UNIVERSITY ENGINEERING BUILDING

University, Mid Atlantic Region, United States

Project Team:

Architect—Stantec Architecture, Inc. MEP Engineer—Stantec Architecture, Inc. Structural Engineer—Barber & Hoffman General Contractor—Massaro Corporation Clean Room (Design) - Innovate Labs Systems

Architecture:

Features 2 separate wings connected via a main corridor

East Wing & Subgrade Level house Laboratory space

West Wing houses Office and Classroom Space

Masonry veneer, red brick and limestone, with Curtain Walls

Utilizes a fully adhered single ply TPO roofing system

Mechanical:

Building requires 2 full size mechanical rooms

Level 0 Mechanical Room assigned to clean room and part of Level 1

Penthouse Mechanical Room assigned to the rest of the building

A total of 8 AHU's (4400—23750 CFM) and 4 Heat Recovery Coils handle all the heating and cooling (transportation of hot and chilled water)

General Information:

Location—University, Mid Atlantic Region Function—Education/Research Size—95,000 GSF Stories Above Grade/Total Stories—4/6 Total Project Cost—\$43 M Dates of Construction—Jan. 2013—Nov. 2014 Project Delivery Method—Design/Bid/Build

Structural:

Foundation consists of Caissons and a 2' thick foundation wall Level 1—Penthouse framed using structural steel Greater reinforcement to handle mechanical room in Penthouse 3-1/2" thick concrete slabs on deck

Electrical:

Dual service entry points into building (2500 kVA Transfoirmer at each point)

Backup generators and main equipment located outside of the Southeast corner of the building

480Y/277V, 3 PH main switchboard supplies power to the entire building via (2) main distribution panels

http://www.engr.psu.edu/ae/thesis/portfolios/2014/jpf5110/index.html

Jeremy Feath Construction Option