

SOUTHWEST

Green Line LRT Extension



Business Advisory Committee

September 28, 2016



Today's Topics

- Project Readiness
 - Milestones Achieved
 - Look Ahead
 - Critical Agreements
- Construction Contracts Overview
- Right-of-Way Acquisition Overview
- Construction Outreach and Communications



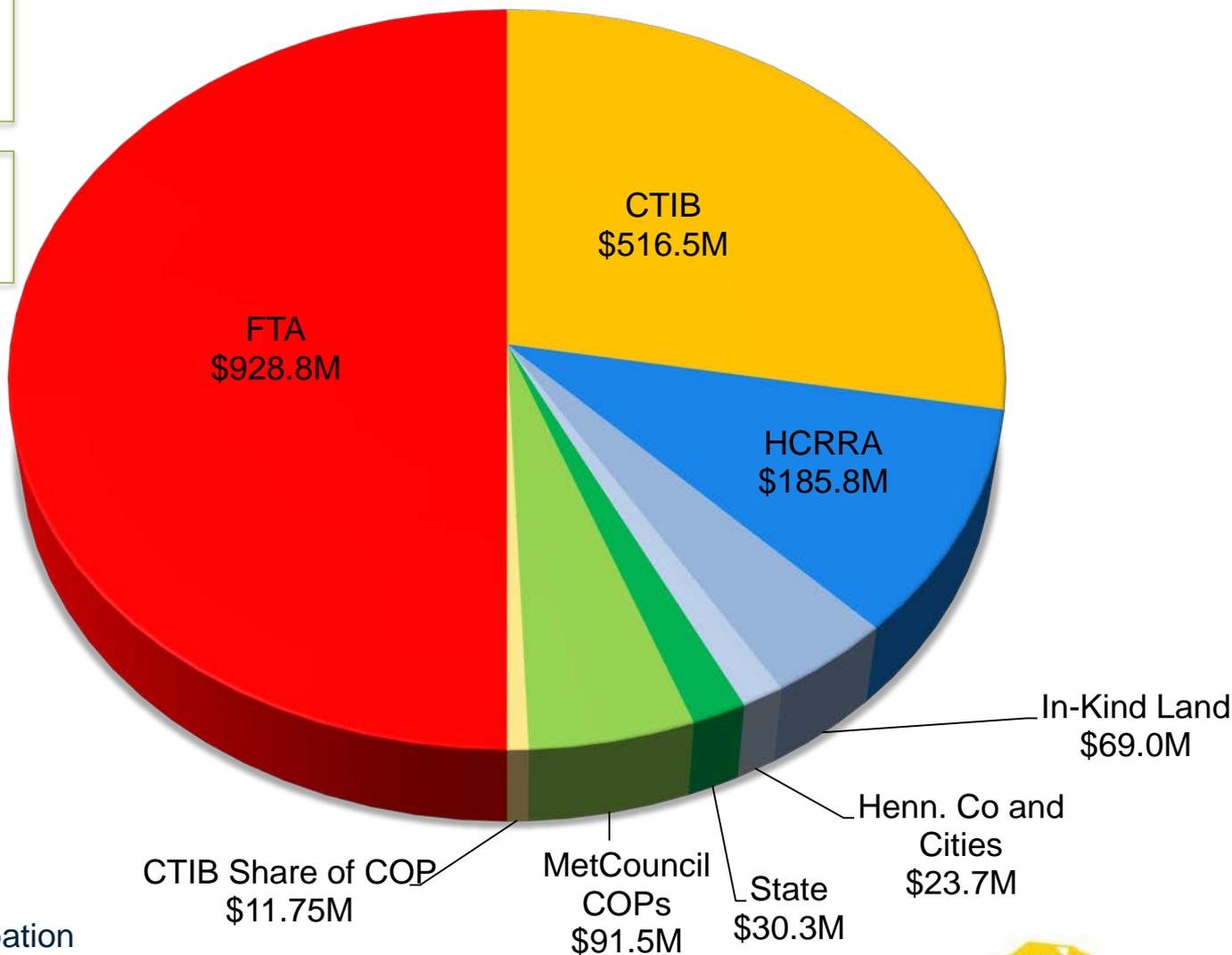
Project Readiness

Project Readiness: Local Funds Committed

September 2016

\$1.858 Billion Total Project Estimate

\$928.8 Million Local Funds Committed



COP – Certificates of Participation

Project Readiness: Milestones Completed

- Environmental reviews complete
 - Final Environmental Impact Statement: May 2016
 - Record of Decision: July 2016
 - FEIS Determination of Adequacy: Aug 2016
- Funding commitments for 100% (\$928.8M) of the local share complete Aug 2016
- Application for Entry into Engineering for FTA New Starts Program Aug 2016
- 90% design plans complete
- 90% cost estimate complete

Milestones Look Ahead

Milestone	Rev. 10.0 Submitted 8/19/16
FTA Approves Entry into Engineering	Nov 2016
Complete 100% Design Package for Civil	Dec 2016
Submit FFGA Application	Early 2017
Complete 100% Design Package for Systems	March 2017
Complete 100% Design Package for OMF	May 2017
FTA Approves FFGA	July 2017
Heavy Construction	2017-2020
Revenue Service	2021

Construction Contracts Overview

5 Main Contracts

Contract	Procurement Method	Timing	DBE Goal
Civil	Design/Bid/Build	Q1 2017	16%
Systems	Design/Bid/Build	Q2 2017	TBD
Operations & Maintenance Facility	Design/Bid/Build	Q2 2017	TBD
Fare Collection	Request for Proposals	Q4 2017	TBD
Light Rail Vehicles	Request for Proposals	In Process	n/a

Civil Contract Scope

- 15 Stations
 - Vertical circulation
 - West Lake St.
 - Bryn Mawr
 - Bassett Creek Valley



Civil Contract Scope

- Park-and-rides
 - 7 Surface lots with a total of 1,747 spaces
 - 1 Ramp at SouthWest Station with 2 elevators



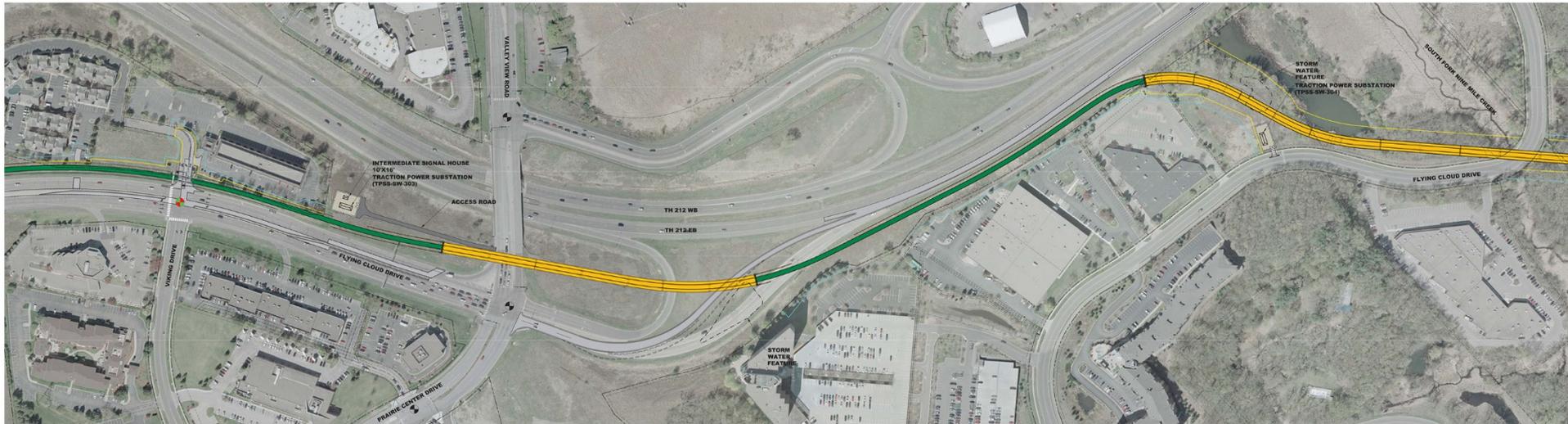
Civil Contract Scope

- 44 structures
 - 29 new bridges: LRT, pedestrian, roadway, freight
 - 7 existing bridges with modifications
 - 6 pedestrian tunnels
 - 2 cut and cover tunnels
 - TH62 582 ft
 - Kenilworth 2,236 ft
- 110 retaining walls
- 14.5 miles of double track for LRT

Civil Contract Scope

- Demolition of 14 existing buildings
- Soil improvements
- Roadways and trails
- Systemwide cable trough/ductbank/foundations
- Utilities and drainage
- Urban design and landscaping
- Freight: BNSF, TCWR, CP

Valley View and Nine Mile Creek Bridges



SOUTHWEST LRT ALIGNMENT
 SEGMENT W1 / W2 - EDEN PRAIRIE
 NINE MILE CREEK



COLOR KEY

Green	LET TRACK AREA	Red	EXISTING SIGNALIZED INTERSECTION
Light Green	ALTERNATE / DESIGN AREA	Black	PROPOSED SIGNALIZED INTERSECTION
Blue	STATION PLATFORM	Red	STATION FENCE SUBSTATION
Yellow	STATION	Black	STATION BUILDING DETAIL WALLS
Red	ROADWAY	Black	RAIL AREA
Grey	RAIL / STREET	Black	RAIL PROPERTY ACQUISITION
Yellow	SURFACE PARKING	Black	PARTIAL PROPERTY ACQUISITION
Orange	BRIDGE	Black	RIGHT OF WAY
Black	RETAINING WALL	Black	PROPERTY LINE
		Black	TERMINARY CONSTRUCTION ELEMENT



JANUARY 2016 **4**

THE PROPOSED SOUTHWEST LRT PROJECT IS NOT FINAL, BUT IS STILL UNDER ENVIRONMENTAL REVIEW AND THE PROJECT IS SUBJECT TO CHANGE. THESE PLANS ARE NOT FINAL. THE DESIGN AND COST OF THE PROJECT ARE SUBJECT TO CHANGE. THE DESIGN AND COST OF THE PROJECT ARE SUBJECT TO CHANGE. THE DESIGN AND COST OF THE PROJECT ARE SUBJECT TO CHANGE. THE DESIGN AND COST OF THE PROJECT ARE SUBJECT TO CHANGE.



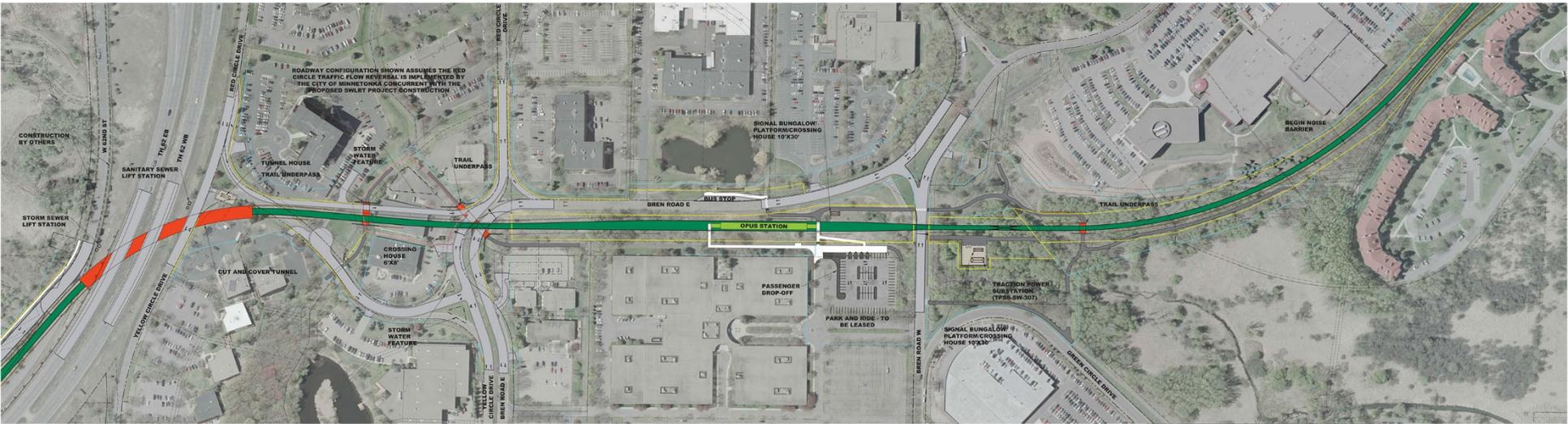
Valley View Bridge



Nine Mile Creek Bridge



Tunnel Under TH 62



SOUTHWEST LRT ALIGNMENT
SEGMENT W2 / W3 - EDEN PRAIRIE / MINNETONKA
OPUS STATION

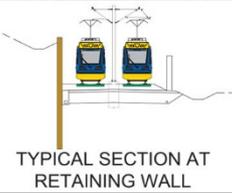
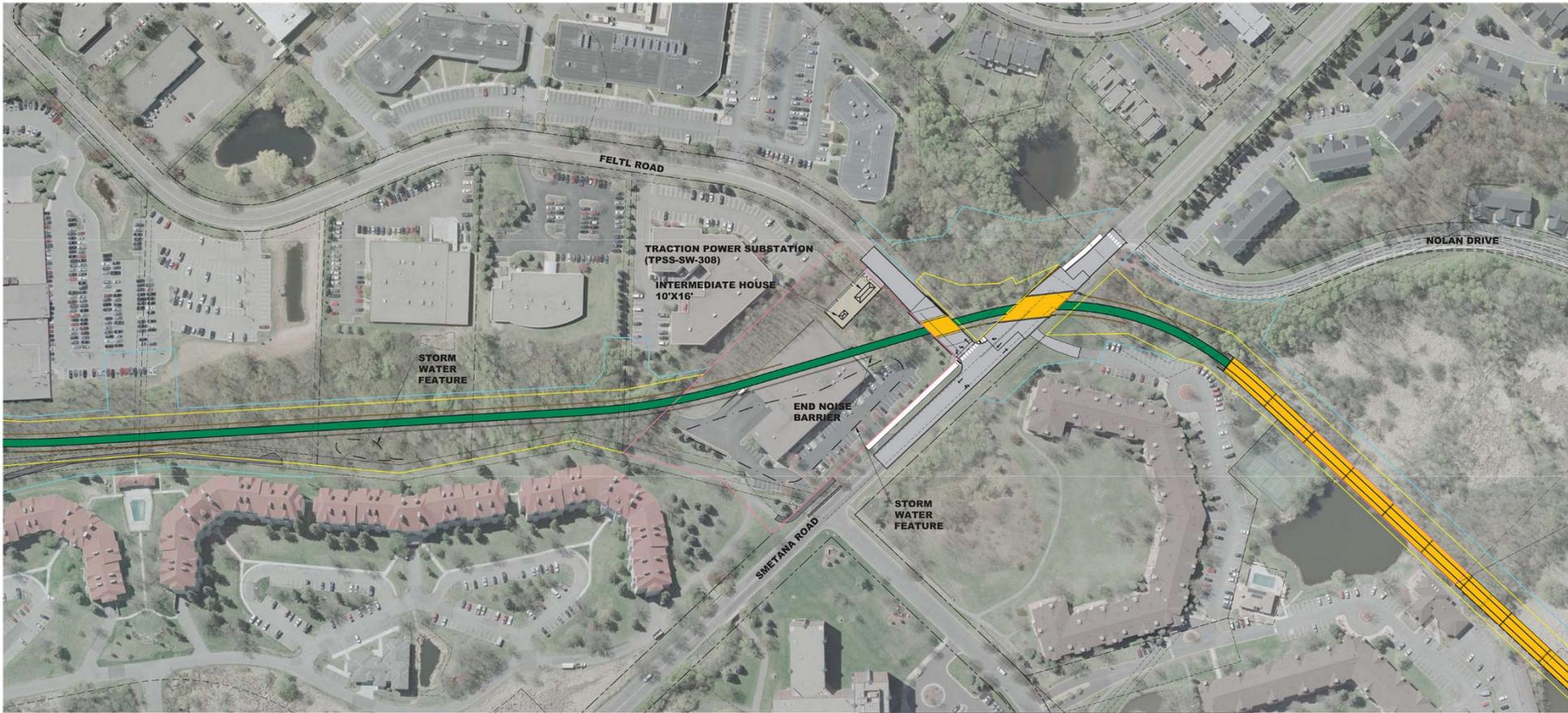
COLOR LEGEND	
[Green Line]	LRT TRACK AREA
[Red Line]	EXISTING SIGNALLED INTERSECTION
[Orange Line]	PROPOSED SIGNALLED INTERSECTION
[Blue Line]	STATION PLATFORM
[Yellow Line]	TRACTION POWER SUBSTATION
[Black Line]	STATION BUILDING DESIGN MARKERS
[Red Line]	STREET
[Blue Line]	DATE LINE
[Green Line]	TOTAL PROPERTY ACQUISITION
[Yellow Line]	PARTIAL PROPERTY ACQUISITION
[Black Line]	RIGHT OF WAY
[Red Line]	PROPERTY LINE
[Blue Line]	TEMPORARY CONSTRUCTION EXISTENCE



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THE PROPOSED ALIGNMENT OF PROJECT IS NOT FINAL, BUT IS STILL UNDER ENVIRONMENTAL REVIEW AND THE PROJECT IS SUBJECT TO CHANGE. THESE PLANS ARE NOT FINAL. THE DESIGN, CONSTRUCTION AND MAINTENANCE OF THIS PROJECT WILL BE SUBJECT TO STATE AND FEDERAL REGULATIONS, REVIEW OF OTHER LOCAL REQUIREMENTS AND THE CITY OF EDEN PRAIRIE. THE PROJECT DESIGN WILL BE SUBJECT TO REVIEW BY THE COUNCIL AND APPROVED BY THE COUNCIL. THE PROJECT WILL BE SUBJECT TO REVIEW BY THE COUNCIL AND APPROVED BY THE COUNCIL. THE PROJECT WILL BE SUBJECT TO REVIEW BY THE COUNCIL AND APPROVED BY THE COUNCIL. THE PROJECT WILL BE SUBJECT TO REVIEW BY THE COUNCIL AND APPROVED BY THE COUNCIL.

Minnetonka-Hopkins Bridge



SOUTHWEST LRT ALIGNMENT SEGMENT W3 - MINNETONKA / HOPKINS MINNETONKA / HOPKINS BRIDGE

COLOR LEGEND

	LRT TRACK AREA		EXISTING SIGNALIZED INTERSECTION
	PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNALIZED INTERSECTION
	STATION PLATFORM		TRACTION POWER SUBSTATION
	ROADWAY		SYSTEMS BUILDING (DESIGN VARIES)
	TUNNEL		GATE ARM
	TRAIL / BIKEWAY		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE
			TEMPORARY CONSTRUCTION EASEMENT



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JANUARY 2016



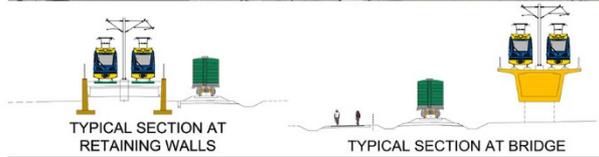
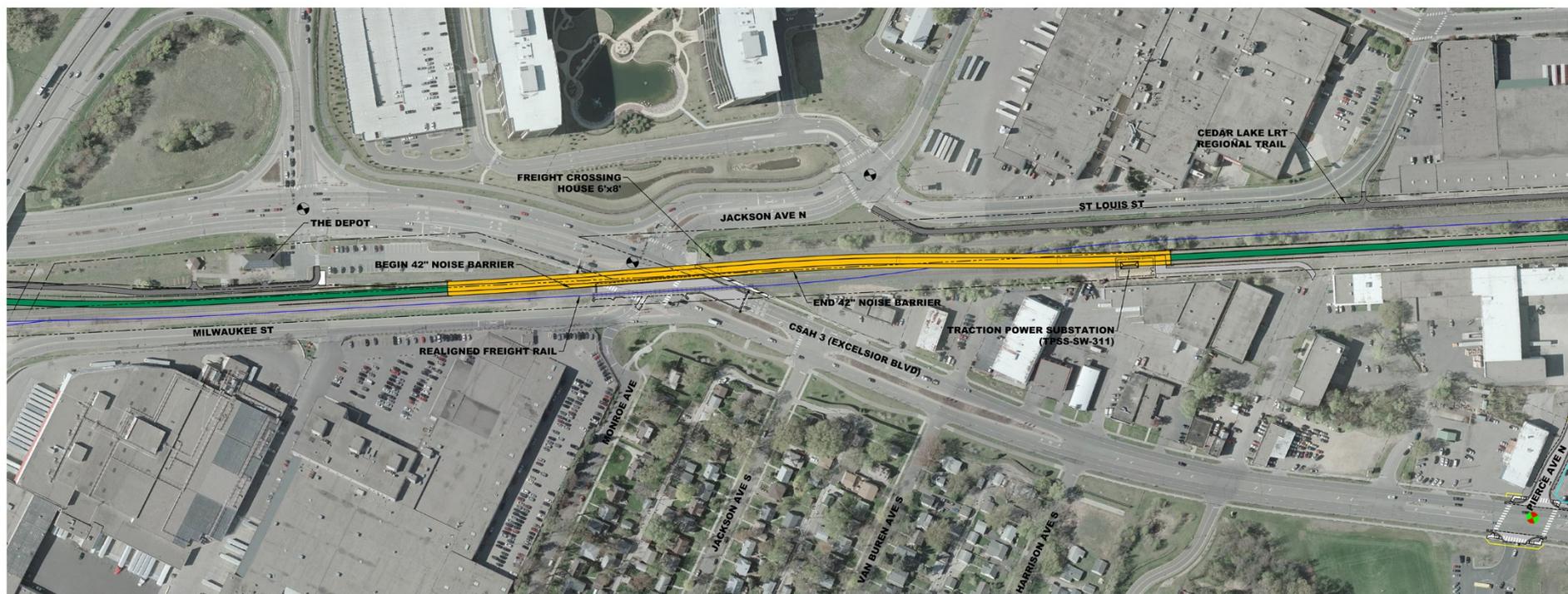
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Minnetonka-Hopkins Bridge



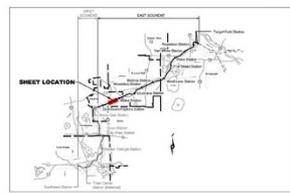
Excelsior Blvd Bridge



SOUTHWEST LRT ALIGNMENT SEGMENT E1 - HOPKINS EXCELSIOR BLVD. CROSSING

COLOR LEGEND

	LRT TRACK AREA		EXISTING SIGNALIZED INTERSECTION
	PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNALIZED INTERSECTION
	STATION PLATFORM		TRACTION POWER SUBSTATION
	TUNNEL		SYSTEMS BUILDING (DESIGN VARIES)
	ROADWAY		GATE ARM
	TRAIL / BIKEWAY		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE
			TEMPORARY CONSTRUCTION EASEMENT



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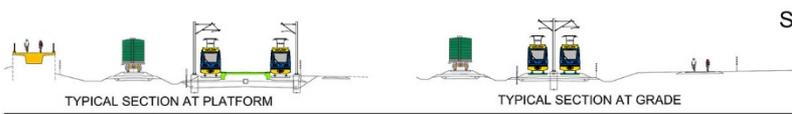
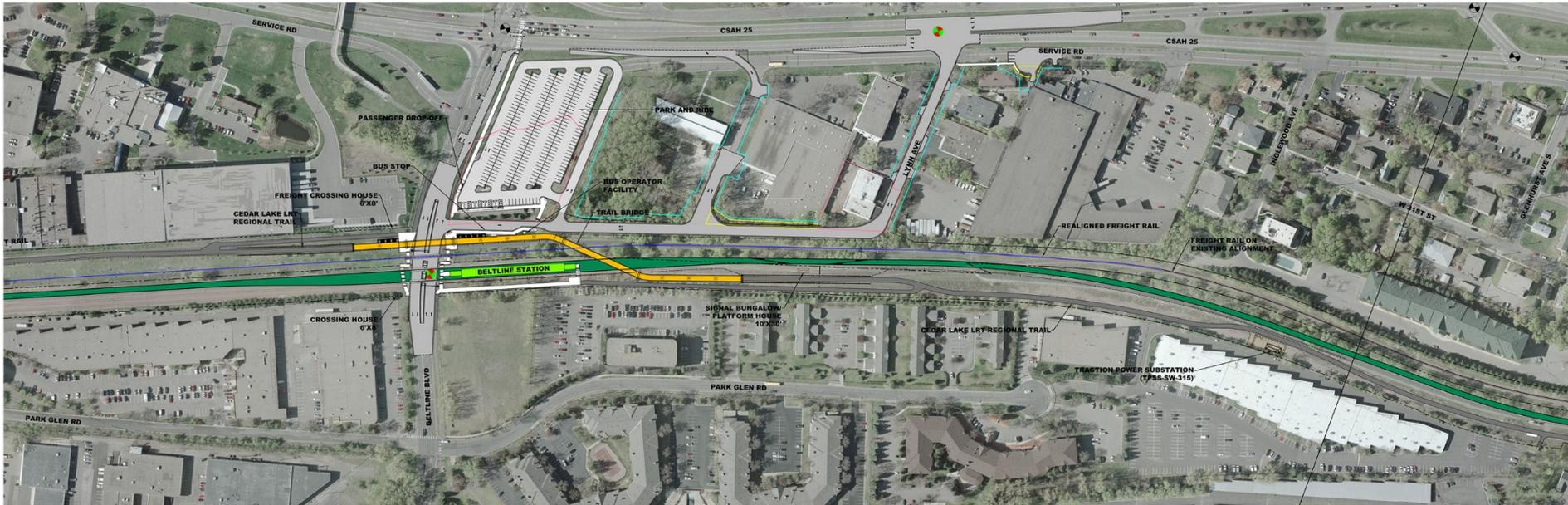
SCALE: 1" = 100' (VERTICAL FEET)

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Excelsior Blvd Bridge



Beltline Boulevard Station



SOUTHWEST LRT ALIGNMENT
SEGMENT E2 - ST. LOUIS PARK
BELTLINE STATION

COLOR LEGEND	
[Green Box]	LRT TRACK AREA
[Light Green Box]	BIKEWAY / SIDEWALK AREA
[Yellow Box]	STATION PLATFORM
[Red Box]	TUNNEL
[Grey Box]	ROADWAY
[Light Blue Box]	TRAIL / BIKEWAY
[Orange Box]	SURFACE PARKING
[Dark Yellow Box]	BRIDGE
[Light Yellow Box]	RETAINING WALL
[Red Circle]	EXISTING SIGNALIZED INTERSECTION
[Green Circle]	PROPOSED SIGNALIZED INTERSECTION
[Black Box]	REACTOR POWER SUBSTATION
[Red Box]	SYSTEMS BUILDING DESIGN (30'x15')
[Blue Box]	RAIL BRIDGE
[Yellow Box]	TOTAL PROPERTY ACQUISITION
[Light Blue Box]	PARTIAL PROPERTY ACQUISITION
[Dashed Line]	RIGHT OF WAY
[Dotted Line]	PROPERTY LINE
[Light Blue Box]	TEMPORARY CONSTRUCTION EASEMENT



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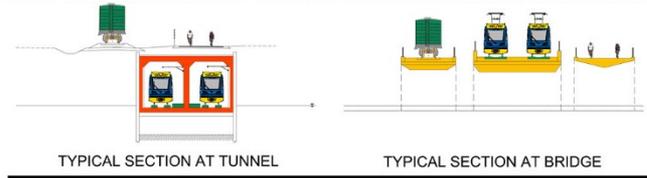
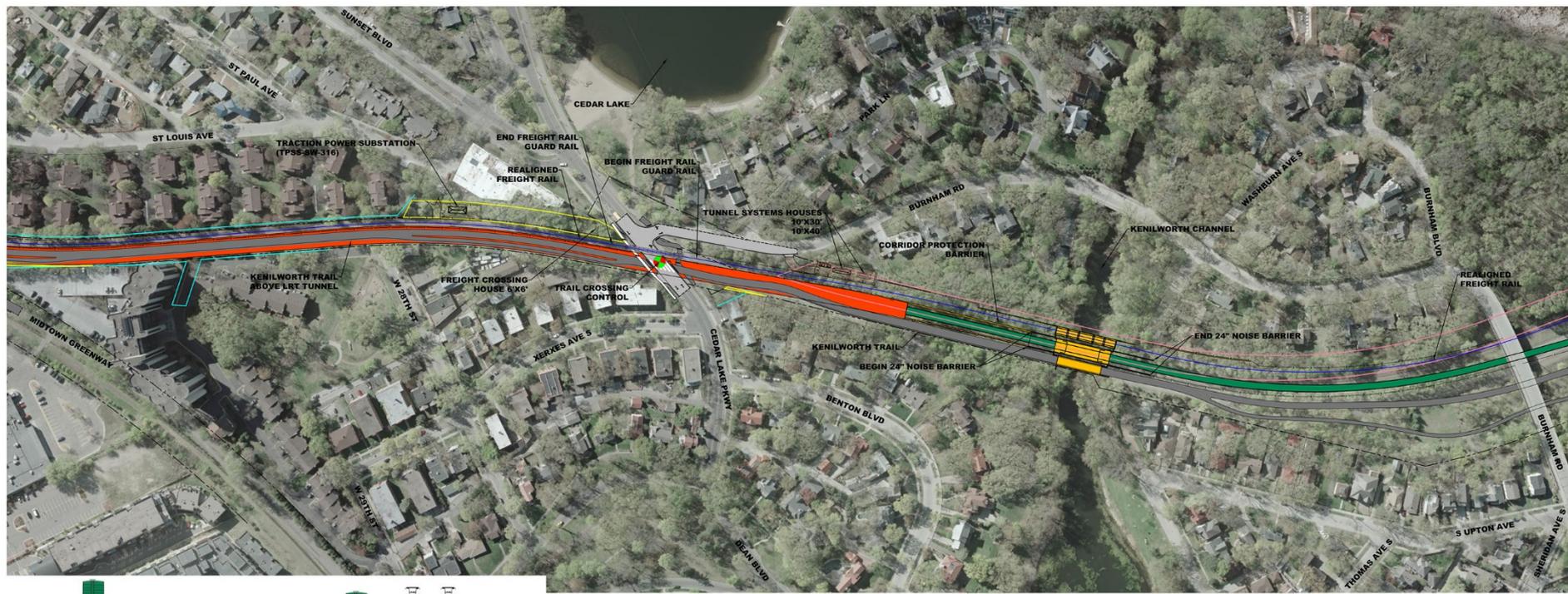
JANUARY 2016

Beltline Boulevard Station

- 268 space surface park-and-ride lot



Kenilworth Corridor



SOUTHWEST LRT ALIGNMENT SEGMENT E3 - MINNEAPOLIS CEDAR LAKE PKWY CROSSING

COLOR LEGEND	
[Green Box]	LRT TRACK AREA
[Yellow Box]	STATION PLATFORM / SIDEWALK AREA
[Orange Box]	TUNNEL
[Grey Box]	ROADWAY
[Light Grey Box]	TRAIL / BIKEWAY
[Yellow Box]	SURFACE PARKING
[Orange Box]	BRIDGE
[Light Blue Box]	RETAINING WALL
[Black Circle]	EXISTING SIGNALIZED INTERSECTION
[Red Circle]	PROPOSED SIGNALIZED INTERSECTION
[Green Circle]	TRACTION POWER SUBSTATION
[Red Line]	SYSTEMS BUILDING (DESIGN WARNERS)
[Black Line]	GATE ARM
[Red Line]	TOTAL PROPERTY ACQUISITION
[Yellow Line]	PARTIAL PROPERTY ACQUISITION
[Dashed Line]	RIGHT OF WAY
[Dotted Line]	PROPERTY LINE
[Blue Line]	TEMPORARY CONSTRUCTION EASEMENT



SOUTHWEST LRT **METROPOLITAN**

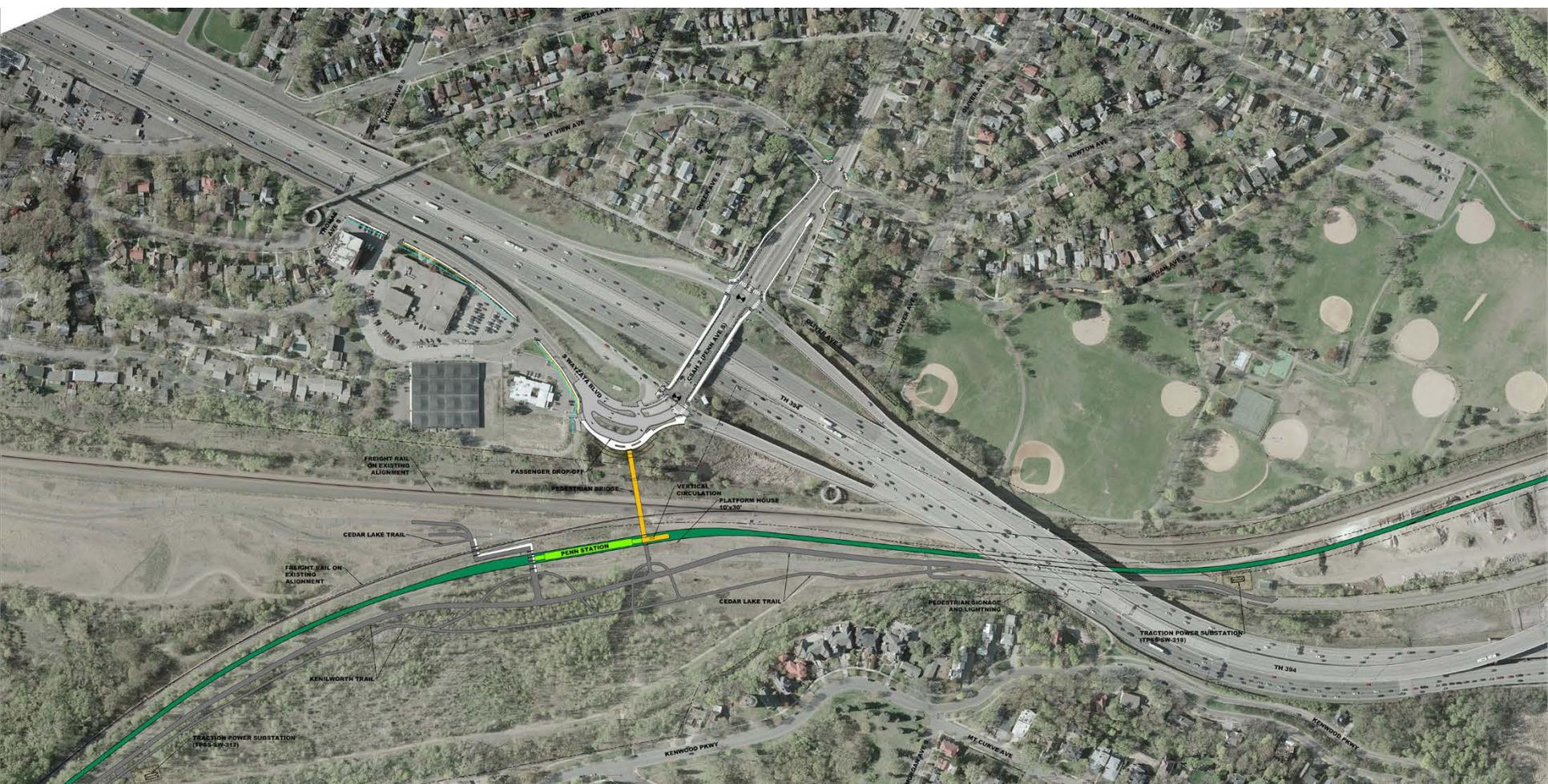
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Kenilworth Corridor: North Portal



Bryn Mawr Station



SOUTHWEST LRT ALIGNMENT
 SEGMENT E4 - MINNEAPOLIS
 PENN STATION

COLOR LEGEND

Light Green	MT TRACK AREA	Black	EXISTING SIGNALLED INTERSECTION
Dark Green	EXISTENCE OF SIGNAL AREA	Red	UNPAVED SIGNALLED INTERSECTION
Light Blue	STATION PLATFORM	Blue	TRACTION POWER SUBSTATION (GENERAL LINE)
Orange	RAILROAD	Red	LOCAL BUS/LOCAL GENERAL LINE
Yellow	RAILROAD RIGHT-OF-WAY	Black	MT RAIL
Dark Green	RAILROAD RIGHT-OF-WAY	Black	MT RAIL
Light Green	RAILROAD RIGHT-OF-WAY	Black	RAILROAD RIGHT-OF-WAY
Dark Green	RAILROAD RIGHT-OF-WAY	Black	RAILROAD RIGHT-OF-WAY
Dark Green	RAILROAD RIGHT-OF-WAY	Black	RAILROAD RIGHT-OF-WAY
Dark Green	RAILROAD RIGHT-OF-WAY	Black	RAILROAD RIGHT-OF-WAY



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Bryn Mawr Station

- One elevator and pedestrian bridge from station platform to passenger drop off area at Penn Ave



Systems Contract Scope

- Systems site work
- Traction power substations (TPSS)
 - 19 TPSS on main line
 - 2 at the OMF
- 3 Tunnel systems houses
 - 2 for Kenilworth tunnel
 - 1 for TH 62 tunnel
- Overhead contact system
- LRT and freight signaling systems
- Tunnel facilities systems
 - Tunnel power
 - Ventilation
- Communications systems
 - Supervisory Control and Data Acquisition (SCADA)
 - Rail Control Center (RCC)
 - Radio
 - Public Announcement/Variable Message Signs
 - Intrusion detection
 - Close Circuit TV (CCTV)
 - Emergency call boxes
 - Telephones
 - Building Management Systems
- SWLRT systems integration

Signaling Systems: Active Warning Device



Security Features



Emergency phone



Security camera

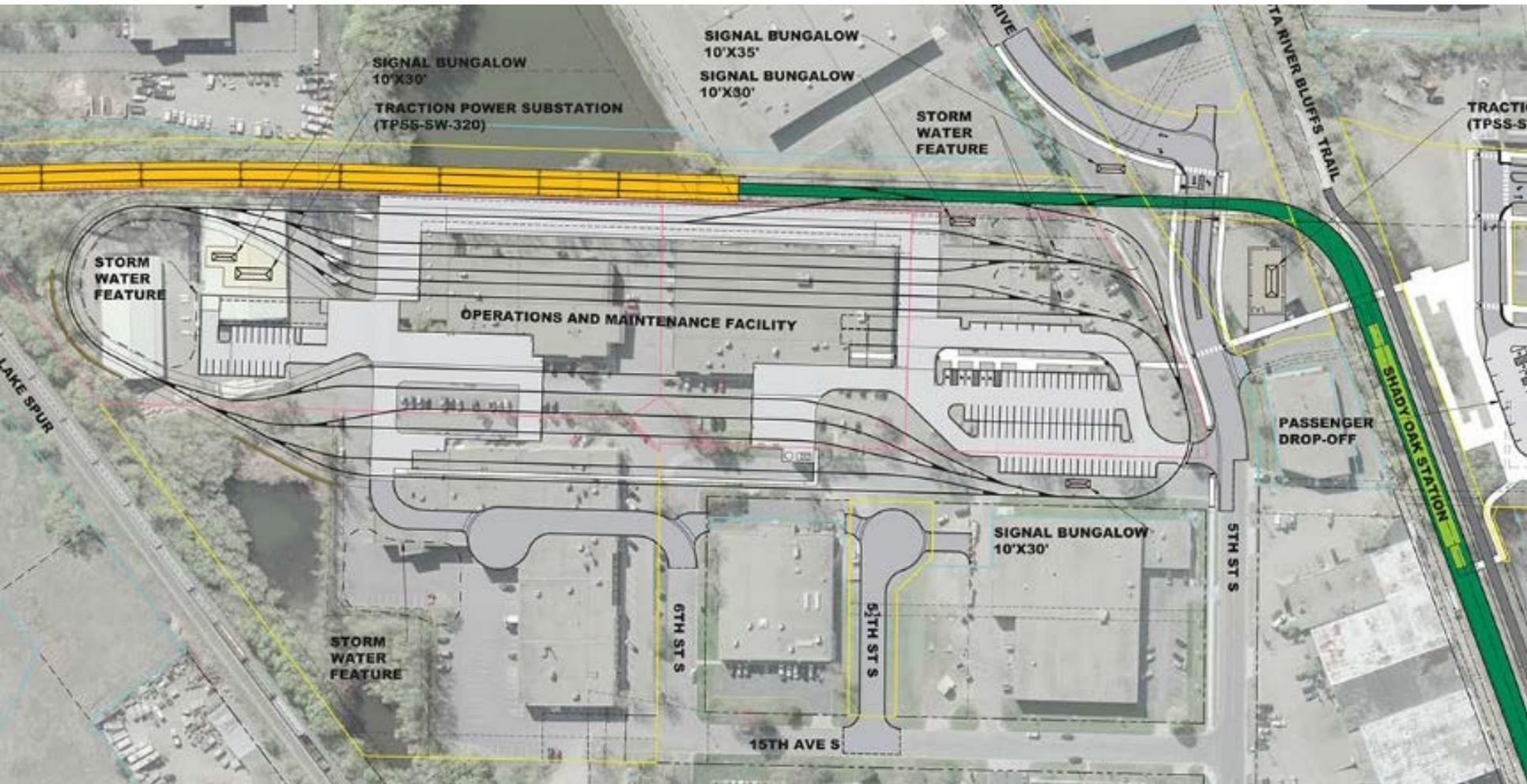
OMF Contract Scope

- Demolition of 6 existing buildings
- Soil improvements
- Yard track
- OMF building: 2 story, 162,356 sf
- Access roads
- Systemwide electrical cable trough/ductbank/foundations
- Utilities and drainage
- Urban design and landscaping

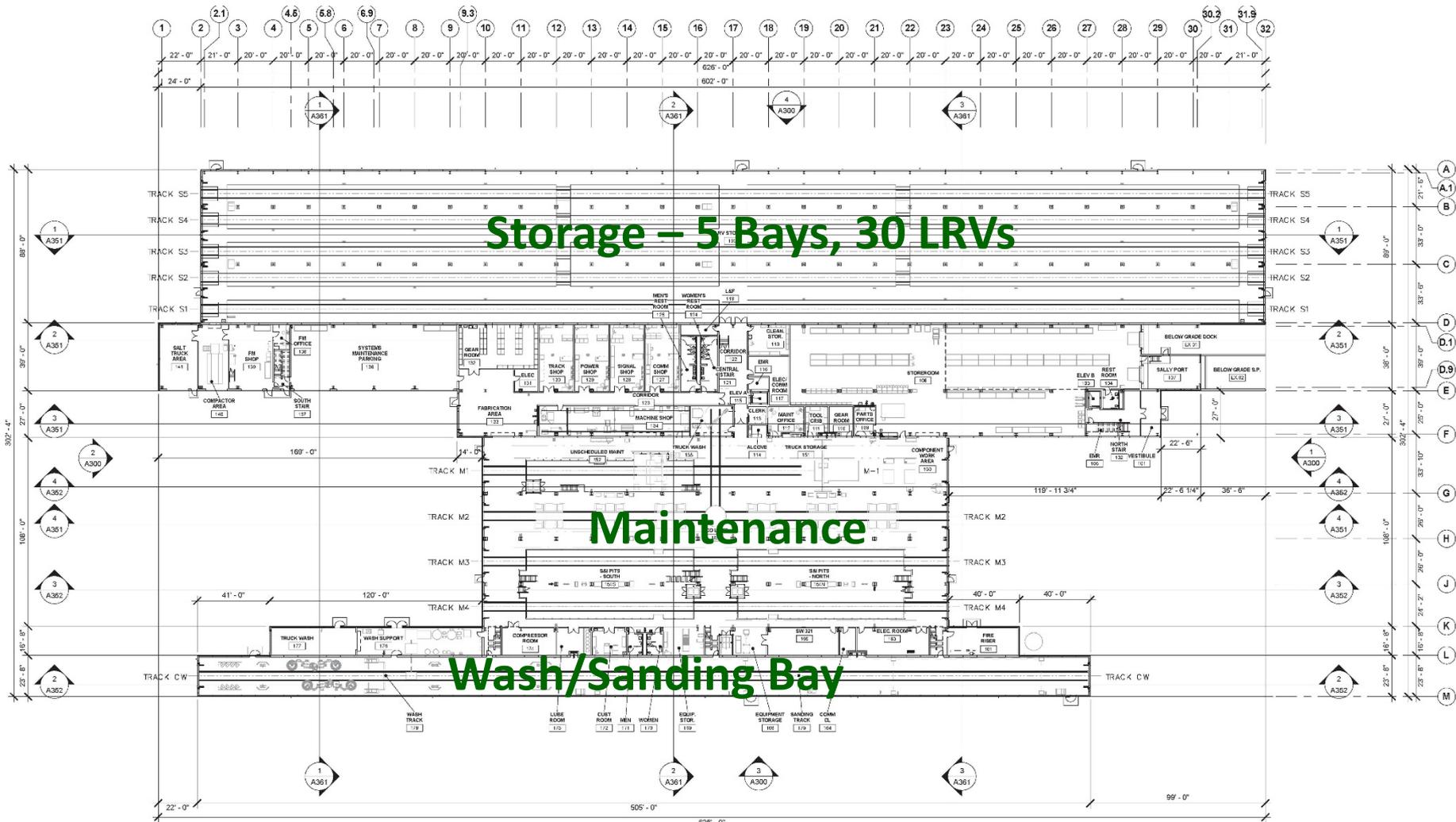
OMF Contract Scope



Operations and Maintenance Facility



Operations and Maintenance Facility Layout



Operations and Maintenance Facility



Light Rail Vehicles Contract

- Light Rail Vehicle Scope:
 - Type III LRVs
 - Base order: 27
 - Options: Up to 50 total
 - Evaluation: In progress with single proposer
 - Limited Notice to Proceed: Q4 2016



Fare Collection Contract

- Fare Collection Scope:
 - Ticket Vending Machines (TVM): 43
 - Smart Card Validators: 66
 - Conduit provided for 30 future TVMs in Civil contract



Right-of-Way Acquisition Process Overview

Property Rights Needed to Begin Critical Activities in Following Areas

- Glenwood Ave Bridge over BNSF
- Kenilworth Tunnel
- Freight rail realignment in Bass Lake Spur & Kenilworth Corridor
- Louisiana Ave Bridge segments
- Excelsior Blvd Bridge
- Operations and Maintenance Facility
- SouthWest Station area



Right-of-Way Acquisition Process

Offer Accepted

- Appraisal approved
- Closing and recording
- Payment made
- Title and possession

Negotiated Settlement

- Appraisal approved
- Settlement approval
- Closing and recording
- Payment made
- Title and possession

Condemnation

- Appraisal approved
- Condemnation filing
- Payment made
- Title and possession
- Complete condemnation process

Construction Outreach and Communications

Construction Professionals Career Fair

- Date: Tuesday, Oct 18
- Time: 3:00 – 6:00 PM
- Location: SWLRT Project Office, St Louis Park
- Agenda:
 - 3:00 – 3:30: Open House
 - 3:30 – 4:00: Project Staff Presentation
 - 4:00 – 5:00: Open House
 - 5:00 – 5:30: Project Staff Presentation
 - 5:30 – 6:00: Open House
- Other outlets: transportation industry, social media, website, project newsletter, feature articles in local papers

Construction Outreach/Communication Plan

- Includes lessons learned/feedback from Blue and Green Lines
- Incorporates best practices from national, large-scale public works projects
- Developed in conjunction with SWLRT advisory committees
- Ensures clear, consistent project information throughout construction
- Describes methods/techniques to inform the public
- Includes metrics/evaluation

Construction Outreach/Communications

- Best practices:
 - Community construction communication committee
 - Outreach coordinators
 - 24-hour construction hotline
 - Property/business owners meetings
 - Public meetings
 - Construction tours
 - Neighborhood updates
 - Social media/website/media
 - Weekly construction updates
 - Signage



Member and Committee Reports

More Information

Online:

www.SWLRT.org

Email:

SWLRT@metrotransit.org

Twitter:

www.twitter.com/southwestlrt

