Construction Project Briefing

January 9, 2019



Today's Presentation

- ELMI East Lake, Milwaukee, Illinois Substation Upgrade
- 95th Street Terminal Improvement Program
- Quincy Loop Station Upgrade
- Belmont and Jefferson Park Station Improvements (Blue Line)
- Garfield Green Station Renovation
- Red Purple Modernization Project



Justification of Need:	The existing traction power equipment at these substations is well past its useful life and needs to be replaced to assure reliable 600-volt DC traction power. Rehabilitate the substation buildings to a state of good repair.	
Priority of Project:	High	
Total Project Budget:	\$ 69M	
Construction Contract Value:	\$ 42.9M	
Earned to Date:	48.5%	
Percent Change Orders to Construction Contract:	0	
Percent Time Used:	60%	
DBE:	Goal: 20% / Commitment: 20% Contract is on track to meet the DBE goal Outreach events conducted: 2 (CTA)	
Funding Source:	CTA Bonds, RTA Bonds	
Estimated Start Date/Estimated Length of Project:	NTP: April 10, 2017; Substantial Completion March 8, 2020	
Designer of Record:	T.Y. Lin International	
Construction Manager/General Contractor:	STV	

Detailed Overview of Scope:

Rehabilitation of existing buildings and building envelopes to a state of good repair at East Lake, Milwaukee, and Illinois. Scope of work includes replacement of roof, tuck-pointing, hazardous material abatement, structural repairs and improvements, plumbing and mechanical repairs and improvements, and electrical repairs and improvements.

Replace existing AC/DC conversion equipment at all locations and getaway cables at East Lake.

Part of the scope of this project includes CTA purchasing 10 East Lake from ComEd.



Impact on Customers:	There will be minimum impact to CTA customers.
Benefit to System:	 Additional traction power capacity Reduced traction power related train defects Improved reliability for revenue service Improved safety
Benefit to Community:	Improved Reliability and Safety
Impact on Accessibility:	None
Estimated # of Jobs Created:	897 indirect, 188 direct
Customer Communication Need:	Construction activity notices will be provided to inform businesses and residents regarding temporary construction impacts (noise, dust, street/alley closures) throughout the project.

Comparable Projects:

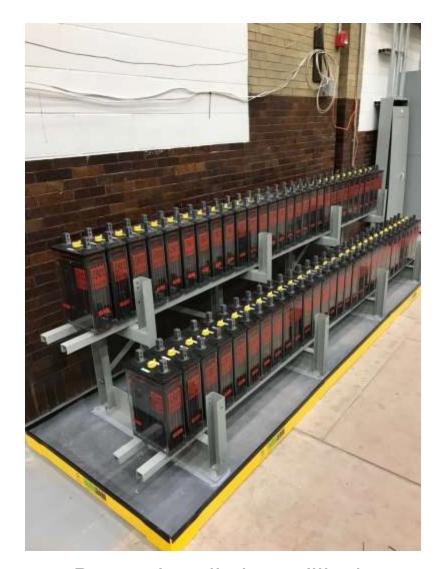
• Traction Power Systems Upgrades and Improvements Kimball, Princeton, and State Substation Projects.



Construction Progress

Phase	Description	Status
Construction		
	Traction power testing is ongoing at Illinois Substation.	Ongoing
	Traction power cable installation is ongoing at Illinois and Milwaukee Substation	Ongoing
	Final building repairs are being completed at Illinois and Milwaukee Substations	Ongoing
	All of the DC Switchgear is in service at Milwaukee Substation.	Completed
	Transformers, Rectifiers and AC Switchgear are being tested at Milwaukee Substation and placed in service.	Ongoing
	Demolition of existing traction power equipment is complete at Illinois and Milwaukee.	Completed
	Manufacturing of traction power equipment is in progress at East Lake Substation.	Ongoing
	Factory Acceptance Testing of traction power equipment at East Lake Substation is progressing.	Ongoing
	Tuckpointing, masonry, demo, and lead paint abatement is in progress at East Lake Substation.	Ongoing
N/A		

cta





Battery Installation at Illinois
Substation

Concrete Transformer Pads
Poured at Milwaukee Substation







Interior CMU Wall Installation at East Lake Substation



Priority of Project:	The terminal is functionally obsolete and does not allow for optimal bus operations and pedestrian flow. High
	High
Tatal Davis of Dudmat.	
Total Project Budget:	\$280 M
Construction Contract Value:	Advance Package 1: \$ 2,482,588 Advance Package 2: \$24,697,210 Main Terminal Contract: \$188,395,277
Earned to Date:	Advance Package 1: 100% Advance Package 2: 100% Main Terminal Contract: 88%
Percent Change Orders to Construction Contract:	Advance Package 1: (0.3%) Advance Package 2: 7% Main Terminal Contract: 4.7%
Percent Time Used:	Advance Package 1: 100% Advance Package 2: 100% Main Terminal Contract: 100%
DBE:	Advance Package 1: Goal: 30% / Commitment: 35.19% / Final Attainment*: 37.26% Advance Package 2: Goal: 30% / Commitment: 30% / Final Attainment*: 37.80% Main Terminal Contract: Goal: 27% / Commitment: 27% Contract is on track to meet the DBE goal Outreach events conducted: 8 *Attainment is based on progress payments and may vary over the life of the project
Funding Source:	Federal, State, Bond

Estimated Start Date/Estimated Length of Project:	Main Terminal Contract: NTP: Nov 24, 2015; North Terminal – Terminal operational December 30, 2018.
AP1/AP2 Construction Manager/General Contractor:	Walsh / II in One JV
Main Terminal Contractor:	F.H. Paschen / Milhouse JV
Owners Representative:	Jacobs/SQN JV

Detailed Overview of Scope:

The 95thTerminal Improvement Project will create new South and North terminal buildings at 95th on the Dan Ryan Red Line. The new terminal buildings will create a functional and efficient intermodal facility to enhance bus service and improve pedestrian safety. Scope includes the replacement and expansion of the terminal and platform and the addition of bus and pedestrian bridges. New administrative office space will be built and new bus bays will be provided around the terminal buildings.



Impact on Customers:	Track closures and weekend station closures during construction. Temporary relocation of certain bus operations to nearby streets during construction phasing.
Benefit to System:	Improved customer circulation and safety by relieving congestion. Improved bus service and improved pedestrian safety.
Benefit to Community:	Improved pedestrian safety with new pedestrian bridge over 95 th Street, longer train platform extending to the new South Terminal Building.
Impact on Accessibility:	New south and north terminal buildings with improved accessible routes to buses.
Estimated # of Jobs Created:	3,640 indirect, 762 direct
Customer Communication Need:	Requires periodic track closures and possible station closures with bus shuttle service. Bus Operations may be relocated to adjacent streets during certain phases of construction.

Comparable Projects:

Wilson Station

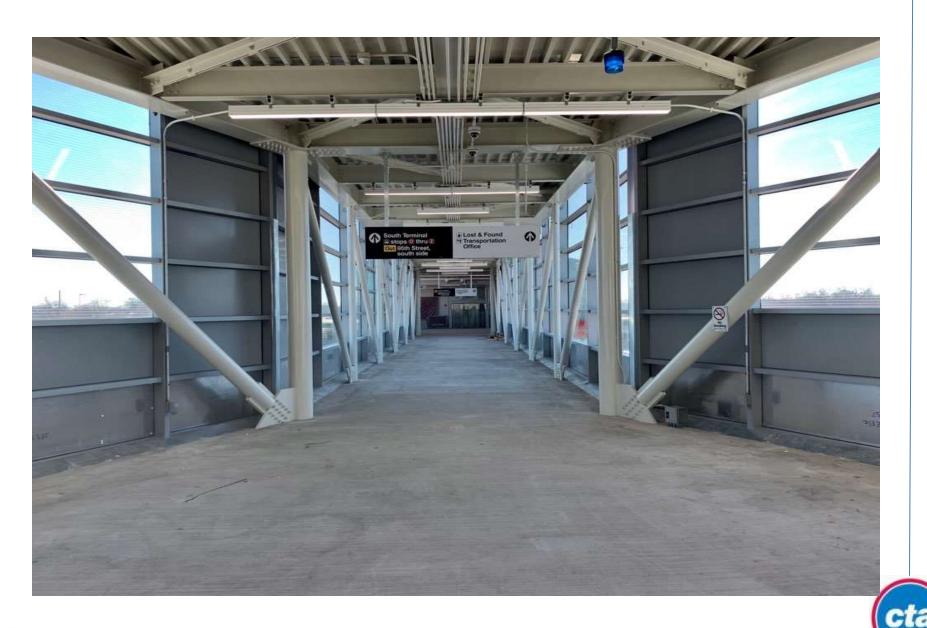


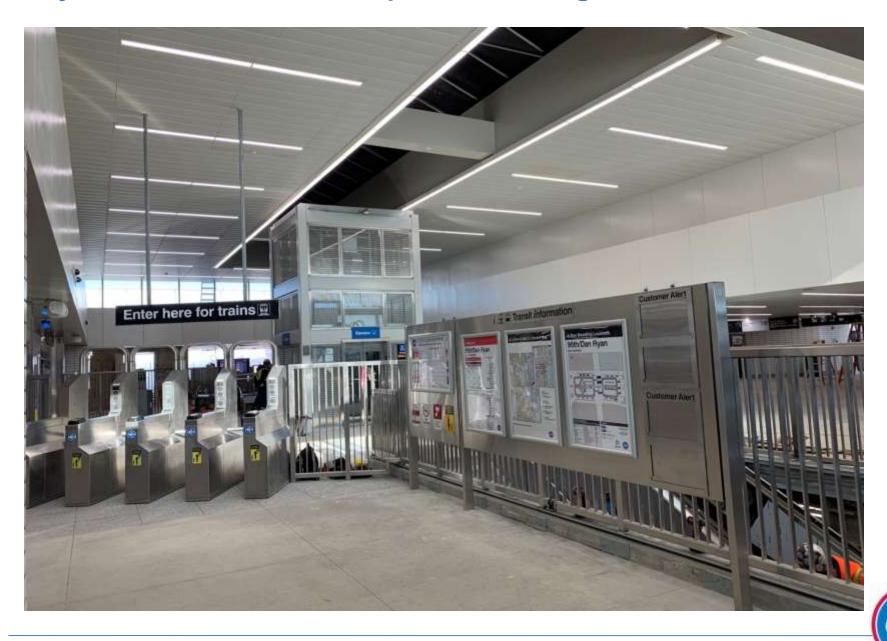
Construction Progress

Phase	Description	Status
Construction	 South Terminal: Various punchlist work is ongoing. 	Ongoing
	 North Terminal Building: Interior room and wall construction is complete. Buildout of the interior concourse level continues; wall finishes, painting, granite flooring, and wayfinding signage installation is ongoing. Red ribbon metal panel installation is nearly complete. Electrical conduit/wire rough-ins and plumbing installation at the concourse level and platform level is ongoing. Escalator and elevator city inspection is complete Pedestrian Bridge structural slab and roofing complete; curtain wall and red ribbon metal panel installation is ongoing. Communications devices such as cameras, speakers, phones, and digital 	Complete Ongoing Ongoing Ongoing Complete Ongoing Ongoing
	 North Terminal Bus Area: Site area fencing installation is complete. Bus canopy panel installation is ongoing; electrical and communication device installation is ongoing. Bus shelters and bus supervisor kiosk installation is ongoing. Bus movement testing is complete, bus bay assignments finalized, and CTA Bus Operator training for the new terminal is ongoing. 	Complete Ongoing Ongoing Ongoing
	 96th Interlocking work continues; testing and commissioning expected to be complete Q1 2019 allowing for full operational service 	Ongoing
Delay Explanation:		
N/A		

cta









Justification of Need:	The Station is not currently accessible. The project will provide another accessible Loop station, as well as provide additional repairs and improvements throughout the station.	
Priority of Project:	High	
Total Project Budget:	\$18M	
Construction Contract Value:	\$11.7M	
Earned to Date:	86%	
Percent Change Orders to Construction Contract:	0	
Percent Time Used:	100%	
DBE:	Goal: 30%, Commitment: 30% Contract is on track to meet the DBE goal Outreach events conducted: 1 (CTA)	
Funding Source:	TIF, CTA Bonds	
Estimated Start Date/Estimated Length of Project:	NTP: July 27, 2016; Contract substantial Completion, February 1, 2018 (Actual projected – 4 th Qtr. 2018)	
Designer of Record:	Exp US Services	
Construction Manager/General Contractor:	Parsons Brinckerhoff/Ragnar Benson Construction, LLC	

$\textbf{Detailed Overview of Scope:} \ \ \textbf{The station will include the following features:}$

- Two (2) new Elevators with connection bridges to stationhouses.
- One new exit stair.
- · New electrical service.
- New and upgraded Electrical fixtures.
- · Painting upgrades.
- · Replacement of existing wood floors with new tile floors at both stationhouses.



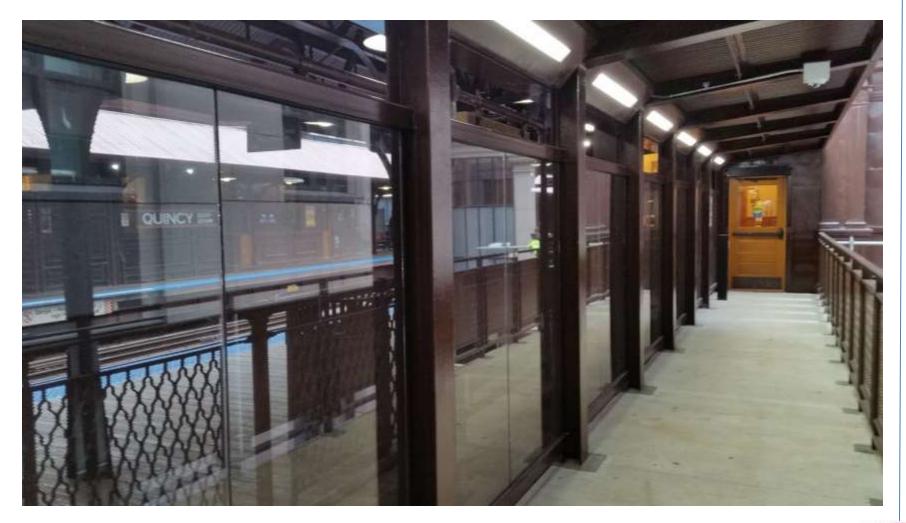
Project Title: Quincy Loop Station UpgradeConstruction Progress

Phase	Description	Status
Construction	Street Level, East Side:	
	East elevator is completed and opened for service.	Completed
	Elevated connection bridge walkway build out is completed and opened for service.	Completed
	East elevator control closet roof installation continues.	Ongoing
	City elevator inspection punch list correction items continues.	Ongoing
	Street Level, West Side:	
	West elevator is completed and opened for service	Completed
	Elevated connection bridge walkway build out is completed and opened for service.	Completed
	West elevator control closet roof installation continues	Ongoing
	Other planned activities:	
	Electrical conduit /wiring installation throughout the station continues.	Ongoing
	New janitor closets build out continues with doors and panel installation.	Ongoing
	New drop metal ceiling installation and lighting at mezzanine level completed.	Completed
	New station access ADA doors installation are completed and opened for service.	Completed
	New exit stair build out is completed and opened for service.	Completed
	Street site work, light poles, concrete sidewalk and curbs continues	Ongoing
	Exit stairs, railings, barriers and gates build out continues.	Ongoing

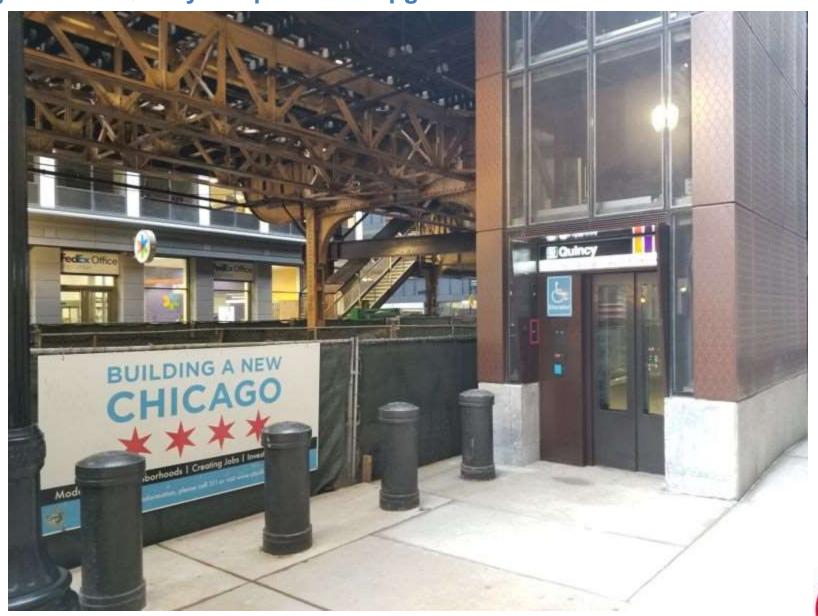
















Justification of Need:	Most elements of the Belmont and Jefferson Park Stations have not experience major renovation or updating since being built in 1970. In order to bring both stations to a state of good repair, upgrades are required. In addition, Jefferson Park Bus Terminal will be brought up to current ADA standards.	
Priority of Project:	High	
Total Project Budget:	\$ 42.2 M	
Construction Contract Value:	\$ 30.8 M	
Earned to Date:	36% (thru Nov)	
Percent Change Orders to Construction Contract:	0	
Percent Time Used:	66%	
DBE:	Goal: 30% / Commitment: 30% Contract is on track to meet the DBE goal Outreach events conducted: 2 (CTA HQ and Community First Hospital)	
Funding Source:	CTA PBV, CTA Bonds, RTA Bonds, IDOT, FTA, TIF, TIFIA	
Start Date/Length of Project:	NTP: October 16, 2017; Substantial completion Belmont & Jefferson Park Rail Stations: December 31, 2018; Substantial completion Belmont Bus turnaround and canopy; 1st quarter 2019; and Substantial completion Jefferson Park Bus Terminal: July 8, 2019	
Designer of Record:	EXP	
Construction Manager/General Contractor:	Parsons Brinckerhoff/Walsh Construction	

Overview of Scope: Both the Belmont and Jefferson Park Stations will be brought to a state of good repair. Scope of work includes electrical and lighting upgrades, floor replacements, sidewalk repair, updated signage, wall repairs, water mitigation, and improved customer amenities. Belmont will also receive a Gateway Canopy element that will invoke a sense of community and protect customers from the elements. Jefferson Park Bus terminal will be brought to current ADA standards via larger bus islands, improved lighting and signage, and repaired pavement and sidewalks.



	-
Impact on Customers:	 8 Weekend Station Closures at Belmont Belmont Bus Turnaround Closed up to 90 Days for Construction 8 Weekend Single Tracks 45 Nightly Single Tracks Longitudinal Partial Platform Closures: 3 weeks each side at Belmont and Jefferson Park One half of Jefferson Park Bus Terminal Closed at a time (Bus stops temporarily relocated) during terminal construction
Benefit to System:	Extensive renovations to both stations. Jefferson Park Bus Terminal will meet current ADA standards.
Benefit to Community:	Improved reliability, safety and accessibility
Impact on Accessibility:	Improves accessibility in the Jefferson Park Bus Terminal.
Estimated # of Jobs Created:	546 indirect, 114 direct
Customer Communication Need:	Construction activity notices and customer notices will be needed to alert customers, businesses and residents to weekend and night work occurrences. Extensive communication will be required for weekend closures, extended partial platform closures, and bus terminal closures.

Comparable Projects:

• O'Hare Line – Addison, Irving Park, Montrose, Harlem, and Cumberland Station Renovations



Construction Progress

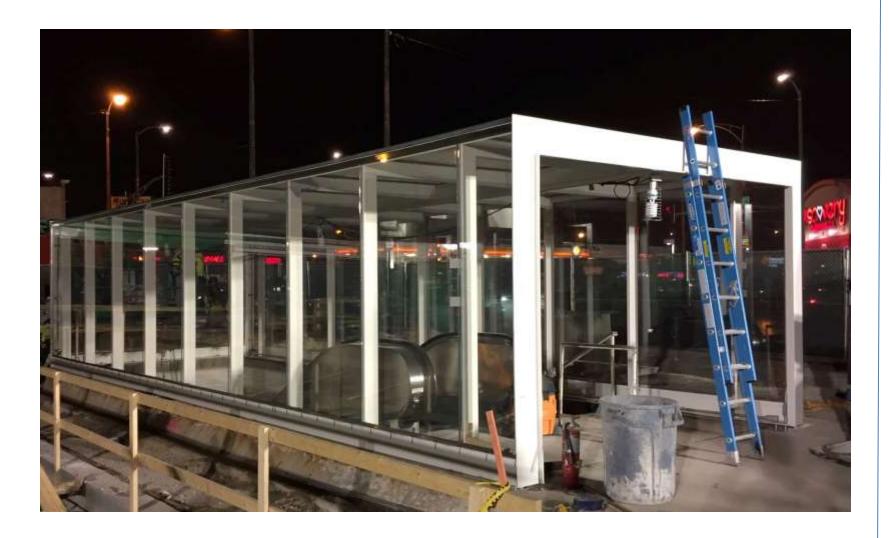
Phase	Description	Status
Design	Achieve Final Design	Complete
Construction	Topping Slab Replacement at Belmont Platform	Complete
	Construction at Belmont Station	Ongoing
	Installation of Belmont Gateway Canopy	Ongoing
	Topping Slab Replacement at Jefferson Park Rail Station	Complete
	Construction at Jefferson Park Rail Station	Complete
	Construction at North Half of Jefferson Park Bus Terminal.	Ongoing
	Construction at South Half of Jefferson Park Bus Terminal.	Planned

Delay Explanation:	

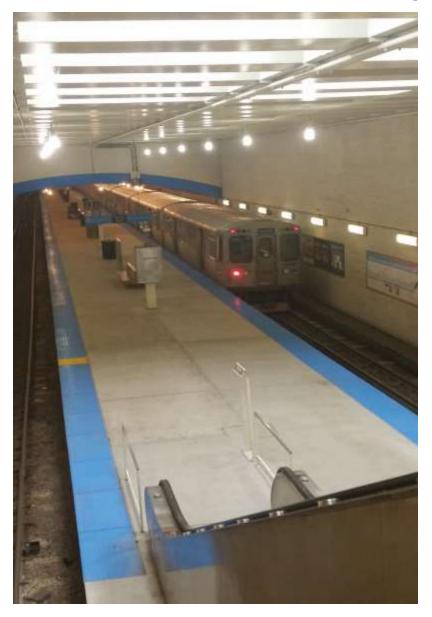














Justification of Need:	The purpose of the project is to upgrade and enhance The Garfield Gateway, as well as create a transit gateway to the community. The project will increase pedestrian access and flow at the operational station with a variety of streetscape improvements, including crosswalk enhancements, new lighting, bike racks, landscaping, and traffic control devices. Also, the original historic landmark street level station will be refurbished.
Priority of Project:	High
Total Project Budget:	\$42 M
Construction Contract Value:	25,978,000
Earned to Date:	40% (Thru Oct.)
Percent Change Orders to Construction Contract:	0%
Percent Time Used:	91.1%
DBE:	DBE Goal: 30% Contract is on track to meet the DBE goal Outreach events conducted: 2 (CTA HQ & Arts Incubator)
Estimated Start Date/Estimated Length of Project:	NTP: October 25, 2017 Substantial Completion: January 8, 2019
Designer of Record:	Walsh Construction Company / Exp US Services
Construction Manager / Owners Representative:	Arcadis

Detailed Overview of Scope:

This Project will bring elements of Garfield Station and the historic station to a state of good repair and enhance the aesthetics of the station. A new platform slab will be installed along with new furniture, signage, and mid-platform exit stairs. A new canopy will be placed that extends to an 8 car length and will have new LED light fixtures and new speakers. The historic track structure will be painted and new access stairs will be installed. The operational stationhouse will be refinished, a new escalator to the southbound tracks will be installed, and existing elevators will be improved. Street level improvements include bike lanes, a new bus stop configurations, and a new walkway.



Impact on Customers:	 Track Occurrences 30 Nightly Single Tracks Maximum 6 Weekend Line cuts Operational Stationhouse Closure 90 day closure of operational stationhouse. (Once temp. station is complete) 14 day platform closure: per platform. (Back riding on each side) Construction of temporary stationhouse just north of stationhouse. 	
Benefit to System:	Increased reliability and safety for customers, rail and bus operations.	
Benefit to Community:	The overall aesthetics of the Garfield station, historic station, and the track structure will be improved. New LED light fixtures, platform furniture, speakers and communications, and midplatform exit stairs will also be added. There will also be improvements to the streetscape (bus stop, landscaping) and the parking lot.	
Impact on Accessibility:	The current elevator will be improved and a new escalator will be added to the Southbound tracks. New speakers and new signage.	
Estimated # of Jobs Created:	114 indirect, 546 direct	
Customer Communication Need:	Construction Activity Notices regarding construction-related impacts.	

Comparable Projects:

Quincy Loop Station Upgrade

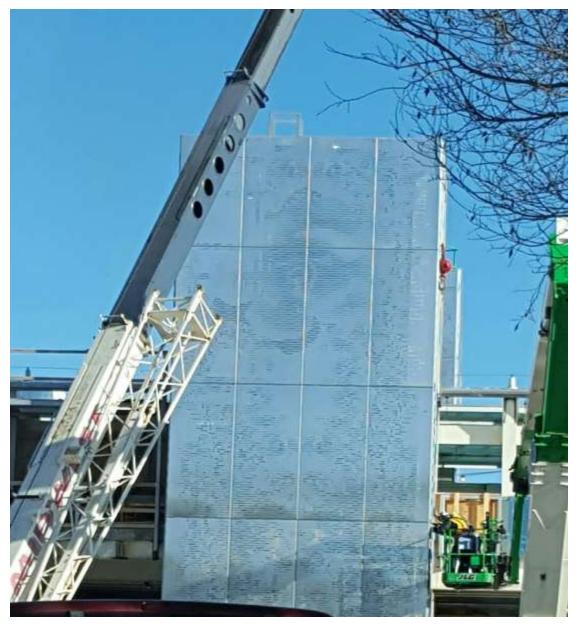


Construction Progress

Phase	Description	Status
Construction		
	Platform canopy Installation.	Completed
	Platform topping removal and replacement.	Completed
	Painting historic track structure.	Ongoing
	Operational stationhouse demolition.	Completed
	Northside of Garfield sidewalk demolition.	Completed
	Operational stationhouse gypsum board ceiling installation.	Completed
	Installed granite flooring in the station house.	Completed
	Installed west escalator truss and stairs.	Completed
	Installation of elevator exterior cladding frames.	Ongoing
	Installation of elevator cabs.	Ongoing
	Historic station house interior structural repairs.	Ongoing
	Paint removal from exterior of historic station house and masonry restoration.	Ongoing
	Installation underground sewer utilities.	Ongoing

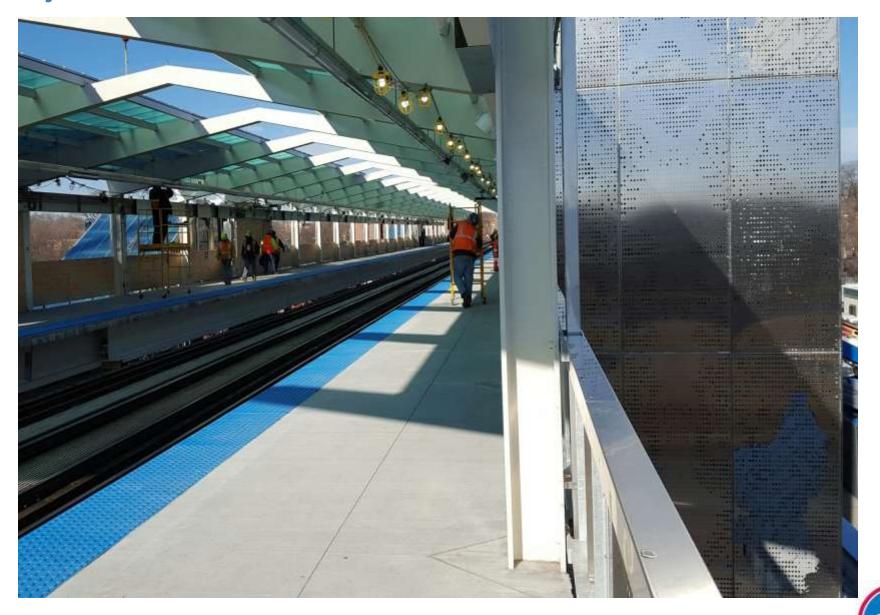








Project Title: GARFIELD GREEN STATION RENOVATION





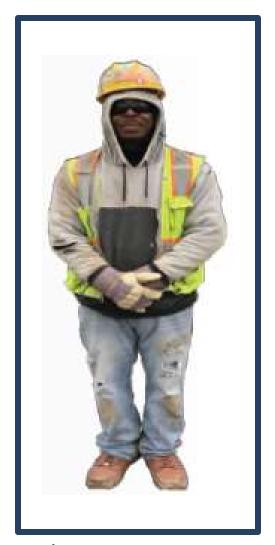
Garfield Green Line Station: Workforce Goals and Current Attainment

Category	Goal (% of total labor hours)	Current Attainment (% of hours completed as of 1/3/2019)
Workforce Investment Opportunity Act (WIOA) (Disadvantaged individuals)	10%	21%
Union Apprentice	10%	13%
City of Chicago Residency	50%	54%
Neighborhood Footprint	7.5%	21%

MICHAEL NEAL

- Carpenter
- Resident of Chicago's Englewood neighborhood

JEFFREY LANE



- Laborer
- Veteran
- Resident of Chicago's Washington Park neighborhood.

ALEXIS COBB



- Carpenter
- Mother
- Resident of Chicago's Washington Park neighborhood.

Justification of Need:	 Advance Utility Relocation to relocate utilities in conflict with future RPM Phase One construction. Demolition Work Orders: Two Mid-Con Work Orders to demolish buildings at 18 parcels to facilitate future RPM Phase One Construction. 		
Priority of Project:	High		
Total Project Budget:	 Additional support costs as part of RPM Phase One Project Budget of \$2.2B Advance Utility Relocation: \$35,000,000 per Ordinance No. 017-53 Demolition: \$4,380,195 Construction Contract Value 		
Construction Contract Value:	 Advance Utility Relocation: \$14,388,661 (Work Orders Authorized as of 11/20/18) Demolition: \$4,380,195 		
Earned to Date:	 Advance Utility Relocation: 39% (ComEd ductbank), 25% (all work) Demolition: 63% 		
Percent Change Orders to Construction Contract:	Advance Utility Relocation: N/ADemolition: 0%		
Percent Time Used:	Advance Utility Relocation: 42%Demolition: 100%		
DBE:	 Advance Utility Relocation: CTA Diversity continues to work with Utilities to provide opportunities for DBEs and other diverse contractors. Demolition: Work Orders are on track to meet the DBE goals of 30% 		
Funding Source:	CTA Bonds, FTA Core Capacity Grant, CMAQ, TIFs		
Estimated Start Date/Estimated Length of Project:	 Advance Utility Relocation NTP: 06/25/18 (373 days) Planned Substantial Completion: 07/02/19 Demolition NTP: 01/16/18 (322 Days) Planned Substantial Completion: 01/25/19 (Contractor notified of potential Liquidated Damages) 		



Designer of Record:	 Advance Utility Relocation: Relevant Utility Agency Demolition: CTA
Construction Manager/General Contractor:	 Advance Utility Relocation: CM= WSP; GCs = Relevant Utility Agency or Contractor Demolition: CM = WSP; GCs = ICC Group Inc. and John Burns Construction

Detailed Overview of Scope:

- Advance Utility Relocation: Relocate underground and overhead facilities ahead of track and station construction.
- Demolition: Demolish properties needed for RPM Phase One ahead of track and station construction.



Periodic flagging activities while poles being set/removed.
Flagging and Track Impacts during select demolition activities.
Reduces risk and duration for the future RPM Phase One Design-Build Project.
Reduces risk and duration for the future RPM Phase One Design-Build Project.
None
N/A
Construction Activity Notices will be provided to inform businesses and residents regarding temporary construction impacts (noise, dust, street/alley closures) throughout the advance work.

Comparable Projects:



Construction Progress

Phase	Description	Status
Design	Advance Utility Relocation – Utilities are finalizing design and Work Orders.	Ongoing
Construction	Advance Utility Relocation – ComEd installing poles and duct bank.	Ongoing
	Demolition Package 1 –All work is substantially complete.	Complete
	Demolition Package 2 – Demolition work began on November 18, 2019 and will continue for several weeks until complete.	Ongoing
Close-Out	Demolition Package 1 - Review of submittals of warranties and as-built drawings.	Ongoing

Delay	Fxn	lana	tion:
Delay	LVA	iaiia	uon.

N/A



Project Title: RPM Advance Utility Work and Property Demolition

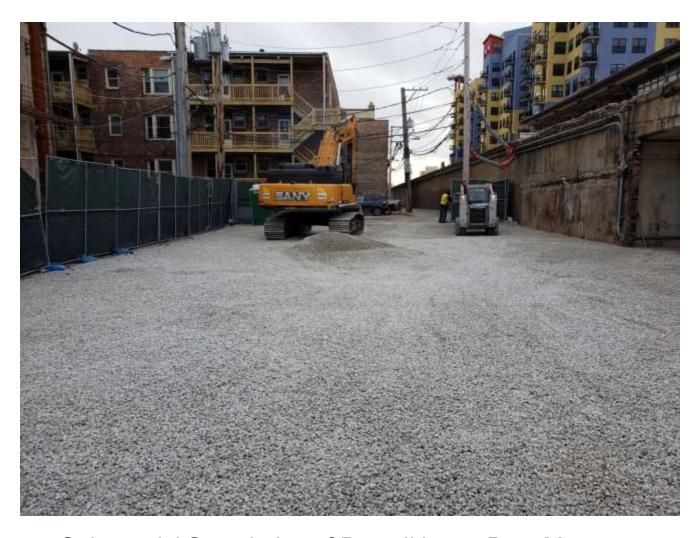




Setting Manhole South of Balmoral (left) and Service Feed Pull on Roscoe (right)



Project Title: RPM Advance Utility Work and Property Demolition



Substantial Completion of Demolition at Bryn Mawr



Justification of Need:	The existing traction power equipment at these substations is well past its useful life and needs to be replaced to assure reliable 600-volt DC traction power. Rehabilitate the substation buildings to a state of good repair.
Priority of Project:	High
Total Project Budget:	\$25,954,699.00 (Part of RPM Phase One Project Budget of \$2.2B)
Construction Contract Value:	\$14,500,000.00
Earned to Date:	41%
Percent Change Orders to Construction Contract:	None at this time.
Percent Time Used:	63%
DBE:	Goal: 25% / Commitment: 25.17% Contract is on track to meet the DBE Goal Outreach events conducted: 1 (CTA HQ)
Funding Source:	CTA Bonds, FTA Core Capacity Grant, CMAQ, TIFs
Estimated Start Date/Estimated Length of Project:	NTP: August 2017; Substantial Completion: August 2019; (Length: 730 calendar days)
Designer of Record:	TY Lin
Construction Manager/General Contractor:	CM = STV; GC = Clark Construction Group

Detailed Overview of Scope:

Replace Broadway Substation traction power equipment and rehabilitate various structural, architectural, civil, mechanical, plumbing, and electrical elements.



Impact on Customers:	None to minimum during construction. Infrequent Track Access Occurrences (Track Out of Service and Reroutes).
Benefit to System:	 Additional traction power capacity Reduced traction power related train defects Improved reliability for revenue service Improved safety
Benefit to Community:	Improved Reliability and Safety
Impact on Accessibility:	None
Estimated # of Jobs Created:	450 indirect and 95 direct
Customer Communication Need:	Construction Activity Notices will be provided to inform businesses and residents regarding temporary construction impacts (noise, dust, street/alley closures) throughout the project.

Comparable Projects:

- East Lake Substation (Loop and Adjacent Lines)
- Milwaukee Substation (Blue Line)



Construction Progress

Phase	Description	Status
Construction	Right-of-Way traction power cable replacement work, traction power equipment deliveries, and demolition, excavation, and replacement of remaining floor areas.	Ongoing
	Factory acceptance testing for the AC traction power equipment is complete and ready to be delivered to site.	Ongoing
	DC Gear scheduled to be delivered and installed during December	Ongoing

De	lav	Exp	olar	nati	on:

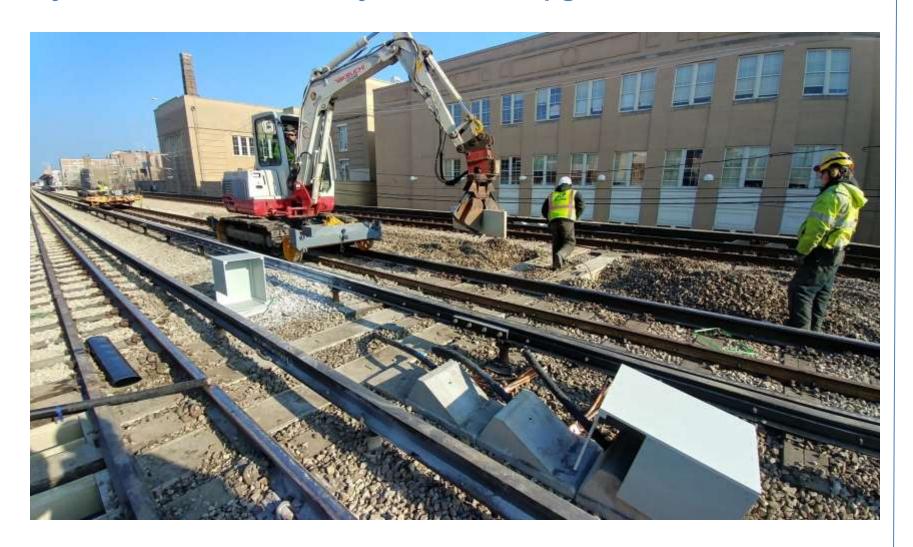
N/A





Installation of Bracket Supports for Cable Trays and Conduit





54-Hour Weekend Trackwork

