## **DAVIDSON & ASSOCIATES**

CONSTRUCTION ANALYSTS, INC.

## St. John Paul the Great Catholic High School Construction Document Review & Quality Assurance









Construction of a new three-story, 188,440 GSF, high school for the Diocese of Arlington VA near the Potomac River in Dumfries, VA. Project is a steel frame structure with masonry and cold-formed metal frame (CFMF) backup walls protected by air and weather resistive barriers and primarily clad with brick veneer and exterior insulation & finish system (EIFS). Glue-laminated timbers are incorporated at several of the vaulted roof structures.

## Challenge:

• Review substantially completed construction documents to identify air/water infiltration issues, vapor/thermal transmission though the exterior envelope while providing economical solutions to maintain/enhance constructability.

## Value Added:

- During the design phase Davidson & Associates (D&A) identified insufficient detailing at critical elements of the exterior envelope, including air- and weather-barrier continuity at backup wall substrate changes, and provided modification recommendations that enhanced the constructability of the project and reduced construction costs.
- D&A's curated construction phase services provided timely field inspection of the work progress for proper integration of multiple exterior wall and roofing systems. Early on in this phase, our inspections identified trade sequencing that resulted in isolated flashing issues, permitting correction for the remainder of the project and allowing the owner to evaluate remedial options.

Service performed: Technical construction document review; quality assurance during construction.

Owner: Catholic Diocese of Arlington Virginia Contractor: Hess Construction Company

Architect: MTFA Architecture Inc. Cost: \$49,000,000 Duration: 2006 - 2008