



Overlook Towers

at Dulles Corner
Herndon, VA

Anthony Perrotta
Structural

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/amp324>

Architectural

- Two nine story office buildings and two one five story parking deck
- The facade is composed of precast architectural panels and mirrored glass curtain walls
- Rooftop mechanical penthouse housing major mechanical equipment

Primary Project Team

Owner: S. Vardell Realty Investments, LLC
Architect: Nortike Associates
Landscape Architect: Lewis Scully Gionet
Structural Engineer: Haynes Whaley Associates
M.E.P.: KTA Group Inc.
Civil Engineer: William H. Gordon Associates

Mechanical

- 4 Centrally located elevators
- 2 water cooled chillers located in the penthouse
- 30 HP 480V floor AHU (floors 2-9)
- 50 HP Make-up heating unit on the roof

Project Overview

Total Size: 262,200 square feet
Project Cost: \$20.5 million per office building
Estimated Schedule: Sept. 2006 - Dec. 2007
Delivery Method: Design-Bid-Build
Occupancy Type: Office Building

Structural

Foundation: 5TH S.O.G. with #3 reinforcing
 10 mil vapor barrier over 4" stone
 8' - 14' square spread footings

Superstructure: The typical floor beam is a W24x55 and are spaced at 10' o.c. The roof is supported by different sized trusses spaced at approximately 6'-0" o.c. The major lateral supporting system are braced frames located near the elevator shafts and the central core.

Roofing System: Open web joists at 6'-0" o.c.
 4" extruded polystyrene insulation on metal decking.
 Penthouse sits on 6.25" lightweight concrete slab.

Lighting/Electrical

- 3 phase/480V electrical service provided
- 3 phase/4 wire 350KW backup generator
- 2 4,000A main switchboards
- Metal-halide site lighting
- Office space is lit by fluorescent lighting

