



COMMISSIONING FOR HVAC RENOVATION

PROJECT LOCATION: Federal Courthouse – Gainesville, Florida

EXPERIENCE OF: Mitchell Gulledge Engineering, Inc.

ROLE IN PROJECT: Prime Professional – MEP Design and CxA

CONSTRUCTION COST

\$2,700,000

COMPLETION DATE

April 2018

PROJECT STAFFING

Project Manager:

Craig Gulledge, PE, CxA

Mechanical Lead:

Craig Gulledge, PE, CxA

Primary CxA:

Ark Szczurowski, PE, CxA

Structural Consultant:

Sputo & Lammert

Architectural Consultant:

Todd Whitehead, AIA

PROJECT OWNER

General Services Administration

Arnold Heidt, III

77 Forsyth Street

Atlanta, GA 30303

BUILDER

Blakeland Construction Services

Carlos Malpartida

13568 NW 1st Lane, Suite 2

Jonesville, FL 32669



PROJECT SUMMARY:

The project was initially presented by the Government with a budget of between \$2M and \$6M for the HVAC renovation of four chilled water air handling units (AHU), cleaning all ductwork, providing a new dedicated outside air (DOAS) unit, all new building automation controls, replacing 89 terminal boxes and refurbishing a central station built up penthouse AHU. Mitchell Gulledge Engineering was contracted to perform the first \$2M phase to include refurbishment of the 1970s-era built up chilled water air handling unit and to provide a new DOAS AHU. Equipment was upgraded from dual temperature terminal units to full VAV with heating hot water reheat for the 50,000 sq ft of office and court spaces spanning three floors. Mitchell Gulledge Engineering also provided commissioning services.

The initial project budget included a wide scope and range of funding. A thorough review of the project goals and a detailed engineering cost estimate revealed a significant gap between the available budget and project expectations. A prioritized engineering plan for implementation of the work was developed to bring the first phase into budget for this fully occupied building. Engineering cost estimates revealed the owner’s full scope of work was in excess of \$8M. Mr. Szczurowski assisted in refining the scope and phasing of work to best implement the full scope of work over several phases. Further exacerbating the budget was the fact that all work would be required to take place after normal business hours so the court would not be disrupted. As prime consultant for the design team, Mitchell Gulledge Engineering, devised a plan to strategically phase the inside renovation after hours and on weekends while the AHU refurbishment could take place during business hours. Mitchell Gulledge Engineering designed the dedicated outside air system with sufficient capacity to ensure it could operate as a temporary AHU while the main AHU was being refurbished.

We understand the value of communicating with the building stakeholders about how a renovation project is going to affect their operations. By thinking outside the box, Mitchell Gulledge Engineering is able to maximize the impact of project funding and minimize the disruption to building occupants. As the prime professional, our analysis and understanding of how the occupants (judges, US Marshall Service, and attorneys) scheduled their use of the building allowed our team of architects and engineers to design an HVAC replacement and power upgrade that did not affect their ongoing operations while meeting strict sound criteria in an occupied building.

