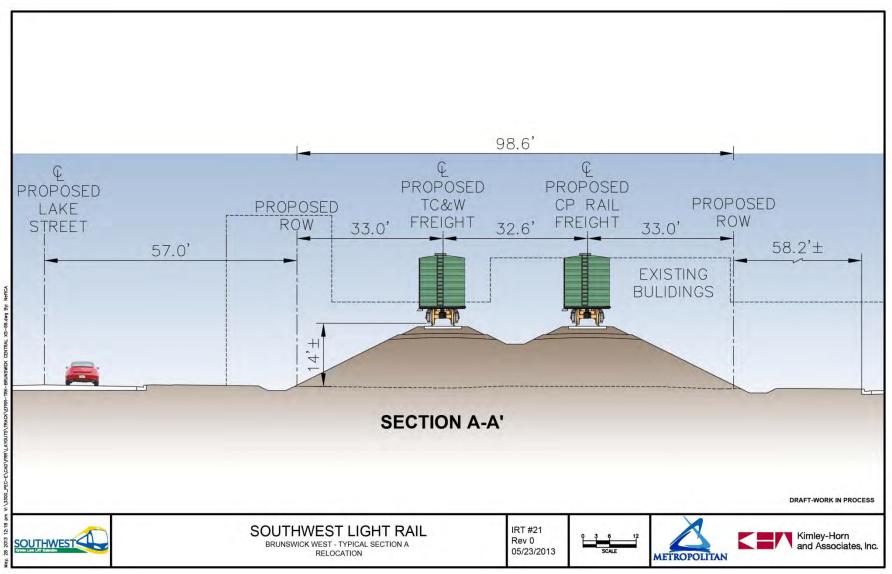


### **Brunswick West Alignment**



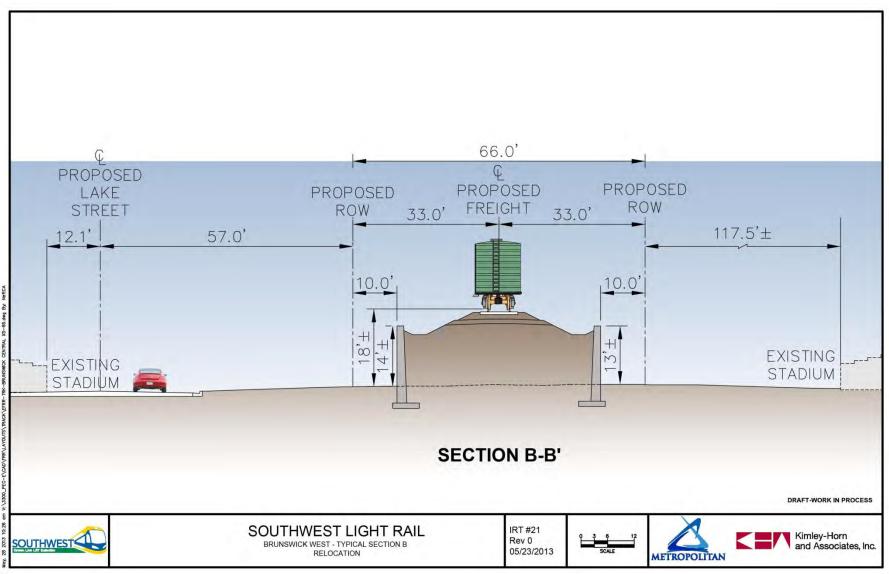


#### **Brunswick West Alignment – Typical Section A-A'**



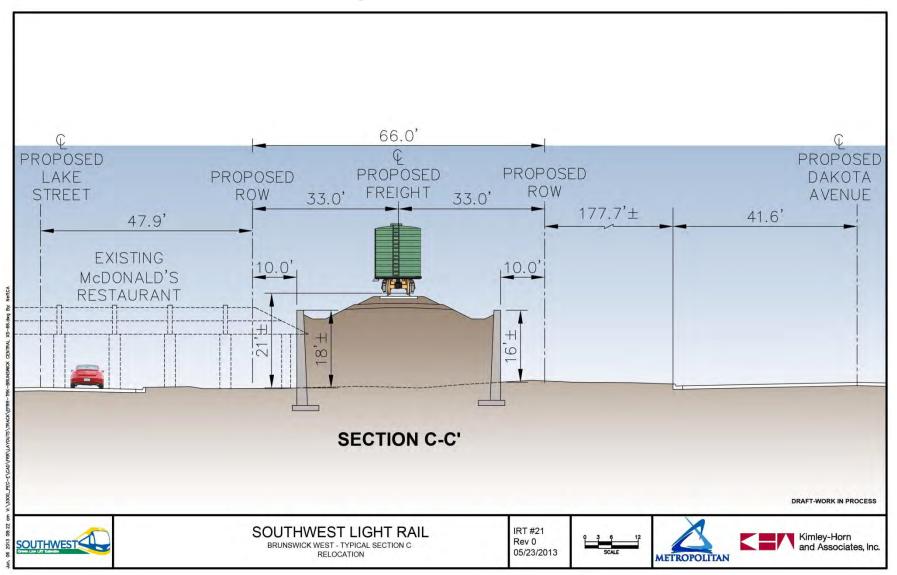


#### **Brunswick West Alignment – Typical Section B-B'**



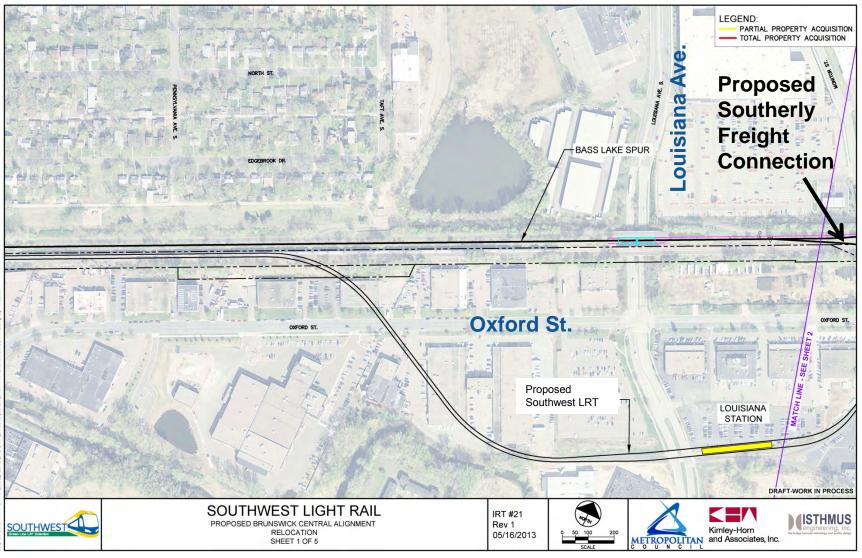


#### **Brunswick West Alignment – Typical Section C-C'**



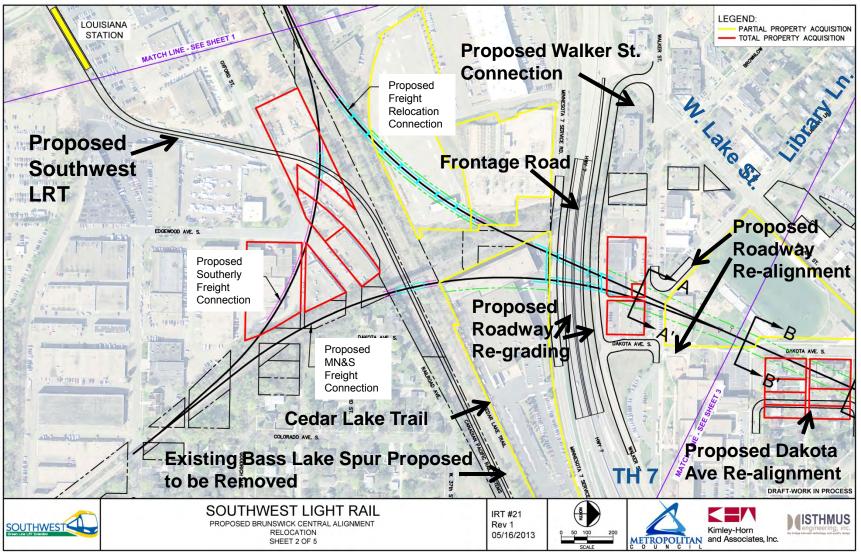


### **Brunswick Central Alignment**



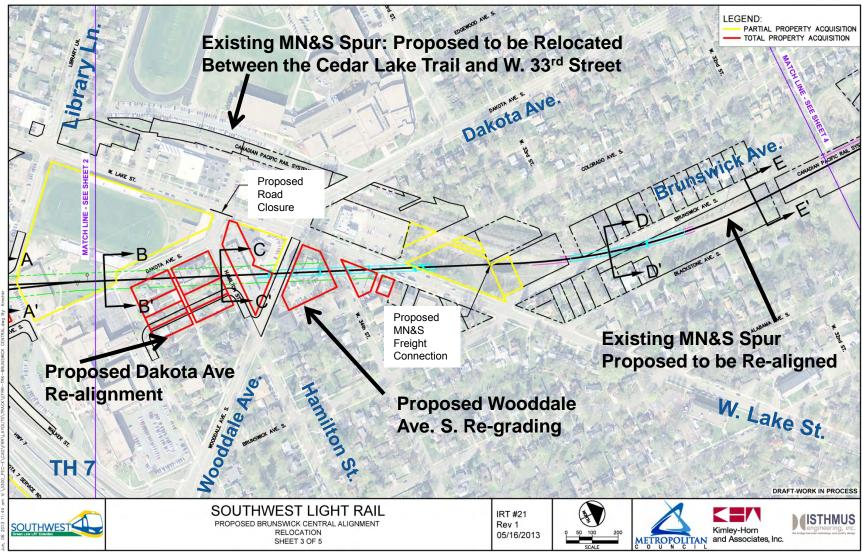


### **Brunswick Central Alignment**



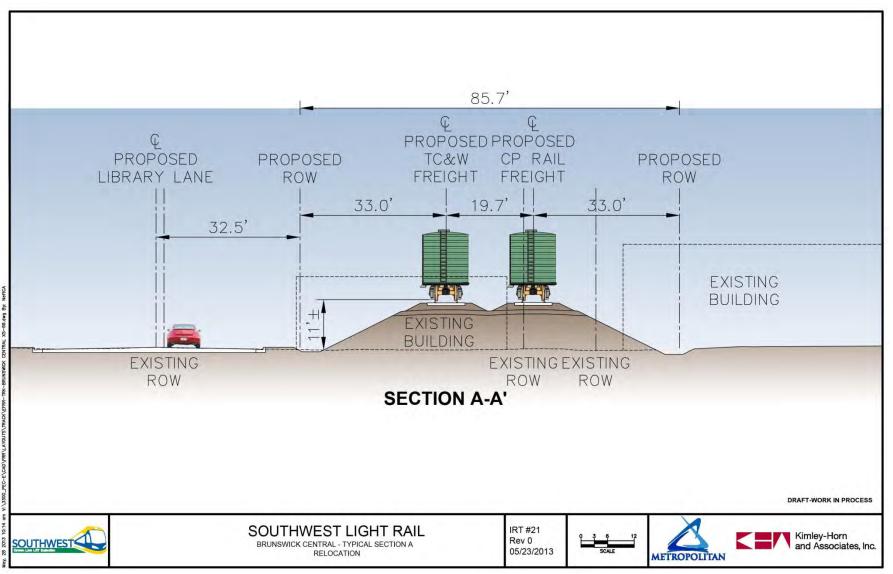


### **Brunswick Central Alignment**



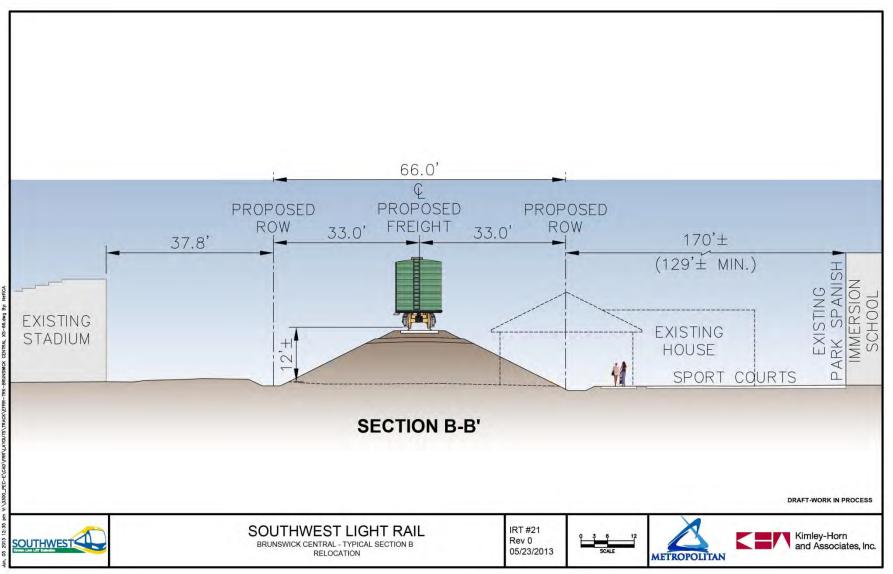


#### **Brunswick Central Alignment – Typical Section A-A'**



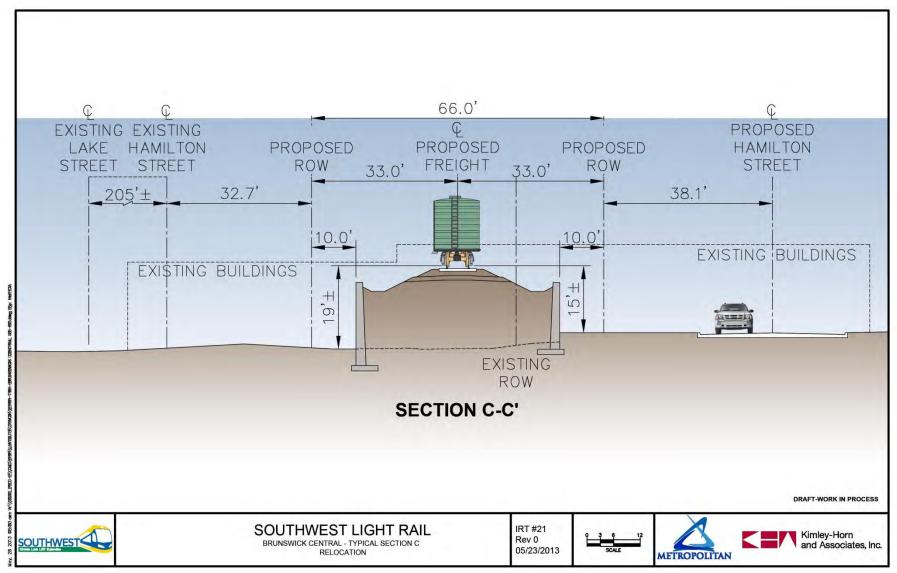


### **Brunswick Central Alignment – Typical Section B-B'**



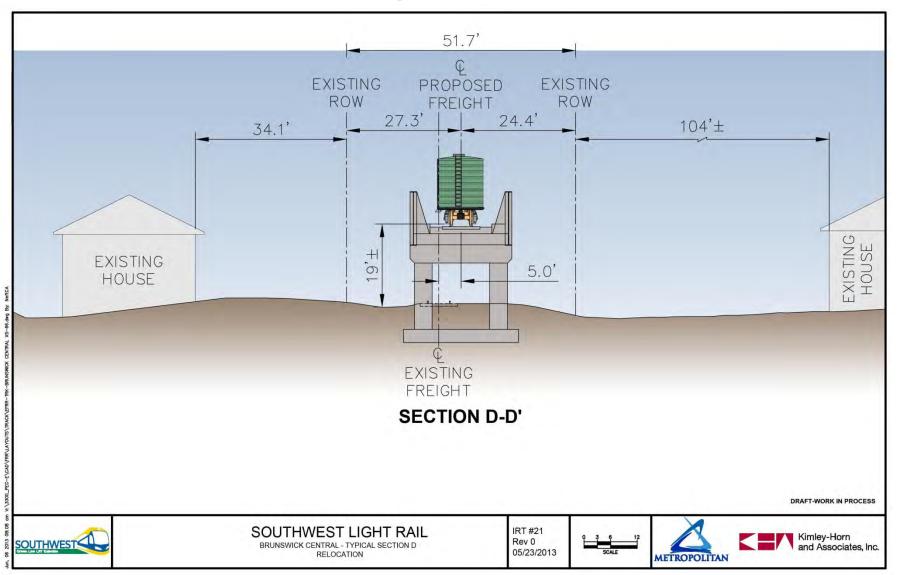


### **Brunswick Central Alignment – Typical Section C-C'**





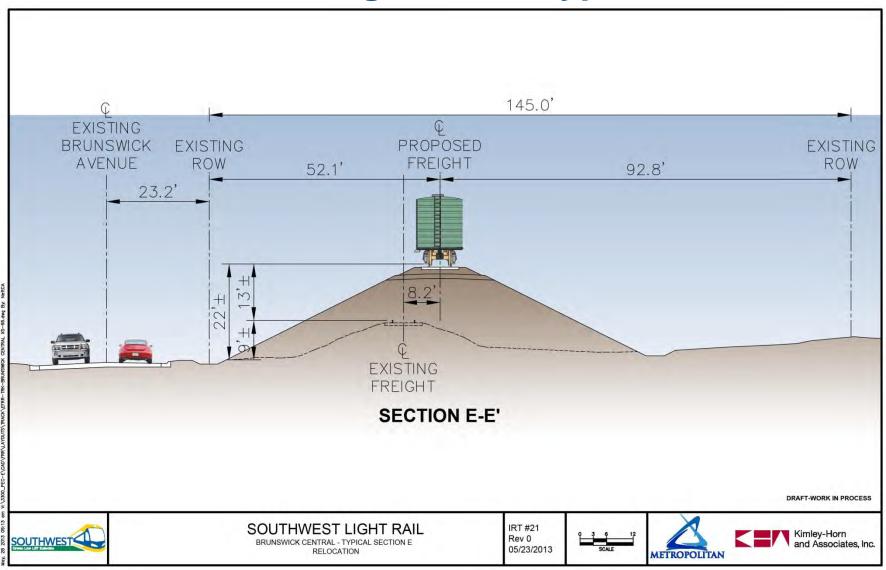
#### **Brunswick Central Alignment – Typical Section D-D'**



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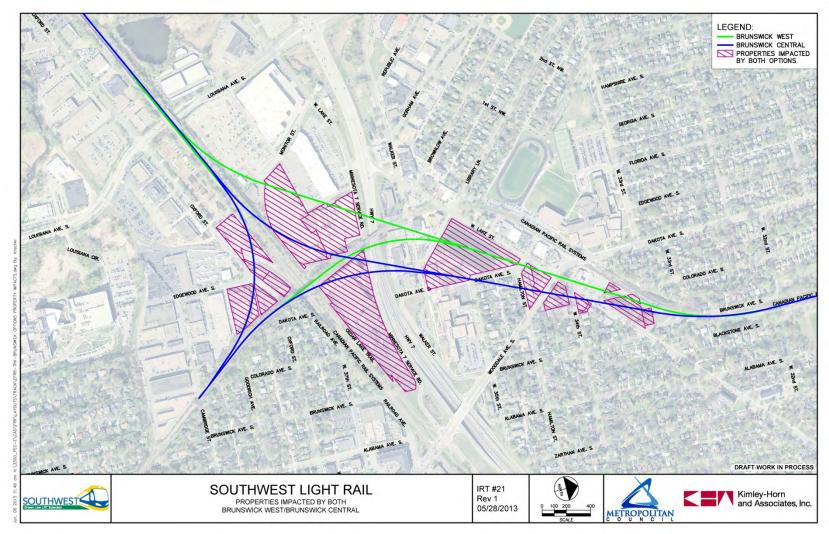


### **Brunswick Central Alignment – Typical Section E-E'**



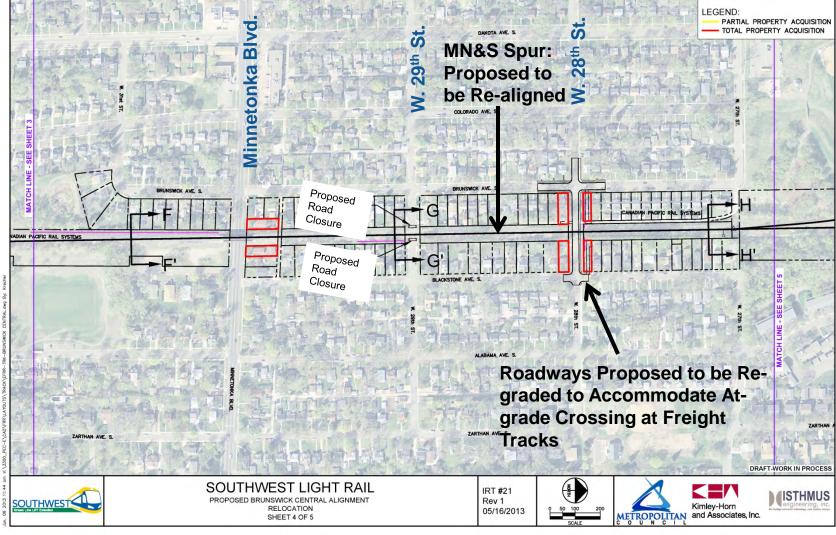


### Brunswick West/Central Alignments: Property Impacts Common to Both Options



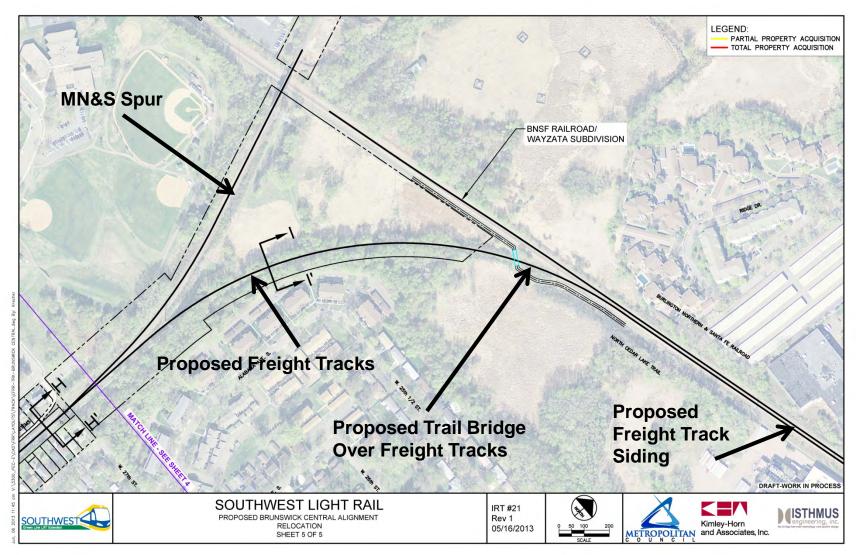


### Brunswick Alignment: Segment Common to Both West and Central Options



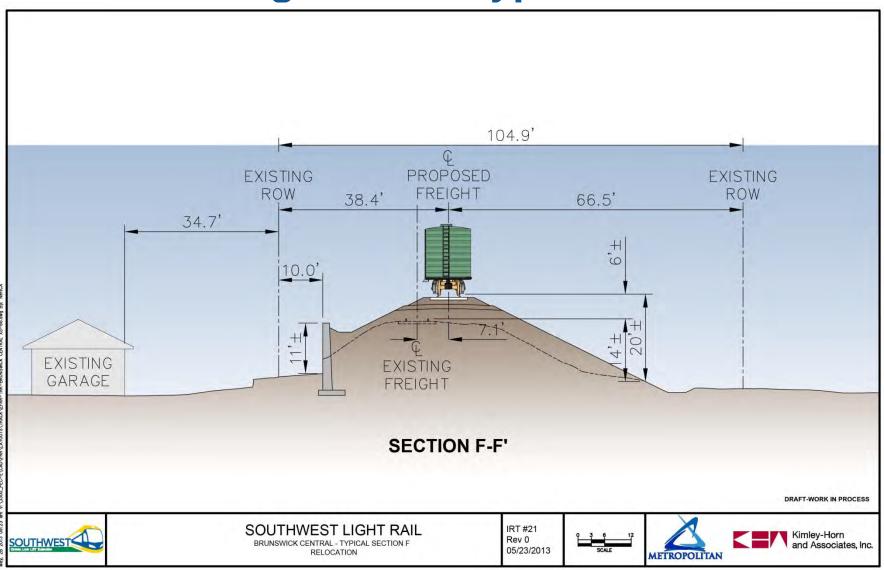


#### Brunswick Alignment Segment Common to Both West and Central Options



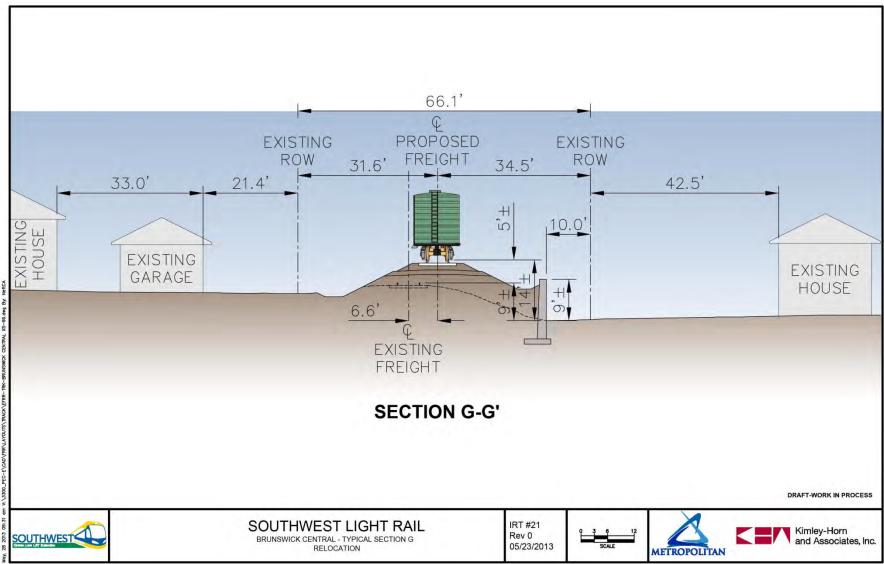


### **Brunswick Alignment – Typical Section F-F'**



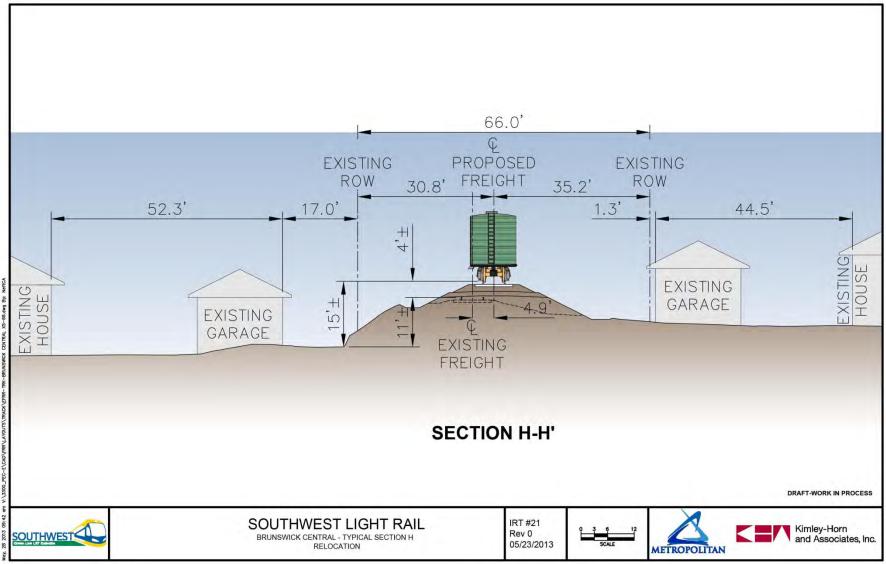


### **Brunswick Alignment – Typical Section G-G'**



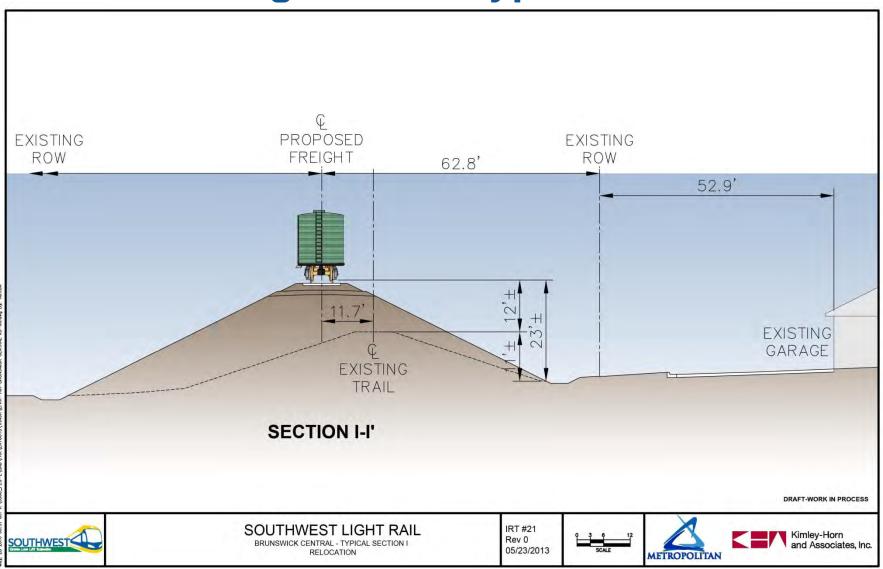


### **Brunswick Alianment – Typical Section H-H'**





### **Brunswick Alignment – Typical Section I-I'**





### Freight Rail Technical Issue #21

- Presentations to Date: Review co-location and relocation designs / seek input
  - St. Louis Park School Board May 28
  - Minneapolis Transportation & Public Works Committee June 4
  - Special Joint SWLRT Business/Community Advisory Committee – June 6



## Freight Rail Technical Issue #21

- Next Steps
  - SWLRT Corridor Management Committee June 12
  - Public Open Houses June 13
  - Develop cost estimates/Continue design refinement environmental evaluation – June/July
  - Present recommended design option
    - o Business Advisory Committee July 24
    - Community Advisory Committee July 25
    - SWLRT Corridor Management Committee August 7
    - Metropolitan Council August
  - Continue design refinement environmental evaluation



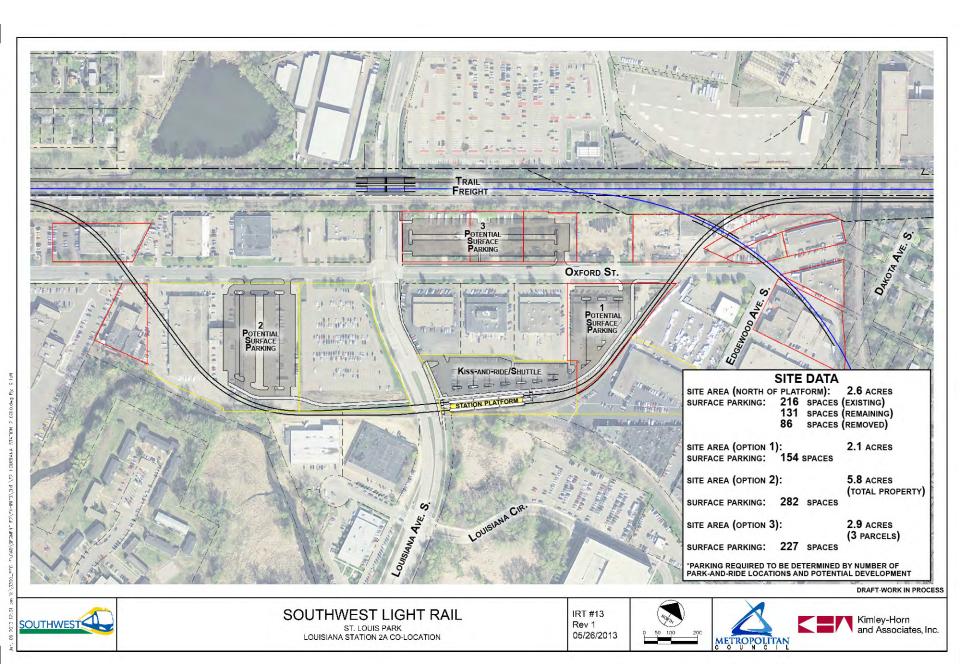


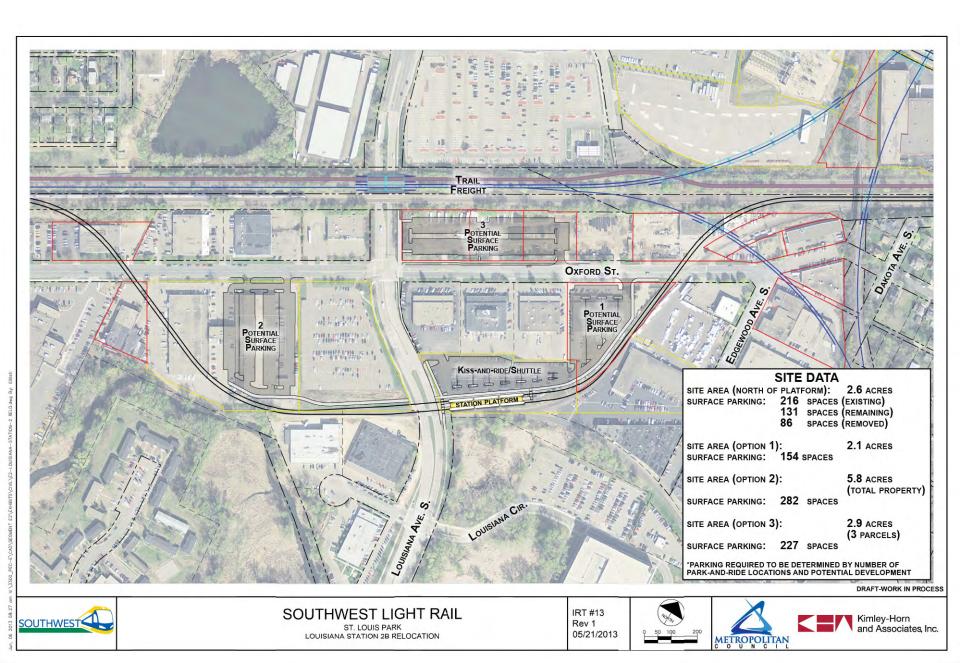
## SWLRT Stations: Louisiana, Beltline, West Lake, and 21<sup>st</sup> Street

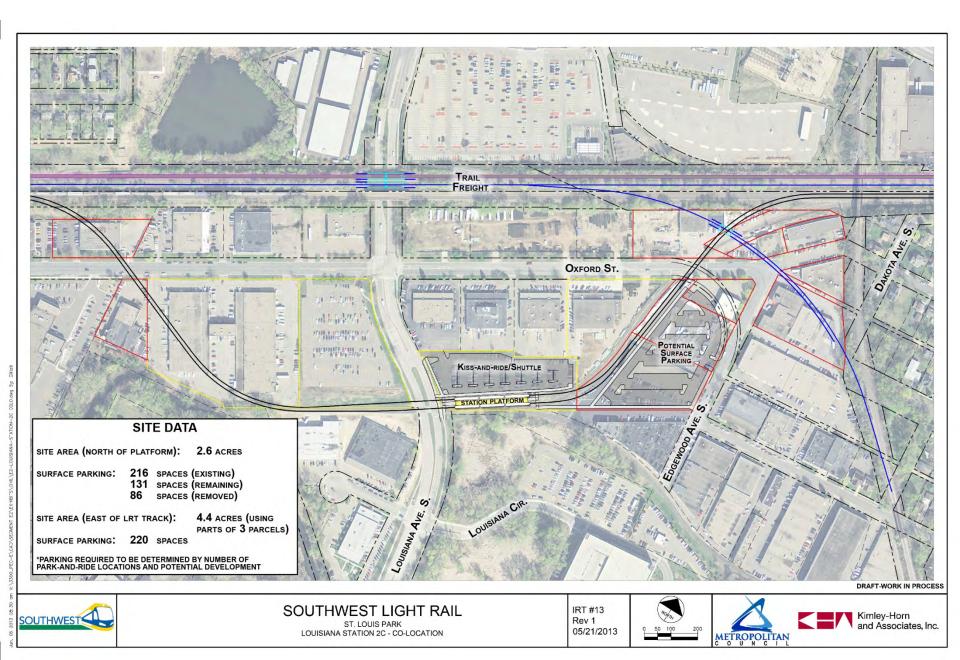
# TH 100 and Cedar Lake Parkway

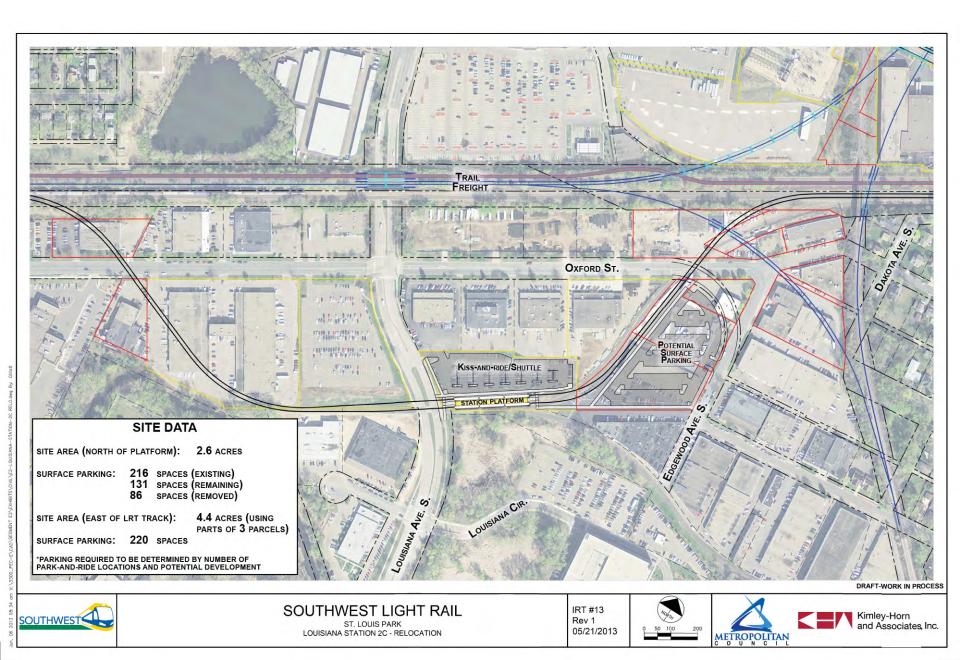


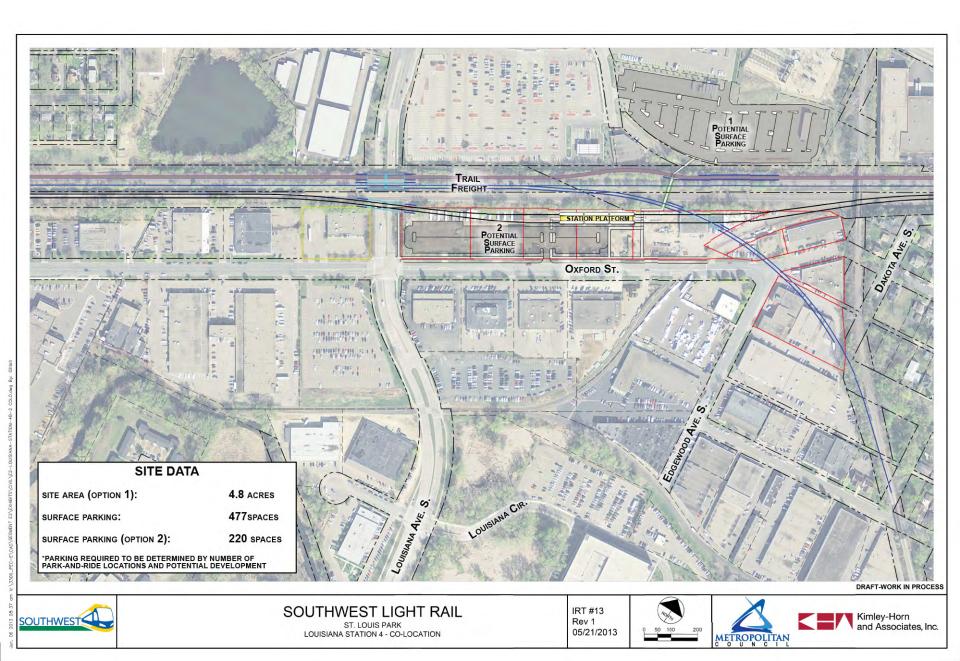
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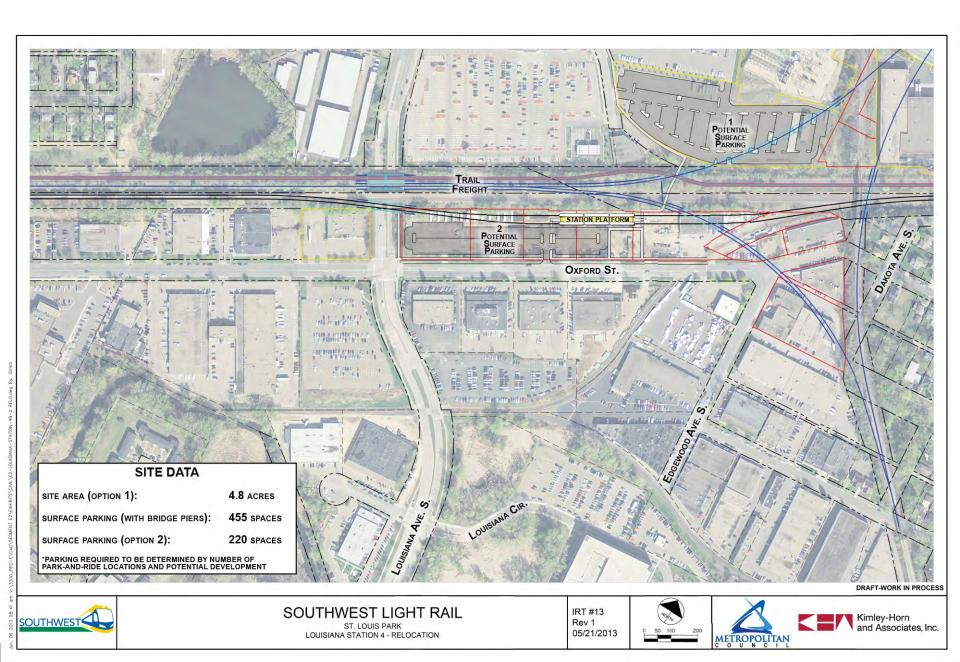


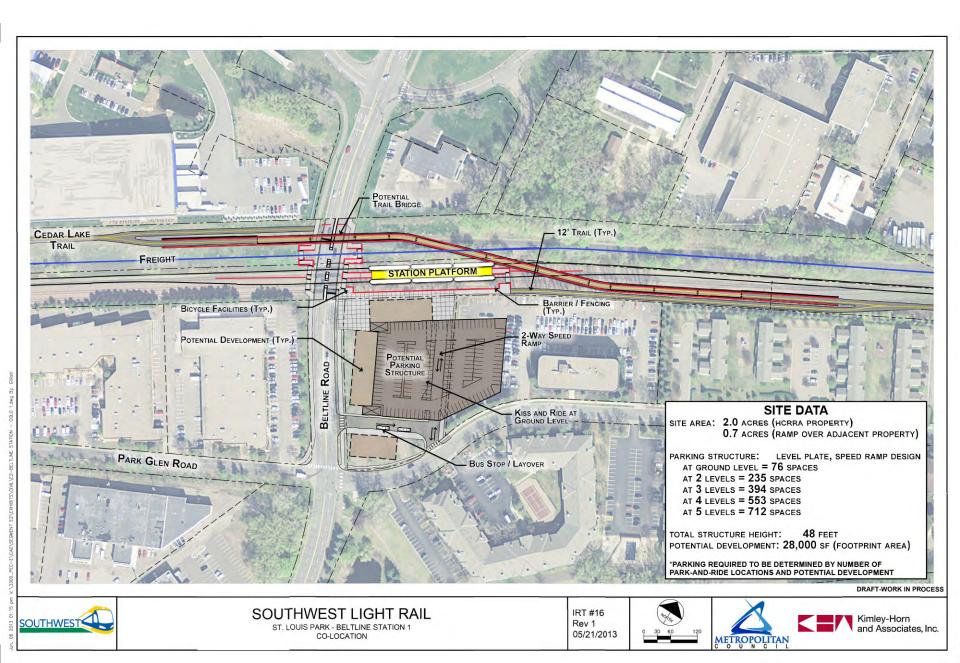


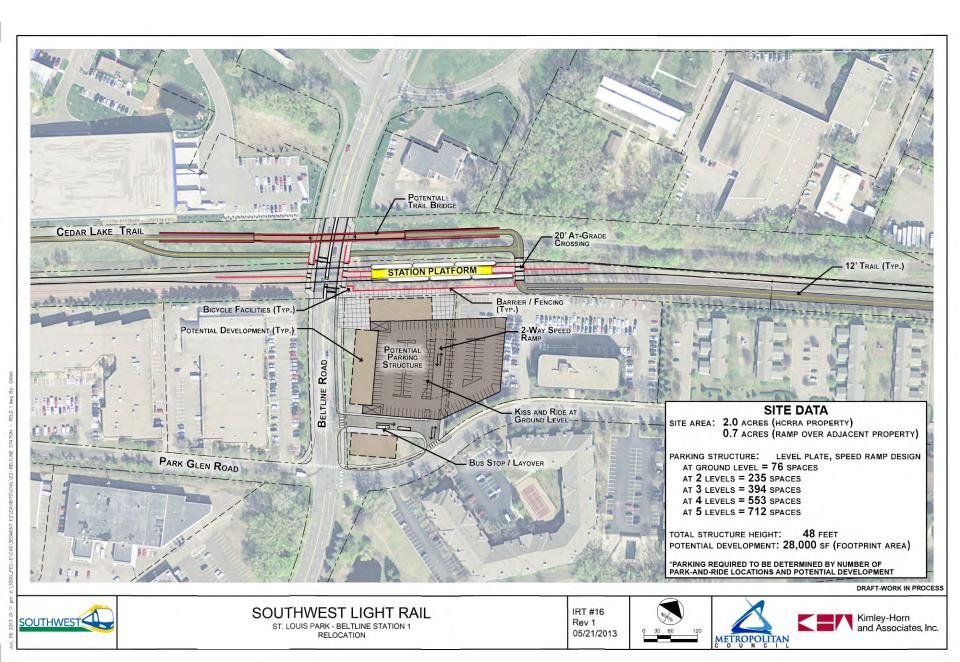


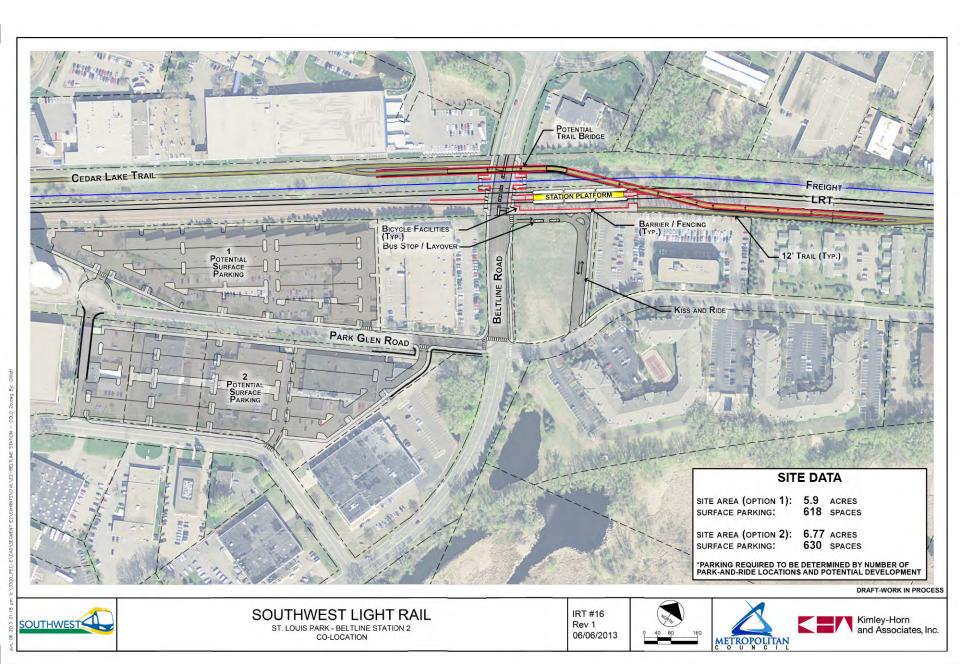


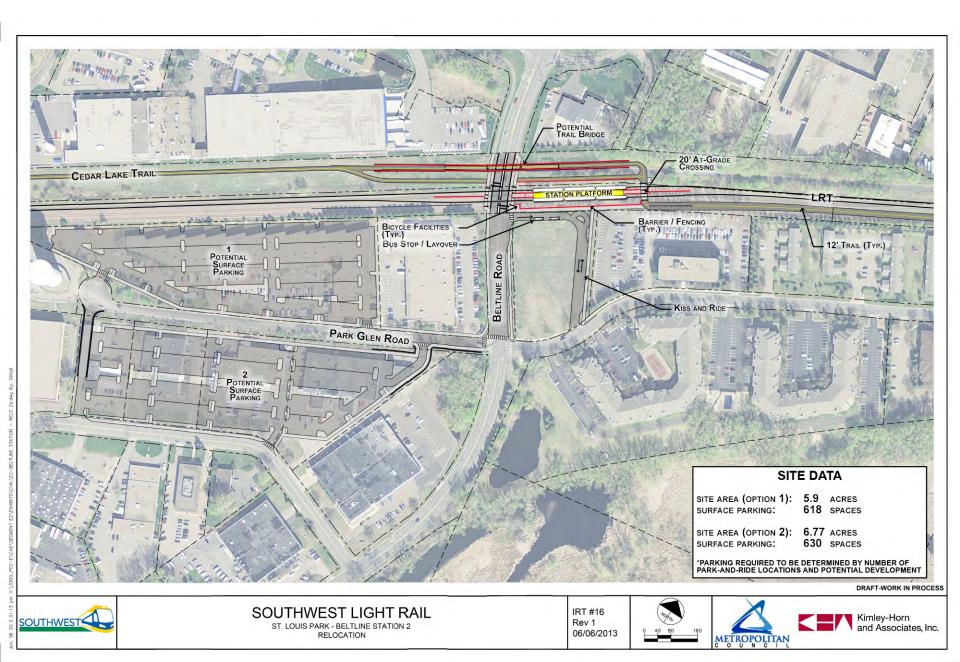


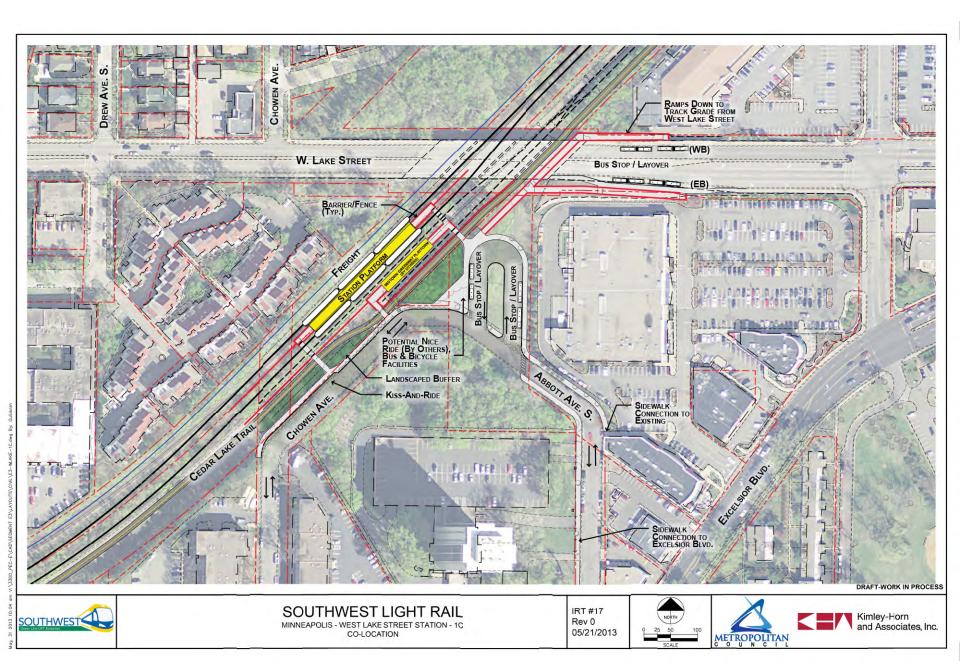


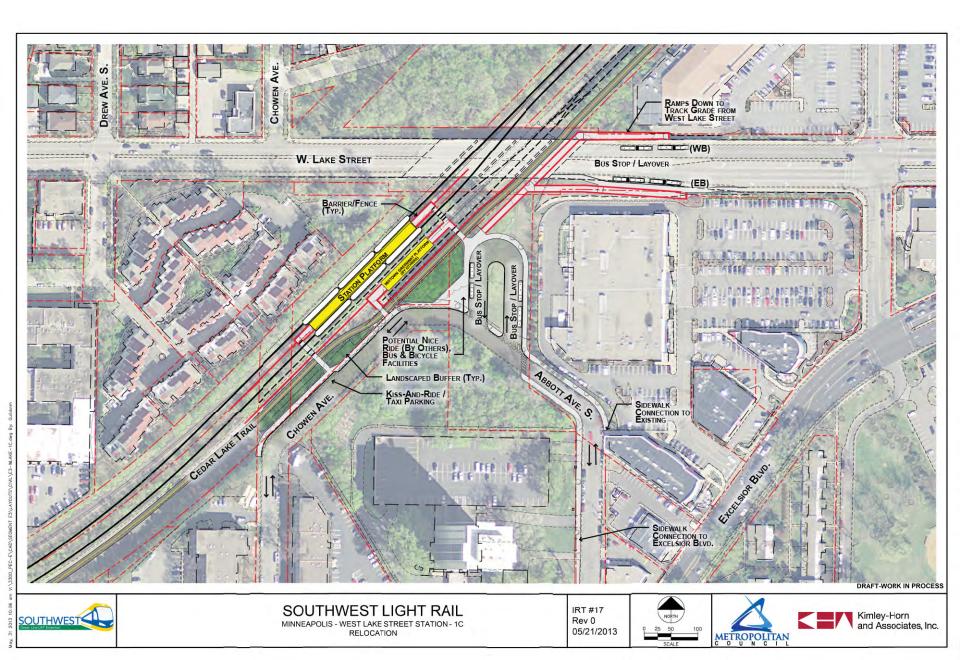


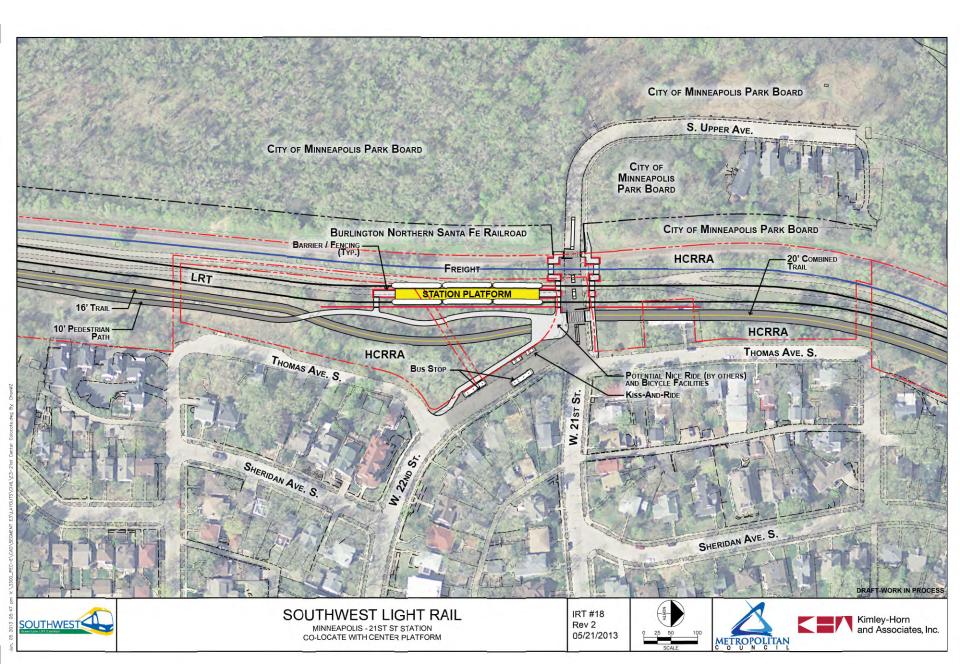


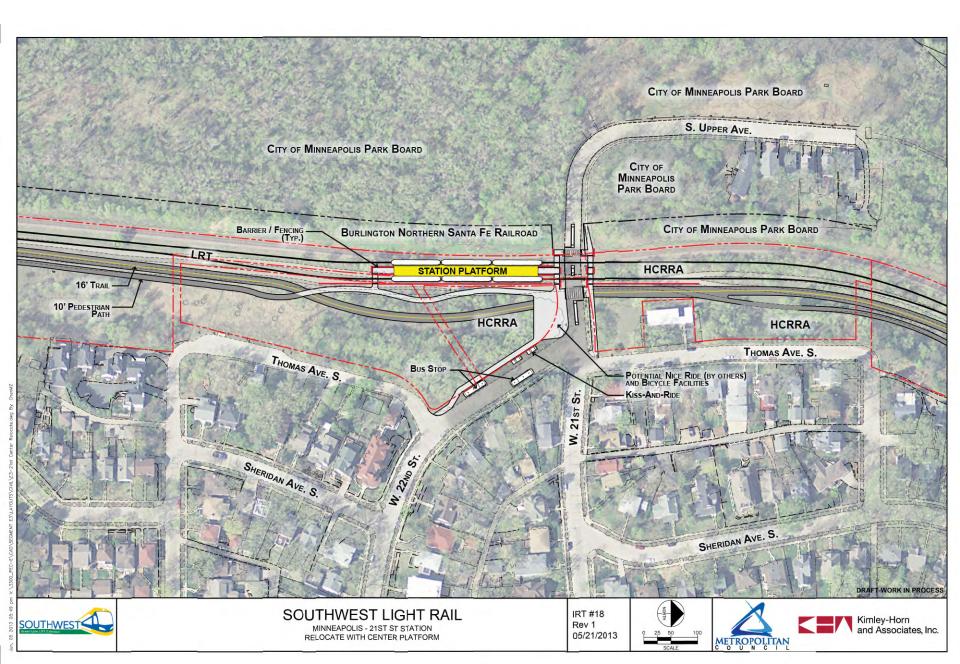


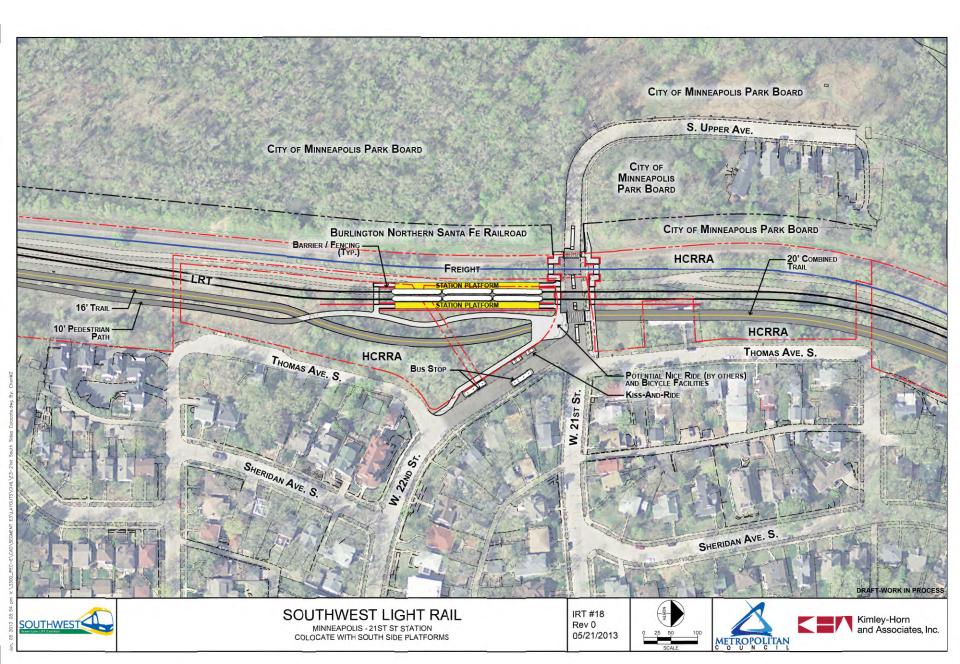


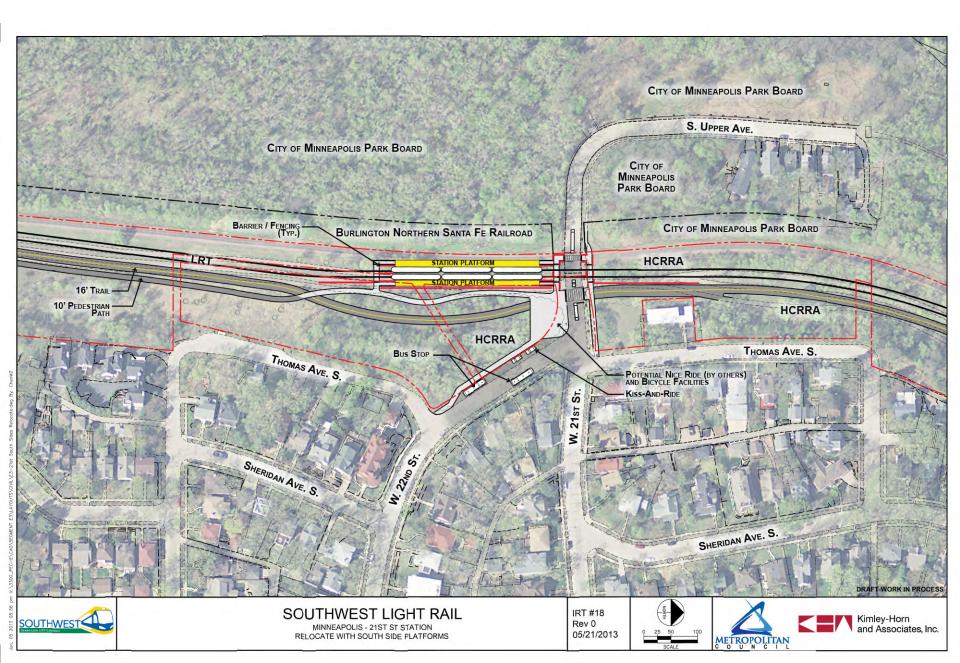


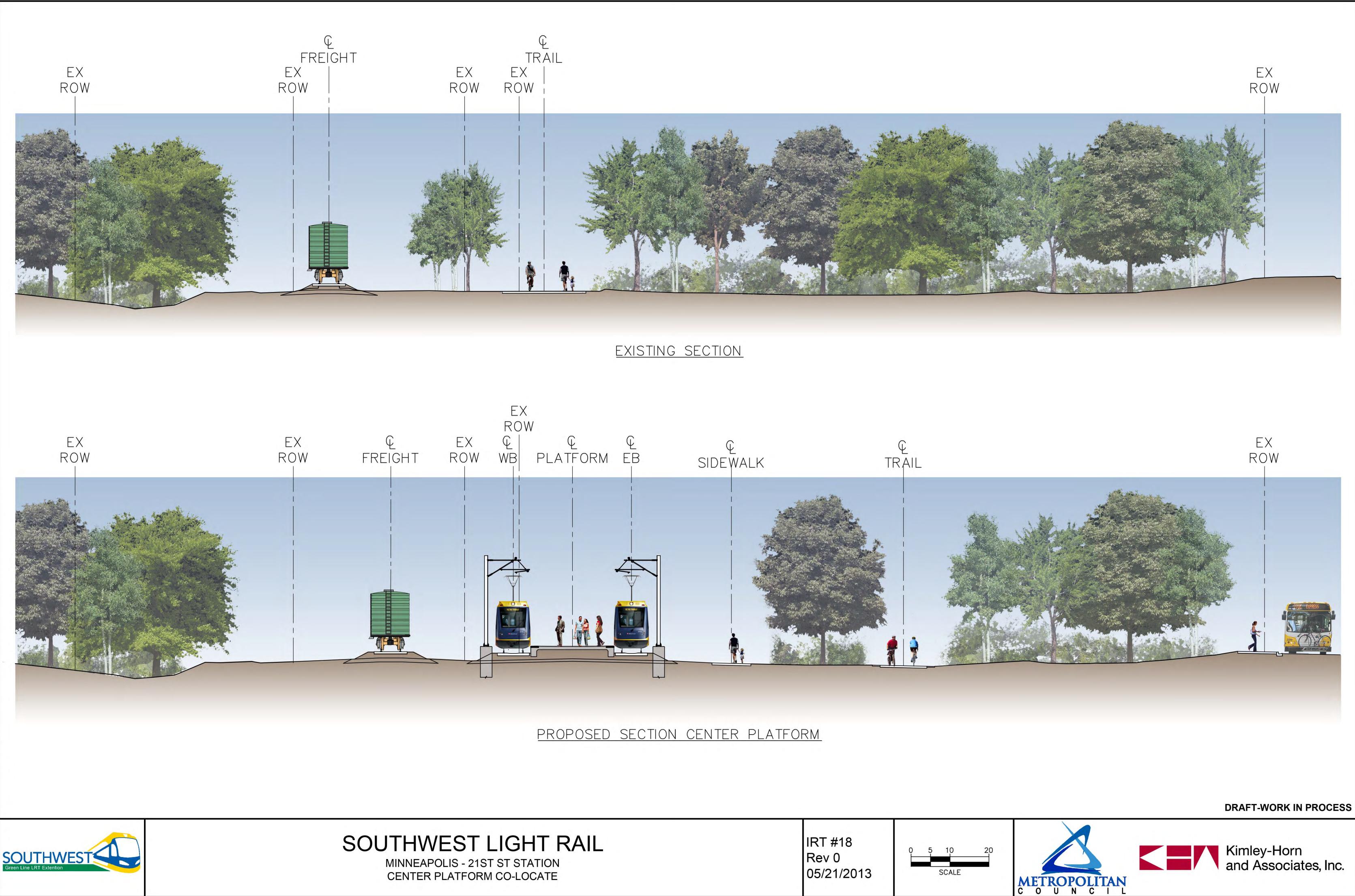






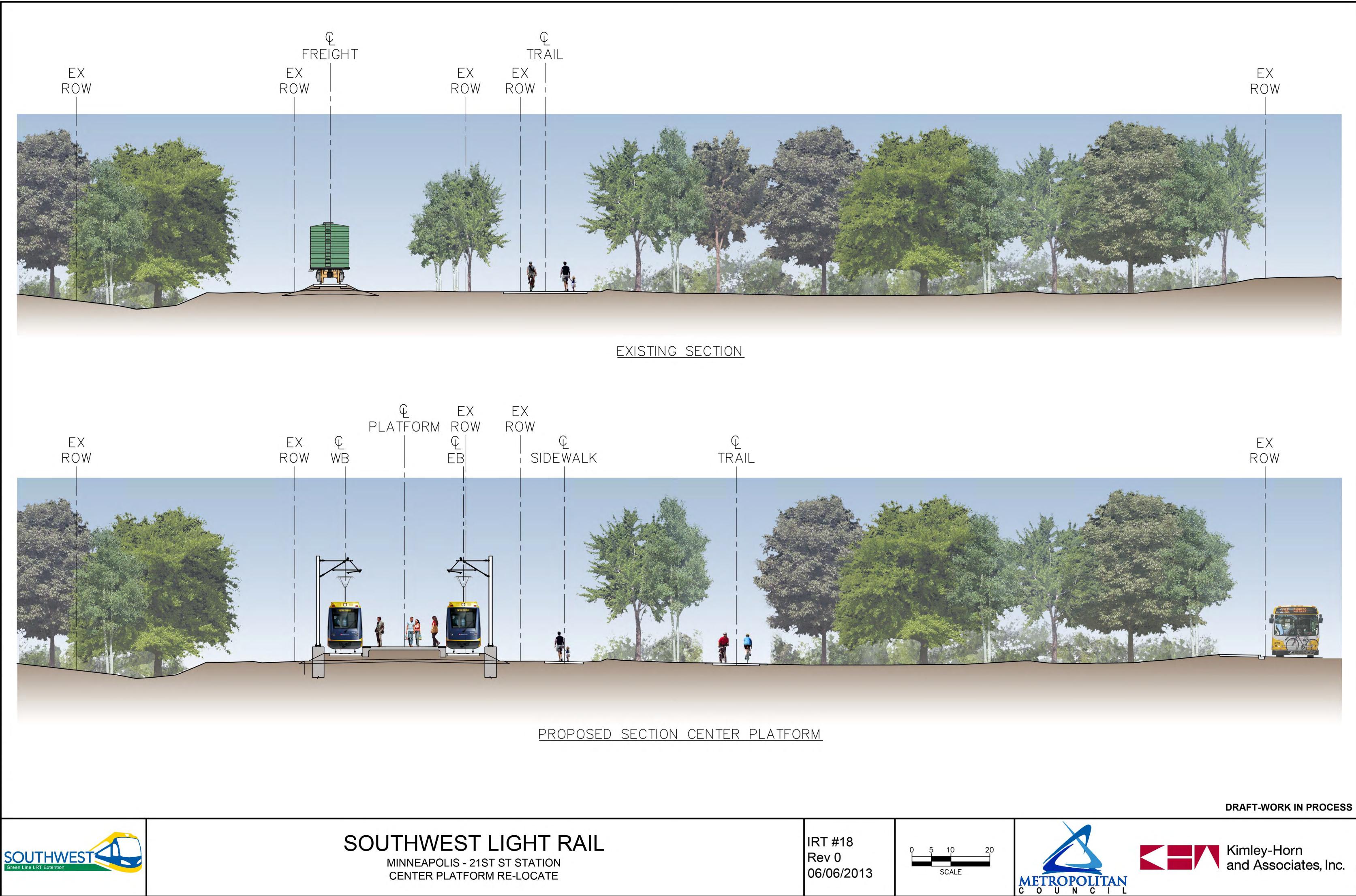






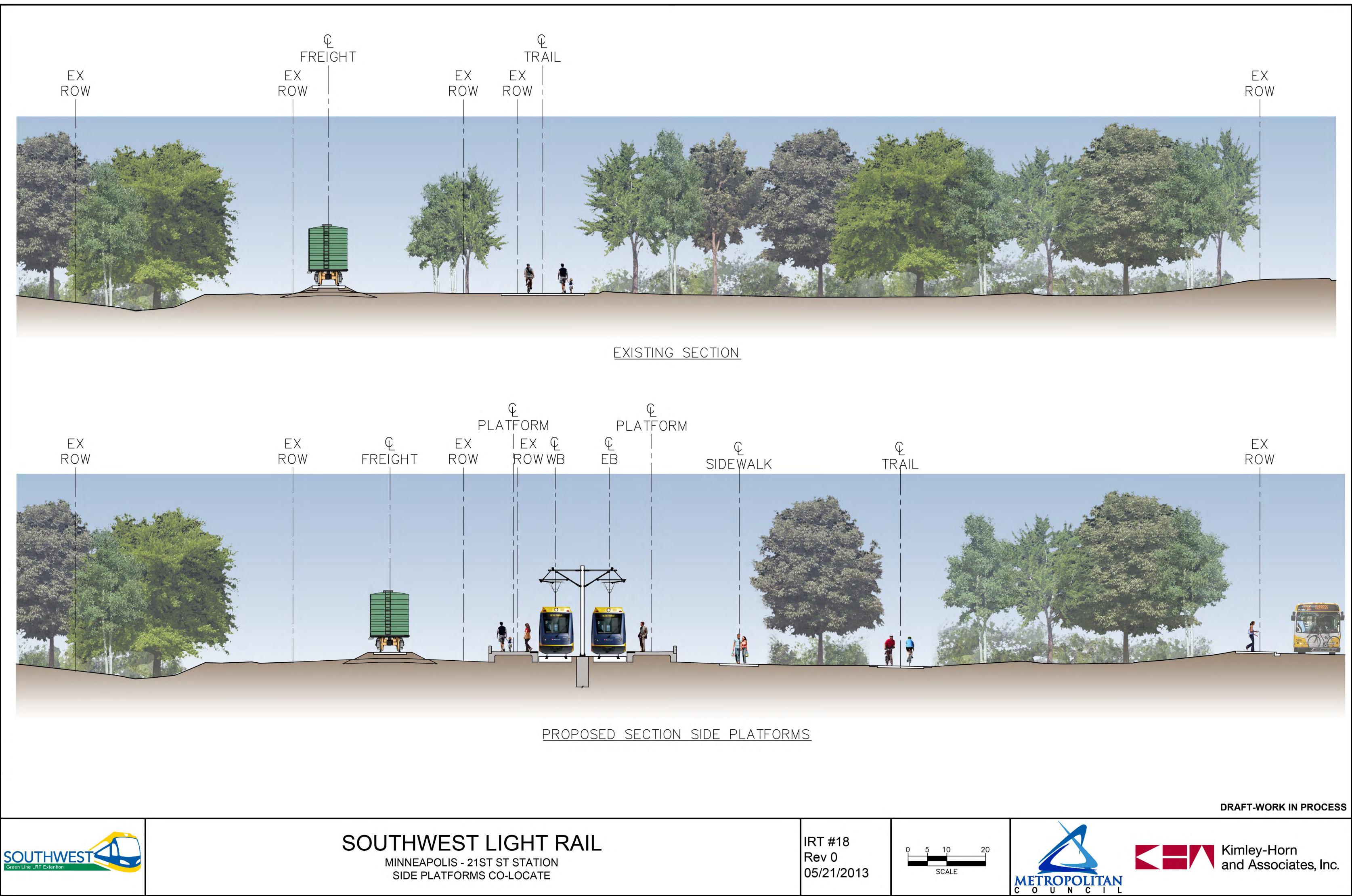
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ST LIGHT RAIL - 21ST ST STATION FORM CO-LOCATE	IRT #18 Rev 0 05/21/2013	0 5 10 SCA

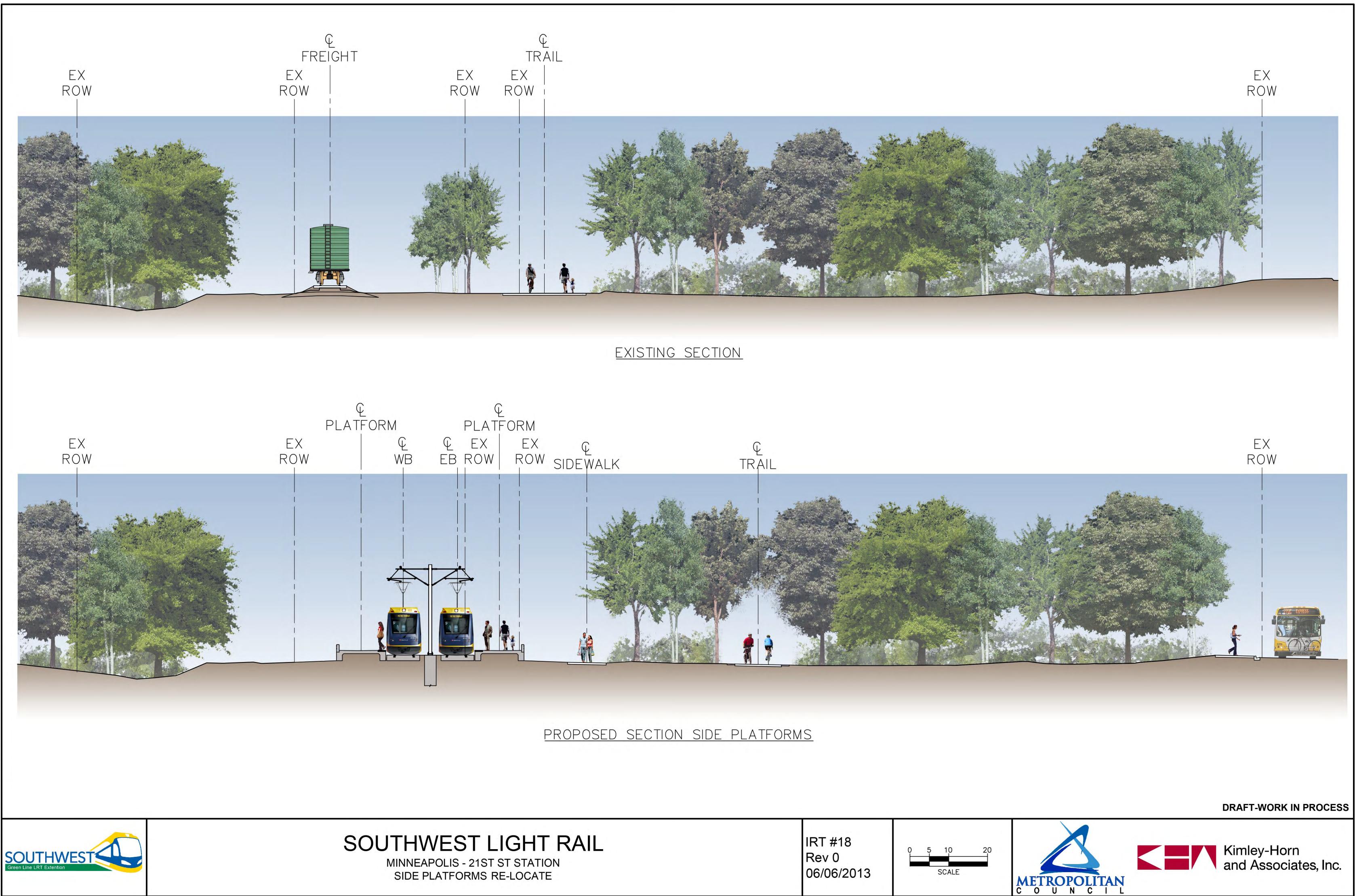


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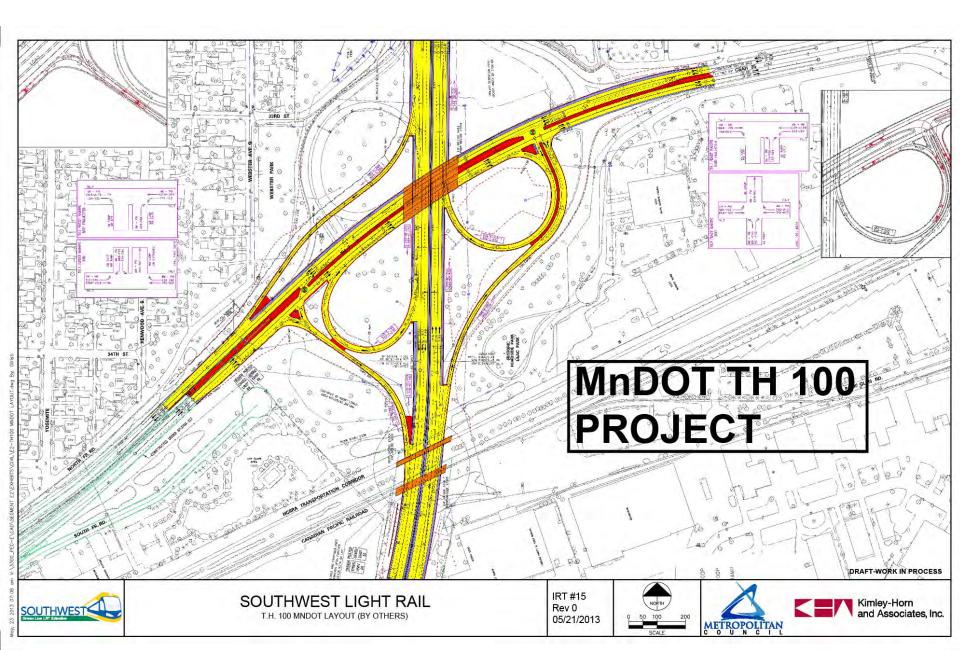


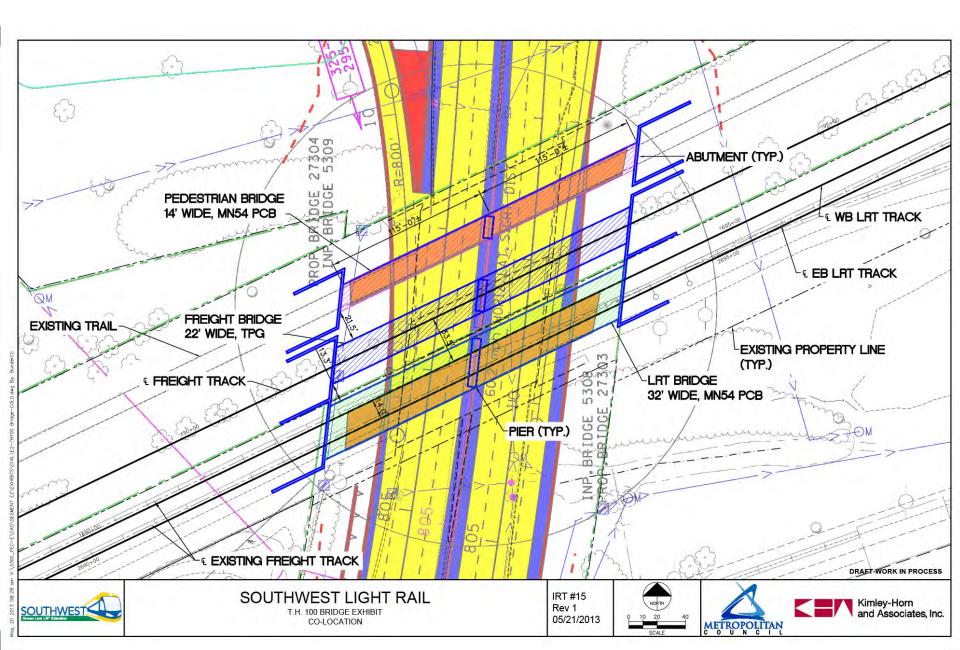
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ST LIGHT RAIL - 21ST ST STATION DRMS CO-LOCATE	IRT #18 Rev 0 05/21/2013	0 5 10 SCA

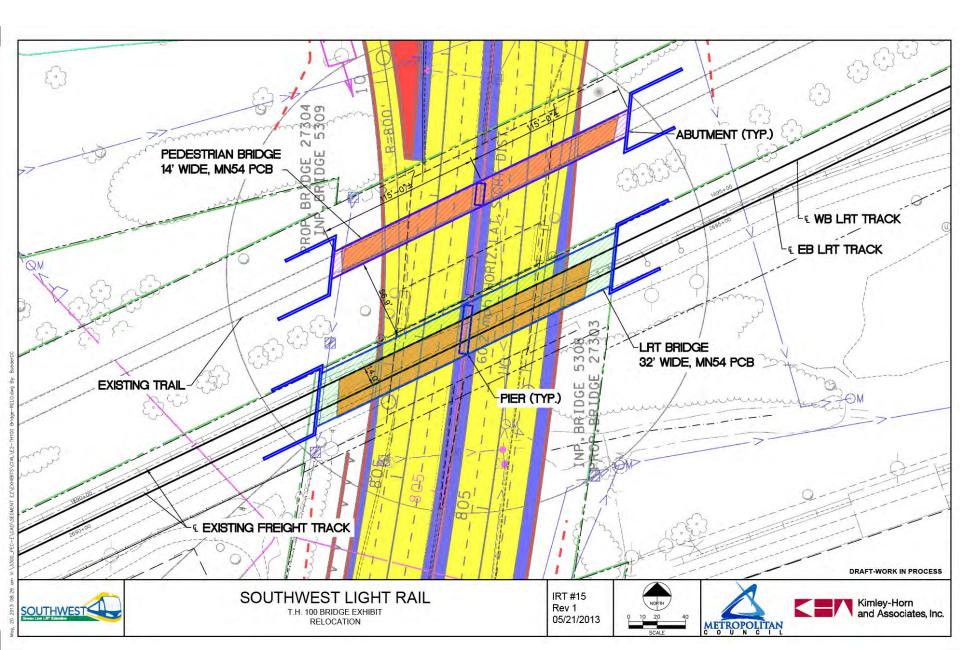


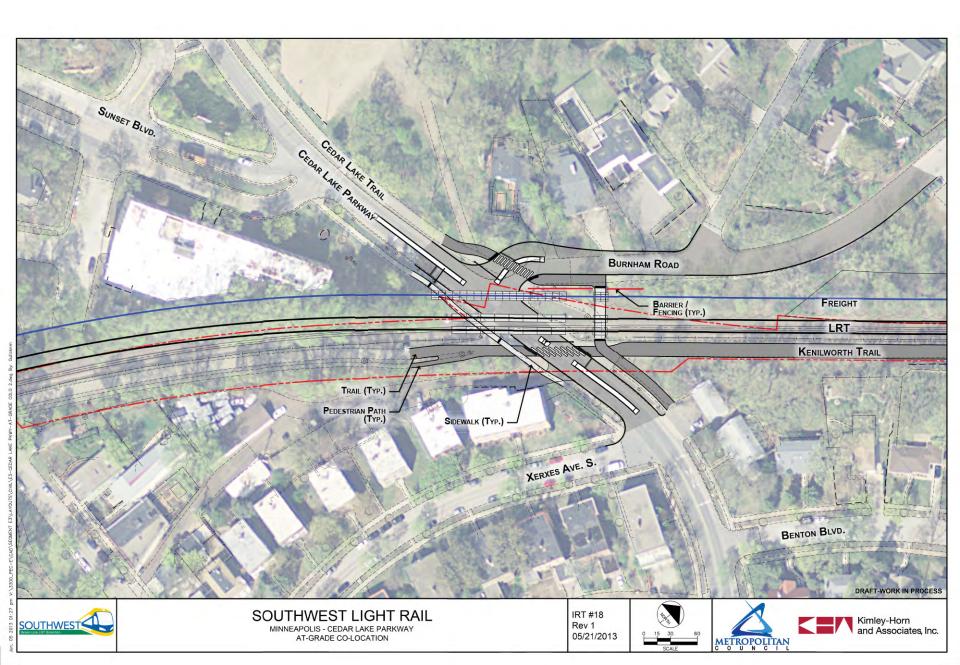
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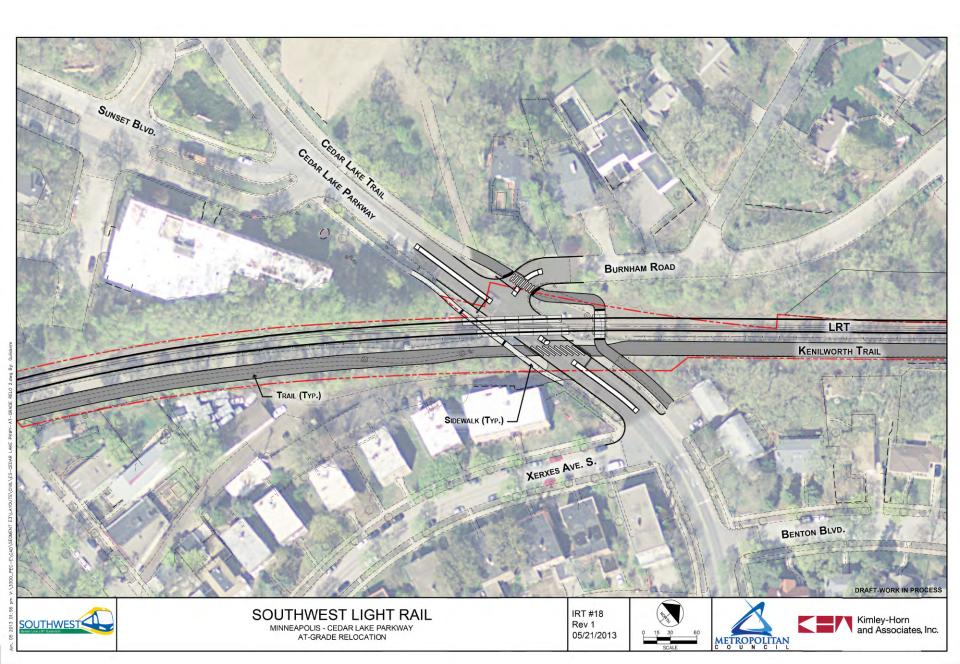
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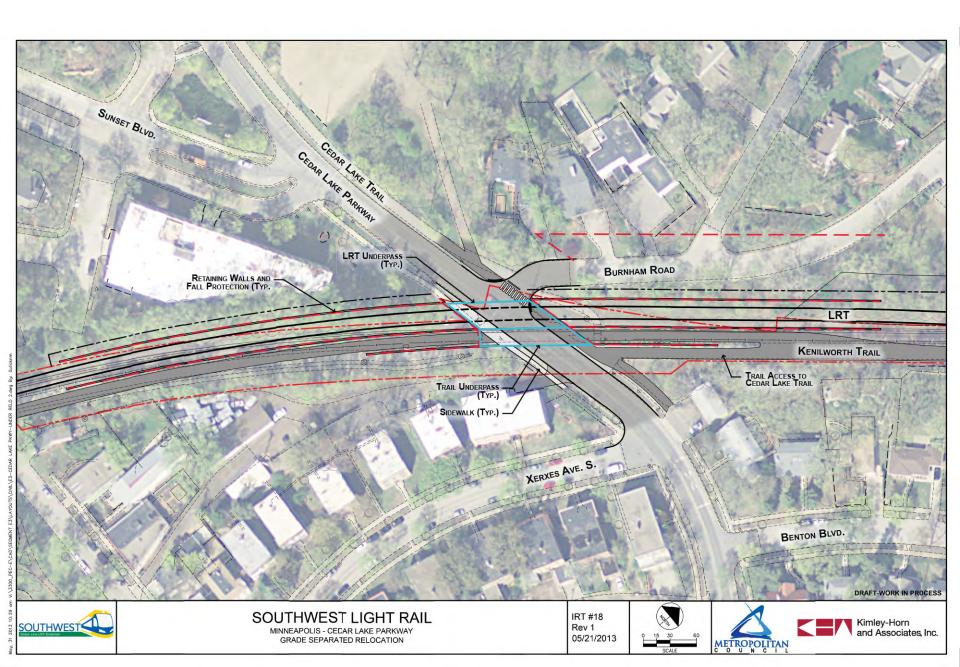














# Communications and Outreach Update



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### **Special Joint BAC and CAC Meeting**

- Welcome and Introductions
- Technical Issue Presentations:
  - Freight Rail: Co-location and Relocation Options
  - SWLRT Stations: Louisiana, Beltline, West Lake and 21st Street
  - TH 100 and Cedar Lake Parkway
- Next Steps/Open Houses:
  - June 13: Freight Rail Co-location and Relocation
  - June 17 June 26: SWLRT Stations
- Technical Issues Workshop/Discussion



### BAC and CAC Technical Comments/Key Themes

- Freight Co-location Options
  - Concerned with impacts to residential properties
  - Concerned about corridor aesthetics and noise
  - More open to deep bore tunnel option through corridor
- Freight Relocation Options
  - Concerned with impacts to school properties
  - Concerned about visual impacts of freight rail structures
  - Concerned with impacts to business and residential properties



#### **BAC and CAC Technical Key Themes**

- Louisiana, Beltline, West Lake and 21<sup>st</sup> Street Stations
  - Encourage multi-modal access to stations
  - Concerned about on-street neighborhood parking impacts
  - Ensure opportunities for development are preserved around stations



### **BAC and CAC Technical Key Themes**

- TH 100
  - Concerned about MnDOT project timing and construction
- Cedar Lake Parkway
  - Prefers LRT underpass scenario



June 6 Special Joint BAC and CAC Meeting



## **SWLRT Open Houses**

- Freight Rail Open Houses: June 13
  - Location: Benilde-St. Margaret's School, St. Louis Park
  - 8:00 9:30 AM
  - 4:30 7:00 PM
- Station Open Houses: June 17 June 26
  - June 17: Minneapolis (8:00 9:30 AM)
  - June 17: Minneapolis (4:30 7:00 PM)
  - June 18: Minnetonka/Hopkins (4:30 7:00 PM)
  - June 20: St. Louis Park (4:30 7:00 PM)
  - June 24: Minneapolis (4:30 7:00 PM)
  - June 26: Eden Prairie (4:30 7:00 PM)



#### **More Information**

Online:

www.SWLRT.org

Email:

SWLRT@metrotransit.org

Twitter:

www.twitter.com/southwestlrt

