HARTSFIELD-JACKSON AIRPORT - Atlanta, Georgia

FIFTH RUNWAY I-285 BRIDGE STRUCTURES

SCOPE Provide mechanical and fire suppression systems to protect 5th runway bridge structures over Interstate Highway 285.



*Owner*Atlanta Hartsfield-Jackson Airport

General Contractor
Archer Western Contractors

Prime ConsultantWomack & Associates

Construction Cost \$160,000,000 (total) \$2,000,000 (mechanical)

SPECIAL CIRCUMSTANCES

- In addition to standard code requirements, the Clayton County Fire Department (CCFD) also requested the following features:
 - FireAde 2000 wetting agent in lieu of AFFF.
 - Ability to re-supply the foam storage tanks while in use.
 - Auxiliary foam supply to battle smaller fires without utilizing the fire pump house.
- Fire suppression system includes a 100hp Fire Pump, two 2,200-gallon air compressor/dryers, two pre-action valve assemblies, two 2,000-gallon foam storage tanks, two 600-gallon underground storage tanks, two foam transfer pump assemblies, and two under-roadway vaults to house eductor assemblies.
- Ventilation System includes 12 75hp longitudinal jet fans integrated with carbon monoxide sensing system to ventilate on build-up of CO within the tunnels. Provisions for 12 future fans were incorporated for build-out of access lanes.
- Fans can be utilized for smoke evacuation of the tunnel via manual activation locally by the fire department. Local fan control is possible at various points on site for safety considerations.
- Designed heating, air conditioning, and ventilation for four utilities buildings housing electrical switchgear, UPS systems, and the computer command center. Critical computer and electrical systems were provided with 100 % redundant HVAC units.





