WMC MECHANICAL
PROJECTS

FCA-Update HVAC, Phase 8 at
John J. Pershing VA Medical Center

Role of Firm:
WMC/RSP Construction JV provided and performed all project management including: Senior Project Manager, Project Manager, Superintendent and QA/QC personnel. Management functions included the creation of project documentation including, but not limited to, the following: Pre-construction activities, quality control plan, environmental control plan, and safety plan along with the initial project construction schedule.
After the Notice-to-Proceed was released, WMC/RSP Construction management implemented the quality control and approved pre-construction plans. This included a two-month, milestone construction schedule that allowed for flexibility and adaptability, in response to the ongoing medical mission requirements. In conjunction with the schedule, our Project Manager and On- Site Superintendent worked daily with the Facilities Engineer, Hospital Administration, and Director of Nursing to pre-plan operations and alleviate nursing staff and patient activity conflict. Preparatory planning with subcontractors was performed along with initial inspections, final inspections and commissioning.
WMC/RSP Construction also self-performed over 65% of labor but subcontracted the electrical portion of project. WMC/RSP Construction also installed specialized HVAC equipment installations.
Engineering (design engineer and architect) was provided by SSC Engineering, of St. Louis, Missouri. SCC Engineering is one of our preferred engineering firms.

Description of Project:
At Notice-to-Proceed initial meeting, the Contracting Officer's Representative requested an immediate, emergency mobilization to correct a serious issue with the potable water supply to the hospital. WMC/RSP Construction JV mobilized within 24 hours and installed 400 feet of new, four-inch copper, potable water main concluding with a weekend, mid-day shutdown to minimize impact and correct the problem, at no additional cost to the customer.

Work included significant, architectural, HVAC, electrical and medical gas renovations on three floors of the primary medical facility, the central energy plant, and seven surrounding support buildings. All interior work was performed in/around occupied space which required attention to infection control, demanding the use of dust tight partitions, daily vacuuming, and clean floor mats at all entrances, while coordinating all activities with Nursing Staff to minimize impact on patient care.
Demolition included HVAC pumps, medical gas system, controls, air handling units, concrete pads, roof curbs and roof dormers, piping, duct, duct accessories, fans, walls, doors, flooring, ceilings, windows and roofs.
New installation consisted of the upgrading of controls on existing HVAC systems, as well as, installing controls for the new HVAC equipment. This included, but was not limited to, 3-boilers, existing multiple air handling units, fan coil units, variable air volume boxes, pumps, variable frequency drives, boiler room emergency shut-offs and building temperature control systems.
Approximately 1,600 feet of steam and chilled water lines were demolished and replaced on the third floor wing of the hospital. Third floor isolation wing consisted of demo of all HVAC controls, exhaust fan, and existing air handler.

<Next Page---->

A new air handler, VAV system and HEPA filter system was installed capable of maintaining either a negative or positive air pressure for the existing isolation rooms depending on the needs of infection control. Architectural infill was necessary to accommodate the new equipment, requiring the existing ceiling to be lowered and walls to be moved.
Electrical work consisted of new power wiring associated with a renovation of the hospitals third floor, the removal and reinstallation of the main motor control center and energy control center of the boiler room, and installation of flow metering devices for the chilled water system, steam system and hot water system.
Other upgrades to the hospital included the installation of high efficiency fan motors, one 75 HP and two 15 HP motors in AC-4 and AC-5. Upgraded variable frequency drives on equipment throughout the hospital, 14 VFD's. Testing and balance of the HVAC systems, as well as, recertification of medical gas systems was performed.

Much of our success during this project can be attributed to successful partnering with the excellent engineering, maintenance and Nursing VA staff. Interaction with facility staff at all levels was professional, courteous, and mission oriented. Working with them was our pleasure.