P130 MECHANICAL AND ELECTRICAL IMPROVEMENTS

CONTRACT #N462470-09-D-9044

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Brief to SAME Washington, DC Post
Over 2,500 salaried employees
ENR ranked 9th in Design-Build Firms
ENR ranked 10th largest Contractors
$6 billion revenue
$4 billion bonding capacity
5A-1 Dun & Bradstreet rating
Zero debt
30 offices nationwide
Whiting-Turner Offices

50% Construction Document Review
Industries & Project Experience

- Higher Education
- Primary & Secondary Education
- Government
- Healthcare
- Historic Preservation
- Lodging – Hospitality
- Mission Critical – Data Centers
- Mixed-Use Development
- Offices
- Parking Garages
- Senior Living
- Residential

- Retail
- Cyber Security
- Microelectronics
- Nanotechnology
- Transportation
- Warehouse & Distribution
- Water/Wastewater
- Bridges & Dams
- Utilities & Power Generation
- Science + Technology – Laboratories
- Science + Technology – Pharmaceuticals
- Sports Arenas
- Entertainment Facilities
The objective of the P130 project is to relocate, upgrade and construct a utility infrastructure to support the proposed Medical Center Addition / Alteration (MCAA, P114) at Walter Reed National Military Medical Center, Bethesda, Maryland.

Utilities and services affected due to the construction of the new MCAA include steam, condensate return, chilled water, potable water, sanitary sewer, storm sewer, natural gas, electric, telephone, security, fire alarm, and pneumatic tube systems. The installation of new and relocated utilities will either be by direct bury, concrete encased duct banks, jack and bored encasement pipes with carrier pipe inside or in a utility tunnel.
P-130 Project Overview

1,300 lf of Concrete Utility Tunnel
- Approximately 3,000 CY of concrete
- 190 tons of rebar

1,800 lf of Sanitary Sewer

1,800 lf of Storm Sewer

1,500 lf of electrical/telecom Ductbank
P-130 Project Overview
Then and Now

East / West Corridor, Along Building 9
East / West Corridor, Along Building 9
Then and Now

q Brown Drive
Schedule

- Awarded March 2015
- CDW May 2015/100% Design December 2015
- Fully Mobilized October 2015
- MDE Permit Received October 2015
- Pit #5 Completed July 2016
- Utility Tunnel 40% Complete
- Work Complete in Summer 2017
Challenges

- Unforeseen/Unknown Utilities
  - As-Builts Generally Inadequate
  - Extensive Use of Utilities Location Services
  - Unidentified Utilities have caused delays and inefficient work processes in an effort to mitigate delays
  - Use of hydro-excavating has helped considerably

- Rock
  - Inadequate Geotechnical Investigation
  - Quantity and Quality of Rock has been an issue

- Coordination
SAFETY