

TBTA Brooklyn Battery Tunnel Project BB-15A Control and Monitoring Enhancements/Control Room Modernization

The Brooklyn Battery Tunnel is the longest continuous underwater vehicular tunnel in North America. Two ventilation buildings in lower Manhattan, a third near the Brooklyn portal, and a fourth just off Governors Island provide a complete air change in the tunnel every one and a half minutes.

AG as a subconsultant to Jacobs/Edwards and Kelcey was selected by TBTA to perform design and construction management services for the updating of the tunnel operating systems (mechanical and electrical) to increase safety, efficiency, reliability, planning, redundancy and maintenance. Services also included remodeling of the control room and Tunnel Management Center (TMC) while minimizing the impact of construction on life and safety tunnel operations. The scope included electrical/mechanical systems located in nine locations. Design tasks included Administrative Procedures and Investigation; Advanced Design with Constructability Review; Final Design, Pre-Construction and Design Support during Construction; and System Programming and Maintenance Requirements.

The electrical design included the control room power, communication systems and lighting. AG also developed the complete mechanical engineering package which detailed an upgrade to the existing HVAC and ductwork. Due to the critical nature of the tunnel, a complete temporary control room was designed. AG assisted in the development of the temporary control room design package including power, UPS and communication wiring.

Location:

New York, NY

Owner:

TBTA

Services Provided:

Mechanical

Electrical

Communications

Construction Management



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