



Project

Owner: United States Navy
A/E: Kling, Washington, D.C.
CM - Skanska Corp. - Design/Build Project
Two Story, 75,000 s.f.
\$17 Million, Scheduled Opening Oct. 2006

Mechanical

- Three Air Handling Units to supply the 1st and 2nd floor, and theater space
- Three Electric Steam humidifiers for the 1st and 2nd floor, and theater space
- Two expansion tanks for hot/chilled water
- A 1991 MBH Oil-fired Boiler and a 110 ton water-cooled chiller
- 330 GPM Cooling Tower

Architecture

- Two story mixed-use business with some A-3 Assembly use (training theater)
- The building serves as the final element in the ensemble with two other buildings
- The entrance lobby is the main focal point of the design bridging the new building with the existing one

Electrical

- 13.8 KV 3 phase parallel service entrance to existing exterior switchgear
- Power is connected from the existing exterior switchgear to the double-ended Main Switchboard (1600A)
- Two existing 1250 kW diesel-fired engine generators will provide standby power
- Life safety loads will be provided with battery backup from the Standby Power System (SPS)

Structural

- Superstructure will be framed with structural steel
- Second floor will be a composite metal floor deck and wide flange beams and girders
- Roof will utilize steel joists and a metal roof deck.
- Exterior is 8" reinforced CMU with punched windows
- Slab-on-grade foundation with footers under all columns and exterior walls

Lighting

- Site lighting is pole mounted fixtures with bollards along some walkways
- Daylighting the indoor space was maximized using two "L" shaped wings that provide a break in the exterior wall allowing daylight to enter
- Indirect fixtures in the office areas, direct fixtures in most other spaces, specialty lighting in the Auditorium and Lobby

Christopher Ankeny

Lighting/Electrical

<http://www.arche.psu.edu/thesis/eportfolio/2007/portfolios/CSA130/>