

DEA Clandestine Laboratory Training Center Quantico Marine Corps Base, Quantico, VA

General Data:

Size: 34,152 sq ft
Number of Stories: 1 story plus Mechanical Mezzanine Level
Dates of Construction: October, 2006 – December, 2007 (tentative)
Cost: \$10 million (available construction funds)
Project Delivery Method: Invitational Bid for GMP

Project Team:

Owner: United States Navy
Occupant: Drug Enforcement Agency Training Academy
A/E Firm: Kling – Architecture, Engineering, Interiors, Planning
Contractor: unknown, still in bid period
Construction Manager: unknown, still in bid period
Site/Civil Engineer: A. Morton Thomas
Geotechnical: Haley & Aldrich
Acoustical: ACENTECH

Architecture:

- Slab-on-grade masonry building
- Brick veneer accented with courses of CMU
- Large expanses of curtain-wall glazing for natural light
- Curved outline of 2:12 sloped standing seam metal roof
- Low building profile with deep roof overhangs
- Clerestory windows spanning most of west elevation
- U-shaped circulation spine

Mechanical:

- (5) draw-through AHU's ranging up to 10,880 cfm
 - o (3) VFD and (2) constant volume
 - o (1) 100% OA unit serving analytical lab
 - o (2) Economizers with return fan integral to AHU
- (2) 105.5 ton air-cooled chillers serving AHU's
 - o (6) hermetic scroll compressors per chiller, each with (1) step
- (3) ACU's serving electrical rooms and LAN equipment room
 - o Up to 2,200 cfm and 34.9 ton
 - o Each with separate air-cooled condensing unit
- (2) 1500 MBH natural gas fired boilers with #2 fuel oil back-up
- Fin tube radiators for sensible heating of exterior zones
 - o Up to 18 MBH with 27' active length
- Cabinet unit heaters in stairs, corridors, vestibules, and showers
 - o Up to 420 cfm and 50.8 MBH

Structural:

- Concrete strip footings along exterior walls
- Concrete spread footings under interior columns
- 6" concrete slab on grade reinforced by welded wire fabric
- Steel wide-flange superstructure
- Columns full-height from slab to roof
- Typical bay size 34' x 28'
- Steel tube cross-bracing and exterior support of canopy

Electrical:

- (2) parallel 13.2 kV feeders from utility
- 750 kVA main transformer steps down to 480V
- 1,200 A main distribution panel
- Outdoor 230 kW emergency generator powered by #2 fuel oil