Claude Moore Medical Education Building

Handley McDonald | Structural Option

www.personal.psu.edu/hpm5009



Owner: University of Virginia <u>Architect</u>: CO, with Train & Partner <u>Contractor and CM</u>: Barton Malow <u>Structural Engineer</u>: Nolen Frisa Ass. <u>MEP Engineer</u>: Bard, Rao, & Athanas

Business and Laboratory occupancy 58,000 sq.ft.

\$40 MILLION TOTAL COST

6 STORIES

Construction Start: Winter 2007 Construction End: Fall 2010

ARCHITECTURE

- -Centralizes the University Health Program
- -Focuses on large, circular section where learning center and lecture hall are located

MECHANICAL

- -4 Air handling units located on penthouse floor
- -Variable air volume system
- -All units equipped with heating/cooling coils

LIGHTING/ELECTRICAL

- -624KVA total load on building
- -Shares connection to adjacent building MR5
- -Lighting solutions mainly fluourescent





STRUCTURE

- -Steel Frame structure, with no typical bay size
- -Several transfer girders to account for irregularity
- Steel moment frame, braced frame, and CMU shear walls for lateral resistance
- Concrete drilled pier foundation

CONSTRUCTION

- -Traditional design-bid-build delivery method
- Contractor selected based 50% on price, and 50% on technical expertise
- -University now uses Penn State BIM template