

Construction Project Briefing

October 11, 2017



Today's Presentation

- **95th Street Terminal Improvement Program**
- **Wilson Transfer Station, Track, and Structure Reconstruction**
- **Ravenswood Loop Signals Upgrade Project**
- **Illinois Medical District (IMD) Rehabilitation Project**
- **Quincy Loop Station Upgrade**
- **ELMI – East Lake, Milwaukee, Illinois Substation Upgrade**



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: \$180,000,000
Earned to Date:	Advance Package 1: 100% Advance Package 2: 96% Main Terminal Contract: 31%
Percent Change Orders to Construction Contract:	Advance Package 1: (0.3%) Advance Package 2: 7% Main Terminal Contract: 0%
Percent Time Used:	Advance Package 1: 100% Advance Package 2: 100% Main Terminal Contract: 61%
DBE:	Advance Package 1: Goal: 30% / Commitment: 35.19% / Current Attainment*: 37.26% Advance Package 2: Goal: 30% / Commitment: 30% / Current Attainment*: 31.79% 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:	Advance Package 1: NTP Issued June 6, 2014 / 180 days Advance Package 2: NTP Issued July 24, 2014 / 661 days Main Terminal Contract: NTP Issued Nov 24, 2015 / 1118 days
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
<p>Close-out Advance Package 2: Dan Ryan Retaining Walls</p>	<ul style="list-style-type: none"> ▪ CTA issued Substantial Completion for Milestone 2 on May 15, 2016. ▪ Final Change Order No. 6 was approved at the July 2017 board meeting; final administrative close-out is on-going. 	Ongoing
<p>Design/ Pre-Construction Main Terminal Contract</p>	<ul style="list-style-type: none"> ▪ Design progression on Design Package 5: North Terminal is ongoing ▪ Contractor is preparing various TWP's for Concurrence of Award, such as Sealants, Plumbing, Stairs/Gates/Railings, Metal Wall Panels, Site & Building Signage. 	Ongoing
<p>Construction Main Terminal Contract</p>	<ul style="list-style-type: none"> ▪ South terminal building steel erection is complete; building steel detailing is on-going. ▪ South Bus Bridge deck and sidewalk pour complete. ▪ Bus canopy foundation work in State and Lafayette embankment areas is complete; grade beams poured. ▪ 95th Bridge South Widening steel erection is complete; detailing of steel is on-going. ▪ 96th interlocking installation is underway. ▪ East track reconstruction complete; east pocket returned to revenue service. ▪ South Terminal concourse level deck framing installation began. ▪ South Terminal elevator and escalator hung pit framing complete. ▪ Electrical service ductbanks poured. ▪ Gas service installation is on-going. 	Ongoing
<p>Delay Explanation:</p>		
<p>N/A</p>		



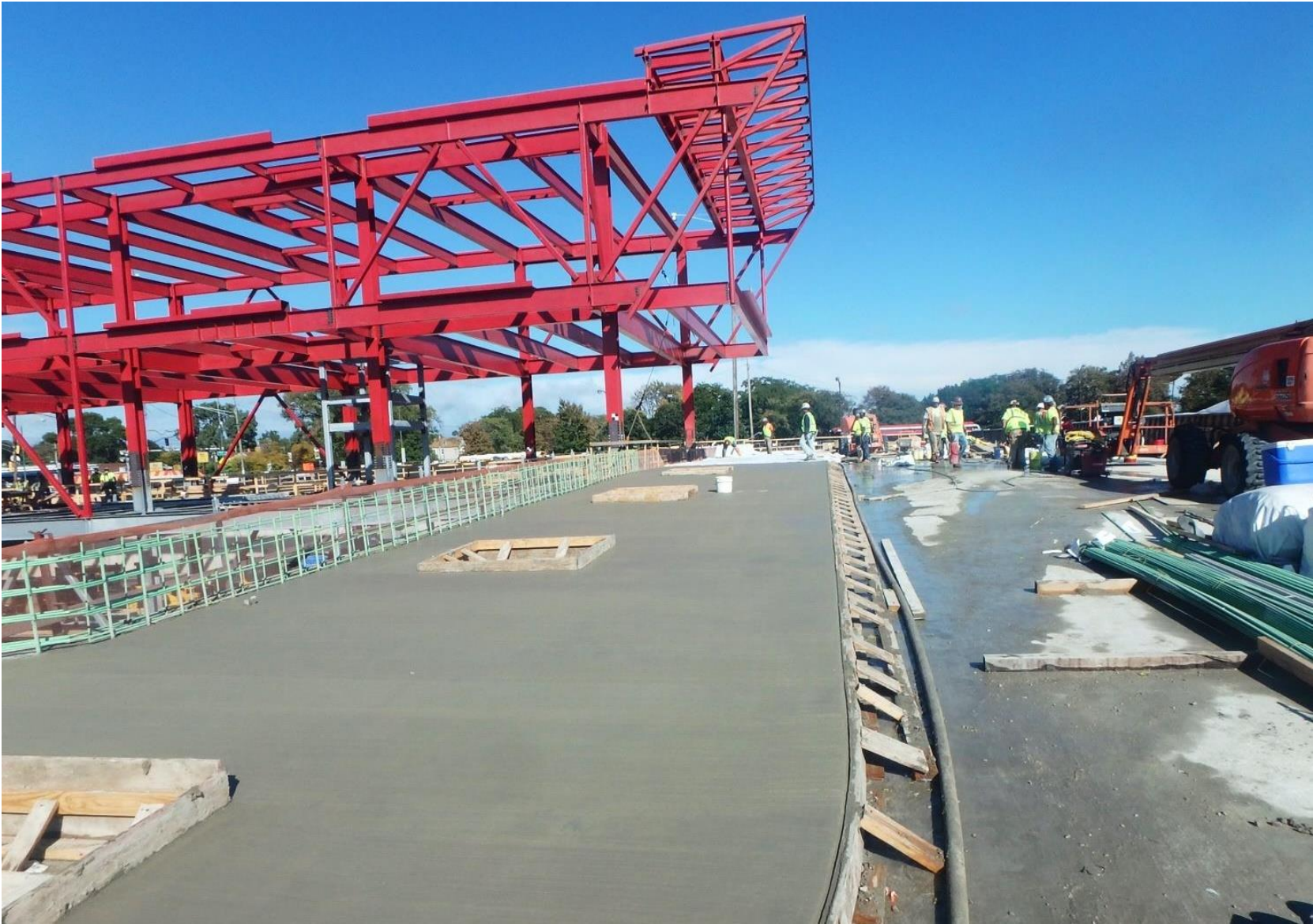
PROJECT TITLE: 95TH TERMINAL IMPROVEMENT PROGRAM



South Terminal Building



PROJECT TITLE: 95TH TERMINAL IMPROVEMENT PROGRAM



South Bus Bridge - Sidewalk Poured



Project Title: 95th Terminal Improvement Program



96th Interlocking Installation



Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Justification of Need:	The Station is functionally obsolete and does not allow for optimal transit operations.
Priority of Project:	High
Total Project Budget:	\$206 M
Construction Contract Value:	\$152,370,000
Earned to Date:	78%
Percent Change Orders to Construction Contract:	(0.6%)
Percent Time Used:	90%
DBE:	Goal: 25% / Commitment: 27.52% Contract is on track to meet the DBE goal Outreach events conducted: 1
Funding Source:	Federal, State, Bond and TIF
Estimated Start Date/Estimated Length of Project:	NTP 7/25/14; Substantial Completion 1/10/18
Designer of Record:	HNTB
Construction Manager/General Contractor:	Arcadis/Walsh/II In One JV

Detailed Overview of Scope: The station will replace the badly deteriorated station that was built in 1923. The station will have multiple entrances/exits and will include the following features:

- Two (2) new 26 foot – 10 car concrete island platforms with full canopies.
- New main station located on the south side of Wilson Ave., new auxiliary entrance/exit at Sunnyside Ave. and a new auxiliary entrance/exit on the north side of Wilson.
- New elevators, escalators, lighting, signage, fare control, security cameras and art work.
- Replace old existing elevated track structure with new track structure to accommodate the new station platform and the necessary infrastructure to support the new track alignment.



Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Impact on Customers:	There will be minimum impact to CTA customers
Benefit to System:	<ul style="list-style-type: none">• New modern, more spacious and accessible stationhouse with three (3) entrances.• Upgraded track structure infrastructure and signals for more reliable service.• New transfer point between Red and Purple express rail lines.
Benefit to Community:	<ul style="list-style-type: none">• Modern facility with new system upgrades.• Easy access entrances through three (3) entry points.• Bigger platforms that will accommodate higher capacity for passengers to avoid overcrowding.• Platform canopies to protect customers from elements.• New ADA accessible station.
Impact on Accessibility:	Station will be fully accessible upon completion.
Estimated # of Jobs Created:	2,678 indirect, 560 direct
Customer Communication Need:	<ul style="list-style-type: none">• Construction activity notices will be provided to inform businesses and residents regarding temporary stations and construction impacts (noise, dust, street/alley impacts) throughout the project.

Comparable Projects:

- 95th Station – Red Line



Project Title: Wilson Transfer Station, Track & Structure Reconstruction

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> <li data-bbox="367 242 1043 278">• New track 4 installation completed and activated. <li data-bbox="367 314 1023 349">• New East platform canopy build out completed. <li data-bbox="367 385 1458 421">• Wilson main station build out continues. Station is partially opened for public use. <li data-bbox="367 456 1477 492">• West elevator and west escalator installation is completed and open for public use. <li data-bbox="367 528 966 564">• Wilson auxiliary station build out continues. <li data-bbox="367 599 898 635">• Sunnyside station build out continues. <li data-bbox="367 671 859 706">• Gerber building build out continues <li data-bbox="367 742 1420 806">• Sunnyside west and east ramp steel enclosure, roofing and lighting installation continues. <li data-bbox="367 842 1410 878">• Installation of east elevator and east escalator equipment build out continues. <li data-bbox="367 913 1130 949">• New surface parking lot pavement and curbs continues. <li data-bbox="367 985 1429 1049">• New sidewalk installation – curb, gutter and street pavement at Broadway Ave. continues. <li data-bbox="367 1085 1313 1120">• New vehicle storage building build out at Clifton substation continues. <li data-bbox="367 1156 927 1192">• Perimeter Fencing installation continues 	<p data-bbox="1564 242 1709 278">Completed</p> <p data-bbox="1564 314 1709 349">Completed</p> <p data-bbox="1564 385 1709 421">Ongoing</p> <p data-bbox="1564 456 1709 492">Completed</p> <p data-bbox="1564 528 1709 564">Ongoing</p> <p data-bbox="1564 599 1709 635">Ongoing</p> <p data-bbox="1564 671 1709 706">Ongoing</p> <p data-bbox="1564 742 1709 778">Ongoing</p> <p data-bbox="1564 842 1709 878">Ongoing</p> <p data-bbox="1564 913 1709 949">Ongoing</p> <p data-bbox="1564 985 1709 1021">Ongoing</p> <p data-bbox="1564 1085 1709 1120">Ongoing</p> <p data-bbox="1564 1156 1709 1192">Ongoing</p>



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



East Platform Build Out



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



Elevators Towers and Canopy Build Out



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



New Platform Canopies



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



Wilson Main Station Exterior



Project Title: Wilson Transfer Station, Track & Structure Reconstruction



Wilson Station Interior



Project Title: Ravenswood Loop Signal Upgrade Project

Justification of Need:	The signal system for the Ravenswood Loop Connector section of the CTA Brown line was originally commissioned in 1975. In order to decrease headways and improve reliability, the system will be replaced with a new system.
Priority of Project:	High
Total Project Budget:	\$ 50 M
Construction Contract Value:	\$ 32.6M
Earned to Date:	41.5%
Percent Change Orders to Construction Contract:	0
Percent Time Used:	75.7%
DBE:	Goal: 10% / Commitment: 10% Contract is on track to meet the DBE goal Outreach events conducted: 1 (CTA)
Funding Source:	CTA PBV, CTA Bonds, FTA
Start Date/Length of Project:	November 4, 2015 – April 2, 2018
Designer of Record:	Parsons Transportation
Construction Manager/General Contractor:	Parsons Brinckerhoff/Ragnar Benson Construction, LLC

Overview of Scope: The signal system upgrade will include the following features:

- Removal of all existing signal equipment, cabling, and signal platforms.
- Design & install new platforms, cabling, cable support brackets, and signal equipment.
- Communication network design, configuration, installation, and commissioning.



Project Title: Ravenswood Loop Signal Upgrade Project

Impact on Customers:	54 hour line cut to cut over new signal system.
Benefit to System:	<ul style="list-style-type: none"> • Decreased headways • More reliable equipment • More robust signal network • Better diagnostic abilities • More reliable track circuit indications • Added loss of shunt detection system • Optimized curve speeds (potentially reduce run times)
Benefit to Community:	<ul style="list-style-type: none"> • Maximizing number of trains allowed in the corridor. • Less customer inconvenience due to signal system malfunction.
Impact on Accessibility:	None
Estimated # of Jobs Created:	650 indirect, 136 direct
Customer Communication Need:	<ul style="list-style-type: none"> • Construction activity notices will be provided to inform businesses and residents regarding line cut and construction impacts (noise, dust, street/alley impacts) throughout the project.

Comparable Projects:
<ul style="list-style-type: none"> • Loop Signal Project • Dearborn Signal Project



Project Title: Ravenswood Loop Signal Upgrade Project

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">• Installation of cable brackets and cable.	Ongoing
	<ul style="list-style-type: none">• Installation of foundations and structural steel to support new signal houses.	Ongoing
	<ul style="list-style-type: none">• Installation of new signal houses.	Planned
	<ul style="list-style-type: none">• Installation of new signal equipment.	Planned
	<ul style="list-style-type: none">• Integration and troubleshooting of new system.	Planned
	<ul style="list-style-type: none">• System Cutover.	Planned

Delay Explanation:

During the design phase it was determined that additional signal equipment was required for this Project. Due to lead time associated with the new equipment, the substantial completion date to the project was extended.



Project Title: Ravenswood Loop Signal Upgrade Project



Installing Willow Relay House Platform Steel



Project Title: Ravenswood Loop Signal Upgrade Project



Installing Willow Relay House Platform Steel



Project Title: Illinois Medical District (IMD) Rehabilitation Project

Justification of Need:	To improve the accessibility of the Illinois Medical District Station and rehabilitate the station to a state of good repair. The project will make all three station entrances ADA accessible, including the addition of an elevator to the Ogden entrance.
Priority of Project:	High
Total Project Budget:	\$23 M
Construction Contract Value:	\$14,221,000
Earned to Date:	30%
Percent Change Orders to Construction Contract:	0%
Percent Time Used:	74%
DBE:	Goal: 30%, Commitment: 30% Contract is on track to meet the DBE goal Outreach events conducted: 2 (CTA)
Funding Source:	TIF
Estimated Start Date/Estimated Length of Project:	NTP: September 26, 2016 Substantial Completion : January 26, 2018
General Contractor:	McHugh Construction/ UJAMAA Joint Venture
Construction Manager / Owners Representative:	STV

Detailed Overview of Scope:

The Illinois Medical District Rehabilitation Project will rehabilitate the Damen and Paulina stationhouses and concourses through structural reinforcements and upgraded exterior envelopes & interior improvements. The project will reconstruct and expand the Ogden stationhouse providing new upgraded electrical service and elevator access to the platform as well as reinforced structural components. Platform restorations and improvements will also be incorporated. All three station entrances will be ADA compliant and will incorporate lighting improvements, communication system improvements and signage upgrades.



Project Title: Illinois Medical District (IMD) Rehabilitation Project

Impact on Customers:	<p>Station will remain open at all times. Temporary Station Entrance closures will occur and access to portions of the platform will be limited during phased construction work. ADA accessibility will be maintained at either the Paulina Stationhouse or Damen Stationhouse during all phases of construction.</p> <ul style="list-style-type: none"> • 50 maximum nightly single track occurrences. • 5 maximum weekend single track occurrences. • Partial platform closures.
Benefit to System:	Improved customer circulation. Provides accessibility to customers with disabilities at all 3 entrances of IMD Station which maintains the highest ridership on the Congress Branch.
Benefit to Community:	Improved aesthetics and pedestrian safety with new metal panel stationhouse exteriors, stainless steel stationhouse interior panels & new stationhouse storefronts. Upgraded LED lighting, upgraded communication systems and new signage.
Impact on Accessibility:	New elevator installation at Ogden Stationhouse. Concrete resurfacing of Damen & Paulina Concourses.
Estimated # of Jobs Created:	299 indirect, 63 direct
Customer Communication Need:	Construction activity notices will be needed to alert customers, businesses and residents to temporary entrance closures, weekend and night work occurrences. Extensive communication will be required for weekend closures and for extended partial platform closures.

Comparable Projects:
<ul style="list-style-type: none"> • Quincy Loop Station Upgrade • YNB 5-Stations Project



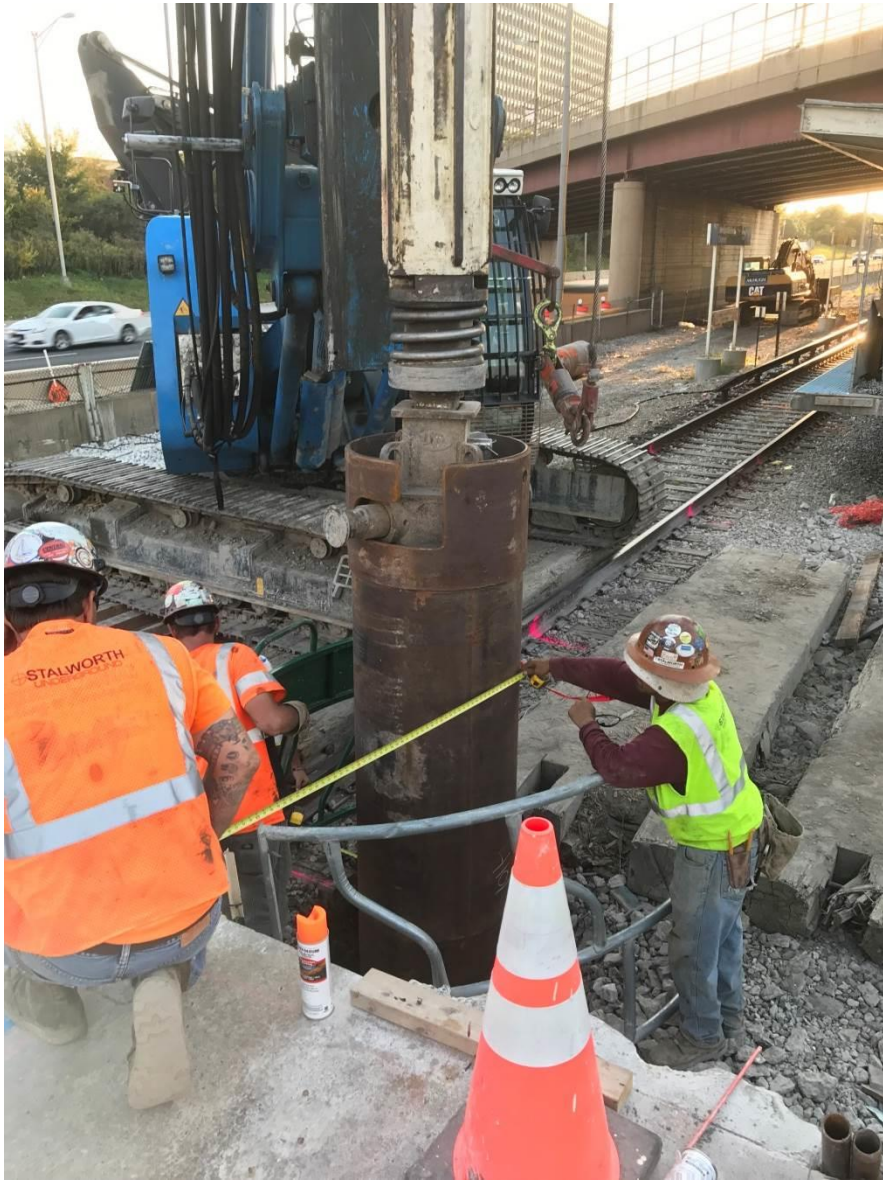
Project Title: Illinois Medical District (IMD) Rehabilitation Project

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">▪ Damen Stationhouse / Concourse Rehabilitation.▪ Partial Platform Rehabilitation.▪ Damen Stationhouse Reopening.▪ Ogden / Paulina Entrance Closure for Rehabilitation.▪ Ogden Stationhouse Demolition▪ Paulina Stationhouse / Concourse Rehabilitation▪ Remaining Platform Rehabilitation▪ Upgraded Electric Service to Ogden Stationhouse▪ Caisson Installation for Ogden Extension / Elevator▪ Elevator Installation	Complete Complete Complete Complete Ongoing Ongoing Ongoing Ongoing Complete Ongoing
Delay Explanation:		
N/A		



PROJECT TITLE: ILLINOIS MEDICAL DISTRICT (IMD) REHABILITATION PROJECT



Ogden Stationhouse – Caisson Installations



PROJECT TITLE: ILLINOIS MEDICAL DISTRICT (IMD) REHABILITATION PROJECT



Caisson Installation: Steel casing placement



Project Title: Quincy Loop Station Upgrade

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:	24%
Percent Change Orders to Construction Contract:	0
Percent Time Used:	81%
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 7/27/16; Substantial completion 12/24/17
Designer of Record:	Exp US Services
Construction Manager/General Contractor:	Parsons Brinckerhoff/Ragnar Benson Construction, LLC

Detailed Overview of Scope: 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 Upgrade

Impact on Customers:	There will be minimum impact to CTA customers.
Benefit to System:	<ul style="list-style-type: none">• Accessible Station.• New upgraded electrical service to the station.• Upgraded lighting.• New stationhouse floors.
Benefit to Community:	<ul style="list-style-type: none">• It will improve beneficial use of the station by providing accessible path to the station.• Easy access entrances through two new (2) entry points.• New outer loop platform exit stair will provide a new exit point from platform to street.
Impact on Accessibility:	Station will be fully accessible upon completion.
Estimated # of Jobs Created:	234 indirect, 49 direct
Customer Communication Need:	<ul style="list-style-type: none">• Construction activity notices will be provided to inform businesses and residents regarding temporary stations and construction impacts (noise, dust, street/alley impacts) throughout the project.

Comparable Projects:

- IMD Station – Blue Line



Project Title: Quincy Loop Station Upgrade

Construction Progress

Phase	Description	Status
Construction	<u>Street Level, East Side:</u>	
	• Micropile installation for the Earth Retention System (ERS) completed.	Completed
	• Retaining wall completed.	Completed
	• Formwork build out for the east elevator pile cap continues	Ongoing
	• Excavation/demolition in preparation for the micropile foundations for the new walkway column support continues.	Ongoing
	• Formwork build out for the east column support pile cap continues	Ongoing
	<u>Street Level, West Side:</u>	
	• Drilling preparation for the Earth retention System installation to start.	Planned
	• Demolition/excavation work for west elevator continues.	Ongoing
	• Micropile installation for the west elevator foundation continues.	Ongoing
<u>Other activities:</u>		
• Station painting activities continue	Ongoing	

Delay Explanation:

N/A



Project Title: Quincy Loop Station Upgrade



East Side – Walkway Column Pile Cap Preparation



Project Title: Quincy Loop Station Upgrade



East Side – East Elevator Pile Cap Form Work



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:	0%
Percent Change Orders to Construction Contract:	0
Percent Time Used:	11%
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 04/10/2017 ; Substantial completion 03/08/2020
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:
<ul style="list-style-type: none">• 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">Milestone #1 Design Conference has been completed on 5/19/17.	Completed
	<ul style="list-style-type: none">Submittals and Process plans are being generated by the contractor and reviewed by all parties.	Ongoing
	<ul style="list-style-type: none">Clark mobilized to Milwaukee and Illinois Substations in July of 2017.	Completed
	<ul style="list-style-type: none">Tuck-pointing has been ongoing at Illinois and Milwaukee. Tuck-pointing is 75% complete at Illinois and 65% complete at Milwaukee. The parapet walls have been re-built at Illinois.	Ongoing
	<ul style="list-style-type: none">Demolition of a courtyard wall has been completed at Milwaukee.	Completed
	<ul style="list-style-type: none">Roof replacement has started at Illinois and Milwaukee.	Ongoing
	<ul style="list-style-type: none">Manufacturing of traction power equipment has started for Illinois and Milwaukee.	Ongoing

Delay Explanation:

N/A



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



Illinois Substation Tuck-pointing

