REDLAND TECHNOLOGY CENTER

Rockville, MD

Owner: Perseus Realty, LLC

CM: Clark Construction Group, LLC

Architect: DNC Architects, Inc.

MEP Engineer: Meta Engineers, P.C.

Structural Engineer: SK&A, P.A.

Delivery Method: Design-Bid-Build

Cost: $ 52,800,000 negotiated GMP

Construction Dates: December 2007 - May 2009

Architecture

- 3 building office complex with parking garage built in 2 phases, building 1 built in 2004
- 24.5 acre site near I-270 corridor and Shady Grove Metro station of Washington D.C.
- Building 2: 9 levels, 210,240 SF
  Building 3: 6 levels, 136, 430 SF
  Parking Garage: 6 levels, 314,600 SF
- Architectural precast façade with ribbons windows, curtain wall, stone medallion accents
- State-of-the-art fitness center and café
- Fully adhered EPDM rubber sheet membrane roofing system
- Work of renowned Washington D.C. glass artist Mindy Weisel to be displayed in lobbies
- Pursuing LEED Silver certification

Mechanical

- Self-contained air conditioning units on each floor with typical capacity of 24,750 CFM
- Three 293 ton water cooling towers on roof
- Medium pressure ductwork
- Variable air volume units to control environment in tenant areas efficiently
- Separate heat pump units for café, fitness center, and elevator machine room

Structural

- Structural steel framing with 3" composite metal deck and 3" lightweight concrete slab
- Typical bay size is 30'-0" x 30'-0"
- Braced frames to resist lateral loads
- 5" normal weight slab-on-grade with grade beams and 46 caissons
- 13'-4" typical floor-to-floor height
- Open floor plans, column free corners

Electrical

- Two 2500A, 460Y/265V feeds to building
- Two 2000A, 460Y/265V copper bus ducts supply power to upper floors
- Three transformers to step power down to 208Y/120 for tenant use
- 600KW, 480Y/277 diesel generator set
- 277V Lithonia luminaries

Construction

- Existing 140,000 sqft. parking lot demolished
- Close proximity to residential neighborhood and office buildings, noise ordinances
- 150 daily average construction workers onsite

Shawn Pepple

Construction Management Option

www.engr.psu.edu/ae/thesis/portfolios/2009/sap5001