



## **E-J Electric installs pre-fab traction power substation for LIRR**

March 24, 2020 - Design / Build

Queens, NY E-J Electric Installation Co. has installed one of the country's largest pre-fabricated traction power substations in Long Island City. The pre-fabricated structure spans over 250 ft. in length. The structure consists of 20 sections with each section over 45 ft. wide and weighing up to 96,000 lbs.

The Long Island Railroad Traction Power Substation contains three separate 3MW traction power lineups each with a dedicated 26.4kV incoming utility service. Each lineup consists of Medium Voltage Utility and Service Switchgear, Rectifier Transformer, Rectifier, AC and DC Bus Duct and DC Switchgear. DC Tie Buses rated up to 30kA along with over 40 DC Feeder, Main and Tie Breakers will provide traction power to LIRR's Main Line and Sunnyside Yard tracks. All traction power equipment is integrated with a SCADA system which will allow remote operation and monitoring.

In addition to traction power equipment, the structure also has dedicated control, communications, battery, electrical distribution, storage and crew rooms.

E-J Electric used the latest technology during structural and foundation vault design phases including Trimble Scanning and Trimble GPS layout tools to collect data from the construction site and utilized prefabrication techniques to create distinctive design layouts. These methods ensured that installation of the building and electrical Infrastructure in the foundation vault is accurate, properly coordinated and safely executed.

"We are excited to deliver this infrastructure project for the East Side Access Program," said Anthony Mann, President and CEO of E-J Electric. "Utilizing Trimble 3D Scanning, GPS Layouts and Revit modelling allowed for design optimization as well as helped to ensure safety."

New York Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540