



Washington-Lee High School

Arlington, Virginia

Project Team

Owner: Arlington Public Schools

Architect: Grimm and Parker Architects

CM: McDough Bolyard Peck

GC: Hess Construction Company

Civil Engineer: ADTEK Engineers, Inc.

MEP Engineer: Mendoza, Ribas, Farinas and Associates

Food Service: Nyikos Associates

Aquatics: Councilman, Hunsaker and Associates

Project Features

Building Type: Educational

Size: 350,000 sq. ft

Dates of Construction: Phase 1 - April 2006 to December 2007

Phase 2 - January 2008 to July 2009

Phase 3 - July 2009 to December 2009

Total Cost: \$95.2 Million

Delivery Method: CM advisor

Building Contains: Classrooms to hold over 1600 students, 16 Science labs, 3 Business labs, 8 Computer labs, 3 Music rooms, a cafeteria that opens up to the track, 800 seat auditorium, gym, 2 pools and a diving area.

Structural

Foundation: Shallow spread footings under columns and Strip footings around the building perimeter

Floors: Structural Steel beams typically spanning between 20 and 30 ft. with a composite metal deck with 5 1/4 inch light weight concrete

Roof: Open web steel joists with 1.5 inch deep x 22 gauge metal roof deck

Lateral Force: CMU shear walls

Façade: Red Brick along with metal panels and large southern facing windows

Mechanical & Electrical

Mechanical: (2) 750 GPM 500 Ton Chillers
(11) AHU's ranging from 9000 to 21500 CFM
5000 MBH Gas fired Boiler

Each temperature zone contains own VAV box with reheat coil

Electrical: 8000 Amp 277/480, volt 3-phase 4-wire service with a 277/480 volt 150 KW diesel generator

Indoor lamps are F32W/SP35/T8/RS

*Building trying to get LEED Silver Certification

Matthew Hoerr – Construction Management

www.engr.psu.edu/ae/thesis/portfolios/2008/mjh371