



# Construction Project Briefing



December 14, 2022



# Today's Presentation

- **CDOT - Lake Line - Damen Station**
- **Non-Revenue Maintenance**
- **Traction Power Upgrades - Canal Tie House, Barry and Damen Substations**
- **Refresh & Renew Program**
- **Red and Purple Modernization Project**



# Project Title: CDOT - Lake Line - Damen Station

## Construction Progress

Phase	Description	Status
<b>Construction</b>	<ul style="list-style-type: none"><li data-bbox="211 354 706 406">• Relocation of aerial signal and communication cables</li><li data-bbox="211 417 621 442">• Replace rivets with bolts at bent steel</li><li data-bbox="211 453 756 504">• Begin excavation of drilled foundations (caisson) at Station House</li><li data-bbox="211 515 735 566">• Relocate Electric Duct Bank w/I Station Footprint (Planning)</li><li data-bbox="211 577 742 602">• Drilling/Installing Deep Benchmarks/Inclinometers</li><li data-bbox="211 613 763 665">• Excavation/Pouring Concrete for Grade Beams and Caisson Caps</li><li data-bbox="211 675 749 727">• Framing, Installing Rebar and Poring Concrete for Building Core</li></ul>	Completed Completed Completed On-Going Completed On-Going On-Going



# Project Title: CDOT - Lake Line - Damen Station



## Damen Station

## Drilling/Installing Deep Benchmark



# Project Title: CDOT - Lake Line - Damen Station



**Damen Station  
House**

**Pouring  
Concrete  
Caisson Cap**



# Project Title: CDOT - Lake Line - Damen Station



**Damen Station  
House**

**Pouring  
Concrete Mat  
for Building  
Core**



# Project Title: Non-Revenue Rail Vehicle Facility

## Construction Progress

Phase	Description	Status
<b>Construction</b>	Design Phase <ul style="list-style-type: none"><li>• Design Validation</li><li>• Intermediate Design</li><li>• Permitting – Underground Package</li><li>• Permitting – Building Package</li><li>• Final Design</li></ul>	Complete Complete Complete Complete Under Review
	Construction Phase <ul style="list-style-type: none"><li>• Building Foundations</li><li>• Grade Beams Pours</li><li>• Foundation Utility Work</li><li>• Electrical Ductbank Routing</li><li>• ComEd Switchgear Installation</li><li>• Precast Panel Erection</li><li>• Structural Steel Installation</li></ul>	Complete Complete In Progress In Progress In Progress Upcoming Upcoming

**Delay Explanation:**



# Project Title: Non-Revenue Rail Vehicle Facility



**Helical Anchor Installation for Precast Support**



# Project Title: Non-Revenue Rail Vehicle Facility



**Excavation of Calumet Ave. for the  
Utility Cut & Cap**



# Project Title: Non-Revenue Rail Vehicle Facility



**ComEd Installation of the Transformer and Switchboard**



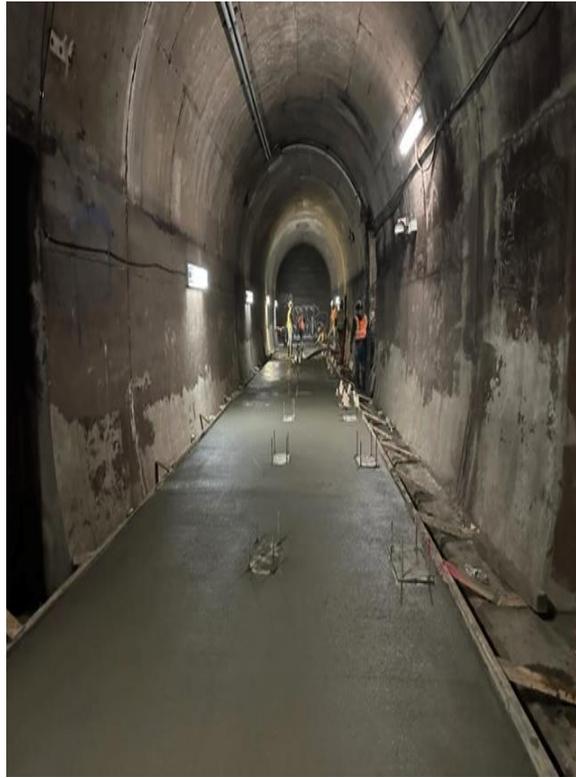
# Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations

## Construction Progress

Phase	Description	Status
<b>Haymarket Substation</b>	• Excavate Courtyard for new equipment foundations	Completed
	• Site Preparation and rebar installation for new equipment foundations	Ongoing
	• Form/Pour new equipment foundations	Ongoing
	• Install new courtyard masonry wall	Upcoming
<b>Canal Tie-House</b>	• Fabricate new Canal Tie-House Building	Ongoing
	• Fabricate new Canal Tie-House equipment	Ongoing
	• Install rebar and pour new Tie-House foundation slab	Completed
	• Install, form and pour new Ductbank 1	Completed
	• Install, form, and pour new Ductbank 2	Ongoing
<b>Damen Substation</b>	• Obtain Building Permit	Complete
	• Fabricate new substation electrical equipment	Ongoing
	• Site excavation and preparation	Ongoing
	• Install foundation micropiles and grade beams	Ongoing
	• Build building exterior walls and roof	Upcoming
<b>Barry Substation</b>	• Obtain foundations permit	Ongoing
	• Obtain building permit	Ongoing
	• Fabricate new substation electrical equipment	Ongoing
	• Mobilization	Ongoing
	• Demolition of existing building	Upcoming



# Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



**Canal Tie-House Concrete Slab**



# Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



**NB Duct Bank Installation Canal**



# Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



**Excavation for Haymarket Courtyard Expansion**



# Project Title: Refreshed & Renewed

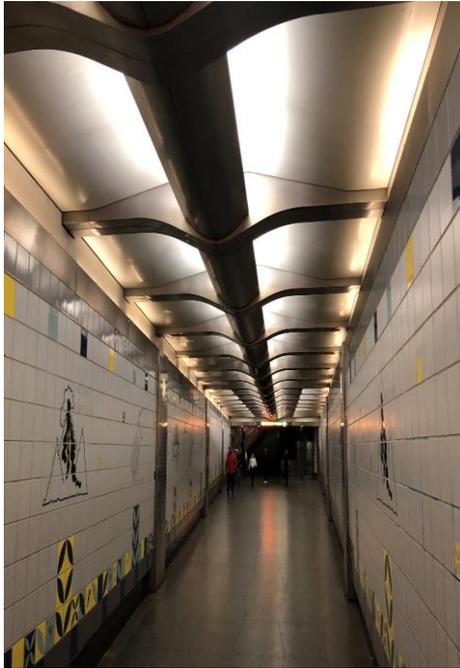
Department	Description	Status
<b>Facility Maintenance</b>	<u>Rail Stations Full Program Scope 28 Stations (28 of 28 Completed)</u> <ul style="list-style-type: none"> <li>• Quincy Loop</li> <li>• Roosevelt/ Red</li> <li>• Roosevelt/ Orange/ Green</li> <li>• 51st/ Green Line (Additional)</li> <li>• 47th/ Red Line (Additional)</li> <li>• Cermak Chinatown/ Red Line (Additional)</li> <li>• Clark &amp; Lake/ Blue Line (Additional)</li> </ul>	Completed Completed Completed Completed Completed Completed
	<u>Painting and Lightning Only Improvements 92 Stations Con't (82 of 92 Completed)</u> <ul style="list-style-type: none"> <li>• Addison / Brown (Painting) SBE</li> <li>• Paulina / Brown (Painting) SBE</li> <li>• Wellington / Brown (Painting) SBE</li> <li>• Southport / Brown (Painting) SBE</li> <li>• Montrose / Brown (Painting) SBE</li> <li>• Damen / Brown (Painting) SBE</li> <li>• Western / Brown (Painting) SBE</li> <li>• Rockwell / Brown (Painting) SBE</li> <li>• Kedzie / Brown (Painting) SBE</li> <li>• Kimball / Brown (Painting) SBE</li> <li>• Damen / Pink (Painting) SBE</li> <li>• 18th / Pink (Painting) SBE</li> <li>• Polk / Pink (Painting) SBE</li> </ul>	Completed Completed Completed Scheduled Scheduled Scheduled Scheduled Scheduled Scheduled Scheduled Scheduled Scheduled Scheduled

**Delay Explanation:**

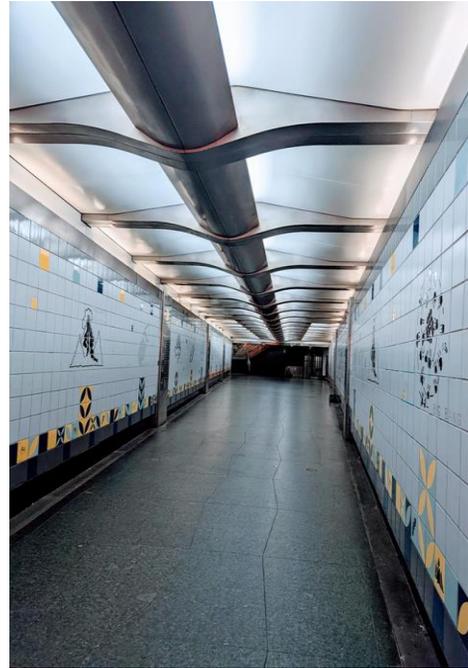


# Project Title: Refreshed & Renewed

**Before**



**After**



**Roosevelt/Red/Orange/Green Line – LED Replacement**



# Project Title: Refreshed & Renewed

**BEFORE**



**After**



**Roosevelt/Red/Orange/Green Line – Elevator  
LED Replacement**



# Project Title: Refreshed & Renewed

**Before**



**After**



**Roosevelt/Red – LED Replacement, Column Painting  
and Power Washing of Platform Floor**



# Project Title: Refreshed & Renewed

**Before**



**After**



**Roosevelt/Red/Orange/Green Line – LED Replacement,  
Column Painting and Power Washing of Platform Floor**

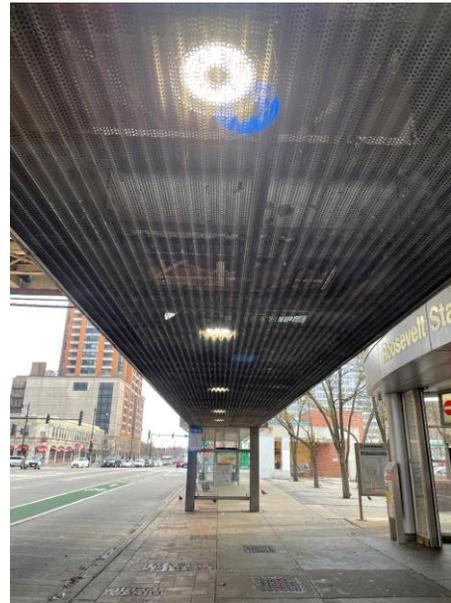


# Project Title: Refreshed & Renewed

**Before**



**After**



**Roosevelt/Red/Orange/Green Line – Addition of LED lightening under the bus stop canopy**



# Project Title: Refreshed & Renewed

Before



After



**Cermak Chinatown/Red Line – Back light CTA Logo and add red accent lighting below canopy**



# Project Title: Refreshed & Renewed

**Before**



**After**



**Cermak Chinatown/Red Line – Removed irrigation lines, added new soil & mulch to planters for Spring planting**



# Project Title: Refreshed & Renewed

**Before**



**After**

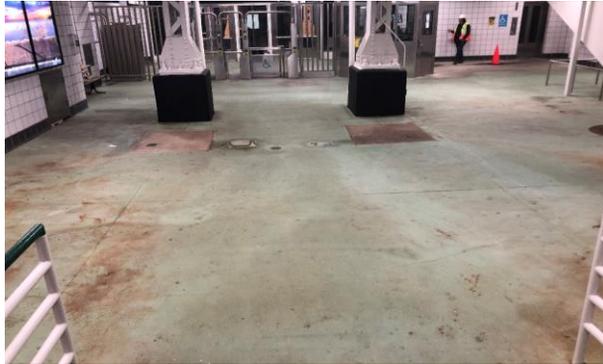


**51st/Green Line – Convert under the structure  
lighting to LED**



# Project Title: Refreshed & Renewed

**Before**



**After**



**51<sup>st</sup>/Green Line – Paint station floor with grey epoxy paint**



# Project Title: Refreshed & Renewed

**Before**



**After**



**51<sup>st</sup> Green Line – Relocate dumpsters from front of station  
To across the street and add bike racks**



# Project Title: Refreshed & Renewed

**Before**



**After**



**51<sup>st</sup> Green Line – New location of dumpster  
Added concrete pad and fencing with privacy slats**



# Project Title: Refreshed & Renewed

**Before**



**After**



**47<sup>th</sup> Red Line – Install directional flood lightening on steel structure to illuminate bus stop waiting area**



## Project Title: Refreshed & Renewed



**Convert Artistic Overpass Canopy Light Fixtures to LED for an Illuminated Crosswalk and Artwork Showcase**



# Project Title: Refreshed & Renewed

**Before**



**After**



**47<sup>th</sup> Red Line – New LED wall pack lightening installed, and back lightening added to signage for better station visibility**



# Project Title: Refreshed & Renewed

**Before**



**After**



**Clark & Lake Blue Line – Removal of granite staircase  
and installation of new stairs**



# Project Title: Refreshed & Renewed

**Before**



**After**

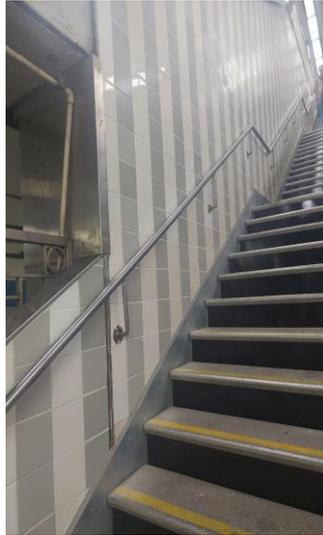


**Clark & Lake Blue Line – Removal of granite staircase and installation of new stairs**



# Project Title: Refreshed & Renewed

After



**Clark & Lake Blue Line – Removal of granite staircase and installation of new stairs.**



# Project Title: RPM Phase One – Design-Build Contract

<b>Justification of Need:</b>	The RPM Phase One Project is greatly needed in order to expand capacity on CTA's most utilized rail line and to replace aging infrastructure.	
Priority of Project:	High	
Total Project Budget:	\$ 2.1 Billion (excludes Transit TIF interest payments)	
Construction Contract Value:	Original - \$1,272,275,929    Current - \$1,268,818,121	
Earned to Date:	57.5%	
Percent Change Orders to Construction Contract:	-0.27%	
Percent Time Used:	68%	
DBE:	Design: Goal: 20% / Commitment: 20.64% Construction Goal: 20% / Commitment: 20% Workforce Goals: 10% WIOA / 15% Apprentice / 35% EDA	Contractor is on track to meet the DBE goal
Funding Source:	CTA Financing, FTA Core Capacity Grant, CMAQ, TIFs	
NTP / Construction Start / Estimated Completion:	February 8, 2019 / October 2019 / 2025	
Design-Build Contractor:	Walsh-Flour Design-Build Team	
Owners Representative:	Elevated Solutions Partners	
<b>Detailed Overview of Scope:</b>	RPM Phase One consists of the following elements that will allow CTA to expand service along the Red and Purple lines:	
	<ul style="list-style-type: none"> <li>• Lawrence to Bryn Mawr Modernization (LBMM) – complete reconstruction and addition of ADA accessibility at four Red Line stations (Lawrence, Argyle, Berwyn, and Bryn Mawr) and reconstruction of 6 miles of track, structures, and viaducts from Leland Ave. to Ardmore Ave.</li> <li>• Red-Purple Bypass (RPB) - Construction of a grade-separated bypass for the Brown Line at Clark Junction, just north of Belmont Ave. Includes realignment and reconstruction of 1.4 miles of mainline tracks and structure between Belmont station and south of Cornelia Ave.</li> <li>• Corridor Signal Improvements (CSI) – Installation of new higher-capacity signal system on 23 miles of track between Belmont and Howard stations.</li> </ul>	



# Project Title: RPM Phase One – Design-Build Contract

Phase	Description	Status
<b>Administrative / Design:</b>  <b>Construction:</b>	<ul style="list-style-type: none"> <li>▪ Continued submittal/revisions of required management plans</li> <li>▪ Continued Design Development in support of Red-Purple Bypass, Lawrence to Bryn Mawr Modernization, and Corridor Signal Improvements</li>   <li>▪ Pre-Stage Work               <ul style="list-style-type: none"> <li>– Punchlist work</li> </ul> </li>   <li>▪ Red-Purple Bypass (RPB).               <ul style="list-style-type: none"> <li>– Ravenswood structure rehabilitation</li> <li>– Clark Relay House electrical distribution equipment installation</li> <li>– Drilled Shaft Stage 2</li> <li>– Construction of concrete columns and caps</li> <li>– Pre-cast beam installation</li> <li>– North Mainline Stage 2 closed deck installation</li> <li>– Construction of signal and traction power concrete ductbanks and risers</li> </ul> </li>   <li>▪ Lawrence to Bryn Mawr Modernization               <ul style="list-style-type: none"> <li>– Pre-cast Segment fabrication</li> <li>– Concrete columns and caps construction</li> <li>– Pre-cast Segment erection</li> <li>– Bryn Mawr and Argyle Temp Station (Stage B) Foundations</li> <li>– DF Track construction</li> <li>– Winona Relay House construction</li> <li>– Transition Bridge erection at Ardmore</li> <li>– Rail flash butt welding</li> </ul> </li>   <li>▪ Corridor Signal Improvements (CSI)               <ul style="list-style-type: none"> <li>– Signal network fiber installation and testing from Kenmore to Lakewood-Seminary and Southport</li> <li>– Cable bracket and fiber slack enclosure installation Loyola to Jarvis</li> <li>– Installation of snake tray and brackets for signal/comm cabling near Wilson Station</li> </ul> </li> </ul>	<p>Ongoing Ongoing</p> <p>Ongoing</p> <p>Ongoing Completed Ongoing Ongoing Ongoing Ongoing</p> <p>Ongoing Completed Ongoing Ongoing Ongoing Ongoing Ongoing</p> <p>Completed Ongoing Ongoing</p>
<b>Delay Explanation:</b>		



# Project Title: RPM Phase One – Design-Build Contract



## Red-Purple Bypass Pier Cap Concrete Pour



# Project Title: RPM Phase One – Design-Build Contract

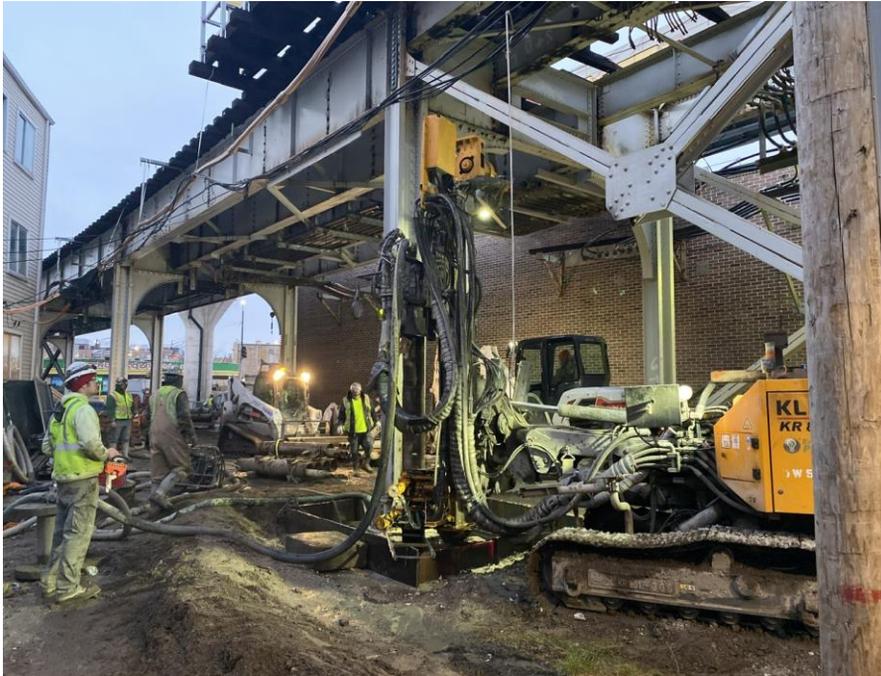


## Red-Purple Bypass Precast Beam Installation



# Project Title: RPM Phase One – Design-Build Contract

## Red-Purple Bypass Micropile Foundations for Ravenswood Rehabilitation

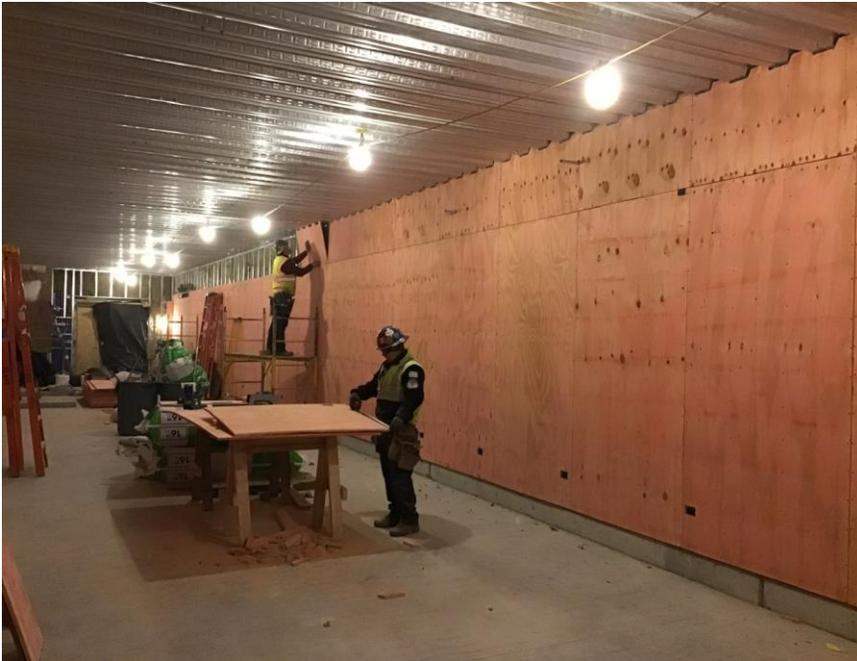




# Project Title: RPM Phase One – Design-Build Contract



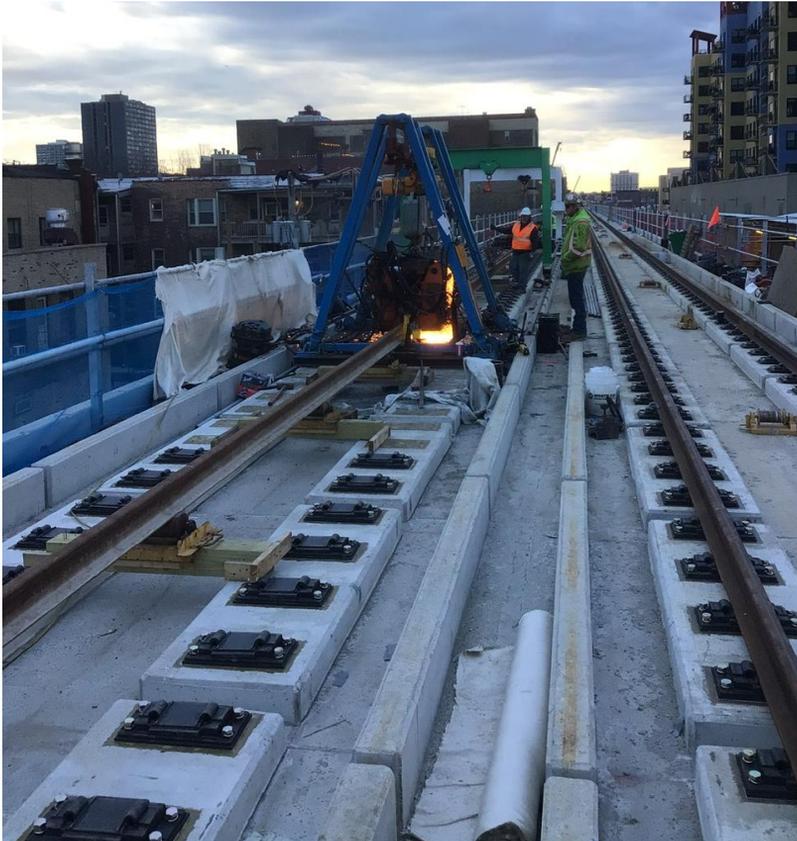
## Lawrence to Bryn Mawr Modernization Argyle Temporary Station Foundation Work



## Lawrence to Bryn Mawr Modernization Winona Relay House Plywood Panel Work



# Project Title: RPM Phase One – Design-Build Contract



## Lawrence to Bryn Mawr Modernization - Rail Installation



# Project Title: RPM Phase One – Design-Build Contract



## Lawrence to Bryn Mawr Modernization Segment Erection



# Project Title: RPM Phase One – Design-Build Contract

	Outreach type	Major Activities	Timing
Community	 <p data-bbox="194 670 454 725"><b>Going for a spin: Open for Business Facebook Live feature on Cirques Experience in Edgewater 11/17</b></p>	<ul data-bbox="551 295 1058 743" style="list-style-type: none"> <li>• Weekly Red-Purple Bypass Project updates for 44<sup>th</sup> ward</li> <li>• Lawrence to Bryn Mawr project updates for 48<sup>th</sup> ward</li> <li>• New “Enjoy Local” campaign launched</li> <li>• Roscoe-Newport neighbors construction briefing</li> <li>• Enjoy Local door-hanger distribution in RPM communities</li> <li>• Uptown United business and community ambassador programs discussion</li> <li>• Monthly “Virtual Office” answering constituent questions</li> <li>• Open for Business Facebook Live feature on “Cirques Experience” in Edgewater</li> <li>• Social media posts/video celebrating Red-Purple Bypass birthday</li> </ul>	<p data-bbox="1100 288 1162 306">Weekly</p> <p data-bbox="1100 334 1179 352">Bi-weekly</p> <p data-bbox="1100 380 1193 398">October 24</p> <p data-bbox="1100 425 1193 444">October 24</p> <p data-bbox="1100 471 1193 490">October 24</p> <p data-bbox="1100 517 1200 536">November 4</p> <p data-bbox="1100 585 1200 603">November 8</p> <p data-bbox="1100 631 1208 649">November 17</p> <p data-bbox="1100 698 1208 717">November 19</p>
Workforce & SBE/DBE	 <p data-bbox="182 1052 476 1085"><b>Trades Information Session at Malcom X College at 11/30</b></p>	<ul data-bbox="551 803 1058 1071" style="list-style-type: none"> <li>• Monthly DBE/Workforce Outreach &amp; Compliance Meeting</li> <li>• DBE and Workforce Numbers as of 11/30/2022</li> <li>• Dollars Awarded To Date: \$230,594,243               <ul data-bbox="644 893 936 936" style="list-style-type: none"> <li>• Unique DBE Firms To Date: 84</li> <li>• Unique Firms New to CTA: 32</li> </ul> </li> <li>• Total Labor Hours Produced: 1,038,535</li> <li>• Total Dollars Earned: \$60,312,935</li> <li>• Jobs created to date (construction trade labor on the design-build team): 1,731 individuals</li> </ul>	<p data-bbox="1100 812 1168 831">Ongoing</p>