

Lexington Catholic High School

Science Wing and High Marks Center Addition

Owner: Catholic Diocese of Lexington
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Building Area: 27,394 SF add to 140,100 SF
Construction Cost: \$ 6,280,000
Project Status: Completed 2024

Project Description: Science Wing consisting of Chemistry, General Science, Biology labs with classrooms and prep rooms. New High Marks center for independent and collaborative study rooms



Engineering Highlights:

Mechanical:

HVAC System is geothermal system with vertical heat pumps located in individual rooms. Dedicated Outdoor Air unit provides tempered air to each heat pump return. Fume hoods were installed in science labs with epoxy coated exhaust fans.

Electrical:

Electrical service for entire existing 140,000 SF building had to be relocated to make room for the new addition. A new service was installed to back feed the existing service and provide new service to new addition. Emergency kill switches were provided for each lab to kill electrical, gas, and water in case of an emergency. had to be upgraded early in construction to move the existing electrical service where the new addition would be located. Existing PA system was upgraded and new PA/Clock system was provided in the new addition.

Life Safety:

A large portion of the existing building and the new addition were grouped together to provide a 51,521 SF building completely separate via a fire wall. A new 3-hour fire wall was installed through the existing building causing existing utilities to be rerouted and reconnected. This 51,521 SF building containing existing areas and new addition was equipped with a new voice fire alarm system. A completely new sprinkler service was provided to reconnect the portion of the existing building and new addition that reside on same side of the fire wall.

Plumbing:

Emergency shower/eyewash stations and eyewash only stations were provided through lab and prep areas. Gas system was provided to Bunsen burner turrets on top of chemistry lab tables.