

The Clarendon Center—South Block

Arlington, VA

Architecture:

- Office tower is located on the west side of the block, while the residential tower wraps around the north and east sides
- The courtyard with lap-pool is open to the south
- Four levels of below grade parking accommodating 465 total spaces
- Goal is to obtain LEED Certification as required by Arlington County
- Ground floor retail has typical storefront facade
- Remainder of building has 4" brick masonry on 4"-6" metal stud façade



Structural System:

- Residential tower uses a post-tensioned floor system, while the office tower uses a reinforced concrete floor system
- Reinforced concrete columns that includes square, rectangular, circular, and sloped configurations
- Both typical reinforced concrete and post-tensioned beams are utilized
- Reinforced concrete shear walls in stair wells and elevators take shear loads
- Foundation consists of a reinforced concrete mat foundation in varying thicknesses

Statistics:

Location: 1200 N. Garfield Street & 3030 Clarendon Boulevard

Size: 365,000 SF above grade, 222,000 SF below

Number of Stories: 4 below grade, 1 retail level, 11 residential levels & 8 office levels

Project Team:

Owner: Saul Holdings Limited Partnership

Occupants: No anchor tenants currently

General Contractor: Clark Residential, LLC

Architect: Torti Gallas & Partners, Inc.

Structural: Tadjer-Cohen-Edelson Associates, Inc.

Civil: Bowman Consulting Group, Ltd.

MEP: GHT, Limited

Electrical: Cherry Lane Electrical

Electrical/Lighting System:

- Both 208Y/120V & 480Y/277V, 3-phase, 4-wire electrical systems
- (1) 4000 amp and (3) 3000 amp main switchboards
- Combination of up lights and up/down lights illuminate the façade
- Surface mounted and recessed lighting is used in the interiors

Mechanical System:

- Office tower uses an evaporative-cooled roof-top unit
- Residential units include individual heat pumps
- Gas heat and water supply the residential units

Zachariah A. Wasser
Structural Option

<http://www.engr.psu.edu/ae/thesis/portfolios/2010/zaw5002/index.html>