FDA OC/ ORA Office Building

Silver Spring, MD

Adam Love Structural Option

www.engr.psu.edu/ae/thesis/portfolios/2010/ael5029/index

Architecture:

- Mixed use office building that forms the final phase of the consolidation efforts of the FDA.
- The 500,000 S.F. Office Building was laid out to morrior the existing buildings on the site. The building is broken up into 4 wings, A through D.



Building Statistics:

Size: 500,000 S.F.

Construction Dates: 6/07 to 12/10 Final Contract Cost: \$110 Million Delivery Method: Lump Sum Project

Project Team:

Owner:

GSA

Occupant:

FDA

General Contractor:

Tompkins Builders

Construction Manager:

Heery-Tishman

Architectural Engineer:

KlingStubbins in association with RTKL

Geotechnical Engineer:

Schnabel Engineering Association



Structural:

- Spread Footings were used for the building's foundation. Where 95% compaction could not be met; Geopiers were used under the footings.
- The structure of the building was designed to prevent progressive collapse. The exterior beams of each floor are the primary elements in the progressive collapse design.

Mechanical Systems:

- 4 AHU's are provied on the roof with VAV boxes throughout the building.
- The AHU range rom 20,000 to 30,000 L/s.

<u>Lighting / Electrical Systems:</u>

- Daylighting controls are provided with the florescent lighting system.
- 13.8 kV is supplied from the Central Utility Plant.
- A Unit Substation in Building 31 supplies the swtchgear and then supplies 208Y/120 V to each wing.

