

## JOB FACT SHEET

Facility: **University of Maryland  
Capital Region Medical Center**

Location: **Largo, MD**

Project Type:  
**Off Site Construction – Central Utility Plant**

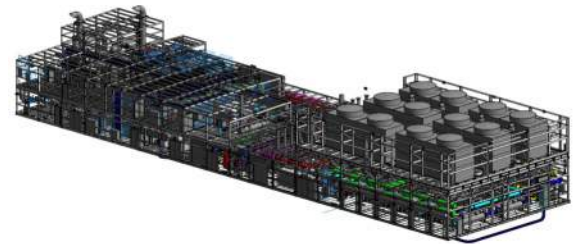
Duration:  
**Sixteen (16) Months**

### PROJECT OVERVIEW

EAS was brought on board as a design assist partner to work with the University of Maryland and the engineer of record in designing a complete central utility plant servicing a new 600,000 hospital serving the entire Washington D.C. area. EAS provided a complete central utility plant including combined heat and power to serve all of the main plumbing, electrical and mechanical infrastructure. EAS provided a complete turnkey solution including controls package and installation of the utility plant.

### PROJECT HIGHLIGHTS

- Roughly 30,000 square feet shipped in 93 main sections
- The Central Utility Plant was fabricated in its entirety in EAS's High Point, NC Facility
- The Central Utility Plant consisted of chilled water, hot water, domestic water, rainwater harvesting, 2 MW cogen plant, medium voltage switchgear and transformers, ATS, paralleling gear, transvac system, office/fit out space and coordination for field installation of med gas, med vac and fire pump equipment



### TECHNICAL DETAILS

- (12) 535 ton Series Counterflow centrifugal chillers – (4) to be installed in the future
- (12) 550 ton Counterflow open cooling towers – (4) to be installed in the future with cooling tower platforms and screen walls
- (12) 6,000 MBH dual fuel condensing boilers - (4) to be installed in the future
- (8) Domestic water to water heaters from 1347 MBH to 2084 MBH
- (4) 400 GPM centrifugal solid separators for cooling tower filtration
- (2) Point of entry copper silver ionization systems for water purification
- (2) Point of entry filtrations systems
- Pumping systems for chilled water, hot water, domestic water and domestic pressure booster, condenser water and co-gen pumping
- (4) Skidded tower filtration systems
- (1) 17,200 CFM custom air handler
- (1) 140 GPM rain water management system for tower makeup water with 50 micron and ultraviolet filtration, cistern pumps, day tank and booster pump
- (1) Triplex water softener system





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### TECHNICAL DETAILS *(Continued)*

- Open loop and chilled water treatment systems
- (4) Bypass filtration systems at 300 microns
- Plant conditioning
- Complete domestic and mechanical piping systems
- Complete controls provided by EAS which was based on an Allen Bradley redundant PLC controls system with RIO controllers and multiple HMI panels
- (3) 1500 kva transformers, (3) 750 kva transformers  
(4) 30 kva transformers, (3) 45 kva transformers
- (1) 2000 KW gas CHP unit
- (7) ATS
- 4000 Amp switchgear and 5000 Amp paralleling switchgear, switchboards, panelboards, other distribution panels, conduit, wiring, lighting
- Installation of all medium voltage gear
- Turnkey installation provided by EAS





**ENVIRONMENTAL  
AIR  
SYSTEMS, LLC**

250 Swathmore Avenue  
High Point, NC 27263  
336-861-0047

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**JOB PHOTOS**