

Construction Project Briefing

February 13, 2019



Today's Presentation

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



Project Title: ELMI – East Lake, Milwaukee, Illinois Substation Upgrade

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:	52.3%
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.



Project Title: ELMI – East Lake, Milwaukee, Illinois Substation Upgrade

Impact on Customers:	There will be minimum impact to CTA customers.
Benefit to System:	<ul style="list-style-type: none">• 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.



Project Title: ELMI – East Lake, Milwaukee, Illinois Substation Upgrade

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> • Milwaukee Substation has achieved Substantial Completion. • Traction power testing is ongoing at Illinois Substation. • Traction power cable installation is completed at Illinois Substation • Final building repairs are being completed at Illinois. • Manufacturing of traction power equipment is in progress at East Lake Substation. • Factory Acceptance Testing of traction power equipment at East Lake Substation is progressing. • Tuckpointing, masonry, demo, and lead paint abatement is in progress at East Lake Substation. 	<p>Completed</p> <p>Ongoing</p> <p>Completed</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>

Delay Explanation:
N/A



Project Title: ELMI – East Lake, Milwaukee, Illinois Substation Upgrade



New Masonry Installation at East Lake Substation

Project Title: ELMI – East Lake, Milwaukee, Illinois Substation Upgrade



Metal Decking Installation at East Lake Substation



Project Title: 95th Terminal Improvement Program

Justification of Need:	The terminal is functionally obsolete and does not allow for optimal bus operations and pedestrian flow.
Priority of Project:	High
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: 91%
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



Project Title: 95th Terminal Improvement Program

Estimated Start Date/Estimated Length of Project:	Main Terminal Contract: NTP: Nov 24, 2015; South Terminal – operational April 15, 2018. North Terminal – Terminal operational December 31, 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 95th Terminal 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.



Project Title: 95th Terminal Improvement Program

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:
<ul style="list-style-type: none"> Wilson Station



Project Title: 95th Terminal Improvement Program

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> ▪ South Terminal: <ul style="list-style-type: none"> ▪ Various punchlist work is ongoing. ▪ Preparations for the final South Terminal building and platform reconfiguration activities are ongoing. ▪ North Terminal: <ul style="list-style-type: none"> ▪ North entrance area work is ongoing; red metal wall panel, ceiling, lights, speaker, and camera installation are ongoing. ▪ ComEd electrical feeder tie-in for concession spaces ongoing. ▪ North Bus Bridge bus canopy panel installation is ongoing; electrical and communication device installation is ongoing. ▪ Various punchlist work is ongoing. ▪ 96th Interlocking work continues; testing and commissioning expected to be complete early Q2 2019 allowing for full operational service 	<p>Ongoing Ongoing</p> <p>Ongoing</p> <p>Ongoing Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>
Delay Explanation:		
N/A		



Project Title: 95th Terminal Improvement Program



North Terminal North Entrance – Graffiti Film Installation



Project Title: 95th Terminal Improvement Program



North Terminal North Bus Bridge – Canopy Device Installation



Project Title: Belmont and Jefferson Park Station Improvements

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:	40% (thru Dec)
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; 1 st 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.



Project Title: Belmont and Jefferson Park Station Improvements

Impact on Customers:	<ul style="list-style-type: none"> • 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



Project Title: Belmont and Jefferson Park Station Improvements

Construction Progress

Phase	Description	Status
Design	<ul style="list-style-type: none">• Achieve Final Design	Complete
Construction	<ul style="list-style-type: none">• Topping Slab Replacement at Belmont Platform	Complete
	<ul style="list-style-type: none">• Construction at Belmont Station	Ongoing
	<ul style="list-style-type: none">• Installation of Belmont Gateway Canopy	Ongoing
	<ul style="list-style-type: none">• Topping Slab Replacement at Jefferson Park Rail Station	Complete
	<ul style="list-style-type: none">• Construction at Jefferson Park Rail Station	Complete
	<ul style="list-style-type: none">• Construction at North Half of Jefferson Park Bus Terminal.	Ongoing
	<ul style="list-style-type: none">• Construction at South Half of Jefferson Park Bus Terminal.	Planned

Delay Explanation:



Project Title: Belmont and Jefferson Park Station Improvements



Jefferson Park – Concrete Poured at North End



Project Title: Belmont and Jefferson Park Station Improvements



Belmont Canopy Steel



Project Title: Belmont and Jefferson Park Station Improvements



Belmont Canopy Shoring Assembly and Vent Shaft Rehabilitation



Project Title: Garfield Green Station Renovation

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:	68% (Thru Dec.)
Percent Change Orders to Construction Contract:	0%
Percent Time Used:	100%
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.



Project Title: Garfield Green Station Renovation

Impact on Customers:	<p>Track Occurrences</p> <ul style="list-style-type: none"> • 30 Nightly Single Tracks • Maximum 6 Weekend Line cuts <p>Operational Stationhouse Closure</p> <ul style="list-style-type: none"> • 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 mid-platform 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:	
<ul style="list-style-type: none"> • Quincy Loop Station Upgrade 	



Project Title: Garfield Green Station Renovation

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">• Painting historic track structure.• Installed winter protection tarp around the historic station.• Northside of Garfield sidewalk installation• Operational stationhouse decorative tile ceiling installation.• .Installed west escalator truss and stairs.• Installation of elevator exterior cladding frames.• Installation of elevator cabs.• Historic station house interior structural repairs.• Historic station house masonry harvesting• Installation underground sewer utilities.• Operational Stationhouse reopened January 10, 2019• Compiling Punch list.	Ongoing Completed Completed Ongoing Completed Completed Completed Ongoing Completed Ongoing Completed Ongoing
Delay Explanation:		
N/A		



Project Title: GARFIELD GREEN STATION RENOVATION



Garfield Opening - Ribbing Cutting Event



Project Title: GARFIELD GREEN STATION RENOVATION



Street Level Entrance



Project Title: GARFIELD GREEN STATION RENOVATION



East Elevator Tower



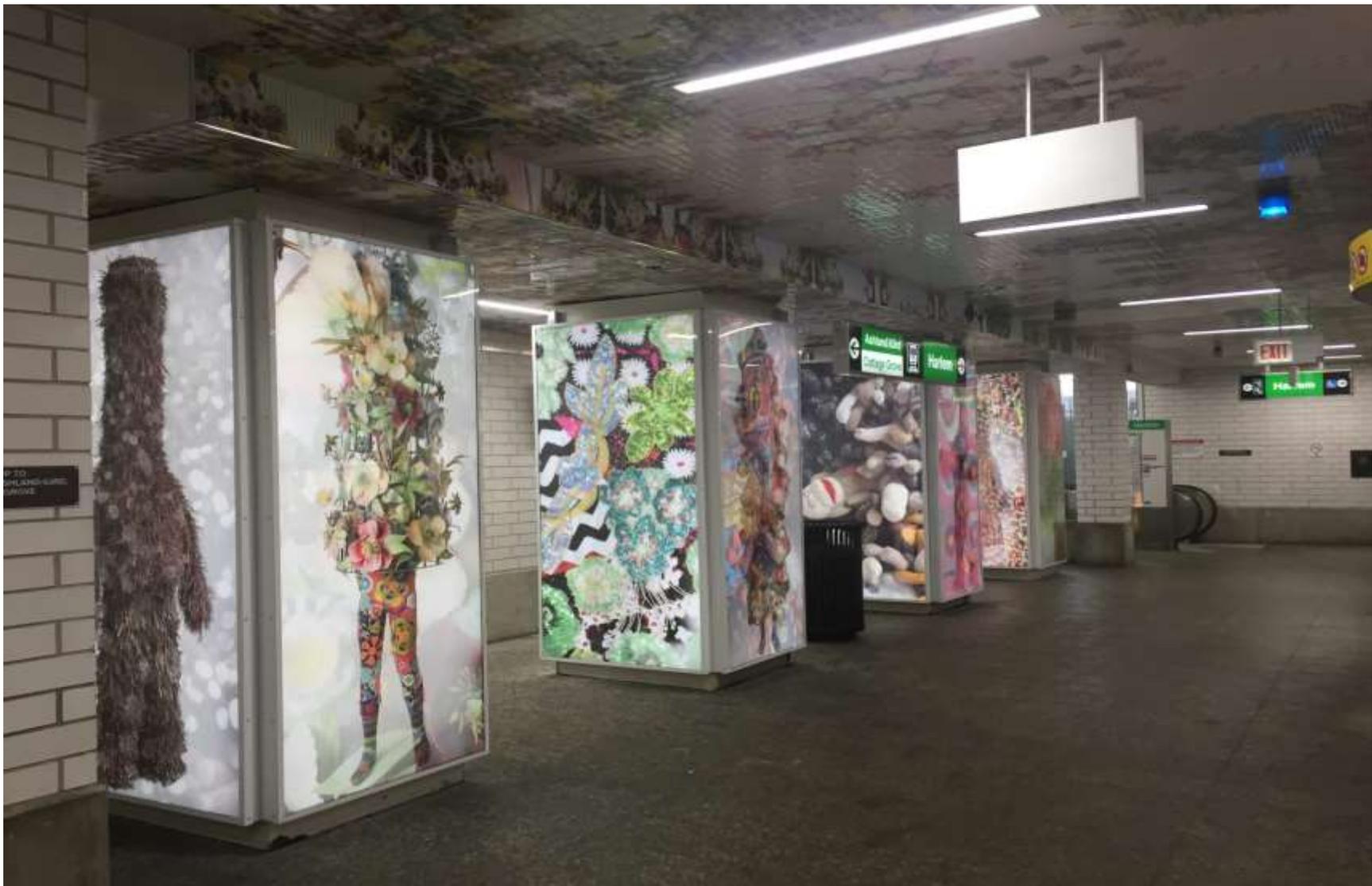
Project Title: GARFIELD GREEN STATION RENOVATION



West Elevator Tower



Project Title: GARFIELD GREEN STATION RENOVATION



Lenticular Panels – East View



Project Title: GARFIELD GREEN STATION RENOVATION



Station House Ceiling



Project Title: RPM Advance Contracts

Justification of Need:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • High
Total Project Budget:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • Advance Utility Relocation: \$14,776,549 (Work Orders Authorized (as of 01/24/19) • Demolition: \$4,380,195
Earned to Date:	<ul style="list-style-type: none"> • Advance Utility Relocation: 41% (ComEd ductbank), 30% (all work) • Demolition: 70%
Percent Change Orders to Construction Contract:	<ul style="list-style-type: none"> • Advance Utility Relocation: N/A • Demolition: 0%
Percent Time Used:	<ul style="list-style-type: none"> • Advance Utility Relocation: 50% • Demolition: 100%
DBE:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • CTA Bonds, FTA Core Capacity Grant, CMAQ, TIFs
Estimated Start Date/Estimated Length of Project:	<ul style="list-style-type: none"> • 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: 03/01/2019 (Contractor notified of potential Liquidated Damages)



Project Title: RPM Advance Contracts

Designer of Record:	<ul style="list-style-type: none">• Advance Utility Relocation: Relevant Utility Agency• Demolition: CTA
Construction Manager/General Contractor:	<ul style="list-style-type: none">• 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: <ul style="list-style-type: none">• 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.	

Project Title: RPM Advance Contracts

Impact on Customers:	<ul style="list-style-type: none">• Periodic flagging activities while poles being set/removed.• Flagging and Track Impacts during select demolition activities.
Benefit to System:	<ul style="list-style-type: none">• Reduces risk and duration for the future RPM Phase One Design-Build Project.
Benefit to Community:	<ul style="list-style-type: none">• Reduces risk and duration for the future RPM Phase One Design-Build Project.
Impact on Accessibility:	<ul style="list-style-type: none">• None
Estimated # of Jobs Created:	<ul style="list-style-type: none">• N/A
Customer Communication Need:	<ul style="list-style-type: none">• 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:

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Project Title: RPM Advance Contracts

Construction Progress

Phase	Description	Status
Design:	<ul style="list-style-type: none">• Advance Utility Relocation – Utilities are finalizing design and Work Orders.	Ongoing
Construction:	<ul style="list-style-type: none">• Advance Utility Relocation – ComEd installing poles and duct bank.• Demolition Package 1 –All work is substantially complete.• Demolition Package 2 – Demolition work began on November 18, 2018 and will continue for several weeks until complete.	Ongoing Complete Ongoing
Close-Out:	<ul style="list-style-type: none">• Demolition Package 1 - Review of submittals of warranties and as-built drawings.	Ongoing

Delay Explanation:

N/A



Project Title: RPM Advance Utility Work and Property Demolition



Manhole installation at Winona Street (left) and ComEd removal of overhead cables in Newport Alley (right)

Project Title: RPM Advance Utility Work and Property Demolition



East Wall exposure of Parcel 8 Demolition

Project Title: RPM Broadway Substation Upgrade

Justification of Need:	<ul style="list-style-type: none"> 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:	<ul style="list-style-type: none"> High
Total Project Budget:	<ul style="list-style-type: none"> \$25,954,699.00 (Part of RPM Phase One Project Budget of \$2.2B)
Construction Contract Value:	<ul style="list-style-type: none"> \$14,500,000.00
Earned to Date:	<ul style="list-style-type: none"> 52%
Percent Change Orders to Construction Contract:	<ul style="list-style-type: none"> None at this time.
Percent Time Used:	<ul style="list-style-type: none"> 69%
DBE:	<ul style="list-style-type: none"> Goal: 25% / Commitment: 25.17% Contract is on track to meet the DBE Goal Outreach events conducted: 1 (CTA HQ)
Funding Source:	<ul style="list-style-type: none"> CTA Bonds, FTA Core Capacity Grant, CMAQ, TIFs
Estimated Start Date/Estimated Length of Project:	<ul style="list-style-type: none"> NTP: August 2017; Substantial Completion: August 2019; (Length: 730 calendar days)
Designer of Record:	<ul style="list-style-type: none"> TY Lin
Construction Manager/General Contractor:	<ul style="list-style-type: none"> 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.



Project Title: RPM Broadway Substation Upgrade

Impact on Customers:	<ul style="list-style-type: none">• None to minimum during construction.• Infrequent Track Access Occurrences (Track Out of Service and Reroutes).
Benefit to System:	<ul style="list-style-type: none">• Additional traction power capacity• Reduced traction power related train defects• Improved reliability for revenue service• Improved safety
Benefit to Community:	<ul style="list-style-type: none">• Improved Reliability and Safety
Impact on Accessibility:	<ul style="list-style-type: none">• None
Estimated # of Jobs Created:	<ul style="list-style-type: none">• 450 indirect and 95 direct
Customer Communication Need:	<ul style="list-style-type: none">• 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)



Project Title: RPM Broadway Substation Upgrade

Construction Progress

Phase	Description	Status
Construction:	• DC Gear Installed and Tested	Ongoing
	• AC Gear Installed and Tested	Ongoing
	• Rectifier Transformer Line Up #2 Installed	Ongoing
	• Traction Power Cable Work Continued	Ongoing

Delay Explanation:

N/A



Project Title: RPM Broadway Substation Upgrade



AC and DC Gear Installed and Tested

Project Title: RPM Broadway Substation Upgrade



Rectifier Transformer Line Up #2 Installed

Lake Shore Drive Assistance

