



Alabama Forensic Science Building Phased Commissioning Services

About the Facility:

The Robert Clinton Hatch Hall Forensic Sciences Building is shared by the Alabama Department of Forensic Sciences and Alabama State University (ASU). The 50,000 square foot, eight-year-old facility incorporates state-of-the-art forensic sciences laboratories, computer labs, a mock courtroom, instrumentation laboratory and a criminal logistics laboratory for instruction in techniques used to examine evidential material.

Challenges

Facility owners were specifically concerned with the operations related to the forensics lab spaces. Overall, the building was allowing substantial amounts of water infiltration during rain fall, and the current HVAC system was unable to provide a positive pressure environment. Additionally, the facility's temperature and humidity lab requirements were not desirable and coordinated air space was inconsistent. Because of these issues, the forensic labs were experiencing a high concentration of airborne fungi particles. Any one of these issues could greatly impact and compromise forensic testing. It was important to determine and resolve root causes quickly so as to not impact or delay lab testing.



Point of Contact

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SEA resolved historic and ongoing building systems operations through a phased commissioning approach within 6 weeks—resulting in optimal conditions for forensic lab.

Scope of Work

To achieve overall building success, all systems needed to operate optimally. Ongoing preventative maintenance of the building envelope and the HVAC systems also needed to be consistent. SEA was hired to quickly implement a phased commissioning process and worked to develop contract documents for system repairs and replacement. SEA also ensured that all building systems were operating optimally during the construction phase. Below is a breakdown of the phased commissioning approach:

Phase 1: The team worked to investigate all systems and conduct controls assessments. This included Testing, Adjusting and Balancing (TAB) the Chiller and ASU—resulting in an Investigative Report.

Phase 2: In this phase, the SEA team defined the necessary solutions for all of the operations and worked to rewrite code controls. This documentation included a master schedule, costs analysis and responsibility matrix.

Phase 3: SEA worked to upgrade controls and make all final repairs with additional TAB measures.

Phase 4: Phase four provided the final commissioning report of all activities conducted in the previous phases and included a roadmap for future operations and maintenance.

