



University Centralized Biological Laboratory

HVAC & Plumbing Renovations

Contract Value: \$2.9 Million

Project Description:

S. P. McCarl & Company, Inc. installed all the HVAC and plumbing systems for the renovated laboratory. Our scope of work called for a complete renovation of 90% of the approximate 50,000 square foot facility. The scope included replacing equipment such as air handlers, heat exchangers, air separators, expansion tanks, and numerous circulating and condensate pumps. The mechanical room was confined for the large amount of equipment installed.

Our company fabricated and installed all of the plumbing, piping and sheet metal required for the project. This included approximately 60,000 lbs. of both galvanized and stainless steel ductwork and thousands of feet of piping for both the HVAC and plumbing systems. There were numerous plumbing fixtures and equipment installed with the renovation.

Technical Challenge:

Because this work was completed in a biological lab it provided unique challenges. Close coordination with the owner and the other trades was necessary due to the importance of taking care of the animals that lived in the facility. Phasing was difficult in that 90% of the facility had to be renovated, yet was still being inhabited by the animals.

A temporary shelter was built for the animals to handle one part of the project. The animals were moved from location to location to accommodate the work. This process required detailed planning by our company to make sure the animals had proper living conditions. The HVAC systems required special controls for each area, as the animals were relocated throughout the building. Because of the importance of the tests done on the animals, there was intense scrutiny of our ability to ensure that the climate control was carefully monitored throughout the duration of the project.

Therefore the Project Manager, Project Foremen, and all tradespersons had to work closely with the facility owners to ensure their work did not intrude on the living conditions of the animals. In addition to focusing on the safe, timely, and quality installation of all the plumbing and HVAC systems, the health and welfare of the animals themselves required the highest level of attention.

