



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

The CTA has identified additional traction power demands based on results from the Blue Line Load Flow study and determined that three (3) areas along the blue line O’Hare branch and Dearborn subway may experience problems with running the new fleet at the service levels proposed. To continue providing a reliable and safe service, it is necessary to build two (2) new traction power substations, one at Barry and the other at Damen with all their infrastructure support along with installing a new Tie Breaker house in the Dearborn subway. Also, the project includes the replacement of all traction power equipment at the Haymarket substation.

Justification of Need:

Priority of Project:	High
Total Project Budget:	\$113 Million
Construction Contract Value:	\$58 Million
Earned to Date:	22.5% (As of December 2022)
Percent Change Orders to Construction Contract:	0
Percent Time Used:	45% (As of December 2022)
DBE:	Goal: 25% Commitment: 25.71% Workforce Goals: 10% Career Opportunity/ 8% Apprentice/ 25% EDA Contract is on track to meet the DBE goal
Funding Source:	CTA Bonds / Rebuild Illinois
Estimated Start Date/Estimated Length of Project:	NTP: 10.20.21 Estimated Duration 900 days /Substantial Completion April 04, 2024
Designer of Record:	TYLin
Construction Manager/General Contractor:	WSP / John Burns Construction



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Impact on Customers:	Minor service disruptions during track access occurrences.
Benefit to System:	The new traction power substation will increase service reliability to the Blue Line.
Benefit to Community:	New buildings will enhance and will blend with the surrounding community and will benefit transit riders in the Blue Line with a safer and more reliable service.
Impact on Accessibility:	N/A
Customer Communication Need:	Construction Activity Notices.

Comparable Projects:

East Lake, Milwaukee & Illinois (ELMI) and Broadway substations



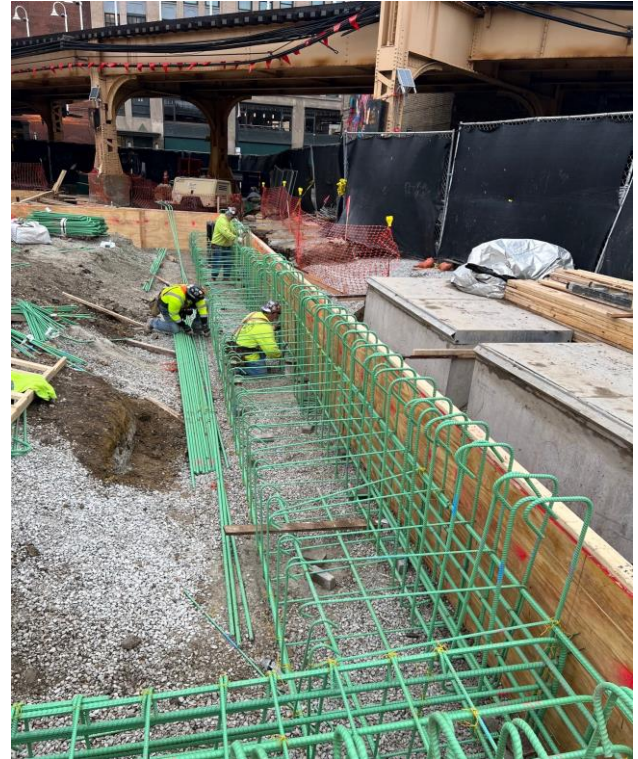
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Construction Progress

Phase	Description	Status
Haymarket Substation	• Install new electrical equipment	Upcoming
	• Site Preparation and rebar installation for new equipment foundations	Completed
	• Form/Pour new equipment foundations	Completed
	• Install new courtyard masonry wall	Completed
Canal Tie-House	• Fabricate new Canal Tie-House Building	Ongoing
	• Fabricate new Canal Tie-House equipment	Ongoing
	• Install new Canal Tie-House equipment	Upcoming
	• Test and Commission new Canal Tie-House	Upcoming
	• Install, form, and pour new Ductbank 2	Ongoing
Damen Substation	• Build building interior, flooring, rooms, and finishes	Upcoming
	• 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
Barry Substation	• Obtain foundations permit	Ongoing
	• Obtain building permit	Ongoing
	• Fabricate new substation electrical equipment	Ongoing
	• Mobilization	Ongoing
	• Demolition of existing building	Completed



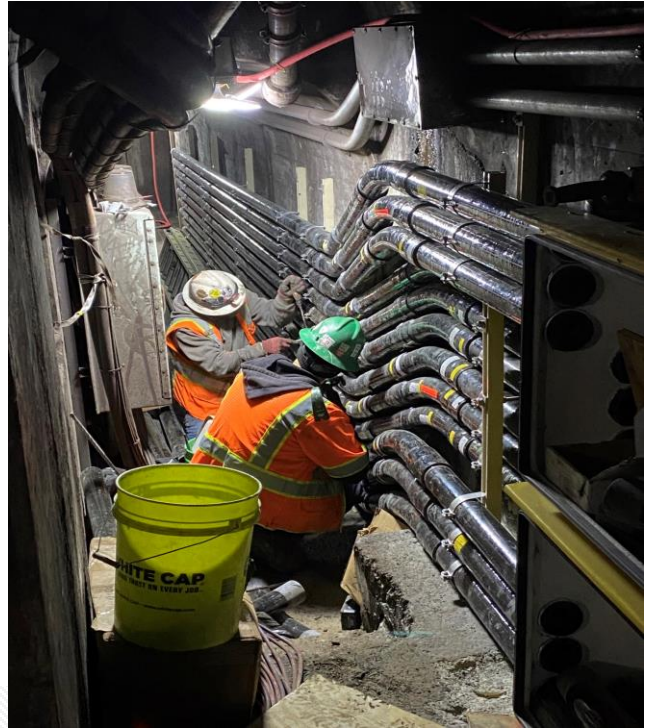
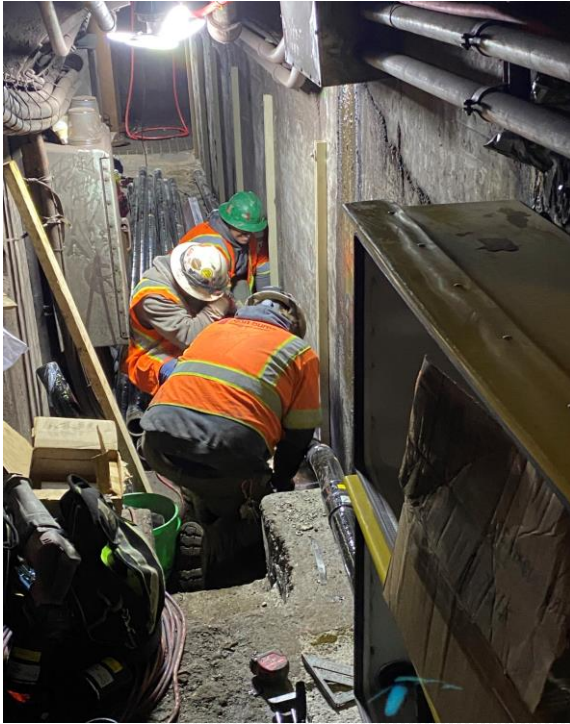
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Forming Grade Beams at Damen



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Install Wall Mounted Conduit at Canal



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Building East Wall at Haymarket



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Completed East Wall at Haymarket



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**Adjacent Property
Demolition at Barry**