PROJECT BACKGROUND

The Southern Illinois University Medicine Building is a brand-new state-of-the-art 42,000 square foot, two-story medical office building constructed on Southern Illinois Healthcare’s Memorial Hospital of Carbondale campus. The new building features a family medicine clinic including professional development teaching labs on the first floor and the medical school’s physician assistant program on the second floor. The building was built by Southern Illinois Healthcare and leased to Southern Illinois University medical school, continuing the deeply rooted partnership between the healthcare provider and educator.
The building is served with two packaged single zone DX rooftop units with airside economizer capability. Air handling units serve VAVs with hot water reheat coils and hot water finned tube radiation is located below windows. Heating water is supplied from two gas fired condensing boilers in a centralized plant. The boilers each include an integral primary pump and two variable speed building pumps supply the system in a primary-secondary configuration.

The building is illuminated by LED fixtures with localized 0-10V dimming control in the exam and teaching spaces. Fixtures were strategically designed in circulation spaces to highlight the building's architecture. The East and South exterior façade of the facility is illuminated by ground mounted wall grazing fixtures providing a captivating evening view.

The lighting control features localized vacancy control with integral dimming to provide user defined lighting levels along with shutting the fixtures off automatically when the room is unoccupied. The corridors and common space are connected to networked controllers, programmed to business hours of the clinic and education programs. The exterior features photoeye control with two levels of automatic timeclock shutoff. Night-time setback modes are implemented to conserve energy by reducing ventilation rates and turning down air handling unit operation during periods of unoccupied hours.

With both education and clinical programs, the building hours can fluctuate with late night researchers. Systems were installed to keep students and staff safe. Emergency phone stations were installed on the exterior and interior of the facility.

Overhead paging was installed and integrated with the phone system to communicate throughout the facility. The building is equipped with access control points and closed-circuit surveillance systems.

Information Technology was built to house infrastructure of both Southern Illinois Healthcare and Southern Illinois University to provide the users connectivity to the education and healthcare platforms which features computers fit with Epic software in the clinical spaces. The system includes fiber connectivity directly to Memorial Hospital of Carbondale across Oak Street.

McClure worked diligently onsite to determine a path and navigate the fiber line from the heart of Memorial Hospital and the adjacent Professional Office Building through the parking garage and under Oak Street to the new building.

McClure provided commissioning systems for the following systems: (1) HVAC including packaged Trane air handlers and exhaust fans, (2) heating hot water including Campus natural gas boilers, (3) domestic hot water, (4) and lighting controls. A first-use roll-out of a new automation system (for the client) was also installed and commissioned. Additionally, McClure provided in-field construction administration assistance specifically in the areas of scheduling, start-up coordination, test and balance review, and issue resolution and conducted a systems training class for the facility group in charge of the building including topics on theory of operation, system implementation, and automation review and troubleshooting.